FINAL

REMEDIAL INVESTIGATIONS AND REMEDIAL ACTIONS SUMMARY REPORT

Middlesex County College Property (Area 17/17A, Building 118, Areas H, X, and W, and High Traffic Areas) Former Raritan Arsenal

FUDS Project Number CO2NJ0084

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AVATAR ENVIRONMENTAL

A Service-Disabled Veteran Owned Small Business

This Remedial Investigations and Remedial Actions Summary Report was prepared by Avatar Environmental, LLC (Avatar) to present and summarize the previous investigations, removal actions, and human health risk assessment for the Investigations Areas located on Middlesex County College property at the Former Raritan Arsenal in Edison, New Jersey. This work was prepared in accordance with Avatar's contract with the U.S. Army Corps of Engineers (USACE), North Atlantic Division, New England District (CENAE) Hazardous Toxic Radioactive Waste (HTRW) (Contract No. W912WJ-11-D-0002, Delivery Order 0001).

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Acronyms and Abbreviations

ABS	dermal absorption factor
ABS_{GI}	fraction of contaminant absorbed in gastrointestinal tract
ADAF	Age-Dependent Adjustment Factor
ADD	average daily dose
AEHA	Army Environmental Hygiene Agency
AF	adherence factor
AOC	area of concern
ARAR	Applicable or Relevant and Appropriate Requirement
ASR	Archival Search Report
AT	average time
AT_c	averaging time (cancer)
AT_{nc}	averaging time (noncancer)
ATSDR	Agency for Toxic Substances and Disease Registry
Avatar	Avatar Environmental, LLC
BERA	baseline ecological risk assessment
bgs	below ground surface

BW	body weight
CalEPA	California Environmental Protection Agency
CDI	chronic daily intake
CEA	Classification Exception Area
CENAE	U.S. Army Corps of Engineers – New England District
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm^2	squared centimeter
COC	contaminant of concern
COPC	contaminant of potential concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CSF	cancer slope factor
CSF_o	oral cancer slope factor
CSF_d	dermal cancer slope factor
CSM	conceptual site model
CTE	central tendency exposure
cy	cubic yard
DCE	dichloroethylene
DERP	Defense Environmental Restoration Program
DL	detection limit
DMM	discarded military munitions
DOD	Department of Defense
DRL&E	Depot Road Leasing and Excavating
DSMOA	Defense Services Memorandum of Agreement
ED	exposure duration
EE/CA	Engineering Evaluation/Cost Analysis
EF	exposure frequency
EO	Executive Order
EODT	EOD Technology, Inc.
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ET	exposure time
FI	fraction ingested
FS	feasibility study
ft	feet
ft^2	square feet
FUDS	Formerly Used Defense Site
GPR	ground penetrating radar
GSA	General Services Administration
GWFS	Groundwater and Vapor Intrusion Feasibility Study
GWQS	Groundwater Quality Standard
HA	hazard assessment
HHRA	Human Health Risk Assessment
HI	hazard index
HQ	hazard quotient
hr	hour

HTA	High Traffic Area
HTW	hazardous and/or toxic waste
IAQ	indoor air quality
IGWSCC	Impact to the Groundwater Soil Cleanup Criteria
ILR	Industrial Land Reclamation (Landfill)
IRIS	Integrated Risk Information System
IRS	soil ingestion rate
IT	International Technology Corporation
kg	kilograms
kg/mg	kilograms per milligram
KM	Kaplan-Meier
LADD	limited average daily dose
LEAD	Letterkenny Army Depot
LHRA	limited health risk assessment
LOQ	limit of quantitation
m^3/kg	cubic meters per kilogram
MCC	Middlesex County College
MCL	Maximum Contaminant Level
MD	munitions debris
MEC	munitions and explosives of concern
mg	milligram
mg/cm^2	milligrams per squared centimeter
mg/day	milligrams per day
mg/kg	milligrams per kilogram
mg/m^3	milligrams per cubic meter
MIP	membrane interface probe
MNA	monitored natural attenuation
MRL	Minimal Risk Level
MTBE	methyl tert-butyl ether
NCP	National Contingency Plan
ND	not detected
NFA	no further action
NHL	non-Hodgkin lymphoma
NJDEP	New Jersey Department of Environmental Protection
NPL	National Priorities List
NRDCSCC	Non-Residential Direct Contact Soil Cleanup Criteria
OBG	O'Brien & Gere
OE	ordnance and explosives
OEW	ordnance explosive waste
OHM	OH Materials, Inc.
OU	operable unit
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PEF	particulate emission factor
PID	photoionization detector

PPRTVs	Provisional Peer Review Toxicity Values
QA/QC	Quality Assurance/Quality Control
RA	remedial action
RAGS	Risk Assessment Guidance for Superfund
RAWP	Remedial Action Work Plan
RDCSCC	Residential Direct Contact Soil Cleanup Criteria
RfC	reference concentration
RfD	reference dose
RfD_o	oral reference dose
RfD_d	dermal reference dose
RI	remedial investigation
RME	reasonable maximum exposure
RSL	Regional Screening Level
SA	exposed skin surface area
SARA	Superfund Amendments and Reauthorization Act
SC	soil conductivity
SCC	soil cleanup criteria
SLERA	screening level ecological risk assessment
SRS	soil remediation standard
SVOC	semivolatile organic compound
TBA	tert-butyl alcohol
TCE	trichloroethylene
TCL	target compound list
TCLP	toxicity characteristic leachate procedure
TCRA	time critical removal action
TEP	Thomas Edison Park
THQ	target hazard quotient
TIC	tentatively identified compound
TNT	trinitrotoluene
TPH	total petroleum hydrocarbons
TR	target risk
TVHC	total volatile hydrocarbons
UCL	upper-confidence limit
URF	unit risk factor
USACE	U.S. Army Corps of Engineers
USC	United States Code
USRADS	UltraSonic Ranging And Data System
UST	underground storage tank
UXO	unexploded ordnance
VF	volatilization factor
VI	vapor intrusion
VOC	volatile organic compound
$\mu g/m^3$	micrograms per cubic meter
µg/mg	micrograms per milligram
Weston	Weston Solutions, Inc.

WRA	well restriction area
WWI	World War I
WWII	World War II
XRF	x-ray fluorescence

Executive Summary

Avatar Environmental, LLC (Avatar) has prepared this *Remedial Investigations and Remedial Actions Summary Report for the Investigations Areas Located on Middlesex County College Property* at the former Raritan Arsenal (FUDS Project Number CO2NJ0084) located in Edison, New Jersey. The former Raritan Arsenal has been divided into several Operable Units (OUs) based on a combination of property ownership, land use, and historical Investigation Area boundaries with another OU for site-wide groundwater and vapor intrusion. This Report is for the Middlesex County College (MCC) OU and presents the following information:

- Summaries of the previous investigations and interim response actions that have occurred at the MCC area during the over 20-year investigation history of the site;
- An update of the human health risk assessment (HHRA) that was previously prepared for the MCC area;
- A summary of the analytical data of the affected media associated with the MCC area and comparisons with Federal and State of New Jersey screening standards for restricted and unrestricted land uses; and
- Suggested options for addressing uncertainties associated with undocumented buried munitions and explosives of concern (MEC) at the former Raritan Arsenal.

The following Investigation Areas have been identified on MCC property and are the focus of this report:

- Area 17 and Area 17A – Former Burning, Salvage, and Property Disposal Area;
- Building 118 – Adapter Booster Disposal and Underground Storage Tank (UST) Area;
- Areas X, H, and W – Former Administrative and Barracks Area; and
- Additional areas such as the High Traffic Area, UST removal areas, and the PCB Transformers Areas that were not identified in the Archival Search Reports (ASRs) are also considered in this report.

Investigations commenced in the early 1960s and continue to the present and have included:

- Archival searches to identify areas of potential contamination including MEC based on historical operations;
- Geophysical surveys across a large portion of the MCC OU to identify subsurface anomalies including discarded military munitions (DMM), munitions debris (MD), and possibly unexploded ordnance (UXO);
- DMM removal and a geophysical survey at Building 118;
- UST removals;
- PCB transformer removals;
- Soil and groundwater investigations that delineated and characterized the levels of contamination throughout the MCC area including those areas of high use (i.e., the High Traffic Areas);
- An interim response action at the ball fields and tennis courts associated with Area 17/17A;
- An interim response action at Area W and follow-on studies;
- A time-critical removal action (TCRA) of MEC identified in the eastern portion of the MCC area;
- Ongoing monitoring of groundwater Area of Concern (AOC) 10; and
- A baseline HHRA that evaluated the degree of soil exposure within MCC using health-protective assumptions on the current and future uses of MCC property.

Conclusions

The remedial investigations (RIs), interim response actions, and HHRA evaluated all identified potential hazardous and toxic waste (HTW) contamination associated with the MCC property and, in certain cases, resulted in the large-scale response actions of impacted soils at Area 17/17A, Building 118, and Area W. Residual contaminant levels in soils have been compared with restricted and unrestricted use criteria from the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). Although there are isolated exceedances of the restricted and unrestricted use screening criteria, the CERCLA-compliant, site-specific baseline HHRA indicates that exposures to the residual soil are acceptable for unrestricted land use. USACE does not utilize state promulgated remediation standards as a trigger to take an action or not take an action. Rather, USACE uses a

CERCLA-compliant HHRA, as was done for the MCC property, to determine if there is risk to support the need for any remedial action. For MCC, it has been demonstrated that the property is safe for unrestricted use and therefore no remedial actions and/or land use restrictions will be executed by USACE. Accordingly, no further action by the Department of Defense is required for HTW in soils at the Investigation Areas associated with the MCC. Groundwater AOC 10 located on the MCC is being addressed as a separate OU for site wide groundwater and vapor intrusion.

The majority of the MCC property has been reworked with parking lots, buildings, and landscaping. During development some DMM and MD was discovered. A magnetometer survey was conducted in 1991 at Investigation Area 17 and no ordnance-related items were found. Additional magnetometer surveys were conducted in 1993 on approximately 74 acres of undeveloped land within the MCC campus, and MEC items were not detected. Although the best available detection technologies for MEC preclude absolute certainty, there is no identifiable MEC density. Thus, the risk of exposure, based on a qualitative assessment, to MEC on these 74 acres is low for both current and future use.

Most areas of the MCC property have been investigated and developed; however, MEC may be present at the limited uninvestigated areas and areas that were minimally disturbed during development (e.g., parking lots and landscaping). Development that includes invasive activities could occur within the MCC OU in the future. It is not likely or probable that MEC will be encountered during these activities based on the surveys and removals that have occurred in the past but it is possible. Based on the evaluations presented herein, and the pragmatic constraints to area-wide MEC clearance, the institutional control/notification response action alternative (referred to as Alternative RA-3 in the Draft Final EE/CA report [FWENC, 2000]) is most appropriate for the entire former Raritan Arsenal, including the MCC property. Implementation of that alternative will be through the building or construction permit process in the affected municipalities, in order to assure compliance over time.

USACE intends to complete a MEC Hazard Assessment (HA) for the entire MCC property in order to evaluate the likelihood of encountering MEC in the future. This assessment will use all

existing MEC investigations and removals to date in order to evaluate current conditions. The results of the MEC HA along with this RI will be used to complete a Feasibility Study (FS) for MEC. The FS will develop and evaluate options for any potentially remaining MEC and will be provided to stakeholders for review and comment after which a Proposed Plan and Decision Document specifically for MEC will be prepared. The Proposed Plan and Decision Document for MEC will be separate and distinct from the Proposed Plan and Decision Document for HTRW.

1. INTRODUCTION AND OBJECTIVES

Avatar Environmental, LLC (Avatar) has prepared this *Remedial Investigations and Remedial Actions Summary Report for the Investigations Areas Located on Middlesex County College Property* at the former Raritan Arsenal (FUDS Project Number CO2NJ0084) located in Edison, New Jersey. For investigation purposes, the former Raritan Arsenal has been divided into several Operable Units (OUs) based on property ownership and land use with another OU for site-wide groundwater and vapor intrusion issues. These are listed in the table below. The OUs are subject to change as the remedial investigation process evolves for each of OU.

Operable Unit	Approximate Acreage	Description	Areas of Concern
Middlesex County College	**162**	**Located in the northwest corner of the former Raritan Arsenal (excludes Building 229 and its parking lot which are being evaluated as part of the stand-alone RI for Investigation Area 18D)**	**Building 118, Areas 17/17A, H, X and W, and High Traffic Areas**
U.S.EPA and GSA Property Area	177	Located in the north central portion of the former Raritan Arsenal	Area 1 and Areas 18A, 18B, 18C, 18E, 18F, and 18G
Investigation Area 18D	66	Located between Middlesex County College and the U.S.EPA and GSA Property Area	Area 18D
Thomas Edison Park (TEP) and Investigation Areas 9, 10, and 19	498	Located at the western side of the former Raritan Arsenal	Areas 9, 10, and 19
Commercial/Industrial Area	1,050	Located in the center of the former Raritan Arsenal	Area 2, Area 3, Area 4, Area 7, Area 8, Area 14, Area 15, Area 20, Owen-Illinois, Building 151, and Inland Container Corporation
Investigation Area 5	12	Borders Capped Area 14 and the Undeveloped/Wetlands Area	Area 5
Undeveloped/Wetlands Area	956	Located in the southern portion of the Former Raritan Arsenal on the north side of the Raritan River	Areas 6A and 6B, Area 11, Area 12, Area 13, and Area 16
Groundwater/Vapor Intrusion	NA	All groundwater plumes located over the former Raritan Arsenal	Groundwater Areas of Concern 2, 4A, 4B, 6A, 6B, 6C, 8A/B, 8C, 8D, 9, and 10
Total Acreage:	2,921		
Note: Bolded row is the subject of this report.			

Groundwater and vapor intrusion (including indoor air quality) associated with the MCC OU and the entire former Raritan Arsenal is being addressed under a separate OU. The groundwater and vapor intrusion OU is currently in the Feasibility Study (FS) phase which is being developed in a separate deliverable and contract.

This report summarizes all of the previous investigations that have been conducted at the Middlesex County College (MCC) property to date, presents the physical and analytical data associated with these investigations, and updates the human health risk assessment (HHRA) that was previously prepared for the MCC property. This report was prepared for the United States Army Corps of Engineers (USACE) New York and New England Districts under USACE Contract W912WJ-11-D-0002, Delivery Order 0001.

This Report presents the following information:

1. Summaries of the previous investigations and interim response actions that have occurred at the MCC property during the over 20-year investigation history of the site;
2. An update of the HHRA that was previously prepared for the MCC property;
3. A summary of the analytical data of the affected media associated with the MCC property and comparisons with Federal and State of New Jersey screening standards for restricted and unrestricted land uses; and
4. Conclusions that discuss the significance and potential uncertainties of the findings of remedial investigations as well as suggested options to reduce the associated uncertainties where applicable.

The previous investigations were funded and directed by USACE and documented in technical reports prepared by several consultants during the Phase I, Phase II, and Supplemental Phase II Remedial Investigations (RIs) and Remedial Action (RA) Reports. Human health and ecological risk assessments have also been performed at the site. Under contract to Watermark Environmental, Inc., Avatar conducted a HHRA (Watermark, 2009). An updated HHRA is included in this report due to the inclusion of additional historic data, updated toxicity values (e.g., trichloroethylene) from the United States Environmental Protection Agency (EPA), and an updated protocol from EPA for calculating cancer risks for constituents (e.g., polycyclic

aromatic hydrocarbons) that exhibit carcinogenicity through a mutagenic mode of action. Weston Solutions, Inc. (Weston) performed a Screening Level Ecological Risk Assessment (SLERA) and a Baseline Ecological Risk Assessment (BERA) (Weston, 2004 and 2008a, respectively). The risk assessments were performed to assist USACE in making risk management decisions for MCC. The reports associated with the previous investigations performed at MCC are included on a CD in Appendix A and listed in the References Section (Section 8).

1.1 REGULATORY REQUIREMENTS AND AGENCY COORDINATION

Activities at the former Raritan Arsenal site are being administered by the USACE under the Defense Environmental Restoration Program/Formerly Used Defense Sites (DERP/FUDS) program. The Army is the executive agent on behalf of the Department of Defense (DOD) charged with meeting all applicable environmental restoration requirements at FUDS, regardless of which DOD component previously owned or used the property. The Secretary of the Army further delegated the program management and execution responsibility for FUDS to the USACE.

In carrying out its responsibilities, USACE must comply with the DERP statute (10 USC 2701 et seq.), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 42 USC § 9601 *et seq.*), Executive Orders (EOs) 12580 and 13016, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and all applicable DOD (e.g., DOD Management Guidance for the DERP) and Army policies in managing and executing the FUDS program.

For FUDS properties not included on the National Priorities List (NPL), the DERP statute requires that response actions addressing DOD hazardous substances, pollutants, and contaminants be conducted in accordance with CERCLA. In all other cases, CERCLA is DOD's preferred framework for environmental restoration. States or tribes are generally the lead regulator for environmental investigations and responses at non-NPL FUDS. DOD maintains lead agency authority at non-NPL FUDS, coordinates project activities with the lead regulatory agency, and provides notice and opportunity for comment to the appropriate state, tribal, and local authorities.

The former Raritan Arsenal property was identified as eligible for action under the FUDS program. The property is not on the NPL. Therefore, the New Jersey Department of Environmental Protection (NJDEP) is the lead regulatory agency. Under the DERP-FUDS program, only known or potential contamination or hazards on the former Raritan Arsenal attributable to former DOD activities (prior to October 17, 1986) can be addressed.

1.2 FORMER RARITAN ARSENAL BACKGROUND AND SETTING

The former Raritan Arsenal site is located in Edison and Woodbridge Townships, Middlesex County, New Jersey. The site is bordered to the north and northwest by Woodbridge Avenue, to the southwest by Mill Road and the Industrial Land Reclamation Landfill, and to the south and east by the Raritan River (Figure 1-1).

Prior to the construction of the Arsenal, the area consisted of tidal marsh, clay and sand pit quarries, and farmland with several residences. The former Raritan Arsenal was used by the U.S. Army from 1917 to 1963. Operations at the site included the receipt, storage, shipment, and decommissioning of ordnance, arms, and machinery. During this period, some waste material, including ordnance and chemical agents, were reportedly buried on site. It has also been reported that explosive materials were routinely destroyed by surface burning or burning in chambers or pits. Accidental explosions in magazine buildings and outdoor storage areas reportedly scattered materials over large areas, and drove ordnance fragments into the ground.

Site operations were phased out between 1961 and 1963. In 1964, the U.S. government sold 2,000 acres of the former Raritan Arsenal to the Visceglia family which formed the Federal Storage Warehouses Company. In 1975, Federal Storage Warehouses split into two companies (Federal Business Centers and Summit Associates, Inc.) and built the Raritan Center, a major industrial complex.

The U.S. government also sold a parcel of land, located in the western part of the site, to Middlesex County. The county developed the area into Thomas Edison Park (TEP) and MCC. Another section of U.S. government property bordering Woodbridge Avenue is managed by

General Services Administration (GSA) and occupied by the U.S. Environmental Protection Agency (EPA), which maintains office, warehouse, and laboratory space on site (Figure 1-2).

The southern half of the site has remained primarily a wetland area with limited development since the closing of the Raritan Arsenal in 1963. The Industrial Land Reclamation (ILR) Landfill, which operated in the 1970s and was closed by court order in 1985, is located adjacent to the southwest border of the former Raritan Arsenal. A more detailed description of the site history can be found in the *Management Action Plan for the Former Raritan Arsenal* (Weston, 2007).

1.3 AREA OF FOCUS – MCC PROPERTY

This section describes the investigation areas that have been identified on MCC property and are the focus of this report. MCC occupies approximately 162 acres in the northwest corner of the former Raritan Arsenal (see Figure 1-2). A few buildings previously constructed by the Army remain and are used by MCC for various administrative purposes. All other structures and roads, fields, parking lots, etc. were constructed by MCC from the 1960's and 1970's (Weston, 2007). There are a number of athletic fields present in this area.

Given the overall size of the MCC Area, it was necessary to prioritize the effort and investigations to areas where known or suspected DOD activities could have resulted in impacts to soil and groundwater. Impacts in this context could include the release of hazardous and/or toxic waste (HTW) and materials and the presence of munitions and explosives of concern (MEC). The areas selected for investigation were identified during closure activities as well as searches of various archives.

1.3.1 MCC Site History

This section briefly describes the DOD-related activities that occurred on MCC property since the creation of the Raritan Arsenal. Much of the information presented in the following subsections was obtained from two Archival Search Reports that were produced for the former Raritan Arsenal (Metcalf and Eddy, 1991 and Dames and Moore, 1993a).

A 1918 site plan indicated that the MCC Property was used as a cantonment (living) area and also contained a hospital complex. During the period between 1918 and 1934, most of the barracks were demolished as they were no longer necessary following World War I (WWI). Construction activities that occurred between 1918 and 1934 included: construction of brick buildings to house non-commissioned officers, development of a 9-hole golf course, building of a swimming pool, and construction of a new hospital building.

Between 1934 and 1943, the remaining WWI barracks were demolished. Buildings constructed during this time period included new barracks, a school building, and other miscellaneous buildings. An area identified as "Future Salvage Yard" was noted on a 1943 site plan.

Few changes occurred within the MCC Property between 1943 and 1961. The Future Salvage Yard noted on the 1943 site plan was not included on a 1954 site plan. However, an area identified as "Burning Ground" was noted on the 1954 site plan. The Burning Ground area is located near the location of the Future Salvage Yard noted on the 1943 site plan.

The former Raritan Arsenal was closed between 1961 and 1963. MCC opened in 1966. A number of buildings have been built since it has opened. In addition, grading and landscaping have been performed for the construction of parking lots, roads, lights, utilities, and athletic fields.

1.3.2 Summary of Archival Search Report Findings

Suspicion of MEC contamination in the MCC Property began at the time of the former Raritan Arsenal's closing. The first investigation performed at the former Raritan Arsenal was a report prepared in 1963 by the Letterkenny Army Depot (LEAD) that discussed the results of a decontamination (explosive residue only) effort performed by the Army during the closure of the former Raritan Arsenal (LEAD, 1963). Seventeen soil investigation areas were identified by LEAD between 1961 and 1963 during Arsenal closure activities. The LEAD Report identified one MEC suspect area on MCC property, Area 17 (referred to as the Former Burning, Salvage, and Property Disposal Area).

The objective of an Archival Search Report (ASR) developed by Metcalf and Eddy was to determine, through archive searches and interviews, other MEC sites in addition to the 17 identified in the 1963 LEAD report (Metcalf and Eddy, 1991). The purpose of the Dames and Moore ASR (1993a) was to identify historic land uses and to find locations where disposal of ordnance and explosive waste, hazardous, toxic, and radiological waste, and chemical agents could have occurred on the 3,200 acres that have been a part of the former Raritan Arsenal during its history. The following subsections present the areas identified in the ASRs.

1.3.2.1 Area 17

As part of the LEAD investigation, decontamination activities at Area 17 consisted of a surface search and ground scarring to uncover buried ordnance. All discovered ordnance was removed. A review of college excavation and construction files from development of Area 17 does not mention hazardous material being found during construction. The Dames and Moore ASR indicated that Area 17 should be evaluated further.

1.3.2.2 Burning Grounds – 1954 Site Plan

The area shown as Burning Grounds on the 1954 site plan was identified as Area 17A. It has been determined that the area was used primarily for decommissioning (i.e., burning) small arms to sell for scrap. An open burning area was clearly observed in historic aerial photographs located near the site of a baseball field. The possibility that a pit was used in Area 17A suggested that debris and soil contamination may be concentrated in one place. The Burning Ground area was reported to be adjacent to a two-acre salvage yard and suspected to be located near the present tennis courts (Metcalf and Eddy, 1991). Further evaluation of this area was recommended.

1.3.2.3 Building 118

Building 118 was used as a hospital from 1931 to 1954. It is currently used as an administration building by MCC. According to interviews, the first known ordnance discovery at the Building 118 area was in 1962. Adapter boosters and grenades were found when trenches were dug to remove water lines. In 1987, adapter boosters were discovered during the installation of utility

lines. Between May 1991 and June 1992, over 83,000 adapter boosters had been discovered and removed.

1.3.2.4 Southwest Corner – Parking Lots

MCC employees recalled several ordnance discoveries during construction of the parking lots in the southwest portion of the MCC property. The ASR reports that some ordnance may remain buried beneath the parking lots. Prior to use as parking lots, the area was the site of officers' quarters, barracks, a mess hall, a guard house, an administration building, a recreation building, and open land. The Southwest Corner of the MCC property is referred to as Areas X, H, and W. Areas H and W are used as parking lots and Area X is undeveloped and wooded.

1.3.2.5 Additional Discoveries of MEC

Small amounts of ordnance have been found at a variety of locations on MCC property including an empty grenade, 100 to 200 detonators, a 50-pound projectile, and several shells and machine gun components (Metcalf and Eddy, 1991).

- On September 14, 1991, an empty grenade (i.e., munitions debris [MD]) was discovered behind the gym area. No ordnance related material was found in a subsequent investigation of the surrounding 3,500 square foot area.
- One hundred to two hundred detonators were uncovered outside the Main Hall during utility related excavation in 1989. This information was reported to EODT/IT personnel working on the college site by MCC employees.
- A 50 lb. projectile was found during construction of the Student Center in 1972. A portion of this building lies over Area 17. This information was provided by MCC employees.
- During construction of parking lot 1A in 1975, a 75 lb. oval piece of MD was removed. There remains a depression in the pavement where the ordnance was removed thought to be a result of incomplete compaction after removal.
- Between 1974 and 1976, several shells and machine gun components were discovered by an MCC employee's son between lot 4 and Lehigh Valley rail line. This information was obtained from MCC personnel.

1.3.2.6 Controls in Place for Additional MEC Discoveries

Most areas of the MCC property have been investigated and developed; however, MEC may remain in uninvestigated areas and areas that were minimally disturbed during development (e.g., parking lots and landscaping). Development that includes invasive activities could occur within the MCC OU in the future. It is not likely or probable that MEC will be encountered during these activities based on the surveys and removals that have occurred in the past but it is possible.

In an effort to address concerns of additional MEC discoveries at MCC and elsewhere at the former Raritan Arsenal, USACE intends to implement a process of periodic notification to all landowners within the boundary of the former Raritan Arsenal. Of note, USACE intends to implement a mass mailing distribution to landowners within the boundaries of the former Raritan Arsenal informing them that their property is located within the boundaries of the former Raritan Arsenal, and encouraging property owners to consider arranging for MEC construction support during any earthmoving, land-clearing or in-water construction. An installation wide feasibility study will be conducted by USACE to develop and evaluate options for any potentially remaining MEC. This feasibility study will be provided to stakeholders for review and comment after which a Proposed Plan and Decision Document specifically for MEC will be prepared.

1.3.3 Investigation Areas Evaluated in this Report

Based on what is known about historic uses of the MCC property, the following Investigation Areas have been identified on MCC property and are the focus of this report. The locations of the Investigation Areas are presented on Figure 2-1.

- Area 17 and Area 17A – Former Burning, Salvage, and Property Disposal Area;
- Building 118 – Adapter Booster Disposal and Underground Storage Tank (UST) Area;
- Areas X, H, and W – Former Administrative and Barracks Area; and
- Additional areas such as the High Traffic Area, UST removal areas, and the PCB Transformers Areas that were not identified in the ASRs are also considered in this report.

In addition to the Investigation Areas listed above, there is a groundwater plume (Groundwater AOC 10) associated with the MCC Area. The groundwater is being evaluated as a separate OU. The issues related to the groundwater plumes, including the vapor intrusion pathway and indoor air quality (IAQ), are generally discussed in this report.

Investigations of non-Army related issues that may be ongoing, such as the Preliminary Assessment at Building 229, are not discussed in this report. Activities at the former Raritan Arsenal site are being administered by the USACE under the DERP/FUDS program. For FUDS not included on the NPL like the former Raritan Arsenal, the DERP statute requires that response actions addressing DOD hazardous substances, pollutants, and contaminants be conducted in accordance with CERCLA. Under the FUDS program, only known or potential contamination or hazards on the former Raritan Arsenal attributable to former DOD activities (prior to October 17, 1986) are addressed. Further, a portion of Investigation Area 18D is within MCC property. Area 18D is not discussed further in this report due to the finding of no significant contamination on MCC property. Area 18D is being evaluated in a stand-alone RI Report. A time critical removal action was completed within Investigation Area 18D in 2003 for a trench of shells encountered during residential development activities at Beechwood property located to the northeast of Building 229.

The previous investigations and interim response actions that have occurred at the MCC investigation areas listed above are summarized in Section 2. The reader is referred to Appendix A to review the full documents. The list that follows presents the investigation and interim response action reports that have been produced for MCC in chronological order:

- *Decontamination of the Ammunition Area at Raritan Arsenal* (LEAD, 1963);
- *Final Engineering Report, Former Raritan Arsenal, Contamination Evaluation* (O'Brien & Gere [OBG], 1989);
- *Archives Search Report for Middlesex County College and Thomas Edison Park*, (Metcalf and Eddy, 1991);
- An investigation into ordnance and explosive wastes locations and removal at Area 17 and Building 118 (International Technology Corporation [IT], 1992).

- *Near-Surface Soil Sampling Program, Thomas A. Edison Park and Middlesex County College* (Dames and Moore, 1992);
- *Archival Search Report* (Dames and Moore, 1993a);
- *Phase I Remedial Investigation of Selected Areas* (Dames and Moore, 1993b);
- *Limited Health Risk Assessment, Middlesex County College Athletic Field and Thomas A. Edison Park* (Dames and Moore, 1993c);
- *Draft Report of Investigation, Area 17* (Weston, 1993);
- *Final Report for the Geophysical Mapping and Sampling of Areas 2, 3, 4, 6, 8, 9, 10, 11, 13, 14, 15, 16, 16A, 18B, 18C, 18D, 19, and MCC at the Former Raritan Arsenal, Volumes I, II, and III* (EODT, 1993);
- *Groundwater Investigation Addendum, Area 17 Investigation* (Weston, 1994a);
- *Area 17 Supplemental Investigation* (Weston, 1994b);
- *Surface Soil Sampling for High Traffic Areas at Middlesex County College* (Weston, 1994c);
- *Remedial Action Report, Area 17 Remedial Construction* (Weston, 1996a);
- *Building 118 and Areas X, H, and W Investigation* (Weston, 1996b);
- *Supplemental Investigation, Areas 2, 3, 7, 9, 11, 16, 18A, 19, Inland Container, and W* (Weston, 1999);
- *Engineering Evaluation/Cost Analysis, Former Raritan Arsenal* (Foster Wheeler Environmental Corporation, 2000);
- *Draft Supplement 2 Phase II Remedial Investigation Report* (Weston, 2000);
- *Remedial Action Report, Remedial Construction – Areas 11, 12, 18A, 18C, and W* (Weston, 2002a);
- *Remedial Action Report, Removal of Transformers and Switches* (Weston, 2002b);
- *Immediate Response, Time Critical Removal Action, Middlesex Community College, Former Raritan Arsenal* (EOD Technology, Inc. [EODT], 2003).
- *Final Groundwater Natural Attenuation Report, Former Raritan Arsenal* (Weston, 2003);

- *Final Screening-Level Ecological Risk Assessment, Former Raritan Arsenal* (Weston, 2004);
- *Discharge Confirmation Report for Case No. 04-05-27-1349-40* (USACE, 2004);
- *Summary Report of Findings for MIP/SC Survey and Treatability Study Evaluation* (Shaw, 2005a);
- *Draft Technical Evaluation of Remedial Alternatives, Area W* (Shaw, 2005b);
- *Management Action Plan for the Former Raritan Arsenal* (USACE, 2007);
- *Final Baseline Ecological Risk Assessment, Former Raritan Arsenal* (Weston, 2008a);
- *Draft Groundwater Remedial Action Work Plan* (Weston, 2008b);
- *Human Health Risk Assessment, Former Raritan Arsenal* (Watermark, 2009); and
- *Draft Groundwater and Vapor Intrusion Feasibility Study, Former Raritan Arsenal* (Weston, 2012).

2. SUMMARY OF PREVIOUS INVESTIGATIONS AND REMOVAL ACTIONS

This section summarizes the previous investigations and interim response actions that have taken place at the investigation areas at the MCC area. Figure 2-1 presents the locations of the investigation areas, past removal areas, and select sampling locations.

2.1 AREA 17 AND AREA 17A - FORMER BURNING, SALVAGE, AND PROPERTY DISPOSAL AREA

Areas 17 and 17A are located on property owned by MCC. Area 17 is a 2-acre area that was reportedly used as a salvage yard from the late 1940s to the early 1960s. Area 17A is a 0.5-acre area reportedly used as a burning ground for the destruction of small arms by non-explosive means in the 1950s. In 1963, suspected ordnance items were removed from Area 17.

Isolated discoveries of ordnance items were made within Area 17 during the construction of MCC in the 1970s and as late as 1991. USACE did not conduct comprehensive MEC surveys in Area 17 because the area was reportedly not used for ordnance storage or handling by the Army. However, surface scarring, a MEC clearance technique, of the top 6 inches of soil was performed throughout Area 17.

Both areas are now fully developed with buildings and landscaping. Area 17A was developed by MCC as a baseball field. Portions of Area 17 contain asphalt paved parking areas, a small wooded area, and landscaped areas with grass. Sections 2.1.1 through 2.1.8 list all investigations associated with Area 17 and Area 17A in chronological order.

2.1.1 O'Brien & Gere (OBG) Investigation

OBG performed a review of excavation and construction files of Area 17 in 1988. This review indicated that no potentially hazardous articles were found during the construction and development activities that occurred in this area (OBG, 1989).

2.1.2 Ordnance Investigation

IT conducted an ordnance search in May 1991 in the vicinity of the Physical Education Building and Student Center within Area 17 (IT, 1992). A magnetometer survey was performed

throughout the Area 17 footprint. The magnetometer detection limit was reported to be approximately 10 to 12 feet bgs (IT, 1992). While no monitoring wells were drilled in the exact area of the 1991 magnetometer survey, the depth to groundwater in the general vicinity of where the magnetometer survey was performed ranged from 30 to 50 ft bgs. Five test pits were excavated at locations with the greatest number of magnetometer "hits" (see Figure 2-1). Ordnance items were not found.

In 1991-92, EODT performed a magnetometer survey of the entire area, except for a small portion in the southeast corner, which is beneath the MCC Student Center building (EODT, 1993). A total of 7,654 magnetic anomalies were found. Due to the large number of anomalies, it was not feasible to investigate each of the anomalies; instead, exploratory test pits were installed to estimate the quantity of ordnance in the area. The test pits, each approximately 6 feet x 6 feet x 3 feet deep, resulted in the identification of a single piece of munition debris, a set of 60-mm mortar fins considered non-hazardous. The area was subsequently restored by landscaping (EODT, 1993).

2.1.3 Archival Search Reports

Metcalf and Eddy (1991) performed an archive search of Area 17 in 1991. Former Raritan Arsenal employees indicated that Area 17 was used as a disposal site for ammunition de-priming, renovation, and other salvage operations. The employees stated that if ammunition salvage material was disposed of at the site, it would have been inert. A review of aerial photographs found that the baseball field in the vicinity of Area 17, identified as Area 17A, was historically used as a burning ground.

Dames & Moore conducted another archive search in July 1993 (Dames and Moore, 1993a). This report indicated that the burning grounds associated with the site were used for mutilating small arms, including shoulder-mounted rocket launchers. The burning ground was reported to be adjacent to a two-acre salvage yard suspected to have been located near the present tennis courts.

2.1.4 Phase I Remedial Investigation (RI)

From 1991 to 1992, Dames and Moore conducted a Phase I RI that included a soil gas survey, collection of soil samples, and the installation and sampling of a monitoring well cluster (MW-55A and MW-55B, shallow well and deep well) that was installed downgradient of Area 17A (Dames and Moore, 1993b).

2.1.4.1 Soil Gas Survey

A soil gas survey was performed to aid in locating the former burning ground. It was used as a field screening technique to assess the presence of volatile organic compounds (VOCs) that may be present due to past activities. Thirty soil gas samples were collected from the former burning grounds area and were analyzed for VOCs. All soil gas samples were collected from a depth of 5 feet (ft) below ground surface (bgs). Low but detectable concentrations of trichloroethylene (TCE), benzene, toluene, and total volatile hydrocarbons (TVHC) were observed in some soil gas samples. Fifteen samples contained TCE. Benzene was detected in three samples; toluene was found in two samples; and TVHC was found in three samples.

2.1.4.2 Soil Samples

Based on the results of the soil gas survey, soil samples were collected from three borings at three soil gas survey locations. The samples were analyzed for VOCs, metals, polycyclic aromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs), and explosives. Composite samples were collected from intervals of 0 to 5 ft and 5 to 10 ft bgs for all analyses except VOCs. Discrete samples were collected from 2-foot sampling intervals for VOC analysis. Four metals (arsenic, barium, cadmium, and lead) were observed at levels exceeding the 1993 NJDEP soil cleanup criteria (SCC) that were current at the time. Low levels of VOCs were detected in the soil samples collected from the three borings. In some cases, the VOCs detected during the soil gas survey were not detected in the soil samples. The detected VOC levels were less than the 1993 NJDEP SCC. PAHs, pesticides, and PCBs were detected in the soil samples at levels less than the 1993 NJDEP standards. Explosives were not detected in the soil samples.

2.1.4.3 Monitoring Well Installation and Sampling

One monitoring well cluster (MW-55A and MW-55B) was installed in the assumed downgradient direction from Area 17A. The wells were located in the vicinity of the boundary between MCC and TEP. MW-55A was drilled to a depth of 9.5 ft (screened between 7 to 9 ft). MW-55B was installed less than 5 ft from MW-55A and was screened between 14 to 21 ft. Groundwater samples were collected from both wells and analyzed for VOCs, semi-volatile organic compounds (SVOCs), explosives, metals, and pesticides. Lead was detected in MW-55A at a concentration that exceeded the 1993 NJDEP groundwater standard. The other analytes were either not detected in the groundwater or were detected at concentrations less than NJDEP standards.

2.1.5 Limited Health Risk Assessment

Analyses of soil samples collected during the Phase I RI conducted by Dames & Moore (Dames and Moore, 1993b) (see Section 2.1.4) detected the presence of metals that exceeded NJDEP SCC. This resulted in a decision by MCC administrators to close the area for public use. A Limited Health Risk Assessment (LHRA) was performed to provide additional information concerning the presence of contamination in near-surface soils and the potential health risks to individuals that could contact the soil (Dames and Moore, 1993c). This investigation was conducted at the request of MCC personnel.

Surface soil sampling was conducted on August 13, 1992 (Dames and Moore, 1992). Ten surface soil samples (0 to 6 inches bgs) were collected in and adjacent to the MCC ballfield. Additionally, two soil samples (0 to 4 ft bgs) were collected in the vicinity of underground utility lines. These data were used to calculate risk based on exposure to the contaminated soil (surface and subsurface) in the MCC ballfield, a portion of TEP, which is immediately adjacent to MCC property, and the surrounding area. The results of the LHRA (completed in 1993) indicated that while some contaminants (i.e., arsenic, lead, and PAHs) exceeded the 1993 NJDEP standards, the calculated risks were within the range of acceptable risks under EPA guidelines (1E-04 to 1E-06). Based on the results of the LHRA, TEP was re-opened, but MCC decided that the ballfield would remain closed pending further study.

2.1.6 Phase II Remedial Investigation

Weston conducted a Phase II RI from September 20 to November 11, 1993 based on a request from MCC for an expedited evaluation (Weston, 1993, 1994a). The goals of the Phase II investigation were to evaluate the horizontal and vertical extent of soil contaminants identified during the Phase I RI and to evaluate groundwater quality. The Phase II investigation of Area 17 tasks included:

- Drilling of 28 shallow and deep soil borings for soils and stratigraphic characterization;
- Collection of 46 surface and subsurface soil samples for laboratory analysis;
- Collection of soil samples for feasibility and geotechnical parameters;
- Installation and development of four monitoring wells (three overburden wells, MW-72A, MW-73A, MW-74B, and one bedrock well, MW-74C);
- Collection of two rounds of groundwater samples from the new wells and from two existing downgradient wells (MW-55A and MW-55B);
- Completion of two rounds of groundwater elevation measurement; and
- Collection of Quality Assurance/Quality Control (QA/QC) samples.

The soil borings ranged in depth from 4 ft bgs in the baseball field area to 116 ft bgs in the northern (upgradient) portion of Area 17. Thirteen of the soil borings were drilled in an area surrounding the ecological park, the Student Center Building, the Athletic Center Building, and athletic fields. The remaining 15 borings were drilled at or adjacent to the baseball field.

Eight surficial soil samples were collected in the vicinity of the ecological park, the Student Center Building, the Athletic Center Building, and athletic fields. These samples targeted areas documented as being scarred on historical aerial photographs at which no previous surface sampling had occurred. Fourteen samples (3.5 to 4 ft bgs) were collected beneath surface locations sampled by Dames and Moore (1993b) during the Phase I RI that showed elevated metals and PAHs from the baseball field and adjacent areas.

Eleven samples were collected from the 0 to 6 inch interval above the first clay layer encountered or groundwater to define the maximum vertical extent of metals in the subsurface. These 11 samples were collected at or near the ecological park, the Student Center Building, the Athletic Center Building, and athletic fields.

To better delineate (horizontally and vertically) elevated metals observed in Dames and Moore (1993b) composite samples collected from the baseball field, four soil borings were drilled in adjacent areas. Samples collected from these borings were from 5.5 to 6 ft bgs, 7.5 to 8 ft bgs, 9.5 to 10 ft bgs, and 0 to 6 inches above groundwater. The soil samples were analyzed for VOCs, SVOCs, pesticides, PCBs, explosives, and metals. Note that not every sample was analyzed for the full range of constituents.

Two of the four wells (MW-74B and MW-74C) installed during the Phase II RI were installed as a well cluster upgradient of Area 17. MW-74B is an overburden well. MW-74C is a bedrock well. The other two wells (MW-72A and MW-73A) were installed downgradient of Area 17 as overburden wells. Samples collected from the new wells were analyzed for VOCs, SVOCs, pesticides, PCBs, explosives, and metals. Samples collected from the existing wells (MW-55A/B) were analyzed for metals.

The main compounds of concern detected in soil during previous investigations and confirmed by the Phase II RI included metals and PAHs. VOCs and pesticides were not detected in soil at levels exceeding NJDEP standards. PCBs and explosives were not detected in any soil samples. Concentrations of PAHs exceeded NJDEP standards in eight of 46 samples. Concentrations of various metals exceeded NJDEP standards in a subset of the 46 soil samples.

In general, metals exceeding 1993 NJDEP standards were detected in the surface and subsurface fill materials associated with the former burning grounds area, especially within the area of the suspected burning pit located in the vicinity of the baseball field infield. The main source of metals appeared to be fill materials consisting of miscellaneous solid waste and construction debris. Based on previous investigations and sampling conducted during the Phase II RI, PAHs exceeding NJDEP standards were detected in surface soils located downgradient and south of the ballfield's first base line, south of the former burning grounds, at one location northeast of the

MCC tennis courts, and at one location south of the MCC Physical Education Building. PAH concentrations in soils below a depth of 2 ft bgs in Area 17 were not detected at concentrations exceeding NJDEP subsurface cleanup standards.

Groundwater levels of aluminum, cadmium, iron, lead, and manganese exceeded the 1993 NJDEP Groundwater Quality Standards (GWQS) for Class IIA aquifers. The levels of aluminum, iron, and manganese are believed to be the result of natural conditions. The slight increase in cadmium and lead concentrations from upgradient to downgradient wells was not sufficient to conclude that activities at the former burn pit had impacted groundwater quality downgradient of the ballfield.

2.1.7 Supplemental Investigation

In 1994, Weston performed a Supplemental Investigation of Area 17A (Weston, 1994b). The purpose of the Supplemental Investigation was to determine the extent of contamination found during previous studies (Phase I and Phase II RIs). The primary areas of concern were the location of the former salvage yard and burn pit at the ballfield and a location at the tennis courts east of the ballfield. The Supplemental Investigation included the following tasks:

- Performance of a ground penetrating radar (GPR) investigation of the baseball field to determine the location of anomalies and fill material;
- Performance of 60 shallow and 26 deep soil borings for soils characterization;
- The collection and field analysis of 332 soil samples for lead using a portable X-Ray Fluorescence (XRF) Spectrometer. Based upon the field results, 80 soil samples were sent to the laboratory for confirmatory analysis;
- The collection and field analysis of 211 soil samples for PAHs using immunoassay test kits. Based upon the field results, 27 soil samples were sent to the laboratory for confirmatory analysis; and
- The collection of eight soil samples for toxicity characteristic leachate procedure (TCLP) metals for soil characterization to aid in the identification of proper disposal methods.

2.1.7.1 GPR Investigation

A GPR survey was conducted to identify the presence of anomalies caused by a suspected burn pit or other fill material at the site. The results of the investigation were then used to locate soil borings to confirm the extent of contamination at the burn pit. Two substantial subsurface anomalies were observed. The first anomaly was located on the northwestern border of the baseball field and had a reflection pattern indicating probable emplaced fill with metallic objects present. The second anomaly was located in the infield of the baseball field. This anomaly appeared to have significant metallic objects and other conductive material along with distinct layers dipping throughout the area.

2.1.7.2 Soil Investigation

A total of 60 shallow (i.e., between 0 and 2 ft bgs) and 26 deep soil borings were advanced during the Supplemental Investigation. The collected soil data were used by USACE to evaluate the extent of the contamination to be addressed in its Remedial Action Work Plan (RAWP) and the subsequent interim response action at Area 17.

Soil boring locations were selected based on a review of past sampling activities, archive reports, locations proposed by MCC for future excavation and construction, GPR results, and the results of field screening for lead and PAHs. Twenty of the deep borings were advanced to 16 ft bgs, four borings were advanced to 12 ft bgs, and two borings were drilled to eight ft bgs. Twenty-four of the 26 deep borings were advanced on and adjacent to the existing baseball field, and along existing utility corridors. Based on elevated soil concentrations of lead found during the surface soil investigation, two of the 26 deep soil borings were advanced in the area of the tennis courts.

In addition to soil boring samples, 40 surficial soil samples were collected from both the 0 to 0.5 ft bgs and 1.5 to 2.0 ft bgs depth intervals from 20 locations in the vicinity of the MCC baseball field, along existing and future utility corridors, and around suspect locations identified in previous investigations. Based on the PAH and metal concentrations found during previous investigations, 80 surficial soil samples were collected from 40 locations in the area of the existing MCC tennis courts.

A total of 332 soil samples were collected for lead analysis in the field using an XRF spectrometer. From each soil boring, the sample with the highest field screening concentration of lead within the 0 to 2 foot range (either 0 to 0.5 ft bgs or 1.5 to 2.0 ft bgs) and the sample with the highest lead concentration below a depth of 2 ft at that boring were sent to the laboratory for analysis. Surface soil samples were selected for laboratory analyses on a random basis, such that approximately equal numbers of samples with detected lead and no detected lead concentration were sent to the laboratory for analyses, to confirm both positive and negative results. A total of 80 soil samples were sent to the laboratory for confirmatory lead analyses. These samples were also analyzed for arsenic and cadmium.

A total of 211 soil samples were also collected for PAH analysis in the field using Rapid Immunoassay Screening test kits. On the basis of the PAH field screening results, soil samples were sent to the laboratory for confirmatory PAH analysis. The boring and surface soil samples were selected for laboratory analysis on a random basis, such that approximately equal numbers of samples with detected PAHs and no detected PAHs were sent to the laboratory for analyses, to confirm both positive and negative results.

Surface soil results

XRF screening results for lead exceeded EPA's 400 milligrams per kilogram (mg/kg) standard for residential use in 19 percent (37 of 172) of the surface soil samples that were screened. This 400 mg/kg level is also the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) for lead. Less than two percent (3 of 160) of the XRF subsurface soil samples contained lead concentrations exceeding the 2,000 mg/kg cleanup standard, the site specific cleanup level for lead that was previously agreed upon by the USACE, EPA, and NJDEP.

Laboratory analysis results for arsenic, cadmium, and lead show detected concentrations in the surface soil samples (0 to 2 ft bgs) above NJDEP RDCSCC. A little more than a quarter (14 of 50) of the surface soil samples collected contained lead concentrations exceeding the RDCSCC. Arsenic was only detected above its RDCSCC in three samples (6 percent). About one-third (16 of 50) of the surface soil samples contained cadmium concentrations exceeding its RDCSCC.

PAH immunoassay screening results for soil samples collected from the first two foot interval bgs indicated that 57 soil samples had total PAH concentrations below 1 mg/kg, 51 soil samples had total PAH concentrations greater than 1 mg/kg but less than 10 mg/kg, and 36 soil samples had total PAH concentrations greater than 10 mg/kg. Sixteen surface soil samples were submitted for confirmatory PAH analysis. Three of the 16 samples analyzed contained specific PAHs with concentrations exceeding the RDCSCC. PAH compounds detected at concentrations exceeding the RDCSCC included the following: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(l ,2,3-cd)pyrene.

Subsurface soil results

Cadmium and lead were detected in subsurface soil samples analyzed at the laboratory at concentrations exceeding their respective RDCSCC. Arsenic was not detected above its RDCSCC in any of the subsurface samples collected. Twelve percent (3 of 25) of the subsurface soil samples contained lead concentrations exceeding the 2,000 mg/kg subsurface cleanup standard for the site. Five of the 25 subsurface soil samples sent to the laboratory contained cadmium concentration exceeding its RDCSCC.

PAH immunoassay screening results for soil samples collected below two ft indicated that 38 soil samples had total PAH concentrations below 1 mg/kg, 11 soil samples had total PAH concentrations greater than 1 mg/kg but less than 10 mg/kg, and 18 soil samples had total PAH concentrations greater than 10 mg/kg.

Eight subsurface soil samples were submitted for confirmatory PAH analysis. PAH compounds were not detected above the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC) in any of the subsurface soil samples collected.

Eight soil samples were collected for TCLP metals analysis. Four soil samples were collected for TCLP metals analysis during the initial sampling. Based upon the elevated TCLP lead concentrations of the first four samples, the USACE requested that four additional soil samples be sent to the laboratory for TCLP metals analysis. Based upon field XRF screening, samples with elevated lead concentrations were submitted for TCLP metals analysis. With the exception

of lead, the other metals were either not detected or were detected below TCLP regulatory levels. Lead was detected in all eight of the samples analyzed. Five samples contained TCLP lead concentration exceeding the TCLP regulatory level.

In addition to the above results, at the request of the USACE, an additional sample was collected beneath the MCC tennis courts from a depth of 1.5 to 2.0 ft bgs and analyzed for VOCs, SVOCs, metals, cyanide, explosives, and total organic carbon. VOCs were detected at concentrations below both the NJDEP RDCSCC and IGWSCC. Two PAHs (benzo(a)anthracene and benzo(a)pyrene) were detected at concentrations exceeding their RDCSCC. All other SVOCs were either not detected or were present at concentrations below the RDCSCC. With the exception of cadmium, all metals were detected at concentrations below the RDCSCC. Cadmium exceeded the RDCSCC, but was less than the Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC).

2.1.8 Interim Response Action

2.1.8.1 Soil

Based on the results of the Phase I RI, the Phase II RI, and the Supplemental Investigation sampling programs described in the previous subsections, it was determined that an interim response action was needed for Area 17/17A. USACE prepared a RAWP in 1994 for soil remediation at the ballfield and tennis courts. The RAWP was approved by MCC, EPA, and NJDEP (see Appendix B of Weston, 1996a). As part of preliminary work before the interim response action, additional surface soil samples and subsurface soil boring samples were collected in both the ballfield and tennis court areas to eliminate data gaps regarding the horizontal and vertical extent of contamination requiring remediation. At a location between the southwest edge of the ballfield and the adjacent MCC parking lot, oily liquid wastes, solvents, and other debris were observed 6 to 8 ft bgs. It was determined that this contamination was unrelated to the burn pit and salvage yard. USACE associated this contamination with the adjacent Investigation Area W and recommended further investigation under a supplemental investigation for Area W (Section 2.4).

The interim response action for Area 17/17A was performed from September 1994 through 1995 (Weston, 1996a). The primary contaminants of potential concern for soil were lead and PAHs, along with, to a lesser extent, arsenic and cadmium.

Approximately 17,500 cubic yards (cy) of contaminated soil and debris were excavated from locations within the ballfield and tennis courts at varying depths. All excavated materials were disposed off site. Figure 2-1 illustrates the extent of the soil removal areas. Soil with contaminant levels below the NJDEP site-specific IGWSCC was used to backfill deep excavations to within 2 ft of the ground surface. Clean fill was used to bring the remaining depth to surface grade.

A total of 455 post-excavation samples were collected. The results of these samples documented remediation compliance with site-specific cleanup standards in all but 18 of the 455 post-excavation sample locations (less than 4 percent of the confirmation samples). Six of the 18 locations were located near the tennis courts within a Conrail railroad line and right-of-way where further excavation was not possible. For the remaining 12 locations, the concentrations marginally exceeded the cleanup standards. These concentrations were reviewed in context with surrounding sample results and averaged with the surrounding results. This averaging was performed in compliance with NJDEP guidelines and resulted in the conclusion that no further action was warranted.

2.1.8.2 Groundwater

The groundwater sampling carried out at Area 17 under the Phase I and II RIs indicated that levels of aluminum, cadmium, iron, lead, and manganese detected in wells downgradient from the former burn pit and salvage yard exceeded NJDEP GWQS for Class IIA aquifers. Upgradient monitoring wells were not sampled for aluminum, iron, and manganese. The levels of aluminum, iron, and manganese in the downgradient wells were thought to represent natural conditions, since these metals occur in native geologic materials and also were detected in soil samples collected outside the ballfield area of concern. Moreover, aluminum, iron, and manganese levels observed at a background groundwater location were similar to those found within Area 17.

The slight increase in cadmium and lead concentrations from upgradient to downgradient wells was not sufficient to conclude that activities at the former burn pit had impacted groundwater quality downgradient of the ballfield.

Cadmium slightly exceeded the NJDEP GWQS in only the closest of three downgradient wells to the ballfield. The NJDEP GWQS for lead was exceeded in only one sample during the Phase II RI. Lead was detected in groundwater in the downgradient well closest to the ballfield at levels consistent with upgradient well concentrations. Lead levels increased slightly in the two more distant downgradient wells, as compared with upgradient concentrations.

PAHs detected in soil samples from the former salvage yard area at levels exceeding RDCSCC were not detected in groundwater samples during the Phase I and Phase II RIs. This indicated that the PAHs detected in surface and subsurface soils in the former salvage yard were not impacting groundwater. Due to the age of the former burning pit and salvage yard, Phase II RI downgradient groundwater sampling results were believed to be representative of a general steady state condition for Area 17. Therefore, based on the analytical results obtained during Phase I and Phase II RI sampling, an interim response action for Area 17 groundwater was not warranted and in a July 1994 correspondence, the NJDEP concurred with this conclusion (NJDEP, 1994).

2.2 BUILDING 118

Building 118 is the former Raritan Arsenal hospital building. It is located in the northwestern portion of the former Raritan Arsenal. The Building 118 area occupies about 3 acres and is surrounded on all sides by landscaped areas. Building 118 is used by MCC as an administration building. Sections 2.2.1 through 2.2.4 list all investigations associated with Building 118 in chronological order.

2.2.1 Archival Search Report

Metcalf and Eddy performed an archive search of Building 118 in 1991 (Metcalf and Eddy, 1991). Information obtained indicates that Building 118 was constructed as a hospital in 1931. It served as a hospital until at least 1954.

2.2.2 Ordnance Investigation

Buried ordnance was discovered at Building 118 during the installation of utility lines in 1987. IT located and excavated nearly 84,000 adapter boosters and one MK11 grenade within an area of approximately 10,000 square feet (ft^2) from behind Building 118 in 1991 (see Figure 2-1 for removal area) (IT, 1992). Post-excavation soil samples were not collected for analysis during the ordnance investigation. After removal of the ordnance behind Building 118, the excavation was backfilled, and the area was restored to its original condition. The USACE Huntsville District removed any ordnance discovered during excavation activities, and the soil removed during the ordnance excavation was placed back in the excavation upon completion of the investigation. In addition, any construction debris, such as concrete, was also placed back into the excavation. The asphalt driveway behind Building 118 was repaved following completion of the ordnance excavation.

In 1991-92, EODT performed a magnetometer survey of the entire area, except for a small portion in the southeast corner, which is beneath the MCC Student Center building (EODT, 1993). A total of 7,654 magnetic anomalies were found. Due to the large number of anomalies, it was not feasible to investigate each of the anomalies; instead, exploratory test pits were installed to estimate the quantity of ordnance in the area. The test pits, each approximately 6 feet x 6 feet x 3 feet deep, resulted in the identification of a single piece of MD, a set of 60-mm mortar fins considered non-hazardous. The area was subsequently restored by landscaping (EODT, 1993)

In 1991-92, EODT performed a magnetometer survey of the Building 118 area (EODT, 1993). A total of 1,129 magnetic anomalies were found. All of the anomalies were investigated. A total of 187 additional adapter boosters were discovered and removed (EODT, 1993)

Follow-up sampling in the areas below and around the former ordnance excavation was performed by Weston and summarized in the Phase II RI report (Weston, 1996b). Subsection 2.2.4 discusses the Phase II RI sampling results.

2.2.3 UST Removals

The removals of two USTs at Building 118 have occurred since 1991. The subsections that follow describe each UST removal. Figure 2-1 depicts the locations of the UST removals.

2.2.3.1 UST Removal 1

On August 22, 1991, a 112-gallon UST containing leaded gasoline was discovered during the ordnance investigation behind Building 118. The tank had been installed by the U.S. Army and was not being used by MCC. The timeline that the tank was installed and put out of service by the Army is not known. The UST was removed on August 27, 1991. During the removal, residual product was pumped from the tank, the tank was cleaned, piping was cut and sealed, and the tank was removed for off-site disposal. Gasoline odors and holes were observed in the top and sides of the tank. Any soil exhibiting indications of contamination was removed and contained for off-site disposal. Approximately 0.5 cubic yards of soil was removed from the excavation and placed in 55-gallon drums for disposal.

After the tank and suspected contaminated soil was removed, the floors and walls of the excavation were screened for organic vapors using a photoionization detector (PID) to identify possible soil contamination. A total of three post-excavation soil samples were collected for analysis in accordance with NJDEP requirements. After the soil samples were collected, the excavation was lined with plastic and filled with clean backfill.

The post-excavation soil samples were collected along the center line of the tank at the base of the excavation (5 ft bgs) and analyzed for VOCs, SVOCs, total petroleum hydrocarbons (TPH), and lead. The analytical results indicated that all compounds were either not detected or were detected at concentrations below NJDEP RDCSCC, NRDCSCC, and IGWSCC, indicating that any potential soil contamination caused by the UST had been addressed.

2.2.3.2 UST Removal 2

On September 19, 1991, a 1,500-gallon, No. 2 fuel oil UST (used by MCC to supply heating oil to Building 118) was partially uncovered during the ordnance investigation behind Building 118. Petroleum-contaminated soil was encountered while excavating for ordnance around the tank.

The integrity of the tank was tested on October 4, 1991. During the test, the UST was found to be tight. Therefore, the cause of the contaminated soil was suspected to be related to spillage during refueling and/or the piping connections. The UST was removed on October 23, 1991.

During the No. 2 fuel oil UST closure, the tank was cleaned, and the piping was cut at the tank and sealed. The piping was not removed since the area had not been cleared of ordnance. Approximately 1.0 cubic yard of soil with slightly elevated PID readings was removed for off-site disposal. The tank was then removed from the excavation. After the tank and suspected contaminated soil was removed, the floors and walls of the excavation were screened for organic vapors using a PID in order to identify possible soil contamination. Screening of soil in the excavation did not indicate the presence of contamination. Three post-excavation soil samples were collected for analysis in accordance with NJDEP requirements.

The post-excavation soil samples were collected along the center line of the tank at the base of the excavation (6 ft bgs) and analyzed for TPH. The analytical results of the post-excavation samples indicated that TPH was detected in two of three samples. One of the detected samples contained TPH at a concentration exceeding the NJDEP cleanup standard (at that time). Thus, the NJDEP required that additional soil be excavated.

In April 1992, an additional 20 cubic yards of soil were excavated from the No. 2 fuel oil UST area to a depth of 12 to 13 ft bgs. Two additional soil samples were collected from the bottom of the excavation for TPH analysis. The analytical results indicated that any remaining contaminated soil had been removed below the UST. In May of 1992, the piping was excavated and removed. Four soil samples were collected from the piping excavation and analyzed for TPH. The analytical results indicated that any contaminated soil was removed during excavation of the piping.

In September 1992, MCC's consultant (American Hi-Tech, Inc.), installed and developed a 37-foot-deep overburden monitoring well between the two former USTs to evaluate possible groundwater contamination. During drilling of the well, no indication of subsurface contamination was noted. The monitoring well was sampled for TPH, TCL VOCs, methyl tert-butyl ether (MTBE), and tert-butyl alcohol (TBA) in October 1992. The analytical results of

groundwater samples collected from the well indicated that no parameters were detected, and the two USTs had not impacted groundwater. MCC abandoned the monitoring well on April 4, 1993. Therefore, the well could not be used during the subsequent Phase I or Phase II RI at Building 118.

2.2.4 Remedial Investigation

As part of the 1994 RI, Weston conducted soil sampling within and near the former ordnance excavation (see Section 2.2.2) (Weston, 1996b). The RI at Building 118 was conducted to evaluate the nature and extent of possible contamination from historical activities and to evaluate site geology. Specifically, the RI at Building 118 targeted the area where former ordnance removal activities had taken place behind Building 118.

The tasks performed during the RI included the following:

- The drilling of 12 soil borings;
- The collection of 24 surface and subsurface soil samples for laboratory analysis;
- The collection of four soil samples for feasibility study parameters and five samples for geotechnical parameters;
- The installation and development of one groundwater overburden monitoring well (MW-68A);
- The completion of two rounds of groundwater elevation measurements from the newly installed overburden monitoring well MW-68A and other monitoring wells located in adjacent areas to evaluate local groundwater flow direction and hydraulic gradient; and
- The collection of groundwater samples from newly installed monitoring well MW-68A to evaluate groundwater quality.

Previous soil investigations associated with the UST closures and removals in the vicinity of Building 118 indicated no contaminants of concern exceeded NJDEP SCC. Given the historic presence of ordnance items, all of the soil samples collected during the RI were analyzed for 2,4,6-trinitrotoluene (TNT) using the Jenkins field screening protocol. Two of the soil samples were submitted to a laboratory for confirmatory explosives analysis using Method 8330.

Explosives compounds were not detected in any of the samples (field screening or fixed laboratory).

Subsets of the soil samples were analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. The analytical results of the RI soil investigation identified one surface soil sample (SS-11812A) that contained PAHs at concentrations exceeding NJDEP RDCSCC. The laboratory results indicated that PAH contamination was not detected in the 2.5 to 3.0 ft bgs depth interval from the same sample location. Therefore, the PAH contamination detected at this location was limited to surface soils. The PAHs detected in the surface soil sample were believed to be associated with runoff from an asphalt driveway north of Building 118, which was installed after completion of the USACE ordnance removal, and are not believed to be associated with past DOD activities at Building 118.

Based on the results of previous groundwater sampling in the Building 118 area and the RI groundwater sampling results, past activities at this area, including the presence of the USTs and buried ordnance, have not impacted groundwater quality.

2.3 RARITAN HALL UST REMOVAL

Upon discovery of an abandoned 1,000 gallon No. 2 fuel oil UST at Raritan Hall, MCC requested that the USACE remove the tank since it was identified as being associated with the former Raritan Arsenal (see Figure 2-1). An interim response action took place on May 27 and 28, 2004 to remove the product and impacted soils. A total of 819 gallons of No. 2 fuel oil (heating) and 182 gallons of water in the tank were pumped out for off-site recycling. The tank system and its associated piping were then secured, decommissioned, and sent off site for recycling per N.J.A.C. 7:26E-6.3.

The area of excavation was expanded on June 7, 2004 as a result of observations of oil sheen on accumulated rainwater in the open excavation. The final limits of excavation were 15 ft long, 8 ft wide and 9.5 ft deep. Approximately 35 cubic yards of soil were excavated and disposed of off-site. Excavated soil was sampled for waste classification parameters and disposed of off-site as non-hazardous waste in accordance with the waste classification analytical results. No further

action (NFA) was deemed adequate by NJDEP. The *Discharge Confirmation Report* presents the UST removal in greater detail (USACE, 2004).

2.4 AREAS X, H, AND W – FORMER ADMINISTRATIVE AND BARRACKS AREA

Areas X, H, and W are located in the northwestern edge of the former Raritan Arsenal. The areas encompass a total of approximately 16 acres. These areas were the site of administrative and barracks activities during former Raritan Arsenal's operational period. Area X is mostly undeveloped; however, two areas within Area X are used by MCC to dump construction and landscaping debris. Except for a portion of Area W that is wooded, Areas H and W are asphalt parking lots. No ordnance investigations have been performed in these areas. Sections 2.4.1 through 2.4.7 list all investigations associated with Areas X, H, and W in chronological order.

2.4.1 Archival Search Report

Areas X, H, and W were historically occupied by officers' quarters, barracks, a mess hall, a guard house, an administration building, a recreation building, and open land (Metcalf and Eddy, 1991). A review of aerial photographs confirmed that this area was the former location of barracks up to the late 1960's. A ground scar was observed in the present Area W location on a 1939 aerial photograph.

Interviews with employees of MCC have revealed several instances where ordnance was discovered during construction of facilities. Unexploded ordnance in the form of one anti-personnel bomb was discovered in Area W. The uncovered ordnance was removed by personnel from Fort Monmouth; and the parking lots were constructed by MCC.

The *Archive Search Report* indicated that there has been little grading conducted in the vicinity of these areas. However, it is believed that cutting and grading of Area H was conducted by MCC during the construction of the parking lots.

2.4.2 Remedial Investigation

The RI for Areas X, H, and W was conducted to evaluate the nature and extent of possible contamination from historical activities at these investigation areas and to evaluate site geology

(Weston, 1996b). The soil investigation targeted subsurface soils throughout the area, and a historical ground scar in Area W which was identified during a review of a historical 1939 aerial photograph. In addition, the investigation targeted surface soils throughout Areas H and W to evaluate whether historical activities have caused soil contamination.

The RI also presents a summary of the sampling and analytical results of soil and water samples collected at Boring 17112, which was drilled on the eastern edge of Area W during the Supplemental Investigation at Area 17 (Weston, 1994b).

The tasks performed during the RI at Areas X, H, and W included the following:

- The collection of 20 surface (0 to 6 inches bgs) soil samples from grassy areas at Areas H and W;
- The drilling of 13 soil borings and the collection of 13 subsurface soil samples for laboratory analysis;
- The collection of two soil samples for geotechnical parameters and the feasibility study;
- The installation and development of one groundwater overburden monitoring well (MW-69A);
- The completion of two rounds of groundwater elevation measurements from the newly installed overburden monitoring well MW-69A and other monitoring wells located in adjacent areas to evaluate local groundwater flow direction and hydraulic gradient; and
- The collection of groundwater samples from newly installed monitoring well MW-69A to evaluate groundwater quality.

The results of the soil samples indicate that historical activities at Areas X, H, and W have not adversely impacted the soils with the exception of the eastern edge of Area W as discussed in Sections 2.4.2.1 and 2.4.3. None of the contaminants observed in the surface and subsurface soil samples had concentrations greater than NJDEP standards. The groundwater sample results indicated groundwater quality has not been impacted from DOD activities. However, since one sample collected from Boring W07 was not analyzed for the parameter specified in the approved work plan, additional sampling within the ground scar at Area W was proposed.

2.4.2.1 Boring 17112

Contamination was found on the eastern edge of Area W in Boring 17112, which is located within a drainage swale between the Area 17 baseball field and Area W. This contamination was discovered on May 24, 1994 during the Supplemental Investigation conducted at Area 17. Since Boring 17112 is located within 70 ft of the Area W ground scar, it was assumed to be associated with Area W and incorporated into the investigation for Areas X, H, and W.

During drilling of Boring 17112, refusal was encountered and the borehole was relocated three times. Elevated PID readings, odors, and stained soil were observed. Soil samples were collected. The analytical results showed elevated levels of cadmium, VOCs, and TPH. Water was observed in the borehole at 7 ft bgs. A water sample was collected and indicated the presence of VOCs at levels exceeding NJDEP GWQS. The water was not believed to represent groundwater and most likely was from the drainage swale. A large area of anomalies was observed around Boring 17112 and along the drainage swale. Based on these results, further sampling and analysis were proposed to delineate the horizontal and vertical extent of the soil contamination.

2.4.3 Supplemental Phase II Remedial Investigation

Additional investigation work was conducted in Area W in 1996 (Weston, 1999). Soil sampling was performed at one parking lot location (boring W07) that was inadvertently omitted from the 1994 sampling. Test pits were also excavated to evaluate the nature of the buried oily wastes encountered in the vicinity of Boring 17112.

One sample was collected at boring W07 from 2.0 to 2.5 ft bgs (first six inches of natural soil) and analyzed for VOC, SVOC, pesticides, and PCBs. All analytes detected in the sample collected from boring W07 were less than NJDEP standards (RDCSCC, NRDCSCC, and IGWSCC). As a result, no further action was warranted for boring W07 location.

Seven test pits were excavated in the vicinity of Boring 17112 and soil samples were collected from six of the pits. The soil samples were analyzed for TPH, VOCs, SVOCs, metals, pesticides, and PCBs. A water sample was collected from one of the test pits (W28) to determine the nature

of the free-product observed in the water. An unidentified liquid was observed trickling into the test pit at approximately 6.5 ft bgs. The liquid is believed to represent water trapped within the debris, fill, and drums located in the area. The soil samples collected from the test pits had VOC levels exceeding the IGWSCC in three test pits, PAHs exceeding the NRDSCC in one of the test pits, and TPHs exceeding the SCC in two of the test pits. The analytical results for the water sample indicated elevated levels of VOCs, SVOCs, and TPH.

The test pits indicated the presence of buried drums and debris. Stained soil, limited free petroleum product, a varnish/old gasoline odor, and elevated organic vapor monitor readings were noted at 3 to 10 ft bgs in the area. Several drums were encountered during the test pits. All drums appeared to be crushed, split open, and/or rusted through. The results of the Supplemental Phase II RI indicated the need for an interim response action.

2.4.4 Interim Response Action

An interim response action was conducted from January to June 1998 to address the subsurface contamination in Area W identified during the Supplemental Phase II RI (Weston, 2002a). A total of 68 drums containing liquid and solid material were over-packed. Over 1,400 cubic yards of stained soil with elevated PID readings were removed. Excavation activities were stopped in order to conduct a GPR survey aimed at identifying buried drums. The GPR survey was performed to locate and identify anomalies indicative of buried drums within the site excavation and beneath the adjacent parking lot. A total of 34 anomalies were identified. Excavation activities stopped in early March 1998 due to site conditions indicating side-slope instability and water present within the excavation.

Following an evaluation of a design and cost alternative, the USACE determined that addressing the problem with a USACE Rapid Response Program contractor would be more cost effective. As a result, OH Materials, Inc. (OHM) completed interim response activities in Area W. OHM investigated the GPR anomalies, resulting in the removal of 606 cubic yards of impacted material; the over-packing of 58 drums; and the removal of approximately 100 drum carcasses and other containers. All visibly stained soil above the perched water table (15 ft bgs) was also removed.

Post-excavation samples were analyzed for TPH, VOCs, PAHs, and PCBs for samples with elevated TPH levels. Nine post-excavation samples were collected during the initial excavation. Seven additional post-excavation samples were collected during OHM activities. VOCs (benzene, xylenes, cis-1,2-dichloroethylene [DCE], and TCE) were detected at concentrations exceeding NJDEP SCC at five locations. Three of the five samples were excavation floor samples and two were sidewall samples.

The results of the laboratory analyses, visual observations, and field screenings indicated that the residual VOC contamination was present in the excavation at or below the location where perched water entered the excavation. Additional soil excavation, which would require extensive side slope cutback, was not cost effective as determined by site conditions (parking lot and adjacent ballfield). The NJDEP agreed with the USACE proposal that any remaining residual soil contamination would be addressed as part of the Supplemental 2 Phase II RI (Section 2.4.5) and the site-wide groundwater monitoring program (evaluated as a separate OU) and that the excavation could be backfilled.

A monitoring well (MW-129) was installed downgradient of the Area W excavation based on the results of a Geoprobe shallow groundwater investigation. This well is being sampled as part of the on-going quarterly site-wide groundwater monitoring program. TCE and other VOCs were detected in the groundwater downgradient of the Area W excavation. This area is designated as Groundwater AOC 10.

2.4.5 Supplement 2 Phase II Remedial Investigation

In 1999, an additional soil investigation was completed at the Area W excavation by Weston (Weston, 2000). This investigation was conducted to determine the quantity of residual contamination below and surrounding the former excavation within the vadose zone and to collect the necessary geotechnical data to aid in the development of a final response approach, if applicable.

Sixteen soil borings were completed to investigate the former excavation. Ten borings were installed within the excavation and six borings were installed outside (on the slopes) of the

excavation. Two soil samples were collected from each boring below the final depth of the prior remediation area.

The VOC results were compared with the more stringent of the NRDSCC or IGWSCC. TCE and 1,2-DCE were detected in the sandy soil beneath the former excavation at concentrations that exceeded these standards in 13 of the 16 borings. The results indicated that the majority of the contamination existed between the bottom of the final excavation (10 ft bgs) and the top of the water table (20 ft bgs). Additional review of the soil and groundwater data was required to determine whether an additional interim response action was warranted to address the residual VOCs present in the soil and groundwater.

2.4.6 MIP/SC Survey and Treatability Study Evaluation

At the request of USACE, a remedial investigation of Area W vadose zone soil was conducted by Shaw in October 2004 (Shaw, 2005a). Subsurface characterization was performed using Membrane Interface Probe (MIP) and Soil Conductivity (SC) technologies. The MIP/SC technology is a direct push tool that produces continuous chemical and physical logs of the vadose and saturated zones. Continuous soil cores were performed and soil analytical data were collected to correlate the physical and chemical data obtained by the MIPs system. Laboratory treatability studies were also performed by Shaw on soil and groundwater samples collected from Area W during the investigation.

The purpose of the MIP investigation was to provide a delineation of the vertical and horizontal limits of the chlorinated VOCs and identify fine-grained soil layers within the unsaturated zone at Area W. The MIP system was used to determine soil types and zones of elevated VOC concentrations. MIP detector results were compared and correlated with soil laboratory analytical results to determine the approximate spatial limit of soils impacted with chlorinated VOCs.

Data collected during this investigation indicated that most of the vadose zone VOC contamination resides in the deep vadose zone, between 12 and 20 ft bgs. However, a shallow zone (approximately 4 to 8 ft bgs) of contamination was indicated in the vicinity of three borings. Chlorinated VOC impacts were also observed within the saturated zone in one instance at a depth of 31 ft bgs.

MIP field data and soil analytical data suggests that the bulk of the contamination may reside below the water table. However, because the focus of this investigation was the vadose zone, only one soil sample was collected from within the saturated zone; and no groundwater samples were collected in the study area.

Treatability testing was performed to assess the potential feasibility of in situ chemical oxidation to destroy chlorinated ethene contamination in saturated soil and groundwater, as well as vadose zone soil. The chemical oxidation treatability study results indicated that the use of either sodium or potassium permanganate has the potential to be effective for treatment of chlorinated ethene contamination at the site.

2.4.7 Technical Evaluation of Remedial Alternatives

In 2005, Shaw Environmental performed an investigation and evaluation of remedial alternatives for the residual contamination including that below the water table (Shaw, 2005b). The remedial alternatives evaluated included air sparging combined with soil vapor extraction, in-situ chemical oxidation using permanganate, in-situ thermal desorption, excavation with off-site disposal of soils, and monitored natural attenuation (MNA) for groundwater with a deed notice for soils. The remedial alternatives were evaluated against criteria of effectiveness, implementability, and cost. Shaw recommended that natural attenuation with a deed notice for soils be selected as the remedy for the following reasons:

- A significant portion of the source area was previously remediated via soil removal;
- Most of the remaining contamination in Area W lies below the water table; therefore a deed notice would be effective at protecting human health by controlling access to the area of concern; and
- Natural groundwater attenuation has been documented within the Groundwater AOC 10 plume.

2.5 HIGH TRAFFIC AREAS

Responding to a request from MCC, the USACE conducted a preliminary assessment and investigation in 1994 to evaluate MCC campus locations of student/staff high activity not

previously sampled (Weston, 1994c). The high traffic areas (HTAs) sampling was conducted to determine if any contaminants existed on the site that could impact the health of site users.

The initial investigation included the collection of 32 surface soil samples. Sampling locations were selected by representatives from USACE, the Army Environmental Hygiene Agency (AEHA), MCC, and Weston. A discrete 0 to 0.5 foot depth sampling interval was utilized to evaluate surface soil contamination for all parameters. Analytical results indicated that pesticides or PAHs exceeded the RDCSCC at five locations. Based on these results, additional soil sampling was proposed to delineate the extent of the contamination.

In 1999, the USACE conducted a Supplement 2 Phase II investigation at the MCC HTAs (Weston, 2000). Four borings were advanced around each of five previous sample locations to delineate PAH and pesticide compounds identified during the 1994 HTA investigation. Two samples were collected from each boring, one from 0 to 0.5 ft bgs and one from 1.5 to 2.0 ft bgs. PAHs were detected at concentrations below the NRDCSCC and IGWSCC in surface soil samples adjacent to an asphalt driveway, parking area, and roadway. Pesticides (DDT and dieldrin) were detected in surface soil samples at concentrations exceeding the RDCSCC or NRDCSCC. The concentrations of pesticides detected were typical of levels expected to be present from general historical pesticide application known to have occurred at the former Raritan Arsenal.

2.6 PCB TRANSFORMER AREA

The USACE identified numerous out-of-service electrical transformers and switches remaining from Army operations during the numerous investigation activities. Previous sampling of the transformers and switches by Metcalf & Eddy indicated that these items contained PCBs. Beginning in January 1999, Weston conducted a transformer removal action at MCC and adjacent portions of the former Raritan Arsenal (Weston, 2002b). A total of 21 transformers and 23 switches were removed from the MCC area and Buildings 214, 216, and 217 of the former Raritan Arsenal and disposed of at a licensed off-site treatment and disposal facility. Transformers and switches were removed from aboveground concrete pads, below ground vaults, and telephone poles. PCB-contaminated soil was removed from two concrete pad

locations and PCB-contaminated water was removed from two vaults. Lead contaminated sediment also was removed from one vault. Analytical results of the soil samples collected post-remediation indicated that contamination associated with the transformers and switches was removed to below the NJDEP RDCSCC. Residual PCB contamination was detected on the concrete inner surfaces of a manhole following decontamination efforts and the USACE closed the manhole in-place with a deed notice in February 2001. No further action has been recommended for the areas included in the transformer removal project, with the exception of maintaining the deed notice previously mentioned. NJDEP agreed with this approach.

2.7 ENGINEERING EVALUATION/COST ANALYSIS

An Engineering Evaluation/Cost Analysis (EE/CA) of the former Raritan Arsenal, including the Investigation Areas on MCC, was conducted by Foster Wheeler Environmental Corporation (2000). The purpose of the EE/CA was to evaluate possible MEC removal alternatives, select appropriate response actions and document the decision-making process in selecting non-time critical removal. Specifically, the tasks involved were:

- Evaluate the adequacy of MEC removal actions accomplished to date for reducing the potential for public exposure to MEC at this site, consistent with current land use and future development plans;
- Compile and summarize the data from previous MEC investigations and removal actions accomplished to date; and
- Develop, evaluate, compare, and select final response action alternatives for MEC contamination in accordance with applicable regulations.

A qualitative risk assessment of MEC was performed for the areas at MCC to provide support for the selection of appropriate response actions. For the qualitative analysis, risks of MEC exposure and risks of MEC-related injury or death for current and projected future use are considered either "low" or "high", depending on the presence and depth of MEC and the current and projected future land use in each area. Areas which have no documented MEC-related uses, areas that have been subject to investigation with no MEC discovered, and areas that have been subject to a complete MEC removal action are generally considered to pose a low risk of MEC exposure and a low risk of a MEC-related injury or death regardless of current or projected future land use.

The risk is not considered zero for any areas on the former Raritan Arsenal due to technical limitations on detection of MEC and the possibility that MEC exists in areas that were not investigated due to a lack of historical documentation of MEC-related activities.

Areas which have significant confirmed MEC present (including areas that have been the subject of a MEC removal action but are known to have MEC remaining) are generally considered to have a high risk of MEC exposure if there is a current or projected future use that would result in potential exposure to the MEC. However, this risk must be distinguished from the risk of a MEC-related injury or death, which is dependent on both the presence of MEC and the actions of people encountering the MEC. Since the former Raritan Arsenal has no identified firing ranges, any MEC encountered is likely to be unarmed and would require significant action on it to become armed and fire. Therefore, if appropriate property uses and/or behaviors are enforced, even though there is a high risk of MEC exposure (resulting simply from the presence of MEC), the risk of a MEC-related injury or death may be low. On the other hand, if inappropriate property uses and/or behaviors are allowed, the risk of a MEC-related injury or death could be high in these areas.

The following narratives found in Section 2.7.1 through 2.7.4 describe the findings of the qualitative MEC risk assessment for the MCC areas of concern. The recommended response action based on the results of the EE/CA is presented in Section 2.7.5.

2.7.1 Area 17

Area 17 has been the subject of an extensive magnetometer survey with an effective depth of approximately 10 to 12 ft bgs (see Section 2.1.2), resulting in a large number of magnetic anomalies, but only a single scrap item of MD (non-explosive). The historic use of Area 17 was a reportedly a salvage yard and the entire area has undergone extensive development consisting of the construction of buildings, roadways, parking lots, and utilities. Those portions of Area 17 not developed have been landscaped. The MEC density is determined to be minimal for all depths in this area. The qualitative risk of MEC exposure in this area for current use is considered low. Based on the available data for this area, which demonstrate no evidence of MEC present, the risk of MEC exposure for future activities is also considered low.

2.7.2 Area 17A

Area 17A underwent an interim response action for the contaminated soil (see Section 2.1.8). MEC has not been identified during investigations or during remediation. The MEC density is minimal for all depths in this area. The risk of MEC exposure in this area for current use is considered low. Based on the available data for this area, which demonstrate no evidence of MEC present, the qualitative risk of MEC exposure for future activities is also considered low.

2.7.3 Building 118

Clearance of a trench containing large amounts of MD, and careful follow-up investigation of the surrounding 4.2 acres of land on the MCC campus has been completed (see Section 2.2.2). The MEC density was determined to be minimal for depths from 0 to 4 ft, but potentially higher at greater depths. Based on the completed clearance activities and the presence of the existing building, the risk of MEC exposure for current use in this area is considered low. Due to the potential for remaining subsurface MEC in areas that have only been disturbed at the surface (i.e., areas paved or landscaped), a qualitative assessment of risk of MEC exposure for more intrusive activities (e.g., building construction) in these areas is considered high (FWENC, 2000). Per the EE/CA (FWENC, 2000), areas which have significant confirmed MEC present (including areas that have been the subject of a MEC removal action but are known to or suspected to have MEC remaining) are generally considered to have a high (qualitatively-based) risk of MEC exposure if there is a current or projected future use that would result in potential exposure to the MEC. Information available from the Building 118 removal makes no mention of MEC remaining after the completion of the removal.

2.7.4 Remainder of MCC Area

Seventeen plots located on MCC property consisting of approximately 74 acres were chosen for geophysical surveying (EODT, 1993). A Schonstedt Model GA-52B Magnetic Locator was utilized along with the UltraSonic Ranging And Data System (USRADS®) to complete the surveying (EODT, 1993). All anomalies that were observed within the 17 plots were subjected to review by committee. The members of the committee were:

- MCC personnel (2);

- Site Safety Representative from the Huntsville District of the USACE;
- EODT Senior Site Supervisor; and
- USRADS® Supervisor.

After evaluation of plot and track maps provided by USRADS and utility maps furnished by MCC, each discovered anomaly was addressed. Twelve plots were selected for further investigation. No MEC were recovered.

Locations of the 1993 geophysical mapping are presented on Figure 2-1. The geophysical survey locations were digitized from the original 1993 report as geographic information files are not available and should be considered approximate. The risk of MEC exposure in this area for both current and future use is considered low.

2.7.5 EE/CA Conclusion

The future risk of MEC exposure may increase in all study areas based on potential development activities. It is assumed that development would typically include invasive activities that significantly increase the probability of MEC exposure in those areas where subsurface removal activities have not been conducted or MEC is known to remain following a removal action. However, it is not practical to perform an MEC clearance in all areas of the MCC property without knowledge of its intended future use. Further, it is not technically feasible to perform a clearance operation in areas that are already developed, even though future use of the area could include widespread redevelopment. Therefore, based on these considerations and the evaluations presented herein, it was recommended that the institutional control/notification response action alternative (referred to as Alternative RA-3 in the EE/CA report) be established for the MCC property. Implementation of the alternative will be through the building or construction permit process in the affected municipalities.

USACE intends to complete a MEC Hazard Assessment (HA) for the entire MCC property in order to evaluate the likelihood of encountering MEC in the future. This assessment will use all existing MEC investigations and removals to date in order to evaluate current conditions. The results of the MEC HA along with this RI will be used to complete a Feasibility Study (FS) for

MEC. The FS will develop and evaluate options for any potentially remaining MEC and will be provided to stakeholders for review and comment after which a Proposed Plan and Decision Document specifically for MEC will be prepared. The Proposed Plan and Decision Document for MEC will be separate and distinct from the Proposed Plan and Decision Document for HTRW.

As summarized in a letter dated December 21, 2011, NJDEP raised concerns regarding the recent munitions findings in Area 15, which is located outside of MCC property but within the limits of the former Raritan Arsenal boundary. In an effort to address NJDEP concerns, the USACE (responsible for administration and execution of the FUDS program) intends to implement a process of periodic notification to all landowners within the boundary of the former Raritan Arsenal. Of note, USACE intends to implement a mass mailing distribution to landowners within the boundaries of the former Raritan Arsenal informing them that their property is located within the boundaries of the former Raritan Arsenal, and encouraging property owners to consider arranging for MEC construction support during any earthmoving, land-clearing or in-water construction. USACE's post-remedy responsibilities do not include an institutional control or any agreement which commits USACE to future construction support outside of its CERCLA and DERP requirements. This policy is consistent with the FUDS' Military Munitions Response Program throughout the United States.

The use of institutional land use controls commonly requires the participation of local governments because land use is generally controlled at the state or municipal level. For this reason, land use controls should be managed and maintained at the local level whenever possible. For FUDS properties, state or local government agencies with appropriate authorities (i.e., zoning boards) or the property owner are often the best candidates for land use control management and enforcement.

In the case of the former Raritan Arsenal, the issuance of building permits is controlled by the local government. This means that restrictions on whether or how the building is carried out has to be enacted by the local government. The township is willing and eager to put such restrictions in place in order to protect health and safety. USACE has provided appropriate technical

expertise by drafting the language for the building permit conditions, providing a list of MEC contractors, and providing informational resources about MEC. USACE will also coordinate with any permittees with respect to munitions findings.

The use of land use controls makes appropriate use of the township's legal authority to govern whether and how building activities are carried out within its jurisdiction. It does not require the township to provide technical advice; rather, it uses the township's authority to require permittees to obtain appropriate technical advice and supervision.

An installation wide Feasibility Study will be conducted by USACE to develop and evaluate options for any potentially remaining MEC. This Feasibility Study will be provided to stakeholders for review and comment after which a Proposed Plan and Decision Document specifically for MEC will be prepared.

2.8 BUILDING 229

Building 229 was constructed in June 1941. It was reportedly used by the U.S. military for small arms packing purposes between June 1941 and October 1942. After 1942, the area appears to be used for storage with no other apparent use or operation activity. The property was transferred to GSA in 1963. The building and surrounding property were unused until 1976 when MCC acquired the property. Since then, Building 229 has been used by MCC as the Facilities Management Building. Exterior areas are used for parking and storage.

There are ongoing investigations at Building 229 being conducted by MCC and their contractors (Kleinfelder, 2011). These investigations are not included in this Remedial Investigation Report, but will be addressed under a separate RI for Area 18D.

A USACE-led time critical removal action (TCRA) was conducted adjacent to Building 229 in 2003. EODT performed the TCRA of discarded military munitions (DMM) (EODT, 2003). MCC was in the process of a trench excavation for a new storm sewer north of Building 229 on March 31, 2003 when they encountered munitions (14 Mark 1 50lb HE practice bombs, unarmed). Excavation activities by MCC were immediately halted. On August 27, 2003,

excavation along a new portion of the existing storm drain unearthed two Mark 1 50lb HE practice bombs (unarmed).

EODT was tasked with the excavation of the remaining 60 ft of trench to a depth of 3 ft bgs (subsequently changed to 4 ft bgs) while locating, removing, and disposing all MEC- related items. Figure 2-1 presents the approximate location of the TCRA. The Building 229 area of the MCC property is referenced here but is not part of the overall RI for the MCC Operable Unit. Building 229 will be addressed as part of the separate Investigation Area 18D Remedial Investigation, which overlaps onto the adjacent property owned by the EPA.

2.9 GROUNDWATER AREA OF CONCERN 10

As presented in Section 1, groundwater contamination at the former Raritan Arsenal is being addressed and evaluated as a separate OU under a separate USACE task order contract. A Draft Groundwater and Vapor Intrusion Feasibility Study (GWFS) (Weston, 2012) is currently being reviewed by USACE. NJDEP conditionally approved USACE's recommendation of a Monitored Natural Attenuation (MNA) remedy for site groundwater on March 12, 2003 pending resolution of any vapor intrusion issues. As part of the Groundwater Remedial Action Work Plan issued in 2008 (Weston, 2008b), the USACE formally proposed a Classification Exception Area (CEA) that covered all of the groundwater AOCs, including groundwater AOC 10. Further, the USACE formally proposed a MNA remedy for groundwater AOC 10.

This section provides a general summary of the groundwater issues at the MCC Area. The groundwater contamination associated with MCC is identified as groundwater AOC 10. The plume originates at the former buried drum area associated with Area W. The former source area was remediated in 1998 by removal and disposal of grossly contaminated soils. VOCs were detected at concentrations exceeding NJDEP SCC in the 1998 post-excavation samples and the 1999 Phase II RI soil samples.

As of 2005, AOC 10 extended south-southeast from the former buried drum area, underlying portions of the physical boundaries of Area W, Area X, Area 17A, and Area 10 (encompassing the Middlesex County Building). The upgradient extent of the plume was estimated to be south

of monitoring well MW-73A. Data collected in 1993 indicated that VOCs were not detected in MW-73A.

The available groundwater data indicates that the following VOCs were detected within the AOC 10 plume: bromodichloromethane, chloroform, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, and vinyl chloride. Cis-1,2-DCE and TCE were found at levels exceeding the Federal MCL and/or the NJDEP Class IIA GWQS.

USACE has investigated remedial alternatives for AOC 10. In October 2004, Shaw Environmental conducted a MIP and soil conductivity survey within and surrounding the former excavation at Area W. The MIP was used to delineate the contamination remaining after the 1998 remediation activities during which over 2,000 cubic yards of soil were removed. Soil samples were collected from selected locations to confirm the MIP results. TCE and cis-1,2-DCE exceeded the NJDEP SCC in five of the samples collected.

The results of the survey were to be used as part of a treatability study evaluation. Groundwater samples were not collected during Shaw's investigation. In December 2005, Shaw issued the *Technical Evaluation for Remedial Alternative for Area W – Final Report* (Shaw, 2005b). The use of MNA was recommended for groundwater. This was recommended because the source area was remediated and residual contamination remained primarily below the water table. As demonstrated through the historic permanent well locations and the available well data, MNA has been documented for the AOC 10 plume. The source and plume wells were sampled during Weston's 2005 sampling event. TCE results from this event support the documented decreasing trend of TCE at these wells.

As described in the Natural Attenuation Report (Weston, 2003), the following lines of evidence demonstrate that natural attenuation has occurred and is occurring within groundwater AOC 10 and elsewhere with the former Raritan Arsenal: DCE and methane (breakdown products of TCE) are present in the source area, decreasing VOC concentrations in the source area, decreasing TCE concentrations in the AOC 10 plume, increasing cis-1,2-DCE concentrations corresponding to decreasing TCE in MW-131 (downgradient well), and no VOC present in sentinel wells. The

Draft GWFS (Weston, 2012) further supports that natural attenuation has occurred and is occurring within groundwater AOC 10.

2.10 INDOOR AIR QUALITY AND VAPOR INTRUSION

Vapor intrusion (VI) has been investigated since 2003 to fulfill the conditional approval requirement of the NJDEP for MNA as a remedy for contaminated groundwater. As presented in Section 1, vapor intrusion issues including indoor air quality at the former Raritan Arsenal are being addressed and evaluated as a separate OU under a separate USACE task order contract. This subsection provides a general summary of the indoor air quality issues associated with the VI pathway. The following was extracted from the Draft GWFS (Weston, 2012) and summarizes the status of groundwater AOC 10.

Due to the fact that concentrations of some VOCs in groundwater exceeded the screening levels, the one building (Middlesex County training facility) located within Groundwater AOC 10 was investigated to evaluate the vapor intrusion pathway. Based on the groundwater exceedances, an indoor air evaluation was expedited for groundwater AOC 10. After two rounds of indoor air and subslab soil gas sampling, the NJDEP agreed that the primary vapor intrusion concern is the non-DOD related Freon 12 which should be further evaluated by the building owner/tenant. AOC 10 will be further evaluated in the GWFS, and will continue to be monitored for the potable pathway as part of the site-wide MNA approach.

2.11 ECOLOGICAL RISK ASSESSMENT

Weston conducted a screening-level ecological risk assessment (SLERA) of the former Raritan Arsenal in March 2004 (Weston, 2004). As a follow-up to the SLERA, a BERA was completed by Weston in March 2008 (Weston, 2008a). The MCC area was considered in both investigations but potential ecological risk was not evaluated because of:

- The lack of suitable ecological habitat in the majority of the area; and
- The residual contamination that is present is deeper than 2 ft bgs where terrestrial receptor exposure is not a concern.

3. CONCEPTUAL SITE MODEL (CSM)

This section discusses the CSM based on an evaluation of the environmental and physical setting of the MCC Property, institutional knowledge of contamination sources, fate and transport processes, and an assessment of potential contaminant exposure pathways and human and ecological receptors. It is important to note that all known sources of contamination within the MCC OU, either identified during the Archival Searches or subsequently discovered, have been sampled and in some case have undergone interim response actions.

The former Raritan Arsenal site encompasses approximately 3,200 acres in Edison and Woodbridge Townships, Middlesex County, New Jersey. The site is bordered to the north and northwest by Woodbridge Avenue, to the southwest by Mill Road and the Industrial Land Reclamation Landfill, and to the south and east by the Raritan River (Figure 1-2). The former Raritan Arsenal was used by the U.S. Army from 1917 to 1963. Operations at the site included the receipt, storage, shipment, and decommissioning of ordnance, arms, and machinery. MCC occupies approximately 163 acres in the northwest corner of the former Raritan Arsenal. A 1918 site plan indicated that the MCC Area was used as a cantonment area and also contained a hospital complex. A few buildings previously constructed by the Army remain and are used by MCC for various administrative purposes. All other structures and roads, fields, parking lots, etc. were constructed by MCC from the 1960's and 1970's up until recent times (Weston, 2007). There are a number of athletic fields present in this area.

The former Raritan Arsenal is located on the northern side of the Raritan River, which discharges to Raritan Bay approximately 5 miles to the east. The former Raritan Arsenal site geology is characterized by an overburden layer, approximately 10 to 80 feet thick, composed of unconsolidated sediments underlain by bedrock composed of shales, metamorphosed shales, and an igneous diabase sill. The site groundwater hydrology is characterized by separate aquifers in the overburden and bedrock. Groundwater within both the overburden and bedrock aquifers flows southeastward across the site toward the Raritan River. The depth to groundwater in the overburden zone varies from 2 to 30 feet, depending on the location.

Historic contaminants consisted of VOCs, PAHs, pesticides, and metals in surface and subsurface soils and VOCs and metals in groundwater. The source of soil contamination was the presence of buried ordnance, drums, and associated debris discovered in Area 17A, Building 118, Area W, various USTs and transformers, and non DOD-related activities in the High Traffic Area (i.e., asphalt walkways and historical pesticide use). The source of VOC concentrations in the groundwater was leaking buried drums and debris discovered in Area W. As described in Section 2, interim response actions have been performed at Area 17 and 17A, Area W, and Building 118, thereby removing the contaminant source areas. While discussed in this report, the contamination issues related to the residual groundwater concentration, including vapor intrusion and IAQ, are being evaluated as a separate OU under a separate USACE task order contract.

The highest remaining soil contaminant concentrations were found in several High Traffic Area surface soil samples and in an Area W test pit subsurface soil sample and were evaluated in the HHRA (Section 6). Individuals that could be exposed to soil include groundskeepers, construction/utility workers, student recreational users, indoor workers, daycare children, and hypothetical future residents. These receptors have the potential to be exposed to surface and/or subsurface soil via incidental ingestion, dermal contact, inhalation of dust emissions, and inhalation of VOCs released from soil. The indoor worker has no direct contact with soil and therefore, the dermal contact pathway is not evaluated for this receptor. Section 6 discusses the potentially exposure receptors in greater detail.

There is currently no use of groundwater on site. All buildings, including MCC buildings, are connected to municipal water. Groundwater is not expected to be used in the future because new buildings will connect to municipal water. Additionally, the Classification Exception Area (CEA) and well restriction area (WRA) are in place for portions of the former Raritan Arsenal. The CEA encompasses the portions of the former Raritan Arsenal where groundwater is contaminated as a result of DOD activities. Most of the MCC property is not included in the CEA. The only portion of the MCC property impacted by the CEA is the AOC 10 plume, which includes Area 17A and parts of Area X, H, and W. Therefore, there is no contact with the groundwater. It is possible that the indoor air may be affected as a result of the vapor intrusion

pathway. As noted previously in this report, the vapor intrusion pathway is being evaluated as a separate OU with groundwater. As a brief synopsis for groundwater AOC 10, the evaluation of the vapor intrusion pathway for the one building located over AOC 10 plume concluded there is no risk from vapor intrusion. Any future buildings constructed in this area will need to be designed with consideration given to the potential for the vapor intrusion pathway.

Existing wildlife habitat is minimal at the MCC Property. As presented in Section 2.10, potential ecological risk was not evaluated because of the lack of suitable ecological habitat in the majority of the area and/or the majority of residual contamination that is present is deeper than 2 ft bgs where terrestrial receptor exposure is not a concern.

4. NATURE AND EXTENT OF CONTAMINATION

This section compares the available soil and groundwater data with Federal and New Jersey standards to determine the nature and extent of contamination. Section 4.1 presents a brief summary of the data that were available for the comparisons. The soil and groundwater comparisons are discussed in Sections 4.2 and 4.3, respectively.

4.1 AVAILABLE DATA

As discussed throughout Section 2, a number of sample collection efforts have occurred at MCC dating back to the early 1990s. This subsection presents the data available for comparisons with standards. Table 4-1 presents a summary of the past investigations that have taken place in chronological order. Data were not collected for a number of the past investigations but these were included on Table 4-1 for completeness. For the investigations that did include sample collection, the status of the data (i.e., available and included in the summaries or not) is summarized.

4.1.1 Soil

The soil data from five past investigations were available and included in the data comparisons. These included:

- *Surface Soil Sampling for High Traffic Areas at Middlesex County College* (Weston, 1994c);
- *Final Report of Investigation, Building 118 and Areas X, H, and W* (Weston, 1996b);
- *Supplemental Report of Investigation, Areas 2, 3, 7, 9, 11, 16, 18A, 19, Inland Containers, and W Investigations* (Weston, 1999);
- *Final Remedial Action Report, Remedial Construction – Areas 11, 12, 18A, 18C, and W* (Weston, 2002a); and
- *Discharge Confirmation Report, Case No. 04-05-27-1349-40* (USACE, 2004).

Post-excavation confirmatory samples that were laboratory-analyzed and of known quality were included in the comparisons. As shown on Table 4-1, analytical data were not collected for a number of investigations performed at the MCC OU. These investigations included ASRs, MEC

surveys, remedial action work plans, and various other types of reports related to the environmental investigation of the MCC OU (see Table 4-1 for a description). Soil data, both analytical data and field screening data, which were collected over the course of multiple investigations to guide the removal actions at the ballfield and tennis court areas that underwent extensive removal actions by excavation, were not compared with screening levels because this soil is no longer present. Soil data from other sources that were of unknown quality or data that were not available electronically were also not used.

4.1.1.1 Background Levels

The State of New Jersey has published background levels of metals (BEM, 1998). The background levels vary depending on the location within the State. The former Raritan Arsenal is situated within the Coastal Plain Region. The Coastal Plain Region data were obtained from sampling points that were located in parks (playgrounds, city parks, etc.) The rationale to sample parks was to maximize the probability of finding undisturbed soil and to minimize the probability of collecting samples too close to known hazardous waste sites (BEM, 1998). This is an important point to be considered when evaluating the risks based on the Coastal Plain Region background data. It most likely does not adequately represent the actual background PAH levels in the immediate vicinity of the former Raritan Arsenal. The background levels associated with the former Raritan Arsenal, a well-populated and heavily used area containing many asphalt parking areas, would be expected to be greater than the levels observed at more pristine sites. The subsections that follow compare the site levels of arsenic and chromium with New Jersey background levels. Background comparisons for other contaminants are presented in Section 6.5.4.

<u>Chromium</u>

Select statistical values for chromium are presented in Table 4-2. It is clear that the levels detected at MCC are similar to or even less than background values from New Jersey. This demonstrates that the chromium levels at MCC are a result of background concentrations and not due to historical DOD activities or sources. Therefore, chromium concentrations in soil were not considered in the comparisons discussed in Section 4.2.

Arsenic

The NJDEP background level for arsenic is 19 mg/kg and is based on a 95th percentile concentration of 248 areas that were sampled within New Jersey. This level is the basis of the state residential soil criteria. The maximum observed arsenic level in MCC soils is 19.4 mg/kg (essentially equal to the background level). This indicates that the arsenic levels at MCC are most likely attributable to background levels and not historical DOD activities or sources.

4.1.2 Groundwater

A number of groundwater monitoring wells have been developed and sampled since 1994. These wells include: MW-1, MW-55A/B, MW-68A, MW-69A, MW-72A, MW-73A, MW-74B/C, MW-129, MW-131, MW-132, MW-149, MW-150, MW-151, MW-160, and MW-161 (see Figure 4-4). A subset of these wells has been sampled for VOCs, SVOCs, pesticides, PCBs, explosives, and metals.

4.1.3 Sediment and Surface Water

Sediment and surface water data were not collected from the MCC area due to a lack of permanent streams or waterbodies. Thus, comparisons with standards were not applicable.

4.2 SOIL COMPARISON

For the soil comparisons, the following standards for restricted and unrestricted uses were used: EPA's RSLs (EPA, 2011a) and New Jersey's SRSs (NJDEP, 2009). The industrial soil RSLs and the non-residential SRSs were used for the restricted use comparisons. The residential soil RSLs and the residential SRSs were used for the unrestricted use comparisons.

Figure 2-1 presents the soil sample locations for MCC. The figure presents the soil investigation areas discussed in Section 2 along with the location of removal actions. The sample locations presented do not include any locations that were excavated during the interim response actions. Post-excavation samples are presented, where available. Only laboratory analytical data are presented. XRF, immunoassay, or other field screening data are not presented or compared with screening standards. Appendix B presents the available soil data.

Table 4-3 presents the comparisons of the contaminant levels observed in the MCC soil (0 to 10 ft bgs) to the previously mentioned screening levels. Table 4-3 also presents the following information:

- List of contaminants detected in the soil;
- The range of detected concentrations;
- The location of the maximum concentration;
- The detection frequency;
- The range of limits of quantitation (LOQs);
- The average concentration; and
- The screening levels for restricted and unrestricted uses.

The maximum detected concentration for each detected analyte was compared to the screening standards. The screening standard was shaded on Table 4-3 if the maximum detected concentration exceeded the screening standard. The maximum concentrations for the following analytes exceeded at least one of the screening standards:

PAHs	Pesticides	VOCs	Metals
Benzo(a)anthracene	alpha-Chlordane	Ethylbenzene	Arsenic
Benzo(a)pyrene	gamma-Chlordane	TCE	Chromium
Benzo(b)fluoranthene	4,4-DDE		Vanadium
Benzo(k)fluoranthene	4,4-DDT		
Chrysene	Dieldrin		
Dibenz(a,h)anthracene	Heptachlor epoxide		
Indeno(1,2,3,cd)pyrene			
Naphthalene			

Table 4-4 presents point-by-point comparisons for the analytes whose maximum detected concentration exceeded a screening standard in Table 4-3. Figures 4-1 through 4-3 present the

locations of the screening standard exceedances. The following subsections discuss the magnitude and frequency of the exceedances by analytes.

4.2.1 PAHs

Benzo(a)anthracene – exceeded the unrestricted use (i.e., residential use) screening standards at 20 of 46 locations. Exceedances of unrestricted use standards were observed in a sample collected to the south of the Area W excavation, an Area W test pit sample collected from 9.5 to 10 ft bgs, and two sample locations from Building 118 collected in the vicinity of an asphalt parking lot. A number of exceedances were also found at the High Traffic Area locations, the majority of which were near asphalt walkways or parking lots.

The restricted use (i.e., commercial or industrial use) screening standards were exceeded at one High Traffic Area location (HTA-2). The result from this location is discussed in detail in Section 6.5.4.

Benzo(a)pyrene – exceeded the unrestricted use screening standards at 36 of 46 locations. Unrestricted use exceedances were observed in a sample collected to the south of the Area W excavation and two sample locations at Building 118 collected in the vicinity of an asphalt parking lot. The unrestricted use standards were also exceeded in 33 of 34 High Traffic Area locations

The restricted use screening standards were exceeded in a sample collected from the Area W remediation floor, a sample location at Building 118 collected in the vicinity of an asphalt parking lot, and at 13 High Traffic Area locations.

Benzo(b)fluoranthene – exceeded the unrestricted use screening standards at 26 of 46 locations. Exceedances of unrestricted use standards were observed in a sample collected to the south of the Area W excavation, two sample locations at Building 118 collected in the vicinity of an asphalt parking lot, and at 23 High Traffic Area locations.

The restricted use screening standards were exceeded at one High Traffic Area location (HTA-2). The result from this location is discussed in detail in Section 6.5.4.

Benzo(k)fluoranthene – exceeded the unrestricted use screening standards at one location (HTA-2). The result from this location is discussed in detail in Section 6.5.4. The restricted use screening standards were not exceeded.

Chrysene – exceeded the unrestricted use screening standard from EPA at one location (HTA-2). The result from this location is discussed in detail in Section 3.5.4. The restricted use screening standards were not exceeded.

Dibenz(a,h)anthracene – exceeded the unrestricted use screening standards at 12 of 46 locations. The exceedances of the standards were observed in a sample collected to the south of the Area W excavation, a sample location at Building 118 collected in the vicinity of an asphalt parking lot, and at 10 High Traffic Area locations.

The restricted use screening standards were exceeded at three locations. The exceedances of the standards were observed in a sample collected to the south of the Area W excavation, a sample location at Building 118 collected in the vicinity of an asphalt parking lot, and at one High Traffic Area location (HTA-2).

Indeno(1,2,3-cd)pyrene – exceeded the unrestricted use screening standards at 11 of 46 locations. Exceedances were observed in a sample collected to the south of the Area W excavation, a sample at Building 118 collected in the vicinity of an asphalt parking lot, and at nine High Traffic Area locations.

The restricted use screening standards were exceeded at one High Traffic Area location (HTA-2). The result from this location is discussed in detail in Section 6.5.4.

Naphthalene – exceeded the unrestricted and restricted use screening standards at one of 46 locations. The exceedance was observed in an Area W test pit sample collected from 9.5 to 10 ft bgs.

4.2.2 VOCs

Ethylbenzene – exceeded the EPA restricted use screening standard at one of 32 locations. The exceedance was observed in an Area W test pit sample collected from 9.5 to 10 ft bgs.

TCE – exceeded both the unrestricted and restricted use screening standards at five of 32 locations. Exceedances were observed in samples collected from the Area W remediation floor and sidewalls and in an Area W test pit sample collected from 9.5 to 10 ft bgs. These samples are discussed in Section 6.5.4.

4.2.3 Pesticides

Chlordane (alpha and gamma) – exceeded the NJDEP unrestricted use screening standard at one of 44 locations.

DDT and DDE – exceeded the unrestricted use screening standards at two of 44 locations (HTA-2 and HTA-3). The restricted use standard from EPA was exceeded at HTA-3. Exceedances of DDT are discussed in Section 6.5.4.

Dieldrin – exceeded the unrestricted use screening standards at six of the 44 sampling locations (High Traffic Area locations). The restricted use standards were exceeded at three locations. Exceedances of dieldrin are discussed in Section 6.5.4.

Heptachlor Epoxide – exceeded the unrestricted use screening standards at two of 44 sampling locations (HTA-2 and HTA-27). The restricted use standard from EPA was exceeded at HTA-2.

4.2.4 Metals

Arsenic – slightly exceeded the NJDEP standard for unrestricted and restricted use at one location (HTA-14). The NJDEP standard of 19 mg/kg is based on typical background concentrations of arsenic for New Jersey.

Vanadium – exceeded the unrestricted use screening standards from EPA at all but one of the sample locations. NJDEP standards for vanadium were not exceeded.

4.3 GROUNDWATER COMPARISON

For groundwater comparisons, the Federal Maximum Contaminant Levels (MCLs) and the NJDEP GWQS uses were used. Figure 4-4 presents the monitoring well locations and the wells with exceedances of organic contaminants. Table 4-5 presents the comparisons of the

contaminant levels observed in the groundwater with the screening standards. The concentrations for the following analytes exceeded at least one of the screening standards:

- TCE – exceeded the MCL and the GWQS in the samples collected from a number of wells, including:
  - MW-129: samples collected between 1998 and 2005.
  - MW-131: samples collected between 1999 and 2005.
  - MW-132: one sample collected in December 2000.
  - MW-149: one sample collected in April 2005.
  - MW-160: one sample collected in July 2010.

- Cis-1,2-DCE –exceeded the MCL and the GWQS in four samples collected between August 2000 and April 2005 from MW-131.

- Aluminum – exceeded the GWQS in MW-1 (sample collected 1996).

- Arsenic – exceeded the MCL and GWQS in MW-1 (sample collected 1996).

- Iron – exceeded the GWQS in MW-1 (sample collected 1996).

- Manganese – exceeded the GWQS in MW-1 (sample collected 1996).

5. CONTAMINANT FATE AND TRANSPORT

Neither chemical concentrations nor chemical structures remain constant in the environment. When a chemical is released into the environment, it may be transported, transformed, and/or accumulated in one or more media. This section discusses the processes and various chemical and physical properties that affect the fate and transport of the contaminants detected at the Site.

5.1 CONTAMINANT SOURCES

The primary source of the contaminated media at the former Raritan Arsenal including the MCC Property is the varied military-related operations that occurred between 1916 and 1963. Historical military uses at the site that have contributed to the contamination include its use as an arsenal and weapons storage and handling facility, as well as a number of manufacturing training missions. Since transfer of ownership of the former Raritan Arsenal from the Army to private entities, additional contamination has been introduced from sources outside the historical uses by the Army including, among others, the application of pesticides and herbicides, introduction of fill material into some areas, chemical spills/releases by private enterprises, development of asphalt parking areas and walkways, uncontrolled dumping, and brush fires. It is likely that the observed levels of carcinogenic PAHs (cPAHs) in the MCC Area soils and the resultant risk levels are not from DOD operations or activities but rather from non-DOD sources such as construction of walkways, parking areas, buildings, etc. Another potentially significant source of PAHs is the periodic brush fires that occur in the undeveloped portion of the former Raritan Arsenal. It is difficult to quantify the amount of PAHs deposited from the atmosphere during the burn events but it is not expected to be insignificant as it has been reported that fires occur in the area multiple time per year. The most recent fire occurred on April 10, 2014.

Specifically, the following potential sources of contamination have been identified within the MCC area:

- Area 17 and 17A – Area 17 is a 2-acre area that was reportedly used as a salvage yard for ammunition de-priming, renovation, and other salvage operations. Area 17A is a 0.5-acre area reportedly used as a burning ground for the destruction of small arms by non-explosive means. Isolated discoveries of MEC items were also made within Area 17. The source of contaminants within Area 17 and 17A was due to historical

activities at the salvage yard and burn pit. As discussed in Section 2, an interim response action addressed the contamination at Area 17 and 17A.

- Building 118 – Building 118 is the former Raritan Arsenal hospital building. MEC items were discovered in the vicinity to the building. During the MEC investigation, a 112-gallon UST containing leaded gasoline and a 1,500-gallon, No. 2 fuel oil UST were found behind Building 118, and a 1,000 gallon No. 2 fuel oil UST was discovered at Raritan Hall. Contamination within the Building 118 area was due to the presence of, and activities related to, the MEC items and USTs. As discussed in Section 2, an interim response action addressed the contamination at Building 118.

- Areas X, H, and W – Areas X, H, and W were the site of administrative and barracks activities during the operational period of the former Raritan Arsenal. Area W was historically occupied by officers' quarters, barracks, a mess hall, a guard house, an administration building, a recreation building, and open land. There were instances where MEC was discovered within Area W. The presence of crushed, split open, and/or rusted through buried drums and debris were also discovered in Area W. Areas H and X were historically occupied by officers' quarters, barracks, a mess hall, a guard house, an administration building, a recreation building, and open land. Contamination was due to the presence of MEC, buried drums, and debris discovered in Area W. As discussed in Section 2, an interim response action addressed the contamination in Area W.

- High Traffic Areas – An evaluation of MCC campus locations with high traffic activities (e.g., walkways) was conducted in order to determine if any contaminants existed on the site that could impact the health of site users. The data collected from the High Traffic Areas were evaluated in the HHRA performed for the MCC Area (Section 6).

- PCB Transformer Area – PCB contamination was discovered during investigation activities which were conducted due to the presence of numerous out-of-service electrical transformers and switches remaining from Army operation. As discussed in Section 2.6, a response action addressed the locations of the PCB transformers.

5.2 MIGRATION PATHWAYS

The potential contaminant migration pathways include the following:

- Storm water/surface water runoff releasing and transporting contaminants in soil to other areas on-site via site drainage;

- Wind erosion/volatilization releasing COPCs from soil;

- Leaching of contaminants present in soil to groundwater; and

- Migration of volatile compounds from groundwater into buildings (vapor intrusion).

5.3 ENVIRONMENTAL FATE AND TRANSPORT

The environmental fate and transport characteristics of the contaminants in the MCC Property are described herein. Organic contaminants detected in soil above the EPA RSLs or NJDEP SRSs for restricted (i.e., industrial) and unrestricted (i.e., residential) use included PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3,cd)pyrene, and naphthalene), pesticides (alpha-chlordane, gamma-chlordane, 4,4-DDE, 4,4-DDT, dieldrin, and heptachlor epoxide), and VOCs (ethylbenzene and TCE). PAHs and chlorinated pesticides are resistant to degradation and would be expected to be persistent.

Organics detected in groundwater above the Federal MCLs and the NJDEP GWQS uses included TCE and cis-1,2-DCE. All of the detected TCE groundwater concentrations exceeded both the MCL and the GWQS. As described in the Draft GWFS (Weston, 2012), biodegradation is a natural biological activity whereby contaminants are degraded. Biological activities fall into two classes; aerobic and anaerobic. Aerobic environments tend to be oxidizing and tend to have a higher capacity for degrading hydrocarbons and low-concentration short-chain chlorinated organic compounds. Anaerobic environments tend to be reducing, and generally have a higher capacity to immobilize contaminants such as metals through reduction reactions and sulfide fixation. Anaerobic environments are also sufficiently reducing to dehalogenate the more highly chlorinated, inert, and environmentally persistent organic compounds. Organic contaminants may also be degraded by abiotic mechanisms, including hydrolysis, dehydrohalogenation, and reduction. These mechanisms are typically much slower than biodegradation rates.. As described in the Natural Attenuation Report (Weston, 2003), the following lines of evidence demonstrate that natural attenuation has occurred and is occurring within groundwater AOC 10 and elsewhere with the Former Raritan Arsenal: DCE and methane (breakdown products of TCE) are present in the source area, decreasing VOC concentrations in the source area, decreasing TCE concentrations in the AOC 10 plume, increasing cis-1,2-DCE concentrations corresponding to decreasing TCE in MW-131 (downgradient well), and no VOC present in sentinel wells. The Draft GWFS (Weston, 2012) further supports that natural attenuation has occurred and is occurring within groundwater AOC 10.

Inorganics detected in soil above the EPA RSLs or NJDEP's SRSs for restricted and unrestricted use included arsenic, chromium, and vanadium. Inorganics detected in groundwater above the Federal MCLs and the NJDEP GWQS uses included aluminum, arsenic, iron, and manganese. The mobility of metals in soil depends on many factors including soil type, oxidizing/reducing conditions, pH, and organic content. Metals do not degrade, but may be subject to various reactions (e.g., complexing or precipitation that can alter their properties.

Of the three inorganic compounds detected in soil that exceeded their respective EPA RSLs or NJDEP's SRSs use criteria, arsenic had one detected concentration in groundwater that exceeded the MCL and GWQS. Chromium detected concentrations were all below the MCL and GWQS, and vanadium was not detected in groundwater.

The fate and transport of principal site contaminants is described below.

- Migration of contaminants to sediment and surface water data is unlikely due to the lack of permanent streams or waterbodies in the MCC Property.
- Concentrations of PAHs, pesticides, and metals are present in soil with the majority of the concentrations in the High Traffic Areas. Concentrations of VOCs were also present in soil but were limited to Area W. Although not a concern for PAHs, pesticides, and metals, there is the potential for VOCs in Area W to leach to the groundwater.
- Only two VOCs (cis-1,2-DCE and TCE) and four metals (aluminum, arsenic, iron, and manganese) are present at elevated levels in the groundwater. Potential migration of soil contaminants to groundwater is therefore not likely a significant pathway of concern.
- There is a concern for the vapor intrusion pathway due to the presence of VOCs in the AOC 10 plume. There is currently one structure located above AOC 10. The potential vapor intrusion pathway is being evaluated as a separate OU.

6. HUMAN HEALTH RISK ASSESSMENT

6.1 INTRODUCTION

The HHRA evaluates the contamination present in site soil, sediment, and surface water in order to estimate the potential risks (cancer and noncancer) associated with human contact with these media at the MCC Property. When determining potential exposures to evaluate, consideration was given to the current and reasonably anticipated future uses of the site. The HHRA was conducted in accordance with the guidance under CERCLA. Published guidance from the USACE and the NJDEP were also considered.

A HHRA serves multiple roles in the CERCLA decision-making process, including:

- Estimating the potential risks to exposed individuals if no actions are taken (i.e., baseline conditions);
- Assisting in determining the need for remedial action; and
- Providing a basis for determining cleanup goals.

Because the site is being investigated and remediated under the DERP-FUDS program, the remedial investigations including the assessment of human health risks were conducted in accordance with CERCLA. The USACE has sought the services of NJDEP through a Defense Services Memorandum of Agreement (DSMOA), under which the state supports the regulatory framework established under DERP.

The HHRA was conducted to determine the extent to which soil may require action under CERCLA. This approach is consistent with how USACE conducts remedial investigations under CERCLA nationwide, and is required by federal regulations.

The HHRA was based on EPA and USACE guidance and methods, site-specific information, and NJDEP guidance including:

- EPA Risk Assessment Guidance for Superfund (RAGS), Volume I;
    1. Human Health Evaluation Manual, Part A (EPA, 1989).

2. Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment (EPA, 2004).

3. Human Health Evaluation Manual, Part F, Supplemental Guidance for Inhalation Risk Assessment (EPA, 2009).

- EPA Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors" (EPA, 1991);
- EPA Exposure Factors Handbook (EPA, 1997);
- EPA Supplemental Guidance for Developing Soil Screening Levels (EPA, 2002a);
- EPA Child Exposure Factors Handbook (EPA, 2002b);
- EPA Regional Screening Levels (EPA, 2011a);
- EPA ProUCL software (EPA, 2011b);
- Other relevant EPA risk assessment guidance;
- USACE's Risk Assessment Handbook, Volume I: Human Health Evaluation (USACE, 1999);
- NJDEP Soil Remediation Standards – Ingestion and Dermal Exposure Pathway – Basis and Background (NJDEP, 2008a); and
- NJDEP Soil Remediation Standards – Inhalation Exposure Pathway – Basis and Background (NJDEP, 2008b).

The HHRA presented in this section is an update to the original HHRA completed for the former Raritan Arsenal (Watermark, 2009). The technical approach followed during the performance of this updated HHRA is described in the Final Work Plan – Human Health Risk Assessment – Former Raritan Arsenal (Watermark, 2007) with modifications to reflect recent risk assessment guidance.

6.2 HAZARD IDENTIFICATION

The hazard identification presents the data available to assess site risks, evaluates the usability of the data, outlines the approach used to summarize the data, and identifies the contaminants of potential concern (COPCs). The hazard identification process involves the following tasks:

- Review of the previous site investigations and available data;

- Identification of the media of potential concern;
- Summarization of the data to be used in the HHRA;
- Evaluation of the data usability;
- Establishment of the guidelines for data reduction;
- Evaluation of the data for use in the risk assessment; and
- COPC selection process.

The following subsections describe each of these tasks in greater detail.

6.2.1 Groundwater

As mentioned in Section 1, contamination issues associated with groundwater and the vapor intrusion pathway are being evaluated as a separate OU under a separate task order contract. This section discusses the groundwater in general terms. There is currently no use of groundwater on site. All buildings are connected to municipal water. Groundwater is not expected to be used in the future because new buildings will connect to municipal water. Additionally, the CEA and WRA are in place for portions of the former Raritan Arsenal. The CEA encompasses the portions of the former Raritan Arsenal where groundwater is contaminated as a result of DOD activities. Most of the MCC property is not included in the CEA. The only portion of the MCC property impacted by the CEA is the AOC 10 plume, which includes Area 17A and parts of Area X, H, and W.

As described in Section 2.9, MNA was recommended for groundwater AOC 10. This was recommended because the source area was remediated and residual contamination remained below the water table. As demonstrated through the historic permanent well locations and the available well data, MNA has been documented for the AOC 10 plume (Weston, 2003 and 2012). The source and plume wells were sampled during Weston's 2005 sampling event. TCE results from this event support the documented decreasing trend of TCE at these wells.

6.2.2 Media of Potential Concern

Based on the previous investigations performed at the former Raritan Arsenal, a site visit to the area, and the current and reasonably anticipated future uses, exposure to contaminated soil is of potential concern to human receptors at MCC. The sediment data collected from the drainage

ditches within MCC were treated as soil for the HHRA. Discussions with individuals that have knowledge of site conditions along with observations made during a visit to the area indicate that water flows through the drainageways only during and immediately following heavy rainfall or snowmelt. During periods without precipitation, the ditches are dry. Therefore, the ditches were treated as a soil exposure scenario in this HHRA.

6.2.3 Data Used in the Risk Assessment

Section 2 presents an overview of all of the data that have been collected during multiple investigations of the former Raritan Arsenal site. The data from five past investigations were available and included in the HHRA. These included:

- *Surface Soil Sampling for High Traffic Areas at Middlesex County College* (Weston, 1994c);
- *Final Report of Investigation, Building 118 and Areas X, H, and W* (Weston, 1996b);
- *Supplemental Report of Investigation, Areas 2, 3, 7, 9, 11, 16, 18A, 19, Inland Containers, and W Investigations* (Weston, 1999);
- *Final Remedial Action Report, Remedial Construction – Areas 11, 12, 18A, 18C, and W* (Weston, 2002a); and
- *Discharge Confirmation Report, Case No. 04-05-27-1349-40* (USACE, 2004).

Soil data from areas that were excavated during removal actions were not used in the HHRA. Soil data from other sources that were of unknown quality or data that were not available electronically were not used in the HHRA. Post-excavation confirmatory samples that were laboratory-analyzed and of known quality were used in the HHRA.

In general, the samples collected at the former Raritan Arsenal have been analyzed for the following constituents: VOCs, SVOCs, explosives, PAHs, pesticides, PCBs, metals, and cyanide.

As described in Section 2, a number of interim response actions have already taken place at MCC. Areas that were successfully remediated based on confirmation samples were not evaluated as part of the HHRA.

6.2.4 Guidelines for Data Reduction

The following guidelines for data reduction were used to produce the data summaries for each medium. These approaches are consistent with EPA RAGS (EPA, 1989).

- If an analyte was not positively identified in any sample for a given medium because it is reported as a nondetect (indicated by a "U" qualifier), because it was present as a result of blank contamination (indicated by a "B" qualifier for organics), because it was identified as a tentatively identified compound (TIC) (indicated by a "N" qualifier for organics), or because it was rejected (indicated by an "R" qualifier), it was not addressed for that medium;

- Analytical results with a "U" qualifier data represent nondetect samples for the analyte evaluated. Section 6.3.2 discusses how nondetect samples were used in the calculations of the 95 percent upper-confidence limits (95% UCL). The same approach was used for organic results with a "B" qualifier ; and

- If a sample duplicate was collected and analyzed, the average of the two reported concentrations was used for subsequent calculations unless there is a greater than 50% difference, in which case the higher of the two concentrations was used. In the case of a detected sample and a nondetect duplicate, the detected concentration was carried through subsequent calculations.

6.2.5 Data Evaluation

The objective of the data evaluation is to summarize the data for use in the risk assessment. Summary tables have been prepared and present the following information:

- List of analytes detected;
- Range of detected concentrations;
- Location of maximum detected concentration;
- Frequency of detection;
- Range of LOQs; and
- Arithmetic mean.

The following data groupings were used to evaluate the site soil data. These data groupings are based on the known and anticipated uses of MCC. Summaries for two soil data groupings were presented: one for the surface soil (0 to 2 ft bgs) and one for the surface/subsurface soil (0 to 10 ft bgs), hereafter termed the "aggregate soil". The surface soil data were used to evaluate the receptors that are not expected to contact soil at depth, while the aggregate soil data (0 to 10 ft

bgs) were used to evaluate those receptors that are likely to contact the soil beneath the surface as part of normal work activities (i.e., construction and utility workers), and future receptors (i.e., future residents) that may contact the aggregate soil as a result of soil mixing that is likely to occur during construction activities.

Tables 6-1 and 6-2 present the data summaries for the surface and aggregate soil at MCC, respectively. Detected analytes include VOCs, SVOCs, PAHs, one PCB (Aroclor 1254 in aggregate only), pesticides, metals, and cyanide.

6.2.6 Selection of Contaminants of Potential Concern (COPCs)

A COPC selection process was conducted to identify a subset of analytes that were detected in the soil at levels that could pose a potential risk to exposed human receptors. The criteria that were used to determine COPCs include:

- Non-detection – If an analyte was not detected in any samples, it was not evaluated as a COPC.
- A comparison of maximum detected concentrations to risk-based criteria – If the maximum detected concentration for a given analyte was greater than its EPA Regional Screening Level (RSL) (EPA, 2011a) or NJDEP SRS (NJDEP, 2008a) for residential soil exposure, it was identified as a COPC. When an analyte did not have a screening criterion available, a suitable surrogate analyte was identified and the screening value for the surrogate analyte was used in the COPC selection process. The analytes for which surrogate screening values were used are noted on the COPC screening tables. There were cases where a suitable surrogate could not be identified for an analyte and a comparison to screening criteria could not be performed. These analytes were not carried forward in the risk assessment. Per CERCLA guidance for selecting COPCs, the RSLs based on noncancer health effects were adjusted to reflect a target hazard quotient (THQ) of 0.1 (the published values are set at a THQ of one) to account for potential additivity or cumulative effects of multiple contaminants on similar organs. The published NJDEP SRSs values were used for the comparisons (i.e., no adjustments were made). A target risk (TR) for cancer based criteria of one-in-a-million (expressed as 1E-06) was used. In cases where an analyte has both a cancer and noncancer screening value, the lower (i.e., more stringent) of the two values was used for screening.
- Certain metals detected in the MCC soil may be naturally occurring. While a comparison to background concentrations is not a criterion for selecting COPCs, it can be useful in determining the degree to which the on-site metals concentrations are similar to naturally occurring levels. Numerical comparisons are usually performed

to accomplish this and may consist of comparisons of the site and background maximum detected concentrations and arithmetic means.

Metals (i.e., calcium, iron, magnesium, potassium, and sodium) considered to be essential nutrients to human health were eliminated from consideration as COPCs.

Tables 6-1 and 6-2 present the COPC selection process for the analytes that were detected in the surface and aggregate soil at MCC, respectively. The maximum detected concentrations in surface soil for a number of analytes exceeded the residential soil screening criteria including PAHs, pesticides, and metals. In the aggregate soil, the maximum detected concentrations for a number of analytes exceeded the residential soil screening criteria including the analytes listed above from the surface soil plus ethylbenzene and TCE.

6.3 EXPOSURE ASSESSMENT

The exposure assessment characterizes the nature, extent, and magnitude of potential exposure of human receptors to COPCs considering the current and the reasonably anticipated future uses of MCC. The exposure assessment involves several elements, including:

- Evaluating the exposure setting, which includes describing the local land and water uses and identifying the potentially exposed human populations;
- Developing a conceptual site model (CSM), which includes describing the source of contamination, the transport and release mechanisms, the exposure media, the exposure routes, and the potentially exposed populations;
- Calculating the exposure point concentrations (EPCs) for each COPC for each of the exposure scenarios and routes of exposure;
- Identifying the exposure models and parameters that were used to calculate the exposure doses; and
- Calculating the exposure doses for both cancer and noncancer effects.

Doses and risks were estimated based on the reasonable maximum exposure (RME). The RME is a high-end description of risk defined by EPA guidance (1992) as:

"… a plausible estimate of the individual risk for those persons at the upper end of the risk distribution. The intent of this description is to convey an estimate of risk in the upper range of the distribution, but to avoid estimates which are beyond the true distribution."

In addition, the central tendency exposure (CTE) was evaluated. The CTE represents the exposure which is based on average exposure parameters to calculate an average exposure dose and risk to an individual.

6.3.1 Conceptual Site Model (CSM) for Human Exposures

A CSM describes the contaminant source(s), the release and transport mechanisms, the exposure media, the exposure routes, and the potentially exposed human populations. The primary objective of the CSM is to identify the complete and incomplete exposure pathways. A complete pathway has all of the components listed above, whereas an incomplete pathway is missing one or more. Figure 6-1 presents the CSM for MCC. Each element of the CSM is described in detail in the following sections.

6.3.1.1 Source of Contamination

The primary source of the contaminated media at the former Raritan Arsenal including the MCC area is the varied military-related operations that occurred between 1916 and 1963. Historical military uses at the site that may have contributed to the contamination include its use as an arsenal and weapons storage and handling facility, as well as a number of manufacturing and troop training missions. Since transfer of ownership of the former Raritan Arsenal from the Army to private entities, additional contamination has been introduced to the site from sources outside the historical uses by the Army including, among others, the application of pesticides and herbicides, introduction of fill material into some areas, chemical spills/releases by private enterprises, uncontrolled dumping, and brush fires.

6.3.1.2 Release and Transport Mechanisms

There are three primary mechanisms that can release and transport COPCs at the site: surface water runoff, wind erosion/volatilization, and leaching into groundwater. Surface water runoff occurs during precipitation events when COPCs in the soil are released and transported to other areas on site via site drainage. Wind erosion can play a role in releasing COPCs from soil. This is primarily related to areas with less than 50 percent (50%) vegetative cover and where activities such as heavy truck traffic on unpaved roads and other construction-related activity are occurring (EPA, 2002a). While the fully developed areas are unlikely to experience significant wind

erosion, dust emissions may be an important route of exposure at the undeveloped areas given the potential for future construction activities. It is also possible that VOCs present in the soil can volatilize and be inhaled.

As noted previously, leaching to groundwater and the subsequent groundwater contamination has been evaluated separately and are not the focus of this risk assessment.

6.3.1.3 Exposure Media and Routes of Exposure

The potentially contaminated media include soils, sediments, and surface water.

- Soil – COPCs in soil may be incidentally ingested and absorbed through the skin by exposed human receptors. In addition, dust or VOCs released from the soil into the air would be available for inhalation;
- Sediment – for this HHRA, sediment was treated as soil for MCC; and
- Surface Water – contact with surface water was not quantitatively evaluated in the HHRA. This is based on the limited attractiveness and accessibility, the intermittent nature of the on-site drainage ditches, and the shallow depth of the water when present.

6.3.1.4 Potentially Exposed Populations

Six potentially exposed populations were evaluated for MCC as shown in Figure 6-1:

- **Groundskeeper** – a groundskeeper could be exposed to soils and sediments in the drainage ditch areas at MCC during typical activities such as cutting lawns, landscaping activities, and other tasks that could require contact with surface soils and sediments (which were treated as soil);
- **Construction/Utility Worker** – it is possible that construction activities or utility installation and maintenance activities could expose workers to site soils down to a depth of 10 ft bgs which is the assumed depth required for typical construction activities;
- **Student Recreational User** – this recreational user represents a college student who could contact site soils during any number of recreational activities that could occur at the college;
- **Indoor Worker** – an employee of MCC could come into contact with site soils as part of their typical activities. This exposure would be significantly lower than groundskeeping exposure, as the college worker is assumed to be involved in

administrative and clerical duties that would require him/her to spend the majority of their time at work indoors. Since the duration of exposure for the indoor worker is assumed to be much greater than the length of time an individual student is assumed to attend the college, the indoor worker scenario results in greater exposure than typical student exposure (apart from the recreational use that was evaluated separately);

- **Daycare child** – there is currently a daycare facility located at MCC (see Edison Hall on Figure 2-1). It is assumed that children (1-5 years old) who attend the daycare could be exposed to surface soils during times spent playing outdoors. This is a conservative assumption because a daycare child's movement is limited by a fence around the daycare facility; and

- **Future Residents** – it was conservatively assumed that MCC could be developed for residential purposes in the future. Although this scenario is considered highly unlikely, it was evaluated to estimate the upper-bound of the potential risks.

6.3.2 Exposure Point Concentrations (EPCs)

EPCs are the COPC concentrations that a receptor is assumed to come in contact with at a site assuming that the receptor would randomly visit all areas of the site. The EPC used in most cases was the one-sided 95% UCL of the mean. EPA's ProUCL software program (Version 4.1.00) was used for calculating UCLs in this risk assessment, as this program allows the user to calculate distribution-specific UCLs, as well as UCLs for data that do not exhibit a specific distribution (EPA, 2011b).

The first step in computing a UCL of a population mean is to test for the data distribution. ProUCL tests for normal, lognormal, and gamma distributions. There are a number of procedures to test for data distribution:

- Graphical test based upon a Q-Q plot;
- Lilliefors test (tests for normality or lognormality for data sets with samples sizes greater than or equal to 50);
- Shapiro-Wilk W test (tests for normality or lognormality for data sets with samples sizes less than 50);
- Anderson-Darling test (tests for gamma distribution); and
- Kolmogorov-Smirnov test (tests for gamma distribution).

ProUCL recommends that a graphical Q-Q plot test should always be accompanied by other more powerful tests (i.e., Lilliefors, Shapiro-Wilk, Anderson Darling, and Kolmogorov-Smirnov tests). The Shapiro-Wilk test or the Lilliefors test was run at a 0.05 level of significance in conjunction with the Q-Q plot to test for normality or lognormality. The Anderson Darling and Kolmogorov-Smirnov tests were run to test for gamma distribution at a 0.05 level of significance. If the data set does not fit any of the three distributions tested, then EPA guidance recommends nonparametric approaches for estimating sample statistics.

The list below presents the process for determining the EPCs.

- If between 3 and 8 samples were collected within a data grouping, the EPC is the 75th percentile. Full detection limits are used as values for the non-detected samples in these small data sets.
- If 8 or more samples were collected within a data grouping, but the data set contains fewer than 4 detects, the EPC is based on an ad-hoc value, i.e., the 75th percentile. As for small data sets, full detection limits are used as values for the non-detected samples.
- If 8 or more samples were collected within a data grouping and the data set contains at least 4 detects, but the data set contains less than 50% detects, a nonparametric-based UCL/EPC is considered. The nonparametric-based value is derived using either Kaplan-Meier (KM) or bootstrapping estimation procedures, unless there are fewer than 10 detects. If there are fewer than 10 detects, the bootstrapping estimates are not considered.
- If 8 or more samples were collected within a data grouping and the data set contains at least 50% detects, the appropriate distribution of the data set are determined and UCLs/EPCs are selected as guided by the ProUCL supporting documentation. If the recommended UCL exceeds the maximum detected concentration, a Chebyshev-based UCL is selected as the EPC if possible. If the Chebyshev-based UCL is still higher than maximum detected concentration, the maximum concentration is selected as the EPC.

Tables 6-3 and 6-4 present the EPCs used in the HHRA.

EPA guidance recommends that an outlier analysis should be conducted because outliers (samples with abnormally high or low concentrations) tend to distort most parametric statistics and have been known to have an impact (although somewhat lesser) on nonparametric statistics based on ranks. Outlier analyses were conducted for those COPCs that either directly resulted in

unacceptable levels of risk (cancer or noncancer) or were significant contributors to total cancer risks or noncancer hazard indices that exceeded the applicable regulatory risk levels. Section 6.5.4 describes the outlier analyses and the potential impact on the overall risk estimates.

EPA's ProUCL software program (Version 4.1.00) provides two procedures for identifying outliers: 1) the Dixon test, and 2) the Rosner test. The results of the outlier analysis were reviewed and the 95% UCLs were re-calculated with the outliers removed from the data set. The potential impacts on the site risks from the presence of any outliers were qualitatively and semi-quantitatively evaluated (Section 6.5.4).

6.3.3 Exposure Equations and Parameters

This section presents the equations and parameters that were used to estimate the chronic daily intakes (CDIs; exposure doses) of the COPCs for each receptor through the applicable exposure pathways. Many of the exposure parameters that were used are standard values recommended by EPA and are presented and discussed in the subsections that follow. Where a standard value cannot be obtained or is not appropriate, site-specific information and professional judgment was used. The text and exposure equation tables in the following sections show the exposure assessment input assumptions.

Exposure doses are dependent upon the magnitude, frequency, and duration of exposure. They are estimated by combining the COPC concentration (i.e., the EPC) and the exposure parameters. The exposure doses are expressed as intakes in milligrams of COPC per kilogram of body weight per day (mg/kg-day). Two types of doses were calculated in this risk assessment. The first, the lifetime average daily dose (LADD), which is averaged over a 70-year lifetime, was used to estimate cancer risk. The second, the average daily dose (ADD), which is averaged over the actual exposure duration for each receptor, was used to estimate noncancer health effects.

The following list presents the exposure parameters that were used to estimate COPC intakes. Tables 6-5 through 6-22 present the parameters listed below for the exposure scenarios evaluated in the HHRA.

- Exposure frequency (EF) – represents the number of days per year (days/year) that a human receptor is engaged in a particular activity that could result in exposure;

- Exposure duration (ED) – represents the total length of time in years that a receptor engages in an activity that could result in exposure;

- Exposure time (ET) – represents the number of hours per day (hr/day) that a receptor engages in an activity that could result in exposure;

- Body weight (BW) – represents the average receptor body weight over the exposure period, expressed in kilograms (kg);

- Averaging time (AT) – represents the period over which exposure is averaged, expressed in days. Averaging time is dependent on the type of evaluation: cancer or noncancer. The cancer AT (AT_c) is based on a 70-year lifetime for all age groups, which equals 25,550 days (i.e., 70 years x 365 days/year). The noncancer AT (AT_{nc}) equals the receptor-specific ED multiplied by 365 days/year;

- Soil ingestion rate (IRS) – represents the amount of soil that is incidentally ingested on a daily basis, expressed in units of milligram per day (mg/day);

- Fraction ingested (FI) – a unitless term that represents the fraction of soil that is ingested from the contaminated source;

- Exposed skin surface area (SA) – represents the amount of skin exposed to contaminated soil, expressed in units of square centimeters per day (cm^2/day);

- Soil-to-skin adherence factor (AF) – describes the amount of soil that adheres to the skin per surface area unit, expressed as milligrams per square centimeter (mg/cm^2);

- Dermal absorption factor (ABS) – a unitless, COPC-specific term that represents the fraction of COPC that is assumed to penetrate the skin after dermal exposure with contaminated soils. The ABS factors were obtained from EPA's dermal risk assessment guidance (EPA, 2004). Table 6-5 presents the ABS values for the COPCs;

- Particulate emission factor (PEF) – a site-specific value that relates the concentration of a COPC in soil to the concentration of dust particles in air, expressed as cubic meters per kilogram (m^3/kg). Airborne dust levels were modeled based on wind erosion and truck traffic on unpaved roads. Tables 6-8 and 6-7 present the PEFs that were used in the HHRA; and

- Volatilization factor (VF) – a COPC- and site-specific value that relates the concentration of a volatile COPC in soil to the concentration of in air, expressed as m^3/kg. Tables 6-8 through 6-10 present the VFs that were used in the HHRA.

To ensure that risk estimates are conservative and protective of human health, intakes based on a combination of upper-end, typically the upper 90th or 95th percentile, and average exposure factors termed the RME, were calculated (EPA, 1992). The CTE risks provide additional insight into the degree of uncertainty associated with the conservative risk estimates by using average or 50th percentile exposure factors, where appropriate. Exposure factors for both the RME and CTE scenarios are presented in the following sections and accompanying tables.

6.3.3.1 Groundskeeper

Groundskeepers could be exposed to soil COPCs while performing routine activities at MCC, such as mowing lawns, grounds upkeep and maintenance, and working in and along the drainage ditches. It is assumed that the groundskeeper exposure is occurring at the present time and will continue to occur in the future. It is assumed that the groundskeepers are exposed to surface soil (0 to 2 ft bgs). Soil exposure pathways evaluated include incidental ingestion, dermal contact, inhalation of dust emissions, and inhalation of VOCs released from soil. Tables 6-11 and 6-12 present the exposure parameters and models that were used to estimate groundskeeper exposure to soil.

The outdoor worker EF of 225 days/year was used for the RME (EPA, 2002a). For the CTE, an EF of about half of the RME was used (110 days/year). The default worker ED of 25 years was used for the RME (EPA, 2002a). For the CTE, an ED approximately half of the RME value was used (12 years). The AT_{nc} is 9,125 days and 4,380 days for the RME and CTE, respectively. The adult BW is 70 kg (EPA, 1997). The IRS for an outdoor worker of 100 mg/day was used for the RME (EPA, 2002a). The IRS for an indoor worker of 50 mg/day was used for the CTE (EPA, 2002a). A value of 1.0 was used for the RME FI, indicating that 100% of ingested soil is assumed to come from the site. The FI was reduced by 50% for the CTE evaluation.

The SA was 3,300 cm^2/day (equating to the 50th percentile values for head, forearms, and hands) (EPA, 2004) and applies to both the RME and CTE. The geometric mean AF value for the utility worker/heavy equipment operator of 0.2 mg/cm^2 was used for the RME (EPA, 2004). For the CTE, the geometric mean AF for the commercial/industrial groundskeeper of 0.02 mg/cm^2

was used (EPA, 2004). Inhalation exposure was assumed to be 8 hours/day for the RME and 4 hours/day for the CTE.

6.3.3.2 Construction/Utility Worker

Given the potential for construction activities and utility work at MCC, a worker scenario that combines the exposure from construction and utility activities was evaluated. The construction worker is assumed to be a worker who is involved with the construction of new buildings or other structures. The utility worker is involved in the installation and maintenance of utility lines. It is assumed that the construction and utility related work are both soil intensive activities that last for a short duration. Therefore, a single exposure scenario was modeled to estimate exposure to both receptors. It is assumed that the construction/utility worker exposure is occurring at the present time and will continue in the future. The construction/utility worker is assumed to be exposed to soil to a depth of 10 ft bgs. Exposure pathways evaluated for this worker scenario include incidental soil ingestion, dermal contact with soil, inhalation of dust emissions, and inhalation of VOCs released from soil. Tables 6-13 and 6-14 present the exposure parameters and models that were used to estimate construction/utility worker exposure to soil.

Construction and utility work related activities likely result in a high level of soil contact for an assumed period of three months. The RME EF for the construction/utility worker was 60 days/year, which equates to exposure 5 days a week for 12 weeks. For the CTE, a value of one-half of the RME was used (30 day/year). An ED of one year was used for the RME and CTE. The AT_{nc} is 365 days/year for the RME and CTE. The adult BW is 70 kg (EPA, 1997). The IRS value for construction workers of 330 mg/day was used for the RME (EPA, 2002a). The ingestion rate for other outdoor workers (100 mg/day) was used for the CTE (EPA, 2002a). A value of 1.0 was used for the RME FI, indicating that 100% of ingested soil is from the site. The FI was reduced to 50% for the CTE evaluation.

The exposed SA was 3,300 cm^2/day (equating to the 50th percentile values for head, forearms, and hands) (EPA, 2004) and applied to both the RME and CTE. The 95th percentile soil-to-skin AF value for construction workers of 0.3 mg/cm^2 was used for the RME (EPA, 2004). For the

CTE, the geometric mean AF for construction workers of 0.1 mg/cm^2 was used (EPA, 2004). Inhalation exposure was assumed to be 8 hours/day for the RME and 4 hours/day for the CTE.

6.3.3.3 Indoor Worker

An indoor worker was evaluated based on the office use at MCC. Employees are assumed to spend the majority of the work day indoors with exposure to COPCs through incidental ingestion of surface soils that have become entrained in indoor dust, and inhalation of airborne COPCs as a result of wind erosion and volatilization, as their primary exposure routes. EPA suggests that indoor workers have no direct contact with soil (EPA, 2002a). Therefore, the dermal contact pathway was not evaluated. Tables 6-15 and 6-16 present the exposure parameters and models that were used to estimate indoor worker exposure to soil.

The indoor worker EF of 250 days/year was used for the RME (EPA, 2002a). For the CTE, an EF of half of the RME was used (125 days/year). The default worker ED of 25 years was used for the RME (EPA, 2002a). For the CTE, an ED approximately half of the RME value was used (12 years). The AT_{nc} is 9,125 days and 4,380 days for the RME and CTE, respectively. The adult BW is 70 kg (EPA, 1997). The IRS for an indoor worker of 50 mg/day was used for the RME (EPA, 2002a). An IRS of half of the RME value was used for the CTE (25 mg/day). A value of 1.0 was used for the RME FI. The FI was reduced to 50% for the CTE evaluation. Inhalation exposure was assumed to be 8 hours/day for the RME and 4 hours/day for the CTE.

6.3.3.4 Student Recreational Users

The MCC Property contains attractive recreational venues including soccer fields, baseball fields, walking paths, and picnic areas, etc., that are currently used by individuals who engage in recreational activities. This use is expected to continue into the future. Recreational exposure to surface soil (0-2 ft bgs) was evaluated. Evaluated exposure pathways include incidental soil ingestion, dermal contact and absorption, and inhalation of COPCs released from the soil. Tables 6-17 and 6-18 present the exposure parameters and models that were used to estimate student recreational user exposure to soil.

The student recreational user was assumed to be exposed for the 8 months of the year when the ground is not frozen or snow-covered (i.e., April through November). During these months, exposure is assumed to occur 3 days/week (assume 4.33 weeks per month). This equates to an exposure frequency of 104 days/year for the RME. A value of one-half of the RME values was used for the CTE (52 days/year). An ED of 4 years was used for the RME. This is a conservative assumption given the fact that the MCC is a two-year college. An ED of 2 years was used for the CTE. The student body weight was assumed to be 70 kg (EPA, 1997). The AT_{nc} is 1,460 days and 730 days for the RME and CTE, respectively.

The soil ingestion rate was 100 mg/day for the RME. This value represents the ingestion rate conventionally used for adult residential exposure. The IRS for an indoor worker was used for the CTE (50 mg/day). The RME FI was set at 0.5 to reflect the likelihood that approximately 50% of the daily ingested amount of soil is actually from the MCC area. The CTE FI was set at 0.25.

The SA was assumed to be 5,700 cm^2 (head, hands, forearms and lower legs). This value is consistent with residential exposure and was used for the RME and CTE. For the RME, geometric mean soil-to-skin AF of 0.07 mg/cm^2 (residential gardeners) was used (EPA, 2004). The AF for the CTE was the geometric mean value for the adult soccer player (0.01 mg/cm^2) (EPA, 2004). Inhalation exposure was assumed to be 4 hours/day for the RME and 2 hours/day for the CTE.

6.3.3.5 Daycare Child

A daycare child exposure scenario was evaluated at MCC because these receptors are currently present at MCC although not in areas with contaminated soil that could be accessible to children. However, for the purposes of the HHRA, it was conservatively assumed that children attending a daycare facility at MCC would contact contaminated soil. Exposure pathways evaluated include incidental soil ingestion, dermal contact with soil, inhalation of outdoor dust, and inhalation of VOCs in soil. Tables 6-19 and 6-20 present the exposure parameters and models that were used to estimate the daycare child exposure to soil.

An EF of 250 days/year was used for the RME. This is based on the assumption that the child attends day care for 5 days a week for 50 weeks of the year. It is assumed that two weeks are spent away on vacation. For the CTE, an EF of 125 days/year was used. The child is assumed to be at daycare and exposed to soil from 1 to 5 years of age. Thus, an ED of 5 years was used for the RME and CTE. The AT_{nc} is 1,825 days for the RME and CTE.

The child BW is 15 kg (EPA, 1997). For the RME, the IRS for the child was 200 mg/day (EPA, 2002a). The CTE IRS estimate was 100 mg/day (EPA, 1997). A value of 0.5 was used for the RME FI based on the assumption that 50% of ingested soil is from the site. The FI was reduced to 25% for the CTE estimate.

For dermal contact, the recommended values for residential exposure that are presented in EPA guidance were used (EPA, 2004). The exposed SA was 2,800 cm^2/day for both the RME and CTE (EPA, 2004). For the RME, the geometric mean soil-to-skin AF of 0.2 mg/cm^2 (children playing in wet soil) was used (EPA, 2004). For the CTE, a geometric mean AF of 0.04 mg/cm^2 (children playing in dry soil) was used (EPA, 2004). Inhalation exposure was assumed to be 8 hours/day for the RME and 4 hours/day for the CTE.

6.3.3.6 Future Residents

Residential development is unlikely at MCC given the current and likely future land use at the site and the nature of the site activities and surroundings. However, a future residential scenario was evaluated to determine an upper-bound on the level of risks posed by the site. It is assumed that residents could contact aggregate soil as a result of mixing that is expected to occur during construction activities. Exposure pathways evaluated include incidental soil ingestion, dermal contact with soil, inhalation of outdoor dust, and inhalation of VOCs in soil. Tables 6-21 and 6-22 present the exposure parameters and models that were used to estimate the residential exposure to soil.

For soil exposure, an EF of 350 days/year was used for both the RME and CTE (EPA, 2002a). An ED of 30 years (24 years as an adult and 6 years as a child) was used for the RME (EPA, 2002a). For the CTE, an ED of 15 years (9 years as an adult and 6 years as a child) was used (EPA, 1997). The AT_{nc} for the RME for the child and adult are 2,190 days and 8,760 days,

respectively. The AT_{nc} for the CTE for the child and adult are 2,190 days and 3,285 days, respectively. The child and adult BWs are 15 kg and 70 kg, respectively (EPA, 1997). For the RME, the IRS for the child and adult was 200 mg/day and 100 mg/day, respectively (EPA, 2002a). The CTE IRS estimates were 100 mg/day and 50 mg/day for the child and adult, respectively. A value of 1.0 was used for the RME FI. The FI was reduced to 50% for the CTE estimate.

For dermal contact, the recommended values for residential exposure that are presented in EPA guidance were used (EPA, 2004). The exposed SAs for the child and adult resident of 2,800 cm^2/day and 5,700 cm^2/day were used for both the RME and CTE, respectively (EPA, 2004). For the RME, geometric mean soil-to-skin AFs of 0.2 mg/cm^2 (children playing in wet soil) and 0.07 mg/cm^2 (residential gardeners) were used for the child and adult, respectively (EPA, 2004). For the CTE, geometric mean AFs of 0.04 mg/cm^2 (children playing in dry soil) and 0.01 mg/cm^2 (residential gardeners) were used for the child and adult, respectively (EPA, 2004).

6.4 TOXICITY ASSESSMENT

The toxicity assessment identifies the toxicity values for the COPCs used in the estimation of potential cancer risks and noncancer health effects. It also provides a description of the terms that are used to estimate toxic effects (i.e., cancer and noncancer effects) along with the data sources. Summary tables are included that present the toxicity values for each COPC (Tables 6-23 through 6-26).

6.4.1 Cancer Effects

For cancer effects, the toxicity values are expressed as oral cancer slope factors (CSF) in units of milligrams of COPC per kilogram of body weight per day $(mg/kg\text{-}day)^{-1}$ or as inhalation unit risk factors (URF) in units of micrograms of COPC per cubic meter $(\mu g/m^3)^{-1}$. EPA has assigned each contaminant a “weight-of-evidence” category that represents the likelihood of it being a human carcinogen (EPA, 1989). Six weight-of-evidence categories exist:

- A – Human carcinogen;
- B1 – Probable human carcinogen, limited human data are available;

- B2 – Probable human carcinogen, sufficient evidence in animals and inadequate or no evidence in humans;
- C – Possible human carcinogen;
- D – Not classifiable as to human carcinogenicity; and
- E – Evidence of non-carcinogenicity for humans.

As of 2005, EPA revised the weight-of-evidence categories to include the following five cancer hazard descriptors (EPA, 2005):

- Carcinogenic to humans;
- Likely to be carcinogenic to humans;
- Suggestive evidence of carcinogenic potential;
- Inadequate information to assess carcinogenic potential; and
- Not likely to be carcinogenic in humans.

COPCs that are classified in categories A through C following the 1989 weight-of-evidence classification and in the first three categories according to the 2005 classification system are generally carried through the risk characterization step if CSFs have been developed.

For carcinogens that act with a mutagenic mode of action for carcinogenesis, EPA recommends application of Age-Dependent Adjustment Factors (ADAFs) to the CSF to address early lifetime exposures and the increased susceptibility of children to carcinogens (EPA, 2005). Further discussion is provided in Section 6.5.1.

6.4.2 Noncancer Effects

Noncarcinogens refer to contaminants that cause toxic effects other than cancer. Noncancer effects can include, for example, central nervous system damage, reproductive effects, and other systemic effects. For noncancer effects, the toxicity values are expressed as oral reference doses (RfD) in units of mg/kg-day and reference concentrations (RfC) in units of mg/m^3. The premise of noncancer toxicity values is that there is an exposure level below which deleterious noncancer effects are not expected to occur.

6.4.3 Sources of Toxicity Values

When available, CSFs and RfDs were obtained from the following sources in the order presented (EPA, 2003):

- Tier 1 – Integrated Risk Information System (IRIS) (EPA, 2011c);
- Tier 2 – EPA's Provisional Peer Review Toxicity Values (PPRTVs) as summarized on the current version of the RSL table; and
- Tier 3 – Other Toxicity Values summarized on the current version of the RSL table including California EPA (CalEPA) values, Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels (MRLs), and toxicity values developed by various state agencies.

6.4.4 Dermal Exposure

Dermal toxicity values were derived from the oral toxicity values as described in EPA dermal risk assessment guidance (EPA, 2004). In general, the oral CSFs (CSF_o) and oral RfDs (RfD_o) are expressed as administered doses (i.e., the amount of a contaminant administered per unit time and weight). Conversely, exposures resulting from the dermal pathway are expressed as absorbed doses. Therefore, it is necessary to make an adjustment to the oral toxicity value to account for the contaminant-specific absorption efficiency.

The fraction of a COPC that is absorbed in the gastrointestinal tract, also known as ABS_{gi}, is a critical factor when adjusting from an administered to an absorbed dose. The ABS_{GI} values that were used in this risk assessment were obtained from EPA (2004). The CSF_o and RfD_o are each adjusted to an absorbed dose using different methods. The dermal CSF (CSF_d) was derived by dividing the CSF_o by the ABS_{gi} as shown in Equation 6-1.

Equation 6-1

$$CSF_d = \frac{CSF_o}{ABS_{gi}}$$

Where:

CSF_d = Dermal cancer slope factor $(mg/kg\text{-}day)^{-1}$
CSF_o = Oral cancer slope factor $(mg/kg\text{-}day)^{-1}$
ABS_{gi} = Fraction of COPC absorbed in the gastrointestinal tract (unitless).

The dermal reference dose (RfD_d) was derived by multiplying the RfD_o by the ABS_{gi} as shown in Equation 6-2.

Equation 6-2

$$RfD_d = RfD_o \times ABS_{gi}$$

Where:

RfD_d	=	Dermal reference dose (mg/kg-day).
RfD_o	=	Oral reference dose (mg/kg-day).
ABS_{gi}	=	Fraction of COPC absorbed in the gastrointestinal tract (unitless).

6.4.5 Summary of Toxicity Values Used in HHRA

Tables 6-23 through 6-26 present the available toxicity values (oral, dermal, and inhalation) for each COPC, as well as the source, the EPA weight-of evidence category, the route of administration, and the critical effect.

6.5 RISK CHARACTERIZATION

The risk characterization integrates the information developed in the exposure assessment and the toxicity assessment into an evaluation of the potential risks associated with exposure to COPCs. Both cancer risks and noncancer health effects were evaluated for the RME scenarios and CTE scenarios. Cancer risks were calculated for those COPCs with evidence of carcinogenicity and for which cancer toxicity values are available. Noncancer health effects were evaluated for COPCs (i.e., including carcinogens) for which noncancer toxicity values are available.

6.5.1 Cancer Risk

In accordance with EPA policy (EPA, 1989), cancer risk is expressed as the probability that an individual will develop cancer during a 70-year lifetime in excess of the background risk for developing cancer. Therefore, the calculated cancer risks represent the incremental lifetime cancer risk to the specific receptors in excess of the background probability of developing cancer. Cancer risk is expressed in scientific notation as the probable number of cancers

produced by COPC exposure per a defined population number (i.e., 1 in 1,000,000 or 1E-06). The calculated cancer risk is a plausible upper-bound estimate of the true risk.

Potential cancer risks from the ingestion and dermal contact pathways were calculated by multiplying the estimated LADD intake that is calculated for a COPC through an exposure route by the exposure route-specific CSF (see Equation 6-3).

Equation 6-3

$$\text{Risk} = \text{LADD} \times \text{CSF}$$

Where:

LADD	=	Lifetime average daily dose; intake averaged over a 70-year lifetime as mg COPC/kg-body weight per day.
CSF	=	COPC- and route-specific cancer slope factor $(\text{mg/kg-day})^{-1}$.

Potential cancer risks from the inhalation pathway were calculated by multiplying the modeled air concentration (CA) by the URF as shown in Equation 6-4.

Equation 6-4

$$\text{Inhalation Cancer Risk} = \text{CA} \times \text{URF}$$

Where:

CA	=	Modeled air concentration $(\mu g/m^3)$.
URF	=	COPC-specific inhalation unit risk factor $(\mu g/m^3)^{-1}$.

Cancer risks were summed across the relevant pathways for a given receptor and exposure scenario to yield a cumulative lifetime risk. EPA's cancer risk range is an increased risk of developing cancer, based on a plausible upper-bound estimate of risk, of approximately 1 in 1,000,000 (1E-06) to 1 in 10,000 (1E-04). Risks that exceed this range typically require some type of remedial action, while risks within or below this risk range typically do not.

<u>Carcinogens that act with a mutagenic mode of action</u>

For carcinogens that act with a mutagenic mode of action for carcinogenesis, EPA recommends application of ADAFs to the CSF to address early lifetime exposures and the increased susceptibility of children to carcinogens (EPA, 2005). As presented in the RSL Table (EPA, 2011a), the following COPCs exhibit a mutagenic mode of action for carcinogenesis:

Benzo(a)anthracene	Chrysene
Benzo(a)pyrene	Dibenz(a,h)anthracene
Benzo(b)fluoranthene	Indeno(1,2,3-cd)pyrene
Benzo(k)fluoranthene	Chromium (hexavalent form)
	Trichloroethylene

The ADAFs for specific age-groups classes are presented below:

Age (years)	ADAF (unitless)
0 to <2	10
2 to <16	3
≥16	1

Equation 6-5 illustrates how the ADAFs are included in the calculations of risk for carcinogenic PAHs and chromium. Trichloroethylene was evaluated with a different approach and is discussed in further detail below. Section 6.5.3 provides the scenario-specific risk calculation tables.

Equation 6-5

PAHs and Chromium

$$Risk_{moa} = LADD \times CSF \times ADAF$$

Where:

$Risk_{moa}$	=	Age-group specific cancer risk based on COPCs (PAHs and chromium) that exhibit a mutagenic mode of action.
LADD	=	Lifetime average daily dose based on intake parameters specific to the age group evaluated; intake averaged over a 70-year lifetime as mg COPC/kg-body weight per day.
CSF	=	COPC- and route-specific cancer slope factor $(mg/kg\text{-}day)^{-1}$.
ADAF	=	Age group specific Age-Dependent Adjustment Factor.

RME Residential lifetime exposure factors were divided into two age groupings: child – 0 to 6 years and adult – 6 to 30 years. CTE Residential lifetime exposure factors were divided into two age groupings: 6 years as a child – 0 to 6 years and 9 years as an adult – 20 to 29 years. This discontinuous exposure pattern was selected in order to utilize the most conservative ADAFs for

both the child and adult age groups. Potential risk to an individual resident was assessed using the information presented below.

Age (years)	Exposure Factors	Exposure Duration (years)	ADAF (unitless)
0 to <2	Child (RME or CTE)	2	10
2 to <6	Child (RME or CTE)	4	3
6 to <16	Adult (RME)	10	3
20 to <29	Adult (CTE)	9	1
16 to <30	Adult (RME)	14	1

$$\text{Total Risk for RME resident exposures} = \text{Risk}_{0\text{ to }<2} + \text{Risk}_{2\text{ to }<6} + \text{Risk}_{6\text{ to }<16} + \text{Risk}_{16\text{ to }<30}$$

$$\text{Total Risk for CTE resident exposures} = \text{Risk}_{0\text{ to }<2} + \text{Risk}_{2\text{ to }<6} + \text{Risk}_{20\text{ to }<29}$$

Potential risk to a day care child was assessed using the information presented below. The total risk to a day care child is the sum of the risks across applicable age groupings.

Age (years)	Exposure Factors	Exposure Duration (years)	ADAF (unitless)
1 to <2	Child (RME or CTE)	1	10
2 to <6	Child (RME or CTE)	4	3

$$\text{Total Risk for RME and CTE day care child exposures} = \text{Risk}_{0\text{ to }<2} + \text{Risk}_{2\text{ to }<6}$$

Trichloroethylene

As discussed in the IRIS *Trichloroethylene Assessment Summary* (EPA, 2011c), TCE is carcinogenic by a mutagenic mode of action for induction of kidney tumors. There is also more limited evidence for non-Hodgkin lymphoma (NHL) and liver carcinogenicity. In order to account for the mutagenic mode of action for kidney tumors, EPA recommends applying ADAFs when estimating kidney cancer risks from early life exposure to TCE. However, NHL and liver cancer must also be accounted for in the cancer risk estimates. To accommodate all three carcinogenic effects, cancer risks were derived for each age group, including adjusted kidney cancer potency values and unadjusted potency values for liver cancer and NHL.

Equations 6-6 and 6-7 presented below illustrate how the ADAFs are included in the pathway-specific risk calculations for trichloroethylene and how the adjusted kidney and unadjusted liver and NHL CSFs are integrated:

Equation 6-6

$$\text{Ingestion Risk}_{moa} = \text{LADD} \times \text{CSF}_{kidney} \times \text{ADAF} + \text{LADD} \times \text{CSF}_{liver+NHL}$$

Equation 6-7

$$\text{Inhalation Risk}_{moa} = \text{CA} \times \text{URF}_{kidney} \times \text{ADAF} + \text{CA} \times \text{CSF}_{liver+NHL}$$

Where:

Risk_{moa}	=	Age-group specific cancer risk from TCE exposure.
LADD	=	Lifetime average daily dose based on intake parameters specific to the age group evaluated; intake averaged over a 70-year lifetime as mg COPC/kg-body weight per day.
CA	=	Modeled indoor air concentration ($\mu g/m^3$).
CSF	=	TCE end point-specific cancer slope factor $(mg/kg\text{-}day)^{-1}$.
URF	=	TCE end point-specific inhalation unit risk factor $(\mu g/m^3)^{-1}$.
ADAF	=	Age group specific Age-Dependent Adjustment Factor.

RME Residential lifetime exposure factors were divided into two age groupings: child – 0 to 6 years and adult – 6 to 30 years. CTE Residential lifetime exposure factors were divided into two age groupings: 6 years as a child – 0 to 6 years and 9 years as an adult – 20 to 29 years. This discontinuous exposure pattern was selected in order to utilize the most conservative ADAFs for both the child and adult age groups. Potential risk to an individual resident was assessed using the information presented below.

Age (years)	Exposure Factors	Exposure Duration (years)	ADAF (unitless)
0 to <2	Child (RME or CTE)	2	10
2 to <6	Child (RME or CTE)	4	3
6 to <16	Adult (RME)	10	3
20 to <29	Adult (CTE)	9	1

Age (years)	Exposure Factors	Exposure Duration (years)	ADAF (unitless)
16 to <30	Adult (RME)	14	1

Total Risk for RME resident exposures = $\text{Risk}_{0 \text{ to } <2} + \text{Risk}_{2 \text{ to } <6} + \text{Risk}_{6 \text{ to } <16} + \text{Risk}_{16 \text{ to } <30}$

Total Risk for CTE resident exposures = $\text{Risk}_{0 \text{ to } <2} + \text{Risk}_{2 \text{ to } <6} + \text{Risk}_{20 \text{ to } <29}$

6.5.2 Noncancer Health Effects

Potential noncancer health effects were evaluated by the calculation of hazard quotients (HQs) and hazard indices (HIs). For the ingestion and dermal contact pathways, the HQ is the ratio of the ADD through a given exposure route to the COPC- and route-specific RfD. The HQ-RfD relationship is illustrated by Equation 6-8.

Equation 6-8

$$HQ = ADD/RfD$$

Where:

HQ	=	Hazard quotient.
ADD	=	Average daily dose; estimated daily intake averaged over the exposure duration (mg/kg-day).
RfD	=	Reference dose (mg/kg-day).

For inhalation exposure, the HQ is the ratio of the modeled air concentration (CA) and the COPC-specific RfC as presented in Equation 6-9.

Equation 6-9

$$\text{Inhalation } HQ = CA / (RfC \times CF)$$

Where:

HQ	=	Hazard quotient
CA	=	Modeled air concentration ($\mu g/m^3$)
RfC	=	COPC-specific reference concentration (mg/m^3)
CF	=	Conversion factor (1,000 µg/mg)

HQs were summed to calculate HIs for each scenario. HIs were calculated for each exposure route, and a total HI was calculated based on exposure to the COPCs from exposure routes for each receptor.

EPA has defined a site HI of one for any given exposure scenario as the point of departure. If the HI is greater than one, further evaluation is necessary before a recommendation for site remediation is made. In addition, if the site HI was greater than one, the HI was calculated for COPCs with common target endpoints because the COPC-specific RfD values are based on a critical target organ effect (EPA, 1989). Thus, it is inappropriate to add all HQs (regardless of target endpoint) because the resulting HI will reflect an artificially high estimate of noncancer toxicity for an exposed population. Therefore, the HQs were also segregated by COPC-specific target organ and summed to yield organ-specific HIs. The HQs from COPCs that are lacking target endpoint information (designated as 'No Information' in the tables presented in Section 6.5.3) were not included in the summation of organ-specific HIs.

6.5.3 Risk Results

Tables 6-27 through 6-30 present general summaries of the estimated cancer risks and noncancer HIs for each receptor for both the RME and the CTE. Figures 6-2 and 6-3 show the risk levels in graphical format.

Future Residents – Tables 6-31 through 6-36 present the cancer risks and HQs/HIs for the future residents. Tables 6-37 through 6-40 present the cancer risk calculations for the COPCs that demonstrate a mutagenic mode of action for carcinogenesis. The total RME cancer risk (3.3E-04) exceeds the EPA risk range (Table 6-31). The RME cancer risk from the incidental soil ingestion pathway (2.6E-04) is the major contributor to the total RME risk estimate (about 80%). The total RME cancer risks from benzo(a)pyrene (1.4E-04) and chromium (5.9E-05) accounts for 42% and 18% of the total risk, respectively. The total CTE cancer risk (7.1E-05) falls within the EPA risk range (Table 6-32).

The total HIs exceed the noncancer benchmark of one for the child resident (see Tables 6-33 and 6-34). The total RME HI exceeds the noncancer benchmark of one for the adult (see Table 6-35). TCE exposure through the incidental soil ingestion route is the primary contributor to the child and adult RME HIs. The adult CTE HI is less than the noncancer benchmark of one (Table 6-36).

Groundskeeper – Tables 6-41 through 6-44 present the cancer risks and HQs/HIs for the groundskeeper. The total RME cancer risk (4.0E-05) falls within the EPA risk range (Table 6-41). The RME cancer risk from the incidental soil ingestion pathway (2.5E-05) is the major contributor to the total RME risk estimate (about 63%). The total RME risks from benzo(a)pyrene (1.4E-05) and the pesticide dieldrin (1.1E-05) contribute 35% and 28% of the total RME risk, respectively. None of the other COPCs has a total RME risk greater than 1E-05.

As presented on Table 6-42, the total CTE cancer risk (1.8E-06) is well below EPA's acceptable risk threshold of 1E-04. The total RME and CTE HIs are less than the noncancer benchmark of one (Tables 6-43 and 6-44).

Construction/Utility Worker – Tables 6-45 through 6-48 present the cancer risks and HQs/HIs for the construction/utility worker. As shown on Table 6-45, the total RME cancer risk (2.0E-06) is at the low end of the EPA risk range. Chromium is the only COPC with a total RME risk greater than 1E-06. The total CTE cancer risk is less than the EPA risk threshold. The total RME and CTE HIs are less than the noncancer benchmark of one (Tables 6-47 and 6-48).

Student Recreational User – Tables 6-49 through 6-52 present the cancer risks and HQs/HIs for the student recreational user. The total RME cancer risk (1.6E-06) is at the low end of the EPA risk range (Table 6-49). None of the COPCs has a total RME risk greater than 1E-06. The total CTE cancer risk (8.2E-08) is less than the EPA risk range. The total RME and CTE noncancer HIs are less than the noncancer benchmark of one (Tables 6-51 and 6-52).

Indoor Worker – Tables 6-53 through 6-56 present the cancer risks and HQs/HIs for the indoor worker. The total RME cancer risk (1.4E-05) is within the EPA's acceptable risk range (Table 6-53) and results from incidental soil ingestion contributes nearly the entire RME risk. Benzo(a)pyrene (4.1E-06) and dieldrin (3.7E-06) contribute 29% and 26% of the total RME risk, respectively. Arsenic and chromium each account for approximately 15% of the total RME risk. None of the other COPCs has a cancer risk greater than 1E-06.

The total CTE cancer risk (8.5E-07) is less than the EPA risk range (Table 6-54). The total RME and CTE HIs are less than the noncancer benchmark of one (Tables 6-55 and 6-56).

Daycare Child – Tables 6-57 through 6-60 present the cancer risks and HQs/HIs for the daycare child. Tables 6-61 through 6-62 present the cancer risk calculations for the COPCs that demonstrate a mutagenic mode of action for carcinogenesis. The total RME cancer risk (1.2E-04) exceeds the EPA risk range (Table 6-57). The RME cancer risk from the incidental soil ingestion pathway is the major contributor to the total RME risk estimate (about 65%). The total RME risk from benzo(a)pyrene (5.8E-05) contributes 50% of the total risk. Other significant contributors to the total RME risk include chromium (14%) and dieldrin (9%).

As presented on Table 6-58, the total CTE cancer risk (1.4E-05) is within the EPA risk range. The total RME and CTE HIs are less than the noncancer benchmark of one (Tables 6-59 and 6-60).

6.5.4 Evaluation of Significant Contributors to Risks

A review of the risk tables discussed in Section 6.5.3 indicates that certain COPCs evaluated in the HHRA are significant contributors to the total risks. Only two of the scenarios evaluated in the HHRA have risks that exceed EPA's risk criteria: future resident exposure to aggregate soil and daycare child exposure to surface soil. This section presents the primary risk contributing COPCs and discusses factors that need to be considered to appropriately understand the calculated risks. The following COPCs are the primary contributors to the calculated risks:

- Carcinogenic PAHs (cPAHs) – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
- Dieldrin (pesticide).
- Trichloroethylene (TCE).
- Arsenic and chromium (evaluated as hexavalent chromium in the risk calculations).

The subsections that follow discuss issues such as statistical outlier concentrations, additional sampling that has taken place at historic sample locations with elevated levels, background levels, historical pesticide applications, and assumptions on the valence state of chromium.

6.5.4.1 Outlier Analysis

Outlier analyses were conducted for those COPCs that either directly resulted in exceedances of risk benchmarks (cancer or noncancer) or were significant contributors to total cancer risks or noncancer hazard indices that exceeded risk benchmarks. The outlier analyses were conducted using ProUCL (EPA, 2011b). Statistical outliers (upper tail and lower tail) were determined to be present at a 95% confidence level. As directed by ProUCL, Dixon's outlier test (Dixon, 1953) was used for datasets with less than 25 data points and Rosner's test was used for datasets with 25 or more data points. Details of Rosner's test can be found in Gilbert (1987). Dixon's test can only detect one statistical outlier whereas Rosner's test can detect up to 10 outliers.

As shown on Table 6-27, the total RME cancer risks for the daycare child and future residents exceed 1E-04, the upper-end of the EPA risk range. The noncancer RME HIs to the child and adult residents exceeds the noncancer benchmark of one (Table 6-29). A review of the calculated risk levels indicates that the cPAHs account for the majority of the future resident cancer risks. Other contributors to the future resident risk are chromium, dieldrin, and arsenic. Together these COPCs make up 93% of the future resident cancer risks. The same COPCs also account for the majority of the daycare child cancer risks. Exposure to TCE results in the elevated HIs for the future residents. Tables 6-63 through 6-65 present the contributions of the COPCs to the elevated risk levels.

The data for these COPCs were reviewed to determine the presence of potential outlier concentrations. Table 6-66 summarizes the results of the outlier analysis including the outlier test performed, the number of outliers present, the value of the outlier(s), and the sample location and collection date. Upper tail outliers were determined to be present at a 95% confidence level for each COPC tested. Statistical outliers were identified for the cPAHs, dieldrin, and TCE and are discussed in the following section.

6.5.4.1.1 Carcinogenic PAHs (cPAHs)

All of the identified outliers for the cPAHs are located in the surface soil at location HTA-2 (see Figure 2-1 and Table 6-1). The sample with the elevated cPAHs was collected during the High Traffic Area investigation that was performed in October 1994 to evaluate locations of high

activity. The sample location HTA-2 is next to an asphalt walkway. Additional delineation sampling of location HTA-2 was performed in 1999 (Weston, 2000). Four borings were advanced approximately 5 to 10 ft from the original HTA-2 location with two samples collected from each boring (0 to 0.5 ft bgs and 1.5 to 2 ft bgs). One sample was collected from 1.5 to 2 ft bgs from the original HTA-2 location to evaluate the depth of contamination. Note, however, that due to absence of data and ancillary information in electronic format, the inclusion of these data in the current HHRA was not possible.

Nevertheless, to provide some measure of analysis, a comparison was made between the results of the 1999 sampling event and that of the 1994 sampling event. There were no significant changes in site conditions between the 1994 and 1999 sampling events indicating that the 1994 and 1999 sampling results are comparable. PAHs were found in the 1999 samples; however, the 1999 results were less than the 1994 result. Using benzo(a)pyrene as an example, the 1999 surface concentrations ranged from 0.93 mg/kg to 2 mg/kg. The 1999 deeper sample concentrations for benzo(a)pyrene ranged from 0.03 mg/kg to 0.57 mg/kg. These ranges are significantly less than the 1994 benzo(a)pyrene surface result of 14 mg/kg. The 1999 benzo(a)pyrene result from 1.5 to 2 ft bgs from the original HTA-2 location was less than the 1994 surface soil result (1999 result – 0.26 mg/kg; 1994 result – 14 mg/kg).

The 1994 sample result from HTA-2 skews the 95% UCLs and risks high. The 1999 sample results call into question the level of confidence in the 1994 sample result. Higher levels are found in the surface soil. This possibly indicates that the source of the cPAHs is the asphalt walkway and is not related to historical DOD activities at MCC. The comparison of the 1999 samples with the single sample from 1994 shows that the sample from 1994 should be eliminated from consideration in the risk calculations. The sample is approximately 18 years old and more recent and spatially representative samples conclusively show that the single sample result from HTA-2 should not be evaluated in the final risk estimates for the future residents and daycare child. For additional clarification, the site levels of cPAHs are compared with PAH levels observed in New Jersey soils and other sources of background levels of PAHs (see Subsection 6.5.4.2.3).

6.5.4.1.2 Trichloroethylene (TCE)

The TCE outlier (1500 mg/kg) is found at location TP-W33A within the former Area W excavation at a depth of 9.5 to 10 ft bgs. A review of other TCE samples within the former Area W excavation indicates that residual TCE contamination is present at four additional locations (see Table 6-67).

For the calculation of risks, it was conservatively assumed that excavations for future residential development would be to 10 ft bgs. This is the reason the TCE outlier concentration and other residual TCE concentrations are included in the risk estimates for future residential exposure. However, the groundwater table is relatively shallow in the vicinity of former Area W thereby precluding deep excavations for hypothetical residential development. These TCE sample results should not be evaluated in the final risk estimates for the future residents. However, the elevated TCE levels may need to be addressed for potential vapor intrusion should development ever occur at the location of the Area W. The vapor intrusion pathway is being evaluated as a separate OU (along with groundwater).

Section 2.4.4 discusses the interim response action that took place at Area W. It was determined that residual VOC (i.e., TCE) contamination was present in the excavation at or below the location where perched water entered the excavation. Additional soil excavation, which would require extensive side slope cutback, was not cost effective as determined by site conditions. The NJDEP agreed with the USACE proposal that any remaining residual soil contamination would be addressed as part of the Supplemental 2 Phase II RI and the site-wide groundwater monitoring program and that the excavation could be backfilled.

6.5.4.1.3 Dieldrin

The dieldrin outlier is located in the surface soil at location HTA-27 (see Figure 2-1 and Table 6-1). This sample was collected during the 1994 High Traffic Area investigation. Additional delineation sampling of location HTA-27 was performed in 1999 (Weston, 2000, these data were not available during the HHRA process). Four borings were advanced approximately 5 to 10 ft from the original HTA-27 location with two samples collected from each boring (0 to 0.5 ft bgs

and 1.5 to 2 ft bgs). One sample was collected from 1.5 to 2 ft bgs from the original HTA-27 location to evaluate the depth of contamination.

Dieldrin was detected in the 1999 samples; however, the 1999 results were less than the 1994 result. The 1999 surface concentrations ranged from 0.063 mg/kg to 0.72 mg/kg. The 1999 deeper sample concentrations ranged from not detected (ND) to 0.026 mg/kg. These ranges are significantly less than the 1994 surface result of 5.7 mg/kg. In addition, the 1999 result from 1.5 to 2 ft bgs from the original HTA-27 location was ND.

The comparison of the 1999 samples with the single sample from 1994 shows that the sample from 1994 should be eliminated from consideration in the risk calculations. The sample is approximately 18 years old and more recent and spatially representative samples conclusively show that the single sample result from HTA-27 should not be evaluated in the final risk estimates for the future residents and daycare child. For additional clarification, the site levels of dieldrin are compared with dieldrin levels observed in New Jersey soils (see Subsection 6.5.4.2.3).

6.5.4.2 Background Comparisons

6.5.4.2.1 Chromium

As discussed in Section 4.1.1.1, it is clear that the chromium levels detected at MCC are similar to or even less than background values from New Jersey. This demonstrates that the chromium risks calculated for MCC are a result of background concentrations and not due to historical DOD activities or sources. Therefore, chromium concentrations in soil should not be considered in the risk calculations as they relate to any future decisions on remediation.

6.5.4.2.2 Arsenic

The NJDEP background level for arsenic is 19 mg/kg, which is the basis of the state residential soil criteria. The maximum observed arsenic level in MCC soils is 19.4 mg/kg (essentially equal to the background level). This indicates that the arsenic risks calculated for MCC are most likely attributable to background levels and not historical DOD activities or sources. Therefore, arsenic

concentrations in soil should not be considered in the risk calculations as they relate to any future decisions on remediation.

6.5.4.2.3 Carcinogenic PAHs

It is likely that the observed levels of cPAHs in MCC soils are not from DOD operations or activities but rather from non-DOD sources such as MCC construction of walkways and parking areas. Two comparisons of the site levels of cPAHs with background levels are presented in this section. The first presents a comparison of site PAH levels with levels found in New Jersey (see Table 6-68). The background data used in this comparison were obtained from *Characterization of Ambient Levels of Selected Metals and Other Analytes in New Jersey Coastal Plan Region Soils* (BEM, 1998). It was determined by NJDEP that background soil samples would be collected from parks (playgrounds, city parks, etc.) (BEM, 1998). The rationale for this was to maximize the probability of finding undisturbed surface soil and to minimize the probability of collecting samples too close to known hazardous waste sites. Because of the background sample collection rationale, it is unlikely that the New Jersey background data are suitable for comparison with data collected from within the former Raritan Arsenal which as discussed throughout this report has been developed for a variety of uses such as MCC and commercial/industrial operations with regular vehicle traffic. Nevertheless, these background data were compared with the site data that included all cPAH data collected from MCC with the exception of the data collected from sample location HTA-2 which is discussed in detail in Subsection 6.5.4.1.1.

As one would expect, the site levels exceed the New Jersey background data in almost every case (see Table 6-68). These results are not indicative of DOD sources of cPAHs at MCC but are reflective of the lower concentration of cPAHs one would expect to find at parks and other undisturbed areas. As a piece of additional information to consider when evaluating cPAHs levels and the attribution of non-DOD sources, Appendix C presents photographs of soil sample locations that have elevated levels of PAHs and the surrounding land use.

Recent research (Mahler, et al., 2012) indicates that coal-tar-based sealcoat which is commonly used in the eastern United States can be a significant source of PAHs in various environmental

compartments including soil adjacent to sealcoat treated areas such as parking areas and walkways. The authors reported a central tendency (mean or median) ΣPAH concentration of 105 mg/kg adjacent to a coal-tar-based sealed parking lot. It should be noted that the ΣPAH concentration reported by the authors is represented by the sum of 16 PAHs. As a comparison, the ΣPAH concentration at HTA-2, which contains the highest PAH levels found on MCC property, based on the sum of the PAHs is approximately 110 mg/kg. While USACE has not researched the use of coal-tar-based sealcoat at MCC or elsewhere at the former Raritan Arsenal, the research of Mahler et al. and the results of this comparison indicate that detected PAH concentrations are within the range typically found near paved surfaces and should be considered when making decisions at the former Raritan Arsenal with respect to PAHs.

Another potentially significant source of PAHs is the periodic brush fires that occur in the undeveloped portion of the former Raritan Arsenal. It is difficult to quantify the amount of PAHs deposited from the atmosphere during the burn events but it is not expected to be insignificant as it has been reported that fires occur in the area multiple time per year. The most recent fire occurred on April 10, 2014.

6.5.4.2.4 Pesticides

The historic activities that have occurred at the former Raritan Arsenal have been investigated and reported in a number of documents throughout the years. There is no indication suggesting that pesticides were stored or disposed of in the MCC area during DOD activities at the former Raritan Arsenal. Note also, that the presence of DDT and metabolites are most likely associated with mosquito eradication program that occurred along the east coast of the U.S. from the 1950's thru the early 1970's. The presence of pesticides is most likely attributable to historical pesticide application.

Dieldrin results in the highest individual pesticide cancer risk level. As shown on Tables 6-63 and 6-65, the dieldrin risk levels (even with the outlier concentration observed in HTA-27 included) are within the NCP acceptable risk range of 1E-06 to 1E-04. Even though dieldrin does not result in unacceptable risk, a comparison with background levels was performed to put the observed dieldrin levels in perspective. The background data were obtained for *A Summary of*

Selected Soil Constituents and Contaminants at Background Locations in New Jersey (NJDEP, 1993). The site data included all dieldrin data collected from MCC with the exception of sample location HTA-27 as discussed in Section 6.5.4.1.3. Table 6-69 presents the results of the comparison. As shown on Table 6-69, the site and background levels are similar.

6.5.4.3 Hexavalent Chromium

As discussed in Subsection 4.1.1.1, it is clear that chromium is present in MCC soil at levels less than background. Another important aspect of the chromium risk calculated in the HHRA is the form chromium (i.e., valence state) is assumed to be present. Total chromium was evaluated in the risk calculations using hexavalent chromium (Cr +6) toxicity values. The use of Cr +6 toxicity values resulted in chromium being a significant contributor to the total risk estimates. The percentage of Cr +6 in total chromium at MCC is unknown, but is likely far less than 100%. At two Superfund sites in Region 1 with suspected or known hexavalent chromium sources, Cr +6 concentrations were 2 to 5% of the total chromium values. In addition, another Region 1 Superfund site not suspected to have a Cr +6 source had all non-detects for Cr +6. Given there are no suspected sources of Cr +6 at this site, it is more appropriate to use the trivalent chromium toxicity values. Doing so would significantly reduce the chromium risks.

6.6 UNCERTAINTY ANALYSIS

The uncertainty analysis provides information to the appropriate decision makers (i.e., risk managers) about the key assumptions, their inherent uncertainty and variability, and the impact of this uncertainty and variability on the estimates of risk. The uncertainty analysis shows that risks are relative in nature and do not represent an absolute quantification. The subsections that follow identify the major uncertainties inherent in the HHRA process by report section to determine if the calculated risks may have been overestimated or underestimated, and the approximate degree to which this may have occurred.

6.6.1 Analytical Data

- **Use of J-qualified data** – Throughout this report, J-qualified analytical data results were treated as detected concentrations. In fact, the J-qualified results were given equal weight as unqualified positive detections in accordance with EPA's RAGS.

However, J-qualified concentrations are often times unreliable estimates and should be treated as such when making decisions at the MCC OU.

6.6.2 Exposure Assessment

- **The selection of exposure scenarios** – It is possible that some scenarios evaluated in the HHRA overstated realistic exposures, and thus overestimated the actual site risks. For example, the evaluation of a future residential scenario would significantly overestimate potential site risks given the current conditions and anticipated future land uses.

- **The selection of exposure assumptions** – The exposure assumptions directly influence the calculated doses and ultimately the calculation of risk. The RME concept was used to estimate the exposure potential for each of the receptors that were evaluated in the HHRA. The RME is defined as the "maximum exposure that is reasonably expected to occur at the site" (EPA, 1989). In most cases, these assumptions are upper-bound estimates of potential real-life exposures, and possibly result in an overestimation of risk. For example, it was assumed that daycare children are exposed to site soil for 250 days/year. This is clearly not the case as day care-aged children would most likely not contact soil during periods of low temperatures, when the ground is snow-covered, and during days with precipitation. The same holds true for the residential exposure frequency of 350 days/year. The conservatism of these exposure parameters needs to be considered in order to properly interpret the risks calculated in this HHRA.

- **Calculation of 95% UCLs** – As presented in Section 6.3.2, one-side 95% UCLs were calculated and used as the EPCs. A conservative approach of using the full DL for NDs was followed for all COPCs in this HHRA. The resulting value represents a conservative estimate of the COPC concentration to which an individual could be exposed in any given exposure unit during the defined exposure duration and frequency. It is likely that using the full detection limit overestimates the site risk to some degree.

- **Daycare Child Exposure** – the risk assessment assumed that daycare child exposure occurs throughout the entire MCC area. This is clearly not the case. Child care facilities, such as the one located at MCC, are located in a small area. It is possible for the children and staff to leave the facility for trips and contact site soil but this would not be a common occurrence.

6.6.3 Toxicity Assessment

- **The use of CSFs and RfDs** – Both cancer risks and noncancer health effects were evaluated using EPA-approved or provisional toxicity criteria. The CSFs and RfDs are derived to be health protective of human exposure. Therefore, risk calculations, which are partially based on toxicity estimates, are intended to be protective of exposed human populations including sub-populations that tend to be susceptible to

exposure (e.g., young receptors, old receptors, and receptors with pre-existing conditions such as respiratory issues). The exact degree of overestimation cannot always be determined and each COPC must be evaluated on a case-by-case basis.

- **Lack of toxicity values for dermal exposure** – Toxicity values for dermal exposures have not been developed by EPA. Oral RfDs and oral CSFs were adjusted and used to assess toxicity from dermal exposures following guidelines provided by EPA. The dermal route of exposure can result in different patterns of distribution, metabolism, and excretion than occur from the oral route. When oral toxicity values for systemic effects are applied to dermal exposures, uncertainty in the risk assessment is introduced because these differences are not taken into account. Since any toxicity differences between oral and dermal exposure would depend on the specific COPC, use of oral toxicity factors can result in the overestimation or underestimation of risk. It is not possible to make a general statement about the direction or magnitude of this uncertainty.

- **Dermal carcinogenicity of PAHs** – The majority of animal and human studies of PAH exposure strongly suggest that the carcinogenic effects resulting from exposure occur at the site of contact or administration (e.g., skin tumors from dermal contact, GI tumors from oral contact) (ATSDR, 1995). There is little evidence that PAHs produce systemic tumors following dermal contact (ATSDR, 1995). In order to justify the extrapolation of an CSF_o to a CSF_d, an assumption must be made that the type of cancer produced by oral administration is the same as that which would be expected following dermal contact (i.e., that dermal contact with PAHs would produce GI tumors). Since this is not believed to be the case, even though dermal absorption has been quantified for PAHs, extrapolation of the CSF_o to the dermal route of exposure introduces a high level of uncertainty into the analysis. Although it is unlikely that GI tumors would be produced by dermal contact with PAHs, since there is evidence that dermal contact with PAHs may cause skin cancer, the only available data (i.e., the CSF_o) was used to quantify potential cancer risk from dermal contact with PAHs. This approach introduces a high degree of uncertainty into the analysis, and may overestimate the dermal cancer risks from PAHs to a significant degree.

6.7 RISK ASSESSMENT CONCLUSIONS

As discussed in Section 6.5.4, certain risk estimates need to be re-considered in light of new and/or more realistic information including:

- Newer soil data around locations HTA-2 and HTA-27;
- Background concentrations of cPAHs, dieldrin, chromium. and arsenic;
- Assumptions regarding hypothetical residential use at the former Area W excavation;

- Historic application of pesticides; and
- Chromium toxicity.

The analyses presented in Section 6.5.4 for these specific issues results in significant reductions in risks for the two scenarios (future residents and daycare child) that showed risk calculations greater than the EPA cancer risk range and the noncancer benchmark of one. Figures 6-4 and 6-5 provide a visual representation of the impacts of these changes for these two scenarios. As shown in these figures, the risks with these corrections in place are all below the upper limits for risk established by the National Contingency Plan.

The conclusion for the HHRA for MCC is that the potential exposure and consequent risks to adults and children using this area are not a concern for restricted or unrestricted uses. This conclusion is based on all chemical data available to define the nature and extent of contamination within MCC property excluding the Building 229 Area (Building 229 will be addressed under a stand-alone RI for Investigation Area 18D). This HHRA does not evaluate the risk or uncertainty pertaining to MEC.

7. CONCLUSIONS AND RECOMMENDATIONS

The previous sections of this report present and summarize all investigations and interim response actions that have occurred within the Investigation Areas located on Middlesex County College property. Investigations commenced in the early 1960s and continue to the present and have included:

- Archival searches to identify areas of potential contamination including MEC based on historical operations;
- Geophysical surveys across a large portion of the MCC OU to identify subsurface anomalies including DMM, MD, and possibly UXO;
- DMM removal and a geophysical survey at Building 118;
- UST removals;
- PCB transformer removals;
- Soil and groundwater investigations that delineated and characterized the levels of contamination throughout the MCC area including areas known to experience high use (i.e., the High Traffic Areas);
- An interim response action at the ball fields and tennis courts associated with Area 17/17A;
- An interim response action at Area W and follow-on studies;
- A TCRA of MEC identified on the eastern portion of the MCC area;
- Ongoing monitoring of the AOC 10 groundwater plume; and
- A baseline HHRA that evaluated the degree of soil exposure within MCC using health-protective assumptions on the current and future uses of MCC property (Section 6).

Because concerns for site contamination generally relate to either hazardous, toxic waste (HTW) or MEC, two types of investigations have been performed at the MCC Area. The first type of investigations focused on hazardous and toxic waste issues related to past DOD uses. The HTW issues have been addressed through RIs, interim response actions, and the HHRA associated with areas in the MCC. The RIs focused on those areas known or suspected to be contaminated

through the ASRs. The conclusions related to the hazardous and toxic waste issues are presented in Section 7.1.

The second type of investigations focused on MEC issues related to the MCC property that have been investigated through the ASRs, geophysical surveys, and interim response actions. The former Raritan Arsenal will always have uncertainty associated with MEC. However, significant development has removed much of this uncertainty. Construction of buildings, utilities, parking lots, roadways, ball fields, tennis courts, etc. have reworked most of the surface soils and large areas of deeper soils. Geophysical surveys regardless of the effective depth of the surveying instrument cannot eliminate uncertainty pertaining to MEC but can only minimize it. The process has been to look where there are documented areas of suspected use, storage or disposal and/or to follow up in areas where MEC has been inadvertently discovered. However, due to the practical limitations in characterizing the full extent of MEC distribution throughout such a large area, conclusions associated with MEC issues are less certain than those for HTW. The conclusions related to the MEC issues are presented in Section 7.2.

7.1 HAZARDOUS AND TOXIC WASTE CONCLUSIONS

The RIs, interim response actions, and HHRA evaluated all identified potential contamination of the MCC property and in certain cases resulted in the large-scale response actions of contaminated soils at Area 17/17A, Building 118, and Area W. Residual contaminant levels in soils have been compared with restricted and unrestricted use criteria from EPA and NJDEP. Although there are exceedances of the restricted and unrestricted use criteria (see Section 4), the CERCLA-compliant, site-specific baseline HHRA indicates that the calculated risk levels are acceptable for unrestricted use. USACE does not utilize state promulgated remediation standards as a trigger to take an action or not take an action. Rather, USACE uses a CERCLA-compliant HHRA, as was done for the MCC OU, to determine if there is risk to support the need for any remedial action.

Based on the previous investigations, the interim response actions, and the current HHRA, a recommendation of No Further Action is made for hazardous and toxic waste at the Investigations Areas associated with MCC.

7.2 MEC CONCLUSIONS

The conclusions related to the potential for MEC at the MCC property are based on previously performed geophysical surveys, the EE/CA (FWENC, 2000), and recent information from USACE. Future exposure to MEC is not likely or probable but possible in all areas based on potential development involving invasive activities. Based on the evaluations presented herein and the pragmatic constraints to area-wide MEC clearance, it was recommended that the institutional control/notification response action alternative (referred to as Alternative RA-3 in the EE/CA report) be established for the MCC property. Implementation of this alternative would be through the building or construction permit process in the affected municipalities. The Township of Edison has implemented a "procedural requirement" that requires the property owner to arrange for MEC construction safety support during any earthmoving, land-clearing or in-water construction activities during acquisition of a building permit from the Township of Edison.

USACE intends to complete a MEC Hazard Assessment (HA) for the entire college property in order to evaluate the likelihood of encountering MEC in the future. This assessment will use all existing MEC investigations and removals to date in order to evaluate current conditions. The results of the MEC HA along with this RI will be used to complete a Feasibility Study (FS) for MEC. The FS will develop and evaluate options for any potentially remaining MEC and will be provided to stakeholders for review and comment after which a Proposed Plan and Decision Document specifically for MEC will be prepared. The Proposed Plan and Decision Document for MEC will be separate and distinct from the Proposed Plan and Decision Document for HTRW.

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TABLES

Section 4 Tables

Table 4-1
Summary of Available Data by Source
Middlesex County College
Former Raritan Arsenal

Investigation Report/Source	Agency/Contractor	Report Date	Status of Data
Final Engineering Report, Former Raritan Arsenal, Contamination Evaluation	O'Brien and Gere Engineers	1989	Not applicable; data not collected.
Archives Search Report for Middlesex County College and Thomas Edison Park	Metcalf and Eddy	1991	Not applicable; data not collected.
Near-Surface Soil Sampling Program, Thomas A. Edison Park and Middlesex County College	Dames and Moore	1992	Samples collected from ballfield; area remediated
Draft Archive Search Report, Former Raritan Arsenal	Dames and Moore	1993	Not applicable; data not collected.
Final Report, Phase I Remedial Investigation of Selected Areas of Former Raritan Arsenal	Dames and Moore	1993	Samples collected from ballfield; area remediated
Limited Health Risk Assessment, Middlesex County College Athletic Field and Thomas A. Edison Park	Dames and Moore	1993	Not applicable; data not collected.
Final Report of Investigation, Groundwater Investigation Addendum, Area 17 Investigation	Weston Solutions	1994	Samples collected from ballfield; area remediated
Final Report of Investigation, Area 17 Supplemental Investigation	Weston Solutions	1994	Samples collected from ballfield; area remediated
Final Report of Investigation, Surface Soil Sampling for High Traffic Areas at Middlesex County College	**Weston Solutions**	**1994**	**Samples collected from numerous high traffic area locations throughout MCC; Data included in Data Summary Report (tables and figures)**
Final Remedial Action Report, Area 17 Remedial Construction	Weston Solutions	1996	Post excavation samples available in hard copy only
Final Report of Investigation, Building 118 and Areas X, H, and W	**Weston Solutions**	**1996**	**Data included in Data Summary Report (tables and figures)**
Work Plan, Soil Remediation at Areas 11, 12, 18A, 18C and W	Depot Road Leasing and Excavating	1997	Not applicable; data not collected.
Documentation of Remedial Action, Areas 11, 12, 18A, 18C and W	Depot Road Leasing and Excavating	1998	Not applicable; data not collected.
Final Report - Area W Former Raritan Arsenal	OH Materials	1998	Not applicable; data not collected.
Supplemental Report of Investigation, Areas 2, 3, 7, 9, 11, 16, 18A, 19, Inland Containers, and W Investigations	**Weston Solutions**	**1999**	**Two of the test pit locations (TP-W29 and TP-W33A) included in Data Summary Report (tables and figures). Other locations remediated.**
Draft Supplement 2 Phase II Remedial Investigation Report	Weston Solutions	2000	Data not available in electronic format.
Final Remedial Action Report, Remedial Construction – Areas 11, 12, 18A, 18C, and W	**Weston Solutions**	**2002**	**The post excavation samples and one pre-remediation sample presented in this report are included in the Data Summary Report (tables and figures).**
Final Remedial Action Report, Removal of Transformers and Switches at the Former Raritan Arsenal	Weston Solutions	2002	Data not available in electronic format.
Final Screening-Level Ecological Risk Assessment Report	Weston Solutions	2004	Not applicable; data not collected.
Discharge Confirmation Report, Case No. 04-05-27-1349-40	**USACE**	**2004**	**Post remediation sample collected after UST removal are included in the Data Summary Report (tables and text).**
Summary Report of Findings for MIP/SC Survey and Treatability Study Evaluation	Shaw Environmental	2005	Not applicable; data not collected.
Draft Technical Evaluation of Remedial Alternatives	Shaw Environmental	2005	Not applicable; data not collected.
Management Action Plan for the Former Raritan Arsenal	USACE	2007	Not applicable; data not collected.
Final Baseline Ecological Risk Assessment Report	Weston Solutions	2008	Not applicable; data not collected.
Final Human Health Risk Assessment – Former Raritan Arsenal	Watermark Environmental	2009	Not applicable; data not collected.

Table 4-2
Summary of Background Levels of Chromium and Comparison with Site Levels
Middlesex County College
Former Raritan Arsenal

Statistic	MCC	NJ Background (BEM, 1998)
Mean:	15.5	18.7
Median:	14.8	11.8
Maximum:	44.9	171
90th Percentile:	24.8	34.7
95th Percentile:	33	39.8
95% Upper Confidence Limit of the Mean:	17.4	23.7

Units in mg/kg.

Table 4-3
Summary of Analytes Detected in Soil (0 to 10 ft bgs) and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Screening Levels Industrial Soil	EPA Regional Screening Screening Levels Residential Soil	NJDEP Soil Remediation Standards Industrial Soil	NJDEP Soil Remediation Standards Residential Soil
83329	Acenaphthene	0.061	0.82	mg/kg	SS-11812A-4/12/1994	7/42	0.33 - 0.72	0.35	33000	3400	37000	3400
208968	Acenaphthylene	0.052	1.8	mg/kg	SS-HTA-2-10/30/1994	14/42	0.33 - 3.7	0.39	33000	3400	300000	NA
120127	Anthracene	0.042	3.6	mg/kg	SS-HTA-2-10/30/1994	22/42	0.33 - 0.39	0.35	170000	17000	30000	17000
11097691	Aroclor-1254	0.045	0.045	mg/kg	TP-W33A-6/12/1996	1/9	0.035 - 2.4	0.51	0.74	0.22	1	0.2
56553	Benzo(a)anthracene	0.053	17	mg/kg	SS-HTA-2-10/30/1994	34/42	0.33 - 0.39	0.72	**2.1**	**0.15**	**2**	**0.6**
50328	Benzo(a)pyrene	0.051	14	mg/kg	SS-HTA-2-10/30/1994	33/42	0.33 - 3.7	0.70	**0.21**	**0.015**	**0.2**	**0.2**
205992	Benzo(b)fluoranthene	0.053	21	mg/kg	SS-HTA-2-10/30/1994	34/42	0.35 - 3.7	0.95	**2.1**	**0.15**	**2**	**0.6**
191242	Benzo(g,h,i)perylene	0.045	1.4	mg/kg	SA-W-01-11/6/1997	30/42	0.33 - 3.7	0.35	NA	NA	30000	380000
207089	Benzo(k)fluoranthene	0.041	6.2	mg/kg	SS-HTA-2-10/30/1994	29/42	0.33 - 3.7	0.49	21	**1.5**	23	**6**
117817	Bis(2-ethylhexyl)phthalate	0.049	4.1	mg/kg	SS-HTA-10-10/31/1994	28/41	0.33 - 1.3	0.46	120	35	140	35
78933	2-Butanone	0.94	5	mg/kg	PE-W01-1/14/1998	2/22	0.01 - 65	4.3	200000	28000	44000	3100
85687	Butylbenzylphthalate	0.049	0.15	mg/kg	SS-HTA-10-10/31/1994	4/41	0.33 - 3.7	0.40	910	260	14000	1200
86748	Carbazole	0.042	0.69	mg/kg	SS-11812A-4/12/1994	9/41	0.33 - 3.7	0.39	NA	NA	96	24
5103719	alpha-Chlordane	0.6	0.6	mg/kg	SS-HTA-27-3/30/1994	1/40	0.0018 - 1.2	0.072	6.5	1.6	1	**0.2**
5566347	gamma-Chlordane	0.56	0.56	mg/kg	SS-HTA-27-3/30/1994	1/40	0.0018 - 1.2	0.071	6.5	1.6	1	**0.2**
218019	Chrysene	0.049	17	mg/kg	SS-HTA-2-10/30/1994	36/42	0.35 - 0.39	0.76	210	**15**	230	62
72548	4,4-DDD	0.035	0.37	mg/kg	SS-HTA-2-3/30/1994	7/40	0.003 - 0.01	0.027	7.2	2	13	3
72559	4,4-DDE	0.012	3	mg/kg	SS-HTA-3-3/30/1994	33/40	0.003 - 0.01	0.28	5.1	**1.4**	9	**2**
50293	4,4-DDT	0.0054	7.7	mg/kg	SS-HTA-3-3/30/1994	29/40	0.003 - 0.01	0.54	**7**	**1.7**	8	**2**
53703	Dibenz(a,h)anthracene	0.048	2.5	mg/kg	SS-HTA-2-10/30/1994	11/42	0.33 - 3.7	0.43	**0.21**	**0.015**	**0.2**	**0.2**
132649	Dibenzofuran	0.2	0.58	mg/kg	SS-11812A-4/12/1994	2/42	0.33 - 3.7	0.43	1000	78	NA	NA
91941	3,3'-Dichlorobenzidine	0.3	0.3	mg/kg	SS-HTA-2-10/30/1994	1/41	0.33 - 7.4	0.61	3.8	1.1	4	1
75343	1,1-Dichloroethane	0.002	0.002	mg/kg	SA-W-01-11/6/1997	1/29	0.005 - 32	1.8	17	3.3	24	8
540590	1,2-Dichloroethene	17	17	mg/kg	TP-W33A-6/12/1996	1/10	0.005 - 0.006	1.7	9200	700	560	230
156592	cis-1,2-Dichloroethene	0.009	3.1	mg/kg	PE-W01-1/14/1998	3/19	0.005 - 7.3	1.1	2000	160	560	230
60571	Dieldrin	0.007	5.7	mg/kg	SS-HTA-27-3/30/1994	9/40	0.003 - 0.24	0.17	**0.11**	**0.03**	**0.2**	**0.04**
100414	Ethylbenzene	0.001	10	mg/kg	TP-W33A-6/12/1996	9/29	0.005 - 2.8	0.88	27	**5.4**	110000	7800
206440	Fluoranthene	0.066	3.8	mg/kg	SS-11812A-4/12/1994	36/42	0.35 - 3.7	0.63	22000	2300	24000	2300
86737	Fluorene	0.057	1.1	mg/kg	SS-HTA-2-10/30/1994	7/42	0.33 - 3.7	0.44	22000	2300	24000	2300
1024573	Heptachlor epoxide	0.01	0.24	mg/kg	SS-HTA-2-3/30/1994	6/40	0.0018 - 0.12	0.017	**0.19**	**0.053**	0.3	**0.07**
193395	Indeno(1,2,3-c,d)pyrene	0.042	12	mg/kg	SS-HTA-2-10/30/1994	31/42	0.33 - 3.7	0.60	**2.1**	**0.15**	**2**	**0.6**
91576	2-Methylnaphthalene	0.064	15	mg/kg	TP-W33A-6/12/1996	4/42	0.33 - 0.72	0.78	4100	310	2400	230
108101	4-Methyl-2-pentanone	0.54	0.54	mg/kg	PE-W01-1/14/1998	1/22	0.01 - 65	4.3	53000	5300	NA	NA
91203	Naphthalene	0.084	40	mg/kg	TP-W33A-6/12/1996	4/42	0.33 - 0.72	1.3	**18**	**3.6**	**17**	**6**
1111125	Petroleum hydrocarbon	9	13200	mg/kg	TP-W33A-6/12/1996	18/20	3.5999999 - 26.799999	1763	NA	NA	NA	NA
85018	Phenanthrene	0.045	13	mg/kg	SS-HTA-2-10/30/1994	34/42	0.33 - 0.39	0.84	NA	NA	300000	NA
129000	Pyrene	0.064	3.3	mg/kg	SS-11812A-4/12/1994	37/42	0.35 - 0.39	0.55	17000	1700	18000	1700
127184	Tetrachloroethylene	0.008	0.28	mg/kg	01-1/14/1998, PE-W05-1/1	3/29	0.005 - 32	1.6	2.6	0.55	5	2
108883	Toluene	0.001	40	mg/kg	TP-W33A-6/12/1996	9/29	0.005 - 2.8	2.5	45000	5000	91000	6300
71556	1,1,1-Trichloroethane	0.04	0.39	mg/kg	PE-W01-1/14/1998	2/29	0.005 - 32	1.8	38000	8700	4200	290
79016	Trichloroethylene	0.001	1500	mg/kg	TP-W33A-6/12/1996	13/29	0.005 - 2.8	70	**14**	**2.8**	**20**	**7**
1330207	Xylenes, Total	0.013	50	mg/kg	TP-W33A-6/12/1996	8/29	0.005 - 2.8	3.7	2700	630	170000	12000
7429905	Aluminum	1020	7320	mg/kg	SS-11801A-4/11/1994	7/14	0.1 - 0.1	2223	990000	77000	NA	78000
7440360	Antimony	0.26	1	mg/kg	SS-11812A-4/12/1994	14/39	0.1 - 0.5	0.36	410	31	450	31
7440382	Arsenic	0.24	19.4	mg/kg	SS-HTA-14-3/30/1994	56/63	0.2 - 0.9	4.2	**1.6**	**0.39**	**19**	**19**
7440393	Barium	4.2	82.2	mg/kg	SS-HTA-32-3/30/1994	53/58	1.2 - 3.7	32	190000	15000	59000	16000
7440417	Beryllium	0.05	0.95	mg/kg	SS-HTA-32-3/30/1994	35/39	0.04 - 0.21	0.43	2000	160	140	16
7440439	Cadmium	0.05	1.6	mg/kg	SS-HTA-12-3/30/1994	50/63	0.04 - 0.3	0.37	800	70	78	78
7440702	Calcium	47.4	1590	mg/kg	SS-HTA-14-3/30/1994	14/14	NA	723	NA	NA	NA	NA

Table 4-3
Summary of Analytes Detected in Soil (0 to 10 ft bgs) and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Screening Levels		NJDEP Soil Remediation Standards	
									Industrial Soil	Residential Soil	Industrial Soil	Residential Soil
7440484	Cobalt	1.5	8	mg/kg	SS-11801A-4/11/1994	14/14	NA	4.8	300	23	590	1600
7440508	Copper	2.2	78.5	mg/kg	SS-11805A-4/12/1994	38/39	2.8 - 2.8	17	41000	3100	45000	3100
57125	Cyanide	0.4	1.1	mg/kg	SS-H01A-4/13/1994	2/37	0.25 - 0.61	0.32	20000	1600	23000	1600
7439896	Iron	12000	28300	mg/kg	SS-W27A-4/13/1994	14/14	NA	18457	720000	55000	NA	NA
7439921	Lead	1.2	204	mg/kg	SS-HTA-2-3/30/1994	61/63	1.7 - 7.1999998	39	800	400	800	400
7439954	Magnesium	33.2	2890	mg/kg	SS-HTA-32-3/30/1994	14/14	NA	797	NA	NA	NA	NA
7439965	Manganese	1.9	168	mg/kg	SS-11811A-4/12/1994	7/14	0.1 - 0.1	38	23000	1800	5900	11000
7439976	Mercury	0.06	3.3	mg/kg	SS-HTA-14-3/30/1994	23/63	0.01 - 0.1	0.22	34	5.6	65	23
7440020	Nickel	0.44	13.8	mg/kg	SS-HTA-32-3/30/1994	32/39	0.19 - 1.1	4.41	20000	1500	23000	1600
7440097	Potassium	338	1200	mg/kg	SS-HTA-32-3/30/1994	12/14	102 - 106	482	NA	NA	NA	NA
7782492	Selenium	0.33	2.6	mg/kg	SS-X03A-4/21/1994	32/54	0.1 - 0.44	0.50	5100	390	5700	390
7440224	Silver	0.3	1	mg/kg	SS-HTA-10-3/30/1994	26/63	0.1 - 0.49	0.41	5100	390	5700	390
7440235	Sodium	47.5	94.6	mg/kg	SS-HTA-14-3/30/1994	7/14	31 - 86.800003	56	NA	NA	NA	NA
7440280	Thallium	0.26	0.85	mg/kg	PE-W12-7/7/1998	5/39	0.1 - 0.62	0.27	NA	NA	79	5
7440315	Tin	1.9	30	mg/kg	SS-HTA-4-3/30/1994	6/7	0.1 - 0.1	6.3	610000	47000	NA	NA
7440622	Vanadium	3.2	37.9	mg/kg	SS-H01A-4/13/1994	14/14	NA	23	72	**5.5**	1100	78
7440666	Zinc	0.65	217	mg/kg	SS-11812B-4/12/1994	21/39	3.8 - 30	35	310000	23000	110000	23000

[a]Number of sampling locations at which analyte was detected compared with total number of sampling locations; duplicates at a location were averaged and considered one sample.

[b]Based on nondetected samples.

[c]Nondetects were included at the full detection limit.

mg/kg = Milligrams per kilogram.

NA = Not applicable.

Shading indicates that the maximum detected concentration exceeded the screening level.

J-qualified analytical data results were treated as detected concentrations and were given equal weight as unqualified positive detections in accordance with EPA's RAGS. However, J-qualified concentrations are often times unreliable estimates and should be treated as such when making decisions at the MCC OU.

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Benzo(a)anthracene						EPA RSL	EPA RSL	NJDEP SRS	NJDEP SRS
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier	Industrial 2.1	Residential 0.15	Industrial 2	Residential 0.6
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.2		-	X	-	X
Area W	Test Pit	TP-W33A	6/12/1996	0.38	J	-	X	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.2	J	-	X	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.8		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.08	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	17		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.36	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.053	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.29	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.3	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.074	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.073	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.38	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.18	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.085	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.38	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.28	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.13	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.78		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.17	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.52		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.63		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.064	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.053	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.059	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.092	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.068	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.12	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.62		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.17	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.29	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.058	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.79		-	X	-	X

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Benzo(a)pyrene						EPA RSL	EPA RSL	NJDEP SRS	NJDEP SRS
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier	Industrial 0.21	Residential 0.015	Industrial 0.2	Residential 0.2
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.6		X	X	X	X
Area W	Test Pit	TP-W33A	6/12/1996	3.7	U	-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.18	J	-	X	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.4		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.084	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	14		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.29	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.051	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.26	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.22	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.059	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.068	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.38	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.18	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.18	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.44		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.26	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.13	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.21	J	-	X	X	X
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.16	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.11	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.46		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.68		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.13	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.068	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.053	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.073	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.084	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.072	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.14	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.56		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.17	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.084	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.25	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.12	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.054	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.78		X	X	X	X

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Benzo(b)fluoranthene						EPA RSL Industrial 2.1	EPA RSL Residential 0.15	NJDEP SRS Industrial 2	NJDEP SRS Residential 0.6
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.4		-	X	-	X
Area W	Test Pit	TP-W33A	6/12/1996	3.7	U	-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.16	J	-	X	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.2		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.13	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	21		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.59		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.081	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.4		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.3	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.12	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.56		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.24	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.22	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.57		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.47		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.19	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.053	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	1.3		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.25	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.17	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.58		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.96		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.19	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.082	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.21	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.81		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.25	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.16	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.37	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.18	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.092	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	1.1		-	X	-	X

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Benzo(k)fluoranthene						EPA RSL Industrial	EPA RSL Residential	NJDEP SRS Industrial	NJDEP SRS Residential
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier	21	1.5	23	6
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.4		-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	3.7	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.18	J	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.2		-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.049	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	6.2		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.16	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.044	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.23	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.096	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.2	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.16	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.086	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.47		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.063	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.25	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.39	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.076	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.041	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.056	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.047	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.081	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.31	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.1	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.06	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.16	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.073	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.42		-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Chrysene						EPA RSL	EPA RSL	NJDEP SRS	NJDEP SRS
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier	Industrial 210	Residential 15	Industrial 230	Residential 62
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.13	J	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.5		-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.69	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.22	J	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.7		-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.12	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	17		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.38	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.062	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.33	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.28	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.09	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.086	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.53		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.28	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.08	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.45		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.42		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.19	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.049	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	1.1		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.24	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.15	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.63		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.88		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.16	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.094	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.078	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.086	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.12	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.098	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.19	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.71		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.22	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.15	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.34	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.18	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.084	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	1		-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
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U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Dibenz(a,h)anthracene						EPA RSL Industrial 0.21	EPA RSL Residential 0.015	NJDEP SRS Industrial 0.2	NJDEP SRS Residential 0.2
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	0.47	J	X	X	X	X
Area W	Test Pit	TP-W33A	6/12/1996	3.7	U	-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.32	J	X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	2.5		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.048	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.07	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.083	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.058	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.16	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.084	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.12	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.1	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.15	J	-	X	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Ethylbenzene						EPA RSL Industrial 27	EPA RSL Residential 5.4	NJDEP SRS Industrial 110000	NJDEP SRS Residential 7800
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
UST Removal	Remediation Floor Excavation	PE-MCC09	6/7/2004	0.54	U	-	-	-	-
UST Removal	Remediation Wall Excavation	PE-MCC10	6/7/2004	0.7		-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC11	6/7/2004	0.52	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC05	5/27/2004	0.41	J	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC06	5/27/2004	0.48	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC07	5/27/2004	0.5	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC08	5/27/2004	0.66		-	-	-	-
Area W	Remediation Wall Excavation	PE-W14	7/9/1998	0.006	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W15	7/9/1998	0.006	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W16	7/9/1998	0.71	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W12	7/7/1998	1.5	J	-	-	-	-
Area W	Remediation Wall Excavation	PE-W10	6/25/1998	0.186	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W11	6/25/1998	0.012	U	-	-	-	-
Area W	Remediation Floor Excavation	PE-W300	6/25/1998	0.012	U	-	-	-	-
Area W	Remediation Floor Excavation	PE-W09	1/21/1998	3.6	J	-	-	-	-
Area W	Remediation Wall Excavation	PE-W06	1/20/1998	0.001	J	-	-	-	-
Area W	Remediation Wall Excavation	PE-W04	1/15/1998	0.005	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	1.1		-	-	-	-
Area W	Remediation Floor Excavation	PE-W01	1/14/1998	1.7		-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	0.005	U	-	-	-	-
Area10	Soil Sample	SS-MCC50A	3/6/1998	0.68	U	-	-	-	-
Area10	Soil Sample	SS-MCC01A	3/6/1998	2.8	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	10	J	-	X	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.0055	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.006	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.006	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.006	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.005	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.006	U	-	-	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Indeno(1,2,3-cd)pyrene						EPA RSL Industrial 2.1	EPA RSL Residential 0.15	NJDEP SRS Industrial 2	NJDEP SRS Residential 0.6
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	0.35	U	-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	1.1		-	X	-	X
Area W	Test Pit	TP-W33A	6/12/1996	3.7	U	-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.064	J	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.71		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.061	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	12		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.13	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.063	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.16	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.13	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.3	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.084	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.31	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.21	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.099	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.042	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.12	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.087	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.31	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.49		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.1	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.064	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.045	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.068	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.068	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.072	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.11	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.42	J	-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.13	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.076	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.14	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.1	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.61		-	X	-	X

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Naphthalene						EPA RSL Industrial 18	EPA RSL Residential 3.6	NJDEP SRS Industrial 17	NJDEP SRS Residential 6
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	1		-	-	-	-
Area W	Soil Sample	SA-W-01	11/6/1997	0.72	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	40		X	X	X	X
Area W	Test Pit	TP-W29A	6/10/1996	0.37	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.35	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.39	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.36	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.35	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.38	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.36	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	1.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94	0.084	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94	0.33	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94	0.33	U	-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Trichloroethylene						EPA RSL Industrial 14	EPA RSL Residential 2.8	NJDEP SRS Industrial 20	NJDEP SRS Residential 7
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
UST Removal	Remediation Floor Excavation	PE-MCC09	6/7/2004	0.14	U	-	-	-	-
UST Removal	Remediation Wall Excavation	PE-MCC10	6/7/2004	0.13	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC11	6/7/2004	0.13	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC05	5/27/2004	0.14	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC06	5/27/2004	0.12	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC07	5/27/2004	0.12	U	-	-	-	-
UST Removal	Remediation Floor Excavation	PE-MCC08	5/27/2004	0.12	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W14	7/9/1998	0.006	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W15	7/9/1998	0.005	J	-	-	-	-
Area W	Remediation Wall Excavation	PE-W16	7/9/1998	0.71	U	-	-	-	-
Area W	Remediation Wall Excavation	PE-W12	7/7/1998	120		X	X	X	X
Area W	Remediation Wall Excavation	PE-W10	6/25/1998	0.16		-	-	-	-
Area W	Remediation Wall Excavation	PE-W11	6/25/1998	0.012	U	-	-	-	-
Area W	Remediation Floor Excavation	PE-W300	6/25/1998	0.47		-	-	-	-
Area W	Remediation Floor Excavation	PE-W09	1/21/1998	100		X	X	X	X
Area W	Remediation Wall Excavation	PE-W06	1/20/1998	0.032		-	-	-	-
Area W	Remediation Wall Excavation	PE-W04	1/15/1998	0.002	J	-	-	-	-
Area W	Remediation Wall Excavation	PE-W05	1/15/1998	16		X	X	-	X
Area W	Remediation Floor Excavation	PE-W01	1/14/1998	290		X	X	X	X
Area W	Soil Sample	SA-W-01	11/6/1997	0.001	J	-	-	-	-
Area10	Soil Sample	SS-MCC50A	3/6/1998	0.21	J	-	-	-	-
Area10	Soil Sample	SS-MCC01A	3/6/1998	2.8	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	1500	J	X	X	X	X
Area W	Test Pit	TP-W29A	6/10/1996	0.0015	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.016		-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.006	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.006	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.005	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.006	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.006	U	-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = alpha-Chlordane						EPA RSL Industrial 6.5	EPA RSL Residential 1.6	NJDEP SRS Industrial 1	NJDEP SRS Residential 0.2
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Test Pit	TP-W29A	6/10/1996	0.0018	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.0019	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.05	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.044	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.041	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0018	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.045	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.04	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.85	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	1.2	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	0.6		-	-	-	X
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.002	U	-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
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U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = gamma-Chlordane						EPA RSL Industrial 6.5	EPA RSL Residential 1.6	NJDEP SRS Industrial 1	NJDEP SRS Residential 0.2
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Test Pit	TP-W29A	6/10/1996	0.0018	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.0019	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.05	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.044	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.041	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0018	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.045	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.04	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.85	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	1.2	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	0.56		-	-	-	X
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.002	U	-	-	-	-

RSL = Regional Screening Level
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X = indicates the concentration is greater than the screening level
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U = not detected

Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = 4,4-DDE						EPA RSL Industrial 5.1	EPA RSL Residential 1.4	NJDEP SRS Industrial 9	NJDEP SRS Residential 2
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Test Pit	TP-W29A	6/10/1996	0.0037	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.0037	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.01	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.0088	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.0082	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0035	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.37		-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.012		-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.53		-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.28		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.22		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	1.8		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	3		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.12		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.031		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.019		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.068		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.034		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.095		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.32		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.23		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.21		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.21		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.044		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.4		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.047		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.029		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.2		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.037		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.088		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.032		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.04		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.023		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.45		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.12		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.041		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.45		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.54		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.62		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.22		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.18		-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = 4,4-DDT						EPA RSL	EPA RSL	NJDEP SRS	NJDEP SRS
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier	Industrial 7	Residential 1.7	Industrial 8	Residential 2
Area W	Test Pit	TP-W29A	6/10/1996	0.0037	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.0037	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.01	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.0088	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.0082	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0035	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.73		-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.0054	J	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.56		-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.18	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.41		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	6.7		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	7.7		X	X	-	X
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.17		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.12		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.039		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.17		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.52		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.24		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.38		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.35		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.56		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.089		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.056		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.17		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.034		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.044		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.041		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.31		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.086	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.1		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.47		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.56		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.41		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.14		-	-	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Dieldrin						EPA RSL Industrial 0.11	EPA RSL Residential 0.03	NJDEP SRS Industrial 0.2	NJDEP SRS Residential 0.04
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Test Pit	TP-W29A	6/10/1996	0.0037	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.007		-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.01	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.0088	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.0082	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0035	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.029		-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.0081	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.17	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.24	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.062		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.13		X	X	-	X
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.018		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.037		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	5.7		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.29		X	X	X	X
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.051		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.003	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.003	U	-	-	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Heptachlor Epoxide						EPA RSL Industrial 0.19	EPA RSL Residential 0.053	NJDEP SRS Industrial 0.3	NJDEP SRS Residential 0.07
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Area W	Test Pit	TP-W29A	6/10/1996	0.0018	U	-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	0.0019	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.005	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.0044	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.0041	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	5/2/1996	0.0018	U	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	0.0045	U	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	0.004	U	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	0.085	U	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	0.12	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	0.24		X	X	-	X
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	0.01		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	0.017		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	0.024		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	0.012		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	0.093		-	X	-	X
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	0.002	U	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	0.002	U	-	-	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Arsenic									
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier			NJDEP SRS Industrial 19	NJDEP SRS Residential 19
Area W	Remediation Wall Excavation	PE-W12	7/7/1998	0.98		-	-	-	-
Area W	Remediation Wall Excavation	PE-W10	6/25/1998	1.1		-	-	-	-
Area W	Remediation Wall Excavation	PE-W11	6/25/1998	2		-	-	-	-
Area W	Test Pit	TP-W33A	6/12/1996	1.6		-	-	-	-
Area W	Test Pit	TP-W29A	6/10/1996	0.90	U	-	-	-	-
Areas H, W, X	Soil Sample	SS-X03A	4/21/1994	1.9		-	-	-	-
Areas H, W, X	Soil Sample	SS-X01A	4/21/1994	0.40		-	-	-	-
Areas H, W, X	Soil Sample	SS-X04A	4/21/1994	0.74		-	-	-	-
Building 118	Soil Sample	SS-11808A	4/18/1994	0.46	J	-	-	-	-
Building 118	Soil Sample	SS-11802A	4/18/1994	0.26	J	-	-	-	-
Building 118	Soil Sample	SS-11809A	4/18/1994	0.97	J	-	-	-	-
Building 118	Soil Sample	SS-11807A	4/15/1994	0.64	J	-	-	-	-
Building 118	Soil Sample	SS-11814A	4/15/1994	0.45	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	0.24	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-H02A	4/13/1994	1.2	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-W04A	4/13/1994	0.20	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-W05A	4/13/1994	0.24	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-W07A	4/13/1994	0.21	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-W06A	4/13/1994	0.36	J	-	-	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	0.23	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	0.23	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-W02A	4/13/1994	0.22	UJ	-	-	-	-
Areas H, W, X	Soil Sample	SS-W03A	4/13/1994	0.20	UJ	-	-	-	-
Building 118	Soil Sample	SS-11806A	4/12/1994	1.3	J	-	-	-	-
Building 118	Soil Sample	SS-11810A	4/12/1994	0.82	J	-	-	-	-
Building 118	Soil Sample	SS-11811B	4/12/1994	1.8	J	-	-	-	-
Building 118	Soil Sample	SS-11812B	4/12/1994	2.3	J	-	-	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	2.3	J	-	-	-	-
Building 118	Soil Sample	SS-11812A	4/12/1994	2	J	-	-	-	-
Building 118	Soil Sample	SS-11805A	4/12/1994	2.6	J	-	-	-	-
Building 118	Soil Sample	SS-11803A	4/12/1994	1.4	J	-	-	-	-
Building 118	Soil Sample	SS-11801A	4/11/1994	0.96	J	-	-	-	-
Building 118	Soil Sample	SS-11804A	4/11/1994	2.5	J	-	-	-	-
Building 118	Soil Sample	SS-11813A	4/11/1994	2.6	J	-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-1	3/30/1994	7.2		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-2	3/30/1994	8.6		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-3	3/30/1994	17.1		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	5.7		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	6.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	5.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-7	3/30/1994	5.6		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-8	3/30/1994	4.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-9	3/30/1994	11.3		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-10	3/30/1994	4.9		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	11.9		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-12	3/30/1994	4.8		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-13	3/30/1994	5.2		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	19.4		-	-	X	X
High Traffic Area	Soil Sample	SS-HTA-15	3/30/1994	6.8		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-16	3/30/1994	4		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-17	3/30/1994	3.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-18	3/30/1994	4.9		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-19	3/30/1994	5.7		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	5.8		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-21	3/30/1994	8.6		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-22	3/30/1994	8		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-23	3/30/1994	9.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-24	3/30/1994	12.4		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-25	3/30/1994	3.9		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-26	3/30/1994	9.4		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	4.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-28	3/30/1994	5.2		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-29	3/30/1994	5.5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-30	3/30/1994	5		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-31	3/30/1994	6.1		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	6.2		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-33	3/30/1994	9.1		-	-	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	5.4		-	-	-	-

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Table 4-4
Point-by-Point Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Analyte = Vanadium						EPA RSL Industrial 72	EPA RSL Residential 5.5	NJDEP SRS Industrial 1100	NJDEP SRS Residential 78
Investigation Area	Sample Type	Sample ID	Sample Date	Result (mg/kg)	Qualifier				
Building 118	Soil Sample	SS-11807A	4/15/1994	10.2	J	-	X	-	-
Building 118	Soil Sample	SS-11814A	4/15/1994	8.5	J	-	X	-	-
Areas H, W, X	Soil Sample	SS-H01A	4/13/1994	37.9	J	-	X	-	-
Areas H, W, X	Soil Sample	SS-W01A	4/13/1994	34.6	J	-	X	-	-
Areas H, W, X	Soil Sample	SS-W27A	4/13/1994	28.2	J	-	X	-	-
Building 118	Soil Sample	SS-11810A	4/12/1994	9.6		-	X	-	-
Building 118	Soil Sample	SS-11811A	4/12/1994	26.1		-	X	-	-
Building 118	Soil Sample	SS-11801A	4/11/1994	11.6		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-4	3/30/1994	22		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-5	3/30/1994	27.8		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-6	3/30/1994	25.3		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-11	3/30/1994	33.3		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-14	3/30/1994	25.9		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-20	3/30/1994	29.2		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-27	3/30/1994	22.5		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-32	3/30/1994	31.4		-	X	-	-
High Traffic Area	Soil Sample	SS-HTA-34	3/30/1994	3.2		-	-	-	-

RSL = Regional Screening Level
SRS = Soil Remediation Standard
X = indicates the concentration is greater than the screening level
J = estimated value, potentially unreliable concentration
U = not detected

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

		Field Sample ID:	GW1-MW-1		GW1-MW-129		GW1-MW-223		GW2-MW-129		GW3-MW-129		GW3-MW-202		GW4-MW-129		GW4-MW-202		GW5-MW-129	
		Sample Date:	5/20/1996		10/20/1998		10/20/1998		8/27/1999		1/14/2000		1/14/2000		5/1/2000		5/1/2000		8/11/2000	
Note: units in µg/L.		**Location ID:**	MW-1		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
Methane/Ethane/Ethene																				
ETHANE	NLE	NLE	NA		NA		NA		5	U	NA		NA		5.8	U	5.8	U	NA	
ETHENE	NLE	NLE	NA		NA		NA		5	U	NA		NA		6.2	U	6.2	U	NA	
METHANE	NLE	NLE	NA		NA		NA		5	U	NA		NA		5.9	U	6.4	U	NA	
Volatile Organic Compounds (VOCs)																				
1,1,1-TRICHLOROETHANE	200	30	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-TETRACHLOROETHANE	NLE	1	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-TRICHLOROETHANE	5	3	1	U	6	U	6	U	3	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHANE	NLE	50	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	NLE	1	1	U	4	U	4	U	2	U	1	U	1	U	1	U	1	U	1	U
1,2-DICHLOROETHANE	5	2	1	U	4	U	4	U	2	U	1	U	1	U	1	U	1	U	1	U
1,2-DICHLOROPROPANE	5	1	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U	1	U
2-BUTANONE	NLE	300	5	U	10	U	10	U	5	U	5	U	5	U	5	U	2	J	5	U
2-HEXANONE	NLE	NLE	5	U	10	U	10	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	NLE	NLE	5	U	10	U	10	U	5	U	5	U	5	U	5	U	5	U	5	U
ACETONE	NLE	6000	35	U	10	U	10	U	5	U	5	U	5	U	5	U	5.5	U	5	U
BENZENE	5	1	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U	1	U
BROMODICHLOROMETHANE	80	1	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U	1	U
BROMOFORM	80	4	1	U	8	U	8	U	4	U	1	U	1	U	1	U	1	U	1	U
BROMOMETHANE	NLE	10	2	U	10	U	10	U	2	U	5	U	5	U	5	UJ	5	U	5	U
CARBON DISULFIDE	NLE	700	1	U	6.4	J	10	U	5	U	1	U	1	U	1	U	1	U	1	U
CARBON TETRACHLORIDE	5	1	1	U	4	U	4	U	2	U	1	U	1	U	1	U	1	U	1	U
CHLOROBENZENE	100	50	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
CHLOROETHANE	NLE	NLE	2	U	10	U	10	U	2	U	1	U	1	U	1	U	1	U	1	U
CHLOROFORM	80	70	0.11	J	1	J	1.1	J	1.2	J	1	U	1	U	1	U	1	U	1.01	
CHLOROMETHANE	NLE		2	U	10	U	10	U	2	U	1	U	1	U	1	U	1	U	1	U
CIS-1,2-DICHLOROETHENE	70	70	NA		61		68		26		33.8		33.6		23		25.3		25.4	
CIS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
DIBROMOCHLOROMETHANE	80	1	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
ETHYLBENZENE	700	700	1	U	8	U	8	U	4	U	1	U	1	U	1	U	1	U	1	U
METHYLENE CHLORIDE	5	3	3.6	U	6	U	6	U	3	U	2.5	U	2.5	U	1	U	1	U	1	U
STYRENE	100	100	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
TETRACHLOROETHYLENE	5	1	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U	1	U
TOLUENE	1000	600	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
TOTAL-1,2-DICHLOROETHENE	NLE	NLE	1	U	NA		NA		NA		NA		NA		NA		NA		NA	
TRANS-1,2-DICHLOROETHENE	100	100	NA		10	U	10	U	5	U	0.2	J	0.2	J	1	U	1	U	1	U
TRANS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
TRICHLOROETHYLENE	1	5	1	U	160		170		39		43.9		42.2		32.2		37.1		32	
VINYL CHLORIDE	2	1	2	U	10	U	10	U	2	U	1	U	1	U	1	U	1	U	1	U
XYLENES (TOTAL)	10000	1000	1	U	10	U	10	U	5	U	1	U	1	U	1	U	1	U	1	U
(TIC) UNKNOWN	NLE	NLE	2.251	J	NA		NA		NA		NA		NA		NA		NA		NA	
Semi-Volatile Organic Compounds (SVOCs)																				
1,2,4-TRICHLOROBENZENE	70	9	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
1,2-DICHLOROBENZENE (BNA)	600	600	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
1,3-DICHLOROBENZENE (BNA)		600	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
1,4-DICHLOROBENZENE (BNA)	75	75	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4,5-TRICHLOROPHENOL	NLE	700	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4,6-TRICHLOROPHENOL	NLE	20	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DICHLOROPHENOL	NLE	20	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DIMETHYLPHENOL	NLE	100	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROPHENOL	NLE	40	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROTOLUENE (BNA)	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,6-DINITROTOLUENE (BNA)	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLORONAPHTHALENE	NLE	600	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLOROPHENOL	NLE	40	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLNAPHTHALENE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLPHENOL (O-CRESOL)	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
2-NITROANILINE	NLE	NLE	50	U	NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW5-MW-202		GW6-MW-129		GW6-MW-202		GW7-MW-129		GW7-MW-202		GW9-MW-129		GW8-MW-129		GW1-MW-131		GW2-MW-131	
		Sample Date:	8/11/2000		12/5/2000		12/5/2000		3/26/2001		3/26/2001		7/1/2010		4/1/2005		8/31/1999		1/14/2000	
		Location ID:	MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-131		MW-131	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
Methane/Ethane/Ethene																				
ETHANE	NLE	NLE	NA		5.8	U	NA		NA		NA		NA		NA		5	U	NA	
ETHENE	NLE	NLE	NA		6.2	U	NA		NA		NA		NA		NA		5	U	NA	
METHANE	NLE	NLE	NA		10.7		NA		NA		NA		NA		NA		5	U	NA	
Volatile Organic Compounds (VOCs)																				
1,1,1-TRICHLOROETHANE	200	30	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	0.6	J
1,1,2,2-TETRACHLOROETHANE	NLE	1	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	2	U	1	U
1,1,2-TRICHLOROETHANE	5	3	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	6	U	1	U
1,1-DICHLOROETHANE	NLE	50	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	10	U	1	U
1,1-DICHLOROETHENE	NLE	1	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	4	U	1	U
1,2-DICHLOROETHANE	5	2	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	4	U	1	U
1,2-DICHLOROPROPANE	5	1	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	2	U	1	U
2-BUTANONE	NLE	300	5	U	5	U	5	U	5	U	5	U	10	U	0.9	U	10	U	5	U
2-HEXANONE	NLE	NLE	5	U	5	U	5	U	5	U	5	U	10	U	0.9	U	10	U	5	U
4-METHYL-2-PENTANONE	NLE	NLE	5	U	5	U	5	U	5	U	5	U	10	U	0.4	U	10	U	5	U
ACETONE	NLE	6000	5	U	5	U	5	U	5	U	5	U	10	U	1	U	10	U	5	U
BENZENE	5	1	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	2	U	1	U
BROMODICHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	1	U	0.12	J	0.3	U	2	U	1	U
BROMOFORM	80	4	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	8	U	1	U
BROMOMETHANE	NLE	10	5	U	1	U	1	U	1	U	1	U	1	U	0.3	U	4	U	5	U
CARBON DISULFIDE	NLE	700	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	10	U	1	U
CARBON TETRACHLORIDE	5	1	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	4	U	1	U
CHLOROBENZENE	100	50	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	1	U
CHLOROETHANE	NLE	NLE	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	4	U	1	U
CHLOROFORM	80	70	0.99	J	0.98	J	1.1		1.11		1.04		3.6		4.6		10	U	1	U
CHLOROMETHANE	NLE		1	U	3.29	U	3.82	U	1	U	1	U	1	U	0.4	U	4	U	1	U
CIS-1,2-DICHLOROETHENE	70	70	24.3		18.2		22.2		16		15.8		10		6		54		53.4	
CIS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	1	U
DIBROMOCHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	10	U	1	U
ETHYLBENZENE	700	700	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	8	U	1	U
METHYLENE CHLORIDE	5	3	1	U	1.45	U	1.49	U	1.53	U	1.51	U	1	U	0.9	U	6	U	2.3	U
STYRENE	100	100	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	1	U
TETRACHLOROETHYLENE	5	1	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	2	U	0.2	J
TOLUENE	1000	600	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	1	U
TOTAL-1,2-DICHLOROETHENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
TRANS-1,2-DICHLOROETHENE	100	100	1	U	1	U	1	U	1	U	1	U	1	U	0.3	U	10	U	1	U
TRANS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	1	U	1	U	0.4	U	10	U	1	U
TRICHLOROETHYLENE	1	5	30.7		21.3		26.2		26.5		26.4		7.2		13		1500		1200	
VINYL CHLORIDE	2	1	1	U	1	U	1	U	1	U	1	U	0.17	J	0.4	U	4	U	1	U
XYLENES (TOTAL)	10000	1000	1	U	1	U	1	U	1	U	1	U	3	U	0.2	U	10	U	1	U
(TIC) UNKNOWN	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Semi-Volatile Organic Compounds (SVOCs)																				
1,2,4-TRICHLOROBENZENE	70	9	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,2-DICHLOROBENZENE (BNA)	600	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,3-DICHLOROBENZENE (BNA)		600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,4-DICHLOROBENZENE (BNA)	75	75	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,5-TRICHLOROPHENOL	NLE	700	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,6-TRICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DIMETHYLPHENOL	NLE	100	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,6-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLORONAPHTHALENE	NLE	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLOROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLNAPHTHALENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLPHENOL (O-CRESOL)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-NITROANILINE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW3-MW-131		GW4-MW-131		GW5-MW-131		GW6-MW-131		GW8-MW-131		GW7-MW-131		GW1-MW-132		GW2-MW-132		GW3-MW-132	
		Sample Date:	5/1/2000		8/11/2000		12/5/2000		3/23/2001		7/1/2010		4/1/2005		9/21/1999		1/14/2000		5/1/2000	
		Location ID:	MW-131		MW-131		MW-131		MW-131		MW-131		MW-131		MW-132		MW-132		MW-132	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
Methane/Ethane/Ethene																				
ETHANE	NLE	NLE	5.8	U	NA		5.8	U	NA		NA		NA		5	U	NA		5.8	U
ETHENE	NLE	NLE	6.2	U	NA		6.2	U	NA		NA		NA		5	U	NA		6.2	U
METHANE	NLE	NLE	4.9	UJ	NA		7.45		NA		NA		NA		16		NA		7.6	U
Volatile Organic Compounds (VOCs)																				
1,1,1-TRICHLOROETHANE	200	30	1	U	1	U	1	U	1	U	2	U	0.6	U	5	U	1	U	1	U
1,1,2,2-TETRACHLOROETHANE	NLE	1	1	U	1	U	1	U	1	U	2	U	0.9	U	1	U	1	U	1	U
1,1,2-TRICHLOROETHANE	5	3	1	U	1	U	1	U	1	U	2	U	0.6	U	3	U	1	U	1	U
1,1-DICHLOROETHANE	NLE	50	1	U	1	U	1	U	1	U	2	U	0.7	U	5	U	1	U	1	U
1,1-DICHLOROETHENE	NLE	1	1	U	1	U	1	U	1	U	0.46	J	0.7	U	2	U	1	U	1	U
1,2-DICHLOROETHANE	5	2	1	U	1	U	1	U	1	U	2	U	0.7	U	2	U	1	U	1	U
1,2-DICHLOROPROPANE	5	1	1	U	1	U	1	U	1	U	2	U	0.7	U	1	U	1	U	1	U
2-BUTANONE	NLE	300	5	U	5	U	5	U	5	U	20	U	1.8	U	5	U	5	U	3	J
2-HEXANONE	NLE	NLE	5	U	5	U	5	U	5	U	20	U	1.9	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	NLE	NLE	5	U	5	U	5	U	5	U	20	U	0.8	U	5	U	5	U	5	U
ACETONE	NLE	6000	5	U	5	U	5	U	5	U	20	U	1.9	U	5	U	5	U	5	U
BENZENE	5	1	1	U	1	U	1	U	1	U	2	U	0.6	U	1	U	1	U	1	U
BROMODICHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	2	U	0.6	U	1	U	1	U	1	U
BROMOFORM	80	4	1	U	1	U	1	U	1	U	2	U	0.5	U	4	U	1	U	1	U
BROMOMETHANE	NLE	10	5	U	5	U	1	U	1	U	2	U	0.7	U	2	U	5	U	5	U
CARBON DISULFIDE	NLE	700	1.9	U	1	U	1	U	1	U	2	U	0.5	U	5	U	1	U	1.6	U
CARBON TETRACHLORIDE	5	1	1	U	1	U	1	U	1	U	2	U	0.6	U	2	U	1	U	1	U
CHLOROBENZENE	100	50	1	U	1	U	1	U	1	U	2	U	0.5	U	5	U	1	U	1	U
CHLOROETHANE	NLE	NLE	1	U	1	U	1	U	1	U	2	U	0.7	U	2	U	1	U	1	U
CHLOROFORM	80	70	1	U	1.05		0.73	J	0.89	J	2		3.5		5	U	1	U	1	U
CHLOROMETHANE	NLE		1	U	1	U	2.03	U	1	U	2	U	0.8	U	2	U	1	U	0.9	J
CIS-1,2-DICHLOROETHENE	70	70	30	J-	55	J	98.8		78.2	J	450		82		5	U	1	U	1	U
CIS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	2	U	0.5	U	5	U	1	U	1	U
DIBROMOCHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	2	U	0.4	U	5	U	1	U	1	U
ETHYLBENZENE	700	700	1	U	1	U	1	U	1	U	2	U	0.7	U	4	U	1	U	1	U
METHYLENE CHLORIDE	5	3	1	U	1	U	1.43	U	2.68	U	2	U	1.8	U	3	U	2.7	U	1	U
STYRENE	100	100	1	U	1	U	1	U	1	U	2	U	0.6	U	5	U	1	U	1	U
TETRACHLOROETHYLENE	5	1	1	U	1	U	1	U	1	U	2	U	0.7	U	1	U	1	U	1	U
TOLUENE	1000	600	1	U	1	U	1	U	1	U	2	U	0.5	U	5	U	1	U	1	U
TOTAL-1,2-DICHLOROETHENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
TRANS-1,2-DICHLOROETHENE	100	100	1	U	0.51	J	1	U	1	U	2.5		6.7		5	U	1	U	1	U
TRANS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	2	U	0.7	U	5	U	1	U	1	U
TRICHLOROETHYLENE	1	5	520.4	J	692		838		397	J	320		210		1	U	1	U	1	U
VINYL CHLORIDE	2	1	1	U	1	U	1	U	1	U	0.58	J	0.7	U	2	U	1	U	1	U
XYLENES (TOTAL)	10000	1000	1	U	1	U	1	U	1	U	6	U	0.4	U	5	U	1	U	1	U
(TIC) UNKNOWN	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Semi-Volatile Organic Compounds (SVOCs)																				
1,2,4-TRICHLOROBENZENE	70	9	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,2-DICHLOROBENZENE (BNA)	600	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,3-DICHLOROBENZENE (BNA)		600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,4-DICHLOROBENZENE (BNA)	75	75	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,5-TRICHLOROPHENOL	NLE	700	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,6-TRICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DIMETHYLPHENOL	NLE	100	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,6-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLORONAPHTHALENE	NLE	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLOROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLNAPHTHALENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLPHENOL (O-CRESOL)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-NITROANILINE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

		Field Sample ID:	GW4-MW-132		GW5-MW-132		GW6-MW-132		GW8-MW-132		GW7-MW-132		GW1-MW-149		GW1-MW-150		GW1-MW-151		GW1-MW-160	
		Sample Date:	8/11/2000		12/5/2000		3/26/2001		7/1/2010		4/1/2005		4/1/2005		4/1/2005		4/1/2005		7/1/2010	
Note: units in µg/L.		**Location ID:**	MW-132		MW-132		MW-132		MW-132		MW-132		MW-149		MW-150		MW-151		MW-160	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
Methane/Ethane/Ethene																				
ETHANE	NLE	NLE	NA		5.8	U	NA		NA		NA		NA		NA		NA		NA	
ETHENE	NLE	NLE	NA		6.2	UJ	NA		NA		NA		NA		NA		NA		NA	
METHANE	NLE	NLE	NA		24.7		NA		NA		NA		NA		NA		NA		NA	
Volatile Organic Compounds (VOCs)																				
1,1,1-TRICHLOROETHANE	200	30	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
1,1,2,2-TETRACHLOROETHANE	NLE	1	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U
1,1,2-TRICHLOROETHANE	5	3	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
1,1-DICHLOROETHANE	NLE	50	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
1,1-DICHLOROETHENE	NLE	1	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
1,2-DICHLOROETHANE	5	2	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
1,2-DICHLOROPROPANE	5	1	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
2-BUTANONE	NLE	300	5	U	5	U	5	U	10	U	0.9	U	0.9	U	0.9	U	0.9	U	50	U
2-HEXANONE	NLE	NLE	5	U	5	U	5	U	10	U	0.9	U	0.9	U	0.9	U	0.9	U	50	U
4-METHYL-2-PENTANONE	NLE	NLE	5	U	5	U	5	U	10	U	0.4	U	0.4	U	0.4	U	0.4	U	50	U
ACETONE	NLE	6000	5	U	5	U	5	U	10	U	1	U	1	U	1	U	1	U	50	U
BENZENE	5	1	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.4		5	U
BROMODICHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	0.3	U	0.8		0.3	U	0.3	U	5	U
BROMOFORM	80	4	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
BROMOMETHANE	NLE	10	5	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
CARBON DISULFIDE	NLE	700	1	U	1	U	1	U	1	U	0.2	U	0.2	U	0.2	U	0.2	U	5	U
CARBON TETRACHLORIDE	5	1	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
CHLOROBENZENE	100	50	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
CHLOROETHANE	NLE	NLE	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
CHLOROFORM	80	70	1	U	1	U	1	U	1	U	0.3	U	8.3		0.3	U	0.3	U	1.8	J
CHLOROMETHANE	NLE		1	U	17	U	1.44		1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
CIS-1,2-DICHLOROETHENE	70	70	1	U	1	U	1	U	1	U	0.4	U	6.3		0.4	U	0.4	U	16	
CIS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
DIBROMOCHLOROMETHANE	80	1	1	U	1	U	1	U	1	U	0.2	U	0.2	U	0.2	U	0.2	U	5	U
ETHYLBENZENE	700	700	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.9		5	U
METHYLENE CHLORIDE	5	3	1	U	1.32	U	1.52	U	1	U	0.9	U	0.9	U	0.9	U	0.9	U	1.7	J
STYRENE	100	100	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
TETRACHLOROETHYLENE	5	1	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
TOLUENE	1000	600	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
TOTAL-1,2-DICHLOROETHENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
TRANS-1,2-DICHLOROETHENE	100	100	1	U	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U	0.3	U	5	U
TRANS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
TRICHLOROETHYLENE	1	5	1	U	1.19		1	U	1	U	0.4	U	54		0.4	U	0.4	U	630	
VINYL CHLORIDE	2	1	1	U	1	U	1	U	1	U	0.4	U	0.4	U	0.4	U	0.4	U	5	U
XYLENES (TOTAL)	10000	1000	1	U	1	U	1	U	3	U	0.2	U	0.2	U	0.2	U	0.2	U	15	U
(TIC) UNKNOWN	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Semi-Volatile Organic Compounds (SVOCs)																				
1,2,4-TRICHLOROBENZENE	70	9	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,2-DICHLOROBENZENE (BNA)	600	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,3-DICHLOROBENZENE (BNA)		600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
1,4-DICHLOROBENZENE (BNA)	75	75	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,5-TRICHLOROPHENOL	NLE	700	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4,6-TRICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DICHLOROPHENOL	NLE	20	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DIMETHYLPHENOL	NLE	100	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2,6-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLORONAPHTHALENE	NLE	600	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-CHLOROPHENOL	NLE	40	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLNAPHTHALENE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-METHYLPHENOL (O-CRESOL)	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-NITROANILINE	NLE	NLE	NA		NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW1-MW-161		GW1-MW-68A		GW2-MW-68A		GW1-MW-69A		GW2-MW-69A		GW2-MW-69A	
		Sample Date:	7/1/2010		11/9/1994		12/14/1994		11/9/1994		12/15/1994		12/15/1994	
		Location ID:	MW-161		MW-68A		MW-68A		MW-69A		MW-69A		MW-69A	
Analyte	**NJDEP GWQS**	**USEPA MCL**												
Methane/Ethane/Ethene														
ETHANE	NLE	NLE	NA		NA		NA		NA		NA		NA	
ETHENE	NLE	NLE	NA		NA		NA		NA		NA		NA	
METHANE	NLE	NLE	NA		NA		NA		NA		NA		NA	
Volatile Organic Compounds (VOCs)														
1,1,1-TRICHLOROETHANE	200	30	1	U	NA		NA		1	U	1	U	NA	
1,1,2,2-TETRACHLOROETHANE	NLE	1	1	U	NA		NA		1	U	1	U	NA	
1,1,2-TRICHLOROETHANE	5	3	1	U	NA		NA		1	U	1	U	NA	
1,1-DICHLOROETHANE	NLE	50	1	U	NA		NA		1	U	1	U	NA	
1,1-DICHLOROETHENE	NLE	1	1	U	NA		NA		1	U	1	U	NA	
1,2-DICHLOROETHANE	5	2	1	U	NA		NA		1	U	1	U	NA	
1,2-DICHLOROPROPANE	5	1	1	U	NA		NA		1	U	1	U	NA	
2-BUTANONE	NLE	300	10	U	NA		NA		2	U	2	U	NA	
2-HEXANONE	NLE	NLE	10	U	NA		NA		2	U	2	U	NA	
4-METHYL-2-PENTANONE	NLE	NLE	10	U	NA		NA		2	U	2	U	NA	
ACETONE	NLE	6000	10	U	NA		NA		5		3	U	NA	
BENZENE	5	1	1	U	NA		NA		1	U	1	U	NA	
BROMODICHLOROMETHANE	80	1	1	U	NA		NA		1	U	1	U	NA	
BROMOFORM	80	4	1	U	NA		NA		1	U	1	U	NA	
BROMOMETHANE	NLE	10	1	U	NA		NA		2	U	2	U	NA	
CARBON DISULFIDE	NLE	700	1	U	NA		NA		1	U	1	U	NA	
CARBON TETRACHLORIDE	5	1	1	U	NA		NA		1	U	1	U	NA	
CHLOROBENZENE	100	50	1	U	NA		NA		1	U	1	U	NA	
CHLOROETHANE	NLE	NLE	1	U	NA		NA		2	U	2	U	NA	
CHLOROFORM	80	70	1.3		NA		NA		1	U	1	U	NA	
CHLOROMETHANE	NLE		1	U	NA		NA		2	U	2	U	NA	
CIS-1,2-DICHLOROETHENE	70	70	1	U	NA		NA		NA		NA		NA	
CIS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	NA		NA		1	U	1	U	NA	
DIBROMOCHLOROMETHANE	80	1	1	U	NA		NA		1	U	1	U	NA	
ETHYLBENZENE	700	700	1	U	NA		NA		1	U	1	U	NA	
METHYLENE CHLORIDE	5	3	1	U	NA		NA		1	U	1	U	NA	
STYRENE	100	100	1	U	NA		NA		1	U	1	U	NA	
TETRACHLOROETHYLENE	5	1	1	U	NA		NA		1	U	1	U	NA	
TOLUENE	1000	600	1	U	NA		NA		1	U	1	U	NA	
TOTAL-1,2-DICHLOROETHENE	NLE	NLE	NA		NA		NA		1	U	1	U	NA	
TRANS-1,2-DICHLOROETHENE	100	100	1	U	NA		NA		NA		NA		NA	
TRANS-1,3-DICHLOROPROPENE	NLE	NLE	1	U	NA		NA		1	U	1	U	NA	
TRICHLOROETHYLENE	1	5	1	U	NA		NA		1	U	1	U	NA	
VINYL CHLORIDE	2	1	1	U	NA		NA		2	U	2	U	NA	
XYLENES (TOTAL)	10000	1000	3	U	NA		NA		1	U	1	U	NA	
(TIC) UNKNOWN	NLE	NLE	NA		NA		NA		NA		2	J	NA	
Semi-Volatile Organic Compounds (SVOCs)														
1,2,4-TRICHLOROBENZENE	70	9	NA		NA		NA		10	U	11	U	NA	
1,2-DICHLOROBENZENE (BNA)	600	600	NA		NA		NA		10	U	11	U	NA	
1,3-DICHLOROBENZENE (BNA)		600	NA		NA		NA		10	U	11	U	NA	
1,4-DICHLOROBENZENE (BNA)	75	75	NA		NA		NA		10	U	11	U	NA	
2,4,5-TRICHLOROPHENOL	NLE	700	NA		NA		NA		50	U	55	U	NA	
2,4,6-TRICHLOROPHENOL	NLE	20	NA		NA		NA		10	U	11	U	NA	
2,4-DICHLOROPHENOL	NLE	20	NA		NA		NA		10	U	11	U	NA	
2,4-DIMETHYLPHENOL	NLE	100	NA		NA		NA		10	U	11	U	NA	
2,4-DINITROPHENOL	NLE	40	NA		NA		NA		50	U	55	U	NA	
2,4-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
2,6-DINITROTOLUENE (BNA)	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
2-CHLORONAPHTHALENE	NLE	600	NA		NA		NA		10	U	11	U	NA	
2-CHLOROPHENOL	NLE	40	NA		NA		NA		10	U	11	U	NA	
2-METHYLNAPHTHALENE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
2-METHYLPHENOL (O-CRESOL)	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
2-NITROANILINE	NLE	NLE	NA		NA		NA		50	U	55	U	NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

		Field Sample ID:	GW1-MW-1		GW1-MW-129		GW1-MW-223		GW2-MW-129		GW3-MW-129		GW3-MW-202		GW4-MW-129		GW4-MW-202		GW5-MW-129	
		Sample Date:	5/20/1996		10/20/1998		10/20/1998		8/27/1999		1/14/2000		1/14/2000		5/1/2000		5/1/2000		8/11/2000	
Note: units in µg/L.		**Location ID:**	MW-1		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
2-NITROPHENOL	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
3,3'-DICHLOROBENZIDINE	NLE	30	20	U	NA		NA		NA		NA		NA		NA		NA		NA	
3-NITROANILINE	NLE	NLE	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
4,6-DINITRO-2-METHYLPHENOL	NLE	NLE	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-BROMOPHENYL PHENYL ETHER	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-CHLORO-3-METHYLPHENOL	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-CHLOROANILINE	NLE	30	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-CHLOROPHENYL PHENYL ETHER	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-METHYLPHENOL	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-NITROANILINE	NLE	NLE	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
4-NITROPHENOL	NLE	NLE	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
ACENAPHTHENE	NLE	400	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
ACENAPHTHYLENE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
ANTHRACENE	NLE	2000	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BENZO(A)ANTHRACENE	NLE	0.1	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BENZO(A)PYRENE	0.2	0.1	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BENZO(B)FLUORANTHENE	NLE	0.2	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BENZO(G,H,I)PERYLENE	NLE		10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BENZO(K)FLUORANTHENE	NLE	0.5	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BIS(2-CHLOROETHOXY)METHANE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BIS(2-CHLOROETHYL) ETHER	NLE	7	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BIS(2-CHLOROISOPROPYL)ETHER	NLE	300	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BIS(2-ETHYLHEXYL) PHTHALATE	6	3	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
BUTYLBENZYLPHTHALATE	NLE	100	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
CARBAZOLE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
CHRYSENE	NLE	5	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DIBENZ(A,H)ANTHRACENE	NLE	0.3	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DIBENZOFURAN	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DIETHYL PHTHALATE	NLE	6000	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DIMETHYL PHTHALATE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DI-N-BUTYL PHTHALATE	NLE	700	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
DI-N-OCTYL PHTHALATE	NLE	100	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
FLUORANTHENE	NLE	300	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
FLUORENE	NLE	300	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEXACHLOROBENZENE	1	0.02	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEXACHLOROBUTADIENE	NLE	1	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEXACHLOROCYCLOPENTADIENE	50	40	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEXACHLOROETHANE	NLE	7	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
INDENO(1,2,3-C,D)PYRENE	NLE	0.2	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
ISOPHORONE	NLE	40	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
NAPHTHALENE	NLE	300	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
NITROBENZENE (BNA)	NLE	6	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
N-NITROSO-DI-N-PROPYLAMINE	NLE	10	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
N-NITROSODIPHENYLAMINE	NLE	10	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
PENTACHLOROPHENOL	1	0.3	50	U	NA		NA		NA		NA		NA		NA		NA		NA	
PHENANTHRENE	NLE	NLE	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
PHENOL	NLE	2000	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
PYRENE	NLE	200	10	U	NA		NA		NA		NA		NA		NA		NA		NA	
(TIC) CHLOROCYCLOHEXANE	NLE	NLE	100	J	NA		NA		NA		NA		NA		NA		NA		NA	
(TIC) UNKNOWN (BNA)	NLE	NLE	7	J	NA		NA		NA		NA		NA		NA		NA		NA	
Polychlorinated Biphenyls (PCBs)																				
AROCLOR-1016	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1221	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1232	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1242	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1248	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1254	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
AROCLOR-1260	NLE	0.5	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW5-MW-202	GW6-MW-129	GW6-MW-202	GW7-MW-129	GW7-MW-202	GW9-MW-129	GW8-MW-129	GW1-MW-131	GW2-MW-131
		Sample Date:	8/11/2000	12/5/2000	12/5/2000	3/26/2001	3/26/2001	7/1/2010	4/1/2005	8/31/1999	1/14/2000
		Location ID:	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-131	MW-131
Analyte	**NJDEP GWQS**	**USEPA MCL**									
2-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NLE	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	0.2	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL) ETHER	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROISOPROPYL)ETHER	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	6	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUTYLBENZYLPHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBAZOLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NLE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZ(A,H)ANTHRACENE	NLE	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NLE	6000	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NLE	700	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NLE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	50	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-C,D)PYRENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPHORONE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (BNA)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	1	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENOL	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NLE	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) CHLOROCYCLOHEXANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) UNKNOWN (BNA)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (PCBs)											
AROCLOR-1016	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW3-MW-131	GW4-MW-131	GW5-MW-131	GW6-MW-131	GW8-MW-131	GW7-MW-131	GW1-MW-132	GW2-MW-132	GW3-MW-132
		Sample Date:	5/1/2000	8/11/2000	12/5/2000	3/23/2001	7/1/2010	4/1/2005	9/21/1999	1/14/2000	5/1/2000
		Location ID:	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-132	MW-132	MW-132
Analyte	**NJDEP GWQS**	**USEPA MCL**									
2-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NLE	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	0.2	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL) ETHER	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROISOPROPYL)ETHER	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	6	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUTYLBENZYLPHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBAZOLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NLE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZ(A,H)ANTHRACENE	NLE	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NLE	6000	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NLE	700	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NLE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	50	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-C,D)PYRENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPHORONE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (BNA)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	1	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENOL	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NLE	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) CHLOROCYCLOHEXANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) UNKNOWN (BNA)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (PCBs)											
AROCLOR-1016	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW4-MW-132	GW5-MW-132	GW6-MW-132	GW8-MW-132	GW7-MW-132	GW1-MW-149	GW1-MW-150	GW1-MW-151	GW1-MW-160
		Sample Date:	8/11/2000	12/5/2000	3/26/2001	7/1/2010	4/1/2005	4/1/2005	4/1/2005	4/1/2005	7/1/2010
		Location ID:	MW-132	MW-132	MW-132	MW-132	MW-132	MW-149	MW-150	MW-151	MW-160
Analyte	**NJDEP GWQS**	**USEPA MCL**									
2-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NLE	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYLPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NLE	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	0.2	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL) ETHER	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROISOPROPYL)ETHER	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	6	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUTYLBENZYLPHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBAZOLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NLE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZ(A,H)ANTHRACENE	NLE	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NLE	6000	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NLE	700	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NLE	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	1	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NLE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	50	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NLE	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-C,D)PYRENE	NLE	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPHORONE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NLE	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (BNA)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NLE	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	1	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENOL	NLE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NLE	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) CHLOROCYCLOHEXANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
(TIC) UNKNOWN (BNA)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (PCBs)											
AROCLOR-1016	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	NLE	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW1-MW-161		GW1-MW-68A		GW2-MW-68A		GW1-MW-69A		GW2-MW-69A		GW2-MW-69A	
		Sample Date:	7/1/2010		11/9/1994		12/14/1994		11/9/1994		12/15/1994		12/15/1994	
		Location ID:	MW-161		MW-68A		MW-68A		MW-69A		MW-69A		MW-69A	
Analyte	**NJDEP GWQS**	**USEPA MCL**												
2-NITROPHENOL	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
3,3'-DICHLOROBENZIDINE	NLE	30	NA		NA		NA		20	U	22	U	NA	
3-NITROANILINE	NLE	NLE	NA		NA		NA		50	U	55	U	NA	
4,6-DINITRO-2-METHYLPHENOL	NLE	NLE	NA		NA		NA		50	U	55	U	NA	
4-BROMOPHENYL PHENYL ETHER	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
4-CHLORO-3-METHYLPHENOL	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
4-CHLOROANILINE	NLE	30	NA		NA		NA		10	U	11	U	NA	
4-CHLOROPHENYL PHENYL ETHER	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
4-METHYLPHENOL	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
4-NITROANILINE	NLE	NLE	NA		NA		NA		50	U	55	U	NA	
4-NITROPHENOL	NLE	NLE	NA		NA		NA		50	U	55	U	NA	
ACENAPHTHENE	NLE	400	NA		NA		NA		10	U	11	U	NA	
ACENAPHTHYLENE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
ANTHRACENE	NLE	2000	NA		NA		NA		10	U	11	U	NA	
BENZO(A)ANTHRACENE	NLE	0.1	NA		NA		NA		10	U	11	U	NA	
BENZO(A)PYRENE	0.2	0.1	NA		NA		NA		10	U	11	U	NA	
BENZO(B)FLUORANTHENE	NLE	0.2	NA		NA		NA		10	U	11	U	NA	
BENZO(G,H,I)PERYLENE	NLE		NA		NA		NA		10	U	11	U	NA	
BENZO(K)FLUORANTHENE	NLE	0.5	NA		NA		NA		10	U	11	U	NA	
BIS(2-CHLOROETHOXY)METHANE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
BIS(2-CHLOROETHYL) ETHER	NLE	7	NA		NA		NA		10	U	11	U	NA	
BIS(2-CHLOROISOPROPYL)ETHER	NLE	300	NA		NA		NA		10	U	11	U	NA	
BIS(2-ETHYLHEXYL) PHTHALATE	6	3	NA		NA		NA		10	U	11	U	NA	
BUTYLBENZYLPHTHALATE	NLE	100	NA		NA		NA		10	U	2	J	NA	
CARBAZOLE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
CHRYSENE	NLE	5	NA		NA		NA		10	U	11	U	NA	
DIBENZ(A,H)ANTHRACENE	NLE	0.3	NA		NA		NA		10	U	11	U	NA	
DIBENZOFURAN	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
DIETHYL PHTHALATE	NLE	6000	NA		NA		NA		10	U	11	U	NA	
DIMETHYL PHTHALATE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
DI-N-BUTYL PHTHALATE	NLE	700	NA		NA		NA		10	U	11	U	NA	
DI-N-OCTYL PHTHALATE	NLE	100	NA		NA		NA		10	U	11	U	NA	
FLUORANTHENE	NLE	300	NA		NA		NA		10	U	11	U	NA	
FLUORENE	NLE	300	NA		NA		NA		10	U	11	U	NA	
HEXACHLOROBENZENE	1	0.02	NA		NA		NA		10	U	11	U	NA	
HEXACHLOROBUTADIENE	NLE	1	NA		NA		NA		10	U	11	U	NA	
HEXACHLOROCYCLOPENTADIENE	50	40	NA		NA		NA		10	U	11	U	NA	
HEXACHLOROETHANE	NLE	7	NA		NA		NA		10	U	11	U	NA	
INDENO(1,2,3-C,D)PYRENE	NLE	0.2	NA		NA		NA		10	U	11	U	NA	
ISOPHORONE	NLE	40	NA		NA		NA		10	U	11	U	NA	
NAPHTHALENE	NLE	300	NA		NA		NA		10	U	11	U	NA	
NITROBENZENE (BNA)	NLE	6	NA		NA		NA		10	U	11	U	NA	
N-NITROSO-DI-N-PROPYLAMINE	NLE	10	NA		NA		NA		10	U	11	U	NA	
N-NITROSODIPHENYLAMINE	NLE	10	NA		NA		NA		10	U	11	U	NA	
PENTACHLOROPHENOL	1	0.3	NA		NA		NA		50	U	55	U	NA	
PHENANTHRENE	NLE	NLE	NA		NA		NA		10	U	11	U	NA	
PHENOL	NLE	2000	NA		NA		NA		10	U	11	U	NA	
PYRENE	NLE	200	NA		NA		NA		10	U	11	U	NA	
(TIC) CHLOROCYCLOHEXANE	NLE	NLE	NA		NA		NA		NA		NA		NA	
(TIC) UNKNOWN (BNA)	NLE	NLE	NA		NA		NA		NA		9	J	5	J
Polychlorinated Biphenyls (PCBs)														
AROCLOR-1016	NLE	0.5	NA		NA		NA		0.52	U	0.53	U	NA	
AROCLOR-1221	NLE	0.5	NA		NA		NA		0.52	U	0.53	U	NA	
AROCLOR-1232	NLE	0.5	NA		NA		NA		0.52	U	0.53	U	NA	
AROCLOR-1242	NLE	0.5	NA		NA		NA		0.52	U	0.53	U	NA	
AROCLOR-1248	NLE	0.5	NA		NA		NA		0.52	U	0.53	U	NA	
AROCLOR-1254	NLE	0.5	NA		NA		NA		1	U	1.1	U	NA	
AROCLOR-1260	NLE	0.5	NA		NA		NA		1	U	1.1	U	NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW1-MW-1		GW1-MW-129		GW1-MW-223		GW2-MW-129		GW3-MW-129		GW3-MW-202		GW4-MW-129		GW4-MW-202		GW5-MW-129	
		Sample Date:	5/20/1996		10/20/1998		10/20/1998		8/27/1999		1/14/2000		1/14/2000		5/1/2000		5/1/2000		8/11/2000	
		Location ID:	MW-1		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129		MW-129	
Analyte	**NJDEP GWQS**	**USEPA MCL**																		
Pesticides																				
4,4-DDD	NLE	0.1	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
4,4-DDE	NLE	0.1	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
4,4-DDT	NLE	0.1	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ALDRIN	NLE	0.04	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
ALPHA-BHC	NLE	0.02	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
ALPHA-CHLORDANE	NLE	NLE	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
BETA-BHC	NLE	0.04	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
DELTA-BHC	NLE	NLE	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
DIELDRIN	NLE	0.03	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDOSULFAN I	NLE	40	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDOSULFAN II	NLE	40	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDOSULFAN SULFATE	NLE	40	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDRIN	2	2	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDRIN ALDEHYDE	NLE	NLE	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
ENDRIN KETONE	NLE	NLE	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
GAMMA BHC (LINDANE)	0.2	0.03	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
GAMMA-CHLORDANE	NLE		0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEPTACHLOR	0.4	0.05	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
HEPTACHLOR EPOXIDE	0.2	0.2	0.052	U	NA		NA		NA		NA		NA		NA		NA		NA	
METHOXYCHLOR	40	40	0.52	U	NA		NA		NA		NA		NA		NA		NA		NA	
TOXAPHENE	3	2	2.6	U	NA		NA		NA		NA		NA		NA		NA		NA	
Explosives																				
1,3,5-TRINITROBENZENE	NLE	NLE	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
1,3-DINITROBENZENE	NLE	NLE	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4,6-TRINITROTOLUENE	NLE	NLE	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-DINITROTOLUENE (VOC)	NLE	NLE	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
2,6-DINITROTOLUENE (VOC)	NLE	NLE	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
AMINO-DNT'S	NLE	NLE	0.39	U	NA		NA		NA		NA		NA		NA		NA		NA	
HMX	NLE	NLE	1.7	U	NA		NA		NA		NA		NA		NA		NA		NA	
NITROBENZENE (VOC)	NLE	6	0.2	U	NA		NA		NA		NA		NA		NA		NA		NA	
NITROGLYCERIN	NLE	NLE	1.6	U	NA		NA		NA		NA		NA		NA		NA		NA	
PETN	NLE	NLE	1.6	U	NA		NA		NA		NA		NA		NA		NA		NA	
RDX	NLE	NLE	0.78	U	NA		NA		NA		NA		NA		NA		NA		NA	
TETRYL	NLE	NLE	0.58	U	NA		NA		NA		NA		NA		NA		NA		NA	
Metals																				
ALUMINUM, TOTAL	200	NLE	661		NA		NA		NA		NA		NA		NA		NA		NA	
ANTIMONY, TOTAL	6	6	4.1		NA		NA		NA		NA		NA		NA		NA		NA	
ARSENIC, TOTAL	3	10	15.1		NA		NA		NA		NA		NA		NA		NA		NA	
BARIUM, TOTAL	6000	2000	NA		NA		NA		NA		NA		NA		NA		NA		NA	
BERYLLIUM, TOTAL	1	4	0.4	U	NA		NA		NA		NA		NA		NA		NA		NA	
CADMIUM, TOTAL	4	5	0.4	U	NA		NA		NA		NA		NA		NA		NA		NA	
CHROMIUM, TOTAL	70	100	6.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
COPPER, TOTAL	1300	1300	7.9	U	NA		NA		NA		NA		NA		NA		NA		NA	
IRON, TOTAL	300	NLE	690		NA		NA		NA		NA		NA		NA		NA		NA	
LEAD, TOTAL	5	15	2.3	U	NA		NA		NA		NA		NA		NA		NA		NA	
MANGANESE, TOTAL	50	NLE	92.4		NA		NA		NA		NA		NA		NA		NA		NA	
MERCURY, TOTAL	2	2	0.1	U	NA		NA		NA		NA		NA		NA		NA		NA	
NICKEL, TOTAL	100	NLE	19		NA		NA		NA		NA		NA		NA		NA		NA	
SELENIUM, TOTAL	40	50	4		NA		NA		NA		NA		NA		NA		NA		NA	
SILVER, TOTAL	40	NLE	1	U	NA		NA		NA		NA		NA		NA		NA		NA	
THALLIUM, TOTAL	2	2	3.6	U	NA		NA		NA		NA		NA		NA		NA		NA	
ZINC, TOTAL	2000	NLE	32.1		NA		NA		NA		NA		NA		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW5-MW-202	GW6-MW-129	GW6-MW-202	GW7-MW-129	GW7-MW-202	GW9-MW-129	GW8-MW-129	GW1-MW-131	GW2-MW-131
		Sample Date:	8/11/2000	12/5/2000	12/5/2000	3/26/2001	3/26/2001	7/1/2010	4/1/2005	8/31/1999	1/14/2000
		Location ID:	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-131	MW-131
Analyte	**NJDEP GWQS**	**USEPA MCL**									
Pesticides											
4,4-DDD	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDT	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-BHC	NLE	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NLE	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA BHC (LINDANE)	0.2	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	0.4	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	0.2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOXAPHENE	3	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Explosives											
1,3,5-TRINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-TRINITROTOLUENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
AMINO-DNT'S	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
HMX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (VOC)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROGLYCERIN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
RDX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRYL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals											
ALUMINUM, TOTAL	200	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY, TOTAL	6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC, TOTAL	3	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM, TOTAL	6000	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM, TOTAL	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM, TOTAL	4	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM, TOTAL	70	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
COPPER, TOTAL	1300	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRON, TOTAL	300	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD, TOTAL	5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE, TOTAL	50	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL, TOTAL	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
SELENIUM, TOTAL	40	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILVER, TOTAL	40	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZINC, TOTAL	2000	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW3-MW-131	GW4-MW-131	GW5-MW-131	GW6-MW-131	GW8-MW-131	GW7-MW-131	GW1-MW-132	GW2-MW-132	GW3-MW-132
		Sample Date:	5/1/2000	8/11/2000	12/5/2000	3/23/2001	7/1/2010	4/1/2005	9/21/1999	1/14/2000	5/1/2000
		Location ID:	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-132	MW-132	MW-132
Analyte	**NJDEP GWQS**	**USEPA MCL**									
Pesticides											
4,4-DDD	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDT	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-BHC	NLE	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NLE	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA BHC (LINDANE)	0.2	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	0.4	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	0.2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOXAPHENE	3	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Explosives											
1,3,5-TRINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-TRINITROTOLUENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
AMINO-DNT'S	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
HMX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (VOC)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROGLYCERIN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
RDX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRYL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals											
ALUMINUM, TOTAL	200	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY, TOTAL	6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC, TOTAL	3	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM, TOTAL	6000	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM, TOTAL	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM, TOTAL	4	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM, TOTAL	70	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
COPPER, TOTAL	1300	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRON, TOTAL	300	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD, TOTAL	5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE, TOTAL	50	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL, TOTAL	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
SELENIUM, TOTAL	40	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILVER, TOTAL	40	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZINC, TOTAL	2000	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

		Field Sample ID:	GW4-MW-132	GW5-MW-132	GW6-MW-132	GW8-MW-132	GW7-MW-132	GW1-MW-149	GW1-MW-150	GW1-MW-151	GW1-MW-160
		Sample Date:	8/11/2000	12/5/2000	3/26/2001	7/1/2010	4/1/2005	4/1/2005	4/1/2005	4/1/2005	7/1/2010
Note: units in µg/L.		**Location ID:**	MW-132	MW-132	MW-132	MW-132	MW-132	MW-149	MW-150	MW-151	MW-160
Analyte	**NJDEP GWQS**	**USEPA MCL**									
Pesticides											
4,4-DDD	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDE	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4-DDT	NLE	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-BHC	NLE	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NLE	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NLE	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NLE	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA BHC (LINDANE)	0.2	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NLE		NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	0.4	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	0.2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOXAPHENE	3	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Explosives											
1,3,5-TRINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-TRINITROTOLUENE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE (VOC)	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
AMINO-DNT'S	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
HMX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE (VOC)	NLE	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROGLYCERIN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETN	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
RDX	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRYL	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals											
ALUMINUM, TOTAL	200	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY, TOTAL	6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC, TOTAL	3	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM, TOTAL	6000	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM, TOTAL	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM, TOTAL	4	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM, TOTAL	70	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
COPPER, TOTAL	1300	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRON, TOTAL	300	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD, TOTAL	5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE, TOTAL	50	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL, TOTAL	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
SELENIUM, TOTAL	40	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILVER, TOTAL	40	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM, TOTAL	2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZINC, TOTAL	2000	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

Note: units in µg/L.

		Field Sample ID:	GW1-MW-161		GW1-MW-68A		GW2-MW-68A		GW1-MW-69A		GW2-MW-69A		GW2-MW-69A	
		Sample Date:	7/1/2010		11/9/1994		12/14/1994		11/9/1994		12/15/1994		12/15/1994	
		Location ID:	MW-161		MW-68A		MW-68A		MW-69A		MW-69A		MW-69A	
Analyte	**NJDEP GWQS**	**USEPA MCL**												
Pesticides														
4,4-DDD	NLE	0.1	NA		NA		NA		0.1	U	0.11	U	NA	
4,4-DDE	NLE	0.1	NA		NA		NA		0.1	U	0.11	U	NA	
4,4-DDT	NLE	0.1	NA		NA		NA		0.1	U	0.11	U	NA	
ALDRIN	NLE	0.04	NA		NA		NA		0.052	U	0.053	U	NA	
ALPHA-BHC	NLE	0.02	NA		NA		NA		0.052	U	0.053	U	NA	
ALPHA-CHLORDANE	NLE	NLE	NA		NA		NA		0.52	U	0.53	U	NA	
BETA-BHC	NLE	0.04	NA		NA		NA		0.052	U	0.053	U	NA	
DELTA-BHC	NLE	NLE	NA		NA		NA		0.052	U	0.053	U	NA	
DIELDRIN	NLE	0.03	NA		NA		NA		0.1	U	0.11	U	NA	
ENDOSULFAN I	NLE	40	NA		NA		NA		0.052	U	0.053	U	NA	
ENDOSULFAN II	NLE	40	NA		NA		NA		0.1	U	0.11	U	NA	
ENDOSULFAN SULFATE	NLE	40	NA		NA		NA		0.1	U	0.11	U	NA	
ENDRIN	2	2	NA		NA		NA		0.1	U	0.11	U	NA	
ENDRIN ALDEHYDE	NLE	NLE	NA		NA		NA		0.1	U	0.11	U	NA	
ENDRIN KETONE	NLE	NLE	NA		NA		NA		0.1	U	0.11	U	NA	
GAMMA BHC (LINDANE)	0.2	0.03	NA		NA		NA		0.052	U	0.053	U	NA	
GAMMA-CHLORDANE	NLE		NA		NA		NA		0.52	U	0.53	U	NA	
HEPTACHLOR	0.4	0.05	NA		NA		NA		0.052	U	0.053	U	NA	
HEPTACHLOR EPOXIDE	0.2	0.2	NA		NA		NA		0.052	U	0.053	U	NA	
METHOXYCHLOR	40	40	NA		NA		NA		0.52	U	0.53	U	NA	
TOXAPHENE	3	2	NA		NA		NA		1	U	1.1	U	NA	
Explosives														
1,3,5-TRINITROBENZENE	NLE	NLE	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
1,3-DINITROBENZENE	NLE	NLE	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
2,4,6-TRINITROTOLUENE	NLE	NLE	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
2,4-DINITROTOLUENE (VOC)	NLE	NLE	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
2,6-DINITROTOLUENE (VOC)	NLE	NLE	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
AMINO-DNT'S	NLE	NLE	NA		0.39	U	0.39	U	0.39	UJ	0.39	U	NA	
HMX	NLE	NLE	NA		1.7	U	1.7	U	1.7	UJ	1.7	U	NA	
NITROBENZENE (VOC)	NLE	6	NA		0.2	U	0.2	U	0.2	UJ	0.2	U	NA	
NITROGLYCERIN	NLE	NLE	NA		NA		NA		NA		NA		NA	
PETN	NLE	NLE	NA		NA		NA		NA		NA		NA	
RDX	NLE	NLE	NA		0.87	U	0.87	U	0.87	UJ	0.87	U	NA	
TETRYL	NLE	NLE	NA		0.7	R	0.7	U	0.7	R	0.7	U	NA	
Metals														
ALUMINUM, TOTAL	200	NLE	NA		NA		NA		NA		NA		NA	
ANTIMONY, TOTAL	6	6	NA		11	U	11	U	NA		NA		NA	
ARSENIC, TOTAL	3	10	NA		1.7	U	1.9	U	NA		NA		NA	
BARIUM, TOTAL	6000	2000	NA		45.2		47.1		NA		NA		NA	
BERYLLIUM, TOTAL	1	4	NA		1.5	U	1.5	U	NA		NA		NA	
CADMIUM, TOTAL	4	5	NA		1	U	2	U	NA		NA		NA	
CHROMIUM, TOTAL	70	100	NA		10.2		20.9		NA		NA		NA	
COPPER, TOTAL	1300	1300	NA		3.6		4.5		NA		NA		NA	
IRON, TOTAL	300	NLE	NA		NA		NA		NA		NA		NA	
LEAD, TOTAL	5	15	NA		2.3	U	1.6	U	NA		NA		NA	
MANGANESE, TOTAL	50	NLE	NA		NA		NA		NA		NA		NA	
MERCURY, TOTAL	2	2	NA		0.2	U	0.2	U	NA		NA		NA	
NICKEL, TOTAL	100	NLE	NA		18		30.7		NA		NA		NA	
SELENIUM, TOTAL	40	50	NA		1.9	U	1.9	UJ	NA		NA		NA	
SILVER, TOTAL	40	NLE	NA		3.1	U	3.1	U	NA		NA		NA	
THALLIUM, TOTAL	2	2	NA		8.5	U	8.5	U	NA		NA		NA	
ZINC, TOTAL	2000	NLE	NA		44.1		47.7		NA		NA		NA	

Table 4-5
Summary of Analytes Detected in Groundwater and Comparison to Standards
Middlesex County College
Former Raritan Arsenal

NOTES:

ug/l - micrograms per liter.

NJDEP - New Jersey Department of Environmental Protection.

GWQS - 2008 Groundwater Quality Standards.

USEPA - Untied States Environmental Protection Agency

MCL - Maximum Contamination Level.

NA - Parameter not analyzed.

NLE - No Level Established.

U - not detected (at method detection limit).

J - estimated concentration, potentially unreliable concentration

Shaded celss indicates that the conc

Section 6 Tables

Table 6-1
Summary of Analytes Detected in Surface Soil - Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Level[d]	Ratio of Maximum Concentration to EPA RSL	NJDEP Residential Soil Remediation Standard[e]	Ratio of Maximum Concentration to NJDEP RSR	COPC
83329	Acenaphthene	6.10E-02	8.20E-01	mg/kg	SS-11812A-4/12/1994	5/34	3.30E-01 - 7.20E-01	3.46E-01	3.40E+02 NC	0.0024	3.40E+03 NC	0.00024	
208968	Acenaphthylene	5.20E-02	1.80E+00	mg/kg	SS-HTA-2-10/30/1994	14/34	3.30E-01 - 3.70E-01	2.95E-01	3.40E+02 NC	0.0053	NBA	---	
120127	Anthracene	4.20E-02	3.60E+00	mg/kg	SS-HTA-2-10/30/1994	20/34	3.30E-01 - 3.30E-01	3.48E-01	1.70E+03 NC	0.0021	1.70E+04 NC	0.00021	
56553	Benzo(a)anthracene	5.30E-02	1.70E+01	mg/kg	SS-HTA-2-10/30/1994	33/34	3.30E-01 - 3.30E-01	7.97E-01	1.50E-01 C	113	6.00E-01 C	28	X
50328	Benzo(a)pyrene	5.10E-02	1.40E+01	mg/kg	SS-HTA-2-10/30/1994	33/34	3.30E-01 - 3.30E-01	6.87E-01	1.50E-02 C	933	2.00E-01 C	70	X
205992	Benzo(b)fluoranthene	5.30E-02	2.10E+01	mg/kg	SS-HTA-2-10/30/1994	34/34	NA	9.86E-01	1.50E-01 C	140	6.00E-01 C	35	X
191242	Benzo(g,h,i)perylene	4.50E-02	1.40E+00	mg/kg	SA-W-01-11/6/1997	30/34	3.30E-01 - 3.30E-01	2.46E-01	3.60E+00 C	0.39	3.80E+05 C	0.0000037	
207089	Benzo(k)fluoranthene	4.10E-02	6.20E+00	mg/kg	SS-HTA-2-10/30/1994	29/34	3.30E-01 - 3.30E-01	4.18E-01	1.50E+00 C	4.1	6.00E+00 C	1.0	X
117817	Bis(2-ethylhexyl)phthalate	4.90E-02	4.10E+00	mg/kg	SS-HTA-10-10/31/1994	26/34	3.30E-01 - 1.30E+00	4.35E-01	3.50E+01 C	0.12	3.50E+01 C	0.12	
85687	Butylbenzylphthalate	4.90E-02	1.50E-01	mg/kg	SS-HTA-10-10/31/1994	4/34	3.30E-01 - 7.20E-01	3.14E-01	2.60E+02 C	0.00058	1.20E+03 NC	0.00013	
86748	Carbazole	4.20E-02	6.90E-01	mg/kg	SS-11812A-4/12/1994	9/34	3.30E-01 - 7.20E-01	2.92E-01	NBA	--	2.40E+01 C	0.029	
5103719	alpha-Chlordane	6.00E-01	6.00E-01	mg/kg	SS-HTA-27-3/30/1994	1/33	2.00E-03 - 8.50E-01	4.71E-02	1.60E+00 C	0.38	2.00E-01 C	3.0	X
5566347	gamma-Chlordane	5.60E-01	5.60E-01	mg/kg	SS-HTA-27-3/30/1994	1/33	2.00E-03 - 8.50E-01	4.59E-02	1.60E+00 C	0.35	2.00E-01 C	2.8	X
218019	Chrysene	4.90E-02	1.70E+01	mg/kg	SS-HTA-2-10/30/1994	34/34	NA	8.52E-01	1.50E+01 C	1.1	6.20E+01 C	0.27	X
72548	4,4-DDD	3.50E-02	3.70E-01	mg/kg	SS-HTA-2-3/30/1994	6/33	3.00E-03 - 3.00E-03	2.64E-02	2.00E+00 C	0.19	3.00E+00 C	0.12	
72559	4,4-DDE	2.30E-02	3.00E+00	mg/kg	SS-HTA-3-3/30/1994	31/33	3.00E-03 - 3.00E-03	3.30E-01	1.40E+00 C	2.1	2.00E+00 C	1.5	X
50293	4,4-DDT	3.40E-02	7.70E+00	mg/kg	SS-HTA-3-3/30/1994	27/33	3.00E-03 - 3.00E-03	6.43E-01	1.70E+00 C	4.5	2.00E+00 C	3.9	X
53703	Dibenz(a,h)anthracene	4.80E-02	2.50E+00	mg/kg	SS-HTA-2-10/30/1994	11/34	3.30E-01 - 3.60E-01	3.43E-01	1.50E-02 C	167	2.00E-01 C	13	X
132649	Dibenzofuran	2.00E-01	5.80E-01	mg/kg	SS-11812A-4/12/1994	2/34	3.30E-01 - 7.20E-01	3.46E-01	7.80E+00 NC	0.074	NBA	---	
91941	3,3'-Dichlorobenzidine	3.00E-01	3.00E-01	mg/kg	SS-HTA-2-10/30/1994	1/34	3.30E-01 - 1.40E+00	3.84E-01	1.10E+00 C	0.27	1.00E+00 C	0.30	
75343	1,1-Dichloroethane	2.00E-03	2.00E-03	mg/kg	SA-W-01-11/6/1997	1/10	6.00E-03 - 7.00E-01	4.48E-01	3.30E+00 C	0.00061	8.00E+00 C	0.00025	
60571	Dieldrin	1.80E-02	5.70E+00	mg/kg	SS-HTA-27-3/30/1994	8/33	3.00E-03 - 1.70E-01	1.99E-01	3.00E-02 C	190	4.00E-02 C	143	X
100414	Ethylbenzene	4.10E-01	7.00E-01	mg/kg	PE-MCC10-6/7/2004	3/10	5.00E-03 - 5.40E-01	3.83E-01	5.40E+00 C	0.13	7.80E+03 NC	0.000090	
206440	Fluoranthene	7.60E-02	3.80E+00	mg/kg	SS-11812A-4/12/1994	34/34	NA	6.14E-01	2.30E+02 NC	0.017	2.30E+03 NC	0.0017	
86737	Fluorene	5.70E-02	1.10E+00	mg/kg	SS-HTA-2-10/30/1994	6/34	3.30E-01 - 7.20E-01	3.51E-01	2.30E+02 NC	0.0048	2.30E+03 NC	0.00048	
1024573	Heptachlor epoxide	1.00E-02	2.40E-01	mg/kg	SS-HTA-2-3/30/1994	6/33	2.00E-03 - 8.50E-02	1.62E-02	5.30E-02 C	4.5	7.00E-02 C	3.4	X
193395	Indeno(1,2,3-c,d)pyrene	4.20E-02	1.20E+01	mg/kg	SS-HTA-2-10/30/1994	31/34	3.30E-01 - 3.30E-01	5.57E-01	1.50E-01 C	80	6.00E-01 C	20	X
91576	2-Methylnaphthalene	6.40E-02	4.20E-01	mg/kg	SS-11812A-4/12/1994	2/34	3.30E-01 - 7.20E-01	3.37E-01	3.10E+01 NC	0.014	2.30E+02 NC	0.0018	
91203	Naphthalene	8.40E-02	1.30E+00	mg/kg	SS-11812A-4/12/1994	2/34	3.30E-01 - 7.20E-01	3.64E-01	3.60E+00 C	0.36	6.00E+00 C	0.22	
1111125	Petroleum Hydrocarbon	4.85E+01	2.61E+03	mg/kg	PE-MCC06-5/27/2004	8/8	NA	1.02E+03	NBA	--	NBA	---	
85018	Phenanthrene	4.50E-02	1.30E+01	mg/kg	SS-HTA-2-10/30/1994	32/34	3.30E-01 - 3.30E-01	7.98E-01	1.70E+02 NC	0.076	NBA	---	
129000	Pyrene	7.60E-02	3.30E+00	mg/kg	SS-11812A-4/12/1994	34/34	NA	5.85E-01	1.70E+02 NC	0.019	1.70E+03 NC	0.0019	
108883	Toluene	1.00E-03	1.80E-01	mg/kg	PE-MCC08-5/27/2004	2/10	6.00E-03 - 7.00E-01	4.07E-01	5.00E+02 NC	0.00036	6.30E+03 NC	0.000029	
71556	1,1,1-Trichloroethane	4.00E-02	4.00E-02	mg/kg	SA-W-01-11/6/1997	1/10	6.00E-03 - 7.00E-01	4.52E-01	8.70E+02 NC	0.000046	2.90E+02 NC	0.00014	
79016	Trichloroethylene	1.00E-03	1.00E-03	mg/kg	SA-W-01-11/6/1997	1/10	6.00E-03 - 1.40E-01	9.13E-02	2.50E+00 NC	0.00040	7.00E+00 C	0.00014	
1330207	Xylenes, Total	1.60E-01	2.00E+00	mg/kg	PE-MCC08-5/27/2004	2/10	5.00E-03 - 7.00E-01	5.42E-01	6.30E+01 NC	0.032	1.20E+04 NC	0.00017	
7429905	Aluminum	6.52E+03	6.52E+03	mg/kg	SS-11811A-4/12/1994	1/8	1.00E-01 - 1.00E-01	8.15E+02	7.70E+03 NC	0.85	7.80E+04 NC	0.084	
7440360	Antimony	7.70E-01	1.00E+00	mg/kg	SS-11812A-4/12/1994	2/9	1.00E-01 - 1.00E-01	2.74E-01	3.10E+00 NC	0.32	3.10E+01 NC	0.032	
7440382	Arsenic	2.00E+00	1.94E+01	mg/kg	SS-HTA-14-3/30/1994	33/33	NA	7.05E+00	3.90E-01 C	50	1.90E+01	1.0	X
7440393	Barium	2.34E+01	8.22E+01	mg/kg	SS-HTA-32-3/30/1994	33/33	NA	4.57E+01	1.50E+03 NC	0.055	1.60E+04 NC	0.0051	
7440417	Beryllium	5.20E-01	9.50E-01	mg/kg	SS-HTA-32-3/30/1994	9/9	NA	6.78E-01	1.60E+01 NC	0.059	1.60E+01 NC	0.059	
7440439	Cadmium	1.10E-01	1.60E+00	mg/kg	SS-HTA-12-3/30/1994	32/33	2.90E-01 - 2.90E-01	3.85E-01	7.00E+00 NC	0.23	7.80E+01 NC	0.021	
7440702	Calcium	6.68E+02	1.59E+03	mg/kg	SS-HTA-14-3/30/1994	8/8	NA	1.10E+03	NUT	---	NUT	---	
7440473	Chromium	1.10E+01	4.49E+01	mg/kg	SS-HTA-25-3/30/1994	33/33	1.00E-01 - 1.00E-01	2.03E+01	2.90E-01 C	155	NBA	---	X
7440484	Cobalt	2.40E+00	7.50E+00	mg/kg	SS-HTA-32-3/30/1994	8/8	NA	4.51E+00	2.30E+00 NC	3.3	1.60E+03 NC	0.0047	X
7440508	Copper	1.62E+01	5.75E+01	mg/kg	SS-11811A-4/12/1994	9/9	NA	3.32E+01	3.10E+02 NC	0.19	3.10E+03 NC	0.019	
57125	Cyanide	4.00E-01	4.00E-01	mg/kg	SS-HTA-30-3/30/1994	1/31	2.50E-01 - 2.50E-01	2.55E-01	1.60E+02 NC	0.0025	1.60E+03 NC	0.00025	
7439896	Iron	1.20E+04	2.12E+04	mg/kg	SS-HTA-32-3/30/1994	8/8	NA	1.60E+04	NUT	---	NBA	---	
7439921	Lead	1.49E+01	2.04E+02	mg/kg	SS-HTA-2-3/30/1994	33/33	NA	6.75E+01	4.00E+02	0.51	4.00E+02	0.51	
7439954	Magnesium	5.52E+02	2.89E+03	mg/kg	SS-HTA-32-3/30/1994	8/8	NA	1.13E+03	NUT	---	NUT	---	
7439965	Manganese	1.68E+02	1.68E+02	mg/kg	SS-11811A-4/12/1994	1/8	1.00E-01 - 1.00E-01	2.11E+01	1.80E+02 NC	0.93	1.10E+04 NC	0.015	
7439976	Mercury	6.20E-02	3.30E+00	mg/kg	SS-HTA-14-3/30/1994	21/33	1.00E-01 - 1.00E-01	3.70E-01	1.00E+00 NC	3.3	2.30E+01 NC	0.14	X
7440020	Nickel	4.90E+00	1.38E+01	mg/kg	SS-HTA-32-3/30/1994	9/9	NA	7.78E+00	1.50E+02 NC	0.092	1.60E+03 NC	0.0086	
7440097	Potassium	3.38E+02	1.20E+03	mg/kg	SS-HTA-32-3/30/1994	8/8	NA	5.70E+02	NUT	---	NUT	---	
7782492	Selenium	3.30E-01	8.40E-01	mg/kg	SS-HTA-30-3/30/1994	30/33	1.00E-01 - 2.90E-01	5.50E-01	3.90E+01 NC	0.022	3.90E+02 NC	0.0022	
7440224	Silver	3.00E-01	1.00E+00	mg/kg	SS-HTA-10-3/30/1994	15/33	1.00E-01 - 4.50E-01	3.43E-01	3.90E+01 NC	0.026	3.90E+02 NC	0.0026	

Table 6-1
Summary of Analytes Detected in Surface Soil - Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Level[d]	Ratio of Maximum Concentration to EPA RSL	NJDEP Residential Soil Remediation Standard[e]	Ratio of Maximum Concentration to NJDEP RSR	COPC
7440235	Sodium	4.75E+01	9.46E+01	mg/kg	SS-HTA-14-3/30/1994	7/8	4.43E+01 - 4.43E+01	6.01E+01	NUT	---	NUT	---	
7440280	Thallium	2.60E-01	2.60E-01	mg/kg	SS-11812A-4/12/1994	1/9	1.00E-01 - 2.40E-01	1.33E-01	7.80E-02 NC	3.3	5.00E+00 NC	0.052	X
7440315	Tin	1.90E+00	3.00E+01	mg/kg	SS-HTA-4-3/30/1994	6/7	1.00E-01 - 1.00E-01	6.33E+00	4.70E+03 NC	0.0064	NBA	---	
7440622	Vanadium	3.20E+00	3.33E+01	mg/kg	SS-HTA-11-3/30/1994	8/8	NA	2.73E+01	3.90E+01 NC	0.85	7.80E+01 NC	0.43	
7440666	Zinc	3.60E+01	1.86E+02	mg/kg	SS-11812A-4/12/1994	9/9	NA	7.29E+01	2.30E+03 NC	0.081	2.30E+04 NC	0.0081	

[a]Number of sampling locations at which analyte was detected compared with total number of sampling locations; duplicates at a location were averaged and considered one sample.

[b]Based on nondetected samples.

[c]Nondetects were included at the full detection limit.

[d]EPA, 2011a.

[e]NJDEP, 2008a.

C = Cancer based, target risk equals 1E-06.
mg/kg = Milligrams per kilogram.
NA = Not applicable.
NBA = No benchmark available.
NC = Noncancer based, target hazard quotient equals 0.1.
NUT = Essential nutrient.

Table 6-2
Summary of Analytes Detected in Aggregate Soil - Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Level[d]	Ratio of Maximum Concentration to EPA RSL	NJDEP Residential Soil Remediation Standard[e]	Ratio of Maximum Concentration to NJDEP RSR	COPC
83329	Acenaphthene	6.10E-02	8.20E-01	mg/kg	SS-11812A-4/12/1994	7/42	3.30E-01 - 7.20E-01	3.49E-01	3.40E+02 NC	0.0024	3.40E+03 NC	0.00024	
208968	Acenaphthylene	5.20E-02	1.80E+00	mg/kg	SS-HTA-2-10/30/1994	14/42	3.30E-01 - 3.70E+00	3.88E-01	3.40E+02 NC	0.0053	NBA	---	
120127	Anthracene	4.20E-02	3.60E+00	mg/kg	SS-HTA-2-10/30/1994	22/42	3.30E-01 - 3.90E-01	3.54E-01	1.70E+03 NC	0.0021	1.70E+04 NC	0.00021	
11097691	Aroclor-1254	4.50E-02	4.50E-02	mg/kg	TP-W33A-6/12/1996	1/9	3.50E-02 - 2.40E+00	5.08E-01	1.10E-01 NC	0.41	2.00E-01 C	0.23	
56553	Benzo(a)anthracene	5.30E-02	1.70E+01	mg/kg	SS-HTA-2-10/30/1994	34/42	3.30E-01 - 3.90E-01	7.15E-01	1.50E-01 C	113	6.00E-01 C	28	X
50328	Benzo(a)pyrene	5.10E-02	1.40E+01	mg/kg	SS-HTA-2-10/30/1994	33/42	3.30E-01 - 3.70E+00	7.05E-01	1.50E-02 C	933	2.00E-01 C	70	X
205992	Benzo(b)fluoranthene	5.30E-02	2.10E+01	mg/kg	SS-HTA-2-10/30/1994	34/42	3.50E-01 - 3.70E+00	9.47E-01	1.50E-01 C	140	6.00E-01 C	35	X
191242	Benzo(g,h,i)perylene	4.50E-02	1.40E+00	mg/kg	SA-W-01-11/6/1997	30/42	3.30E-01 - 3.70E+00	3.48E-01	3.60E+00 C	0.39	3.80E+05 C	0.0000037	
207089	Benzo(k)fluoranthene	4.10E-02	6.20E+00	mg/kg	SS-HTA-2-10/30/1994	29/42	3.30E-01 - 3.70E+00	4.87E-01	1.50E+00 C	4.1	6.00E+00 C	1.0	X
117817	Bis(2-ethylhexyl)phthalate	4.90E-02	4.10E+00	mg/kg	SS-HTA-10-10/31/1994	28/41	3.30E-01 - 1.30E+00	4.56E-01	3.50E+01 C	0.12	3.50E+01 C	0.12	
78933	2-Butanone	9.40E-01	5.00E+00	mg/kg	PE-W01-1/14/1998	2/22	1.00E-02 - 6.50E+01	4.30E+00	2.80E+03 NC	0.0018	3.10E+03 NC	0.0016	
85687	Butylbenzylphthalate	4.90E-02	1.50E-01	mg/kg	SS-HTA-10-10/31/1994	4/41	3.30E-01 - 3.70E+00	4.05E-01	2.60E+02 C	0.00058	1.20E+03 NC	0.00013	
86748	Carbazole	4.20E-02	6.90E-01	mg/kg	SS-11812A-4/12/1994	9/41	3.30E-01 - 3.70E+00	3.86E-01	NBA	--	2.40E+01 C	0.029	
5103719	alpha-Chlordane	6.00E-01	6.00E-01	mg/kg	SS-HTA-27-3/30/1994	1/40	1.80E-03 - 1.20E+00	7.23E-02	1.60E+00 C	0.38	2.00E-01 C	3.0	X
5566347	gamma-Chlordane	5.60E-01	5.60E-01	mg/kg	SS-HTA-27-3/30/1994	1/40	1.80E-03 - 1.20E+00	7.13E-02	1.60E+00 C	0.35	2.00E-01 C	2.8	X
218019	Chrysene	4.90E-02	1.70E+01	mg/kg	SS-HTA-2-10/30/1994	36/42	3.50E-01 - 3.90E-01	7.61E-01	1.50E+01 C	1.1	6.20E+01 C	0.27	X
72548	4,4-DDD	3.50E-02	3.70E-01	mg/kg	SS-HTA-2-3/30/1994	7/40	3.00E-03 - 1.00E-02	2.72E-02	2.00E+00 C	0.19	3.00E+00 C	0.12	
72559	4,4-DDE	1.20E-02	3.00E+00	mg/kg	SS-HTA-3-3/30/1994	33/40	3.00E-03 - 1.00E-02	2.80E-01	1.40E+00 C	2.1	2.00E+00 C	1.5	X
50293	4,4-DDT	5.40E-03	7.70E+00	mg/kg	SS-HTA-3-3/30/1994	29/40	3.00E-03 - 1.00E-02	5.36E-01	1.70E+00 C	4.5	2.00E+00 C	3.9	X
53703	Dibenz(a,h)anthracene	4.80E-02	2.50E+00	mg/kg	SS-HTA-2-10/30/1994	11/42	3.30E-01 - 3.70E+00	4.26E-01	1.50E-02 C	167	2.00E-01 C	13	X
132649	Dibenzofuran	2.00E-01	5.80E-01	mg/kg	SS-11812A-4/12/1994	2/42	3.30E-01 - 3.70E+00	4.29E-01	7.80E+00 NC	0.074	NBA	---	
91941	3,3'-Dichlorobenzidine	3.00E-01	3.00E-01	mg/kg	SS-HTA-2-10/30/1994	1/41	3.30E-01 - 7.40E+00	6.06E-01	1.10E+00 C	0.27	1.00E+00 C	0.30	
75343	1,1-Dichloroethane	2.00E-03	2.00E-03	mg/kg	SA-W-01-11/6/1997	1/29	5.00E-03 - 3.20E+01	1.79E+00	3.30E+00 C	0.00061	8.00E+00 C	0.00025	
540590	1,2-Dichloroethene	1.70E+01	1.70E+01	mg/kg	TP-W33A-6/12/1996	1/10	5.00E-03 - 6.00E-03	1.71E+00	7.00E+01 NC	0.24	2.30E+02 NC	0.074	
156592	cis-1,2-Dichloroethene	9.00E-03	3.10E+00	mg/kg	PE-W01-1/14/1998	3/19	5.00E-03 - 7.30E+00	1.09E+00	1.60E+01 NC	0.19	2.30E+02 NC	0.013	
60571	Dieldrin	7.00E-03	5.70E+00	mg/kg	SS-HTA-27-3/30/1994	9/40	3.00E-03 - 2.40E-01	1.71E-01	3.00E-02 C	190	4.00E-02 C	143	X
100414	Ethylbenzene	1.00E-03	1.00E+01	mg/kg	TP-W33A-6/12/1996	9/29	5.00E-03 - 2.80E+00	8.79E-01	5.40E+00 C	1.9	7.80E+03 NC	0.0013	X
206440	Fluoranthene	6.60E-02	3.80E+00	mg/kg	SS-11812A-4/12/1994	36/42	3.50E-01 - 3.70E+00	6.33E-01	2.30E+02 NC	0.017	2.30E+03 NC	0.0017	
86737	Fluorene	5.70E-02	1.10E+00	mg/kg	SS-HTA-2-10/30/1994	7/42	3.30E-01 - 3.70E+00	4.41E-01	2.30E+02 NC	0.0048	2.30E+03 NC	0.00048	
1024573	Heptachlor epoxide	1.00E-02	2.40E-01	mg/kg	SS-HTA-2-3/30/1994	6/40	1.80E-03 - 1.20E-01	1.69E-02	5.30E-02 C	4.5	7.00E-02 C	3.4	X
193395	Indeno(1,2,3-c,d)pyrene	4.20E-02	1.20E+01	mg/kg	SS-HTA-2-10/30/1994	31/42	3.30E-01 - 3.70E+00	5.99E-01	1.50E-01 C	80	6.00E-01 C	20	X
91576	2-Methylnaphthalene	6.40E-02	1.50E+01	mg/kg	TP-W33A-6/12/1996	4/42	3.30E-01 - 7.20E-01	7.75E-01	3.10E+01 NC	0.48	2.30E+02 NC	0.065	
108101	4-Methyl-2-pentanone	5.40E-01	5.40E-01	mg/kg	PE-W01-1/14/1998	1/22	1.00E-02 - 6.50E+01	4.34E+00	5.30E+02 NC	0.0010	NBA	---	
91203	Naphthalene	8.40E-02	4.00E+01	mg/kg	TP-W33A-6/12/1996	4/42	3.30E-01 - 7.20E-01	1.32E+00	3.60E+00 C	11	6.00E+00 C	6.7	X
1111125	Petroleum hydrocarbon	9.00E+00	1.32E+04	mg/kg	TP-W33A-6/12/1996	18/20	3.60E+00 - 2.68E+01	1.76E+03	NBA	--	NBA	---	
85018	Phenanthrene	4.50E-02	1.30E+01	mg/kg	SS-HTA-2-10/30/1994	34/42	3.30E-01 - 3.90E-01	8.39E-01	1.70E+02 NC	0.076	NBA	---	
129000	Pyrene	6.40E-02	3.30E+00	mg/kg	SS-11812A-4/12/1994	37/42	3.50E-01 - 3.90E-01	5.50E-01	1.70E+02 NC	0.019	1.70E+03 NC	0.0019	
127184	Tetrachloroethylene	8.00E-03	2.80E-01	mg/kg	PE-W01-1/14/1998, PE-W05-1/15/1998	3/29	5.00E-03 - 3.20E+01	1.64E+00	5.50E-01 C	0.51	2.00E+00 C	0.14	
108883	Toluene	1.00E-03	4.00E+01	mg/kg	TP-W33A-6/12/1996	9/29	5.00E-03 - 2.80E+00	2.50E+00	5.00E+02 NC	0.080	6.30E+03 NC	0.0063	
71556	1,1,1-Trichloroethane	4.00E-02	3.90E-01	mg/kg	PE-W01-1/14/1998	2/29	5.00E-03 - 3.20E+01	1.78E+00	8.70E+02 NC	0.00045	2.90E+02 NC	0.0013	
79016	Trichloroethylene	1.00E-03	1.50E+03	mg/kg	TP-W33A-6/12/1996	13/29	5.00E-03 - 2.80E+00	6.99E+01	2.50E+00 NC	600	7.00E+00 C	214	X
1330207	Xylenes, Total	1.30E-02	5.00E+01	mg/kg	TP-W33A-6/12/1996	8/29	5.00E-03 - 2.80E+00	3.70E+00	6.30E+01 NC	0.79	1.20E+04 NC	0.0042	
7429905	Aluminum	1.02E+03	7.32E+03	mg/kg	SS-11801A-4/11/1994	7/14	1.00E-01 - 1.00E-01	2.22E+03	7.70E+03 NC	0.95	7.80E+04 NC	0.094	
7440360	Antimony	2.60E-01	1.00E+00	mg/kg	SS-11812A-4/12/1994	14/39	1.00E-01 - 5.00E-01	3.59E-01	3.10E+00 NC	0.32	3.10E+01 NC	0.032	
7440382	Arsenic	2.40E-01	1.94E+01	mg/kg	SS-HTA-14-3/30/1994	56/63	2.00E-01 - 9.00E-01	4.16E+00	3.90E-01 C	50	1.90E+01	1.0	X
7440393	Barium	4.20E+00	8.22E+01	mg/kg	SS-HTA-32-3/30/1994	53/58	1.20E+00 - 3.70E+00	3.21E+01	1.50E+03 NC	0.055	1.60E+04 NC	0.0051	
7440417	Beryllium	5.00E-02	9.50E-01	mg/kg	SS-HTA-32-3/30/1994	35/39	4.00E-02 - 2.10E-01	4.31E-01	1.60E+01 NC	0.059	1.60E+01 NC	0.059	
7440439	Cadmium	5.00E-02	1.60E+00	mg/kg	SS-HTA-12-3/30/1994	50/63	4.00E-02 - 3.00E-01	3.73E-01	7.00E+00 NC	0.23	7.80E+01 NC	0.021	
7440702	Calcium	4.74E+01	1.59E+03	mg/kg	SS-HTA-14-3/30/1994	14/14	NA	7.23E+02	NUT	---	NUT	---	
7440473	Chromium	2.20E+00	4.49E+01	mg/kg	SS-HTA-25-3/30/1994	63/63	1.00E-01 - 1.00E-01	1.55E+01	2.90E-01 C	155	NBA	---	X
7440484	Cobalt	1.50E+00	8.00E+00	mg/kg	SS-11801A-4/11/1994	14/14	NA	4.80E+00	2.30E+00 NC	3.5	1.60E+03 NC	0.0050	X
7440508	Copper	2.20E+00	7.85E+01	mg/kg	SS-11805A-4/12/1994	38/39	2.80E+00 - 2.80E+00	1.70E+01	3.10E+02 NC	0.25	3.10E+03 NC	0.025	
57125	Cyanide	4.00E-01	1.10E+00	mg/kg	SS-H01A-4/13/1994	2/37	2.50E-01 - 6.10E-01	3.16E-01	1.60E+02 NC	0.0069	1.60E+03 NC	0.00069	
7439896	Iron	1.20E+04	2.83E+04	mg/kg	SS-W27A-4/13/1994	14/14	NA	1.85E+04	NUT	---	NBA	---	
7439921	Lead	1.20E+00	2.04E+02	mg/kg	SS-HTA-2-3/30/1994	61/63	1.70E+00 - 7.20E+00	3.92E+01	4.00E+02	0.51	4.00E+02	0.51	
7439954	Magnesium	3.32E+01	2.89E+03	mg/kg	SS-HTA-32-3/30/1994	14/14	NA	7.97E+02	NUT	---	NUT	---	
7439965	Manganese	1.90E+00	1.68E+02	mg/kg	SS-11811A-4/12/1994	7/14	1.00E-01 - 1.00E-01	3.75E+01	1.80E+02 NC	0.93	1.10E+04 NC	0.015	
7439976	Mercury	6.20E-02	3.30E+00	mg/kg	SS-HTA-14-3/30/1994	23/63	1.00E-02 - 1.00E-01	2.19E-01	1.00E+00 NC	3.3	2.30E+01 NC	0.14	X

Table 6-2
Summary of Analytes Detected in Aggregate Soil - Middlesex County College
Former Raritan Arsenal

CAS Number	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency[a]	Limits of Quantitation[b]	Arithmetic Mean[c]	EPA Regional Screening Level[d]	Ratio of Maximum Concentration to EPA RSL	NJDEP Residential Soil Remediation Standard[e]	Ratio of Maximum Concentration to NJDEP RSR	COPC
7440020	Nickel	4.40E-01	1.38E+01	mg/kg	SS-HTA-32-3/30/1994	32/39	1.90E-01 - 1.10E+00	4.41E+00	1.50E+02 NC	0.092	1.60E+03 NC	0.0086	
7440097	Potassium	3.38E+02	1.20E+03	mg/kg	SS-HTA-32-3/30/1994	12/14	1.02E+02 - 1.06E+02	4.82E+02	NUT	---	NUT	---	
7782492	Selenium	3.30E-01	2.60E+00	mg/kg	SS-X03A-4/21/1994	32/54	1.00E-01 - 4.40E-01	5.00E-01	3.90E+01 NC	0.067	3.90E+02 NC	0.0067	
7440224	Silver	3.00E-01	1.00E+00	mg/kg	SS-HTA-10-3/30/1994	26/63	1.00E-01 - 4.90E-01	4.08E-01	3.90E+01 NC	0.026	3.90E+02 NC	0.0026	
7440235	Sodium	4.75E+01	9.46E+01	mg/kg	SS-HTA-14-3/30/1994	7/14	3.10E+01 - 8.68E+01	5.64E+01	NUT	---	NUT	---	
7440280	Thallium	2.60E-01	8.50E-01	mg/kg	PE-W12-7/7/1998	5/39	1.00E-01 - 6.20E-01	2.75E-01	7.80E-02 NC	11	5.00E+00 NC	0.17	X
7440315	Tin	1.90E+00	3.00E+01	mg/kg	SS-HTA-4-3/30/1994	6/7	1.00E-01 - 1.00E-01	6.33E+00	4.70E+03 NC	0.0064	NBA	---	
7440622	Vanadium	3.20E+00	3.79E+01	mg/kg	SS-H01A-4/13/1994	14/14	NA	2.34E+01	3.90E+01 NC	0.97	7.80E+01 NC	0.49	
7440666	Zinc	6.50E-01	2.17E+02	mg/kg	SS-11812B-4/12/1994	21/39	3.80E+00 - 3.00E+01	3.52E+01	2.30E+03 NC	0.094	2.30E+04 NC	0.0094	

[a]Number of sampling locations at which analyte was detected compared with total number of sampling locations; duplicates at a location were averaged and considered one sample.

[b]Based on nondetected samples.

[c]Nondetects were included at the full detection limit.

[d]EPA, 2011a.

[e]NJDEP, 2008a.

C = Cancer based, target risk equals 1E-06.

mg/kg = Milligrams per kilogram.

NA = Not applicable.

NBA = No benchmark available.

NC = Noncancer based, target hazard quotient equals 0.1.

NUT = Essential nutrient.

Table 6-3
Summary of Exposure Point Concentrations for COPCs in Surface Soil - Middlesex County College
Former Raritan Arsenal

COPC	Arithmetic Mean (mg/kg)	95% UCL (mg/kg)	Maximum Detected Concentration (mg/kg)	Exposure Point Concentration		
				Value (mg/kg)	Statistic	Rationale
Benzo(a)anthracene	7.97E-01	3.89E+00	1.70E+01	3.89E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Benzo(a)pyrene	6.87E-01	3.23E+00	1.40E+01	3.23E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Benzo(b)fluoranthene	9.86E-01	3.64E+00	2.10E+01	3.64E+00	95% Chebyshev (Mean, Sd) UCL	ProUCL Recommendation
Benzo(k)fluoranthene	4.18E-01	1.54E+00	6.20E+00	1.54E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
alpha-Chlordane	4.71E-02	NC	6.00E-01	2.00E-03	75th Percentile	See footnote
gamma-Chlordane	4.59E-02	NC	5.60E-01	2.00E-03	75th Percentile	See footnote
Chrysene	8.52E-01	3.01E+00	1.70E+01	3.01E+00	95% Chebyshev (Mean, Sd) UCL	ProUCL Recommendation
4,4-DDE	3.30E-01	7.75E-01	3.00E+00	7.75E-01	95% KM (Chebyshev) UCL	ProUCL Recommendation
4,4-DDT	6.43E-01	2.51E+00	7.70E+00	2.51E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Dibenz(a,h)anthracene	3.43E-01	3.45E-01	2.50E+00	3.45E-01	95% KM (BCA) UCL	ProUCL Recommendation
Dieldrin	1.99E-01	1.34E+00	5.70E+00	1.34E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Heptachlor epoxide	1.62E-02	3.36E-02	2.40E-01	3.36E-02	95% KM (t) UCL	ProUCL Recommendation
Indeno(1,2,3-c,d)pyrene	5.57E-01	2.72E+00	1.20E+01	2.72E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Arsenic	7.05E+00	8.20E+00	1.94E+01	8.20E+00	95% Approximate Gamma UCL	ProUCL Recommendation
Chromium	2.03E+01	2.27E+01	4.49E+01	2.27E+01	95% Student's-t UCL	ProUCL Recommendation
Cobalt	4.51E+00	NC	7.50E+00	5.65E+00	75th Percentile	See footnote
Mercury	3.70E-01	1.09E+00	3.30E+00	1.09E+00	97.5% KM (Chebyshev) UCL	ProUCL Recommendation
Thallium	1.33E-01	NC	2.60E-01	1.00E-01	75th Percentile	See footnote

NC = Not calculated.
Note: Maximum detected concentration used as the EPC in instances where total samples were less than or equal to 2 or the 75th Percentile exceeded the maximum detected concentration (likely a result of censored data). The 75th Percentile was used as the EPC in instances where total samples were less than or equal to 8 or there were less than 4 detects.

Table 6-4
Summary of Exposure Point Concentrations for COPCs in Aggregate Soil - Middlesex County College
Former Raritan Arsenal

COPC	Arithmetic Mean (mg/kg)	95% UCL (mg/kg)	Maximum Detected Concentration (mg/kg)	Exposure Point Concentration		
				Value (mg/kg)	Statistic	Rationale
Benzo(a)anthracene	7.15E-01	2.43E+00	1.70E+01	2.43E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
Benzo(a)pyrene	7.05E-01	2.03E+00	1.40E+01	2.03E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
Benzo(b)fluoranthene	9.47E-01	3.00E+00	2.10E+01	3.00E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
Benzo(k)fluoranthene	4.87E-01	9.93E-01	6.20E+00	9.93E-01	95% KM (Chebyshev) UCL	ProUCL Recommendation
alpha-Chlordane	7.23E-02	NC	6.00E-01	2.00E-03	75th Percentile	See footnote
gamma-Chlordane	7.13E-02	NC	5.60E-01	2.00E-03	75th Percentile	See footnote
Chrysene	7.61E-01	2.48E+00	1.70E+01	2.48E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
4,4-DDE	2.80E-01	6.56E-01	3.00E+00	6.56E-01	95% KM (Chebyshev) UCL	ProUCL Recommendation
4,4-DDT	5.36E-01	1.62E+00	7.70E+00	1.62E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
Dibenz(a,h)anthracene	4.26E-01	3.08E-01	2.50E+00	3.08E-01	95% KM (BCA) UCL	ProUCL Recommendation
Dieldrin	1.71E-01	8.13E-01	5.70E+00	8.13E-01	95% KM (Chebyshev) UCL	ProUCL Recommendation
Ethylbenzene	8.79E-01	1.34E+00	1.00E+01	1.34E+00	95% KM (t) UCL	ProUCL Recommendation
Heptachlor epoxide	1.69E-02	2.96E-02	2.40E-01	2.96E-02	95% KM (t) UCL	ProUCL Recommendation
Indeno(1,2,3-c,d)pyrene	5.99E-01	1.70E+00	1.20E+01	1.70E+00	95% KM (Chebyshev) UCL	ProUCL Recommendation
Naphthalene	1.32E+00	2.91E+00	4.00E+01	2.91E+00	95% KM (t) UCL	ProUCL Recommendation
Trichloroethylene	6.99E+01	1.61E+02	1.50E+03	1.61E+02	95% KM (t) UCL	ProUCL Recommendation
Arsenic	4.16E+00	5.07E+00	1.94E+01	5.07E+00	95% KM (BCA) UCL	ProUCL Recommendation
Chromium	1.55E+01	1.74E+01	4.49E+01	1.74E+01	95% Approximate Gamma UCL	ProUCL Recommendation
Cobalt	4.80E+00	5.85E+00	8.00E+00	5.85E+00	95% Student's-t UCL	ProUCL Recommendation
Mercury	2.19E-01	3.43E-01	3.30E+00	3.43E-01	95% KM (BCA) UCL	ProUCL Recommendation
Thallium	2.75E-01	3.30E-01	8.50E-01	3.30E-01	95% KM (t) UCL	ProUCL Recommendation

NC = Not calculated.

Table 6-5
Dermal Absorption Factors for Soil Exposure
Former Raritan Arsenal

COPC	Dermal Absorption Factor* (unitless)
Benzo(a)anthracene	0.13
Benzo(a)pyrene	0.13
Benzo(b)fluoranthene	0.13
Benzo(k)fluoranthene	0.13
alpha-Chlordane	0.04
gamma-Chlordane	0.04
Chrysene	0.13
4,4-DDE	0.03
4,4-DDT	0.03
Dibenz(a,h)anthracene	0.13
Dieldrin	0.1
Ethylbenzene	NA
Heptachlor epoxide	0.1
Indeno(1,2,3-c,d)pyrene	0.13
Naphthalene	0.13
Trichloroethylene	NA
Arsenic	0.03
Chromium	NA
Cobalt	NA
Mercury	NA
Thallium	NA

* Exhibit 3-4, *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part E – Supplemental Guidance for Dermal Risk Assessment* (EPA, 2004).

NA = Not available

Table 6-6
Calculation of the Particulate Emission Factor Based on Wind Erosion
Former Raritan Arsenal

$$PEF\,(m^3/kg) = Q/C \times \frac{3{,}600\ sec/hour}{0.036 \times (1 - V) \times (U_m/U_t)^3 \times F(x)}$$

Where:			Value
PEF	=	Particulate emission factor (m^3/kg).	2.67E+09 (calculated)
Q/C_{wind}	=	Inverse of the ratio of the geometric mean air concentration to the emission flux at the center of a square source (g/m^2-s per kg/m^3).	138.7 (NJDEP default value for 2 acres)
V	=	Fraction of vegetative cover (unitless).	0.5 (NJDEP default value)
U_m	=	Mean annual wind speed (m/sec).	4.56 (NJDEP default value)
U_t	=	Equivalent threshold value of wind speed at 7m (m/sec).	11.32 (NJDEP default value)
F(x)	=	Function dependent on U_m/U_t derived using Cowherd et al. (1985).	0.159 (NJDEP default value)

Table 6-7
Calculation of the Particulate Emission Factor Based on Truck Traffic on Unpaved Roads
Former Raritan Arsenal

$$PEF\ (m^3/kg) = Q/C_{sr} \times \frac{1}{F_D} \times \left[\frac{T \times A_R}{\frac{2.6 \times (s/12)^{0.8} \times (W/3)^{0.4}}{(M_{dry}/0.2)^{0.3}} \times \frac{(365\ d/yr - p)}{365 d/yr} \times 281.9\ g/km \times \sum VKT} \right]$$

Where:

$$Q/C_{sr}\ (g/m^2\text{-}s\ per\ kg/m^3) = A \times \exp\left[\frac{(\ln A_s - B)^2}{C}\right]$$

$$F_D = 0.1852 + \frac{5.3537}{t_c} + \frac{-9.6318}{t_c^{\,2}}$$

$$A_R\ (m^2) = (L_R \times W_R)$$

Where:			RME	CTE
PEF	=	Particulate emission factor from truck traffic on unpaved roads (m^3/kg).	1.03E+06	9.71E+05
Q/C_{sr}	=	Inverse of 1-h average air concentration along a straight road segment bisecting a 2-acre square site (g/m^2-s per kg/m^3).	18.4	
F_D	=	Dispersion correction factor (unitless).	0.196	0.207
T	=	Total time over which construction occurs (s).	1.73E+06[a]	8.64E+05[a]
t_c	=	Total time over which construction occurs (hr).	480[a]	240[a]
A_R	=	Surface area of contaminated road segment (m^2).	540	
s	=	Road surface silt content (%).	11 (NJDEP default)	
W	=	Mean vehicle weight (tons).	3.4 (NJDEP default)	
M_{dry}	=	Road surface moisture content (%).	0.2 (NJDEP default)	
p	=	Number of days with at least 0.01 inches of precipitation (days/yr).	121.3 (NJDEP default)	
VKT	=	Sum of fleet vehicle kilometers traveled during the exposure duration (km).	178.2[b]	89.1[b]
A	=	Constant (unitless). Default value (EPA, 2002a).	12.9351	
A_s	=	Areal extent of site soil contamination (acres).	2 (NJDEP default)	
B	=	Constant (unitless). Default value (EPA, 2002a).	5.7383	
C	=	Constant (unitless). Default value (EPA, 2002a).	71.7711	
L_R	=	Length of road segment (m).	90[c]	
W_R	=	Width of road segment (m). Default value (EPA, 2002a).	6	

[a] RME assumes exposure 60 days/year for 8 hours/day; CTE assumes 30 days/year for 8 hours per day.

[b] VKT = 33 vehicles x 0.09 km/day (see L_t) x 60 days/year for the RME. For the CTE, VKT = 33 vehicles x 0.09 km/day x 30 days/year.

[c] Calculated based on the area of the site (2 acres). Assumes site is roughly configured as a square with the unpaved road transecting the area evenly. Value is equal to the square root of the area where 2 acres equals 8,094 m^2.

Table 6-8
Calculation of the Volatilization Factors
Former Raritan Arsenal

$$VF\ (m^3/kg) = Q/C_{vol} \times \frac{(3.14 \times D_A \times T)^{1/2}}{2 \times \rho b \times D_A} \times 0.0001\ m^2/cm^2$$

Where:

$$D_A\ (cm^2/sec) = \frac{\left[\left(\theta_a^{10/3} \times D_i \times H'\right) + \left(\theta_w^{10/3} \times D_w\right)\right]/n^2}{\left(\rho b \times K_d\right) + \theta_w + \left(\theta_a \times H'\right)}$$

Where:			**RME**	**CTE**
VF	=	Soil-to-air volatilization factor (m^3/kg).	See Table 6-9	See Table 6-9
Q/C_{vol}	=	Inverse air concentration at center of source (g/m^2-s per kg/m^3).	138.7 (NJDEP default value for 2 acres)	
D_A	=	Apparent diffusivity (cm^2/sec).	See Table 6-10	
T	=	Exposure interval (sec). Estimated based on exposure duration.	Groundskeeper – 7.88E+08 Construction/Utility Worker – 3.15E+07 Indoor Worker – 7.88E+08 Student – 1.26E+08 Child Recreational User – 1.89E+08 Adult Recreational User – 7.57E+08 Trespasser – 2.52E+08 Daycare child – 1.58E+08 Residents – 9.46E+08	Groundskeeper – 3.78E+08 Construction/Utility Worker – 3.15E+07 Indoor Worker – 3.78E+08 Student – 6.31E+07 Child Recreational User – 1.89E+08 Adult Recreational User – 2.84E+08 Trespasser – 2.52E+08 Daycare child – 1.58E+08 Residents – 4.73E+08
ρb	=	Dry soil bulk density (g/cm^3).	1.5 (NJDEP default)	
θ_a	=	Air-filled soil porosity (L_{air}/L_{soil}).	0.18 (NJDEP default)	
D_i	=	Diffusivity in air (cm^2/sec).	See Table 6-10	
H'	=	Dimensionless Henry's Law Constant (unitless).	See Table 6-10	
θ_w	=	Water-filled soil porosity (L_{water}/L_{soil}).	0.23 (NJDEP default)	
D_w	=	Diffusivity in water (cm^2/sec).	See Table 6-10	
n	=	Total soil porosity(L_{pore}/L_{soil}).	0.41 (NJDEP default)	
K_d	=	Soil-water partition coefficient (cm^3/g).	See Table 6-10	

Table 6-9
Volatilization Factors for Volatile Soil COPCs
Former Raritan Arsenal

CAS Number	COPC	RME					
		Groundskeeper VF (kg/m^3)	Construction/Utility Worker VF (kg/m^3)	Indoor Worker VF (kg/m^3)	Student Recreational User VF (kg/m^3)	Daycare Child VF (kg/m^3)	Residents VF (kg/m^3)
100414	Ethylbenzene	3.17E+06	6.34E+05	3.17E+06	1.27E+06	1.42E+06	3.47E+06
91203	Naphthalene	2.61E+06	5.23E+05	2.61E+06	1.05E+06	1.17E+06	2.86E+06
79016	Trichloroethylene	1.42E+05	2.84E+04	1.42E+05	5.68E+04	6.36E+04	1.56E+05

CAS Number	COPC	CTE					
		Groundskeeper VF (kg/m^3)	Construction/Utility Worker VF (kg/m^3)	Indoor Worker VF (kg/m^3)	Student Recreational User VF (kg/m^3)	Daycare Child VF (kg/m^3)	Residents VF (kg/m^3)
100414	Ethylbenzene	2.20E+06	6.34E+05	2.20E+06	8.97E+05	1.42E+06	2.46E+06
91203	Naphthalene	1.81E+06	5.23E+05	1.81E+06	7.40E+05	1.17E+06	2.03E+06
79016	Trichloroethylene	9.84E+04	2.84E+04	9.84E+04	4.02E+04	6.36E+04	1.10E+05

Table 6-10
Calculation of Apparent Diffusivity for Volatile Soil COPCs
Former Raritan Arsenal

CAS Number	COPC	D_i Diffusion Coefficient in Air [a] (cm^2/sec)	H' Dimensionless Henry's Law Constant [a] (unitless)	D_w Diffusion Coefficient in Water [a] (cm^2/sec)	K_d Soil-Water Partition Coefficient [a] (cm^3/g)	D_A Apparent Diffusivity (cm^2/sec)
100414	Ethylbenzene	3.30E-02	3.23E-01	7.50E-06	2.65E+04	5.26E-09
91203	Naphthalene	5.90E-02	1.98E-02	7.50E-06	2.00E+03	7.74E-09
79016	Trichloroethylene	7.90E-02	4.22E-01	9.10E-06	1.66E+02	2.62E-06

[a]NJDEP, 2007b.

TABLE 6-11
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SURFACE SOIL - GROUNDSKEEPER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Groundskeeper
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	
		EF	Exposure Frequency	225	days/year	EPA, 2002a	
		ED	Exposure Duration	25	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	9,125	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	3,300	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.2	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	225	days/year	EPA, 2002a	
		ED	Exposure Duration	25	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	9,125	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	8	hours/day	Length of work day	
		EF	Exposure Frequency	225	days/year	EPA, 2002a	where:
		ED	Exposure Duration	25	years	EPA, 2002a	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	9,125	days	Calculated	

TABLE 6-12
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - SURFACE SOIL - GROUNDSKEEPER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Groundskeeper
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	50	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	110	days/year	Approximately half of RME value	
		ED	Exposure Duration	12	years	Approximately half of RME value	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	4,380	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	3,300	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.02	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	110	days/year	Approximately half of RME value	
		ED	Exposure Duration	12	years	Approximately half of RME value	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	4,380	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	4	hours/day	Half of work day	
		EF	Exposure Frequency	110	days/year	Approximately half of RME value	where:
		ED	Exposure Duration	12	years	Approximately half of RME value	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	4,380	days	Calculated	

TABLE 6-13
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - AGGREGATE SOIL - CONSTRUCTION/UTILITY WORKER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Aggregate Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Construction/Utility Worker
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Aggregate Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	330	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	
		EF	Exposure Frequency	60	days/year	Professional Judgement (1)	
		ED	Exposure Duration	1	years	Professional Judgement (2)	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	
Dermal	Aggregate Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	3,300	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.3	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	60	days/year	Professional Judgement (1)	
		ED	Exposure Duration	1	years	Professional Judgement (2)	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	8	hours/day	Length of work day	
		EF	Exposure Frequency	60	days/year	Professional Judgement (1)	where:
		ED	Exposure Duration	1	years	Professional Judgement (2)	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emission Factor from Truck Traffic on Unpaved Roads	See Table 6-7	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	

(1) Assumes the construction/utility worker is exposed 5 days per week for a total of 12 weeks.
(2) Assumes the construction/utility worker is exposed for 1 year.

TABLE 6-14
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - AGGREGATE SOIL - CONSTRUCTION/UTILITY WORKER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Aggregate Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Construction/Utility Worker
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Aggregate Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	30	days/year	Professional Judgement (1)	
		ED	Exposure Duration	1	years	Professional Judgement (2)	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	
Dermal	Aggregate Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	3,300	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.1	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	30	days/year	Professional Judgement (1)	
		ED	Exposure Duration	1	years	Professional Judgement (2)	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	4	hours/day	Half of work day	
		EF	Exposure Frequency	30	days/year	Professional Judgement (1)	where:
		ED	Exposure Duration	1	years	Professional Judgement (2)	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emission Factor from Truck Traffic on Unpaved Roads	See Table 6-7	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	365	days	Calculated	

(1) Assumes the construction/utility worker is exposed 5 days per week for a total of 6 weeks.
(2) Assumes the construction/utility worker is exposed for 1 year.

TABLE 6-15
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SURFACE SOIL - INDOOR WORKER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Indoor Worker
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	50	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	
		EF	Exposure Frequency	250	days/year	EPA, 2002a	
		ED	Exposure Duration	25	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	9,125	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	8	hours/day	Length of work day	
		EF	Exposure Frequency	250	days/year	EPA, 2002a	where:
		ED	Exposure Duration	25	years	EPA, 2002a	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	9,125	days	Calculated	

TABLE 6-16
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - SURFACE SOIL - INDOOR WORKER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Indoor Worker
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	25	mg/day	Half of RME value	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	125	days/year	Half of RME value	
		ED	Exposure Duration	12	years	Approximtely half of RME value	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	4,380	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	4	hours/day	Half of work day	
		EF	Exposure Frequency	125	days/year	Half of RME value	where:
		ED	Exposure Duration	12	years	Approximtely half of RME value	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	4,380	days	Calculated	

TABLE 6-17
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SURFACE SOIL - STUDENT RECREATIONAL USER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Student Recreational User
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	104	days/year	Professional Judgement (1)	
		ED	Exposure Duration	4	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,460	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	5,700	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.07	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	104	days/year	Professional Judgement (1)	
		ED	Exposure Duration	4	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,460	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	4	hours/day	Professional Judgement	
		EF	Exposure Frequency	104	days/year	Professional Judgement (1)	where:
		ED	Exposure Duration	4	years	Estimated	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,460	days	Calculated	

(1) Recreational user exposure is assumed to occur 3 times a week from April through November (assume 4.33 weeks per month). The recreational users are not assumed to contact site soil during December, January, February, and March.

TABLE 6-18
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - SURFACE SOIL - STUDENT RECREATIONAL USER
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Student Recreational User
Receptor Age: Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	50	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.25	unitless	Professional Judgement	
		EF	Exposure Frequency	52	days/year	Half of RME value	
		ED	Exposure Duration	2	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	730	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	5,700	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.01	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	52	days/year	Half of RME value	
		ED	Exposure Duration	2	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	730	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	2	hours/day	Professional Judgement	
		EF	Exposure Frequency	52	days/year	Half of RME value	where:
		ED	Exposure Duration	2	years	Estimated	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	730	days	Calculated	

TABLE 6-19
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SURFACE SOIL - DAYCARE CHILD
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Daycare Child
Receptor Age: Child (1-5 years)

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	200	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	250	days/year	Professional Judgement (1)	
		ED	Exposure Duration	5	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	2,800	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.2	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	250	days/year	Professional Judgement (1)	
		ED	Exposure Duration	5	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	8	hours/day	8 hour work day	
		EF	Exposure Frequency	250	days/year	Professional Judgement (1)	where:
		ED	Exposure Duration	5	years	Estimated	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	

(1) The daycare child is assumed to attend daycare 5 days/week for 50 weeks a year.

TABLE 6-20
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - SURFACE SOIL - DAYCARE CHILD
Former Raritan Arsenal

Scenario Timeframe: Current/Future
Medium: Soils
Exposure Medium: Surface Soils (0-2 ft bgs)
Receptor Population: Daycare Child
Receptor Age: Child (1-5 years)

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation
Ingestion	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Chronic daily intake (mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	Half of RME value	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.25	unitless	Professional Judgement	
		EF	Exposure Frequency	125	days/year	Half of RME value	
		ED	Exposure Duration	5	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	
Dermal	Surface Soils	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Dermally Absorbed Dose (mg/kg-day) =
		SA	Exposed Skin Surface Area	2,800	cm^2/day	EPA, 2004	EPC x SA x AF x EF x ED x CF x ABS x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.04	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	125	days/year	Half of RME value	
		ED	Exposure Duration	5	years	Estimated	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-3	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	4	hours/day	Half of work day	
		EF	Exposure Frequency	125	days/year	Half of RME value	where:
		ED	Exposure Duration	5	years	Estimated	CA (µg/m3) = EPC/PEF x CF3
		CF2	Conversion Factor 2	0.042	days/hour	-----	
		CF3	Conversion Factor 3	1000	µg/mg	-----	or
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	CA (µg/m3) = EPC/VF x CF3
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	1,825	days	Calculated	

TABLE 6-21
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion (cancer effects)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IFS_{adj}	Age-adjusted soil ingestion factor	114	mg-year/kg-day	Calculated	EPC x IFS_{adj} x CF x FI x EF x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	Where
		EF	Exposure Frequency	350	days/year	EPA, 2002a	IFS_{adj} = (IRS_c x ED_c x 1/BW_c) + (IRS_a x ED_a x 1/BW_a)
		ED_c	Exposure Duration - child	6	years	EPA, 2002a	
		ED_a	Exposure Duration - adult	24	years	EPA, 2002a	
		IRS_c	Ingestion Rate of Soil - child	200	mg/day	EPA, 2002a	
		IRS_a	Ingestion Rate of Soil - adult	100	mg/day	EPA, 2002a	
		BW_c	Body Weight - child	15	kg	EPA, 1997	
		BW_a	Body Weight - adult	70	kg	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
Ingestion (child noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IRS	Ingestion Rate of Soil	200	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	6	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	2,190	days	Calculated	
Ingestion (adult noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	EPA, 2002a	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	1	unitless	Professional Judgement	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	24	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	8,760	days	Calculated	

TABLE 6-21
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal (cancer effects)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SFS_{adj}	Age-adjusted soil contact factor	361	mg -year/kg-	Calculated	EPC x CF x SFS_{adj} x ABS x EF x 1/AT
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	Where
		EF	Exposure Frequency	350	days/year	EPA, 2002a	SFS_{adj} = (SA_c x AF_c x ED_c x 1/BW_c) + (SA_a x AF_a x ED_a x 1/BW_a)
		SA_c	Exposed Skin Surface Area - child	2,800	cm^2/day	EPA, 2004	
		SA_a	Exposed Skin Surface Area - adult	5,700	cm^2/day	EPA, 2004	
		AF_c	Soil to Skin Adherence Factor - child	0.2	mg/cm^2	EPA, 2004	
		AF_a	Soil to Skin Adherence Factor - adult	0.07	mg/cm^2	EPA, 2004	
		ED_c	Exposure Duration - child	6	years	EPA, 2002a	
		ED_a	Exposure Duration - adult	24	years	EPA, 2002a	
		BW_c	Body Weight - child	15	kg	EPA, 1997	
		BW_a	Body Weight - adult	70	kg	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
Dermal (child noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SA	Exposed Skin Surface Area	2,800	cm^2/day	EPA, 2004	EPC x CF x SA x AF x ABS x EF x ED x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.2	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	6	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	2,190	days	Calculated	
Dermal (adult noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SA	Exposed Skin Surface Area	5,700	cm^2/day	EPA, 2004	EPC x CF x SA x AF x ABS x EF x ED x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.07	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	24	years	EPA, 2002a	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	8,760	days	Calculated	

TABLE 6-21
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Average Daily Concentration (µg/m^3) =
		CA	COPC Air Concentration	Calculated	µg/m^3	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	24	hours/day	Residential exposure	where:
		EF	Exposure Frequency	350	days/year	EPA, 2002a	CA (µg/m3) = EPC/PEF x CF3
		ED	Exposure Duration	30	years	EPA, 2002a	or
		CF2	Conversion Factor 2	0.042	days/hour	-----	CA (µg/m3) = EPC/VF x CF3
		CF3	Conversion Factor 3	1000	µg/mg	-----	
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	10,950	days	Calculated	

TABLE 6-22
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion (cancer effects)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IFS_{adj}	Age-adjusted soil ingestion factor	46	mg-year/kg-day	Calculated	EPC x IFS_{adj} x CF x FI x EF x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	Where
		EF	Exposure Frequency	350	days/year	EPA, 2002a	IFS_{adj} = (IRS_c x ED_c x 1/BW_c) + (IRS_a x ED_a x 1/BW_a)
		ED_c	Exposure Duration - child	6	years	EPA, 1997	
		ED_a	Exposure Duration - adult	9	years	EPA, 1997	
		IRS_c	Ingestion Rate of Soil - child	100	mg/day	Half of RME value	
		IRS_a	Ingestion Rate of Soil - adult	50	mg/day	Half of RME value	
		BW_c	Body Weight - child	15	kg	EPA, 1997	
		BW_a	Body Weight - adult	70	kg	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
Ingestion (child noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IRS	Ingestion Rate of Soil	100	mg/day	Half of RME value	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	6	years	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	2,190	days	Calculated	
Ingestion (adult noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Chronic daily intake (CDI)(mg/kg-day) =
		IRS	Ingestion Rate of Soil	50	mg/day	Half of RME value	EPC x IRS x CF x FI x EF x ED x 1/BW x 1/AT
		FI	Fraction Ingested	0.5	unitless	Professional Judgement	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	9	years	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	3,285	days	Calculated	

TABLE 6-22
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal (cancer effects)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SFS_{adj}	Age-adjusted soil contact factor	52	mg -year/kg-day	Calculated	EPC x CF x SFS_{adj} x ABS x EF x 1/AT
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	Where
		EF	Exposure Frequency	350	days/year	EPA, 2002a	SFS_{adj} = (SA_c x AF_c x ED_c x 1/BW_c) + (SA_a x AF_a x ED_a x 1/BW_a)
		SA_c	Exposed Skin Surface Area - child	2,800	cm^2/day	EPA, 2004	
		SA_a	Exposed Skin Surface Area - adult	5,700	cm^2/day	EPA, 2004	
		AF_c	Soil to Skin Adherence Factor - child	0.04	mg/cm^2	EPA, 2004	
		AF_a	Soil to Skin Adherence Factor - adult	0.01	mg/cm^2	EPA, 2004	
		ED_c	Exposure Duration - child	6	years	EPA, 1997	
		ED_a	Exposure Duration - adult	9	years	EPA, 1997	
		BW_c	Body Weight - child	15	kg	EPA, 1997	
		BW_a	Body Weight - adult	70	kg	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
Dermal (child noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SA	Exposed Skin Surface Area	2,800	cm^2/day	EPA, 2004	EPC x CF x SA x AF x ABS x EF x ED x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.04	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	6	years	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	15	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	2,190	days	Calculated	
Dermal (adult noncancer)	Surface Soils	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Dermally Absorbed Dose (DAD)(mg/kg-day) =
		SA	Exposed Skin Surface Area	5,700	cm^2/day	EPA, 2004	EPC x CF x SA x AF x ABS x EF x ED x 1/BW x 1/AT
		AF	Soil to Skin Adherence Factor	0.01	mg/cm^2	EPA, 2004	
		EF	Exposure Frequency	350	days/year	EPA, 2002a	
		ED	Exposure Duration	9	years	EPA, 1997	
		CF	Conversion Factor	1.00E-06	kg/mg	-----	
		ABS	Dermal Absorption Factor	See Table 6-5	unitless	EPA, 2004	
		BW	Body Weight	70	kg	EPA, 1997	
		AT_{NC}	Averaging Time (Non-Cancer)	3,285	days	Calculated	

TABLE 6-22
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURE - AGGREGATE SOIL - FUTURE RESIDENTS
Former Raritan Arsenal

Scenario Timeframe: Future
Medium: Soils
Exposure Medium: Aggregate Soils (0-10 ft bgs)
Receptor Population: Residents
Receptor Age: Child/Adult

Exposure Route	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Particulate/Volatiles Released from Soil	EPC	Exposure Point Concentration	See Table 6-4	mg/kg	Calculated	Average Daily Concentration ($\mu g/m^3$) =
		CA	COPC Air Concentration	Calculated	$\mu g/m^3$	Calculated	CA x ET x EF x ED x CF2 x 1/AT
		ET	Exposure Time	24	hours/day	Residential exposure	where:
		EF	Exposure Frequency	350	days/year	EPA, 2002a	CA (µg/m3) = EPC/PEF x CF3
		ED	Exposure Duration	9	years	EPA, 1997	or
		CF2	Conversion Factor 2	0.042	days/hour	-----	CA (µg/m3) = EPC/VF x CF3
		CF3	Conversion Factor 3	1000	µg/mg	-----	
		PEF	Particulate Emissions Factor from Wind Erosion	See Table 6-6	m^3/kg	EPA, 2002a	
		VF	Volatilization Factor	See Table 6-9	m^3/kg	EPA, 2002a	
		AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
		AT_{NC}	Averaging Time (Non-Cancer)	3,285	days	Calculated	

Table 6-23
Noncancer Toxicity Data - Oral and Dermal
Former Raritan Arsenal

COPC	Oral RfD Value	Oral RfD Units	GI_{abs} Oral Absorption Efficiency for Dermal (1	Dermal RfD (1) Value	Dermal RfD (1) Units	Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	Source(s)	Date(s) (2)
Benzo(a)anthracene	NA	---	---	NA	---	---	---	---	---
Benzo(a)pyrene	NA	---	---	NA	---	---	---	---	---
Benzo(b)fluoranthene	NA	---	---	NA	---	---	---	---	---
Benzo(k)fluoranthene	NA	---	---	NA	---	---	---	---	---
alpha-Chlordane	5.00E-04	(mg/kg-day)	1.0	5.00E-04	(mg/kg-day)	Liver	300	IRIS (3)	1/1/2009
gamma-Chlordane	5.00E-04	(mg/kg-day)	1.0	5.00E-04	(mg/kg-day)	Liver	300	IRIS (3)	1/1/2009
Chrysene	NA	---	---	NA	---	---	---	---	---
4,4-DDE	NA	---	---	NA	---	---	---	---	---
4,4-DDT	5.00E-04	(mg/kg-day)	1.0	5.00E-04	(mg/kg-day)	Liver	100	IRIS	1/1/2009
Dibenz(a,h)anthracene	NA	---	---	NA	---	---	---	---	---
Dieldrin	5.00E-05	(mg/kg-day)	1.0	5.00E-05	(mg/kg-day)	Liver	100	IRIS	1/1/2009
Ethylbenzene	1.00E-01	(mg/kg-day)	1.0	1.00E-01	(mg/kg-day)	Kidney, Liver	1,000	IRIS	1/1/2009
Heptachlor epoxide	1.30E-05	(mg/kg-day)	1.0	1.30E-05	(mg/kg-day)	Liver	1,000	IRIS	1/1/2009
Indeno(1,2,3-c,d)pyrene	NA	---	---	NA	---	---	---	---	---
Naphthalene	2.00E-02	(mg/kg-day)	1.0	2.00E-02	(mg/kg-day)	Body Weight	3,000	IRIS	1/1/2009
Trichloroethylene	5.00E-04	(mg/kg-day)	1.0	5.00E-04	(mg/kg-day)	Ranges from immune effects to heart effects	Ranges from 10 to 1,000	IRIS	10/3/2011
Arsenic	3.00E-04	(mg/kg-day)	1.0	3.00E-04	(mg/kg-day)	Skin	3	IRIS	1/1/2009
Chromium (Hexavalent)	3.00E-03	(mg/kg-day)	0.025	7.50E-05	(mg/kg-day)	None observed	900	IRIS	1/1/2009
Cobalt	3.00E-04	(mg/kg-day)	1.0	3.00E-04	(mg/kg-day)	No information	No information	PPRTV	2011 RSL Table
Mercury	3.00E-04	(mg/kg-day)	0.07	2.10E-05	(mg/kg-day)	Immune System	1,000	IRIS	1/1/2009
Thallium	1.50E-05	(mg/kg-day)	1.0	1.50E-05	(mg/kg-day)	Hair atrophy	3,000	PPRTV	2011 RSL Table

(1) Source: EPA, 2004.

(2) Represents date source was searched.

(3) Chlordane used as a surrogate.

(4) Represents % of thallium in thallium sulfate, derived based on molecular weight.

Definitions: HEAST=Health Effects Assessment Summry Tables

IRIS=Integrated Risk Information System

NA=Not available

NCEA = National Center for Environmental Assessment

PPRTV=Provisional Peer-Reviewed Toxicity Value

RSL = EPA Regional Screening Level

RfD=Reference dose

Table 6-24
Noncancer Toxicity Data - Inhalation
Former Raritan Arsenal

COPC	Inhalation RfC Value	Inhalation RfC Units	Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	Source(s)	Date(s) (1)
Benzo(a)anthracene	NA	---	---	---	---	---
Benzo(a)pyrene	NA	---	---	---	---	---
Benzo(b)fluoranthene	NA	---	---	---	---	---
Benzo(k)fluoranthene	NA	---	---	---	---	---
alpha-Chlordane	7.00E-04	mg/m^3	Liver	1,000	IRIS	1/1/2009
gamma-Chlordane	7.00E-04	mg/m^3	Liver	1,000	IRIS	1/1/2009
Chrysene	NA	---	---	---	---	---
4,4-DDE	NA	---	---	---	---	---
4,4-DDT	NA	---	---	---	---	---
Dibenz(a,h)anthracene	NA	---	---	---	---	---
Dieldrin	NA	---	---	---	---	---
Ethylbenzene	1.00E+00	mg/m^3	Developmental	300	IRIS	1/1/2009
Heptachlor epoxide	NA	---	---	---	---	---
Indeno(1,2,3-c,d)pyrene	NA	---	---	---	---	---
Naphthalene	3.00E-03	mg/m^3	Respiratory System	3,000	IRIS	1/1/2009
Trichloroethylene	2.00E-03	mg/m^3	Ranges from immune effects to heart effects	Ranges from 10 to 100	IRIS	10/3/2011
Arsenic	1.50E-05	mg/m^3	No information	No information	CalEPA	2011 RSL Table
Chromium (Hexavalent)	8.00E-06	mg/m^3	Respiratory System	90	IRIS	1/1/2009
Cobalt	6.00E-06	mg/m^3	No information	No information	PPRTV	2011 RSL Table
Mercury	3.00E-04	mg/m^3	Nervous system	30	IRIS	1/1/2009
Thallium	NA	---	---	---	---	---

(1) Represents date source was searched.

(2) Antimony trioxide used as a surrogate.

(3) Represents % of thallium in thallium sulfate, derived based on molecular weight.

Definitions: ATSDR=Agency for Toxic Substances and Disease Registry
IRIS=Integrated Risk Information System
MRL=Minimal risk level
RSL = EPA Regional Screening Level
NA=Not available
RfC=Reference concentration
PPRTV=Provisional Peer-Reviewed Toxicity Value

Table 6-25
Cancer Toxicity Data - Oral and Dermal
Former Raritan Arsenal

COPC	Oral CSF Value	Oral CSF Units	GI_{abs} Oral Absorption Efficiency for Dermal (1)	Dermal CSF (1) Value	Dermal CSF (1) Units	Weight of Evidence/ Cancer Guideline Description	Source(s)	Date(s) (2)
Benzo(a)anthracene *	7.30E-01	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
Benzo(a)pyrene *	7.30E+00	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E+00	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
Benzo(b)fluoranthene *	7.30E-01	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
Benzo(k)fluoranthene *	7.30E-02	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E-02	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
alpha-Chlordane	3.50E-01	$(mg/kg\text{-}day)^{-1}$	1.0	3.50E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
gamma-Chlordane	3.50E-01	$(mg/kg\text{-}day)^{-1}$	1.0	3.50E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
Chrysene *	7.30E-03	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E-03	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
4,4-DDE	3.40E-01	$(mg/kg\text{-}day)^{-1}$	1.0	3.40E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
4,4-DDT	3.40E-01	$(mg/kg\text{-}day)^{-1}$	1.0	3.40E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
Dibenz(a,h)anthracene *	7.30E+00	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E+00	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
Dieldrin	1.60E+01	$(mg/kg\text{-}day)^{-1}$	1.0	1.60E+01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
Ethylbenzene	1.10E-02	$(mg/kg\text{-}day)^{-1}$	1.0	1.10E-02	$(mg/kg\text{-}day)^{-1}$	D	CalEPA	2011 RSL Table
Heptachlor epoxide	9.10E+00	$(mg/kg\text{-}day)^{-1}$	1.0	9.10E+00	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	1/1/2009
Indeno(1,2,3-c,d)pyrene *	7.30E-01	$(mg/kg\text{-}day)^{-1}$	1.0	7.30E-01	$(mg/kg\text{-}day)^{-1}$	B2	IRIS	2011 RSL Table
Naphthalene	NA	---	---	NA	---	C	IRIS	1/1/2009
Trichloroethylene - Kidney *	9.30E-03	$(mg/kg\text{-}day)^{-1}$	1.0	9.30E-03	$(mg/kg\text{-}day)^{-1}$	Carcinogenic	IRIS	10/3/2011
Trichloroethylene - Liver+NHL	3.70E-02	$(mg/kg\text{-}day)^{-1}$	1.0	3.70E-02	$(mg/kg\text{-}day)^{-1}$	Carcinogenic	IRIS	10/3/2011
Antimony	NA	---	---	NA	---	No information	---	---
Arsenic	1.50E+00	$(mg/kg\text{-}day)^{-1}$	1.0	1.50E+00	$(mg/kg\text{-}day)^{-1}$	A	IRIS	1/1/2009
Chromium *	5.00E-01	$(mg/kg\text{-}day)^{-1}$	0.025	2.00E+01	$(mg/kg\text{-}day)^{-1}$	Likely	NJDEP	2011 RSL Table
Cobalt	NA	---	---	NA	---	No information	---	---
Mercury	NA	---	---	NA	---	D	IRIS	1/1/2009
Thallium	NA	---	---	NA	---	D	IRIS	1/1/2009

(1) Source: EPA, 2004.

(2) Represents date source was searched.

* Carcinogenic via a mutagenic mode of action.

Definitions: A - Human carcinogen.

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans.

C - Possible human carcinogen.

D - Not classified as to human carcinogenicity.

CalEPA=California Environmental Protection Agency

NJDEP = New Jersey Department of Environmental Protection

IRIS=Integrated Risk Information System

NA=Not available

RSL = EPA Regional Screening Level

Table 6-26
Cancer Toxicity Data - Inhalation
Former Raritan Arsenal

COPC	Unit Risk Value	Unit Risk Units	Weight of Evidence/ Cancer Guideline Description	Source(s)	Date(s) (1)
Benzo(a)anthracene *	1.10E-04	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
Benzo(a)pyrene *	1.10E-03	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
Benzo(b)fluoranthene *	1.10E-04	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
Benzo(k)fluoranthene *	1.10E-04	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
alpha-Chlordane	1.00E-04	$(\mu g/m^3)^{-1}$	B2	IRIS	1/1/2009
gamma-Chlordane	1.00E-04	$(\mu g/m^3)^{-1}$	B2	IRIS	1/1/2009
Chrysene *	1.10E-05	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
4,4-DDE	NA	---	No information	---	---
4,4-DDT	9.70E-05	$(\mu g/m^3)^{-1}$	B2	IRIS	1/1/2009
Dibenz(a,h)anthracene *	1.20E-03	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
Dieldrin	4.60E-03	$(\mu g/m^3)^{-1}$	B2	IRIS	1/1/2009
Ethylbenzene	2.50E-06	$(\mu g/m^3)^{-1}$	D	CalEPA	2011 RSL Table
Heptachlor epoxide	2.60E-03	$(\mu g/m^3)^{-1}$	B2	IRIS	1/1/2009
Indeno(1,2,3-c,d)pyrene *	1.10E-04	$(\mu g/m^3)^{-1}$	B2	CalEPA	2011 RSL Table
Naphthalene	3.40E-05	$(\mu g/m^3)^{-1}$	C	CalEPA	2011 RSL Table
Trichloroethylene - Kidney *	1.00E-06	$(\mu g/m^3)^{-1}$	Carcinogenic	IRIS	10/3/2011
Trichloroethylene - Liver+NHL	3.10E-06	$(\mu g/m^3)^{-1}$	Carcinogenic	IRIS	10/3/2011
Arsenic	4.30E-03	$(\mu g/m^3)^{-1}$	A	IRIS	1/1/2009
Chromium (Hexavalent) *	8.40E-02	$(\mu g/m^3)^{-1}$	A	IRIS	1/1/2009
Cobalt	9.00E-03	$(\mu g/m^3)^{-1}$	No information	PPRTV	2011 RSL Table
Mercury	NA	---	D	IRIS	1/1/2009
Thallium	NA	---	D	IRIS	1/1/2009

(1) Represents date source was searched.

* Carcinogenic via a mutagenic mode of action.

Definitions:

A - Human carcinogen.

B1 - Probable human carcinogen - indicates limited evidence of carcinogenicity in humans.

B2 - Probable human carcinogen - indicates sufficient evidence in animals and and inadequate or no evidence in humans.

C - Possible human carcinogen.

CalEPA=California Environmental Protection Agency

D - Not classified as to human carcinogenicity.

IRIS=Integrated Risk Information System.

NA=Not available.

RSL = EPA Regional Screening Level

PPRTV=Provisional Peer-Reviewed Toxicity Value

Table 6-27

Summary of RME Cancer Risks
Former Raritan Arsenal

Receptor	Cancer Risk			Total
	Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate/VOCs	
Groundskeeper	2.5E-05	1.4E-05	5.6E-08	4.0E-05
Construction/Utility Worker	6.7E-07	1.5E-07	1.2E-06	2.0E-06
Student Recreational User	9.3E-07	6.5E-07	2.1E-09	1.6E-06
Indoor Worker	1.4E-05	NE	6.2E-08	1.4E-05
Daycare Child	7.6E-05	4.0E-05	5.2E-08	1.2E-04
Residents	2.6E-04	6.5E-05	3.0E-06	3.3E-04

Table 6-28

Summary of CTE Cancer Risks
Former Raritan Arsenal

Receptor	Cancer Risk			Total
	Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate/VOCs	
Groundskeeper	1.5E-06	3.4E-07	6.5E-09	1.8E-06
Construction/Utility Worker	5.0E-08	2.5E-08	3.2E-07	3.9E-07
Student Recreational User	5.8E-08	2.3E-08	2.6E-10	8.2E-08
Indoor Worker	8.4E-07	NE	7.4E-09	8.5E-07
Daycare Child	9.5E-06	4.0E-06	1.3E-08	1.4E-05
Residents	5.8E-05	1.1E-05	2.1E-06	7.1E-05

Table 6-29

Summary of RME Hazard Indices
Former Raritan Arsenal

Receptor	Hazard Index			Total
	Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate/VOCs	
Groundskeeper	0.087	0.023	0.00034	0.11
Construction/Utility Worker	0.32	0.0058	0.34	0.67
Student Recreational User	0.020	0.0063	0.000078	0.026
Indoor Worker	0.048	NE	0.00037	0.049
Daycare Child	0.45	0.10	0.00037	0.55
Child Resident	5.2	0.089	0.50	5.8
Adult Resident	0.56	0.014	0.50	1.1

Table 6-30

Summary of CTE Hazard Indices
Former Raritan Arsenal

Receptor	Hazard Index			Total
	Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate/VOCs	
Groundskeeper	0.011	0.0011	0.000082	0.012
Construction/Utility Worker	0.024	0.0010	0.051	0.076
Student Recreational User	0.0025	0.00045	0.000019	0.0030
Indoor Worker	0.0060	NE	0.000093	0.0061
Daycare Child	0.056	0.010	0.000093	0.066
Child Resident	1.3	0.018	0.0013	1.3
Adult Resident	0.14	0.0019	0.0013	0.14

Table 6-31

Reasonable Maximum Exposure Doses and Cancer Risks for Hypothetical Age-Adjusted Residents Exposure to Aggregate Soil - Middlesex County College Former Raritan Arsenal

		RME - Cancer									
		Age-Adjusted Exposure Doses						Age-Adjusted Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	2.43E+00	Mutagenic mode of action; See Table 6-37			7.30E-01	7.30E-01	1.10E-04	1.2E-05	4.6E-06	1.0E-10	1.6E-05
Benzo(a)pyrene	2.03E+00	Mutagenic mode of action; See Table 6-37			7.30E+00	7.30E+00	1.10E-03	9.9E-05	3.8E-05	8.7E-10	1.4E-04
Benzo(b)fluoranthene	3.00E+00	Mutagenic mode of action; See Table 6-37			7.30E-01	7.30E-01	1.10E-04	1.5E-05	5.6E-06	1.3E-10	2.0E-05
Benzo(k)fluoranthene	9.93E-01	Mutagenic mode of action; See Table 6-37			7.30E-02	7.30E-02	1.10E-04	4.9E-07	1.9E-07	4.3E-11	6.7E-07
alpha-Chlordane	2.00E-03	3.13E-09	3.95E-10	3.10E-10	3.50E-01	3.50E-01	1.00E-04	1.1E-09	1.4E-10	3.1E-14	1.2E-09
gamma-Chlordane	2.00E-03	3.13E-09	3.95E-10	3.10E-10	3.50E-01	3.50E-01	1.00E-04	1.1E-09	1.4E-10	3.1E-14	1.2E-09
Chrysene	2.48E+00	Mutagenic mode of action; See Table 6-37			7.30E-03	7.30E-03	1.10E-05	1.2E-07	4.7E-08	1.1E-11	1.7E-07
4,4-DDE	6.56E-01	1.03E-06	9.73E-08	1.02E-07	3.40E-01	3.40E-01	NA	3.5E-07	3.3E-08	NA	3.8E-07
4,4-DDT	1.62E+00	2.54E-06	2.40E-07	2.51E-07	3.40E-01	3.40E-01	9.70E-05	8.6E-07	8.2E-08	2.4E-11	9.4E-07
Dibenz(a,h)anthracene	3.08E-01	Mutagenic mode of action; See Table 6-37			7.30E+00	7.30E+00	1.20E-03	1.5E-05	5.8E-06	1.4E-10	2.1E-05
Dieldrin	8.13E-01	1.27E-06	4.02E-07	1.26E-07	1.60E+01	1.60E+01	4.60E-03	2.0E-05	6.4E-06	5.8E-10	2.7E-05
Ethylbenzene	1.34E+00	2.09E-06	NA	1.60E-04	1.10E-02	1.10E-02	2.50E-06	2.3E-08	NA	4.0E-10	2.3E-08
Heptachlor epoxide	2.96E-02	4.63E-08	1.46E-08	4.59E-09	9.10E+00	9.10E+00	2.60E-03	4.2E-07	1.3E-07	1.2E-11	5.5E-07
Indeno(1,2,3-c,d)pyrene	1.70E+00	Mutagenic mode of action; See Table 6-37			7.30E-01	7.30E-01	1.10E-04	8.3E-06	3.2E-06	7.3E-11	1.2E-05
Naphthalene	2.91E+00	4.55E-06	1.87E-06	4.21E-04	NA	NA	3.40E-05	NA	NA	1.4E-08	1.4E-08
Trichloroethylene	1.61E+02	Mutagenic mode of action; See Table 6-38			4.60E-02	4.60E-02	4.10E-06	1.9E-05	NA	2.4E-06	2.2E-05
Arsenic	5.07E+00	7.94E-06	7.52E-07	7.87E-07	1.50E+00	1.50E+00	4.30E-03	1.2E-05	1.1E-06	3.4E-09	1.3E-05
Chromium	1.74E+01	Mutagenic mode of action; See Table 6-37			5.00E-01	2.00E+01	8.40E-02	5.8E-05	NA	5.7E-07	5.9E-05
Cobalt	5.85E+00	9.15E-06	NA	9.07E-07	NA	NA	9.00E-03	NA	NA	8.2E-09	8.2E-09
Mercury	3.43E-01	5.37E-07	NA	5.32E-08	NA	NA	NA	NA	NA	NA	NA
Thallium	3.30E-01	5.17E-07	NA	5.12E-08	NA	NA	NA	NA	NA	NA	NA
							Total	2.6E-04	6.5E-05	3.0E-06	3.3E-04

Table 6-32

Central Tendency Exposure Doses and Cancer Risks for Age-Adjusted Residents Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer									
		Age-Adjusted Exposure Doses						Age-Adjusted Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	2.43E+00	Mutagenic mode of action; See Table 6-39			7.30E-01	7.30E-01	1.10E-04	2.7E-06	7.8E-07	5.6E-11	3.4E-06
Benzo(a)pyrene	2.03E+00	Mutagenic mode of action; See Table 6-39			7.30E+00	7.30E+00	1.10E-03	2.2E-05	6.5E-06	4.7E-10	2.9E-05
Benzo(b)fluoranthene	3.00E+00	Mutagenic mode of action; See Table 6-39			7.30E-01	7.30E-01	1.10E-04	3.3E-06	9.6E-07	6.9E-11	4.3E-06
Benzo(k)fluoranthene	9.93E-01	Mutagenic mode of action; See Table 6-39			7.30E-02	7.30E-02	1.10E-04	1.1E-07	3.2E-08	2.3E-11	1.4E-07
alpha-Chlordane	2.00E-03	6.36E-10	5.71E-11	9.31E-11	3.50E-01	3.50E-01	1.00E-04	2.2E-10	2.0E-11	9.3E-15	2.4E-10
gamma-Chlordane	2.00E-03	6.36E-10	5.71E-11	9.31E-11	3.50E-01	3.50E-01	1.00E-04	2.2E-10	2.0E-11	9.3E-15	2.4E-10
Chrysene	2.48E+00	Mutagenic mode of action; See Table 6-39			7.30E-03	7.30E-03	1.10E-05	2.7E-08	7.9E-09	5.7E-12	3.5E-08
4,4-DDE	6.56E-01	2.09E-07	1.41E-08	3.05E-08	3.40E-01	3.40E-01	NA	7.1E-08	4.8E-09	NA	7.6E-08
4,4-DDT	1.62E+00	5.15E-07	3.47E-08	7.54E-08	3.40E-01	3.40E-01	9.70E-05	1.8E-07	1.2E-08	7.3E-12	1.9E-07
Dibenz(a,h)anthracene	3.08E-01	Mutagenic mode of action; See Table 6-39			7.30E+00	7.30E+00	1.20E-03	3.4E-06	9.9E-07	7.8E-11	4.4E-06
Dieldrin	8.13E-01	2.59E-07	5.81E-08	3.78E-08	1.60E+01	1.60E+01	4.60E-03	4.1E-06	9.3E-07	1.7E-10	5.1E-06
Ethylbenzene	1.34E+00	4.25E-07	NA	6.23E-08	1.10E-02	1.10E-02	2.50E-06	4.7E-09	NA	1.6E-13	4.7E-09
Heptachlor epoxide	2.96E-02	9.41E-09	2.11E-09	1.38E-09	9.10E+00	9.10E+00	2.60E-03	8.6E-08	1.9E-08	3.6E-12	1.0E-07
Indeno(1,2,3-c,d)pyrene	1.70E+00	Mutagenic mode of action; See Table 6-39			7.30E-01	7.30E-01	1.10E-04	1.9E-06	5.4E-07	3.9E-11	2.4E-06
Naphthalene	2.91E+00	9.25E-07	2.70E-07	1.35E-07	NA	NA	3.40E-05	NA	NA	4.6E-12	4.6E-12
Trichloroethylene	1.61E+02	Mutagenic mode of action; See Table 6-40			4.60E-02	4.60E-02	4.10E-06	4.1E-06	NA	1.8E-06	5.9E-06
Arsenic	5.07E+00	1.61E-06	1.09E-07	2.36E-07	1.50E+00	1.50E+00	4.30E-03	2.4E-06	1.6E-07	1.0E-09	2.6E-06
Chromium	1.74E+01	Mutagenic mode of action; See Table 6-39			5.00E-01	2.00E+01	8.40E-02	1.3E-05	NA	3.1E-07	1.3E-05
Cobalt	5.85E+00	1.86E-06	NA	2.72E-07	NA	NA	9.00E-03	NA	NA	2.4E-09	2.4E-09
Mercury	3.43E-01	1.09E-07	NA	1.60E-08	NA	NA	NA	NA	NA	NA	NA
Thallium	3.30E-01	1.05E-07	NA	1.54E-08	NA	NA	NA	NA	NA	NA	NA
							Total	5.8E-05	1.1E-05	2.1E-06	7.1E-05

Table 6-33

Reasonable Maximum Exposure Doses and Hazard Quotients for Child Residents Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Child Exposure Doses							Child Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	3.10E-05	1.13E-05	8.79E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	2.59E-05	9.44E-06	7.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	3.83E-05	1.39E-05	1.08E-06	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	1.27E-05	4.62E-06	3.59E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	2.56E-08	2.86E-09	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000051	0.0000057	0.0000000010	0.000057
gamma-Chlordane	2.00E-03	2.56E-08	2.86E-09	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000051	0.0000057	0.0000000010	0.000057
Chrysene	2.48E+00	3.17E-05	1.16E-05	8.99E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	8.39E-06	7.05E-07	2.37E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	2.07E-05	1.74E-06	5.86E-07	5.00E-04	5.00E-04	NA	Liver	0.041	0.0035	NA	0.045
Dibenz(a,h)anthracene	3.08E-01	3.94E-06	1.43E-06	1.12E-07	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	1.04E-05	2.91E-06	2.94E-07	5.00E-05	5.00E-05	NA	Liver	0.21	0.058	NA	0.27
Ethylbenzene	1.34E+00	1.71E-05	NA	3.72E-04	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.00017	NA	0.00000037	0.00017
Heptachlor epoxide	2.96E-02	3.78E-07	1.06E-07	1.07E-08	1.30E-05	1.30E-05	NA	Liver	0.029	0.0082	NA	0.037
Indeno(1,2,3-c,d)pyrene	1.70E+00	2.17E-05	7.92E-06	6.16E-07	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	3.72E-05	1.35E-05	9.82E-04	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.0019	0.00068	0.00033	0.0029
Trichloroethylene	1.61E+02	2.06E-03	NA	9.99E-01	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	4.1	NA	0.50	4.6
Arsenic	5.07E+00	6.48E-05	5.45E-06	1.84E-06	3.00E-04	3.00E-04	1.50E-05	Skin	0.22	0.018	0.00012	0.23
Chromium	1.74E+01	2.23E-04	NA	6.30E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.074	NA	0.00079	0.075
Cobalt	5.85E+00	7.47E-05	NA	2.12E-06	3.00E-04	3.00E-04	6.00E-06	No information	0.25	NA	0.00035	0.25
Mercury	3.43E-01	4.39E-06	NA	1.24E-07	3.00E-04	2.10E-05	3.00E-04	Immune System	0.015	NA	0.00000041	0.015
Thallium	3.30E-01	4.22E-06	NA	1.19E-07	1.50E-05	1.50E-05	NA	Hair atrophy	0.28	NA	NA	0.28
								Total	5.2	0.089	0.50	5.8

Total Liver HI	0.35
Total Kidney HI	0.00017
Total Skin HI	0.53
Total Immune Effects HI	4.6
Total Heart Effects HI	4.6
Total Body Weight HI	0.0029

Table 6-34

Central Tendency Exposure Doses and Hazard Quotients for Child Residents Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Child Exposure Doses							Child Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	7.76E-06	2.26E-06	8.79E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	6.49E-06	1.89E-06	7.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	9.58E-06	2.79E-06	1.08E-06	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	3.17E-06	9.24E-07	3.59E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	6.39E-09	5.73E-10	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000013	0.0000011	0.0000000010	0.000014
gamma-Chlordane	2.00E-03	6.39E-09	5.73E-10	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000013	0.0000011	0.0000000010	0.000014
Chrysene	2.48E+00	7.94E-06	2.31E-06	8.99E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	2.10E-06	1.41E-07	2.37E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	5.18E-06	3.48E-07	5.86E-07	5.00E-04	5.00E-04	NA	Liver	0.010	0.00070	NA	0.011
Dibenz(a,h)anthracene	3.08E-01	9.84E-07	2.87E-07	1.12E-07	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	2.60E-06	5.82E-07	2.94E-07	5.00E-05	5.00E-05	NA	Liver	0.052	0.012	NA	0.064
Ethylbenzene	1.34E+00	4.28E-06	NA	4.84E-07	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.000043	NA	0.00000000048	0.000043
Heptachlor epoxide	2.96E-02	9.46E-08	2.12E-08	1.07E-08	1.30E-05	1.30E-05	NA	Liver	0.0073	0.0016	NA	0.0089
Indeno(1,2,3-c,d)pyrene	1.70E+00	5.44E-06	1.58E-06	6.16E-07	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	9.30E-06	2.71E-06	1.05E-06	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.00046	0.00014	0.00000035	0.00060
Trichloroethylene	1.61E+02	5.14E-04	NA	5.82E-05	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	1.0	NA	0.000029	1.0
Arsenic	5.07E+00	1.62E-05	1.09E-06	1.84E-06	3.00E-04	3.00E-04	1.50E-05	Skin	0.054	0.0036	0.00012	0.058
Chromium	1.74E+01	5.56E-05	NA	6.30E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.019	NA	0.00079	0.019
Cobalt	5.85E+00	1.87E-05	NA	2.12E-06	3.00E-04	3.00E-04	6.00E-06	No information	0.062	NA	0.00035	0.063
Mercury	3.43E-01	1.10E-06	NA	1.24E-07	3.00E-04	2.10E-05	3.00E-04	Immune System	0.0037	NA	0.00000041	0.0037
Thallium	3.30E-01	1.05E-06	NA	1.19E-07	1.50E-05	1.50E-05	NA	Hair atrophy	0.070	NA	NA	0.070
								Total	1.3	0.018	0.0013	1.3

Total Liver HI	0.084
Total Kidney HI	0.000043
Total Skin HI	0.13
Total Immune Effects HI	1.0
Total Heart Effects HI	1.0
Total Body Weight HI	0.00060

Table 6-35

Reasonable Maximum Exposure Doses and Hazard Quotients for Adult Residents Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Adult Exposure Doses							Adult Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	3.33E-06	1.73E-06	8.79E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	2.78E-06	1.44E-06	7.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	4.10E-06	2.13E-06	1.08E-06	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	1.36E-06	7.06E-07	3.59E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	2.74E-09	4.37E-10	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000055	0.00000087	0.0000000010	0.0000064
gamma-Chlordane	2.00E-03	2.74E-09	4.37E-10	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000055	0.00000087	0.0000000010	0.0000064
Chrysene	2.48E+00	3.40E-06	1.76E-06	8.99E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	8.99E-07	1.08E-07	2.37E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	2.22E-06	2.66E-07	5.86E-07	5.00E-04	5.00E-04	NA	Liver	0.0044	0.00053	NA	0.0050
Dibenz(a,h)anthracene	3.08E-01	4.22E-07	2.19E-07	1.12E-07	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	1.11E-06	4.44E-07	2.94E-07	5.00E-05	5.00E-05	NA	Liver	0.022	0.0089	NA	0.031
Ethylbenzene	1.34E+00	1.83E-06	NA	3.72E-04	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.000018	NA	0.00000037	0.000019
Heptachlor epoxide	2.96E-02	4.05E-08	1.62E-08	1.07E-08	1.30E-05	1.30E-05	NA	Liver	0.0031	0.0012	NA	0.0044
Indeno(1,2,3-c,d)pyrene	1.70E+00	2.33E-06	1.21E-06	6.16E-07	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	3.98E-06	2.07E-06	9.82E-04	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.00020	0.00010	0.00033	0.00063
Trichloroethylene	1.61E+02	2.20E-04	NA	9.99E-01	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	0.44	NA	0.50	0.94
Arsenic	5.07E+00	6.95E-06	8.31E-07	1.84E-06	3.00E-04	3.00E-04	1.50E-05	Skin	0.023	0.0028	0.00012	0.026
Chromium	1.74E+01	2.38E-05	NA	6.30E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.0079	NA	0.00079	0.0087
Cobalt	5.85E+00	8.01E-06	NA	2.12E-06	3.00E-04	3.00E-04	6.00E-06	No information	0.027	NA	0.00035	0.027
Mercury	3.43E-01	4.70E-07	NA	1.24E-07	3.00E-04	2.10E-05	3.00E-04	Immune System	0.0016	NA	0.00000041	0.0016
Thallium	3.30E-01	4.52E-07	NA	1.19E-07	1.50E-05	1.50E-05	NA	Hair atrophy	0.030	NA	NA	0.030
								Total	0.56	0.014	0.50	1.1

Table 6-36

Central Tendency Exposure Doses and Hazard Quotients for Adult Residents Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Adult Exposure Doses							Adult Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation (µg/m^3)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	8.32E-07	2.46E-07	8.79E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	6.95E-07	2.06E-07	7.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	1.03E-06	3.04E-07	1.08E-06	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	3.40E-07	1.01E-07	3.59E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	6.85E-10	6.25E-11	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000014	0.00000012	0.0000000010	0.0000015
gamma-Chlordane	2.00E-03	6.85E-10	6.25E-11	7.24E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000014	0.00000012	0.0000000010	0.0000015
Chrysene	2.48E+00	8.50E-07	2.52E-07	8.99E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	2.25E-07	1.54E-08	2.37E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	5.55E-07	3.79E-08	5.86E-07	5.00E-04	5.00E-04	NA	Liver	0.0011	0.000076	NA	0.0012
Dibenz(a,h)anthracene	3.08E-01	1.05E-07	3.13E-08	1.12E-07	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	2.78E-07	6.35E-08	2.94E-07	5.00E-05	5.00E-05	NA	Liver	0.0056	0.0013	NA	0.0068
Ethylbenzene	1.34E+00	4.58E-07	NA	4.84E-07	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.0000046	NA	0.00000000048	0.0000046
Heptachlor epoxide	2.96E-02	1.01E-08	2.31E-09	1.07E-08	1.30E-05	1.30E-05	NA	Liver	0.00078	0.00018	NA	0.00096
Indeno(1,2,3-c,d)pyrene	1.70E+00	5.83E-07	1.73E-07	6.16E-07	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	9.96E-07	2.95E-07	1.05E-06	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.000050	0.000015	0.00000035	0.000065
Trichloroethylene	1.61E+02	5.51E-05	NA	5.82E-05	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	0.11	NA	0.000029	0.11
Arsenic	5.07E+00	1.74E-06	1.19E-07	1.84E-06	3.00E-04	3.00E-04	1.50E-05	Skin	0.0058	0.00040	0.00012	0.0063
Chromium	1.74E+01	5.96E-06	NA	6.30E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.0020	NA	0.00079	0.0028
Cobalt	5.85E+00	2.00E-06	NA	2.12E-06	3.00E-04	3.00E-04	6.00E-06	No information	0.0067	NA	0.00035	0.0070
Mercury	3.43E-01	1.17E-07	NA	1.24E-07	3.00E-04	2.10E-05	3.00E-04	Immune System	0.00039	NA	0.00000041	0.00039
Thallium	3.30E-01	1.13E-07	NA	1.19E-07	1.50E-05	1.50E-05	NA	Hair atrophy	0.0075	NA	NA	0.0075
								Total	0.14	0.0019	0.0013	0.14

Table 6-37

Calculation of Reasonable Maximum Exposure Cancer Risks - Mutagenic Mode of Action - Future Residential Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$\text{Risk} = \text{EPC} \times \sum_i \frac{\text{IRS} \times \text{FI} \times \text{CF} \times \text{EF} \times \text{ED}}{\text{BW} \times \text{AT}} \times \text{CSFo} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
EPC	mg/kg	See Table 3-5			
IRS	mg/day	200	200	100	100
FI	unitless	1	1	1	1
CF	kg/mg	1E-06	1E-06	1E-06	1E-06
EF	days/year	350	350	350	350
ED	years	2	4	10	14
BW	kg	15	15	70	70
AT	days	25550	25550	25550	25550
CSFo	$(\text{mg/kg-day})^{-1}$	See Table 3-26			
ADAF	unitless	10	3	3	1

Dermal Contact Risk

Where:

$$\text{Risk} = \text{EPC} \times \sum_i \frac{\text{SA} \times \text{AF} \times \text{ABS} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{BW} \times \text{AT}} \times \text{CSFd} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
EPC	mg/kg	See Table 3-5			
SA	cm^2/day	2800	2800	5700	5700
AF	mg/cm^2	0.2	0.2	0.07	0.07
ABS	unitless	See Table 3-6			
EF	days/year	350	350	350	350
ED	years	2	4	10	14
CF	kg/mg	1E-06	1E-06	1E-06	1E-06
BW	kg	15	15	70	70
AT	days	25550	25550	25550	25550
CSFd	$(\text{mg/kg-day})^{-1}$	See Table 3-26			
ADAF	unitless	10	3	3	1

Inhalation of Particulate Risk

Where:

$$\text{Risk} = \text{EPC} \times 1/\text{PEF} \sum_i \frac{\text{ET} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{AT}} \times \text{URF} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
EPC	mg/kg	See Table 3-5			
PEF	m^3/kg	2.67E+09	2.67E+09	2.67E+09	2.67E+09
ET	hours/day	24	24	24	24
EF	days/year	350	350	350	350
ED	years	2	4	10	14
CF	µg/mg	1000	1000	1000	1000
AT	hours	613200	613200	613200	613200
URF	$(\mu g/m^3)^{-1}$	See Table 3-27			
ADAF	unitless	10	3	3	1

	Incidential Soil Ingestion Risks					
COPC	**EPC**	**CSFo**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
Benzo(a)anthracene	2.43E+00	7.3E-01	6.5E-06	3.9E-06	1.0E-06	4.9E-07
Benzo(a)pyrene	2.03E+00	7.3E+00	5.4E-05	3.2E-05	8.7E-06	4.1E-06
Benzo(b)fluoranthene	3.00E+00	7.3E-01	8.0E-06	4.8E-06	1.3E-06	6.0E-07
Benzo(k)fluoranthene	9.93E-01	7.3E-02	2.6E-07	1.6E-07	4.3E-08	2.0E-08
Chrysene	2.48E+00	7.3E-03	6.6E-08	4.0E-08	1.1E-08	5.0E-09
Dibenz(a,h)anthracene	3.08E-01	7.3E+00	8.2E-06	4.9E-06	1.3E-06	6.2E-07
Indeno(1,2,3-cd)pyrene	1.70E+00	7.3E-01	4.5E-06	2.7E-06	7.3E-07	3.4E-07
Chromium Total	1.74E+01	5.0E-01	3.2E-05	1.9E-05	5.1E-06	2.4E-06

	Dermal Contact Risks						
COPC	**EPC**	**CSFd**	**ABS**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
Benzo(a)anthracene	2.43E+00	7.3E-01	0.13	2.4E-06	1.4E-06	5.4E-07	2.5E-07
Benzo(a)pyrene	2.03E+00	7.3E+00	0.13	2.0E-05	1.2E-05	4.5E-06	2.1E-06
Benzo(b)fluoranthene	3.00E+00	7.3E-01	0.13	2.9E-06	1.7E-06	6.7E-07	3.1E-07
Benzo(k)fluoranthene	9.93E-01	7.3E-02	0.13	9.6E-08	5.8E-08	2.2E-08	1.0E-08
Chrysene	2.48E+00	7.3E-03	0.13	2.4E-08	1.4E-08	5.5E-09	2.6E-09
Dibenz(a,h)anthracene	3.08E-01	7.3E+00	0.13	3.0E-06	1.8E-06	6.8E-07	3.2E-07
Indeno(1,2,3-cd)pyrene	1.70E+00	7.3E-01	0.13	1.7E-06	9.9E-07	3.8E-07	1.8E-07
Chromium Total	1.74E+01	2.0E+01	NA	NA	NA	NA	NA

	Inhalation of Particulate Risks					
COPC	**EPC**	**URFi**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
Benzo(a)anthracene	2.43E+00	1.1E-04	2.7E-11	1.6E-11	4.1E-11	1.9E-11
Benzo(a)pyrene	2.03E+00	1.1E-03	2.3E-10	1.4E-10	3.4E-10	1.6E-10
Benzo(b)fluoranthene	3.00E+00	1.1E-04	3.4E-11	2.0E-11	5.1E-11	2.4E-11
Benzo(k)fluoranthene	9.93E-01	1.1E-04	1.1E-11	6.7E-12	1.7E-11	7.8E-12
Chrysene	2.48E+00	1.1E-05	2.8E-12	1.7E-12	4.2E-12	2.0E-12
Dibenz(a,h)anthracene	3.08E-01	1.2E-03	3.8E-11	2.3E-11	5.7E-11	2.7E-11
Indeno(1,2,3-cd)pyrene	1.70E+00	1.1E-04	1.9E-11	1.2E-11	2.9E-11	1.3E-11
Chromium Total	1.74E+01	8.4E-02	1.5E-07	9.0E-08	2.3E-07	1.1E-07

	Total Cancer Risks			
COPC	**Soil Ingestion**	**Dermal Contact**	**Inhalation**	**Total**
Benzo(a)anthracene	1.2E-05	4.6E-06	1.0E-10	**1.6E-05**
Benzo(a)pyrene	9.9E-05	3.8E-05	8.7E-10	**1.4E-04**
Benzo(b)fluoranthene	1.5E-05	5.6E-06	1.3E-10	**2.0E-05**
Benzo(k)fluoranthene	4.9E-07	1.9E-07	4.3E-11	**6.7E-07**
Chrysene	1.2E-07	4.7E-08	1.1E-11	**1.7E-07**
Dibenz(a,h)anthracene	1.5E-05	5.8E-06	1.4E-10	**2.1E-05**
Indeno(1,2,3-cd)pyrene	8.3E-06	3.2E-06	7.3E-11	**1.2E-05**
Chromium Total	5.8E-05	NA	5.7E-07	**5.9E-05**

Table 6-38

Calculation of Reasonable Maximum Exposure Cancer Risks from Trichloroethylene - Mutagenic Mode of Action - Future Residential Exposure to Aggregate Soil - Middlesex County College Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$\text{Risk} = \text{EPC} \times \sum_i \left(\left(\frac{\text{IRS} \times \text{FI} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{BW} \times \text{AT}} \right) \times \text{CSF}_{\text{kidney}} \times \text{ADAF} \right) + \left(\left(\frac{\text{IRS} \times \text{FI} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{BW} \times \text{AT}} \right) \times \text{CSF}_{\text{Liver}} + \text{NHL} \right)$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
EPC	mg/kg	See Table 3-5			
IRS	mg/day	200	200	100	100
FI	unitless	1	1	1	1
CF	kg/mg	1E-06	1E-06	1E-06	1E-06
EF	days/year	350	350	350	350
ED	years	2	4	10	14
BW	kg	15	15	70	70
AT	days	25550	25550	25550	25550
CSF_{kidney}	$(mg/kg\text{-}day)^{-1}$	9.3E-03			
ADAF	unitless	10	3	3	1
$CSF_{liver+NHL}$	$(mg/kg\text{-}day)^{-1}$	3.7E-02			

	Incidential Soil Ingestion Risks				
COPC	**EPC**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
Trichloroethylene	1.61E+02	7.6E-06	7.6E-06	2.0E-06	2.0E-06

Inhalation of Volatiles Risk

Where:

$$\text{Risk} = \text{EPC} \times 1/\text{VF} \times \sum_i \left(\left(\frac{\text{ET} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{AT}} \right) \times \text{URF}_{\text{kidney}} \times \text{ADAF} \right) + \left(\left(\frac{\text{ET} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{AT}} \right) \times \text{URF}_{\text{liver}} + \text{NHL} \right)$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
EPC	mg/kg	See Table 3-5			
VF	m^3/kg	1.56E+05	1.56E+05	1.56E+05	1.56E+05
ET	hours/day	24	24	24	24
EF	days/year	350	350	350	350
ED	years	2	4	10	14
CF	µg/mg	1000	1000	1000	1000
AT	hours	613200	613200	613200	613200
URF_{kidney}	$(\mu g/m^3)^{-1}$	1.0E-06			
ADAF	unitless	10	3	3	1
$URF_{liver+NHL}$	$(\mu g/m^3)^{-1}$	3.1E-06			

	Inhalation of Volatiles Risks				
COPC	**EPC**	**0-<2**	**2-<6**	**6-<16**	**16-<30**
Trichloroethylene	1.61E+02	3.7E-07	3.5E-07	8.6E-07	8.1E-07

	Total Cancer Risks		
COPC	**Soil Ingestion**	**Inhalation**	**Total**
Trichloroethylene	1.9E-05	2.4E-06	2.2E-05

Table 6-39

Calculation of Central Tendency Exposure Cancer Risks - Mutagenic Mode of Action - Future Residential Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$\text{Risk} = \text{EPC} \times \sum_i \frac{\text{IRS} \times \text{FI} \times \text{CF} \times \text{EF} \times \text{ED}}{\text{BW} \times \text{AT}} \times \text{CSFo} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**0-<2**	**2-<6**	**20-<29**
EPC	mg/kg	See Table 3-5		
IRS	mg/day	100	100	50
FI	unitless	0.5	0.5	0.5
CF	kg/mg	1E-06	1E-06	1E-06
EF	days/year	350	350	350
ED	years	2	4	9
BW	kg	15	15	70
AT	days	25550	25550	25550
CSFo	$(\text{mg/kg-day})^{-1}$	See Table 3-26		
ADAF	unitless	10	3	1

Incidential Soil Ingestion Risks					
COPC	**EPC**	**CSFo**	**0-<2**	**2-<6**	**20-<29**
Benzo(a)anthracene	2.43E+00	7.3E-01	1.6E-06	9.7E-07	7.8E-08
Benzo(a)pyrene	2.03E+00	7.3E+00	1.4E-05	8.1E-06	6.5E-07
Benzo(b)fluoranthene	3.00E+00	7.3E-01	2.0E-06	1.2E-06	9.6E-08
Benzo(k)fluoranthene	9.93E-01	7.3E-02	6.6E-08	4.0E-08	3.2E-09
Chrysene	2.48E+00	7.3E-03	1.7E-08	9.9E-09	8.0E-10
Dibenz(a,h)anthracene	3.08E-01	7.3E+00	2.1E-06	1.2E-06	9.9E-08
Indeno(1,2,3-cd)pyrene	1.70E+00	7.3E-01	1.1E-06	6.8E-07	5.5E-08
Chromium Total	1.74E+01	5.0E-01	7.9E-06	4.8E-06	3.8E-07

Dermal Contact Risk

Where:

$$\text{Risk} = \text{EPC} \times \sum_i \frac{\text{SA} \times \text{AF} \times \text{ABS} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{BW} \times \text{AT}} \times \text{CSFd} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**0-<2**	**2-<6**	**20-<29**
EPC	mg/kg	See Table 3-5		
SA	cm^2	2800	2800	5700
AF	mg/cm^2	0.04	0.04	0.01
ABS	unitless	See Table 3-6		
EF	days/year	350	350	350
ED	years	2	4	9
CF	kg/mg	1E-06	1E-06	1E-06
BW	kg	15	15	70
AT	days	25550	25550	25550
CSFd	$(\text{mg/kg-day})^{-1}$	See Table 3-26		
ADAF	unitless	10	3	1

Dermal Contact Risks						
COPC	**EPC**	**CSFd**	**ABS**	**0-<2**	**2-<6**	**20-<29**
Benzo(a)anthracene	2.43E+00	7.3E-01	0.13	4.7E-07	2.8E-07	2.3E-08
Benzo(a)pyrene	2.03E+00	7.3E+00	0.13	3.9E-06	2.4E-06	1.9E-07
Benzo(b)fluoranthene	3.00E+00	7.3E-01	0.13	5.8E-07	3.5E-07	2.9E-08
Benzo(k)fluoranthene	9.93E-01	7.3E-02	0.13	1.9E-08	1.2E-08	9.5E-10
Chrysene	2.48E+00	7.3E-03	0.13	4.8E-09	2.9E-09	2.4E-10
Dibenz(a,h)anthracene	3.08E-01	7.3E+00	0.13	6.0E-07	3.6E-07	2.9E-08
Indeno(1,2,3-cd)pyrene	1.70E+00	7.3E-01	0.13	3.3E-07	2.0E-07	1.6E-08
Chromium Total	1.74E+01	2.0E+01	NA	NA	NA	NA

Inhalation of Particulate Risk

Where:

$$\text{Risk} = \text{EPC} \times 1/\text{PEF} \sum_i \frac{\text{ET} \times \text{EF} \times \text{ED} \times \text{CF}}{\text{AT}} \times \text{URF} \times \text{ADAF}$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**0-<2**	**2-<6**	**20-<29**
EPC	mg/kg	See Table 3-5		
PEF	m^3/kg	2.67E+09	2.67E+09	2.67E+09
ET	hours/day	24	24	24
EF	days/year	350	350	350
ED	years	2	4	9
CF	µg/mg	1000	1000	1000
AT	hours	613200	613200	613200
URF	$(\mu g/m^3)^{-1}$	See Table 3-27		
ADAF	unitless	10	3	1

Inhalation of Particulate Risks					
COPC	**EPC**	**URFi**	**0-<2**	**6-<13**	**20-<29**
Benzo(a)anthracene	2.43E+00	1.1E-04	2.7E-11	1.6E-11	1.2E-11
Benzo(a)pyrene	2.03E+00	1.1E-03	2.3E-10	1.4E-10	1.0E-10
Benzo(b)fluoranthene	3.00E+00	1.1E-04	3.4E-11	2.0E-11	1.5E-11
Benzo(k)fluoranthene	9.93E-01	1.1E-04	1.1E-11	6.7E-12	5.0E-12
Chrysene	2.48E+00	1.1E-05	2.8E-12	1.7E-12	1.3E-12
Dibenz(a,h)anthracene	3.08E-01	1.2E-03	3.8E-11	2.3E-11	1.7E-11
Indeno(1,2,3-cd)pyrene	1.70E+00	1.1E-04	1.9E-11	1.2E-11	8.6E-12
Chromium Total	1.74E+01	8.4E-02	1.5E-07	9.0E-08	6.8E-08

Total Cancer Risks				
COPC	**Soil Ingestion**	**Dermal Contact**	**Inhalation**	**Total**
Benzo(a)anthracene	2.7E-06	7.8E-07	5.6E-11	**3.4E-06**
Benzo(a)pyrene	2.2E-05	6.5E-06	4.7E-10	**2.9E-05**
Benzo(b)fluoranthene	3.3E-06	9.6E-07	6.9E-11	**4.3E-06**
Benzo(k)fluoranthene	1.1E-07	3.2E-08	2.3E-11	**1.4E-07**
Chrysene	2.7E-08	7.9E-09	5.7E-12	**3.5E-08**
Dibenz(a,h)anthracene	3.4E-06	9.9E-07	7.8E-11	**4.4E-06**
Indeno(1,2,3-cd)pyrene	1.9E-06	5.4E-07	3.9E-11	**2.4E-06**
Chromium Total	1.3E-05	NA	3.1E-07	**1.3E-05**

Table 6-40

Calculation of Central Tendency Exposure Cancer Risks from Trichloroethylene - Mutagenic Mode of Action - Future Residential Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$Risk = EPC \times \sum_i \left(\left(\frac{IRS \times FI \times EF \times ED \times CF}{BW \times AT} \right) \times CSF_{kidney} \times ADAF \right) + \left(\left(\frac{IRS \times FI \times EF \times ED \times CF}{BW \times AT} \right) \times CSF_{liver} + NHL \right)$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**0-<2**	**2-<6**	**20-<29**
EPC	mg/kg	See Table 3-5		
IRS	mg/day	100	100	50
FI	unitless	0.5	0.5	0.5
CF	kg/mg	1E-06	1E-06	1E-06
EF	days/year	350	350	350
ED	years	2	4	9
BW	kg	15	15	70
AT	days	25550	25550	25550
CSF_{kidney}	$(mg/kg\text{-}day)^{-1}$	9.3E-03		
ADAF	unitless	10	3	1
$CSFl_{iver+NHL}$	$(mg/kg\text{-}day)^{-1}$	3.7E-02		

	Incidential Soil Ingestion Risks			
COPC	**EPC**	**0-<2**	**2-<6**	**20-<29**
Trichloroethylene	1.61E+02	1.9E-06	1.9E-06	3.3E-07

Inhalation of Volatiles Risk

Where:

$$Risk = EPC \times 1/VF \times \sum_i \left(\left(\frac{ET \times EF \times ED \times CF}{AT} \right) \times URF_{kidney} \times ADAF \right) + \left(\left(\frac{ET \times EF \times ED \times CF}{AT} \right) \times URF_{liver} + NHL \right)$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**0-<2**	**2-<6**	**20-<29**
EPC	mg/kg	See Table 3-5		
VF	m^3/kg	1.10E+05	1.10E+05	1.10E+05
ET	hours/day	24	24	24
EF	days/year	350	350	350
ED	years	2	4	9
CF	µg/mg	1000	1000	1000
AT	hours	613200	613200	613200
URF_{kidney}	$(\mu g/m^3)^{-1}$	1.0E-06		
ADAF	unitless	10	3	1
$URF_{liver+NHL}$	$(\mu g/m^3)^{-1}$	3.1E-06		

	Inhalation of Volatiles Risks			
COPC	**EPC**	**0-<2**	**2-<6**	**20-<29**
Trichloroethylene	1.61E+02	5.2E-07	4.9E-07	7.4E-07

	Total Cancer Risks		
COPC	**Soil Ingestion**	**Inhalation**	**Total**
Trichloroethylene	4.1E-06	1.8E-06	5.9E-06

Table 6-41

Reasonable Maximum Exposure Doses and Cancer Risks for Groundskeeper Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	1.22E-06	1.05E-06	1.08E-07	7.30E-01	7.30E-01	1.10E-04	8.9E-07	7.7E-07	1.2E-11	1.7E-06
Benzo(a)pyrene	3.23E+00	1.02E-06	8.72E-07	8.95E-08	7.30E+00	7.30E+00	1.10E-03	7.4E-06	6.4E-06	9.8E-11	1.4E-05
Benzo(b)fluoranthene	3.64E+00	1.15E-06	9.83E-07	1.01E-07	7.30E-01	7.30E-01	1.10E-04	8.4E-07	7.2E-07	1.1E-11	1.6E-06
Benzo(k)fluoranthene	1.54E+00	4.83E-07	4.14E-07	4.25E-08	7.30E-02	7.30E-02	1.10E-04	3.5E-08	3.0E-08	4.7E-12	6.5E-08
alpha-Chlordane	2.00E-03	6.29E-10	1.66E-10	5.54E-11	3.50E-01	3.50E-01	1.00E-04	2.2E-10	5.8E-11	5.5E-15	2.8E-10
gamma-Chlordane	2.00E-03	6.29E-10	1.66E-10	5.54E-11	3.50E-01	3.50E-01	1.00E-04	2.2E-10	5.8E-11	5.5E-15	2.8E-10
Chrysene	3.01E+00	9.45E-07	8.11E-07	8.33E-08	7.30E-03	7.30E-03	1.10E-05	6.9E-09	5.9E-09	9.2E-13	1.3E-08
4,4-DDE	7.75E-01	2.44E-07	4.83E-08	2.15E-08	3.40E-01	3.40E-01	NA	8.3E-08	1.6E-08	NA	9.9E-08
4,4-DDT	2.51E+00	7.89E-07	1.56E-07	6.95E-08	3.40E-01	3.40E-01	9.70E-05	2.7E-07	5.3E-08	6.7E-12	3.2E-07
Dibenz(a,h)anthracene	3.45E-01	1.09E-07	9.31E-08	9.56E-09	7.30E+00	7.30E+00	1.20E-03	7.9E-07	6.8E-07	1.1E-11	1.5E-06
Dieldrin	1.34E+00	4.20E-07	2.77E-07	3.70E-08	1.60E+01	1.60E+01	4.60E-03	6.7E-06	4.4E-06	1.7E-10	1.1E-05
Heptachlor epoxide	3.36E-02	1.06E-08	6.97E-09	9.31E-10	9.10E+00	9.10E+00	2.60E-03	9.6E-08	6.3E-08	2.4E-12	1.6E-07
Indeno(1,2,3-c,d)pyrene	2.72E+00	8.56E-07	7.35E-07	7.54E-08	7.30E-01	7.30E-01	1.10E-04	6.3E-07	5.4E-07	8.3E-12	1.2E-06
Arsenic	8.20E+00	2.58E-06	5.11E-07	2.27E-07	1.50E+00	1.50E+00	4.30E-03	3.9E-06	7.7E-07	9.8E-10	4.6E-06
Chromium	2.27E+01	7.15E-06	NA	6.29E-07	5.00E-01	2.00E+01	8.40E-02	3.6E-06	NA	5.3E-08	3.6E-06
Cobalt	5.65E+00	1.78E-06	NA	1.57E-07	NA	NA	9.00E-03	NA	NA	1.4E-09	1.4E-09
Mercury	1.09E+00	3.43E-07	NA	3.02E-08	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	3.15E-08	NA	2.77E-09	NA	NA	NA	NA	NA	NA	NA
							Total	2.5E-05	1.4E-05	5.6E-08	4.0E-05

Table 6-42

Central Tendency Exposure Doses and Cancer Risks for Groundskeeper Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	7.17E-08	2.46E-08	1.26E-08	7.30E-01	7.30E-01	1.10E-04	5.2E-08	1.8E-08	1.4E-12	7.0E-08
Benzo(a)pyrene	3.23E+00	5.96E-08	2.05E-08	1.05E-08	7.30E+00	7.30E+00	1.10E-03	4.4E-07	1.5E-07	1.2E-11	5.8E-07
Benzo(b)fluoranthene	3.64E+00	6.72E-08	2.31E-08	1.18E-08	7.30E-01	7.30E-01	1.10E-04	4.9E-08	1.7E-08	1.3E-12	6.6E-08
Benzo(k)fluoranthene	1.54E+00	2.83E-08	9.72E-09	4.99E-09	7.30E-02	7.30E-02	1.10E-04	2.1E-09	7.1E-10	5.5E-13	2.8E-09
alpha-Chlordane	2.00E-03	3.69E-11	3.90E-12	6.50E-12	3.50E-01	3.50E-01	1.00E-04	1.3E-11	1.4E-12	6.5E-16	1.4E-11
gamma-Chlordane	2.00E-03	3.69E-11	3.90E-12	6.50E-12	3.50E-01	3.50E-01	1.00E-04	1.3E-11	1.4E-12	6.5E-16	1.4E-11
Chrysene	3.01E+00	5.55E-08	1.90E-08	9.77E-09	7.30E-03	7.30E-03	1.10E-05	4.0E-10	1.4E-10	1.1E-13	5.4E-10
4,4-DDE	7.75E-01	1.43E-08	1.13E-09	2.52E-09	3.40E-01	3.40E-01	NA	4.9E-09	3.9E-10	NA	5.2E-09
4,4-DDT	2.51E+00	4.63E-08	3.67E-09	8.16E-09	3.40E-01	3.40E-01	9.70E-05	1.6E-08	1.2E-09	7.9E-13	1.7E-08
Dibenz(a,h)anthracene	3.45E-01	6.37E-09	2.18E-09	1.12E-09	7.30E+00	7.30E+00	1.20E-03	4.6E-08	1.6E-08	1.3E-12	6.2E-08
Dieldrin	1.34E+00	2.47E-08	6.51E-09	4.34E-09	1.60E+01	1.60E+01	4.60E-03	3.9E-07	1.0E-07	2.0E-11	5.0E-07
Heptachlor epoxide	3.36E-02	6.20E-10	1.64E-10	1.09E-10	9.10E+00	9.10E+00	2.60E-03	5.6E-09	1.5E-09	2.8E-13	7.1E-09
Indeno(1,2,3-c,d)pyrene	2.72E+00	5.02E-08	1.72E-08	8.85E-09	7.30E-01	7.30E-01	1.10E-04	3.7E-08	1.3E-08	9.7E-13	4.9E-08
Arsenic	8.20E+00	1.51E-07	1.20E-08	2.67E-08	1.50E+00	1.50E+00	4.30E-03	2.3E-07	1.8E-08	1.1E-10	2.5E-07
Chromium	2.27E+01	4.19E-07	NA	7.39E-08	5.00E-01	2.00E+01	8.40E-02	2.1E-07	NA	6.2E-09	2.2E-07
Cobalt	5.65E+00	1.04E-07	NA	1.84E-08	NA	NA	9.00E-03	NA	NA	1.7E-10	1.7E-10
Mercury	1.09E+00	2.01E-08	NA	3.55E-09	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	1.85E-09	NA	3.25E-10	NA	NA	NA	NA	NA	NA	NA
							Total	1.5E-06	3.4E-07	6.5E-09	1.8E-06

Table 6-43

Reasonable Maximum Exposure Doses and Hazard Quotients for Groundskeeper Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	3.42E-06	2.94E-06	3.01E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	2.84E-06	2.44E-06	2.51E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	3.21E-06	2.75E-06	2.83E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	1.35E-06	1.16E-06	1.19E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	1.76E-09	4.65E-10	1.55E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000035	0.00000093	0.00000000022	0.0000045
gamma-Chlordane	2.00E-03	1.76E-09	4.65E-10	1.55E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000035	0.00000093	0.00000000022	0.0000045
Chrysene	3.01E+00	2.65E-06	2.27E-06	2.33E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	6.82E-07	1.35E-07	6.01E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	2.21E-06	4.38E-07	1.95E-07	5.00E-04	5.00E-04	NA	Liver	0.0044	0.00088	NA	0.0053
Dibenz(a,h)anthracene	3.45E-01	3.04E-07	2.61E-07	2.68E-08	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	1.18E-06	7.77E-07	1.04E-07	5.00E-05	5.00E-05	NA	Liver	0.024	0.016	NA	0.039
Heptachlor epoxide	3.36E-02	2.96E-08	1.95E-08	2.61E-09	1.30E-05	1.30E-05	NA	Liver	0.0023	0.0015	NA	0.0038
Indeno(1,2,3-c,d)pyrene	2.72E+00	2.40E-06	2.06E-06	2.11E-07	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	7.22E-06	1.43E-06	6.36E-07	3.00E-04	3.00E-04	1.50E-05	Skin	0.024	0.0048	0.000042	0.029
Chromium	2.27E+01	2.00E-05	NA	1.76E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.0067	NA	0.00022	0.0069
Cobalt	5.65E+00	4.98E-06	NA	4.38E-07	3.00E-04	3.00E-04	6.00E-06	No information	0.017	NA	0.000073	0.017
Mercury	1.09E+00	9.61E-07	NA	8.46E-08	3.00E-04	2.10E-05	3.00E-04	Immune System	0.0032	NA	0.00000028	0.0032
Thallium	1.00E-01	8.81E-08	NA	7.76E-09	1.50E-05	1.50E-05	NA	Hair atrophy	0.0059	NA	NA	0.0059
								Total	0.087	0.023	0.00034	0.11

Table 6-44

Central Tendency Exposure Doses and Hazard Quotients for Groundskeeper Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	4.18E-07	1.44E-07	7.37E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	3.48E-07	1.19E-07	6.12E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	3.92E-07	1.35E-07	6.91E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	1.65E-07	5.67E-08	2.91E-08	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	2.15E-10	2.27E-11	3.79E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000043	0.000000045	0.000000000054	0.00000048
gamma-Chlordane	2.00E-03	2.15E-10	2.27E-11	3.79E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000043	0.000000045	0.000000000054	0.00000048
Chrysene	3.01E+00	3.24E-07	1.11E-07	5.70E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	8.34E-08	6.61E-09	1.47E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	2.70E-07	2.14E-08	4.76E-08	5.00E-04	5.00E-04	NA	Liver	0.00054	0.000043	NA	0.00058
Dibenz(a,h)anthracene	3.45E-01	3.71E-08	1.27E-08	6.54E-09	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	1.44E-07	3.80E-08	2.53E-08	5.00E-05	5.00E-05	NA	Liver	0.0029	0.00076	NA	0.0036
Heptachlor epoxide	3.36E-02	3.62E-09	9.55E-10	6.37E-10	1.30E-05	1.30E-05	NA	Liver	0.00028	0.000073	NA	0.00035
Indeno(1,2,3-c,d)pyrene	2.72E+00	2.93E-07	1.01E-07	5.16E-08	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	8.83E-07	6.99E-08	1.55E-07	3.00E-04	3.00E-04	1.50E-05	Skin	0.0029	0.00023	0.000010	0.0032
Chromium	2.27E+01	2.45E-06	NA	4.31E-07	3.00E-03	7.50E-05	8.00E-06	None observed	0.00082	NA	0.000054	0.00087
Cobalt	5.65E+00	6.08E-07	NA	1.07E-07	3.00E-04	3.00E-04	6.00E-06	No information	0.0020	NA	0.000018	0.0020
Mercury	1.09E+00	1.17E-07	NA	2.07E-08	3.00E-04	2.10E-05	3.00E-04	Immune System	0.00039	NA	0.000000069	0.00039
Thallium	1.00E-01	1.08E-08	NA	1.90E-09	1.50E-05	1.50E-05	NA	Hair atrophy	0.00072	NA	NA	0.00072
								Total	0.011	0.0011	0.000082	0.012

Table 6-45

Reasonable Maximum Exposure Doses and Cancer Risks for Construction/Utility Worker Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		RME - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	2.43E+00	2.69E-08	1.05E-08	1.86E-06	7.30E-01	7.30E-01	1.10E-04	2.0E-08	7.7E-09	2.0E-10	2.7E-08
Benzo(a)pyrene	2.03E+00	2.25E-08	8.76E-09	1.55E-06	7.30E+00	7.30E+00	1.10E-03	1.6E-07	6.4E-08	1.7E-09	2.3E-07
Benzo(b)fluoranthene	3.00E+00	3.32E-08	1.29E-08	2.30E-06	7.30E-01	7.30E-01	1.10E-04	2.4E-08	9.4E-09	2.5E-10	3.4E-08
Benzo(k)fluoranthene	9.93E-01	1.10E-08	4.29E-09	7.61E-07	7.30E-02	7.30E-02	1.10E-04	8.0E-10	3.1E-10	8.4E-11	1.2E-09
alpha-Chlordane	2.00E-03	2.21E-11	2.66E-12	1.53E-09	3.50E-01	3.50E-01	1.00E-04	7.7E-12	9.3E-13	1.5E-13	8.8E-12
gamma-Chlordane	2.00E-03	2.21E-11	2.66E-12	1.53E-09	3.50E-01	3.50E-01	1.00E-04	7.7E-12	9.3E-13	1.5E-13	8.8E-12
Chrysene	2.48E+00	2.75E-08	1.07E-08	1.90E-06	7.30E-03	7.30E-03	1.10E-05	2.0E-10	7.8E-11	2.1E-11	3.0E-10
4,4-DDE	6.56E-01	7.26E-09	6.54E-10	5.03E-07	3.40E-01	3.40E-01	NA	2.5E-09	2.2E-10	NA	2.7E-09
4,4-DDT	1.62E+00	1.79E-08	1.61E-09	1.24E-06	3.40E-01	3.40E-01	9.70E-05	6.1E-09	5.5E-10	1.2E-10	6.8E-09
Dibenz(a,h)anthracene	3.08E-01	3.41E-09	1.33E-09	2.36E-07	7.30E+00	7.30E+00	1.20E-03	2.5E-08	9.7E-09	2.8E-10	3.5E-08
Dieldrin	8.13E-01	9.00E-09	2.70E-09	6.23E-07	1.60E+01	1.60E+01	4.60E-03	1.4E-07	4.3E-08	2.9E-09	1.9E-07
Ethylbenzene	1.34E+00	1.48E-08	NA	1.67E-06	1.10E-02	1.10E-02	2.50E-06	1.6E-10	NA	4.2E-12	1.7E-10
Heptachlor epoxide	2.96E-02	3.28E-10	9.83E-11	2.27E-08	9.10E+00	9.10E+00	2.60E-03	3.0E-09	8.9E-10	5.9E-11	3.9E-09
Indeno(1,2,3-c,d)pyrene	1.70E+00	1.88E-08	7.34E-09	1.30E-06	7.30E-01	7.30E-01	1.10E-04	1.4E-08	5.4E-09	1.4E-10	1.9E-08
Naphthalene	2.91E+00	3.22E-08	1.26E-08	4.39E-06	NA	NA	3.40E-05	NA	NA	1.5E-10	1.5E-10
Trichloroethylene	1.61E+02	1.78E-06	NA	4.47E-03	4.60E-02	4.60E-02	4.10E-06	8.2E-08	NA	1.8E-08	1.0E-07
Arsenic	5.07E+00	5.61E-08	5.05E-09	3.88E-06	1.50E+00	1.50E+00	4.30E-03	8.4E-08	7.6E-09	1.7E-08	1.1E-07
Chromium	1.74E+01	1.93E-07	NA	1.33E-05	5.00E-01	2.00E+01	8.40E-02	9.6E-08	NA	1.1E-06	1.2E-06
Cobalt	5.85E+00	6.47E-08	NA	4.48E-06	NA	NA	9.00E-03	NA	NA	4.0E-08	4.0E-08
Mercury	3.43E-01	3.80E-09	NA	2.63E-07	NA	NA	NA	NA	NA	NA	NA
Thallium	3.30E-01	3.65E-09	NA	2.53E-07	NA	NA	NA	NA	NA	NA	NA
							Total	6.7E-07	1.5E-07	1.2E-06	2.0E-06

Table 6-46

Central Tendency Exposure Doses and Cancer Risks for Construction/Utility Worker Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	2.43E+00	2.04E-09	1.75E-09	4.93E-07	7.30E-01	7.30E-01	1.10E-04	1.5E-09	1.3E-09	5.4E-11	2.8E-09
Benzo(a)pyrene	2.03E+00	1.70E-09	1.46E-09	4.12E-07	7.30E+00	7.30E+00	1.10E-03	1.2E-08	1.1E-08	4.5E-10	2.4E-08
Benzo(b)fluoranthene	3.00E+00	2.51E-09	2.16E-09	6.09E-07	7.30E-01	7.30E-01	1.10E-04	1.8E-09	1.6E-09	6.7E-11	3.5E-09
Benzo(k)fluoranthene	9.93E-01	8.33E-10	7.15E-10	2.02E-07	7.30E-02	7.30E-02	1.10E-04	6.1E-11	5.2E-11	2.2E-11	1.4E-10
alpha-Chlordane	2.00E-03	1.68E-12	4.43E-13	4.06E-10	3.50E-01	3.50E-01	1.00E-04	5.9E-13	1.5E-13	4.1E-14	7.8E-13
gamma-Chlordane	2.00E-03	1.68E-12	4.43E-13	4.06E-10	3.50E-01	3.50E-01	1.00E-04	5.9E-13	1.5E-13	4.1E-14	7.8E-13
Chrysene	2.48E+00	2.08E-09	1.79E-09	5.04E-07	7.30E-03	7.30E-03	1.10E-05	1.5E-11	1.3E-11	5.5E-12	3.4E-11
4,4-DDE	6.56E-01	5.50E-10	1.09E-10	1.33E-07	3.40E-01	3.40E-01	NA	1.9E-10	3.7E-11	NA	2.2E-10
4,4-DDT	1.62E+00	1.36E-09	2.69E-10	3.29E-07	3.40E-01	3.40E-01	9.70E-05	4.6E-10	9.1E-11	3.2E-11	5.9E-10
Dibenz(a,h)anthracene	3.08E-01	2.58E-10	2.22E-10	6.26E-08	7.30E+00	7.30E+00	1.20E-03	1.9E-09	1.6E-09	7.5E-11	3.6E-09
Dieldrin	8.13E-01	6.82E-10	4.50E-10	1.65E-07	1.60E+01	1.60E+01	4.60E-03	1.1E-08	7.2E-09	7.6E-10	1.9E-08
Ethylbenzene	1.34E+00	1.12E-09	NA	2.72E-07	1.10E-02	1.10E-02	2.50E-06	1.2E-11	NA	6.8E-13	1.3E-11
Heptachlor epoxide	2.96E-02	2.48E-11	1.64E-11	6.01E-09	9.10E+00	9.10E+00	2.60E-03	2.3E-10	1.5E-10	1.6E-11	3.9E-10
Indeno(1,2,3-c,d)pyrene	1.70E+00	1.43E-09	1.22E-09	3.46E-07	7.30E-01	7.30E-01	1.10E-04	1.0E-09	8.9E-10	3.8E-11	2.0E-09
Naphthalene	2.91E+00	2.44E-09	2.09E-09	5.91E-07	NA	NA	3.40E-05	NA	NA	2.0E-11	2.0E-11
Trichloroethylene	1.61E+02	1.35E-07	NA	3.27E-05	4.60E-02	4.60E-02	4.10E-06	6.2E-09	NA	1.3E-10	6.3E-09
Arsenic	5.07E+00	4.25E-09	8.42E-10	1.03E-06	1.50E+00	1.50E+00	4.30E-03	6.4E-09	1.3E-09	4.4E-09	1.2E-08
Chromium	1.74E+01	1.46E-08	NA	3.54E-06	5.00E-01	2.00E+01	8.40E-02	7.3E-09	NA	3.0E-07	3.0E-07
Cobalt	5.85E+00	4.90E-09	NA	1.19E-06	NA	NA	9.00E-03	NA	NA	1.1E-08	1.1E-08
Mercury	3.43E-01	2.88E-10	NA	6.97E-08	NA	NA	NA	NA	NA	NA	NA
Thallium	3.30E-01	2.77E-10	NA	6.70E-08	NA	NA	NA	NA	NA	NA	NA
							Total	5.0E-08	2.5E-08	3.1E-07	3.9E-07

Table 6-47

Reasonable Maximum Exposure Doses and Hazard Quotients for Construction/Utility Worker Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	1.88E-06	7.34E-07	1.30E-04	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	1.57E-06	6.13E-07	1.09E-04	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	2.32E-06	9.05E-07	1.61E-04	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	7.70E-07	3.00E-07	5.32E-05	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	1.55E-09	1.86E-10	1.07E-07	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000031	0.00000037	0.00000015	0.0000036
gamma-Chlordane	2.00E-03	1.55E-09	1.86E-10	1.07E-07	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000031	0.00000037	0.00000015	0.0000036
Chrysene	2.48E+00	1.92E-06	7.50E-07	1.33E-04	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	5.08E-07	4.58E-08	3.52E-05	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	1.26E-06	1.13E-07	8.69E-05	5.00E-04	5.00E-04	NA	Liver	0.0025	0.00023	NA	0.0027
Dibenz(a,h)anthracene	3.08E-01	2.39E-07	9.31E-08	1.65E-05	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	6.30E-07	1.89E-07	4.36E-05	5.00E-05	5.00E-05	NA	Liver	0.013	0.0038	NA	0.016
Ethylbenzene	1.34E+00	1.04E-06	NA	1.17E-04	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.000010	NA	0.00000012	0.000010
Heptachlor epoxide	2.96E-02	2.29E-08	6.88E-09	1.59E-06	1.30E-05	1.30E-05	NA	Liver	0.0018	0.00053	NA	0.0023
Indeno(1,2,3-c,d)pyrene	1.70E+00	1.32E-06	5.14E-07	9.12E-05	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	2.25E-06	8.79E-07	3.07E-04	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.00011	0.000044	0.000102	0.00026
Trichloroethylene	1.61E+02	1.25E-04	NA	3.13E-01	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	0.25	NA	0.16	0.41
Arsenic	5.07E+00	3.93E-06	3.54E-07	2.72E-04	3.00E-04	3.00E-04	1.50E-05	Skin	0.013	0.00118	0.018	0.032
Chromium	1.74E+01	1.35E-05	NA	9.34E-04	3.00E-03	7.50E-05	8.00E-06	None observed	0.0045	NA	0.12	0.12
Cobalt	5.85E+00	4.53E-06	NA	3.13E-04	3.00E-04	3.00E-04	6.00E-06	No information	0.015	NA	0.052	0.067
Mercury	3.43E-01	2.66E-07	NA	1.84E-05	3.00E-04	2.10E-05	3.00E-04	Immune System	0.00089	NA	0.000061	0.00095
Thallium	3.30E-01	2.56E-07	NA	1.77E-05	1.50E-05	1.50E-05	NA	Hair atrophy	0.017	NA	NA	0.017
								Total	0.32	0.0058	0.34	0.67

Table 6-48

Central Tendency Exposure Doses and Hazard Quotients for Construction/Utility Worker Exposure to Aggregate Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation (µg/m^3)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	2.43E+00	1.43E-07	1.22E-07	3.45E-05	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	2.03E+00	1.19E-07	1.02E-07	2.89E-05	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.00E+00	1.76E-07	1.51E-07	4.26E-05	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	9.93E-01	5.83E-08	5.00E-08	1.41E-05	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	1.17E-10	3.10E-11	2.84E-08	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000023	0.000000062	0.000000041	0.00000034
gamma-Chlordane	2.00E-03	1.17E-10	3.10E-11	2.84E-08	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000023	0.000000062	0.000000041	0.00000034
Chrysene	2.48E+00	1.46E-07	1.25E-07	3.53E-05	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	6.56E-01	3.85E-08	7.63E-09	9.33E-06	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	1.62E+00	9.51E-08	1.88E-08	2.30E-05	5.00E-04	5.00E-04	NA	Liver	0.00019	0.000038	NA	0.00023
Dibenz(a,h)anthracene	3.08E-01	1.81E-08	1.55E-08	4.38E-06	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	8.13E-01	4.77E-08	3.15E-08	1.16E-05	5.00E-05	5.00E-05	NA	Liver	0.0010	0.00063	NA	0.0016
Ethylbenzene	1.34E+00	7.86E-08	NA	1.90E-05	1.00E-01	1.00E-01	1.00E+00	Kidney, Liver	0.00000079	NA	0.000000019	0.00000080
Heptachlor epoxide	2.96E-02	1.74E-09	1.15E-09	4.21E-07	1.30E-05	1.30E-05	NA	Liver	0.00013	0.000088	NA	0.00022
Indeno(1,2,3-c,d)pyrene	1.70E+00	9.99E-08	8.57E-08	2.42E-05	NA	NA	NA	---	NA	NA	NA	NA
Naphthalene	2.91E+00	1.71E-07	1.47E-07	4.14E-05	2.00E-02	2.00E-02	3.00E-03	Body Weight	0.0000085	0.0000073	0.000014	0.000030
Trichloroethylene	1.61E+02	9.44E-06	NA	2.29E-03	5.00E-04	5.00E-04	2.00E-03	Ranges from immune effects to heart effects	0.019	NA	0.0011	0.020
Arsenic	5.07E+00	2.98E-07	5.89E-08	7.21E-05	3.00E-04	3.00E-04	1.50E-05	Skin	0.00099	0.00020	0.0048	0.0060
Chromium	1.74E+01	1.02E-06	NA	2.48E-04	3.00E-03	7.50E-05	8.00E-06	None observed	0.00034	NA	0.031	0.031
Cobalt	5.85E+00	3.43E-07	NA	8.31E-05	3.00E-04	3.00E-04	6.00E-06	No information	0.0011	NA	0.014	0.015
Mercury	3.43E-01	2.01E-08	NA	4.88E-06	3.00E-04	2.10E-05	3.00E-04	Immune System	0.000067	NA	0.000016	0.000083
Thallium	3.30E-01	1.94E-08	NA	4.69E-06	1.50E-05	1.50E-05	NA	Hair atrophy	0.0013	NA	NA	0.0013
								Total	0.024	0.0010	0.051	0.076

Table 6-49

Reasonable Maximum Exposure Doses and Cancer Risks for Student Recreational User Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	4.52E-08	4.69E-08	3.98E-09	7.30E-01	7.30E-01	1.10E-04	3.3E-08	3.4E-08	4.4E-13	6.7E-08
Benzo(a)pyrene	3.23E+00	3.76E-08	3.90E-08	3.31E-09	7.30E+00	7.30E+00	1.10E-03	2.7E-07	2.8E-07	3.6E-12	5.6E-07
Benzo(b)fluoranthene	3.64E+00	4.24E-08	4.40E-08	3.73E-09	7.30E-01	7.30E-01	1.10E-04	3.1E-08	3.2E-08	4.1E-13	6.3E-08
Benzo(k)fluoranthene	1.54E+00	1.79E-08	1.85E-08	1.57E-09	7.30E-02	7.30E-02	1.10E-04	1.3E-09	1.4E-09	1.7E-13	2.7E-09
alpha-Chlordane	2.00E-03	2.33E-11	7.42E-12	2.05E-12	3.50E-01	3.50E-01	1.00E-04	8.1E-12	2.6E-12	2.0E-16	1.1E-11
gamma-Chlordane	2.00E-03	2.33E-11	7.42E-12	2.05E-12	3.50E-01	3.50E-01	1.00E-04	8.1E-12	2.6E-12	2.0E-16	1.1E-11
Chrysene	3.01E+00	3.50E-08	3.63E-08	3.08E-09	7.30E-03	7.30E-03	1.10E-05	2.6E-10	2.6E-10	3.4E-14	5.2E-10
4,4-DDE	7.75E-01	9.01E-09	2.16E-09	7.94E-10	3.40E-01	3.40E-01	NA	3.1E-09	7.3E-10	NA	3.8E-09
4,4-DDT	2.51E+00	2.92E-08	6.99E-09	2.57E-09	3.40E-01	3.40E-01	9.70E-05	9.9E-09	2.4E-09	2.5E-13	1.2E-08
Dibenz(a,h)anthracene	3.45E-01	4.01E-09	4.16E-09	3.53E-10	7.30E+00	7.30E+00	1.20E-03	2.9E-08	3.0E-08	4.2E-13	6.0E-08
Dieldrin	1.34E+00	1.55E-08	1.24E-08	1.37E-09	1.60E+01	1.60E+01	4.60E-03	2.5E-07	2.0E-07	6.3E-12	4.5E-07
Heptachlor epoxide	3.36E-02	3.91E-10	3.12E-10	3.44E-11	9.10E+00	9.10E+00	2.60E-03	3.6E-09	2.8E-09	8.9E-14	6.4E-09
Indeno(1,2,3-c,d)pyrene	2.72E+00	3.17E-08	3.29E-08	2.79E-09	7.30E-01	7.30E-01	1.10E-04	2.3E-08	2.4E-08	3.1E-13	4.7E-08
Arsenic	8.20E+00	9.54E-08	2.28E-08	8.40E-09	1.50E+00	1.50E+00	4.30E-03	1.4E-07	3.4E-08	3.6E-11	1.8E-07
Chromium	2.27E+01	2.64E-07	NA	2.33E-08	5.00E-01	2.00E+01	8.40E-02	1.3E-07	NA	2.0E-09	1.3E-07
Cobalt	5.65E+00	6.57E-08	NA	5.79E-09	NA	NA	9.00E-03	NA	NA	5.2E-11	5.2E-11
Mercury	1.09E+00	1.27E-08	NA	1.12E-09	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	1.16E-09	NA	1.02E-10	NA	NA	NA	NA	NA	NA	NA
							Total	9.3E-07	6.5E-07	2.1E-09	1.6E-06

Table 6-50

Central Tendency Exposure Doses and Cancer Risks for Student Recreational User Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	2.82E-09	1.67E-09	4.98E-10	7.30E-01	7.30E-01	1.10E-04	2.1E-09	1.2E-09	5.5E-14	3.3E-09
Benzo(a)pyrene	3.23E+00	2.35E-09	1.39E-09	4.14E-10	7.30E+00	7.30E+00	1.10E-03	1.7E-08	1.0E-08	4.5E-13	2.7E-08
Benzo(b)fluoranthene	3.64E+00	2.65E-09	1.57E-09	4.67E-10	7.30E-01	7.30E-01	1.10E-04	1.9E-09	1.1E-09	5.1E-14	3.1E-09
Benzo(k)fluoranthene	1.54E+00	1.12E-09	6.61E-10	1.97E-10	7.30E-02	7.30E-02	1.10E-04	8.1E-11	4.8E-11	2.2E-14	1.3E-10
alpha-Chlordane	2.00E-03	1.45E-12	2.65E-13	2.56E-13	3.50E-01	3.50E-01	1.00E-04	5.1E-13	9.3E-14	2.6E-17	6.0E-13
gamma-Chlordane	2.00E-03	1.45E-12	2.65E-13	2.56E-13	3.50E-01	3.50E-01	1.00E-04	5.1E-13	9.3E-14	2.6E-17	6.0E-13
Chrysene	3.01E+00	2.18E-09	1.30E-09	3.85E-10	7.30E-03	7.30E-03	1.10E-05	1.6E-11	9.5E-12	4.2E-15	2.5E-11
4,4-DDE	7.75E-01	5.63E-10	7.71E-11	9.92E-11	3.40E-01	3.40E-01	NA	1.9E-10	2.6E-11	NA	2.2E-10
4,4-DDT	2.51E+00	1.82E-09	2.50E-10	3.21E-10	3.40E-01	3.40E-01	9.70E-05	6.2E-10	8.5E-11	3.1E-14	7.1E-10
Dibenz(a,h)anthracene	3.45E-01	2.51E-10	1.49E-10	4.42E-11	7.30E+00	7.30E+00	1.20E-03	1.8E-09	1.1E-09	5.3E-14	2.9E-09
Dieldrin	1.34E+00	9.71E-10	4.43E-10	1.71E-10	1.60E+01	1.60E+01	4.60E-03	1.6E-08	7.1E-09	7.9E-13	2.3E-08
Heptachlor epoxide	3.36E-02	2.44E-11	1.11E-11	4.30E-12	9.10E+00	9.10E+00	2.60E-03	2.2E-10	1.0E-10	1.1E-14	3.2E-10
Indeno(1,2,3-c,d)pyrene	2.72E+00	1.98E-09	1.17E-09	3.49E-10	7.30E-01	7.30E-01	1.10E-04	1.4E-09	8.6E-10	3.8E-14	2.3E-09
Arsenic	8.20E+00	5.96E-09	8.15E-10	1.05E-09	1.50E+00	1.50E+00	4.30E-03	8.9E-09	1.2E-09	4.5E-12	1.0E-08
Chromium	2.27E+01	1.65E-08	NA	2.91E-09	5.00E-01	2.00E+01	8.40E-02	8.3E-09	NA	2.4E-10	8.5E-09
Cobalt	5.65E+00	4.11E-09	NA	7.24E-10	NA	NA	9.00E-03	NA	NA	6.5E-12	6.5E-12
Mercury	1.09E+00	7.93E-10	NA	1.40E-10	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	7.27E-11	NA	1.28E-11	NA	NA	NA	NA	NA	NA	NA
							Total	5.8E-08	2.3E-08	2.6E-10	8.2E-08

Table 6-51

Reasonable Maximum Exposure Doses and Hazard Quotients for Student Recreational User Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	7.91E-07	8.20E-07	6.97E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	6.57E-07	6.82E-07	5.79E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	7.42E-07	7.69E-07	6.53E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	3.12E-07	3.24E-07	2.75E-08	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	4.07E-10	1.30E-10	3.59E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000081	0.00000026	0.000000000051	0.0000011
gamma-Chlordane	2.00E-03	4.07E-10	1.30E-10	3.59E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000081	0.00000026	0.000000000051	0.0000011
Chrysene	3.01E+00	6.12E-07	6.35E-07	5.39E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	1.58E-07	3.78E-08	1.39E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	5.11E-07	1.22E-07	4.50E-08	5.00E-04	5.00E-04	NA	Liver	0.0010	0.00024	NA	0.0013
Dibenz(a,h)anthracene	3.45E-01	7.02E-08	7.28E-08	6.19E-09	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	2.72E-07	2.17E-07	2.40E-08	5.00E-05	5.00E-05	NA	Liver	0.0054	0.0043	NA	0.0098
Heptachlor epoxide	3.36E-02	6.84E-09	5.46E-09	6.02E-10	1.30E-05	1.30E-05	NA	Liver	0.00053	0.00042	NA	0.00095
Indeno(1,2,3-c,d)pyrene	2.72E+00	5.54E-07	5.75E-07	4.88E-08	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	1.67E-06	4.00E-07	1.47E-07	3.00E-04	3.00E-04	1.50E-05	Skin	0.0056	0.0013	0.0000098	0.0069
Chromium	2.27E+01	4.62E-06	NA	4.07E-07	3.00E-03	7.50E-05	8.00E-06	None observed	0.0015	NA	0.000051	0.0016
Cobalt	5.65E+00	1.15E-06	NA	1.01E-07	3.00E-04	3.00E-04	6.00E-06	No information	0.0038	NA	0.000017	0.0038
Mercury	1.09E+00	2.22E-07	NA	1.96E-08	3.00E-04	2.10E-05	3.00E-04	Immune System	0.00074	NA	0.000000065	0.00074
Thallium	1.00E-01	2.04E-08	NA	1.79E-09	1.50E-05	1.50E-05	NA	Hair atrophy	0.0014	NA	NA	0.0014
								Total	0.020	0.0063	0.000078	0.026

Table 6-52

Central Tendency Exposure Doses and Hazard Quotients for Student Recreational User Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	9.88E-08	5.86E-08	1.74E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	8.22E-08	4.87E-08	1.45E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	9.27E-08	5.50E-08	1.63E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	3.91E-08	2.31E-08	6.88E-09	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	5.09E-11	9.28E-12	8.96E-12	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000010	0.000000019	0.000000000013	0.00000012
gamma-Chlordane	2.00E-03	5.09E-11	9.28E-12	8.96E-12	5.00E-04	5.00E-04	7.00E-04	Liver	0.00000010	0.000000019	0.000000000013	0.00000012
Chrysene	3.01E+00	7.65E-08	4.53E-08	1.35E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	1.97E-08	2.70E-09	3.47E-09	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	6.39E-08	8.74E-09	1.12E-08	5.00E-04	5.00E-04	NA	Liver	0.00013	0.000017	NA	0.00015
Dibenz(a,h)anthracene	3.45E-01	8.78E-09	5.20E-09	1.55E-09	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	3.40E-08	1.55E-08	5.99E-09	5.00E-05	5.00E-05	NA	Liver	0.00068	0.00031	NA	0.00099
Heptachlor epoxide	3.36E-02	8.55E-10	3.90E-10	1.51E-10	1.30E-05	1.30E-05	NA	Liver	0.000066	0.000030	NA	0.00010
Indeno(1,2,3-c,d)pyrene	2.72E+00	6.93E-08	4.11E-08	1.22E-08	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	2.09E-07	2.85E-08	3.68E-08	3.00E-04	3.00E-04	1.50E-05	Skin	0.00070	0.000095	0.0000025	0.00079
Chromium	2.27E+01	5.78E-07	NA	1.02E-07	3.00E-03	7.50E-05	8.00E-06	None observed	0.00019	NA	0.000013	0.00021
Cobalt	5.65E+00	1.44E-07	NA	2.53E-08	3.00E-04	3.00E-04	6.00E-06	No information	0.00048	NA	0.0000042	0.00048
Mercury	1.09E+00	2.78E-08	NA	4.89E-09	3.00E-04	2.10E-05	3.00E-04	Immune System	0.000093	NA	0.000000016	0.000093
Thallium	1.00E-01	2.54E-09	NA	4.48E-10	1.50E-05	1.50E-05	NA	Hair atrophy	0.00017	NA	NA	0.00017
								Total	0.0025	0.00045	0.000019	0.0030

Table 6-53

Reasonable Maximum Exposure Doses and Cancer Risks for Indoor Worker Exposure to Surface Soil - Middlesex County College Former Raritan Arsenal

		RME - Cancer						
		Exposure Doses				Cancer Risks		
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Inhalation	Total
Benzo(a)anthracene	3.89E+00	6.79E-07	1.20E-07	7.30E-01	1.10E-04	5.0E-07	1.3E-11	5.0E-07
Benzo(a)pyrene	3.23E+00	5.64E-07	9.94E-08	7.30E+00	1.10E-03	4.1E-06	1.1E-10	4.1E-06
Benzo(b)fluoranthene	3.64E+00	6.37E-07	1.12E-07	7.30E-01	1.10E-04	4.6E-07	1.2E-11	4.6E-07
Benzo(k)fluoranthene	1.54E+00	2.68E-07	4.73E-08	7.30E-02	1.10E-04	2.0E-08	5.2E-12	2.0E-08
alpha-Chlordane	2.00E-03	3.49E-10	6.16E-11	3.50E-01	1.00E-04	1.2E-10	6.2E-15	1.2E-10
gamma-Chlordane	2.00E-03	3.49E-10	6.16E-11	3.50E-01	1.00E-04	1.2E-10	6.2E-15	1.2E-10
Chrysene	3.01E+00	5.25E-07	9.25E-08	7.30E-03	1.10E-05	3.8E-09	1.0E-12	3.8E-09
4,4-DDE	7.75E-01	1.35E-07	2.39E-08	3.40E-01	NA	4.6E-08	NA	4.6E-08
4,4-DDT	2.51E+00	4.39E-07	7.73E-08	3.40E-01	9.70E-05	1.5E-07	7.5E-12	1.5E-07
Dibenz(a,h)anthracene	3.45E-01	6.03E-08	1.06E-08	7.30E+00	1.20E-03	4.4E-07	1.3E-11	4.4E-07
Dieldrin	1.34E+00	2.33E-07	4.11E-08	1.60E+01	4.60E-03	3.7E-06	1.9E-10	3.7E-06
Heptachlor epoxide	3.36E-02	5.87E-09	1.03E-09	9.10E+00	2.60E-03	5.3E-08	2.7E-12	5.3E-08
Indeno(1,2,3-c,d)pyrene	2.72E+00	4.76E-07	8.38E-08	7.30E-01	1.10E-04	3.5E-07	9.2E-12	3.5E-07
Arsenic	8.20E+00	1.43E-06	2.52E-07	1.50E+00	4.30E-03	2.1E-06	1.1E-09	2.2E-06
Chromium	2.27E+01	3.97E-06	6.99E-07	5.00E-01	8.40E-02	2.0E-06	5.9E-08	2.0E-06
Cobalt	5.65E+00	9.87E-07	1.74E-07	NA	9.00E-03	NA	1.6E-09	1.6E-09
Mercury	1.09E+00	1.91E-07	3.36E-08	NA	NA	NA	NA	NA
Thallium	1.00E-01	1.75E-08	3.08E-09	NA	NA	NA	NA	NA
					Total	1.4E-05	6.2E-08	1.4E-05

Table 6-54

Central Tendency Exposure Doses and Cancer Risks for Indoor Worker Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer						
		Exposure Doses				Cancer Risks		
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Inhalation	Total
Benzo(a)anthracene	3.89E+00	4.07E-08	1.44E-08	7.30E-01	1.10E-04	3.0E-08	1.6E-12	3.0E-08
Benzo(a)pyrene	3.23E+00	3.39E-08	1.19E-08	7.30E+00	1.10E-03	2.5E-07	1.3E-11	2.5E-07
Benzo(b)fluoranthene	3.64E+00	3.82E-08	1.35E-08	7.30E-01	1.10E-04	2.8E-08	1.5E-12	2.8E-08
Benzo(k)fluoranthene	1.54E+00	1.61E-08	5.67E-09	7.30E-02	1.10E-04	1.2E-09	6.2E-13	1.2E-09
alpha-Chlordane	2.00E-03	2.10E-11	7.39E-12	3.50E-01	1.00E-04	7.3E-12	7.4E-16	7.3E-12
gamma-Chlordane	2.00E-03	2.10E-11	7.39E-12	3.50E-01	1.00E-04	7.3E-12	7.4E-16	7.3E-12
Chrysene	3.01E+00	3.15E-08	1.11E-08	7.30E-03	1.10E-05	2.3E-10	1.2E-13	2.3E-10
4,4-DDE	7.75E-01	8.12E-09	2.86E-09	3.40E-01	NA	2.8E-09	NA	2.8E-09
4,4-DDT	2.51E+00	2.63E-08	9.27E-09	3.40E-01	9.70E-05	8.9E-09	9.0E-13	8.9E-09
Dibenz(a,h)anthracene	3.45E-01	3.62E-09	1.27E-09	7.30E+00	1.20E-03	2.6E-08	1.5E-12	2.6E-08
Dieldrin	1.34E+00	1.40E-08	4.94E-09	1.60E+01	4.60E-03	2.2E-07	2.3E-11	2.2E-07
Heptachlor epoxide	3.36E-02	3.52E-10	1.24E-10	9.10E+00	2.60E-03	3.2E-09	3.2E-13	3.2E-09
Indeno(1,2,3-c,d)pyrene	2.72E+00	2.85E-08	1.01E-08	7.30E-01	1.10E-04	2.1E-08	1.1E-12	2.1E-08
Arsenic	8.20E+00	8.60E-08	3.03E-08	1.50E+00	4.30E-03	1.3E-07	1.3E-10	1.3E-07
Chromium	2.27E+01	2.38E-07	8.39E-08	5.00E-01	8.40E-02	1.2E-07	7.0E-09	1.3E-07
Cobalt	5.65E+00	5.92E-08	2.09E-08	NA	9.00E-03	NA	1.9E-10	1.9E-10
Mercury	1.09E+00	1.14E-08	4.03E-09	NA	NA	NA	NA	NA
Thallium	1.00E-01	1.05E-09	3.69E-10	NA	NA	NA	NA	NA
					Total	8.4E-07	7.4E-09	8.5E-07

Table 6-55

Reasonable Maximum Exposure Doses and Hazard Quotients for Indoor Worker Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer							
		Exposure Doses					Hazard Quotients		
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	1.90E-06	3.35E-07	NA	NA	---	NA	NA	NA
Benzo(a)pyrene	3.23E+00	1.58E-06	2.78E-07	NA	NA	---	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	1.78E-06	3.14E-07	NA	NA	---	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	7.51E-07	1.32E-07	NA	NA	---	NA	NA	NA
alpha-Chlordane	2.00E-03	9.78E-10	1.72E-10	5.00E-04	7.00E-04	Liver	0.0000020	0.00000000025	0.0000020
gamma-Chlordane	2.00E-03	9.78E-10	1.72E-10	5.00E-04	7.00E-04	Liver	0.0000020	0.00000000025	0.0000020
Chrysene	3.01E+00	1.47E-06	2.59E-07	NA	NA	---	NA	NA	NA
4,4-DDE	7.75E-01	3.79E-07	6.68E-08	NA	NA	---	NA	NA	NA
4,4-DDT	2.51E+00	1.23E-06	2.16E-07	5.00E-04	NA	Liver	0.0025	NA	0.0025
Dibenz(a,h)anthracene	3.45E-01	1.69E-07	2.97E-08	NA	NA	---	NA	NA	NA
Dieldrin	1.34E+00	6.54E-07	1.15E-07	5.00E-05	NA	Liver	0.013	NA	0.013
Heptachlor epoxide	3.36E-02	1.64E-08	2.90E-09	1.30E-05	NA	Liver	0.0013	NA	0.0013
Indeno(1,2,3-c,d)pyrene	2.72E+00	1.33E-06	2.35E-07	NA	NA	---	NA	NA	NA
Arsenic	8.20E+00	4.01E-06	7.07E-07	3.00E-04	1.50E-05	Skin	0.013	0.000047	0.013
Chromium	2.27E+01	1.11E-05	1.96E-06	3.00E-03	8.00E-06	None observed	0.0037	0.00024	0.0039
Cobalt	5.65E+00	2.76E-06	4.87E-07	3.00E-04	6.00E-06	No information	0.0092	0.000081	0.0093
Thallium	1.00E-01	4.89E-08	8.62E-09	1.50E-05	NA	Hair atrophy	0.0033	NA	0.0033
						Total	0.048	0.00037	0.049

Table 6-56

Central Tendency Exposure Doses and Hazard Quotients for Indoor Worker Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer							
		Exposure Doses					Hazard Quotients		
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	2.38E-07	8.37E-08	NA	NA	---	NA	NA	NA
Benzo(a)pyrene	3.23E+00	1.98E-07	6.96E-08	NA	NA	---	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	2.23E-07	7.85E-08	NA	NA	---	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	9.39E-08	3.31E-08	NA	NA	---	NA	NA	NA
alpha-Chlordane	2.00E-03	1.22E-10	4.31E-11	5.00E-04	7.00E-04	Liver	0.00000024	0.000000000062	0.00000024
gamma-Chlordane	2.00E-03	1.22E-10	4.31E-11	5.00E-04	7.00E-04	Liver	0.00000024	0.000000000062	0.00000024
Chrysene	3.01E+00	1.84E-07	6.48E-08	NA	NA	---	NA	NA	NA
4,4-DDE	7.75E-01	4.74E-08	1.67E-08	NA	NA	---	NA	NA	NA
4,4-DDT	2.51E+00	1.53E-07	5.41E-08	5.00E-04	NA	Liver	0.00031	NA	0.00031
Dibenz(a,h)anthracene	3.45E-01	2.11E-08	7.43E-09	NA	NA	---	NA	NA	NA
Dieldrin	1.34E+00	8.17E-08	2.88E-08	5.00E-05	NA	Liver	0.0016	NA	0.0016
Heptachlor epoxide	3.36E-02	2.05E-09	7.24E-10	1.30E-05	NA	Liver	0.00016	NA	0.00016
Indeno(1,2,3-c,d)pyrene	2.72E+00	1.67E-07	5.87E-08	NA	NA	---	NA	NA	NA
Arsenic	8.20E+00	5.01E-07	1.77E-07	3.00E-04	1.50E-05	Skin	0.0017	0.000012	0.0017
Chromium	2.27E+01	1.39E-06	4.90E-07	3.00E-03	8.00E-06	None observed	0.00046	0.000061	0.00052
Cobalt	5.65E+00	3.46E-07	1.22E-07	3.00E-04	6.00E-06	No information	0.0012	0.000020	0.0012
Mercury	1.09E+00	6.67E-08	2.35E-08	3.00E-04	3.00E-04	Immune System	0.00022	0.000000078	0.00022
Thallium	1.00E-01	6.12E-09	2.15E-09	1.50E-05	NA	Hair atrophy	0.00041	NA	0.00041
						Total	0.0060	0.000093	0.0061

Table 6-57

Reasonable Maximum Exposure Doses and Cancer Risks for Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	Mutagenic mode of action; See Table 6-61			7.30E-01	7.30E-01	1.10E-04	4.1E-06	3.0E-06	1.1E-11	7.0E-06
Benzo(a)pyrene	3.23E+00	Mutagenic mode of action; See Table 6-61			7.30E+00	7.30E+00	1.10E-03	3.4E-05	2.5E-05	9.5E-11	5.8E-05
Benzo(b)fluoranthene	3.64E+00	Mutagenic mode of action; See Table 6-61			7.30E-01	7.30E-01	1.10E-04	3.8E-06	2.8E-06	1.1E-11	6.6E-06
Benzo(k)fluoranthene	1.54E+00	Mutagenic mode of action; See Table 6-61			7.30E-02	7.30E-02	1.10E-04	1.6E-07	1.2E-07	4.5E-12	2.8E-07
alpha-Chlordane	2.00E-03	6.52E-10	1.46E-10	1.23E-11	3.50E-01	3.50E-01	1.00E-04	2.3E-10	5.1E-11	1.2E-15	2.8E-10
gamma-Chlordane	2.00E-03	6.52E-10	1.46E-10	1.23E-11	3.50E-01	3.50E-01	1.00E-04	2.3E-10	5.1E-11	1.2E-15	2.8E-10
Chrysene	3.01E+00	Mutagenic mode of action; See Table 6-61			7.30E-03	7.30E-03	1.10E-05	3.1E-08	2.3E-08	8.9E-13	5.4E-08
4,4-DDE	7.75E-01	2.53E-07	4.25E-08	4.77E-09	3.40E-01	3.40E-01	NA	8.6E-08	1.4E-08	NA	1.0E-07
4,4-DDT	2.51E+00	8.19E-07	1.38E-07	1.55E-08	3.40E-01	3.40E-01	9.70E-05	2.8E-07	4.7E-08	1.5E-12	3.3E-07
Dibenz(a,h)anthracene	3.45E-01	Mutagenic mode of action; See Table 6-61			7.30E+00	7.30E+00	1.20E-03	3.6E-06	2.6E-06	1.1E-11	6.2E-06
Dieldrin	1.34E+00	4.36E-07	2.44E-07	8.23E-09	1.60E+01	1.60E+01	4.60E-03	7.0E-06	3.9E-06	3.8E-11	1.1E-05
Heptachlor epoxide	3.36E-02	1.10E-08	6.14E-09	2.07E-10	9.10E+00	9.10E+00	2.60E-03	1.0E-07	5.6E-08	5.4E-13	1.6E-07
Indeno(1,2,3-c,d)pyrene	2.72E+00	Mutagenic mode of action; See Table 6-61			7.30E-01	7.30E-01	1.10E-04	2.9E-06	2.1E-06	8.0E-12	4.9E-06
Arsenic	8.20E+00	2.67E-06	4.49E-07	5.05E-08	1.50E+00	1.50E+00	4.30E-03	4.0E-06	6.7E-07	2.2E-10	4.7E-06
Chromium	2.27E+01	Mutagenic mode of action; See Table 6-61			5.00E-01	2.00E+01	8.40E-02	1.6E-05	NA	5.1E-08	1.6E-05
Cobalt	5.65E+00	1.84E-06	NA	3.48E-08	NA	NA	9.00E-03	NA	NA	3.1E-10	3.1E-10
Mercury	1.09E+00	3.56E-07	NA	6.72E-09	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	3.26E-08	NA	6.16E-10	NA	NA	NA	NA	NA	NA	NA
							Total	7.6E-05	4.0E-05	5.2E-08	1.2E-04

Table 6-58

Central Tendency Exposure Doses and Cancer Risks for Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Cancer									
		Exposure Doses						Cancer Risks			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral CSF $(mg/kg\text{-}day)^{-1}$	Dermal CSF $(mg/kg\text{-}day)^{-1}$	Inhalation URF $(\mu g/m^3)^{-1}$	Soil Ingestion	Dermal Contact	Inhalation	Total
Benzo(a)anthracene	3.89E+00	Mutagenic mode of action; See Table 6-62			7.30E-01	7.30E-01	1.10E-04	5.1E-07	3.0E-07	2.9E-12	8.1E-07
Benzo(a)pyrene	3.23E+00	Mutagenic mode of action; See Table 6-62			7.30E+00	7.30E+00	1.10E-03	4.2E-06	2.5E-06	2.4E-11	6.7E-06
Benzo(b)fluoranthene	3.64E+00	Mutagenic mode of action; See Table 6-62			7.30E-01	7.30E-01	1.10E-04	4.8E-07	2.8E-07	2.7E-12	7.6E-07
Benzo(k)fluoranthene	1.54E+00	Mutagenic mode of action; See Table 6-62			7.30E-02	7.30E-02	1.10E-04	2.0E-08	1.2E-08	1.1E-12	3.2E-08
alpha-Chlordane	2.00E-03	8.15E-11	1.46E-11	3.08E-12	3.50E-01	3.50E-01	1.00E-04	2.9E-11	5.1E-12	3.1E-16	3.4E-11
gamma-Chlordane	2.00E-03	8.15E-11	1.46E-11	3.08E-12	3.50E-01	3.50E-01	1.00E-04	2.9E-11	5.1E-12	3.1E-16	3.4E-11
Chrysene	3.01E+00	Mutagenic mode of action; See Table 6-62			7.30E-03	7.30E-03	1.10E-05	3.9E-09	2.3E-09	2.2E-13	6.2E-09
4,4-DDE	7.75E-01	3.16E-08	4.25E-09	1.19E-09	3.40E-01	3.40E-01	NA	1.1E-08	1.4E-09	NA	1.2E-08
4,4-DDT	2.51E+00	1.02E-07	1.38E-08	3.86E-09	3.40E-01	3.40E-01	9.70E-05	3.5E-08	4.7E-09	3.7E-13	3.9E-08
Dibenz(a,h)anthracene	3.45E-01	Mutagenic mode of action; See Table 6-62			7.30E+00	7.30E+00	1.20E-03	4.5E-07	2.6E-07	2.8E-12	7.1E-07
Dieldrin	1.34E+00	5.45E-08	2.44E-08	2.06E-09	1.60E+01	1.60E+01	4.60E-03	8.7E-07	3.9E-07	9.5E-12	1.3E-06
Heptachlor epoxide	3.36E-02	1.37E-09	6.14E-10	5.17E-11	9.10E+00	9.10E+00	2.60E-03	1.2E-08	5.6E-09	1.3E-13	1.8E-08
Indeno(1,2,3-c,d)pyrene	2.72E+00	Mutagenic mode of action; See Table 6-62			7.30E-01	7.30E-01	1.10E-04	3.6E-07	2.1E-07	2.0E-12	5.6E-07
Arsenic	8.20E+00	3.34E-07	4.49E-08	1.26E-08	1.50E+00	1.50E+00	4.30E-03	5.0E-07	6.7E-08	5.4E-11	5.7E-07
Chromium	2.27E+01	Mutagenic mode of action; See Table 6-62			5.00E-01	2.00E+01	8.40E-02	2.0E-06	NA	1.3E-08	2.1E-06
Cobalt	5.65E+00	2.30E-07	NA	8.70E-09	NA	NA	9.00E-03	NA	NA	7.8E-11	7.8E-11
Mercury	1.09E+00	4.45E-08	NA	1.68E-09	NA	NA	NA	NA	NA	NA	NA
Thallium	1.00E-01	4.08E-09	NA	1.54E-10	NA	NA	NA	NA	NA	NA	NA
							Total	9.5E-06	4.0E-06	1.3E-08	1.4E-05

Table 6-59

Reasonable Maximum Exposure Doses and Hazard Quotients for Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		RME - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation ($\mu g/m^3$)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	1.77E-05	1.29E-05	3.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	1.47E-05	1.07E-05	2.78E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	1.66E-05	1.21E-05	3.14E-07	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	7.01E-06	5.10E-06	1.32E-07	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	9.13E-09	2.05E-09	1.72E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000018	0.0000041	0.00000000025	0.000022
gamma-Chlordane	2.00E-03	9.13E-09	2.05E-09	1.72E-10	5.00E-04	5.00E-04	7.00E-04	Liver	0.000018	0.0000041	0.00000000025	0.000022
Chrysene	3.01E+00	1.37E-05	9.99E-06	2.59E-07	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	3.54E-06	5.95E-07	6.68E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	1.15E-05	1.93E-06	2.16E-07	5.00E-04	5.00E-04	NA	Liver	0.023	0.0039	NA	0.027
Dibenz(a,h)anthracene	3.45E-01	1.58E-06	1.15E-06	2.97E-08	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	6.10E-06	3.42E-06	1.15E-07	5.00E-05	5.00E-05	NA	Liver	0.12	0.068	NA	0.19
Heptachlor epoxide	3.36E-02	1.53E-07	8.59E-08	2.90E-09	1.30E-05	1.30E-05	NA	Liver	0.012	0.0066	NA	0.018
Indeno(1,2,3-c,d)pyrene	2.72E+00	1.24E-05	9.05E-06	2.35E-07	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	3.74E-05	6.29E-06	7.07E-07	3.00E-04	3.00E-04	1.50E-05	Skin	0.12	0.021	0.000047	0.15
Chromium	2.27E+01	1.04E-04	NA	1.96E-06	3.00E-03	7.50E-05	8.00E-06	None observed	0.035	NA	0.00024	0.035
Cobalt	5.65E+00	2.58E-05	NA	4.87E-07	3.00E-04	3.00E-04	6.00E-06	No information	0.086	NA	0.000081	0.086
Mercury	1.09E+00	4.98E-06	NA	9.40E-08	3.00E-04	2.10E-05	3.00E-04	Immune System	0.017	NA	0.00000031	0.017
Thallium	1.00E-01	4.57E-07	NA	8.62E-09	1.50E-05	1.50E-05	NA	Hair atrophy	0.030	NA	NA	0.030
								Total	0.45	0.10	0.00037	0.55

Table 6-60

Central Tendency Exposure Doses and Hazard Quotients for Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

		CTE - Noncancer										
		Exposure Doses							Hazard Quotients			
COPC	EPC (mg/kg)	Soil Ingestion (mg/kg-day)	Dermal Contact (mg/kg-day)	Inhalation (µg/m^3)	Oral RfD (mg/kg-day)	Dermal RfD (mg/kg-day)	Inhalation RfC (mg/m^3)	Primary Target Organ	Soil Ingestion	Dermal Contact	Inhalation	Hazard Index
Benzo(a)anthracene	3.89E+00	2.22E-06	1.29E-06	8.37E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(a)pyrene	3.23E+00	1.84E-06	1.07E-06	6.96E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(b)fluoranthene	3.64E+00	2.08E-06	1.21E-06	7.85E-08	NA	NA	NA	---	NA	NA	NA	NA
Benzo(k)fluoranthene	1.54E+00	8.76E-07	5.10E-07	3.31E-08	NA	NA	NA	---	NA	NA	NA	NA
alpha-Chlordane	2.00E-03	1.14E-09	2.05E-10	4.31E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000023	0.00000041	0.000000000062	0.0000027
gamma-Chlordane	2.00E-03	1.14E-09	2.05E-10	4.31E-11	5.00E-04	5.00E-04	7.00E-04	Liver	0.0000023	0.00000041	0.000000000062	0.0000027
Chrysene	3.01E+00	1.72E-06	9.99E-07	6.48E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDE	7.75E-01	4.42E-07	5.95E-08	1.67E-08	NA	NA	NA	---	NA	NA	NA	NA
4,4-DDT	2.51E+00	1.43E-06	1.93E-07	5.41E-08	5.00E-04	5.00E-04	NA	Liver	0.0029	0.00039	NA	0.0033
Dibenz(a,h)anthracene	3.45E-01	1.97E-07	1.15E-07	7.43E-09	NA	NA	NA	---	NA	NA	NA	NA
Dieldrin	1.34E+00	7.63E-07	3.42E-07	2.88E-08	5.00E-05	5.00E-05	NA	Liver	0.015	0.0068	NA	0.022
Heptachlor epoxide	3.36E-02	1.92E-08	8.59E-09	7.24E-10	1.30E-05	1.30E-05	NA	Liver	0.0015	0.00066	NA	0.0021
Indeno(1,2,3-c,d)pyrene	2.72E+00	1.55E-06	9.05E-07	5.87E-08	NA	NA	NA	---	NA	NA	NA	NA
Arsenic	8.20E+00	4.68E-06	6.29E-07	1.77E-07	3.00E-04	3.00E-04	1.50E-05	Skin	0.016	0.0021	0.000012	0.018
Chromium	2.27E+01	1.30E-05	NA	4.90E-07	3.00E-03	7.50E-05	8.00E-06	None observed	0.0043	NA	0.000061	0.0044
Cobalt	5.65E+00	3.22E-06	NA	1.22E-07	3.00E-04	3.00E-04	6.00E-06	No information	0.011	NA	0.000020	0.011
Mercury	1.09E+00	6.23E-07	NA	2.35E-08	3.00E-04	2.10E-05	3.00E-04	Immune System	0.0021	NA	0.000000078	0.0021
Thallium	1.00E-01	5.71E-08	NA	2.15E-09	1.50E-05	1.50E-05	NA	Hair atrophy	0.0038	NA	NA	0.0038
								Total	0.056	0.010	0.000093	0.066

Table 6-61

Calculation of Reasonable Maximum Exposure Cancer Risks - Mutagenic Mode of Action - Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$Risk = EPC \times \sum_i \frac{IRS \times FI \times CF \times EF \times ED}{BW \times AT} \times CSFo \times ADAF$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**1-<2**	**2-<6**	
EPC	mg/kg	See Table 3-4		
IRS	mg/day	200	200	
FI	unitless	0.5	0.5	
CF	kg/mg	1E-06	1E-06	
EF	days/year	250	250	
ED	years	1	4	
BW	kg	15	15	
AT	days	25550	25550	
CSFo	$(mg/kg\text{-}day)^{-1}$	See Table 3-26		
ADAF	unitless	10	3	

	Incidential Soil Ingestion Risks			
COPC	**EPC**	**CSFo**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	7.30E-01	1.9E-06	2.2E-06
Benzo(a)pyrene	3.23E+00	7.3E+00	1.5E-05	1.8E-05
Benzo(b)fluoranthene	3.64E+00	7.3E-01	1.7E-06	2.1E-06
Benzo(k)fluoranthene	1.54E+00	7.3E-02	7.3E-08	8.8E-08
Chrysene	3.01E+00	7.3E-03	1.4E-08	1.7E-08
Dibenz(a,h)anthracene	3.45E-01	7.3E+00	1.6E-06	2.0E-06
Indeno(1,2,3-cd)pyrene	2.72E+00	7.3E-01	1.3E-06	1.6E-06
Chromium Total	2.27E+01	5.0E-01	7.4E-06	8.9E-06

Dermal Contact Risk

Where:

$$Risk = EPC \times \sum_i \frac{SA \times AF \times ABS \times EF \times ED \times CF}{BW \times AT} \times CSFd \times ADAF$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**1-<2**	**2-<6**		
EPC	mg/kg	See Table 3-4			
SA	cm^2/day	2800	2800		
AF	mg/cm^2	0.2	0.2		
ABS	unitless	See Table 3-6			
EF	days/year	250	250		
ED	years	1	4		
CF	kg/mg	1E-06	1E-06		
BW	kg	15	15		
AT	days	25550	25550		
CSFd	$(mg/kg\text{-}day)^{-1}$	See Table 3-26			
ADAF	unitless	10	3		

	Dermal Contact Risks				
COPC	**EPC**	**CSFd**	**ABS**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	7.30E-01	0.13	1.3E-06	1.6E-06
Benzo(a)pyrene	3.23E+00	7.3E+00	0.13	1.1E-05	1.3E-05
Benzo(b)fluoranthene	3.64E+00	7.3E-01	0.13	1.3E-06	1.5E-06
Benzo(k)fluoranthene	1.54E+00	7.3E-02	0.13	5.3E-08	6.4E-08
Chrysene	3.01E+00	7.3E-03	0.13	1.0E-08	1.3E-08
Dibenz(a,h)anthracene	3.45E-01	7.3E+00	0.13	1.2E-06	1.4E-06
Indeno(1,2,3-cd)pyrene	2.72E+00	7.3E-01	0.13	9.4E-07	1.1E-06
Chromium Total	2.27E+01	2.0E+01	NA	NA	NA

Inhalation of Particulate Risk

Where:

$$Risk = EPC \times 1/PEF \sum_i \frac{ET \times EF \times ED \times CF}{AT} \times URF \times ADAF$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**1-<2**	**2-<6**	
EPC	mg/kg	See Table 3-4		
PEF	m^3/kg	2.67E+09	2.67E+09	
ET	hours/day	8	8	
EF	days/year	250	250	
ED	years	1	4	
CF	µg/mg	1000	1000	
AT	hours	613200	613200	
URF	$(\mu g/m^3)^{-1}$	See Table 3-27		
ADAF	unitless	10	3	

	Inhalation of Particulate Risks			
COPC	**EPC**	**URFi**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	1.10E-04	5.2E-12	6.3E-12
Benzo(a)pyrene	3.23E+00	1.10E-03	4.3E-11	5.2E-11
Benzo(b)fluoranthene	3.64E+00	1.10E-04	4.9E-12	5.9E-12
Benzo(k)fluoranthene	1.54E+00	1.10E-04	2.1E-12	2.5E-12
Chrysene	3.01E+00	1.10E-05	4.0E-13	4.8E-13
Dibenz(a,h)anthracene	3.45E-01	1.20E-03	5.1E-12	6.1E-12
Indeno(1,2,3-cd)pyrene	2.72E+00	1.10E-04	3.7E-12	4.4E-12
Chromium Total	2.27E+01	8.40E-02	2.3E-08	2.8E-08

	Total Cancer Risks			
COPC	**Soil Ingestion**	**Dermal Contact**	**Inhalation**	**Total**
Benzo(a)anthracene	4.1E-06	3.0E-06	1.1E-11	**7.0E-06**
Benzo(a)pyrene	3.4E-05	2.5E-05	9.5E-11	**5.8E-05**
Benzo(b)fluoranthene	3.8E-06	2.8E-06	1.1E-11	**6.6E-06**
Benzo(k)fluoranthene	1.6E-07	1.2E-07	4.5E-12	**2.8E-07**
Chrysene	3.1E-08	2.3E-08	8.9E-13	**5.4E-08**
Dibenz(a,h)anthracene	3.6E-06	2.6E-06	1.1E-11	**6.2E-06**
Indeno(1,2,3-cd)pyrene	2.9E-06	2.1E-06	8.0E-12	**4.9E-06**
Chromium Total	1.6E-05	NA	5.1E-08	**1.6E-05**

Table 6-62

Calculation of Central Tendency Exposure Cancer Risks - Mutagenic Mode of Action - Daycare Child Exposure to Surface Soil - Middlesex County College
Former Raritan Arsenal

Incidental Soil Ingestion Risk

Where:

$$Risk = EPC \times \sum_i \frac{IRS \times FI \times CF \times EF \times ED}{BW \times AT} \times CSFo \times ADAF$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**1-<2**	**2-<6**	
EPC	mg/kg	See Table 3-4		
IRS	mg/day	100	100	
FI	unitless	0.25	0.25	
CF	kg/mg	1E-06	1E-06	
EF	days/year	125	125	
ED	years	1	4	
BW	kg	15	15	
AT	days	25550	25550	
CSFo	$(mg/kg\text{-}day)^{-1}$	See Table 3-26		
ADAF	unitless	10	3	

	Incidential Soil Ingestion Risks			
COPC	**EPC**	**CSFo**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	7.30E-01	2.3E-07	2.8E-07
Benzo(a)pyrene	3.23E+00	7.3E+00	1.9E-06	2.3E-06
Benzo(b)fluoranthene	3.64E+00	7.3E-01	2.2E-07	2.6E-07
Benzo(k)fluoranthene	1.54E+00	7.3E-02	9.1E-09	1.1E-08
Chrysene	3.01E+00	7.3E-03	1.8E-09	2.1E-09
Dibenz(a,h)anthracene	3.45E-01	7.3E+00	2.1E-07	2.5E-07
Indeno(1,2,3-cd)pyrene	2.72E+00	7.3E-01	1.6E-07	1.9E-07
Chromium Total	2.27E+01	5.0E-01	9.3E-07	1.1E-06

Dermal Contact Risk

Where:

$$Risk = EPC \times \sum_i \frac{SA \times AF \times ABS \times EF \times ED \times CF}{BW \times AT} \times CSFd \times ADAF$$

Exposure Parameters (by age interval, i)					
Parameter	**Units**	**1-<2**	**2-<6**		
EPC	mg/kg	See Table 3-4			
SA	cm^2/day	2800	2800		
AF	mg/cm^2	0.04	0.04		
ABS	unitless	See Table 3-6			
EF	days/year	125	125		
ED	years	1	4		
CF	kg/mg	1E-06	1E-06		
BW	kg	15	15		
AT	days	25550	25550		
CSFd	$(mg/kg\text{-}day)^{-1}$	See Table 3-26			
ADAF	unitless	10	3		

	Dermal Contact Risks				
COPC	**EPC**	**CSFd**	**ABS**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	7.30E-01	0.13	1.3E-07	1.6E-07
Benzo(a)pyrene	3.23E+00	7.3E+00	0.13	1.1E-06	1.3E-06
Benzo(b)fluoranthene	3.64E+00	7.3E-01	0.13	1.3E-07	1.5E-07
Benzo(k)fluoranthene	1.54E+00	7.3E-02	0.13	5.3E-09	6.4E-09
Chrysene	3.01E+00	7.3E-03	0.13	1.0E-09	1.3E-09
Dibenz(a,h)anthracene	3.45E-01	7.3E+00	0.13	1.2E-07	1.4E-07
Indeno(1,2,3-cd)pyrene	2.72E+00	7.3E-01	0.13	9.4E-08	1.1E-07
Chromium Total	2.27E+01	2.0E+01	NA	NA	NA

Inhalation of Particulate Risk

Where:

$$Risk = EPC \times 1/PEF \sum_i \frac{ET \times EF \times ED \times CF}{AT} \times URF \times ADAF$$

Exposure Parameters (by age interval, i)				
Parameter	**Units**	**1-<2**	**2-<6**	
EPC	mg/kg	See Table 3-4		
PEF	m^3/kg	2.67E+09	2.67E+09	
ET	hours/day	4	4	
EF	days/year	125	125	
ED	years	1	4	
CF	µg/mg	1000	1000	
AT	hours	613200	613200	
URF	$(\mu g/m^3)^{-1}$	See Table 3-27		
ADAF	unitless	10	3	

	Inhalation of Particulate Risks			
COPC	**EPC**	**URFi**	**0-<2**	**2-<6**
Benzo(a)anthracene	3.89E+00	1.10E-04	1.3E-12	1.6E-12
Benzo(a)pyrene	3.23E+00	1.10E-03	1.1E-11	1.3E-11
Benzo(b)fluoranthene	3.64E+00	1.10E-04	1.2E-12	1.5E-12
Benzo(k)fluoranthene	1.54E+00	1.10E-04	5.2E-13	6.2E-13
Chrysene	3.01E+00	1.10E-05	1.0E-13	1.2E-13
Dibenz(a,h)anthracene	3.45E-01	1.20E-03	1.3E-12	1.5E-12
Indeno(1,2,3-cd)pyrene	2.72E+00	1.10E-04	9.1E-13	1.1E-12
Chromium Total	2.27E+01	8.40E-02	5.8E-09	7.0E-09

	Total Cancer Risks			
COPC	**Soil Ingestion**	**Dermal Contact**	**Inhalation**	**Total**
Benzo(a)anthracene	5.1E-07	3.0E-07	2.9E-12	**8.1E-07**
Benzo(a)pyrene	4.2E-06	2.5E-06	2.4E-11	**6.7E-06**
Benzo(b)fluoranthene	4.8E-07	2.8E-07	2.7E-12	**7.6E-07**
Benzo(k)fluoranthene	2.0E-08	1.2E-08	1.1E-12	**3.2E-08**
Chrysene	3.9E-09	2.3E-09	2.2E-13	**6.2E-09**
Dibenz(a,h)anthracene	4.5E-07	2.6E-07	2.8E-12	**7.1E-07**
Indeno(1,2,3-cd)pyrene	3.6E-07	2.1E-07	2.0E-12	**5.6E-07**
Chromium Total	2.0E-06	NA	1.3E-08	**2.1E-06**

Table 6-63

Contributions of COPCs to Elevated Cancer Risks
Residential Cancer Risk (exposure to aggregate soil)
Former Raritan Arsenal

Total Risk:	**3.30E-04**	**Percent (%) of Total**
cPAHs risk:	2.10E-04	63%
Chromium risk:	5.90E-05	18%
Dieldrin risk:	2.70E-05	8%
Arsenic risk:	1.30E-05	4%

Table 6-64

Contributions of COPCs to Elevated Hazard Index
Residential Hazard Index (child exposure to aggregate soil)
Former Raritan Arsenal

Total HI:	**5.8**	**Percent (%) of Total**
TCE HI:	4.6	79%

Table 6-65

Contributions of COPCs to Elevated Cancer Risks
Daycare Child Cancer Risk (exposure to surface soil)
Former Raritan Arsenal

Total Risk:	**1.20E-04**	**Percent (%) of Total**
cPAHs risk:	8.40E-05	72%
Chromium risk:	1.60E-05	14%
Dieldrin risk:	1.10E-05	9%
Arsenic risk:	4.70E-06	4%

Table 6-66

Summary of Outlier Analyses
Former Raritan Arsenal

COPC	Outlier Test Performed[a]	Number of Outliers Identified[b]	Outlier Value (mg/kg)	Sample Location/ Collection Date
Surface soil				
cPAHs				
Benzo(a)anthracene	Rosner's	1	1.70E+01	HTA-2 / 10/30/1994
Benzo(a)pyrene	Rosner's	1	1.40E+01	HTA-2 / 10/30/1994
Benzo(b)fluoranthene	Rosner's	1	2.10E+01	HTA-2 / 10/30/1994
Benzo(k)fluoranthene	Rosner's	1	6.20E+00	HTA-2 / 10/30/1994
Chrysene	Rosner's	1	1.70E+01	HTA-2 / 10/30/1994
Dibenz(a,h)anthracene	Rosner's	1	2.50E+00	HTA-2 / 10/30/1994
Indeno(1,2,3-cd)pyrene	Rosner's	1	1.20E+01	HTA-2 / 10/30/1994
Dieldrin	Rosner's	1	5.70E+00	HTA-27 / 3/30/1994
Aggregate soil				
cPAHs				
Benzo(a)anthracene	Rosner's	1	1.70E+01	HTA-2 / 10/30/1994
Benzo(a)pyrene	Rosner's	1	1.40E+01	HTA-2 / 10/30/1994
Benzo(b)fluoranthene	Rosner's	1	2.10E+01	HTA-2 / 10/30/1994
Benzo(k)fluoranthene	Rosner's	1	6.20E+00	HTA-2 / 10/30/1994
Chrysene	Rosner's	1	1.70E+01	HTA-2 / 10/30/1994
Dibenz(a,h)anthracene	Rosner's	1	2.50E+00	HTA-2 / 10/30/1994
Indeno(1,2,3-cd)pyrene	Rosner's	1	1.20E+01	HTA-2 / 10/30/1994
Trichloroethylene	Rosner's	1	1.50E+03	TP-W33A / 6/12/1996
Dieldrin	Rosner's	1	5.70E+00	HTA-27 / 3/30/1994

[a] The outlier tests were performed using ProUCL Version 4.1.00 (EPA, 2011b). Dixon's test was used for data sets with less than 25 data points. Rosner's test was used for data sets with 25 or more data points.

[b] 95% confidence level was used to determine outliers.

Table 6-67

Residual TCE in Former Area W Excavation
Former Raritan Arsenal

Sample ID	Concentration (mg/kg)	Depth (ft bgs)
TP-W33A	1500	9.5 to 10
PE-W01	290	7 to 7.5
PE-W12	120	8.5 to 9
PE-W09	100	9 to 9.5
PE-W05	16	7 to 7.5

Table 6-68

Summary of Background Levels of PAHs and Comparison with Site Levels
Middlesex County College
Former Raritan Arsenal

Statistic	Benzo(a)pyrene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(b+j+k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene
	New Jersey Background Levels (BEM, 1998)						
Mean:	0.14	0.14	0.35	0.35	0.15	0.030	0.070
Median:	0.020	0.040	0.19	0.19	0.050	0.010	0.010
Maximum:	1.8	1.8	4.1	4.1	1.8	0.29	0.57
90th Percentile:	0.42	0.43	0.66	0.66	0.47	0.020	0.23
95th Percentile:	0.67	0.57	1.2	1.2	0.70	0.13	0.37
Statistic	**MCC Levels (Surface Soil)**						
Mean:	0.28	0.31	0.38	0.24	0.36	0.28	0.21
Median:	0.17	0.17	0.21	0.16	0.19	0.33	0.12
Maximum:	1.6	1.8	1.4	1.4	1.7	0.47	1.1
90th Percentile:	0.54	0.69	0.99	0.39	0.89	0.33	0.40
95th Percentile:	1.0	0.95	1.2	0.76	1.3	0.34	0.61

Units in mg/kg.

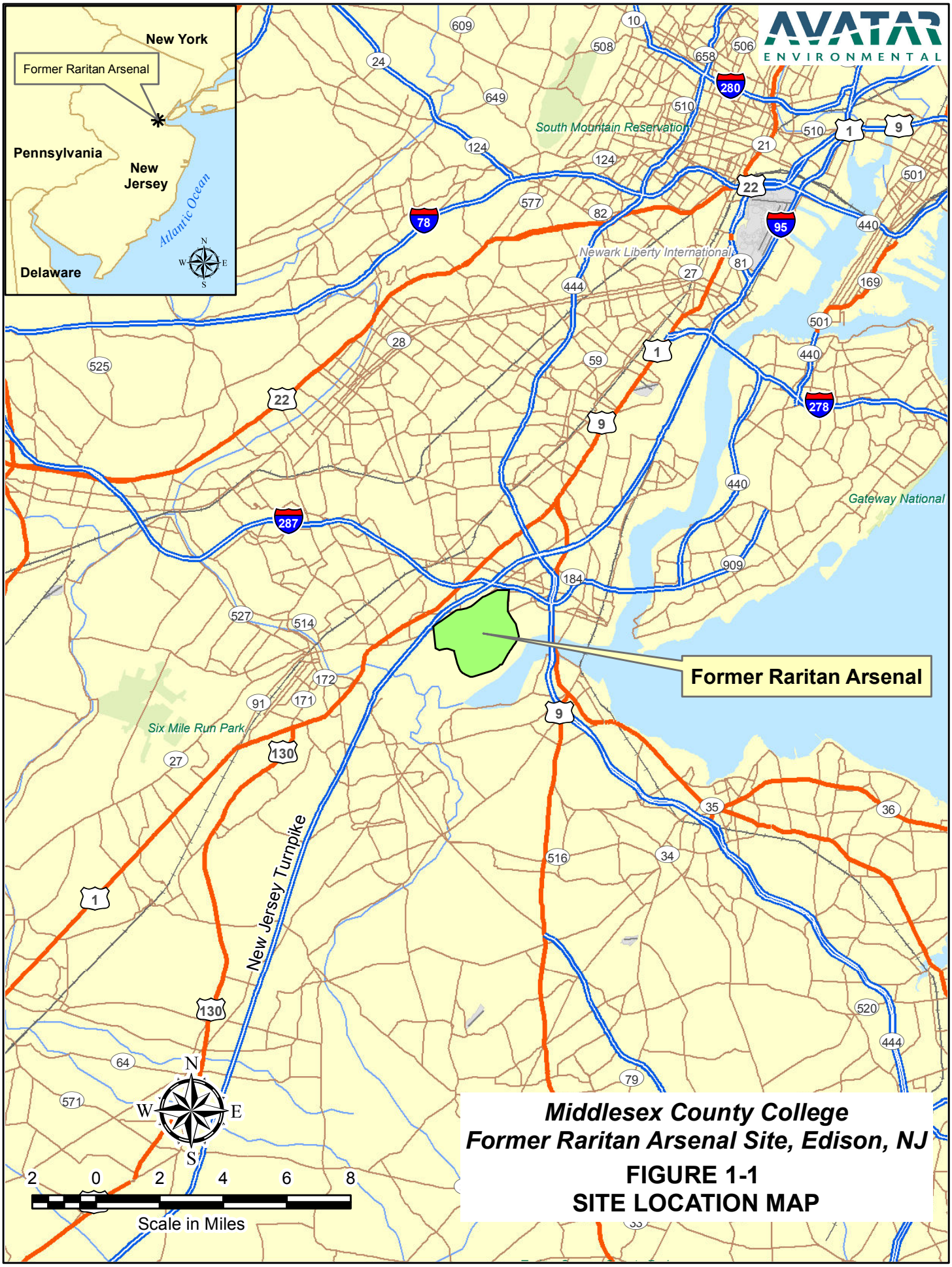
Table 6-69

Summary of Background Levels of Dieldrin and Comparison with Site Levels
Middlesex County College
Former Raritan Arsenal

Area	Frequency of Detection	Range of Concentrations (mg/kg)	Average Concentration (mg/kg)
MCC	7/32	0.018 - 0.29	0.030
Background	13/80	0.0020 - 1.2	0.030

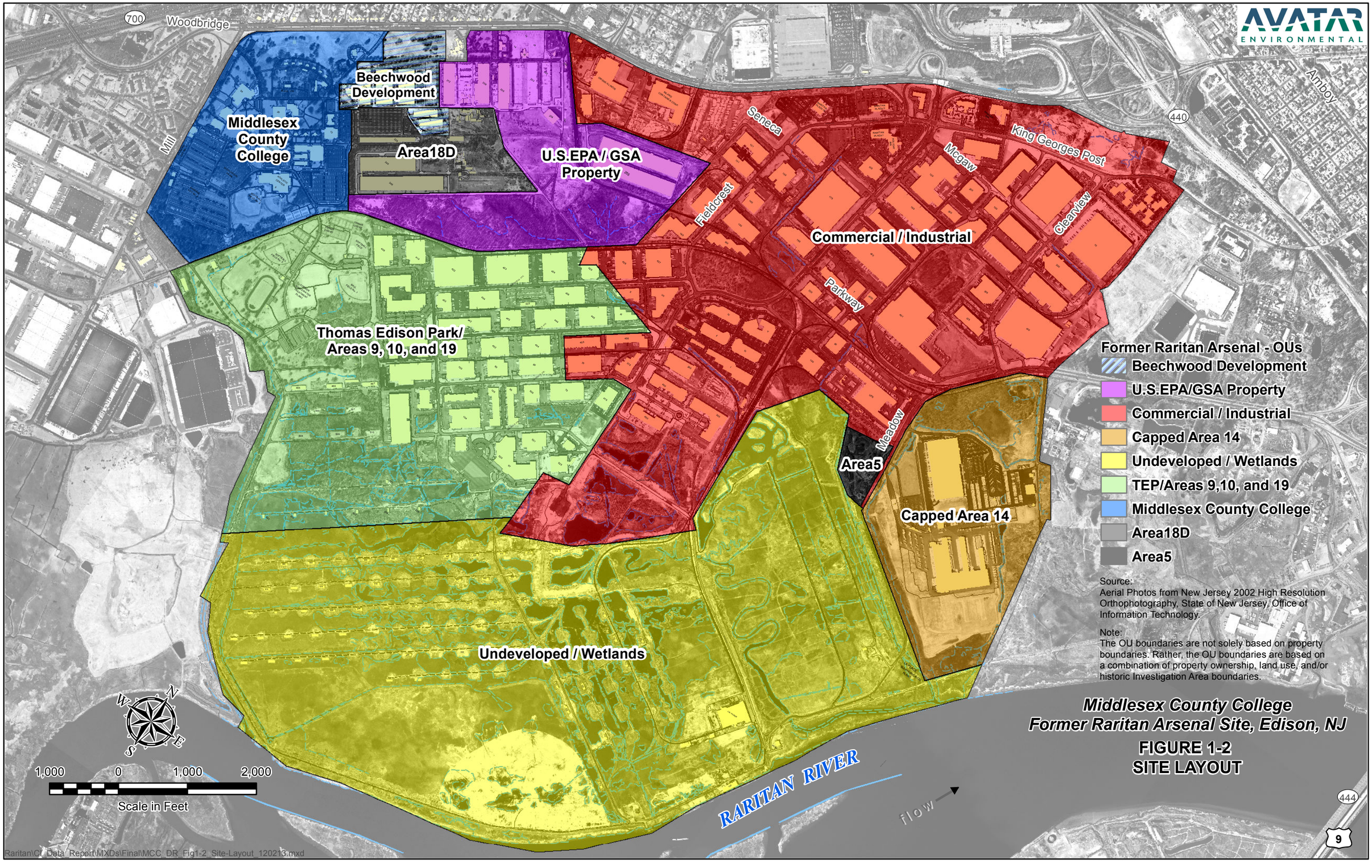
Units in mg/kg.

FIGURES



Middlesex County College
Former Raritan Arsenal Site, Edison, NJ

FIGURE 1-1
SITE LOCATION MAP



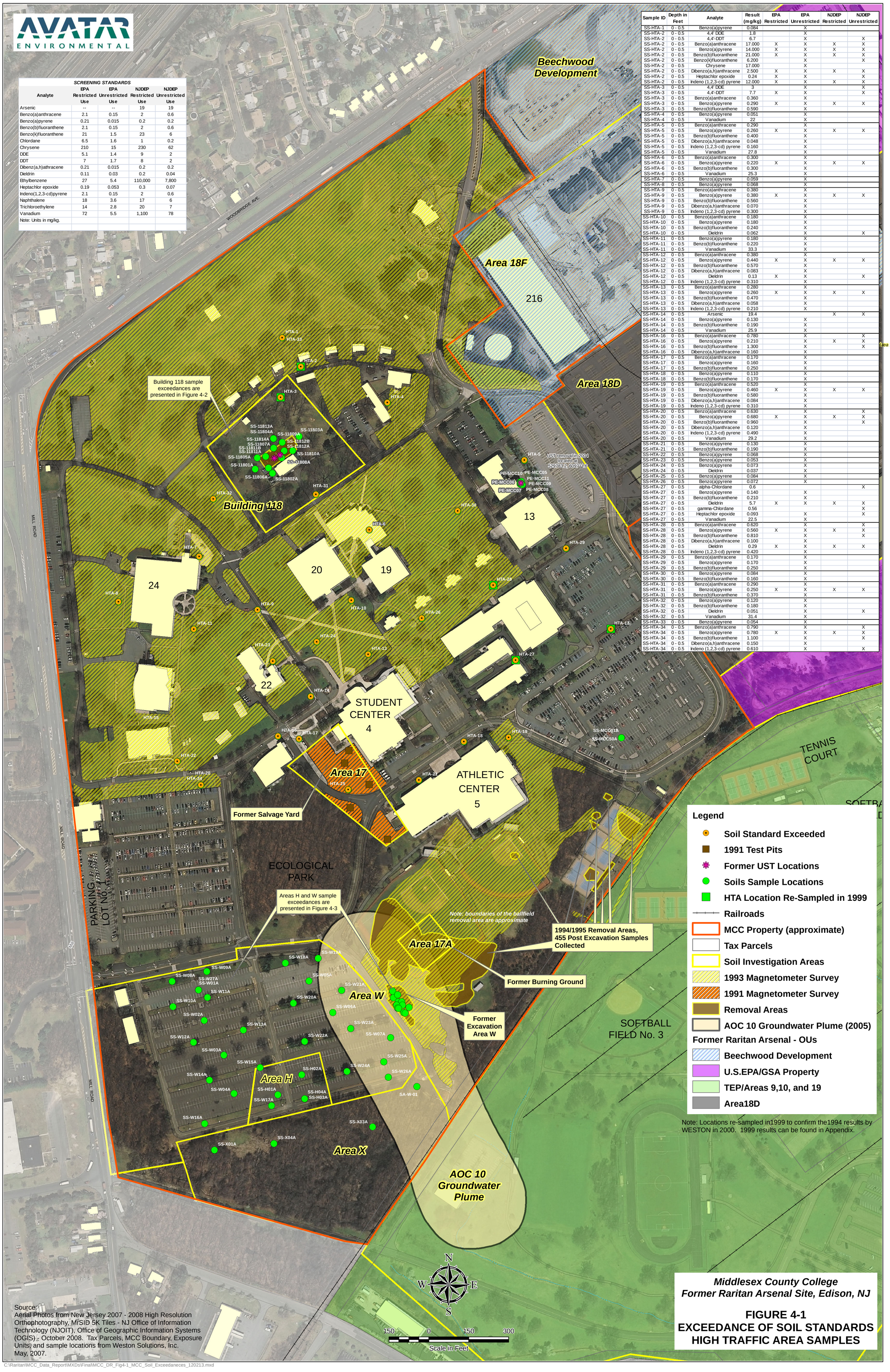
Middlesex County College
Former Raritan Arsenal Site, Edison, NJ

FIGURE 1-2
SITE LAYOUT

Middlesex County College
Former Raritan Arsenal Site, Edison, NJ

FIGURE 2-1
LOCATION OF SOIL SAMPLES AND HISTORIC REMOVAL AREAS

C:\Raritan\MCC_Data_Report\MXDs\Final\MCC_DR_Fig2-1_MCC_Soil_Sample_Locations_041114.mxd



SCREENING STANDARDS

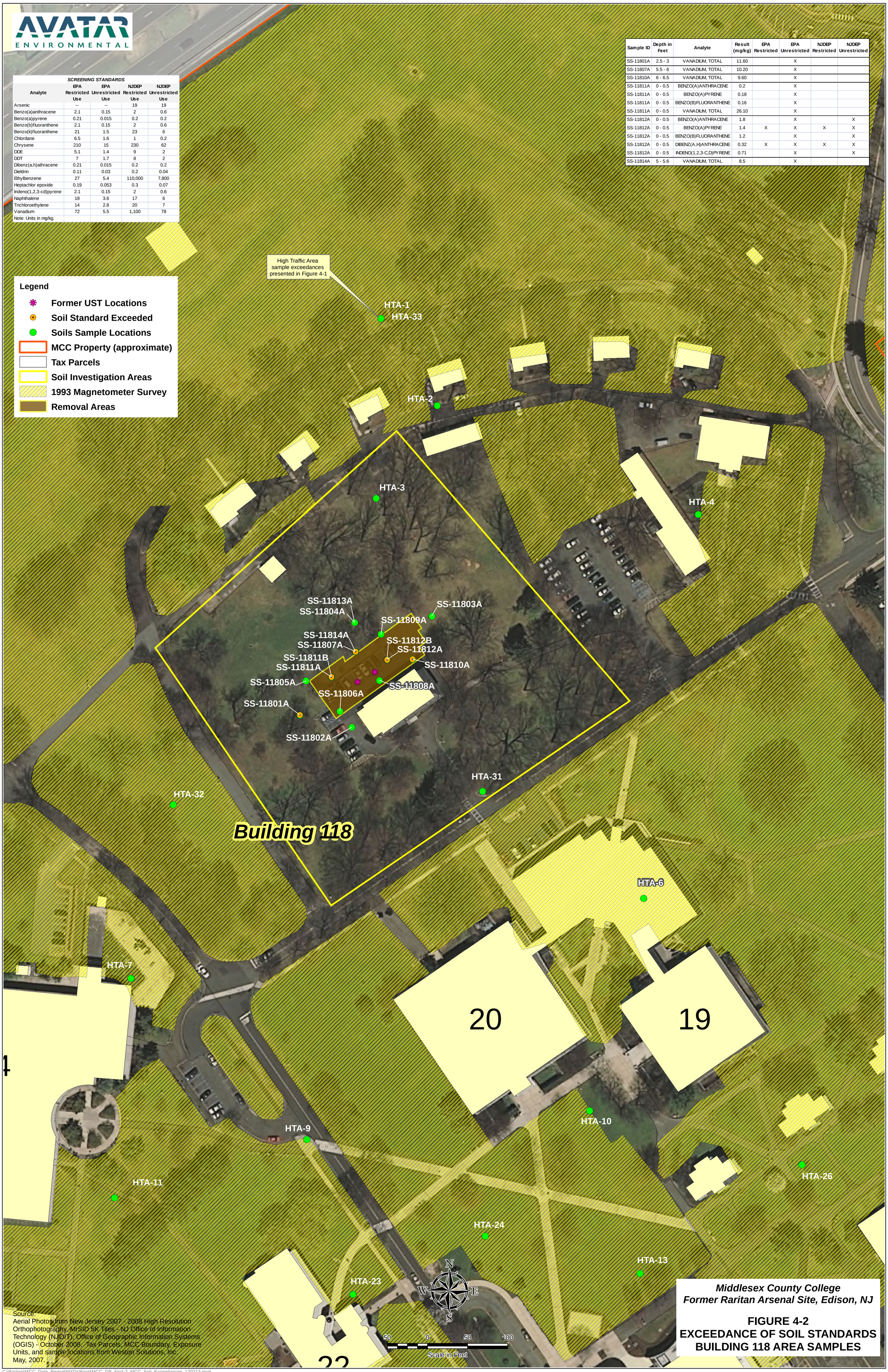
Analyte	EPA Restricted Use	EPA Unrestricted Use	NJDEP Restricted Use	NJDEP Unrestricted Use
Arsenic	--	--	19	19
Benzo(a)anthracene	2.1	0.15	2	0.6
Benzo(a)pyrene	0.21	0.015	0.2	0.2
Benzo(b)fluoranthene	2.1	0.15	2	0.6
Benzo(k)fluoranthene	21	1.5	23	6
Chlordane	6.5	1.6	1	0.2
Chrysene	210	15	230	62
DDE	5.1	1.4	9	2
DDT	7	1.7	8	2
Dibenz(a,h)athracene	0.21	0.015	0.2	0.2
Dieldrin	0.11	0.03	0.2	0.04
Ethylbenzene	27	5.4	110,000	7,800
Heptachlor epoxide	0.19	0.053	0.3	0.07
Indeno(1,2,3-cd)pyrene	2.1	0.15	2	0.6
Naphthalene	18	3.6	17	6
Trichloroethylene	14	2.8	20	7
Vanadium	72	5.5	1,100	78
Note: Units in mg/kg.				

Sample ID	Depth in Feet	Analyte	Result (mg/kg)	EPA Restricted	EPA Unrestricted	NJDEP Restricted	NJDEP Unrestricted
SS-HTA-1	0 - 0.5	Benzo(a)pyrene	0.084		X		
SS-HTA-2	0 - 0.5	4,4' DDE	1.8		X		
SS-HTA-2	0 - 0.5	4,4'-DDT	6.7		X		X
SS-HTA-2	0 - 0.5	Benzo(a)anthracene	17.000	X	X	X	X
SS-HTA-2	0 - 0.5	Benzo(a)pyrene	14.000	X	X	X	X
SS-HTA-2	0 - 0.5	Benzo(b)fluoranthene	21.000	X	X	X	X
SS-HTA-2	0 - 0.5	Benzo(k)fluoranthene	6.200		X		X
SS-HTA-2	0 - 0.5	Chrysene	17.000		X		
SS-HTA-2	0 - 0.5	Dibenzo(a,h)anthracene	2.500	X	X	X	X
SS-HTA-2	0 - 0.5	Heptachlor epoxide	0.24	X	X		X
SS-HTA-2	0 - 0.5	Indeno (1,2,3-cd) pyrene	12.000	X	X	X	X
SS-HTA-3	0 - 0.5	4,4' DDE	3		X		X
SS-HTA-3	0 - 0.5	4,4'-DDT	7.7	X	X		X
SS-HTA-3	0 - 0.5	Benzo(a)anthracene	0.360		X		
SS-HTA-3	0 - 0.5	Benzo(a)pyrene	0.290	X	X	X	X
SS-HTA-3	0 - 0.5	Benzo(b)fluoranthene	0.590		X		
SS-HTA-4	0 - 0.5	Benzo(a)pyrene	0.051		X		
SS-HTA-4	0 - 0.5	Vanadium	22		X		
SS-HTA-5	0 - 0.5	Benzo(a)anthracene	0.290		X		
SS-HTA-5	0 - 0.5	Benzo(a)pyrene	0.260	X	X	X	X
SS-HTA-5	0 - 0.5	Benzo(b)fluoranthene	0.400		X		
SS-HTA-5	0 - 0.5	Dibenzo(a,h)anthracene	0.048		X		
SS-HTA-5	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.160		X		
SS-HTA-5	0 - 0.5	Vanadium	27.8		X		
SS-HTA-6	0 - 0.5	Benzo(a)anthracene	0.300		X		
SS-HTA-6	0 - 0.5	Benzo(a)pyrene	0.220	X	X	X	X
SS-HTA-6	0 - 0.5	Benzo(b)fluoranthene	0.300		X		
SS-HTA-6	0 - 0.5	Vanadium	25.3		X		
SS-HTA-7	0 - 0.5	Benzo(a)pyrene	0.059		X		
SS-HTA-8	0 - 0.5	Benzo(a)pyrene	0.068		X		
SS-HTA-9	0 - 0.5	Benzo(a)anthracene	0.380		X		
SS-HTA-9	0 - 0.5	Benzo(a)pyrene	0.380	X	X	X	X
SS-HTA-9	0 - 0.5	Benzo(b)fluoranthene	0.560		X		
SS-HTA-9	0 - 0.5	Dibenzo(a,h)anthracene	0.070		X		
SS-HTA-9	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.300		X		
SS-HTA-10	0 - 0.5	Benzo(a)anthracene	0.180		X		
SS-HTA-10	0 - 0.5	Benzo(a)pyrene	0.180		X		
SS-HTA-10	0 - 0.5	Benzo(b)fluoranthene	0.240		X		
SS-HTA-10	0 - 0.5	Dieldrin	0.062		X		X
SS-HTA-11	0 - 0.5	Benzo(a)pyrene	0.180		X		
SS-HTA-11	0 - 0.5	Benzo(b)fluoranthene	0.220		X		
SS-HTA-11	0 - 0.5	Vanadium	33.3		X		
SS-HTA-12	0 - 0.5	Benzo(a)anthracene	0.380		X		
SS-HTA-12	0 - 0.5	Benzo(a)pyrene	0.440	X	X	X	X
SS-HTA-12	0 - 0.5	Benzo(b)fluoranthene	0.570		X		
SS-HTA-12	0 - 0.5	Dibenzo(a,h)anthracene	0.083		X		
SS-HTA-12	0 - 0.5	Dieldrin	0.13	X	X		X
SS-HTA-12	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.310		X		
SS-HTA-13	0 - 0.5	Benzo(a)anthracene	0.280		X		
SS-HTA-13	0 - 0.5	Benzo(a)pyrene	0.260	X	X	X	X
SS-HTA-13	0 - 0.5	Benzo(b)fluoranthene	0.470		X		
SS-HTA-13	0 - 0.5	Dibenzo(a,h)anthracene	0.058		X		
SS-HTA-13	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.210		X		
SS-HTA-14	0 - 0.5	Arsenic	19.4			X	X
SS-HTA-14	0 - 0.5	Benzo(a)pyrene	0.130		X		
SS-HTA-14	0 - 0.5	Benzo(b)fluoranthene	0.190		X		
SS-HTA-14	0 - 0.5	Vanadium	25.9		X		
SS-HTA-16	0 - 0.5	Benzo(a)anthracene	0.780		X		X
SS-HTA-16	0 - 0.5	Benzo(a)pyrene	0.210		X	X	X
SS-HTA-16	0 - 0.5	Benzo(b)fluoranthene	1.300		X		X
SS-HTA-16	0 - 0.5	Dibenzo(a,h)anthracene	0.160		X		
SS-HTA-17	0 - 0.5	Benzo(a)anthracene	0.170		X		
SS-HTA-17	0 - 0.5	Benzo(a)pyrene	0.160		X		
SS-HTA-17	0 - 0.5	Benzo(b)fluoranthene	0.250		X		
SS-HTA-18	0 - 0.5	Benzo(a)pyrene	0.110		X		
SS-HTA-18	0 - 0.5	Benzo(b)fluoranthene	0.170		X		
SS-HTA-19	0 - 0.5	Benzo(a)anthracene	0.520		X		
SS-HTA-19	0 - 0.5	Benzo(a)pyrene	0.460	X	X	X	X
SS-HTA-19	0 - 0.5	Benzo(b)fluoranthene	0.580		X		
SS-HTA-19	0 - 0.5	Dibenzo(a,h)anthracene	0.084		X		
SS-HTA-19	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.310		X		
SS-HTA-20	0 - 0.5	Benzo(a)anthracene	0.630		X		X
SS-HTA-20	0 - 0.5	Benzo(a)pyrene	0.680	X	X	X	X
SS-HTA-20	0 - 0.5	Benzo(b)fluoranthene	0.960		X		X
SS-HTA-20	0 - 0.5	Dibenzo(a,h)anthracene	0.120		X		
SS-HTA-20	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.490		X		
SS-HTA-20	0 - 0.5	Vanadium	29.2		X		
SS-HTA-21	0 - 0.5	Benzo(a)pyrene	0.130		X		
SS-HTA-21	0 - 0.5	Benzo(b)fluoranthene	0.190		X		
SS-HTA-22	0 - 0.5	Benzo(a)pyrene	0.068		X		
SS-HTA-23	0 - 0.5	Benzo(a)pyrene	0.053		X		
SS-HTA-24	0 - 0.5	Benzo(a)pyrene	0.073		X		
SS-HTA-24	0 - 0.5	Dieldrin	0.037		X		
SS-HTA-25	0 - 0.5	Benzo(a)pyrene	0.084		X		
SS-HTA-26	0 - 0.5	Benzo(a)pyrene	0.072		X		
SS-HTA-27	0 - 0.5	alpha-Chlordane	0.6				X
SS-HTA-27	0 - 0.5	Benzo(a)pyrene	0.140		X		
SS-HTA-27	0 - 0.5	Benzo(b)fluoranthene	0.210		X		
SS-HTA-27	0 - 0.5	Dieldrin	5.7	X	X	X	X
SS-HTA-27	0 - 0.5	gamma-Chlordane	0.56				X
SS-HTA-27	0 - 0.5	Heptachlor epoxide	0.093		X		X
SS-HTA-27	0 - 0.5	Vanadium	22.5		X		
SS-HTA-28	0 - 0.5	Benzo(a)anthracene	0.620		X		X
SS-HTA-28	0 - 0.5	Benzo(a)pyrene	0.560	X	X	X	X
SS-HTA-28	0 - 0.5	Benzo(b)fluoranthene	0.810		X		X
SS-HTA-28	0 - 0.5	Dibenzo(a,h)anthracene	0.100		X		
SS-HTA-28	0 - 0.5	Dieldrin	0.29	X	X	X	X
SS-HTA-28	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.420		X		
SS-HTA-29	0 - 0.5	Benzo(a)anthracene	0.170		X		
SS-HTA-29	0 - 0.5	Benzo(a)pyrene	0.170		X		
SS-HTA-29	0 - 0.5	Benzo(b)fluoranthene	0.250		X		
SS-HTA-30	0 - 0.5	Benzo(a)pyrene	0.084		X		
SS-HTA-30	0 - 0.5	Benzo(b)fluoranthene	0.160		X		
SS-HTA-31	0 - 0.5	Benzo(a)anthracene	0.290		X		
SS-HTA-31	0 - 0.5	Benzo(a)pyrene	0.250	X	X	X	X
SS-HTA-31	0 - 0.5	Benzo(b)fluoranthene	0.370		X		
SS-HTA-32	0 - 0.5	Benzo(a)pyrene	0.120		X		
SS-HTA-32	0 - 0.5	Benzo(b)fluoranthene	0.180		X		
SS-HTA-32	0 - 0.5	Dieldrin	0.051		X		X
SS-HTA-32	0 - 0.5	Vanadium	31.4		X		
SS-HTA-33	0 - 0.5	Benzo(a)pyrene	0.054		X		
SS-HTA-34	0 - 0.5	Benzo(a)anthracene	0.790		X		X
SS-HTA-34	0 - 0.5	Benzo(a)pyrene	0.780	X	X	X	X
SS-HTA-34	0 - 0.5	Benzo(b)fluoranthene	1.100		X		X
SS-HTA-34	0 - 0.5	Dibenzo(a,h)anthracene	0.150		X		
SS-HTA-34	0 - 0.5	Indeno (1,2,3-cd) pyrene	0.610		X		X

AVATAR ENVIRONMENTAL

SCREENING STANDARDS				
Analyte	EPA Restricted Use	EPA Unrestricted Use	NJDEP Restricted Use	NJDEP Unrestricted Use
Arsenic	--	--	19	19
Benzo(a)anthracene	2.1	0.15	2	0.6
Benzo(a)pyrene	0.21	0.015	0.2	0.2
Benzo(b)fluoranthene	2.1	0.15	2	0.6
Benzo(k)fluoranthene	21	1.5	23	6
Chlordane	6.5	1.6	1	0.2
Chrysene	210	15	230	62
DDE	5.1	1.4	9	2
DDT	7	1.7	8	2
Dibenz(a,h)athracene	0.21	0.015	0.2	0.2
Dieldrin	0.11	0.03	0.2	0.04
Ethylbenzene	27	5.4	110,000	7,800
Heptachlor epoxide	0.19	0.053	0.3	0.07
Indeno(1,2,3-cd)pyrene	2.1	0.15	2	0.6
Naphthalene	18	3.6	17	6
Trichloroethylene	14	2.8	20	7
Vanadium	72	5.5	1,100	78
Note: Units in mg/kg.				

Sample ID	Depth in Feet	Analyte	Result (mg/kg)	EPA Restricted	EPA Unrestricted	NJDEP Restricted	NJDEP Unrestricted
SS-11801A	2.5 - 3	VANADIUM, TOTAL	11.60		X		
SS-11807A	5.5 - 6	VANADIUM, TOTAL	10.20		X		
SS-11810A	6 - 6.5	VANADIUM, TOTAL	9.60		X		
SS-11811A	0 - 0.5	BENZO(A)ANTHRACENE	0.2		X		
SS-11811A	0 - 0.5	BENZO(A)PYRENE	0.18		X		
SS-11811A	0 - 0.5	BENZO(B)FLUORANTHENE	0.16		X		
SS-11811A	0 - 0.5	VANADIUM, TOTAL	26.10		X		
SS-11812A	0 - 0.5	BENZO(A)ANTHRACENE	1.8		X		X
SS-11812A	0 - 0.5	BENZO(A)PYRENE	1.4	X	X	X	X
SS-11812A	0 - 0.5	BENZO(B)FLUORANTHENE	1.2		X		X
SS-11812A	0 - 0.5	DIBENZ(A,H)ANTHRACENE	0.32	X	X	X	X
SS-11812A	0 - 0.5	INDENO(1,2,3-C,D)PYRENE	0.71		X		X
SS-11814A	5 - 5.6	VANADIUM, TOTAL	8.5		X		



Source:
Aerial Photos from New Jersey 2007 - 2008 High Resolution Orthophotography, MrSID 5K Tiles - NJ Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS) - October 2008. Tax Parcels, MCC Boundary, Exposure Units, and sample locations from Weston Solutions, Inc. May, 2007.

Middlesex County College
Former Raritan Arsenal Site, Edison, NJ

FIGURE 4-2
EXCEEDANCE OF SOIL STANDARDS
BUILDING 118 AREA SAMPLES

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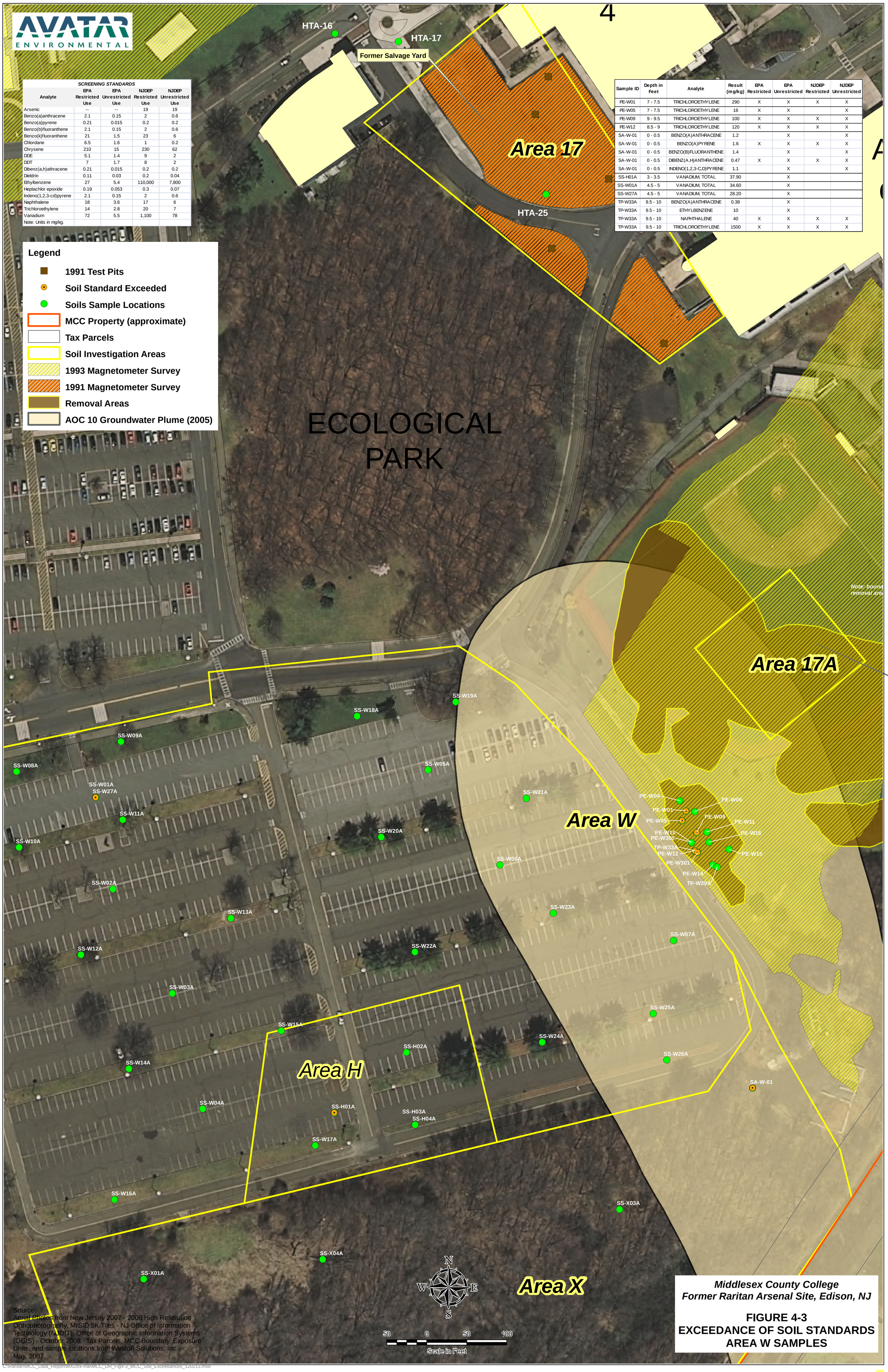

SCREENING STANDARDS				
Analyte	EPA Restricted Use	EPA Unrestricted Use	NJDEP Restricted Use	NJDEP Unrestricted Use
Arsenic	--	--	19	19
Benzo(a)anthracene	2.1	0.15	2	0.6
Benzo(a)pyrene	0.21	0.015	0.2	0.2
Benzo(b)fluoranthene	2.1	0.15	2	0.6
Benzo(k)fluoranthene	21	1.5	23	6
Chlordane	6.5	1.6	1	0.2
Chrysene	210	15	230	62
DDE	5.1	1.4	9	2
DDT	7	1.7	8	2
Dibenz(a,h)athracene	0.21	0.015	0.2	0.2
Dieldrin	0.11	0.03	0.2	0.04
Ethylbenzene	27	5.4	110,000	7,800
Heptachlor epoxide	0.19	0.053	0.3	0.07
Indeno(1,2,3-cd)pyrene	2.1	0.15	2	0.6
Naphthalene	18	3.6	17	6
Trichloroethylene	14	2.8	20	7
Vanadium	72	5.5	1,100	78
Note: Units in mg/kg.				

Sample ID	Depth in Feet	Analyte	Result (mg/kg)	EPA Restricted	EPA Unrestricted	NJDEP Restricted	NJDEP Unrestricted
PE-W01	7 - 7.5	TRICHLOROETHYLENE	290	X	X	X	X
PE-W05	7 - 7.5	TRICHLOROETHYLENE	16	X	X		X
PE-W09	9 - 9.5	TRICHLOROETHYLENE	100	X	X	X	X
PE-W12	8.5 - 9	TRICHLOROETHYLENE	120	X	X	X	X
SA-W-01	0 - 0.5	BENZO(A)ANTHRACENE	1.2		X		X
SA-W-01	0 - 0.5	BENZO(A)PYRENE	1.6	X	X	X	X
SA-W-01	0 - 0.5	BENZO(B)FLUORANTHENE	1.4		X		X
SA-W-01	0 - 0.5	DIBENZ(A,H)ANTHRACENE	0.47	X	X	X	X
SA-W-01	0 - 0.5	INDENO(1,2,3-C,D)PYRENE	1.1		X		X
SS-H01A	3 - 3.5	VANADIUM, TOTAL	37.90		X		
SS-W01A	4.5 - 5	VANADIUM, TOTAL	34.60		X		
SS-W27A	4.5 - 5	VANADIUM, TOTAL	28.20		X		
TP-W33A	9.5 - 10	BENZO(A)ANTHRACENE	0.38		X		
TP-W33A	9.5 - 10	ETHYLBENZENE	10		X		
TP-W33A	9.5 - 10	NAPHTHALENE	40	X	X	X	X
TP-W33A	9.5 - 10	TRICHLOROETHYLENE	1500	X	X	X	X

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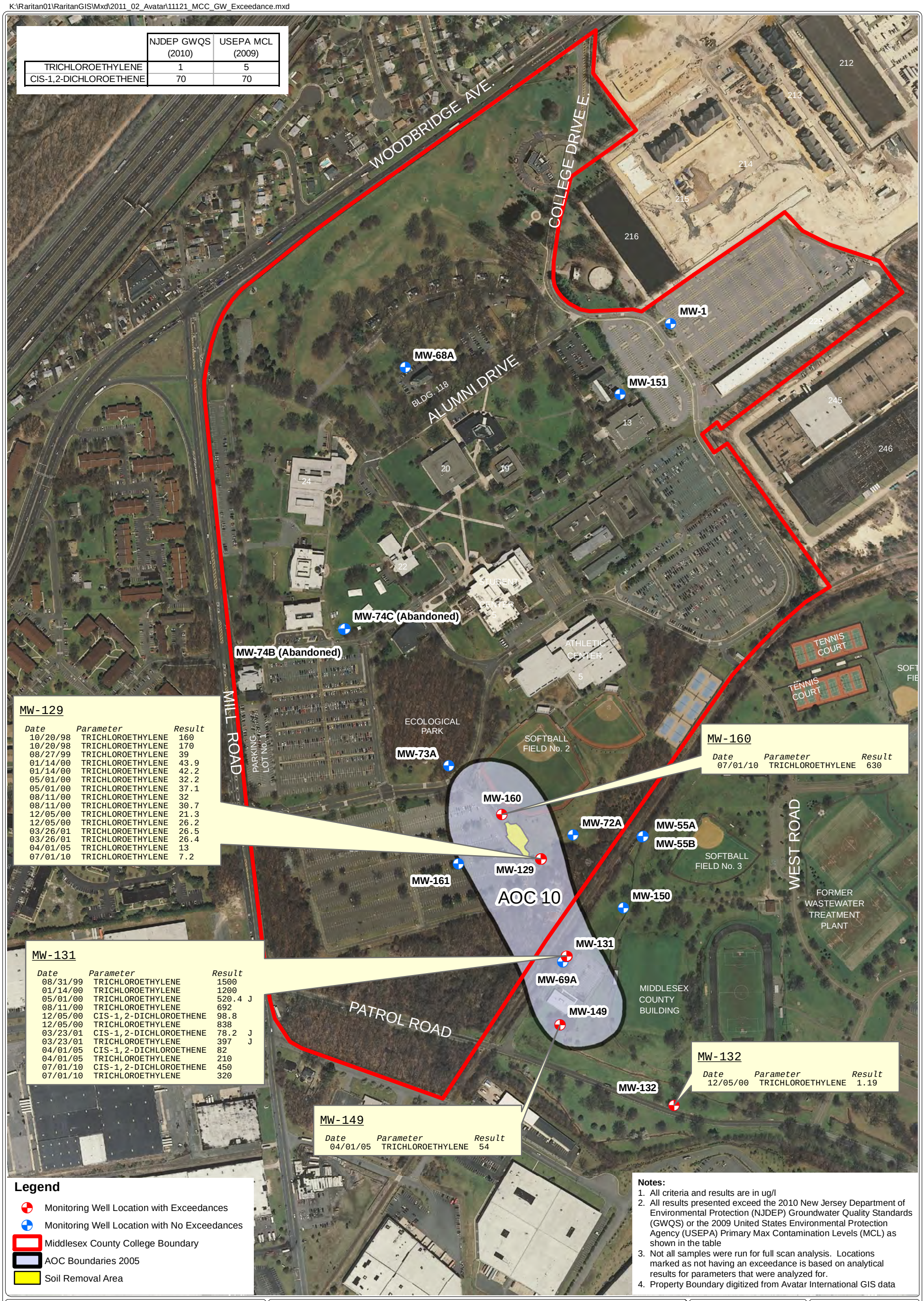
	NJDEP GWQS (2010)	USEPA MCL (2009)
TRICHLOROETHYLENE	1	5
CIS-1,2-DICHLOROETHENE	70	70



MW-129

Date	Parameter	Result
10/20/98	TRICHLOROETHYLENE	160
10/20/98	TRICHLOROETHYLENE	170
08/27/99	TRICHLOROETHYLENE	39
01/14/00	TRICHLOROETHYLENE	43.9
01/14/00	TRICHLOROETHYLENE	42.2
05/01/00	TRICHLOROETHYLENE	32.2
05/01/00	TRICHLOROETHYLENE	37.1
08/11/00	TRICHLOROETHYLENE	32
08/11/00	TRICHLOROETHYLENE	30.7
12/05/00	TRICHLOROETHYLENE	21.3
12/05/00	TRICHLOROETHYLENE	26.2
03/26/01	TRICHLOROETHYLENE	26.5
03/26/01	TRICHLOROETHYLENE	26.4
04/01/05	TRICHLOROETHYLENE	13
07/01/10	TRICHLOROETHYLENE	7.2

MW-160

Date	Parameter	Result
07/01/10	TRICHLOROETHYLENE	630

MW-131

Date	Parameter	Result
08/31/99	TRICHLOROETHYLENE	1500
01/14/00	TRICHLOROETHYLENE	1200
05/01/00	TRICHLOROETHYLENE	520.4 J
08/11/00	TRICHLOROETHYLENE	692
12/05/00	CIS-1,2-DICHLOROETHENE	98.8
12/05/00	TRICHLOROETHYLENE	838
03/23/01	CIS-1,2-DICHLOROETHENE	78.2 J
03/23/01	TRICHLOROETHYLENE	397 J
04/01/05	CIS-1,2-DICHLOROETHENE	82
04/01/05	TRICHLOROETHYLENE	210
07/01/10	CIS-1,2-DICHLOROETHENE	450
07/01/10	TRICHLOROETHYLENE	320

MW-132

Date	Parameter	Result
12/05/00	TRICHLOROETHYLENE	1.19

MW-149

Date	Parameter	Result
04/01/05	TRICHLOROETHYLENE	54

Legend

- Monitoring Well Location with Exceedances
- Monitoring Well Location with No Exceedances
- Middlesex County College Boundary
- AOC Boundaries 2005
- Soil Removal Area

Notes:

1. All criteria and results are in ug/l
2. All results presented exceed the 2010 New Jersey Department of Environmental Protection (NJDEP) Groundwater Quality Standards (GWQS) or the 2009 United States Environmental Protection Agency (USEPA) Primary Max Contamination Levels (MCL) as shown in the table
3. Not all samples were run for full scan analysis. Locations marked as not having an exceedance is based on analytical results for parameters that were analyzed for.
4. Property Boundary digitized from Avatar International GIS data

SCALE: 400 200 0 400
Graphic Scale In Feet

PROJECT: Former Raritan Arsenal
Middlesex County College

CLIENT NAME: United States Army Corps of Engineers

TITLE:
Middlesex County College
Organic Contaminant Groundwater Exceedances

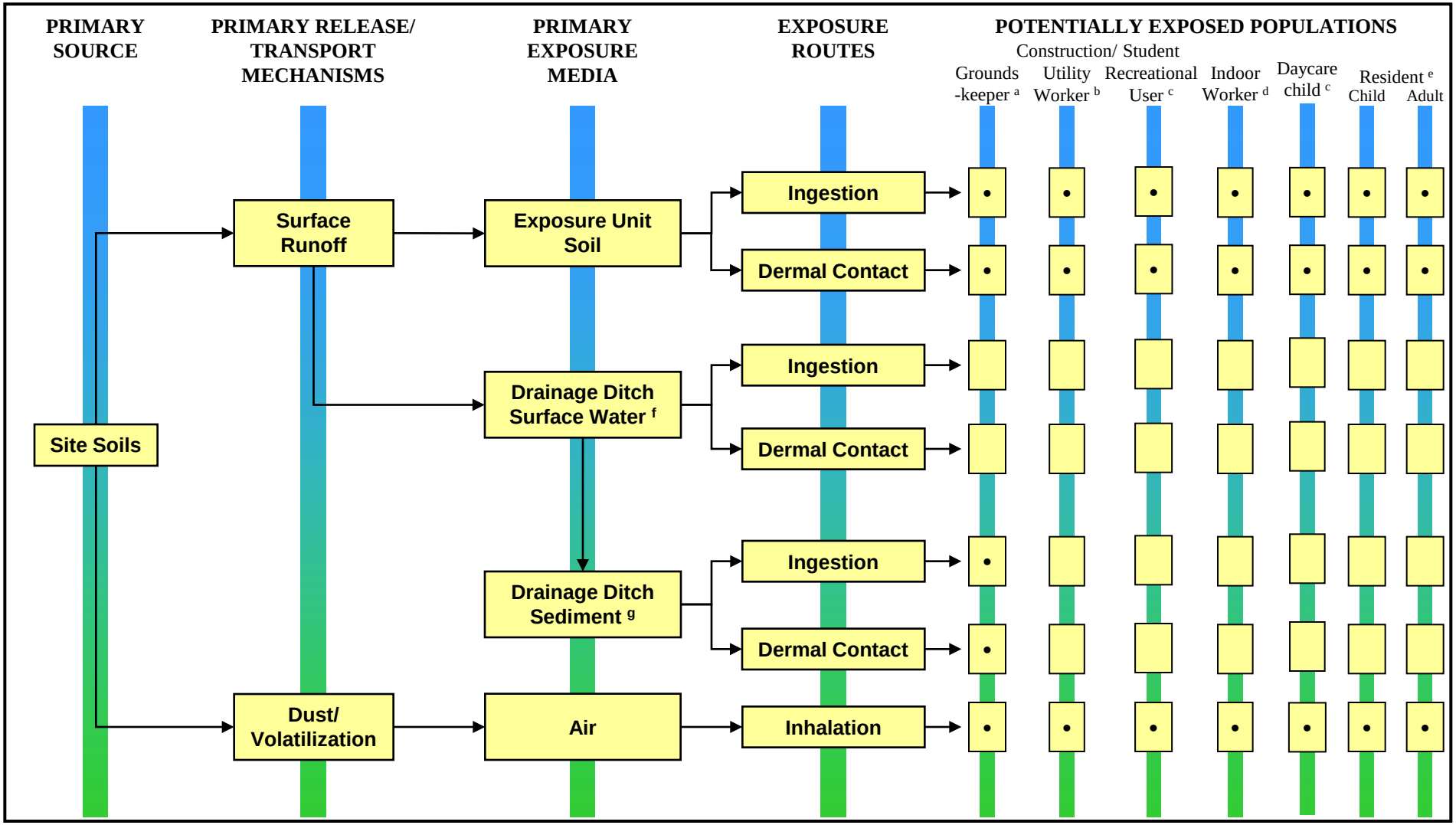
WESTON SOLUTIONS
AVATAR ENVIRONMENTAL

DRAWING NUMBER: 11121

FIGURE #: 4-4

DRAWN BY: A. Salazar
REVIEWED BY: T. Woods
PROJECT MANAGER: P. Bovitz
SCALE: 1" = 400'
DATE: 01/09/2011

N W E S



LEGEND:

[a] It is assumed that the groundskeeper is exposed to surface soil (0-2 ft bgs). The groundskeeper is also assumed to contact drainage ditch sediment which will be treated the same as surface soil.

[b] It is assumed that the construction/utility worker is exposed to aggregate soil (0-10 ft bgs).

[c] It is assumed that the student recreational user and daycare child are exposed to surface soil (0-2 ft bgs).

[d] It is assumed that the indoor worker is exposed to surface soil (0-2 ft bgs).

[e] It is assumed that the residents are exposed to aggregate soil (0-10 ft bgs).

[f] Surface water in the drainage ditches is shallow and is present only after precipitation events. The water dries up during periods without precipitation. Based on this, there is limited exposure potential.

[g] Sediment will be treated the same as soil.

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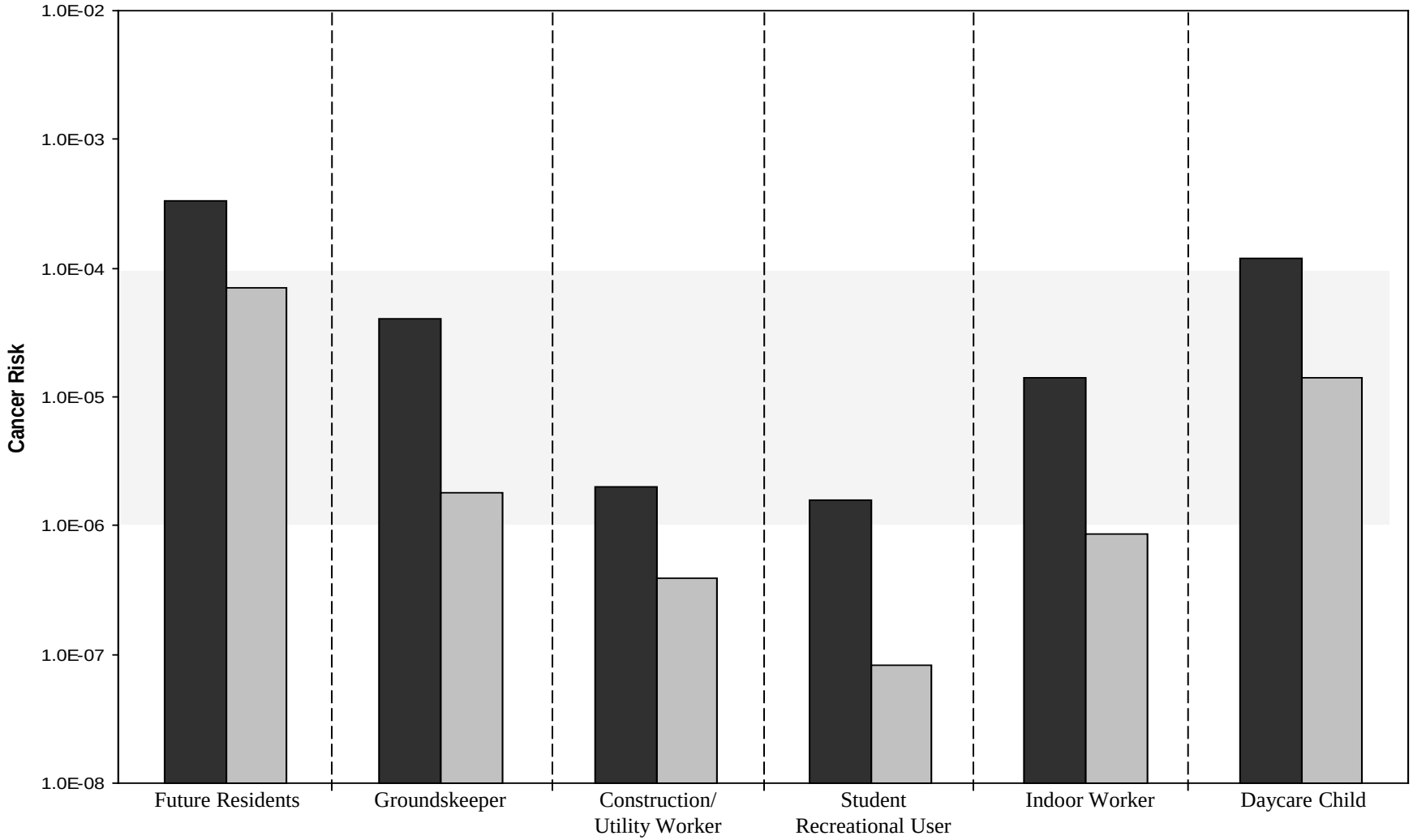
FIGURE 6-1
CONCEPTUAL SITE MODEL
HUMAN HEALTH RISK ASSESSMENT

MIDDLESEX COUNTY COLLEGE

FORMER RARITAN ARSENAL



Legend:

= RME cancer risk.

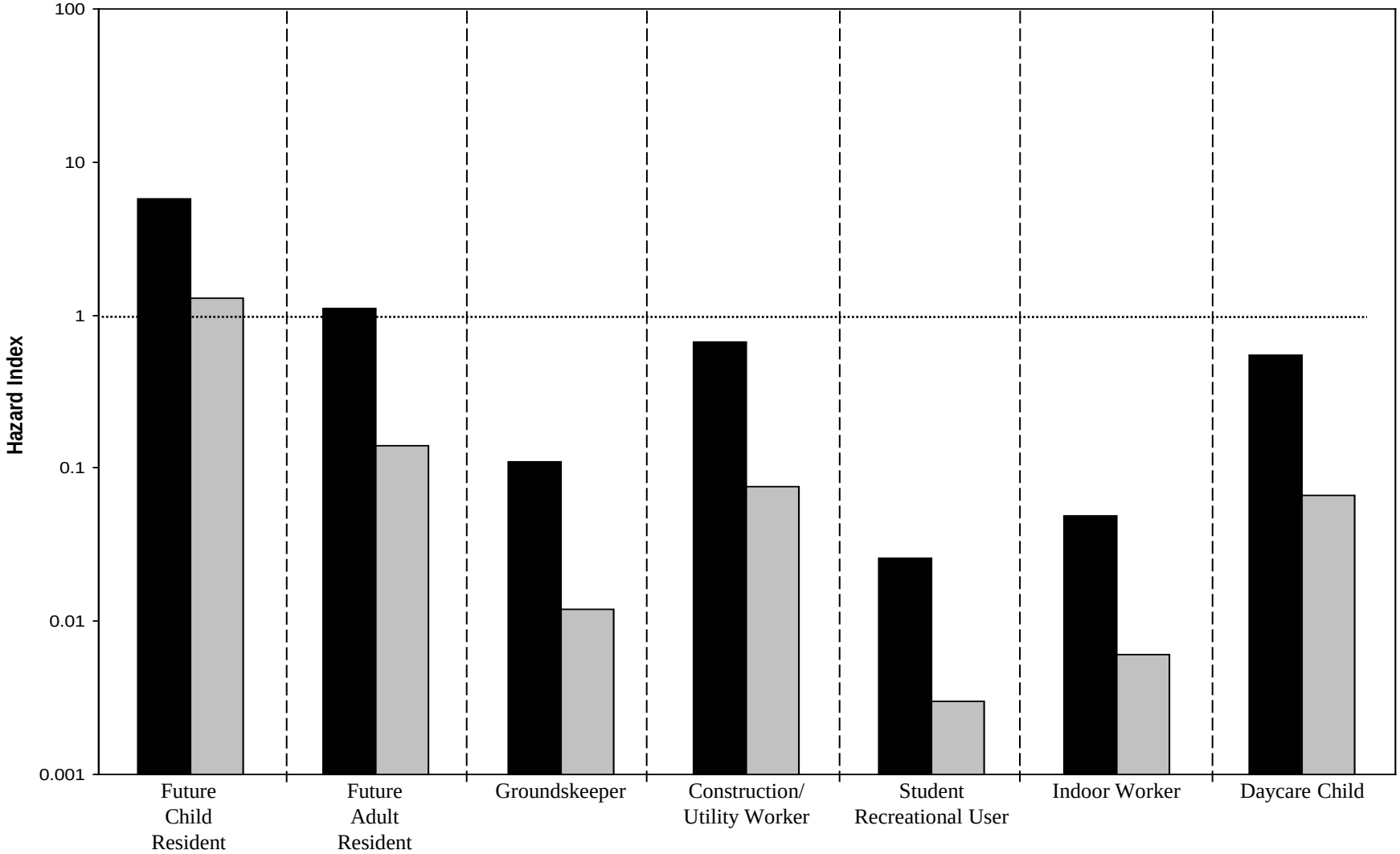
= CTE cancer risk.

Gray shaded area represents EPA's cancer risk range (1E-06 to 1E-04).

FUDS Project Number CO2NJ0084

FIGURE 6-2
SUMMARY OF CANCER RISKS
MIDDLESEX COUNTY COLLEGE

FORMER RARITAN ARSENAL



Legend:

= RME hazard index.

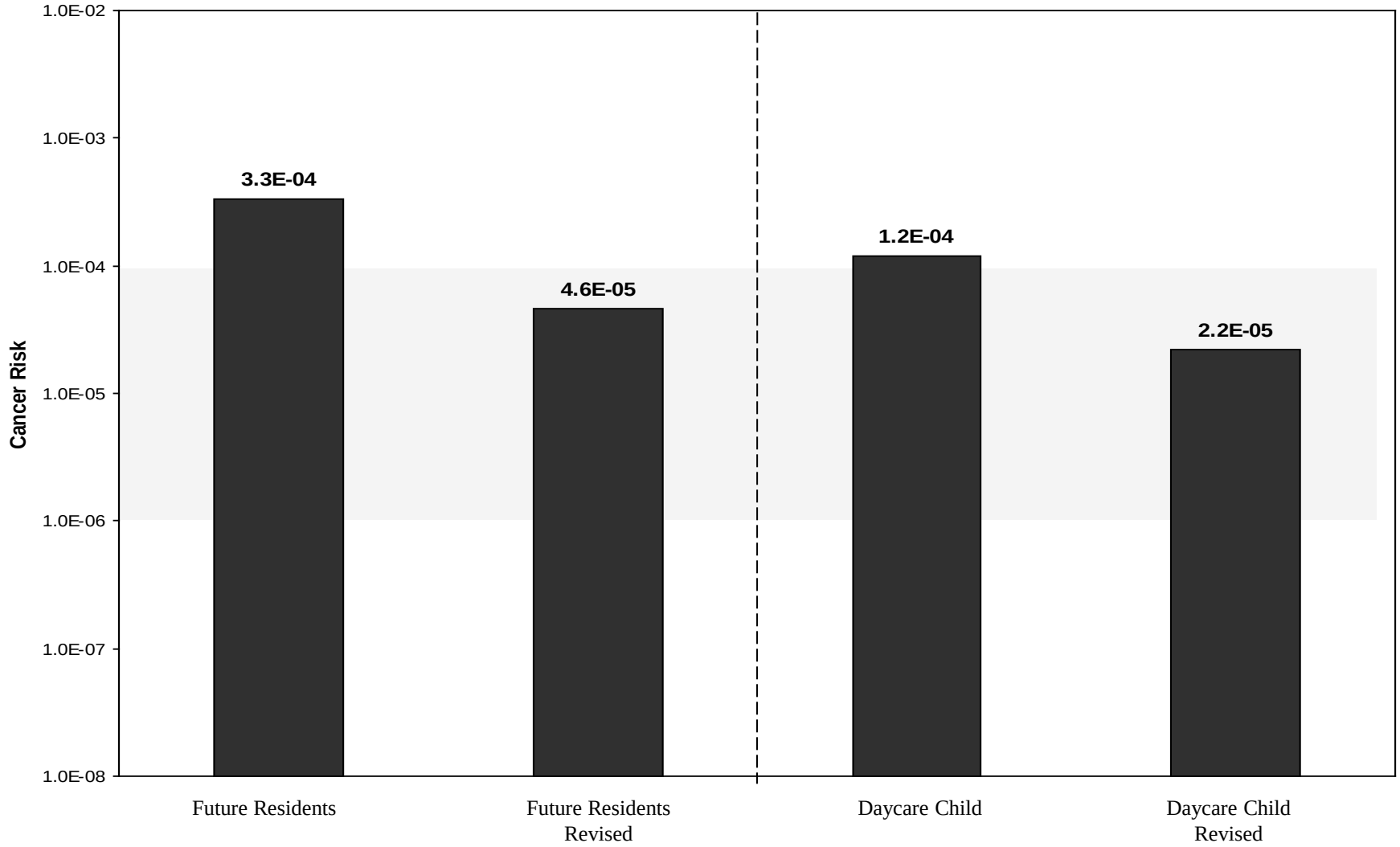
= CTE hazard index.

Horizontal dashed line represents EPA's noncancer benchmark of one.

FUDS Project Number CO2NJ0084

FIGURE 6-3
SUMMARY OF HAZARD INDICES
MIDDLESEX COUNTY COLLEGE

FORMER RARITAN ARSENAL



Legend:

■ = RME cancer risk.

Gray shaded area represents EPA's cancer risk range (1E-06 to 1E-04).

The revised cancer risks were derived based on the issues discussed in Section 6.5.4. Specifically, the following was performed to estimate the revised risks:

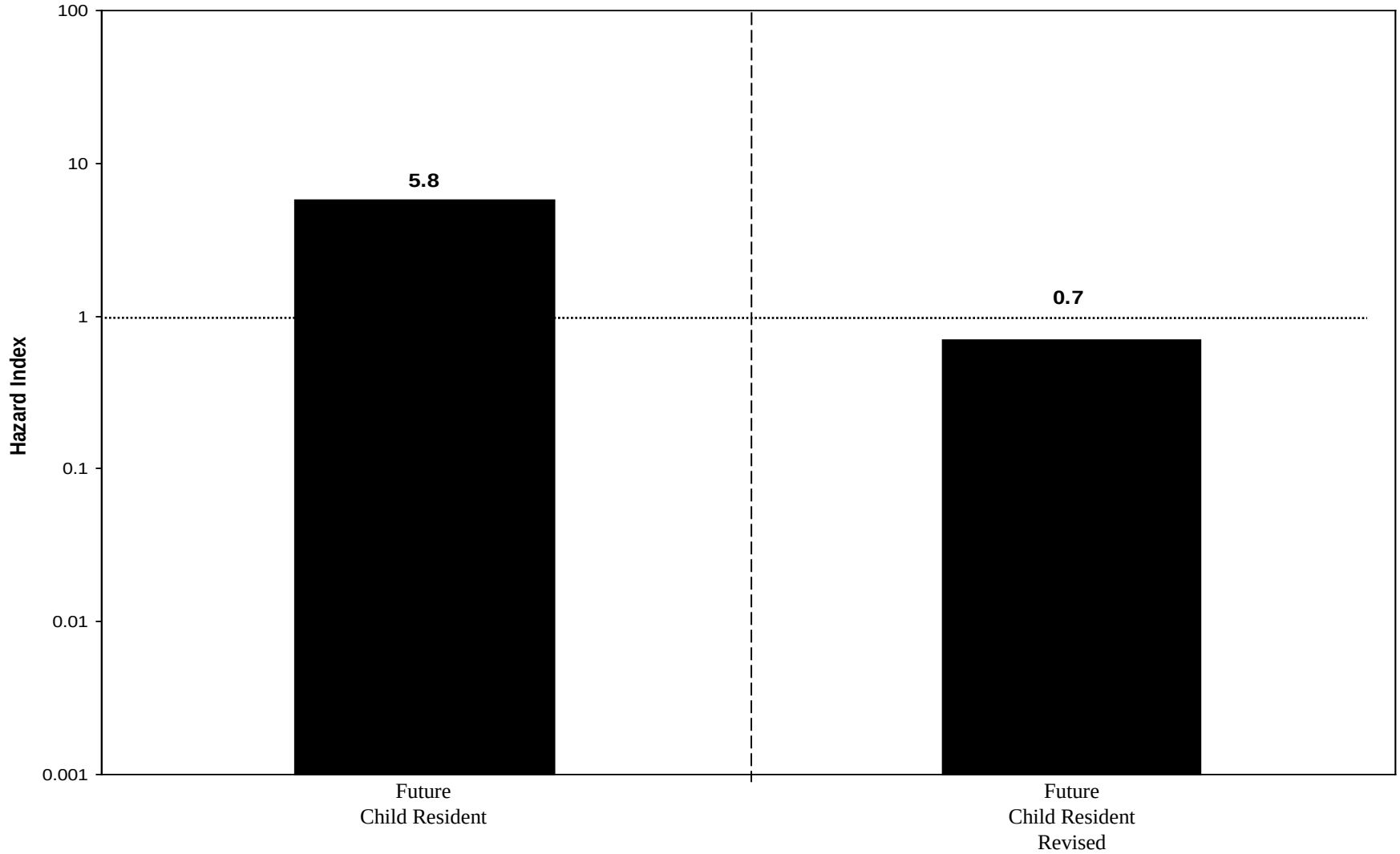
•Remove the arsenic and chromium risk due to background levels.

•Remove the cPAH, TCE, and dieldrin risks with the outlier concentrations included and replace with risks with the outlier concentrations removed.

FUDS Project Number CO2NJ0084

FIGURE 6-4
FINAL CANCER RISKS – FUTURE RESIDENTS AND DAYCARE CHILD
MIDDLESEX COUNTY COLLEGE

FORMER RARITAN ARSENAL



Legend:

■ = RME hazard index.

Horizontal dashed line represents EPA's noncancer benchmark of one.

The revised HI was derived based on the issues discussed in Section 6.5.4. Specifically, the following was performed to estimate the revised risks:
•Remove the arsenic and chromium risk due to background levels.
•Remove the TCE and dieldrin HIs with the outlier concentrations included and replace with HIs with the outlier concentrations removed.

FUDS Project Number CO2NJ0084

FIGURE 6-5
FINAL HAZARD INDEX – FUTURE CHILD RESIDENT
MIDDLESEX COUNTY COLLEGE

FORMER RARITAN ARSENAL

APPENDICES

Appendix A (CD only)

MCC DOCUMENTS

Appendix B

AVAILABLE SOIL DATA

Appendix B
Available Data
Middlesex County College
Former Raritan Arsenal

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.42	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.28	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.28	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.56	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.28	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.41	J	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.42	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	2470	V	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.14	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC05	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.7	U	529781.0544	609715.8932	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.36	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.24	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.24	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.48	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.24	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.48	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.36	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	2610	V	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.12	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC06	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.6	U	529788.1104	609706.331	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.37	U	529780.3219	609707.7962	USACE, 2004

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.25	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.25	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.5	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.25	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.5	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.37	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	145	V	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.12	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC07	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.62	U	529780.3219	609707.7962	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.36	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.24	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.24	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.47	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.24	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.66	V	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.36	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	1080	V	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.18	J	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.12	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.59	U	529780.0921	609712.041	USACE, 2004
PE-MCC08	Remediation Floor Excavation	5/27/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	2	V	529780.0921	609712.041	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.41	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.27	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.27	U	529785.0259	609716.9728	USACE, 2004

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.54	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.27	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.54	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.41	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	48.5	V	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.14	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC09	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.68	U	529785.0259	609716.9728	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.38	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.25	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.25	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.51	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.25	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.7	V	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.38	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	1190	V	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.13	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.64	U	529783.2908	609709.9939	USACE, 2004
PE-MCC10	Remediation Wall Excavation	6/7/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.16	J	529783.2908	609709.9939	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.13	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.39	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.26	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.26	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.13	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	2-CHLOROETHYLVINYLETHER	110-75-8	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BENZENE	71-43-2	0.13	U	529788.9201	609705.6369	USACE, 2004

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.13	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMOFORM	75-25-2	0.52	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.26	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.52	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.39	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	418	V	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.13	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TOLUENE	108-88-3	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.13	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	TRICHLOROFLUOROMETHANE	75-69-4	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-MCC11	Remediation Floor Excavation	6/7/2004	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.64	U	529788.9201	609705.6369	USACE, 2004
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.39	J	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,1-DICHLOROETHANE	75-34-3	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,1-DICHLOROETHENE	75-35-4	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,2-DICHLOROETHANE	107-06-2	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	1,2-DICHLOROPROPANE	78-87-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	2-BUTANONE	78-93-3	5	V	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	2-HEXANONE	591-78-6	1.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	4-METHYL-2-PENTANONE	108-10-1	0.54	J	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	ACETONE	67-64-1	27.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	BENZENE	71-43-2	13.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	BROMODICHLOROMETHANE	75-27-4	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	BROMOFORM	75-25-2	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	BROMOMETHANE	74-83-9	1.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CARBON DISULFIDE	75-15-0	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CARBON TETRACHLORIDE	56-23-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CHLOROBENZENE	108-90-7	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CHLOROETHANE	75-00-3	1.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CHLOROFORM	67-66-3	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CHLOROMETHANE	74-87-3	1.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	3.1	V	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	ETHYLBENZENE	100-41-4	1.7	V	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	METHYLENE CHLORIDE	75-09-2	2	B	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	STYRENE	100-42-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	TETRACHLOROETHYLENE	127-18-4	0.28	J	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	TOLUENE	108-88-3	10	V	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.66	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	TRICHLOROETHYLENE	79-01-6	290	D	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	VINYL CHLORIDE	75-01-4	1.3	U	529308.97	607787.66	Weston, 2002a
PE-W01	Remediation Floor Excavation	1/14/1998	Soil	7	7.5	0	XYLENES (TOTAL)	1330-20-7	19	V	529308.97	607787.66	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,1-DICHLOROETHANE	75-34-3	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,1-DICHLOROETHENE	75-35-4	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,2-DICHLOROETHANE	107-06-2	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	1,2-DICHLOROPROPANE	78-87-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	2-BUTANONE	78-93-3	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	2-HEXANONE	591-78-6	0.01	U	529301.17	607800.47	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	4-METHYL-2-PENTANONE	108-10-1	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	ACETONE	67-64-1	0.022	B	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	BENZENE	71-43-2	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	BROMODICHLOROMETHANE	75-27-4	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	BROMOFORM	75-25-2	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	BROMOMETHANE	74-83-9	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CARBON DISULFIDE	75-15-0	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CARBON TETRACHLORIDE	56-23-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CHLOROBENZENE	108-90-7	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CHLOROETHANE	75-00-3	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CHLOROFORM	67-66-3	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CHLOROMETHANE	74-87-3	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	ETHYLBENZENE	100-41-4	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	METHYLENE CHLORIDE	75-09-2	0.006	B	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	PETROLEUM HYDROCARBON	111-11-25	9	V	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	STYRENE	100-42-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	TETRACHLOROETHYLENE	127-18-4	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	TOLUENE	108-88-3	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	TRICHLOROETHYLENE	79-01-6	0.002	J	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	VINYL CHLORIDE	75-01-4	0.01	U	529301.17	607800.47	Weston, 2002a
PE-W04	Remediation Wall Excavation	1/15/1998	Soil	3	3.5	0	XYLENES (TOTAL)	1330-20-7	0.005	U	529301.17	607800.47	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,1-DICHLOROETHANE	75-34-3	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,1-DICHLOROETHENE	75-35-4	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,2-DICHLOROETHANE	107-06-2	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	1,2-DICHLOROPROPANE	78-87-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	2-BUTANONE	78-93-3	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	2-HEXANONE	591-78-6	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	2-METHYLNAPHTHALENE	91-57-6	3.9	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	4-METHYL-2-PENTANONE	108-10-1	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	ACENAPHTHENE	83-32-9	0.22	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	ACENAPHTHYLENE	208-96-8	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	ACETONE	67-64-1	0.52	JB	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	ANTHRACENE	120-12-7	0.18	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZENE	71-43-2	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZO(A)ANTHRACENE	56-55-3	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZO(A)PYRENE	50-32-8	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZO(B)FLUORANTHENE	205-99-2	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BENZO(K)FLUORANTHENE	207-08-9	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BROMODICHLOROMETHANE	75-27-4	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BROMOFORM	75-25-2	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	BROMOMETHANE	74-83-9	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CARBON DISULFIDE	75-15-0	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CARBON TETRACHLORIDE	56-23-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CHLOROBENZENE	108-90-7	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CHLOROETHANE	75-00-3	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CHLOROFORM	67-66-3	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CHLOROMETHANE	74-87-3	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CHRYSENE	218-01-9	0.13	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	DIBENZOFURAN	132-64-9	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	ETHYLBENZENE	100-41-4	1.1	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	FLUORANTHENE	206-44-0	0.096	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	FLUORENE	86-73-7	0.7	V	529304.04	607775.5	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.35	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	METHYLENE CHLORIDE	75-09-2	0.58	JB	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	NAPHTHALENE	91-20-3	1	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	PETROLEUM HYDROCARBON	111-11-25	6430	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	PHENANTHRENE	85-01-8	2.2	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	PYRENE	129-00-0	0.24	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	STYRENE	100-42-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	TETRACHLOROETHYLENE	127-18-4	0.28	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	TOLUENE	108-88-3	0.25	J	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.66	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	TRICHLOROETHYLENE	79-01-6	16	V	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	VINYL CHLORIDE	75-01-4	1.3	U	529304.04	607775.5	Weston, 2002a
PE-W05	Remediation Wall Excavation	1/15/1998	Soil	7	7.5	0	XYLENES (TOTAL)	1330-20-7	4	V	529304.04	607775.5	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	2-BUTANONE	78-93-3	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	2-HEXANONE	591-78-6	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	ACETONE	67-64-1	0.019	B	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	BENZENE	71-43-2	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	BROMOFORM	75-25-2	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	BROMOMETHANE	74-83-9	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CARBON DISULFIDE	75-15-0	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CHLOROBENZENE	108-90-7	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CHLOROETHANE	75-00-3	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CHLOROFORM	67-66-3	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CHLOROMETHANE	74-87-3	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.009	V	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	ETHYLBENZENE	100-41-4	0.001	J	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	METHYLENE CHLORIDE	75-09-2	0.006	B	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	PETROLEUM HYDROCARBON	111-11-25	15.2	V	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	STYRENE	100-42-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	TOLUENE	108-88-3	0.004	J	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	TRICHLOROETHYLENE	79-01-6	0.032	V	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	VINYL CHLORIDE	75-01-4	0.011	U	529319.92	607786.91	Weston, 2002a
PE-W06	Remediation Wall Excavation	1/20/1998	Soil	7.5	8	0	XYLENES (TOTAL)	1330-20-7	0.013	V	529319.92	607786.91	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,1,1-TRICHLOROETHANE	71-55-6	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,1,2-TRICHLOROETHANE	79-00-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,1-DICHLOROETHANE	75-34-3	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,1-DICHLOROETHENE	75-35-4	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,2-DICHLOROETHANE	107-06-2	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	1,2-DICHLOROPROPANE	78-87-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	2-BUTANONE	78-93-3	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	2-HEXANONE	591-78-6	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	4-METHYL-2-PENTANONE	108-10-1	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	ACETONE	67-64-1	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	BENZENE	71-43-2	1.9	BJ	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	BROMODICHLOROMETHANE	75-27-4	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	BROMOFORM	75-25-2	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	BROMOMETHANE	74-83-9	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CARBON DISULFIDE	75-15-0	7.3	U	529322.4	607760.83	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CARBON TETRACHLORIDE	56-23-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CHLOROBENZENE	108-90-7	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CHLOROETHANE	75-00-3	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CHLOROFORM	67-66-3	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CHLOROMETHANE	74-87-3	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	DIBROMOCHLOROMETHANE	124-48-1	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	ETHYLBENZENE	100-41-4	3.6	J	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	METHYLENE CHLORIDE	75-09-2	9.9	B	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	PETROLEUM HYDROCARBON	111-11-25	3860	V	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	STYRENE	100-42-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	TETRACHLOROETHYLENE	127-18-4	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	TOLUENE	108-88-3	8.4	V	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	7.3	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	TRICHLOROETHYLENE	79-01-6	100	V	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	VINYL CHLORIDE	75-01-4	15	U	529322.4	607760.83	Weston, 2002a
PE-W09	Remediation Floor Excavation	1/21/1998	Soil	9	9.5	0	XYLENES (TOTAL)	1330-20-7	18	V	529322.4	607760.83	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1-DICHLOROETHANE	75-34-3	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1-DICHLOROETHENE	75-35-4	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,2-DICHLOROETHANE	107-06-2	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,2-DICHLOROPROPANE	78-87-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	2-BUTANONE	78-93-3	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	2-HEXANONE	591-78-6	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	4-METHYL-2-PENTANONE	108-10-1	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ACETONE	67-64-1	0.059	BJ	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ANTIMONY, TOTAL	7440-36-0	0.33	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ARSENIC, TOTAL	7440-38-2	1.1	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BENZENE	71-43-2	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BERYLLIUM, TOTAL	7440-41-7	0.10	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMODICHLOROMETHANE	75-27-4	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMOFORM	75-25-2	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMOMETHANE	74-83-9	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CADMIUM, TOTAL	7440-43-9	0.060	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CARBON DISULFIDE	75-15-0	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CARBON TETRACHLORIDE	56-23-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROBENZENE	108-90-7	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROETHANE	75-00-3	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROFORM	67-66-3	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROMETHANE	74-87-3	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHROMIUM, TOTAL	7440-47-3	5.7	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	COPPER, TOTAL	7440-50-8	7.6	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ETHYLBENZENE	100-41-4	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	LEAD, TOTAL	7439-92-1	5.4	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	MERCURY, TOTAL	7439-97-6	0.02	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	METHYLENE CHLORIDE	75-09-2	0.062	BJ	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	NICKEL, TOTAL	7440-02-0	0.75	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	PETROLEUM HYDROCARBON	111-11-25	76.9	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	SELENIUM, TOTAL	7782-49-2	0.44	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	SILVER, TOTAL	7440-22-4	0.12	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	STYRENE	100-42-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TETRACHLOROETHYLENE	127-18-4	0.035	J	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	THALLIUM, TOTAL	7440-28-0	0.62	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TOLUENE	108-88-3	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.062	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRICHLOROETHYLENE	79-01-6	0.16	V	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	VINYL CHLORIDE	75-01-4	0.062	U	529315.93	607748.06	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	XYLENES (TOTAL)	1330-20-7	0.186	U	529315.93	607748.06	Weston, 2002a
PE-W10	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ZINC, TOTAL	7440-66-6	6.8	V	529315.93	607748.06	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1-DICHLOROETHANE	75-34-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,1-DICHLOROETHENE	75-35-4	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,2-DICHLOROETHANE	107-06-2	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	1,2-DICHLOROPROPANE	78-87-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	2-BUTANONE	78-93-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	2-HEXANONE	591-78-6	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	4-METHYL-2-PENTANONE	108-10-1	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ACETONE	67-64-1	0.004	BJ	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ANTIMONY, TOTAL	7440-36-0	0.31	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ARSENIC, TOTAL	7440-38-2	2	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BENZENE	71-43-2	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BERYLLIUM, TOTAL	7440-41-7	0.19	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMODICHLOROMETHANE	75-27-4	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMOFORM	75-25-2	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	BROMOMETHANE	74-83-9	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CADMIUM, TOTAL	7440-43-9	0.050	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CARBON DISULFIDE	75-15-0	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CARBON TETRACHLORIDE	56-23-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROBENZENE	108-90-7	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROETHANE	75-00-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROFORM	67-66-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHLOROMETHANE	74-87-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CHROMIUM, TOTAL	7440-47-3	11.4	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	COPPER, TOTAL	7440-50-8	7	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ETHYLBENZENE	100-41-4	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	LEAD, TOTAL	7439-92-1	3.1	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	MERCURY, TOTAL	7439-97-6	0.01	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	METHYLENE CHLORIDE	75-09-2	0.005	BJ	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	NICKEL, TOTAL	7440-02-0	0.96	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	PETROLEUM HYDROCARBON	111-11-25	3.6	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	SELENIUM, TOTAL	7782-49-2	0.5	V	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	SILVER, TOTAL	7440-22-4	0.11	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	STYRENE	100-42-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TETRACHLOROETHYLENE	127-18-4	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	THALLIUM, TOTAL	7440-28-0	0.57	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TOLUENE	108-88-3	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	TRICHLOROETHYLENE	79-01-6	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	VINYL CHLORIDE	75-01-4	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	XYLENES (TOTAL)	1330-20-7	0.012	U	529335.29	607761.14	Weston, 2002a
PE-W11	Remediation Wall Excavation	6/25/1998	Soil	9	9.5	0	ZINC, TOTAL	7440-66-6	12.4	V	529335.29	607761.14	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,1,1-TRICHLOROETHANE	71-55-6	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,1,2-TRICHLOROETHANE	79-00-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,1-DICHLOROETHANE	75-34-3	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,1-DICHLOROETHENE	75-35-4	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,2-DICHLOROETHANE	107-06-2	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	1,2-DICHLOROPROPANE	78-87-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	2-BUTANONE	78-93-3	0.94	J	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	2-HEXANONE	591-78-6	6.3	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	4-METHYL-2-PENTANONE	108-10-1	6.3	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	ACETONE	67-64-1	2.4	BJ	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	ANTIMONY, TOTAL	7440-36-0	0.71	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	ARSENIC, TOTAL	7440-38-2	0.98	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	BENZENE	71-43-2	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	BERYLLIUM, TOTAL	7440-41-7	0.050	V	529320.03	607737.68	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	BROMODICHLOROMETHANE	75-27-4	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	BROMOFORM	75-25-2	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	BROMOMETHANE	74-83-9	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CADMIUM, TOTAL	7440-43-9	0.51	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CARBON DISULFIDE	75-15-0	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CARBON TETRACHLORIDE	56-23-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CHLOROBENZENE	108-90-7	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CHLOROETHANE	75-00-3	6.3	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CHLOROFORM	67-66-3	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CHLOROMETHANE	74-87-3	6.3	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CHROMIUM, TOTAL	7440-47-3	3.8	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CIS-1,2-DICHLOROETHENE	156-59-2	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	COPPER, TOTAL	7440-50-8	4.4	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	DIBROMOCHLOROMETHANE	124-48-1	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	ETHYLBENZENE	100-41-4	1.5	J	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	LEAD, TOTAL	7439-92-1	14.6	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	MERCURY, TOTAL	7439-97-6	0.02	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	METHYLENE CHLORIDE	75-09-2	0.78	BJ	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	NICKEL, TOTAL	7440-02-0	0.44	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	PETROLEUM HYDROCARBON	111-11-25	3640	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	SELENIUM, TOTAL	7782-49-2	0.42	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	SILVER, TOTAL	7440-22-4	0.12	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	STYRENE	100-42-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	TETRACHLOROETHYLENE	127-18-4	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	THALLIUM, TOTAL	7440-28-0	0.85	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	TOLUENE	108-88-3	6	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	TRANS-1,2-DICHLOROETHENE	156-60-5	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	3.1	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	TRICHLOROETHYLENE	79-01-6	120	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	VINYL CHLORIDE	75-01-4	6.3	U	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	XYLENES (TOTAL)	1330-20-7	7	V	529320.03	607737.68	Weston, 2002a
PE-W12	Remediation Wall Excavation	7/7/1998	Soil	8.5	9	0	ZINC, TOTAL	7440-66-6	6.4	V	529320.03	607737.68	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	2-BUTANONE	78-93-3	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	2-HEXANONE	591-78-6	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	ACETONE	67-64-1	0.004	BJ	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	BENZENE	71-43-2	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	BROMOFORM	75-25-2	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	BROMOMETHANE	74-83-9	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CARBON DISULFIDE	75-15-0	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CHLOROBENZENE	108-90-7	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CHLOROETHANE	75-00-3	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CHLOROFORM	67-66-3	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CHLOROMETHANE	74-87-3	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	ETHYLBENZENE	100-41-4	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	METHYLENE CHLORIDE	75-09-2	0.009	B	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	PETROLEUM HYDROCARBON	111-11-25	53.3	V	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	STYRENE	100-42-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	TOLUENE	108-88-3	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	529342.52	607720.4	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	TRICHLOROETHYLENE	79-01-6	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	VINYL CHLORIDE	75-01-4	0.011	U	529342.52	607720.4	Weston, 2002a
PE-W14	Remediation Wall Excavation	7/9/1998	Soil	5	5.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	529342.52	607720.4	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	2-BUTANONE	78-93-3	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	2-HEXANONE	591-78-6	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	4-METHYL-2-PENTANONE	108-10-1	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	ACETONE	67-64-1	0.003	JB	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	BENZENE	71-43-2	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	BROMOFORM	75-25-2	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	BROMOMETHANE	74-83-9	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CARBON DISULFIDE	75-15-0	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CHLOROBENZENE	108-90-7	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CHLOROETHANE	75-00-3	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CHLOROFORM	67-66-3	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CHLOROMETHANE	74-87-3	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	ETHYLBENZENE	100-41-4	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	METHYLENE CHLORIDE	75-09-2	0.009	B	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	PETROLEUM HYDROCARBON	111-11-25	27.9	V	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	STYRENE	100-42-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	TOLUENE	108-88-3	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	TRICHLOROETHYLENE	79-01-6	0.005	J	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	VINYL CHLORIDE	75-01-4	0.012	U	529362.74	607739.95	Weston, 2002a
PE-W15	Remediation Wall Excavation	7/9/1998	Soil	4	4.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	529362.74	607739.95	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,1-DICHLOROETHANE	75-34-3	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,1-DICHLOROETHENE	75-35-4	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,2-DICHLOROETHANE	107-06-2	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	1,2-DICHLOROPROPANE	78-87-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	2-BUTANONE	78-93-3	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	2-HEXANONE	591-78-6	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	4-METHYL-2-PENTANONE	108-10-1	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	ACETONE	67-64-1	0.28	JB	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	BENZENE	71-43-2	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	BROMODICHLOROMETHANE	75-27-4	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	BROMOFORM	75-25-2	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	BROMOMETHANE	74-83-9	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CARBON DISULFIDE	75-15-0	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CARBON TETRACHLORIDE	56-23-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CHLOROBENZENE	108-90-7	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CHLOROETHANE	75-00-3	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CHLOROFORM	67-66-3	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CHLOROMETHANE	74-87-3	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	ETHYLBENZENE	100-41-4	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	METHYLENE CHLORIDE	75-09-2	0.41	JB	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	PETROLEUM HYDROCARBON	111-11-25	277	V	529337.86	607748.58	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	STYRENE	100-42-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	TETRACHLOROETHYLENE	127-18-4	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	TOLUENE	108-88-3	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	TRICHLOROETHYLENE	79-01-6	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	VINYL CHLORIDE	75-01-4	1.4	U	529337.86	607748.58	Weston, 2002a
PE-W16	Remediation Wall Excavation	7/9/1998	Soil	9	9.5	0	XYLENES (TOTAL)	1330-20-7	0.71	U	529337.86	607748.58	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,1,1-TRICHLOROETHANE	71-55-6	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,1,2-TRICHLOROETHANE	79-00-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,1-DICHLOROETHANE	75-34-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,1-DICHLOROETHENE	75-35-4	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,2-DICHLOROETHANE	107-06-2	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	1,2-DICHLOROPROPANE	78-87-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	2-BUTANONE	78-93-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	2-HEXANONE	591-78-6	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	4-METHYL-2-PENTANONE	108-10-1	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	ACETONE	67-64-1	0.004	BJ	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	BENZENE	71-43-2	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	BROMODICHLOROMETHANE	75-27-4	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	BROMOFORM	75-25-2	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	BROMOMETHANE	74-83-9	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CARBON DISULFIDE	75-15-0	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CARBON TETRACHLORIDE	56-23-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CHLOROBENZENE	108-90-7	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CHLOROETHANE	75-00-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CHLOROFORM	67-66-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CHLOROMETHANE	74-87-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CIS-1,2-DICHLOROETHENE	156-59-2	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	DIBROMOCHLOROMETHANE	124-48-1	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	ETHYLBENZENE	100-41-4	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	METHYLENE CHLORIDE	75-09-2	0.006	B	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	STYRENE	100-42-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	TETRACHLOROETHYLENE	127-18-4	0.008	V	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	TOLUENE	108-88-3	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	TRANS-1,2-DICHLOROETHENE	156-60-5	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	TRICHLOROETHYLENE	79-01-6	0.47	V	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	VINYL CHLORIDE	75-01-4	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W300	Remediation Floor Excavation	6/25/1998	Soil	9	9.5	1	XYLENES (TOTAL)	1330-20-7	0.012	U	529315.93	607748.06	Weston, 2002a
PE-W301	Remediation Floor Excavation	7/7/1998	Soil	8.5	9	1	PETROLEUM HYDROCARBON	111-11-25	2540	V	529320.03	607737.68	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.04	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.002	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4,5-TRICHLOROPHENOL	95-95-4	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4-DICHLOROPHENOL	120-83-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4-DIMETHYLPHENOL	105-67-9	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4-DINITROPHENOL	51-28-5	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-BUTANONE	78-93-3	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-CHLORONAPHTHALENE	91-58-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-CHLOROPHENOL	95-57-8	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-HEXANONE	591-78-6	0.01	U	529392.21	607441.41	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-METHYLNAPHTHALENE	91-57-6	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-NITROANILINE	88-74-4	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	2-NITROPHENOL	88-75-5	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	3,3'-DICHLOROBENZIDINE	91-94-1	1.4	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	3-NITROANILINE	99-09-2	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-CHLOROANILINE	106-47-8	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-METHYL-2-PENTANONE	108-10-1	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-METHYLPHENOL	106-44-5	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-NITROANILINE	100-01-6	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	4-NITROPHENOL	100-02-7	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ACENAPHTHENE	83-32-9	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ACENAPHTHYLENE	208-96-8	0.26	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ACETONE	67-64-1	0.017	B	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ANTHRACENE	120-12-7	0.4	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZENE	71-43-2	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZO(A)ANTHRACENE	56-55-3	1.2	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZO(A)PYRENE	50-32-8	1.6	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZO(B)FLUORANTHENE	205-99-2	1.4	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZO(G,H,I)PERYLENE	191-24-2	1.4	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZO(K)FLUORANTHENE	207-08-9	1.4	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZOIC ACID	65-85-0	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BENZYL ALCOHOL	100-51-6	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1.3	B	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BROMOFORM	75-25-2	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CARBAZOLE	86-74-8	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CARBON DISULFIDE	75-15-0	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CHRYSENE	218-01-9	1.5	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.47	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DIBENZOFURAN	132-64-9	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DIETHYL PHTHALATE	84-66-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DIMETHYL PHTHALATE	131-11-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	FLUORANTHENE	206-44-0	2.1	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	FLUORENE	86-73-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	HEXACHLOROBENZENE	118-74-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	HEXACHLOROBUTADIENE	87-68-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	HEXACHLOROETHANE	67-72-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	1.1	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	ISOPHORONE	78-59-1	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.022	B	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	NAPHTHALENE	91-20-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	NITROBENZENE (BNA)	98-95-3	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.72	U	529392.21	607441.41	Weston, 2002a

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	PENTACHLOROPHENOL	87-86-5	3.6	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	PETROLEUM HYDROCARBON	111-11-25	230	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	PHENANTHRENE	85-01-8	0.71	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	PHENOL	108-95-2	0.72	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	PYRENE	129-00-0	2.1	V	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	STYRENE	100-42-5	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	TOLUENE	108-88-3	0.001	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.005	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.001	J	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.01	U	529392.21	607441.41	Weston, 2002a
SA-W-01	Soil Sample	11/6/1997	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.005	U	529392.21	607441.41	Weston, 2002a
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	ALUMINUM, TOTAL	7429-90-5	7320	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.25	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	0.96	J-	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	21.8	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.66	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.28	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	CALCIUM, TOTAL	7440-70-2	310	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	19.8	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	COBALT, TOTAL	7440-48-4	8	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	13.8	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	CYANIDE, TOTAL	57-12-5	0.54	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	IRON, TOTAL	7439-89-6	24200	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	5.8	J-	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	MAGNESIUM, TOTAL	7439-95-4	715	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	MANGANESE, TOTAL	7439-96-5	90.3	J	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.05	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	9.5	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	POTASSIUM, TOTAL	7440-09-7	591	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.55	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	SODIUM, TOTAL	7440-23-5	31	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.24	U	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	VANADIUM, TOTAL	7440-62-2	11.6	V	528784.61	609763.467	Weston, 1996b
SS-11801A	Soil Sample	4/11/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	30	U	528784.61	609763.467	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	ANTIMONY, TOTAL	7440-36-0	0.23	U	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	ARSENIC, TOTAL	7440-38-2	0.26	J-	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	BARIUM, TOTAL	7440-39-3	14.4	V	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	BERYLLIUM, TOTAL	7440-41-7	0.70	V	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	CADMIUM, TOTAL	7440-43-9	0.26	U	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	CHROMIUM, TOTAL	7440-47-3	12.1	J	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	COPPER, TOTAL	7440-50-8	9.5	V	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	LEAD, TOTAL	7439-92-1	2.5	J	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	MERCURY, TOTAL	7439-97-6	0.053	U	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	NICKEL, TOTAL	7440-02-0	7.5	J	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	SELENIUM, TOTAL	7782-49-2	0.26	UJ	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	SILVER, TOTAL	7440-22-4	0.80	V	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	THALLIUM, TOTAL	7440-28-0	0.22	UJ	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	TOTAL ORGANIC CARBON	7440-44-0	250	J	528849.256	609748.293	Weston, 1996b
SS-11802A	Soil Sample	4/18/1994	Soil	5.5	6	0	ZINC, TOTAL	7440-66-6	21.2	V	528849.256	609748.293	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.24	U	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	1.4	J-	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	20.7	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.59	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.54	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	14.4	J	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	11.5	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	4.2	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.055	U	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	7.8	V	528949.216	609886.728	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.92	V	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.38	J-	528949.216	609886.728	Weston, 1996b
SS-11803A	Soil Sample	4/12/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	26.3	U	528949.216	609886.728	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.33	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	2.5	J-	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	43.4	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.52	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.30	U	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	13.3	J	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	7.4	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	12.2	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.059	U	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	5.8	V	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.48	U	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.24	UJ	528852.878	609878.741	Weston, 1996b
SS-11804A	Soil Sample	4/11/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	28.2	U	528852.878	609878.741	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	ANTIMONY, TOTAL	7440-36-0	0.98	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	ARSENIC, TOTAL	7440-38-2	2.6	J-	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	BARIUM, TOTAL	7440-39-3	35	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	BERYLLIUM, TOTAL	7440-41-7	0.49	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	CADMIUM, TOTAL	7440-43-9	0.53	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	CHROMIUM, TOTAL	7440-47-3	11.3	J	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	COPPER, TOTAL	7440-50-8	78.5	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	LEAD, TOTAL	7439-92-1	57.1	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	MERCURY, TOTAL	7439-97-6	0.057	U	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	NICKEL, TOTAL	7440-02-0	6.2	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	SELENIUM, TOTAL	7782-49-2	0.29	UJ	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	SILVER, TOTAL	7440-22-4	0.57	V	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	THALLIUM, TOTAL	7440-28-0	0.49	J-	528792.354	609806.114	Weston, 1996b
SS-11805A	Soil Sample	4/12/1994	Soil	5	5.5	0	ZINC, TOTAL	7440-66-6	74.4	J	528792.354	609806.114	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	ANTIMONY, TOTAL	7440-36-0	0.56	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	ARSENIC, TOTAL	7440-38-2	1.3	J-	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	BARIUM, TOTAL	7440-39-3	29.7	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	BERYLLIUM, TOTAL	7440-41-7	0.48	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	CADMIUM, TOTAL	7440-43-9	0.42	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	CHROMIUM, TOTAL	7440-47-3	15.2	J	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	COPPER, TOTAL	7440-50-8	10.9	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	LEAD, TOTAL	7439-92-1	5.8	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	MERCURY, TOTAL	7439-97-6	0.057	U	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	NICKEL, TOTAL	7440-02-0	5.9	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	SILVER, TOTAL	7440-22-4	0.64	V	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	THALLIUM, TOTAL	7440-28-0	0.24	UJ	528834.435	609768.202	Weston, 1996b
SS-11806A	Soil Sample	4/12/1994	Soil	5.4	6	0	ZINC, TOTAL	7440-66-6	30.8	J	528834.435	609768.202	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	ALUMINUM, TOTAL	7429-90-5	4120	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	ANTIMONY, TOTAL	7440-36-0	0.22	U	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	ARSENIC, TOTAL	7440-38-2	0.64	J-	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	BARIUM, TOTAL	7440-39-3	10.9	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	BERYLLIUM, TOTAL	7440-41-7	0.56	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	CADMIUM, TOTAL	7440-43-9	0.25	UJ	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	CALCIUM, TOTAL	7440-70-2	299	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	CHROMIUM, TOTAL	7440-47-3	11.4	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	COBALT, TOTAL	7440-48-4	5.1	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	COPPER, TOTAL	7440-50-8	9.6	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	CYANIDE, TOTAL	57-12-5	0.5	U	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	IRON, TOTAL	7439-89-6	19700	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	LEAD, TOTAL	7439-92-1	1.9	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	MAGNESIUM, TOTAL	7439-95-4	344	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	MANGANESE, TOTAL	7439-96-5	58.1	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	MERCURY, TOTAL	7439-97-6	0.051	U	528853.953	609842.52	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	NICKEL, TOTAL	7440-02-0	3.7	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	POTASSIUM, TOTAL	7440-09-7	406	V	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	SELENIUM, TOTAL	7782-49-2	0.25	UJ	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	SILVER, TOTAL	7440-22-4	0.39	U	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	SODIUM, TOTAL	7440-23-5	35.1	U	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	THALLIUM, TOTAL	7440-28-0	0.21	U	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	TOTAL ORGANIC CARBON	7440-44-0	618	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	VANADIUM, TOTAL	7440-62-2	10.2	J	528853.953	609842.52	Weston, 1996b
SS-11807A	Soil Sample	4/15/1994	Soil	5.5	6	0	ZINC, TOTAL	7440-66-6	16.4	U	528853.953	609842.52	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	ANTIMONY, TOTAL	7440-36-0	0.5	U	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	ARSENIC, TOTAL	7440-38-2	0.46	J-	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	BARIUM, TOTAL	7440-39-3	15.2	V	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	BERYLLIUM, TOTAL	7440-41-7	0.88	V	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	CADMIUM, TOTAL	7440-43-9	0.28	U	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	CHROMIUM, TOTAL	7440-47-3	16.1	J	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	COPPER, TOTAL	7440-50-8	10	V	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	LEAD, TOTAL	7439-92-1	1.7	J	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	MERCURY, TOTAL	7439-97-6	0.05	U	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	NICKEL, TOTAL	7440-02-0	7.3	J	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	SILVER, TOTAL	7440-22-4	0.95	V	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	THALLIUM, TOTAL	7440-28-0	0.23	UJ	528883.769	609806.363	Weston, 1996b
SS-11808A	Soil Sample	4/18/1994	Soil	6.5	7	0	ZINC, TOTAL	7440-66-6	24.8	V	528883.769	609806.363	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	1,3,5-TRINITROBENZENE	99-35-4	0.24	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	1,3-DINITROBENZENE	99-65-0	0.24	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	2,4,6-TRINITROTOLUENE	118-96-7	0.24	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.24	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.25	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	AMINO-DNT'S	1946-51-0	0.24	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	ANTIMONY, TOTAL	7440-36-0	0.43	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	ARSENIC, TOTAL	7440-38-2	0.97	J-	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	BARIUM, TOTAL	7440-39-3	19.1	V	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	BERYLLIUM, TOTAL	7440-41-7	0.91	V	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	CADMIUM, TOTAL	7440-43-9	0.28	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	CHROMIUM, TOTAL	7440-47-3	18	J	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	COPPER, TOTAL	7440-50-8	13.7	V	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	HMX	2691-41-0	2.1	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	LEAD, TOTAL	7439-92-1	2.2	J	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	MERCURY, TOTAL	7439-97-6	0.056	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	NICKEL, TOTAL	7440-02-0	6.7	J	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	NITROBENZENE (VOC)	98-95-3	0.25	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	RDX	121-82-4	1	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	SILVER, TOTAL	7440-22-4	0.97	V	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	TETRYL	479-45-8	0.73	U	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	THALLIUM, TOTAL	7440-28-0	0.23	UJ	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	TOTAL ORGANIC CARBON	7440-44-0	426	J	528885.758	609864.148	Weston, 1996b
SS-11809A	Soil Sample	4/18/1994	Soil	5.5	6	0	ZINC, TOTAL	7440-66-6	26.3	V	528885.758	609864.148	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	ALUMINUM, TOTAL	7429-90-5	6100	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	ANTIMONY, TOTAL	7440-36-0	0.24	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	ARSENIC, TOTAL	7440-38-2	0.82	J-	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	BARIUM, TOTAL	7440-39-3	17.4	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	BERYLLIUM, TOTAL	7440-41-7	0.72	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	CADMIUM, TOTAL	7440-43-9	0.27	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	CALCIUM, TOTAL	7440-70-2	193	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	CHROMIUM, TOTAL	7440-47-3	15.7	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	COBALT, TOTAL	7440-48-4	7.5	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	COPPER, TOTAL	7440-50-8	9.4	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	CYANIDE, TOTAL	57-12-5	0.54	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	IRON, TOTAL	7439-89-6	19300	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	LEAD, TOTAL	7439-92-1	3	J-	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	MAGNESIUM, TOTAL	7439-95-4	557	V	528925.188	609832.907	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	MANGANESE, TOTAL	7439-96-5	124	J	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	MERCURY, TOTAL	7439-97-6	0.05	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	NICKEL, TOTAL	7440-02-0	7.1	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	POTASSIUM, TOTAL	7440-09-7	504	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	SELENIUM, TOTAL	7782-49-2	0.27	UJ	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	SILVER, TOTAL	7440-22-4	0.42	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	SODIUM, TOTAL	7440-23-5	59.9	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	THALLIUM, TOTAL	7440-28-0	0.23	U	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	VANADIUM, TOTAL	7440-62-2	9.6	V	528925.188	609832.907	Weston, 1996b
SS-11810A	Soil Sample	4/12/1994	Soil	6	6.5	0	ZINC, TOTAL	7440-66-6	23.6	V	528925.188	609832.907	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DICHLOROPHENOL	120-83-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DIMETHYLPHENOL	105-67-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DINITROPHENOL	51-28-5	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-BUTANONE	78-93-3	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-CHLORONAPHTHALENE	91-58-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-CHLOROPHENOL	95-57-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-HEXANONE	591-78-6	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-METHYLNAPHTHALENE	91-57-6	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-NITROANILINE	88-74-4	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-NITROPHENOL	88-75-5	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.72	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	3-NITROANILINE	99-09-2	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDD	72-54-8	0.035	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDE	72-55-9	0.37	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDT	50-29-3	0.73	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLOROANILINE	106-47-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-METHYL-2-PENTANONE	108-10-1	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-METHYLPHENOL	106-44-5	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-NITROANILINE	100-01-6	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-NITROPHENOL	100-02-7	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACENAPHTHENE	83-32-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACENAPHTHYLENE	208-96-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACETONE	67-64-1	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALDRIN	309-00-2	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALPHA-BHC	319-84-6	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALPHA-CHLORDANE	5103-71-9	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALUMINUM, TOTAL	7429-90-5	6520	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ANTHRACENE	120-12-7	0.13	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ANTIMONY, TOTAL	7440-36-0	0.77	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1016	12674-11-2	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1221	11104-28-2	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1232	11141-16-5	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1242	53469-21-9	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1248	12672-29-6	0.045	U	528824.027	609810.756	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1254	11097-69-1	0.09	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1260	11096-82-5	0.09	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ARSENIC, TOTAL	7440-38-2	2.3	J-	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BARIUM, TOTAL	7440-39-3	34.7	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZENE	71-43-2	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(A)ANTHRACENE	56-55-3	0.2	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(A)PYRENE	50-32-8	0.18	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(B)FLUORANTHENE	205-99-2	0.16	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.059	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(K)FLUORANTHENE	207-08-9	0.18	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BERYLLIUM, TOTAL	7440-41-7	0.63	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BETA-BHC	319-85-7	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMOFORM	75-25-2	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CADMIUM, TOTAL	7440-43-9	0.29	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CALCIUM, TOTAL	7440-70-2	944	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBAZOLE	86-74-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBON DISULFIDE	75-15-0	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHROMIUM, TOTAL	7440-47-3	17.6	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHRYSENE	218-01-9	0.22	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	COBALT, TOTAL	7440-48-4	5.4	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	COPPER, TOTAL	7440-50-8	57.5	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DELTA-BHC	319-86-8	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBENZOFURAN	132-64-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIELDRIN	60-57-1	0.029	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIETHYL PHTHALATE	84-66-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIMETHYL PHTHALATE	131-11-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN I	959-98-8	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN II	33213-65-9	0.009	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN SULFATE	1031-07-8	0.009	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN	72-20-8	0.009	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN ALDEHYDE	7421-93-4	0.009	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN KETONE	53494-70-5	0.009	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	FLUORANTHENE	206-44-0	0.44	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	FLUORENE	86-73-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	GAMMA BHC (LINDANE)	58-89-9	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	GAMMA-CHLORDANE	5103-74-2	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEPTACHLOR	76-44-8	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEPTACHLOR EPOXIDE	1024-57-3	0.0045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROBENZENE	118-74-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROBUTADIENE	87-68-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROETHANE	67-72-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.064	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	IRON, TOTAL	7439-89-6	17000	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ISOPHORONE	78-59-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	LEAD, TOTAL	7439-92-1	54.1	J-	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	MAGNESIUM, TOTAL	7439-95-4	947	V	528824.027	609810.756	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	MANGANESE, TOTAL	7439-96-5	168	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	MERCURY, TOTAL	7439-97-6	0.062	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	METHOXYCHLOR	72-43-5	0.045	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.023	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	NAPHTHALENE	91-20-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	NICKEL, TOTAL	7440-02-0	6.5	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	NITROBENZENE (BNA)	98-95-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	PENTACHLOROPHENOL	87-86-5	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	PHENANTHRENE	85-01-8	0.43	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	PHENOL	108-95-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	POTASSIUM, TOTAL	7440-09-7	400	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	PYRENE	129-00-0	0.35	J	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	SELENIUM, TOTAL	7782-49-2	0.28	UJ	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	SILVER, TOTAL	7440-22-4	0.45	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	SODIUM, TOTAL	7440-23-5	44.3	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	STYRENE	100-42-5	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	THALLIUM, TOTAL	7440-28-0	0.24	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOLUENE	108-88-3	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOXAPHENE	8001-35-2	0.09	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	VANADIUM, TOTAL	7440-62-2	26.1	V	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.012	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	528824.027	609810.756	Weston, 1996b
SS-11811A	Soil Sample	4/12/1994	Soil	0	0.5	0	ZINC, TOTAL	7440-66-6	72.1	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,1-TRICHLOROETHANE	71-55-6	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,2-TRICHLOROETHANE	79-00-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1-DICHLOROETHANE	75-34-3	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1-DICHLOROETHENE	75-35-4	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROETHANE	107-06-2	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROPROPANE	78-87-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DICHLOROPHENOL	120-83-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DIMETHYLPHENOL	105-67-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DINITROPHENOL	51-28-5	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-BUTANONE	78-93-3	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-CHLORONAPHTHALENE	91-58-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-CHLOROPHENOL	95-57-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-HEXANONE	591-78-6	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-METHYLNAPHTHALENE	91-57-6	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-NITROANILINE	88-74-4	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-NITROPHENOL	88-75-5	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.72	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	3-NITROANILINE	99-09-2	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDD	72-54-8	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDE	72-55-9	0.012	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDT	50-29-3	0.0054	J	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLOROANILINE	106-47-8	0.36	U	528824.027	609810.756	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-METHYL-2-PENTANONE	108-10-1	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-METHYLPHENOL	106-44-5	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-NITROANILINE	100-01-6	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-NITROPHENOL	100-02-7	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACENAPHTHENE	83-32-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACENAPHTHYLENE	208-96-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACETONE	67-64-1	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALDRIN	309-00-2	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALPHA-BHC	319-84-6	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALPHA-CHLORDANE	5103-71-9	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ANTHRACENE	120-12-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.35	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1016	12674-11-2	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1221	11104-28-2	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1232	11141-16-5	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1242	53469-21-9	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1248	12672-29-6	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1254	11097-69-1	0.081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1260	11096-82-5	0.081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	1.8	J-	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	14.7	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZENE	71-43-2	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(A)ANTHRACENE	56-55-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(A)PYRENE	50-32-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(B)FLUORANTHENE	205-99-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(G,H,I)PERYLENE	191-24-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(K)FLUORANTHENE	207-08-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.25	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BETA-BHC	319-85-7	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMODICHLOROMETHANE	75-27-4	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMOFORM	75-25-2	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMOMETHANE	74-83-9	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	BUTYLBENZYLPHTHALATE	85-68-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.29	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBAZOLE	86-74-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBON DISULFIDE	75-15-0	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBON TETRACHLORIDE	56-23-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROBENZENE	108-90-7	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROETHANE	75-00-3	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROFORM	67-66-3	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROMETHANE	74-87-3	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	9.2	J	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHRYSENE	218-01-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	12.7	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DELTA-BHC	319-86-8	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBENZOFURAN	132-64-9	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBROMOCHLOROMETHANE	124-48-1	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIELDRIN	60-57-1	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIETHYL PHTHALATE	84-66-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIMETHYL PHTHALATE	131-11-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DI-N-BUTYL PHTHALATE	84-74-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	DI-N-OCTYL PHTHALATE	117-84-0	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN I	959-98-8	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN II	33213-65-9	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN SULFATE	1031-07-8	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN	72-20-8	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN ALDEHYDE	7421-93-4	0.0081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN KETONE	53494-70-5	0.0081	U	528824.027	609810.756	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ETHYLBENZENE	100-41-4	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	FLUORANTHENE	206-44-0	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	FLUORENE	86-73-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	GAMMA BHC (LINDANE)	58-89-9	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	GAMMA-CHLORDANE	5103-74-2	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEPTACHLOR	76-44-8	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEPTACHLOR EPOXIDE	1024-57-3	0.004	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROBENZENE	118-74-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROBUTADIENE	87-68-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROETHANE	67-72-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ISOPHORONE	78-59-1	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	5.7	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.05	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	METHOXYCHLOR	72-43-5	0.04	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	METHYLENE CHLORIDE	75-09-2	0.033	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	NAPHTHALENE	91-20-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	2.8	V	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	NITROBENZENE (BNA)	98-95-3	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	N-NITROSODIPHENYLAMINE	86-30-6	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	PENTACHLOROPHENOL	87-86-5	1.8	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	PHENANTHRENE	85-01-8	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	PHENOL	108-95-2	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	PYRENE	129-00-0	0.36	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.27	UJ	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.43	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	STYRENE	100-42-5	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TETRACHLOROETHYLENE	127-18-4	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.23	UJ	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOLUENE	108-88-3	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOXAPHENE	8001-35-2	0.081	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	TRICHLOROETHYLENE	79-01-6	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	VINYL CHLORIDE	75-01-4	0.01	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	XYLENES (TOTAL)	1330-20-7	0.005	U	528824.027	609810.756	Weston, 1996b
SS-11811B	Soil Sample	4/12/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	16.1	U	528824.027	609810.756	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DICHLOROPHENOL	120-83-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DIMETHYLPHENOL	105-67-9	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DINITROPHENOL	51-28-5	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-BUTANONE	78-93-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-CHLORONAPHTHALENE	91-58-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-CHLOROPHENOL	95-57-8	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-HEXANONE	591-78-6	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-METHYLNAPHTHALENE	91-57-6	0.42	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-NITROANILINE	88-74-4	1.8	U	528893.312	609832.327	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	2-NITROPHENOL	88-75-5	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.74	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	3-NITROANILINE	99-09-2	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDD	72-54-8	0.14	J	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDE	72-55-9	0.53	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,4-DDT	50-29-3	0.56	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLOROANILINE	106-47-8	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-METHYLPHENOL	106-44-5	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-NITROANILINE	100-01-6	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	4-NITROPHENOL	100-02-7	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACENAPHTHENE	83-32-9	0.82	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACENAPHTHYLENE	208-96-8	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ACETONE	67-64-1	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALDRIN	309-00-2	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALPHA-BHC	319-84-6	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ALPHA-CHLORDANE	5103-71-9	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ANTHRACENE	120-12-7	1.3	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ANTIMONY, TOTAL	7440-36-0	1	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1016	12674-11-2	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1221	11104-28-2	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1232	11141-16-5	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1242	53469-21-9	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1248	12672-29-6	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1254	11097-69-1	1.7	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	AROCLOR-1260	11096-82-5	1.7	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ARSENIC, TOTAL	7440-38-2	2	J-	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BARIUM, TOTAL	7440-39-3	38.7	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZENE	71-43-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(A)ANTHRACENE	56-55-3	1.8	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(A)PYRENE	50-32-8	1.4	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(B)FLUORANTHENE	205-99-2	1.2	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.67	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BENZO(K)FLUORANTHENE	207-08-9	1.2	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BERYLLIUM, TOTAL	7440-41-7	0.63	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BETA-BHC	319-85-7	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.3	J	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMOFORM	75-25-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BROMOMETHANE	74-83-9	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CADMIUM, TOTAL	7440-43-9	0.64	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBAZOLE	86-74-8	0.69	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBON DISULFIDE	75-15-0	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROBENZENE	108-90-7	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROETHANE	75-00-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROFORM	67-66-3	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHLOROMETHANE	74-87-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHROMIUM, TOTAL	7440-47-3	15.3	J	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CHRYSENE	218-01-9	1.7	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	COPPER, TOTAL	7440-50-8	41.4	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DELTA-BHC	319-86-8	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.32	J	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBENZOFURAN	132-64-9	0.58	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIELDRIN	60-57-1	0.17	U	528893.312	609832.327	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIETHYL PHTHALATE	84-66-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DIMETHYL PHTHALATE	131-11-3	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN I	959-98-8	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN II	33213-65-9	0.17	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDOSULFAN SULFATE	1031-07-8	0.17	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN	72-20-8	0.17	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN ALDEHYDE	7421-93-4	0.17	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ENDRIN KETONE	53494-70-5	0.17	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ETHYLBENZENE	100-41-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	FLUORANTHENE	206-44-0	3.8	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	FLUORENE	86-73-7	0.89	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	GAMMA BHC (LINDANE)	58-89-9	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	GAMMA-CHLORDANE	5103-74-2	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEPTACHLOR	76-44-8	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEPTACHLOR EPOXIDE	1024-57-3	0.085	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROBENZENE	118-74-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROBUTADIENE	87-68-3	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	HEXACHLOROETHANE	67-72-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.71	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ISOPHORONE	78-59-1	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	LEAD, TOTAL	7439-92-1	52.7	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	MERCURY, TOTAL	7439-97-6	0.28	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	METHOXYCHLOR	72-43-5	0.85	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	METHYLENE CHLORIDE	75-09-2	0.018	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	NAPHTHALENE	91-20-3	1.3	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	NICKEL, TOTAL	7440-02-0	13.5	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	NITROBENZENE (BNA)	98-95-3	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	PENTACHLOROPHENOL	87-86-5	1.8	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	PHENANTHRENE	85-01-8	4.8	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	PHENOL	108-95-2	0.37	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	PYRENE	129-00-0	3.3	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	SELENIUM, TOTAL	7782-49-2	0.29	UJ	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	SILVER, TOTAL	7440-22-4	0.75	V	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	STYRENE	100-42-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	THALLIUM, TOTAL	7440-28-0	0.26	J-	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOLUENE	108-88-3	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TOXAPHENE	8001-35-2	1.7	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	TRICHLOROETHYLENE	79-01-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	VINYL CHLORIDE	75-01-4	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812A	Soil Sample	4/12/1994	Soil	0	0.5	0	ZINC, TOTAL	7440-66-6	186	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DICHLOROPHENOL	120-83-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DIMETHYLPHENOL	105-67-9	0.38	U	528893.312	609832.327	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DINITROPHENOL	51-28-5	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-BUTANONE	78-93-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-CHLORONAPHTHALENE	91-58-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-CHLOROPHENOL	95-57-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-HEXANONE	591-78-6	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-METHYLNAPHTHALENE	91-57-6	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-NITROANILINE	88-74-4	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	2-NITROPHENOL	88-75-5	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.75	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	3-NITROANILINE	99-09-2	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDD	72-54-8	0.18	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDE	72-55-9	0.28	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,4-DDT	50-29-3	0.18	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLOROANILINE	106-47-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-METHYLPHENOL	106-44-5	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-NITROANILINE	100-01-6	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	4-NITROPHENOL	100-02-7	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACENAPHTHENE	83-32-9	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACENAPHTHYLENE	208-96-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ACETONE	67-64-1	0.025	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALDRIN	309-00-2	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALPHA-BHC	319-84-6	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ALPHA-CHLORDANE	5103-71-9	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ANTHRACENE	120-12-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.90	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1016	12674-11-2	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1221	11104-28-2	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1232	11141-16-5	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1242	53469-21-9	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1248	12672-29-6	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1254	11097-69-1	2.4	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	AROCLOR-1260	11096-82-5	2.4	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	2.3	J-	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	24.7	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZENE	71-43-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(A)ANTHRACENE	56-55-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(A)PYRENE	50-32-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(B)FLUORANTHENE	205-99-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(G,H,I)PERYLENE	191-24-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BENZO(K)FLUORANTHENE	207-08-9	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.33	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BETA-BHC	319-85-7	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.16	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMOFORM	75-25-2	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BROMOMETHANE	74-83-9	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	BUTYLBENZYLPHTHALATE	85-68-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.79	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBAZOLE	86-74-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBON DISULFIDE	75-15-0	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROBENZENE	108-90-7	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROETHANE	75-00-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROFORM	67-66-3	0.006	U	528893.312	609832.327	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHLOROMETHANE	74-87-3	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	9.4	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CHRYSENE	218-01-9	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	19.6	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DELTA-BHC	319-86-8	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBENZOFURAN	132-64-9	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIELDRIN	60-57-1	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIETHYL PHTHALATE	84-66-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DIMETHYL PHTHALATE	131-11-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DI-N-BUTYL PHTHALATE	84-74-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	DI-N-OCTYL PHTHALATE	117-84-0	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN I	959-98-8	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN II	33213-65-9	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDOSULFAN SULFATE	1031-07-8	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN	72-20-8	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN ALDEHYDE	7421-93-4	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ENDRIN KETONE	53494-70-5	0.24	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ETHYLBENZENE	100-41-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	FLUORANTHENE	206-44-0	0.066	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	FLUORENE	86-73-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	GAMMA BHC (LINDANE)	58-89-9	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	GAMMA-CHLORDANE	5103-74-2	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEPTACHLOR	76-44-8	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEPTACHLOR EPOXIDE	1024-57-3	0.12	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROBENZENE	118-74-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROBUTADIENE	87-68-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	HEXACHLOROETHANE	67-72-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ISOPHORONE	78-59-1	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	33.5	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.20	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	METHOXYCHLOR	72-43-5	1.2	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	METHYLENE CHLORIDE	75-09-2	0.019	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	NAPHTHALENE	91-20-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	5.3	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	NITROBENZENE (BNA)	98-95-3	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	N-NITROSODIPHENYLAMINE	86-30-6	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	PENTACHLOROPHENOL	87-86-5	1.9	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	PHENANTHRENE	85-01-8	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	PHENOL	108-95-2	0.38	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	PYRENE	129-00-0	0.064	J	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.30	UJ	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.51	V	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	STYRENE	100-42-5	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.66	J-	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOLUENE	108-88-3	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TOXAPHENE	8001-35-2	2.4	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	TRICHLOROETHYLENE	79-01-6	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	VINYL CHLORIDE	75-01-4	0.011	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	XYLENES (TOTAL)	1330-20-7	0.006	U	528893.312	609832.327	Weston, 1996b
SS-11812B	Soil Sample	4/12/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	217	J	528893.312	609832.327	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	ANTIMONY, TOTAL	7440-36-0	0.26	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	ARSENIC, TOTAL	7440-38-2	2.6	J-	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	BARIUM, TOTAL	7440-39-3	43.3	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	BERYLLIUM, TOTAL	7440-41-7	0.59	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	CADMIUM, TOTAL	7440-43-9	0.47	V	528852.878	609878.741	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	CHROMIUM, TOTAL	7440-47-3	19.4	J	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	COPPER, TOTAL	7440-50-8	9.8	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	LEAD, TOTAL	7439-92-1	12	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	MERCURY, TOTAL	7439-97-6	0.08	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	NICKEL, TOTAL	7440-02-0	7.4	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	SELENIUM, TOTAL	7782-49-2	0.30	UJ	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	SILVER, TOTAL	7440-22-4	0.60	V	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	THALLIUM, TOTAL	7440-28-0	0.26	UJ	528852.878	609878.741	Weston, 1996b
SS-11813A	Soil Sample	4/11/1994	Soil	2.5	3	1	ZINC, TOTAL	7440-66-6	20.7	U	528852.878	609878.741	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	ALUMINUM, TOTAL	7429-90-5	4620	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	ANTIMONY, TOTAL	7440-36-0	0.23	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	ARSENIC, TOTAL	7440-38-2	0.45	J-	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	BARIUM, TOTAL	7440-39-3	11.9	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	BERYLLIUM, TOTAL	7440-41-7	0.56	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	CADMIUM, TOTAL	7440-43-9	0.26	UJ	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	CALCIUM, TOTAL	7440-70-2	353	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	CHROMIUM, TOTAL	7440-47-3	13.4	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	COBALT, TOTAL	7440-48-4	6.9	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	COPPER, TOTAL	7440-50-8	7.8	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	CYANIDE, TOTAL	57-12-5	0.53	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	IRON, TOTAL	7439-89-6	17900	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	LEAD, TOTAL	7439-92-1	1.4	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	MAGNESIUM, TOTAL	7439-95-4	384	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	MANGANESE, TOTAL	7439-96-5	78.6	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	MERCURY, TOTAL	7439-97-6	0.053	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	NICKEL, TOTAL	7440-02-0	4.6	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	POTASSIUM, TOTAL	7440-09-7	470	V	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	SELENIUM, TOTAL	7782-49-2	0.27	UJ	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	SILVER, TOTAL	7440-22-4	0.42	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	SODIUM, TOTAL	7440-23-5	36.8	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	THALLIUM, TOTAL	7440-28-0	0.23	U	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	VANADIUM, TOTAL	7440-62-2	8.5	J	528853.953	609842.52	Weston, 1996b
SS-11814A	Soil Sample	4/15/1994	Soil	5	5.6	1	ZINC, TOTAL	7440-66-6	16.8	U	528853.953	609842.52	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4-DICHLOROPHENOL	120-83-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4-DIMETHYLPHENOL	105-67-9	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4-DINITROPHENOL	51-28-5	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-BUTANONE	78-93-3	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-CHLORONAPHTHALENE	91-58-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-CHLOROPHENOL	95-57-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-HEXANONE	591-78-6	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-METHYLNAPHTHALENE	91-57-6	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-NITROANILINE	88-74-4	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	2-NITROPHENOL	88-75-5	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.78	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	3-NITROANILINE	99-09-2	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4,4-DDD	72-54-8	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4,4-DDE	72-55-9	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4,4-DDT	50-29-3	0.01	U	528869.303	607410.559	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-CHLOROANILINE	106-47-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-METHYL-2-PENTANONE	108-10-1	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-METHYLPHENOL	106-44-5	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-NITROANILINE	100-01-6	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	4-NITROPHENOL	100-02-7	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ACENAPHTHENE	83-32-9	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ACENAPHTHYLENE	208-96-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ACETONE	67-64-1	0.02	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ALDRIN	309-00-2	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ALPHA-BHC	319-84-6	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ALPHA-CHLORDANE	5103-71-9	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ALUMINUM, TOTAL	7429-90-5	1110	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ANTHRACENE	120-12-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ANTIMONY, TOTAL	7440-36-0	0.27	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1016	12674-11-2	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1221	11104-28-2	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1232	11141-16-5	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1242	53469-21-9	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1248	12672-29-6	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1254	11097-69-1	0.1	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	AROCLOR-1260	11096-82-5	0.1	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ARSENIC, TOTAL	7440-38-2	0.24	UJ	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BARIUM, TOTAL	7440-39-3	2.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZENE	71-43-2	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZO(A)ANTHRACENE	56-55-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZO(A)PYRENE	50-32-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZO(B)FLUORANTHENE	205-99-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BENZO(K)FLUORANTHENE	207-08-9	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BERYLLIUM, TOTAL	7440-41-7	0.24	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BETA-BHC	319-85-7	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BROMOFORM	75-25-2	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BROMOMETHANE	74-83-9	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CADMIUM, TOTAL	7440-43-9	0.61	V	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CALCIUM, TOTAL	7440-70-2	57.7	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CARBAZOLE	86-74-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CARBON DISULFIDE	75-15-0	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHLOROBENZENE	108-90-7	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHLOROETHANE	75-00-3	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHLOROFORM	67-66-3	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHLOROMETHANE	74-87-3	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHROMIUM, TOTAL	7440-47-3	10.6	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHRYSENE	218-01-9	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	COBALT, TOTAL	7440-48-4	1.9	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	COPPER, TOTAL	7440-50-8	26.7	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	CYANIDE, TOTAL	57-12-5	1.1	V	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DELTA-BHC	319-86-8	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIBENZOFURAN	132-64-9	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIELDRIN	60-57-1	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIETHYL PHTHALATE	84-66-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DIMETHYL PHTHALATE	131-11-3	0.39	U	528869.303	607410.559	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDOSULFAN I	959-98-8	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDOSULFAN II	33213-65-9	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDOSULFAN SULFATE	1031-07-8	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDRIN	72-20-8	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDRIN ALDEHYDE	7421-93-4	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ENDRIN KETONE	53494-70-5	0.01	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ETHYLBENZENE	100-41-4	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	FLUORANTHENE	206-44-0	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	FLUORENE	86-73-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	GAMMA BHC (LINDANE)	58-89-9	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	GAMMA-CHLORDANE	5103-74-2	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEPTACHLOR	76-44-8	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEPTACHLOR EPOXIDE	1024-57-3	0.005	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEXACHLOROBENZENE	118-74-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEXACHLOROBUTADIENE	87-68-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	HEXACHLOROETHANE	67-72-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	IRON, TOTAL	7439-89-6	25100	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ISOPHORONE	78-59-1	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	LEAD, TOTAL	7439-92-1	3	J-	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	MAGNESIUM, TOTAL	7439-95-4	39.3	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	MANGANESE, TOTAL	7439-96-5	2.4	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	MERCURY, TOTAL	7439-97-6	0.061	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	METHOXYCHLOR	72-43-5	0.05	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	METHYLENE CHLORIDE	75-09-2	0.034	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	NAPHTHALENE	91-20-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	NICKEL, TOTAL	7440-02-0	1.1	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	NITROBENZENE (BNA)	98-95-3	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	PENTACHLOROPHENOL	87-86-5	1.9	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	PHENANTHRENE	85-01-8	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	PHENOL	108-95-2	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	POTASSIUM, TOTAL	7440-09-7	106	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	PYRENE	129-00-0	0.39	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	SILVER, TOTAL	7440-22-4	0.49	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	SODIUM, TOTAL	7440-23-5	60.1	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	STYRENE	100-42-5	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	THALLIUM, TOTAL	7440-28-0	0.26	UJ	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TOLUENE	108-88-3	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TOXAPHENE	8001-35-2	0.1	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	TRICHLOROETHYLENE	79-01-6	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	VANADIUM, TOTAL	7440-62-2	37.9	J	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	VINYL CHLORIDE	75-01-4	0.012	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	528869.303	607410.559	Weston, 1996b
SS-H01A	Soil Sample	4/13/1994	Soil	3	3.5	0	ZINC, TOTAL	7440-66-6	6.5	U	528869.303	607410.559	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	1,3,5-TRINITROBENZENE	99-35-4	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	1,3-DINITROBENZENE	99-65-0	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE	118-96-7	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	AMINO-DNT'S	1946-51-0	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.77	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	1.2	J-	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	13.3	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.27	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.43	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	8.8	V	528959.507	607485.958	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	11.4	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	HMX	2691-41-0	2.2	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	25.8	J	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.056	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	3	V	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	NITROBENZENE (VOC)	98-95-3	0.25	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	RDX	121-82-4	1.1	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.45	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	TETRYL	479-45-8	0.74	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.24	U	528959.507	607485.958	Weston, 1996b
SS-H02A	Soil Sample	4/13/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	16.8	U	528959.507	607485.958	Weston, 1996b
SS-H03A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528970.388	607395.484	Weston, 1996b
SS-H04A	Soil Sample	4/19/1994	Soil	0	0.5	1	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528970.388	607395.484	Weston, 1996b
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,1,1-TRICHLOROETHANE	71-55-6	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,1,2-TRICHLOROETHANE	79-00-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,1-DICHLOROETHANE	75-34-3	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,1-DICHLOROETHENE	75-35-4	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,2-DICHLOROETHANE	107-06-2	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	1,2-DICHLOROPROPANE	78-87-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	2-BUTANONE	78-93-3	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	2-HEXANONE	591-78-6	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	4-METHYL-2-PENTANONE	108-10-1	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	ACETONE	67-64-1	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	BENZENE	71-43-2	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	BROMODICHLOROMETHANE	75-27-4	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	BROMOFORM	75-25-2	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	BROMOMETHANE	74-83-9	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CARBON DISULFIDE	75-15-0	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CARBON TETRACHLORIDE	56-23-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CHLOROBENZENE	108-90-7	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CHLOROETHANE	75-00-3	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CHLOROFORM	67-66-3	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CHLOROMETHANE	74-87-3	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CIS-1,2-DICHLOROETHENE	156-59-2	1.1	J	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	DIBROMOCHLOROMETHANE	124-48-1	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	ETHYLBENZENE	100-41-4	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	METHYLENE CHLORIDE	75-09-2	11	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	STYRENE	100-42-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	TETRACHLOROETHYLENE	127-18-4	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	TOLUENE	108-88-3	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	TRANS-1,2-DICHLOROETHENE	156-60-5	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	TRICHLOROETHYLENE	79-01-6	2.8	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	VINYL CHLORIDE	75-01-4	5.6	U	530160.96	608753.2	
SS-MCC01A	Soil Sample	3/6/1998	Soil	3	3.5	0	XYLENES (TOTAL)	1330-20-7	2.8	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,1,1-TRICHLOROETHANE	71-55-6	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,1,2-TRICHLOROETHANE	79-00-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,1-DICHLOROETHANE	75-34-3	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,1-DICHLOROETHENE	75-35-4	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,2-DICHLOROETHANE	107-06-2	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	1,2-DICHLOROPROPANE	78-87-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	2-BUTANONE	78-93-3	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	2-HEXANONE	591-78-6	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	4-METHYL-2-PENTANONE	108-10-1	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	ACETONE	67-64-1	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	BENZENE	71-43-2	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	BROMODICHLOROMETHANE	75-27-4	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	BROMOFORM	75-25-2	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	BROMOMETHANE	74-83-9	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CARBON DISULFIDE	75-15-0	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CARBON TETRACHLORIDE	56-23-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CHLOROBENZENE	108-90-7	0.68	U	530160.96	608753.2	

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CHLOROETHANE	75-00-3	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CHLOROFORM	67-66-3	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CHLOROMETHANE	74-87-3	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CIS-1,2-DICHLOROETHENE	156-59-2	0.33	J	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	DIBROMOCHLOROMETHANE	124-48-1	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	ETHYLBENZENE	100-41-4	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	METHYLENE CHLORIDE	75-09-2	2.6	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	STYRENE	100-42-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	TETRACHLOROETHYLENE	127-18-4	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	TOLUENE	108-88-3	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	TRANS-1,2-DICHLOROETHENE	156-60-5	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.68	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	TRICHLOROETHYLENE	79-01-6	0.21	J	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	VINYL CHLORIDE	75-01-4	1.4	U	530160.96	608753.2	
SS-MCC50A	Soil Sample	3/6/1998	Soil	3	3.5	1	XYLENES (TOTAL)	1330-20-7	0.68	U	530160.96	608753.2	
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4-DICHLOROPHENOL	120-83-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4-DIMETHYLPHENOL	105-67-9	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4-DINITROPHENOL	51-28-5	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-BUTANONE	78-93-3	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-CHLORONAPHTHALENE	91-58-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-CHLOROPHENOL	95-57-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-HEXANONE	591-78-6	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-METHYLNAPHTHALENE	91-57-6	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-NITROANILINE	88-74-4	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	2-NITROPHENOL	88-75-5	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.72	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	3-NITROANILINE	99-09-2	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4,4-DDD	72-54-8	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4,4-DDE	72-55-9	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4,4-DDT	50-29-3	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-CHLOROANILINE	106-47-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-METHYL-2-PENTANONE	108-10-1	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-METHYLPHENOL	106-44-5	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-NITROANILINE	100-01-6	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	4-NITROPHENOL	100-02-7	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ACENAPHTHENE	83-32-9	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ACENAPHTHYLENE	208-96-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ACETONE	67-64-1	0.018	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ALDRIN	309-00-2	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ALPHA-BHC	319-84-6	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ALPHA-CHLORDANE	5103-71-9	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ALUMINUM, TOTAL	7429-90-5	1020	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ANTHRACENE	120-12-7	0.36	U	528571.125	607804.638	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ANTIMONY, TOTAL	7440-36-0	0.26	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1016	12674-11-2	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1221	11104-28-2	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1232	11141-16-5	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1242	53469-21-9	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1248	12672-29-6	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1254	11097-69-1	0.088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	AROCLOR-1260	11096-82-5	0.088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ARSENIC, TOTAL	7440-38-2	0.23	UJ	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BARIUM, TOTAL	7440-39-3	3.1	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZENE	71-43-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZO(A)ANTHRACENE	56-55-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZO(A)PYRENE	50-32-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZO(B)FLUORANTHENE	205-99-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BENZO(K)FLUORANTHENE	207-08-9	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BERYLLIUM, TOTAL	7440-41-7	0.17	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BETA-BHC	319-85-7	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BROMOFORM	75-25-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BROMOMETHANE	74-83-9	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CADMIUM, TOTAL	7440-43-9	0.51	V	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CALCIUM, TOTAL	7440-70-2	47.4	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CARBAZOLE	86-74-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CARBON DISULFIDE	75-15-0	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHLOROBENZENE	108-90-7	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHLOROETHANE	75-00-3	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHLOROFORM	67-66-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHLOROMETHANE	74-87-3	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHROMIUM, TOTAL	7440-47-3	9.6	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CHRYSENE	218-01-9	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	COBALT, TOTAL	7440-48-4	1.5	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	COPPER, TOTAL	7440-50-8	20.1	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	CYANIDE, TOTAL	57-12-5	0.61	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DELTA-BHC	319-86-8	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIBENZOFURAN	132-64-9	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIELDRIN	60-57-1	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIETHYL PHTHALATE	84-66-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DIMETHYL PHTHALATE	131-11-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDOSULFAN I	959-98-8	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDOSULFAN II	33213-65-9	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDOSULFAN SULFATE	1031-07-8	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDRIN	72-20-8	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDRIN ALDEHYDE	7421-93-4	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ENDRIN KETONE	53494-70-5	0.0088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ETHYLBENZENE	100-41-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	FLUORANTHENE	206-44-0	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	FLUORENE	86-73-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	GAMMA BHC (LINDANE)	58-89-9	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	GAMMA-CHLORDANE	5103-74-2	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEPTACHLOR	76-44-8	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEPTACHLOR EPOXIDE	1024-57-3	0.0044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEXACHLOROBENZENE	118-74-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEXACHLOROBUTADIENE	87-68-3	0.36	U	528571.125	607804.638	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	HEXACHLOROETHANE	67-72-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	IRON, TOTAL	7439-89-6	19700	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ISOPHORONE	78-59-1	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	LEAD, TOTAL	7439-92-1	2.2	J-	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	MAGNESIUM, TOTAL	7439-95-4	33.2	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	MANGANESE, TOTAL	7439-96-5	3.2	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	MERCURY, TOTAL	7439-97-6	0.061	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	METHOXYCHLOR	72-43-5	0.044	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	METHYLENE CHLORIDE	75-09-2	0.028	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	NAPHTHALENE	91-20-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	NICKEL, TOTAL	7440-02-0	1.1	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	NITROBENZENE (BNA)	98-95-3	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	PENTACHLOROPHENOL	87-86-5	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	PHENANTHRENE	85-01-8	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	PHENOL	108-95-2	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	POTASSIUM, TOTAL	7440-09-7	102	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	PYRENE	129-00-0	0.36	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	SILVER, TOTAL	7440-22-4	0.47	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	SODIUM, TOTAL	7440-23-5	44.2	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	STYRENE	100-42-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	THALLIUM, TOTAL	7440-28-0	0.25	UJ	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TOLUENE	108-88-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TOXAPHENE	8001-35-2	0.088	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	TRICHLOROETHYLENE	79-01-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	VANADIUM, TOTAL	7440-62-2	34.6	J	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	VINYL CHLORIDE	75-01-4	0.012	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W01A	Soil Sample	4/13/1994	Soil	4.5	5	0	ZINC, TOTAL	7440-66-6	3.8	U	528571.125	607804.638	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	ANTIMONY, TOTAL	7440-36-0	0.44	V	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	ARSENIC, TOTAL	7440-38-2	0.22	UJ	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	BARIUM, TOTAL	7440-39-3	1.2	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	BERYLLIUM, TOTAL	7440-41-7	0.17	V	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	CADMIUM, TOTAL	7440-43-9	0.30	V	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	CHROMIUM, TOTAL	7440-47-3	5.1	V	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	COPPER, TOTAL	7440-50-8	4.6	V	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	LEAD, TOTAL	7439-92-1	1.9	J	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	MERCURY, TOTAL	7439-97-6	0.050	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	NICKEL, TOTAL	7440-02-0	1	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	SILVER, TOTAL	7440-22-4	0.46	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	THALLIUM, TOTAL	7440-28-0	0.25	U	528592.774	607690.278	Weston, 1996b
SS-W02A	Soil Sample	4/13/1994	Soil	3.5	4	0	ZINC, TOTAL	7440-66-6	6.3	U	528592.774	607690.278	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	1,3,5-TRINITROBENZENE	99-35-4	0.24	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	1,3-DINITROBENZENE	99-65-0	0.24	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	2,4,6-TRINITROTOLUENE	118-96-7	0.24	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.24	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.25	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	AMINO-DNT'S	1946-51-0	0.24	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	ANTIMONY, TOTAL	7440-36-0	0.23	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	ARSENIC, TOTAL	7440-38-2	0.20	UJ	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	BARIUM, TOTAL	7440-39-3	1.5	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	BERYLLIUM, TOTAL	7440-41-7	0.10	V	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	CADMIUM, TOTAL	7440-43-9	0.31	V	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	CHROMIUM, TOTAL	7440-47-3	3.6	V	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	COPPER, TOTAL	7440-50-8	4.1	V	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	HMX	2691-41-0	2.1	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	LEAD, TOTAL	7439-92-1	2	J	528666.857	607559.748	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	MERCURY, TOTAL	7439-97-6	0.052	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	NICKEL, TOTAL	7440-02-0	0.93	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	NITROBENZENE (VOC)	98-95-3	0.25	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	RDX	121-82-4	1	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	SILVER, TOTAL	7440-22-4	0.42	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	TETRYL	479-45-8	0.72	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	THALLIUM, TOTAL	7440-28-0	0.22	U	528666.857	607559.748	Weston, 1996b
SS-W03A	Soil Sample	4/13/1994	Soil	1.5	2	0	ZINC, TOTAL	7440-66-6	8.2	U	528666.857	607559.748	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	ANTIMONY, TOTAL	7440-36-0	0.23	U	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	ARSENIC, TOTAL	7440-38-2	0.20	UJ	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	BARIUM, TOTAL	7440-39-3	7.3	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	BERYLLIUM, TOTAL	7440-41-7	0.27	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	CADMIUM, TOTAL	7440-43-9	0.39	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	CHROMIUM, TOTAL	7440-47-3	10.4	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	COPPER, TOTAL	7440-50-8	4.7	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	LEAD, TOTAL	7439-92-1	2.5	J	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	MERCURY, TOTAL	7439-97-6	0.053	U	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	NICKEL, TOTAL	7440-02-0	1.6	V	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	SILVER, TOTAL	7440-22-4	0.41	U	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	THALLIUM, TOTAL	7440-28-0	0.22	U	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	TOTAL ORGANIC CARBON	7440-44-0	290	J	528704.929	607415.356	Weston, 1996b
SS-W04A	Soil Sample	4/13/1994	Soil	3	3.5	0	ZINC, TOTAL	7440-66-6	9.1	U	528704.929	607415.356	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	ANTIMONY, TOTAL	7440-36-0	0.24	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	ARSENIC, TOTAL	7440-38-2	0.24	J-	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	BARIUM, TOTAL	7440-39-3	3.7	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	BERYLLIUM, TOTAL	7440-41-7	0.21	V	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	CADMIUM, TOTAL	7440-43-9	0.38	V	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	CHROMIUM, TOTAL	7440-47-3	8.5	V	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	COPPER, TOTAL	7440-50-8	14.1	V	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	LEAD, TOTAL	7439-92-1	12.2	J	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	MERCURY, TOTAL	7439-97-6	0.055	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	NICKEL, TOTAL	7440-02-0	2.9	V	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	SILVER, TOTAL	7440-22-4	0.43	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	THALLIUM, TOTAL	7440-28-0	0.23	U	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	TOTAL ORGANIC CARBON	7440-44-0	2340	J	528986.54	607838.936	Weston, 1996b
SS-W05A	Soil Sample	4/13/1994	Soil	1	1.5	0	ZINC, TOTAL	7440-66-6	25.1	U	528986.54	607838.936	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	ANTIMONY, TOTAL	7440-36-0	0.24	U	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	ARSENIC, TOTAL	7440-38-2	0.36	J-	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	BARIUM, TOTAL	7440-39-3	7.7	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	BERYLLIUM, TOTAL	7440-41-7	0.28	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	CADMIUM, TOTAL	7440-43-9	0.54	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	CHROMIUM, TOTAL	7440-47-3	10.6	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	COPPER, TOTAL	7440-50-8	5.3	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	LEAD, TOTAL	7439-92-1	2.9	J	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	MERCURY, TOTAL	7439-97-6	0.055	U	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	NICKEL, TOTAL	7440-02-0	1.1	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	SILVER, TOTAL	7440-22-4	0.53	V	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	THALLIUM, TOTAL	7440-28-0	0.22	U	529076.33	607720.258	Weston, 1996b
SS-W06A	Soil Sample	4/13/1994	Soil	1	1.5	0	ZINC, TOTAL	7440-66-6	11	U	529076.33	607720.258	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,1-DICHLOROETHANE	75-34-3	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,1-DICHLOROETHENE	75-35-4	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,2-DICHLOROETHANE	107-06-2	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,2-DICHLOROPROPANE	78-87-5	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.35	U	529293.423	607625.858	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4-DICHLOROPHENOL	120-83-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4-DIMETHYLPHENOL	105-67-9	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4-DINITROPHENOL	51-28-5	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-BUTANONE	78-93-3	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-CHLORONAPHTHALENE	91-58-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-CHLOROPHENOL	95-57-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-HEXANONE	591-78-6	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-METHYLNAPHTHALENE	91-57-6	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-NITROANILINE	88-74-4	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	2-NITROPHENOL	88-75-5	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.7	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	3-NITROANILINE	99-09-2	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4,4-DDD	72-54-8	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4,4-DDE	72-55-9	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4,4-DDT	50-29-3	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-CHLOROANILINE	106-47-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-METHYLPHENOL	106-44-5	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-NITROANILINE	100-01-6	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	4-NITROPHENOL	100-02-7	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ACENAPHTHENE	83-32-9	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ACENAPHTHYLENE	208-96-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ACETONE	67-64-1	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ALDRIN	309-00-2	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ALPHA-BHC	319-84-6	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ALPHA-CHLORDANE	5103-71-9	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ANTHRACENE	120-12-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	ANTIMONY, TOTAL	7440-36-0	0.24	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1016	12674-11-2	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1221	11104-28-2	0.07	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1232	11141-16-5	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1242	53469-21-9	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1248	12672-29-6	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1254	11097-69-1	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	AROCLOR-1260	11096-82-5	0.035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	ARSENIC, TOTAL	7440-38-2	0.21	UJ	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	BARIUM, TOTAL	7440-39-3	5.1	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZENE	71-43-2	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZO(A)ANTHRACENE	56-55-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZO(A)PYRENE	50-32-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZO(B)FLUORANTHENE	205-99-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZO(G,H,I)PERYLENE	191-24-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BENZO(K)FLUORANTHENE	207-08-9	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	BERYLLIUM, TOTAL	7440-41-7	0.20	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BETA-BHC	319-85-7	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BROMODICHLOROMETHANE	75-27-4	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BROMOFORM	75-25-2	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BROMOMETHANE	74-83-9	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	BUTYLBENZYLPHTHALATE	85-68-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	CADMIUM, TOTAL	7440-43-9	0.31	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CARBAZOLE	86-74-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CARBON DISULFIDE	75-15-0	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CARBON TETRACHLORIDE	56-23-5	0.006	U	529293.423	607625.858	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CHLOROBENZENE	108-90-7	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CHLOROETHANE	75-00-3	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CHLOROFORM	67-66-3	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CHLOROMETHANE	74-87-3	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	CHROMIUM, TOTAL	7440-47-3	6.5	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CHRYSENE	218-01-9	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	COPPER, TOTAL	7440-50-8	6.1	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DELTA-BHC	319-86-8	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIBENZOFURAN	132-64-9	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIELDRIN	60-57-1	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIETHYL PHTHALATE	84-66-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DIMETHYL PHTHALATE	131-11-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DI-N-BUTYL PHTHALATE	84-74-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	DI-N-OCTYL PHTHALATE	117-84-0	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDOSULFAN I	959-98-8	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDOSULFAN II	33213-65-9	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDOSULFAN SULFATE	1031-07-8	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDRIN	72-20-8	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDRIN ALDEHYDE	7421-93-4	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ENDRIN KETONE	53494-70-5	0.0035	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ETHYLBENZENE	100-41-4	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	FLUORANTHENE	206-44-0	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	FLUORENE	86-73-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	GAMMA BHC (LINDANE)	58-89-9	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	GAMMA-CHLORDANE	5103-74-2	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEPTACHLOR	76-44-8	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEPTACHLOR EPOXIDE	1024-57-3	0.0018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEXACHLOROBENZENE	118-74-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEXACHLOROBUTADIENE	87-68-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	HEXACHLOROETHANE	67-72-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	ISOPHORONE	78-59-1	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	LEAD, TOTAL	7439-92-1	1.5	J	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	MERCURY, TOTAL	7439-97-6	0.05	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	METHOXYCHLOR	72-43-5	0.018	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	METHYLENE CHLORIDE	75-09-2	0.007	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	NAPHTHALENE	91-20-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	NICKEL, TOTAL	7440-02-0	0.96	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	NITROBENZENE (BNA)	98-95-3	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	N-NITROSODIPHENYLAMINE	86-30-6	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	PENTACHLOROPHENOL	87-86-5	1.8	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	PHENANTHRENE	85-01-8	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	PHENOL	108-95-2	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	PYRENE	129-00-0	0.35	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	SILVER, TOTAL	7440-22-4	0.43	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	STYRENE	100-42-5	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TETRACHLOROETHYLENE	127-18-4	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	THALLIUM, TOTAL	7440-28-0	0.23	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TOLUENE	108-88-3	0.002	J	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TOXAPHENE	8001-35-2	0.088	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	TRICHLOROETHYLENE	79-01-6	0.016	V	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	VINYL CHLORIDE	75-01-4	0.011	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	5/2/1996	Soil	2	2.5	0	XYLENES (TOTAL)	1330-20-7	0.006	U	529293.423	607625.858	Weston, 1996b
SS-W07A	Soil Sample	4/13/1994	Soil	2	2.5	0	ZINC, TOTAL	7440-66-6	8.2	U	529293.423	607625.858	Weston, 1996b
SS-W08A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2.1	V	528472.085	607837.001	Weston, 1996b
SS-W09A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528602.514	607874.387	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3,5-TRINITROBENZENE	99-35-4	0.24	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3-DINITROBENZENE	99-65-0	0.24	U	528475.311	607742.159	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE	118-96-7	0.24	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.6	J	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.24	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.25	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	AMINO-DNT'S	1946-51-0	0.24	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	HMX	2691-41-0	2.1	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	NITROBENZENE (VOC)	98-95-3	0.25	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	RDX	121-82-4	1	U	528475.311	607742.159	Weston, 1996b
SS-W10A	Soil Sample	4/19/1994	Soil	0	0.5	0	TETRYL	479-45-8	0.72	U	528475.311	607742.159	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3,5-TRINITROBENZENE	99-35-4	0.25	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3-DINITROBENZENE	99-65-0	0.25	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE	118-96-7	0.25	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	35.1	V	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.25	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.26	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	AMINO-DNT'S	1946-51-0	0.25	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	HMX	2691-41-0	2.2	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	NITROBENZENE (VOC)	98-95-3	0.26	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	RDX	121-82-4	1.1	U	528604.85	607776.725	Weston, 1996b
SS-W11A	Soil Sample	4/19/1994	Soil	0	0.5	0	TETRYL	479-45-8	0.75	U	528604.85	607776.725	Weston, 1996b
SS-W12A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528552.591	607607.918	Weston, 1996b
SS-W13A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528740.044	607653.724	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3,5-TRINITROBENZENE	99-35-4	0.22	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3-DINITROBENZENE	99-65-0	0.22	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE	118-96-7	0.22	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	15.3	V	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.22	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.23	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	AMINO-DNT'S	1946-51-0	0.22	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	HMX	2691-41-0	1.9	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	NITROBENZENE (VOC)	98-95-3	0.23	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	RDX	121-82-4	0.94	U	528612.617	607465.551	Weston, 1996b
SS-W14A	Soil Sample	4/19/1994	Soil	0	0.5	0	TETRYL	479-45-8	0.65	U	528612.617	607465.551	Weston, 1996b
SS-W15A	Soil Sample	4/18/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.3	J	528803.056	607513.029	Weston, 1996b
SS-W16A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528594.625	607302.017	Weston, 1996b
SS-W17A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528845.598	607369.648	Weston, 1996b
SS-W18A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528897.88	607906.064	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3,5-TRINITROBENZENE	99-35-4	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3-DINITROBENZENE	99-65-0	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE	118-96-7	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	J	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	AMINO-DNT'S	1946-51-0	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	HMX	2691-41-0	1.9	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	NITROBENZENE (VOC)	98-95-3	0.22	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	RDX	121-82-4	0.93	U	529021.135	607924.021	Weston, 1996b
SS-W19A	Soil Sample	4/19/1994	Soil	0	0.5	0	TETRYL	479-45-8	0.65	U	529021.135	607924.021	Weston, 1996b
SS-W20A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	1.9	U	528927.99	607755.007	Weston, 1996b
SS-W21A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529109.317	607803.403	Weston, 1996b
SS-W22A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528970.103	607611.402	Weston, 1996b
SS-W23A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529143.275	607659.922	Weston, 1996b
SS-W24A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529129.214	607498.635	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3,5-TRINITROBENZENE	99-35-4	0.24	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	1,3-DINITROBENZENE	99-65-0	0.23	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE	118-96-7	0.24	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4-DINITROTOLUENE (VOC)	121-14-2	0.23	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,6-DINITROTOLUENE (VOC)	606-20-2	0.24	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	AMINO-DNT'S	1946-51-0	0.23	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	HMX	2691-41-0	2.1	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	NITROBENZENE (VOC)	98-95-3	0.24	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	RDX	121-82-4	1	U	529268.003	607534.497	Weston, 1996b
SS-W25A	Soil Sample	4/19/1994	Soil	0	0.5	0	TETRYL	479-45-8	0.7	U	529268.003	607534.497	Weston, 1996b
SS-W26A	Soil Sample	4/19/1994	Soil	0	0.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529284.869	607476.547	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,1,1-TRICHLOROETHANE	71-55-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,1,2-TRICHLOROETHANE	79-00-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,1-DICHLOROETHANE	75-34-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,1-DICHLOROETHENE	75-35-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,2,4-TRICHLOROBENZENE	120-82-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,2-DICHLOROETHANE	107-06-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,2-DICHLOROPROPANE	78-87-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4,6-TRICHLOROPHENOL	88-06-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4-DICHLOROPHENOL	120-83-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4-DIMETHYLPHENOL	105-67-9	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4-DINITROPHENOL	51-28-5	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,4-DINITROTOLUENE (BNA)	121-14-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2,6-DINITROTOLUENE (BNA)	606-20-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-BUTANONE	78-93-3	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-CHLORONAPHTHALENE	91-58-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-CHLOROPHENOL	95-57-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-HEXANONE	591-78-6	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-METHYLNAPHTHALENE	91-57-6	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-NITROANILINE	88-74-4	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	2-NITROPHENOL	88-75-5	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	3,3'-DICHLOROBENZIDINE	91-94-1	0.71	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	3-NITROANILINE	99-09-2	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4,4-DDD	72-54-8	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4,4-DDE	72-55-9	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4,4-DDT	50-29-3	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-CHLORO-3-METHYLPHENOL	59-50-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-CHLOROANILINE	106-47-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-METHYL-2-PENTANONE	108-10-1	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-METHYLPHENOL	106-44-5	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-NITROANILINE	100-01-6	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	4-NITROPHENOL	100-02-7	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ACENAPHTHENE	83-32-9	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ACENAPHTHYLENE	208-96-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ACETONE	67-64-1	0.015	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ALDRIN	309-00-2	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ALPHA-BHC	319-84-6	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ALPHA-CHLORDANE	5103-71-9	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ALUMINUM, TOTAL	7429-90-5	1640	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ANTHRACENE	120-12-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ANTIMONY, TOTAL	7440-36-0	0.26	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1016	12674-11-2	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1221	11104-28-2	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1232	11141-16-5	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1242	53469-21-9	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1248	12672-29-6	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1254	11097-69-1	0.082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	AROCLOR-1260	11096-82-5	0.082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ARSENIC, TOTAL	7440-38-2	0.23	UJ	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BARIUM, TOTAL	7440-39-3	3.1	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZENE	71-43-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZO(A)ANTHRACENE	56-55-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZO(A)PYRENE	50-32-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZO(B)FLUORANTHENE	205-99-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZO(G,H,I)PERYLENE	191-24-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BENZO(K)FLUORANTHENE	207-08-9	0.35	U	528571.125	607804.638	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BERYLLIUM, TOTAL	7440-41-7	0.29	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BETA-BHC	319-85-7	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BROMODICHLOROMETHANE	75-27-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BROMOFORM	75-25-2	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BROMOMETHANE	74-83-9	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	BUTYLBENZYLPHTHALATE	85-68-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CADMIUM, TOTAL	7440-43-9	0.90	V	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CALCIUM, TOTAL	7440-70-2	81.5	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CARBAZOLE	86-74-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CARBON DISULFIDE	75-15-0	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CARBON TETRACHLORIDE	56-23-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHLOROBENZENE	108-90-7	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHLOROETHANE	75-00-3	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHLOROFORM	67-66-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHLOROMETHANE	74-87-3	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHROMIUM, TOTAL	7440-47-3	11.9	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CHRYSENE	218-01-9	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	COBALT, TOTAL	7440-48-4	2	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	COPPER, TOTAL	7440-50-8	19.2	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	CYANIDE, TOTAL	57-12-5	0.57	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DELTA-BHC	319-86-8	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIBENZ(A,H)ANTHRACENE	53-70-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIBENZOFURAN	132-64-9	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIBROMOCHLOROMETHANE	124-48-1	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIELDRIN	60-57-1	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIETHYL PHTHALATE	84-66-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DIMETHYL PHTHALATE	131-11-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DI-N-BUTYL PHTHALATE	84-74-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	DI-N-OCTYL PHTHALATE	117-84-0	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDOSULFAN I	959-98-8	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDOSULFAN II	33213-65-9	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDOSULFAN SULFATE	1031-07-8	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDRIN	72-20-8	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDRIN ALDEHYDE	7421-93-4	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ENDRIN KETONE	53494-70-5	0.0082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ETHYLBENZENE	100-41-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	FLUORANTHENE	206-44-0	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	FLUORENE	86-73-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	GAMMA BHC (LINDANE)	58-89-9	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	GAMMA-CHLORDANE	5103-74-2	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEPTACHLOR	76-44-8	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEPTACHLOR EPOXIDE	1024-57-3	0.0041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEXACHLOROBENZENE	118-74-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEXACHLOROBUTADIENE	87-68-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	HEXACHLOROETHANE	67-72-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	IRON, TOTAL	7439-89-6	28300	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ISOPHORONE	78-59-1	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	LEAD, TOTAL	7439-92-1	3.4	J-	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	MAGNESIUM, TOTAL	7439-95-4	51.2	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	MANGANESE, TOTAL	7439-96-5	1.9	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	MERCURY, TOTAL	7439-97-6	0.057	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	METHOXYCHLOR	72-43-5	0.041	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	METHYLENE CHLORIDE	75-09-2	0.022	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	NAPHTHALENE	91-20-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	NICKEL, TOTAL	7440-02-0	1.1	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	NITROBENZENE (BNA)	98-95-3	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	N-NITROSODIPHENYLAMINE	86-30-6	0.35	U	528571.125	607804.638	Weston, 1996b

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	PENTACHLOROPHENOL	87-86-5	1.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	PHENANTHRENE	85-01-8	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	PHENOL	108-95-2	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	POTASSIUM, TOTAL	7440-09-7	102	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	PYRENE	129-00-0	0.35	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	SILVER, TOTAL	7440-22-4	0.71	V	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	SODIUM, TOTAL	7440-23-5	86.8	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	STYRENE	100-42-5	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TETRACHLOROETHYLENE	127-18-4	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	THALLIUM, TOTAL	7440-28-0	0.25	UJ	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TOLUENE	108-88-3	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TOXAPHENE	8001-35-2	0.082	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	TRICHLOROETHYLENE	79-01-6	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	VANADIUM, TOTAL	7440-62-2	28.2	J	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	VINYL CHLORIDE	75-01-4	0.011	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	XYLENES (TOTAL)	1330-20-7	0.006	U	528571.125	607804.638	Weston, 1996b
SS-W27A	Soil Sample	4/13/1994	Soil	4.5	5	1	ZINC, TOTAL	7440-66-6	6.9	U	528571.125	607804.638	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	ANTIMONY, TOTAL	7440-36-0	0.26	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	ARSENIC, TOTAL	7440-38-2	0.40	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	BARIUM, TOTAL	7440-39-3	7.5	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	BERYLLIUM, TOTAL	7440-41-7	0.17	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	CADMIUM, TOTAL	7440-43-9	0.27	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	CHROMIUM, TOTAL	7440-47-3	5.1	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	COPPER, TOTAL	7440-50-8	2.8	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	LEAD, TOTAL	7439-92-1	1.2	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	MERCURY, TOTAL	7439-97-6	0.053	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	NICKEL, TOTAL	7440-02-0	1.6	V	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	SELENIUM, TOTAL	7782-49-2	0.27	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	SILVER, TOTAL	7440-22-4	0.42	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	THALLIUM, TOTAL	7440-28-0	0.23	U	528631.089	607202.673	Weston, 1996b
SS-X01A	Soil Sample	4/21/1994	Soil	2.5	3	0	ZINC, TOTAL	7440-66-6	7.2	U	528631.089	607202.673	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	ANTIMONY, TOTAL	7440-36-0	0.5	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	ARSENIC, TOTAL	7440-38-2	1.9	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	BARIUM, TOTAL	7440-39-3	15.2	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	BERYLLIUM, TOTAL	7440-41-7	0.21	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	CADMIUM, TOTAL	7440-43-9	0.29	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	CHROMIUM, TOTAL	7440-47-3	7.2	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	COPPER, TOTAL	7440-50-8	12.5	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	LEAD, TOTAL	7439-92-1	7.2	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	MERCURY, TOTAL	7439-97-6	0.059	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	NICKEL, TOTAL	7440-02-0	1.6	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	SELENIUM, TOTAL	7782-49-2	2.6	V	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	SILVER, TOTAL	7440-22-4	0.45	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	THALLIUM, TOTAL	7440-28-0	0.25	U	529225.897	607289.86	Weston, 1996b
SS-X03A	Soil Sample	4/21/1994	Soil	1	1.5	0	ZINC, TOTAL	7440-66-6	7.7	U	529225.897	607289.86	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.7	1.2	0	2,4,6-TRINITROTOLUENE (JENKINS)	118-96-7	2	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	ANTIMONY, TOTAL	7440-36-0	0.32	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	ARSENIC, TOTAL	7440-38-2	0.74	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	BARIUM, TOTAL	7440-39-3	4.2	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	BERYLLIUM, TOTAL	7440-41-7	0.16	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	CADMIUM, TOTAL	7440-43-9	0.28	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	CHROMIUM, TOTAL	7440-47-3	5.1	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	COPPER, TOTAL	7440-50-8	4.9	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	LEAD, TOTAL	7439-92-1	6.5	V	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	MERCURY, TOTAL	7439-97-6	0.055	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	NICKEL, TOTAL	7440-02-0	0.98	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	SELENIUM, TOTAL	7782-49-2	0.26	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	SILVER, TOTAL	7440-22-4	0.44	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	THALLIUM, TOTAL	7440-28-0	0.22	U	528854.83	607227.256	Weston, 1996b
SS-X04A	Soil Sample	4/21/1994	Soil	0.70	1.2	0	ZINC, TOTAL	7440-66-6	4	U	528854.83	607227.256	Weston, 1996b
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,1,1-TRICHLOROETHANE	71-55-6	0.0055	U	529347.8626	607717.701	Weston, 1999

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,1,2-TRICHLOROETHANE	79-00-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,1-DICHLOROETHANE	75-34-3	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,1-DICHLOROETHENE	75-35-4	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,2,4-TRICHLOROBENZENE	120-82-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,2-DICHLOROETHANE	107-06-2	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,2-DICHLOROPROPANE	78-87-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4,5-TRICHLOROPHENOL	95-95-4	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4,6-TRICHLOROPHENOL	88-06-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4-DICHLOROPHENOL	120-83-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4-DIMETHYLPHENOL	105-67-9	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4-DINITROPHENOL	51-28-5	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,4-DINITROTOLUENE (BNA)	121-14-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2,6-DINITROTOLUENE (BNA)	606-20-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-BUTANONE	78-93-3	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-CHLORONAPHTHALENE	91-58-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-CHLOROPHENOL	95-57-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-HEXANONE	591-78-6	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-METHYLNAPHTHALENE	91-57-6	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-NITROANILINE	88-74-4	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	2-NITROPHENOL	88-75-5	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	3,3'-DICHLOROBENZIDINE	91-94-1	0.74	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	3-NITROANILINE	99-09-2	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4,4-DDD	72-54-8	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4,4-DDE	72-55-9	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4,4-DDT	50-29-3	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-CHLORO-3-METHYLPHENOL	59-50-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-CHLOROANILINE	106-47-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-METHYL-2-PENTANONE	108-10-1	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-METHYLPHENOL	106-44-5	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-NITROANILINE	100-01-6	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	4-NITROPHENOL	100-02-7	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ACENAPHTHENE	83-32-9	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ACENAPHTHYLENE	208-96-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ACETONE	67-64-1	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ALDRIN	309-00-2	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ALPHA-BHC	319-84-6	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ALPHA-CHLORDANE	5103-71-9	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ANTHRACENE	120-12-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ANTIMONY, TOTAL	7440-36-0	0.450	V	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1016	12674-11-2	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1221	11104-28-2	0.074	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1232	11141-16-5	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1242	53469-21-9	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1248	12672-29-6	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1254	11097-69-1	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	AROCLOR-1260	11096-82-5	0.037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ARSENIC, TOTAL	7440-38-2	0.900	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZENE	71-43-2	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZO(A)ANTHRACENE	56-55-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZO(A)PYRENE	50-32-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZO(B)FLUORANTHENE	205-99-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZO(G,H,I)PERYLENE	191-24-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BENZO(K)FLUORANTHENE	207-08-9	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BERYLLIUM, TOTAL	7440-41-7	0.040	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BETA-BHC	319-85-7	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	0.37	U	529347.8626	607717.701	Weston, 1999

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BROMODICHLOROMETHANE	75-27-4	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BROMOFORM	75-25-2	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BROMOMETHANE	74-83-9	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	BUTYLBENZYLPHTHALATE	85-68-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CADMIUM, TOTAL	7440-43-9	0.040	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CARBAZOLE	86-74-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CARBON DISULFIDE	75-15-0	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CARBON TETRACHLORIDE	56-23-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHLOROBENZENE	108-90-7	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHLOROETHANE	75-00-3	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHLOROFORM	67-66-3	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHLOROMETHANE	74-87-3	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHROMIUM, TOTAL	7440-47-3	2.2	V	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CHRYSENE	218-01-9	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	COPPER, TOTAL	7440-50-8	2.2	V	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DELTA-BHC	319-86-8	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIBENZ(A,H)ANTHRACENE	53-70-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIBENZOFURAN	132-64-9	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIBROMOCHLOROMETHANE	124-48-1	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIELDRIN	60-57-1	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIETHYL PHTHALATE	84-66-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DIMETHYL PHTHALATE	131-11-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DI-N-BUTYL PHTHALATE	84-74-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	DI-N-OCTYL PHTHALATE	117-84-0	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDOSULFAN I	959-98-8	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDOSULFAN II	33213-65-9	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDOSULFAN SULFATE	1031-07-8	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDRIN	72-20-8	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDRIN ALDEHYDE	7421-93-4	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ENDRIN KETONE	53494-70-5	0.0037	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ETHYLBENZENE	100-41-4	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	FLUORANTHENE	206-44-0	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	FLUORENE	86-73-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	GAMMA BHC (LINDANE)	58-89-9	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	GAMMA-CHLORDANE	5103-74-2	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEPTACHLOR	76-44-8	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEPTACHLOR EPOXIDE	1024-57-3	0.0018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEXACHLOROBENZENE	118-74-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEXACHLOROBUTADIENE	87-68-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	HEXACHLOROETHANE	67-72-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ISOPHORONE	78-59-1	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	LEAD, TOTAL	7439-92-1	1.7	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	MERCURY, TOTAL	7439-97-6	0.02	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	METHOXYCHLOR	72-43-5	0.018	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	METHYLENE CHLORIDE	75-09-2	0.017	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	NAPHTHALENE	91-20-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	NICKEL, TOTAL	7440-02-0	0.19	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	NITROBENZENE (BNA)	98-95-3	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	N-NITROSODIPHENYLAMINE	86-30-6	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	PENTACHLOROPHENOL	87-86-5	1.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	PETROLEUM HYDROCARBON	111-11-25	26.8	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	PHENANTHRENE	85-01-8	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	PHENOL	108-95-2	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	PYRENE	129-00-0	0.37	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	SELENIUM, TOTAL	7782-49-2	0.30	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	SILVER, TOTAL	7440-22-4	0.11	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	STYRENE	100-42-5	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TETRACHLOROETHYLENE	127-18-4	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	THALLIUM, TOTAL	7440-28-0	0.39	U	529347.8626	607717.701	Weston, 1999

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TOLUENE	108-88-3	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TOXAPHENE	8001-35-2	0.092	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	TRICHLOROETHYLENE	79-01-6	0.0015	J	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	VINYL CHLORIDE	75-01-4	0.011	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	XYLENES (TOTAL)	1330-20-7	0.0055	U	529347.8626	607717.701	Weston, 1999
TP-W29A	Test Pit	6/10/1996	Soil	9.5	10	0	ZINC, TOTAL	7440-66-6	0.65	V	529347.8626	607717.701	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,1,1-TRICHLOROETHANE	71-55-6	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,1,2,2-TETRACHLOROETHANE	79-34-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,1,2-TRICHLOROETHANE	79-00-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,1-DICHLOROETHANE	75-34-3	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,1-DICHLOROETHENE	75-35-4	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,2,4-TRICHLOROBENZENE	120-82-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,2-DICHLOROBENZENE (BNA)	95-50-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,2-DICHLOROETHANE	107-06-2	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,2-DICHLOROPROPANE	78-87-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,3-DICHLOROBENZENE (BNA)	541-73-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	1,4-DICHLOROBENZENE (BNA)	106-46-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4,5-TRICHLOROPHENOL	95-95-4	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4,6-TRICHLOROPHENOL	88-06-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4-DICHLOROPHENOL	120-83-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4-DIMETHYLPHENOL	105-67-9	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4-DINITROPHENOL	51-28-5	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,4-DINITROTOLUENE (BNA)	121-14-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2,6-DINITROTOLUENE (BNA)	606-20-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-BUTANONE	78-93-3	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-CHLORONAPHTHALENE	91-58-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-CHLOROPHENOL	95-57-8	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-HEXANONE	591-78-6	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-METHYLNAPHTHALENE	91-57-6	15	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-METHYLPHENOL (O-CRESOL)	95-48-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-NITROANILINE	88-74-4	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	2-NITROPHENOL	88-75-5	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	3,3'-DICHLOROBENZIDINE	91-94-1	7.4	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	3-NITROANILINE	99-09-2	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4,4-DDD	72-54-8	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4,4-DDE	72-55-9	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4,4-DDT	50-29-3	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4,6-DINITRO-2-METHYLPHENOL	534-52-1	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-BROMOPHENYL PHENYL ETHER	101-55-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-CHLORO-3-METHYLPHENOL	59-50-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-CHLOROANILINE	106-47-8	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-CHLOROPHENYL PHENYL ETHER	7005-72-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-METHYL-2-PENTANONE	108-10-1	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-METHYLPHENOL	106-44-5	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-NITROANILINE	100-01-6	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	4-NITROPHENOL	100-02-7	18	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ACENAPHTHENE	83-32-9	0.47	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ACENAPHTHYLENE	208-96-8	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ACETONE	67-64-1	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ALDRIN	309-00-2	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ALPHA-BHC	319-84-6	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ALPHA-CHLORDANE	5103-71-9	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ANTHRACENE	120-12-7	0.62	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ANTIMONY, TOTAL	7440-36-0	0.320	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1016	12674-11-2	0.037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1221	11104-28-2	0.074	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1232	11141-16-5	0.037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1242	53469-21-9	0.037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1248	12672-29-6	0.037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1254	11097-69-1	0.045	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	AROCLOR-1260	11096-82-5	0.037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ARSENIC, TOTAL	7440-38-2	1.600	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZENE	71-43-2	32	U	529323.474	607735.8068	Weston, 1999

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZO(A)ANTHRACENE	56-55-3	0.38	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZO(A)PYRENE	50-32-8	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZO(B)FLUORANTHENE	205-99-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZO(G,H,I)PERYLENE	191-24-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BENZO(K)FLUORANTHENE	207-08-9	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BERYLLIUM, TOTAL	7440-41-7	0.090	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BETA-BHC	319-85-7	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BIS(2-CHLOROETHOXY)METHANE	111-91-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BIS(2-CHLOROETHYL) ETHER	111-44-4	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1.9	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BROMODICHLOROMETHANE	75-27-4	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BROMOFORM	75-25-2	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BROMOMETHANE	74-83-9	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	BUTYLBENZYLPHTHALATE	85-68-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CADMIUM, TOTAL	7440-43-9	0.24	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CARBAZOLE	86-74-8	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CARBON DISULFIDE	75-15-0	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CARBON TETRACHLORIDE	56-23-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHLOROBENZENE	108-90-7	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHLOROETHANE	75-00-3	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHLOROFORM	67-66-3	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHLOROMETHANE	74-87-3	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHROMIUM, TOTAL	7440-47-3	10.8	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CHRYSENE	218-01-9	0.69	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	CIS-1,3-DICHLOROPROPENE	10061-01-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	COPPER, TOTAL	7440-50-8	11.2	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DELTA-BHC	319-86-8	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIBENZ(A,H)ANTHRACENE	53-70-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIBENZOFURAN	132-64-9	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIBROMOCHLOROMETHANE	124-48-1	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIELDRIN	60-57-1	0.007	I	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIETHYL PHTHALATE	84-66-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DIMETHYL PHTHALATE	131-11-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DI-N-BUTYL PHTHALATE	84-74-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	DI-N-OCTYL PHTHALATE	117-84-0	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDOSULFAN I	959-98-8	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDOSULFAN II	33213-65-9	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDOSULFAN SULFATE	1031-07-8	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDRIN	72-20-8	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDRIN ALDEHYDE	7421-93-4	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ENDRIN KETONE	53494-70-5	0.0037	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ETHYLBENZENE	100-41-4	10	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	FLUORANTHENE	206-44-0	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	FLUORENE	86-73-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	GAMMA BHC (LINDANE)	58-89-9	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	GAMMA-CHLORDANE	5103-74-2	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEPTACHLOR	76-44-8	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEPTACHLOR EPOXIDE	1024-57-3	0.0019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEXACHLOROBENZENE	118-74-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEXACHLOROBUTADIENE	87-68-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEXACHLOROCYCLOPENTADIENE	77-47-4	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	HEXACHLOROETHANE	67-72-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	INDENO(1,2,3-C,D)PYRENE	193-39-5	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ISOPHORONE	78-59-1	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	LEAD, TOTAL	7439-92-1	10.3	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	MERCURY, TOTAL	7439-97-6	0.02	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	METHOXYCHLOR	72-43-5	0.019	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	METHYLENE CHLORIDE	75-09-2	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	NAPHTHALENE	91-20-3	40	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	NICKEL, TOTAL	7440-02-0	0.78	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	NITROBENZENE (BNA)	98-95-3	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	N-NITROSODIPHENYLAMINE	86-30-6	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	PENTACHLOROPHENOL	87-86-5	18	U	529323.474	607735.8068	Weston, 1999

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	PETROLEUM HYDROCARBON	111-11-25	13200	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	PHENANTHRENE	85-01-8	3.7	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	PHENOL	108-95-2	3.7	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	PYRENE	129-00-0	1.1	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	SELENIUM, TOTAL	7782-49-2	0.44	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	SILVER, TOTAL	7440-22-4	0.10	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	STYRENE	100-42-5	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TETRACHLOROETHYLENE	127-18-4	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	THALLIUM, TOTAL	7440-28-0	0.42	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TOLUENE	108-88-3	40	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TOTAL-1,2-DICHLOROETHENE	540-59-0	17	J	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TOXAPHENE	8001-35-2	0.093	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TRANS-1,3-DICHLOROPROPENE	10061-02-6	32	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	TRICHLOROETHYLENE	79-01-6	1500	J-	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	VINYL CHLORIDE	75-01-4	65	U	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	XYLENES (TOTAL)	1330-20-7	50	V	529323.474	607735.8068	Weston, 1999
TP-W33A	Test Pit	6/12/1996	Soil	9.5	10	0	ZINC, TOTAL	7440-66-6	26.7	V	529323.474	607735.8068	Weston, 1999
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.064	J	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-1	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.16	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.37	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.18	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.092	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	1.1		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.081	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.4		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.3	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.12	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.11	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.56		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.065	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.14	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.073	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.31	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.2	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.099	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.65		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.12	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.092	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.31	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.42		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.49		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.1	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.068	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.045	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.068	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.076	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.068	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.12	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.41	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.13	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.1	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.11	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.11	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.054	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.63		---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.051	J	---	---	Weston, 1994c
HTA-2	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.13	J	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.34	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.17	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.23	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.24	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.22	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.24	JB	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.003	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.003	U	---	---	Weston, 1994c
HTA-3	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.21	J	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.16		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.11		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.39		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.78		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	2.2		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.19		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.25		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.2		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.14		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.22		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.088		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.44		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.21		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.1	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.12		---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.084	J	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.33	U	---	---	Weston, 1994c
HTA-4	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	6.8		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	7		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	5.9		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	5.3		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	13.8		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	4.9		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	6.1		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	5.6		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	6.2		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.003	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.099	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.19	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.29	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.15	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.33	U	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.69		---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.21	J	---	---	Weston, 1994c
HTA-5	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.092	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.85		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	13		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.71		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.11	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.068	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.053	J	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.045	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.1	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	0.068	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.16	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.88		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.17	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.41		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.11	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.37	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.23	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.069	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.86		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.052	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.32	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.39	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.069	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.064	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.58		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	765		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	475		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	493		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	415		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	1200		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	542		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	338		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	453		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	637		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.18	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.44		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.08	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.76		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.63		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.22	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.076	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	1.4		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.36	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.19	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	1.1		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	1.7		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.23	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.15	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.1	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.13	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.18	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.15	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.31	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	1.5		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.39	J	---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.71		---	---	Weston, 1994c
HTA-6	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.23	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.55		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.31	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.13	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	1.8		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.077	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.5		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.48		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.13	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.13	J	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.87		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.43		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.7		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.52		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.62		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.52		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.69		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.1	U	---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.53		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.47		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.67		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.6		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.82		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.6		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.38		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.66		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.55		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.57		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.42		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.56		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.49		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.51		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.61		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.82		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.84		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.75		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.55		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.67		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.65		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.53		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33		---	---	Weston, 1994c
HTA-7	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.29		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.43		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.46		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.71		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	1		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.44		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.3		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.54		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.58		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.52		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.44		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.76		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.87		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.79		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.73		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.68		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.57		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.38		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.35		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.51		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.1	U	---	---	Weston, 1994c
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	50.4		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-8	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	94.6		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	52.4		---	---	Weston, 1994c
HTA-8	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	57.4		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	70.7		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	57.6		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	47.5		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	60.6		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	32.1		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	4.6		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	3		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	2.3		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	1.9		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	3.2		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	30		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	2.3		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.1	U	---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	33.3		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	25.9		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	29.2		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	22.5		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	31.4		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	3.2		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	22		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	27.8		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	25.3		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	36		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	65.5		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	54.8		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	66.1		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	75.5		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	59.2		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	56.8		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	40.9		---	---	Weston, 1994c
HTA-9	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	34.8		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.3	J	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.22		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.32		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.23		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.21		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.21		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.5		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.044		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.4		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.047		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.029		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.003	U	---	---	Weston, 1994c
HTA-10	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	1.8		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.2		---	---	Weston, 1994c
HTA-10	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.037		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.088		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.032		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.04		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.023		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.45		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.12		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.041		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	3		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.45		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.54		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.62		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.22		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.18		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.12		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.031		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.019		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.068		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.034		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.095		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.11		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.37		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.049		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.086		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.003	U	---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.41		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.52		---	---	Weston, 1994c
HTA-11	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.24		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.3		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.38		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.35		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.56		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.089		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.056		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	6.7		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.17		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.034		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.044		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.041		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.31		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.086	J	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.1		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	7.7		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.3		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.47		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.56		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.41		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.14		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.17		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.12		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.039		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.003	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.17		---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-12	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.062	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.67		---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.16	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.061	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.052	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.065	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.1	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.081	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.25	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.073	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.19	J	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	1.8		---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-13	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.061	J	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.052	J	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.053	J	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.25	J	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.078	J	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.002	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.6		---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.002	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.1	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.1	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.1	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.1	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.1	U	---	---	Weston, 1994c
HTA-14	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.066	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.13	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.078	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.29	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.085	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.23	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	3.6		---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.17	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.042	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.043	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.17	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.052	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.075	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.076	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.049	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.27	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.07	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.083	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.12	J	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.1	U	---	---	Weston, 1994c
HTA-15	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.1	U	---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.1	U	---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.1	U	---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.1	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.1	U	---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.1	U	---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	7.2		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	4.9		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	11.9		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	4.8		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	5.2		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	19.4		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	6.8		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	4		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	3.5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	4.9		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	5.7		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	8.6		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	5.8		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	8.6		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	8		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	9.5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	12.4		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	3.9		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	9.4		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	4.5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	5.2		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	5.5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	17.1		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	6.1		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	6.2		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	9.1		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	5.4		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	5.7		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	6.3		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	5.3		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	5.6		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	4.5		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	11.3		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	31.3		---	---	Weston, 1994c
HTA-16	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	49.3		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	54.7		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	35.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	33		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	55		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	27.9		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	23.4		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	53.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	71.3		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	62.5		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	47		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	36.3		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	65.5		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	44.6		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	47.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	42.4		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	47		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	39.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	39.2		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	61.9		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	44.2		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	27.3		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	48.4		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	36.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	82.2		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	29.6		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	35.7		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	45.9		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	43.7		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	42.5		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	45.6		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	50.1		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	45.7		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.08	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.18	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.085	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.38	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.28	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.13	J	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.78		---	---	Weston, 1994c
HTA-17	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.17	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.11	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.52		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	17		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.63		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.14	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.064	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.053	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.059	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.092	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.068	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.12	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.62		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.17	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.36	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.11	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.29	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.14	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.058	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.79		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.053	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.29	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.3	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.074	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.073	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.38	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.084	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.18	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.18	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.44		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.26	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.13	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.21	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.16	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.11	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.46		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	14		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.68		---	---	Weston, 1994c
HTA-18	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.13	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.068	J	---	---	Weston, 1994c
HTA-18	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.053	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.073	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.084	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.072	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.14	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.56		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.17	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.29	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.084	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.25	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.12	J	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.054	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.78		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.051	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.26	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.22	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.059	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.068	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.38	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.13	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.24	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.22	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.57		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.47		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.19	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.053	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	1.3		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.25	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.17	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.58		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	21		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.96		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.19	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.11	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.082	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.11	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.14	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.11	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.21	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.81		---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.25	J	---	---	Weston, 1994c
HTA-19	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.59		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.097	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.31	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.049	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.11	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.096	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.2	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	0.16	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.086	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.47		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.11	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.063	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.25	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	6.2		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.39	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.076	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.041	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.056	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.047	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.081	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.31	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.1	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.16	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.06	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.16	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.073	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.42		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.14	J	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.14	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.044	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.23	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.8		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.69		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.57		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.52		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.95		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.67		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.66		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.6		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.6		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.053	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	4.1		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.11	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.21	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.46		---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.33	U	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.26	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.21	J	---	---	Weston, 1994c
HTA-20	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.087	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.13	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.47		---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.13	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.049	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.2	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.35	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.66		---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	1.8		---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.45		---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.12	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.12	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.061	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.11	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.051	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.22	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.096	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.08	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.15	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.15	J	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-21	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c

Appendix B
Available Data
Middlesex County College
Former Raritan Arsenal

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.077	J	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.056	J	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.049	J	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.26		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.5		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.17		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	1.6		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.2		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.4		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.12		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.14		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.22		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	1		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.95		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.32		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.29		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.11		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.19		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.26		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.32		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.83		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.26		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.51		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.4		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.38		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.19		---	---	Weston, 1994c
HTA-22	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.21		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.32		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.3		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.37		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.27		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.18		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.23		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.18		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.23		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.23		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.4		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	668		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	1590		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	1130		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	1160		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	1470		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	1190		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	878		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	952		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	980		---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.1	J	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.057	J	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.059	J	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.11	J	---	---	Weston, 1994c
HTA-23	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.059	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.042	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.07	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.063	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.042	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.057	J	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	15.8		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	17.3		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	20.4		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	20.1		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	11		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	18.8		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	17.7		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	14.3		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	16.2		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	37.1		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	32.8		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	14.9		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	15.7		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	31.7		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	16.5		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	18.1		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	14.3		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	44.9		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	33		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	13.6		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	25.1		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	36.7		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	12.5		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	17.7		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	15		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	21.8		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	13.8		---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.1	U	---	---	Weston, 1994c
HTA-24	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	23.6		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	14.8		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	19.8		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	15.7		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	16		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	13.7		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.12	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.28	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.08	J	---	---	Weston, 1994c

Appendix B
Available Data
Middlesex County College
Former Raritan Arsenal

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.45		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.42		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.19	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.049	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	1.1		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.24	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.15	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.63		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	17		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.88		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.16	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.094	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.078	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.086	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.12	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.098	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.19	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.71		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.22	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.38	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.15	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.34	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.18	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.084	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	1		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.062	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.28	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.09	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.086	J	---	---	Weston, 1994c
HTA-25	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.53		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	3.6		---	---	Weston, 1994c
HTA-25	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	4.3		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	2.6		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	2.4		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	7.5		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	2.6		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	3.9		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	6.4		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	5.6		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	20.7		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	28.7		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	28.2		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	56.7		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	24.9		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	29.3		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	23.8		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	16.2		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	12.6		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.25	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.25	U	---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.4		---	---	Weston, 1994c
HTA-26	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	0.25	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.083	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.058	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.16	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.084	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	2.5		---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.12	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.1	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.15	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.048	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.07	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.33	U	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.2	J	---	---	Weston, 1994c
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-27	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Carbazole	86748	0.33	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Chrysene	218019	0.062		---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.13		---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Dibenzofuran	132649	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluoranthene	206440	0.018		---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Fluorene	86737	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Naphthalene	91203	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.037		---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Phenanthrene	85018	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	10/31/94	Soil	0	0.5	0	Pyrene	129000	0.003	U	---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	5.7		---	---	Weston, 1994c
HTA-28	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.29		---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.051		---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.003	U	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.19	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.28	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.22	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.17	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.26	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.22	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.22	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.23	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.23	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.27	JB	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.29	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.2	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.3	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.27	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.21	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.18	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.27	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.26	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.27	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.23	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.34	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.28	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.18	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.27	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.2	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.26	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.24	JB	---	---	Weston, 1994c
HTA-29	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.26	JB	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.35	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.084	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.7		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.66		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.28	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.076	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	1.6		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.39	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.22	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	1.1		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.24	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	1.6		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.23	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.14	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.12	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.12	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.2	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.14	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.29	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	1.5		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.38	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.8		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.25	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.7		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.31	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.13	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	1.6		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.085	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.59		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.61		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.14	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.14	J	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.94		---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.33	U	---	---	Weston, 1994c
HTA-30	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.068	J	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	1.1		---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.063	J	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.33	U	---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.074	J	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.082	J	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.33	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.057	J	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.002	U	---	---	Weston, 1994c
HTA-31	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	2-Methylnaphthalene	91576	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	3,3'- Dichlorobenzidine	91941	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4' DDE	72559	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDD (p,p'-TDE)	72548	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	4,4'-DDT	50293	0.56		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthene	83329	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Acenaphthylene	208968	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	alpha-Chlordane	5103719	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Aluminum	7429905	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Anthracene	120127	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Antimony	7440360	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Arsenic	7440382	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Barium	7440393	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)anthracene	56553	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(a)pyrene	50328	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(b)fluoranthene	205992	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(g,h,i)perylene	191242	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Benzo(k)fluoranthene	207089	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Beryllium	7440417	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	bis(2-ethylhexyl)phthalate	117817	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Butylbenzylphthalate	85687	0.017		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cadmium	7440439	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Calcium	7440702	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Carbazole	86748	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Chromium	7440473	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Chrysene	218019	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cobalt	7440484	0.024		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Copper	7440508	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Cyanide	57125	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzo(a,h)anthracene	53703	0.012		---	---	Weston, 1994c

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Dibenzofuran	132649	0.24		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Dieldrin	60571	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Di-n-butyl Phthalate	84742	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Endosulfan sulfate	1031078	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluoranthene	206440	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Fluorene	86737	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	gamma-Chlordane	5566347	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Heptachlor epoxide	1024573	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Indeno (1,2,3-cd) pyrene	193395	0.093		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Iron	7439896	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Lead	7439921	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Magnesium	7439954	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Manganese	7439965	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Mercury	7439976	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Naphthalene	91203	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Nickel	7440020	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	PCBs (Total)	1336363	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Phenanthrene	85018	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Potassium	7440097	0.01		---	---	Weston, 1994c
HTA-32	Surface Soil Sample	10/30/94	Soil	0	0.5	0	Pyrene	129000	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Selenium	7782492	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Silver	7440224	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Sodium	7440235	0.002	U	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Thallium	7440280	0.061	J	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Tin	7440315	0.14	J	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Vanadium	7440622	0.084	J	---	---	Weston, 1994c
HTA-32	Surface Soil Sample	3/30/1994	Soil	0	0.5	0	Zinc	7440666	0.31	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	2-Methylnaphthalene	91576	0.21	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	3,3'- Dichlorobenzidine	91941	0.099	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4' DDE	72559	0.33	U	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4'-DDD (p,p'-TDE)	72548	0.042	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4'-DDT	50293	0.12	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Acenaphthene	83329	0.087	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Acenaphthylene	208968	0.31	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	alpha-Chlordane	5103719	12		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Anthracene	120127	0.49		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Arsenic	7440382	0.1	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Barium	7440393	0.064	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Benzo(a)anthracene	56553	0.045	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Benzo(a)pyrene	50328	0.068	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Benzo(b)fluoranthene	205992	0.068	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Benzo(g,h,i)perylene	191242	0.072	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Benzo(k)fluoranthene	207089	0.11	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	bis(2-ethylhexyl)phthalate	117817	0.42	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Butylbenzylphthalate	85687	0.13	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Cadmium	7440439	0.13	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Carbazole	86748	0.076	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Chromium	7440473	0.14	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Chrysene	218019	0.1	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Cyanide	57125	0.33	U	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Dibenzo(a,h)anthracene	53703	0.61		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Dibenzofuran	132649	0.063	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Dieldrin	60571	0.16	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Di-n-butyl Phthalate	84742	0.13	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Endosulfan sulfate	1031078	0.33	U	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Fluoranthene	206440	0.33	U	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Fluorene	86737	0.3	J	---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	gamma-Chlordane	5566347	19700		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Heptachlor epoxide	1024573	14300		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Indeno (1,2,3-cd) pyrene	193395	14400		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Lead	7439921	12000		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Mercury	7439976	21200		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Naphthalene	91203	13600		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	PCBs (Total)	1336363	14600		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Phenanthrene	85018	15400		---	---	Weston, 1994c

Appendix B
Available Data
Middlesex County College
Former Raritan Arsenal

Field Sample ID	Station Type	Sample Date	Sample Type	Sample Top (ft)	Sample Bottom (ft)	Duplicate Sample	Analyte	CAS Number	Result (mg/kg)	Flag	X Coordinate	Y Coordinate	Source
HTA-33	Surface Soil Sample	10/30/94	Soil	0	0.5	1	Pyrene	129000	18600		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Selenium	7782492	47.7		---	---	Weston, 1994c
HTA-33	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Silver	7440224	83.4		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	2-Methylnaphthalene	91576	20.6		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	3,3'- Dichlorobenzidine	91941	71.7		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4' DDE	72559	47.8		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4'-DDD (p,p'-TDE)	72548	116		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	4,4'-DDT	50293	14.9		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Acenaphthene	83329	150		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Acenaphthylene	208968	68.6		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	alpha-Chlordane	5103719	78		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Aluminum	7429905	69.5		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Anthracene	120127	204		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Antimony	7440360	65.1		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Arsenic	7440382	25.7		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Barium	7440393	42.6		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Benzo(a)anthracene	56553	128		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Benzo(a)pyrene	50328	35.3		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Benzo(b)fluoranthene	205992	40.4		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Benzo(g,h,i)perylene	191242	84.9		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Benzo(k)fluoranthene	207089	84.8		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Beryllium	7440417	66		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	bis(2-ethylhexyl)phthalate	117817	65.1		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Butylbenzylphthalate	85687	75.4		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Cadmium	7440439	61.8		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Calcium	7440702	69.1		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Carbazole	86748	71.5		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Chromium	7440473	48.9		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Chrysene	218019	75.7		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Cobalt	7440484	75.4		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Copper	7440508	40.5		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Cyanide	57125	24.9		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Dibenzo(a,h)anthracene	53703	26.7		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Dibenzofuran	132649	29.6		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Dieldrin	60571	55.6		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Di-n-butyl Phthalate	84742	1290		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Endosulfan sulfate	1031078	933		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Fluoranthene	206440	718		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Fluorene	86737	552		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	gamma-Chlordane	5566347	2890		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Heptachlor epoxide	1024573	697		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Indeno (1,2,3-cd) pyrene	193395	897		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Iron	7439896	859		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Lead	7439921	1100		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Magnesium	7439954	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Manganese	7439965	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Mercury	7439976	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Naphthalene	91203	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Nickel	7440020	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	PCBs (Total)	1336363	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Phenanthrene	85018	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Potassium	7440097	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	10/31/94	Soil	0	0.5	1	Pyrene	129000	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Selenium	7782492	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Silver	7440224	0.44		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Sodium	7440235	0.094		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Thallium	7440280	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Tin	7440315	0.1	U	---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Vanadium	7440622	3.3		---	---	Weston, 1994c
HTA-34	Surface Soil Sample	3/30/1994	Soil	0	0.5	1	Zinc	7440666	0.99		---	---	Weston, 1994c

APPENDIX C

PHOTO-DOCUMENTATION REPORT
MIDDLESEX COUNTY COLLEGE
Former Raritan Arsenal

1. INTRODUCTION

Avatar Environmental, LLC (Avatar), under contract to the United States Army Corps of Engineers (USACE) – New England District (CENAE), conducted a photo-documentation of the soil sample locations at the Middlesex County College (MCC) area with elevated levels of polycyclic aromatic hydrocarbons (PAHs). The photo-documentation summary presented herein addresses these sample locations and demonstrates the potential contribution of parking lots, asphalt, vehicular traffic, and other non-Department of Defense (DOD) related sources of PAH levels observed at the former Raritan Arsenal.

2. AREA OF FOCUS

The former Raritan Arsenal ceased DOD operations in 1963 with numerous parcels of land being sold to various public and private entities shortly thereafter. After property transfer, the new property owners extensively developed the exposure units (EUs). Development activities at the MCC EU included the construction of new buildings, roads, and parking lots, all of which have likely introduced PAHs to the former Raritan Arsenal.

The former Raritan Arsenal is a Formerly Used Defense Site (FUDS) and is regulated under the Comprehensive Environmental Compensation and Liability Act (CERCLA). Since it is a FUDS, the Department of Defense (DOD) is not liable for any contamination that is present due to non-DOD activities such as site development activities. As such, it is important to get a clear understanding of the likely sources of the PAHs.

Sampling activities dating back to the 1980s and 1990s have shown levels of PAHs that exceed EPA risk-based screening criteria. The current Remedial Investigations (RIs) and risk assessments have evaluated the PAHs and have spatially presented the sample locations with elevated PAHs.

3. PHOTO-DOCUMENTATION PROCESS

The sample locations with PAH concentrations that exceed EPA's screening criteria in the MCC EU are listed in Table 3-1 and include 34 high traffic area sites (HTA), 2 samples in Building

118, and one sample in Area W. Figure 3-1 spatially presents the locations of the PAH exceedances for the MCC EU.

On June 25th, 2013, Avatar personnel used sample location global positioning coordinates to navigate to each historic sample location, or clustered group of samples when appropriate. Upon arrival at a sampling location, the approximate sample point was flagged and a white-board was used to display the sample location ID(s) collected from the area for the photograph. In most cases, the photograph was not a close-up of a specific spot on the ground but rather a shot of the sampling area in relation to the surrounding landscape and potential sources of PAHs, such as walkways, streets, parking lots, railways (active and inactive), etc. Each photograph was accompanied by a brief description on the Photo-Documentation Form for each sample ID listed in Table 3-1. These descriptions and photographs can be seen in Attachment A. When appropriate, multiple sampling locations were included in the photographs.

4. PAH TRANSPORT/DEPOSITION AND PHOTO DOCUMENTATION RESULTS

In general, PAHs in soil often are the result of atmospheric deposition from both local and long range transport. The presence of PAHs in the soil of regions remote from any industrial activity supports this contention (ATSDR, 1995). New Jersey Department of Environmental Protection (NJDEP) guidance recognizes that PAHs may be attributable to diffuse anthropogenic pollution (DAP), i.e., contaminants that have been broadly distributed, often arising from multiple sources of human activities. DAP generally arise from atmospheric deposition, but may also contain contributions from random, non-point sources that are not attributed to any discharge at the site. DAP contaminants typically include PAHs, which may be present above health-based soil remediation standards. The principal sources of PAHs in soil along highways and roads are vehicular exhausts and emissions from wearing of tires and asphalt.

In addition to the atmospheric deposition discussed above, other anthropogenic sources of PAHs not attributable to former site activities include: surface water runoff from asphalt pavement and coal-tar based sealed pavement, leaching of PAHs, and analysis of samples with pieces of asphalt or road base material inadvertently included in the sample. Research has shown that coal-tar sealed pavements, which is a common practice in the Northeast U.S., can result in elevated soil

PAH concentrations in adjacent soils (Mahler et al., 2012). While USACE has not researched the use of coal-tar-based sealcoat at MCC or elsewhere at the former Raritan Arsenal, the research of Mahler et al., (2012) indicates that detected PAH concentrations are within the range typically found near paved surfaces and should be considered when making decisions at the former Raritan Arsenal with respect to PAHs.

Road base material and construction fill used prior to pouring concrete commonly includes asphalt millings, which contain approximately 5 to 7% asphalt, and is used as a binder for the quarry materials (stone, rock, sand, silt) that make up the load-bearing portion of the bituminous concrete surface. The base material may be difficult to distinguish from surface soil and inadvertently sampled. The source material for historical fill and construction activities in the MCC EU are not definitively known and could be a contributor to PAH levels in soil samples.

As can be seen in the photos included in Attachment A, many of the sample locations with PAHs that exceed screening criteria were collected near paved area. In some cases, the original sample location has been redeveloped or reworked/landscaped. PAHs detected in historic MCC soil samples are believed to be attributed to anthropogenic sources of PAHs rather than historical site activities.

5. REFERENCES

Agency for Toxic Substance and Disease Registry (ATSDR). 1995. *Toxicological Profile for Polycyclic Aromatic Hydrocarbons*. U.S. Department of Health and Human Services.

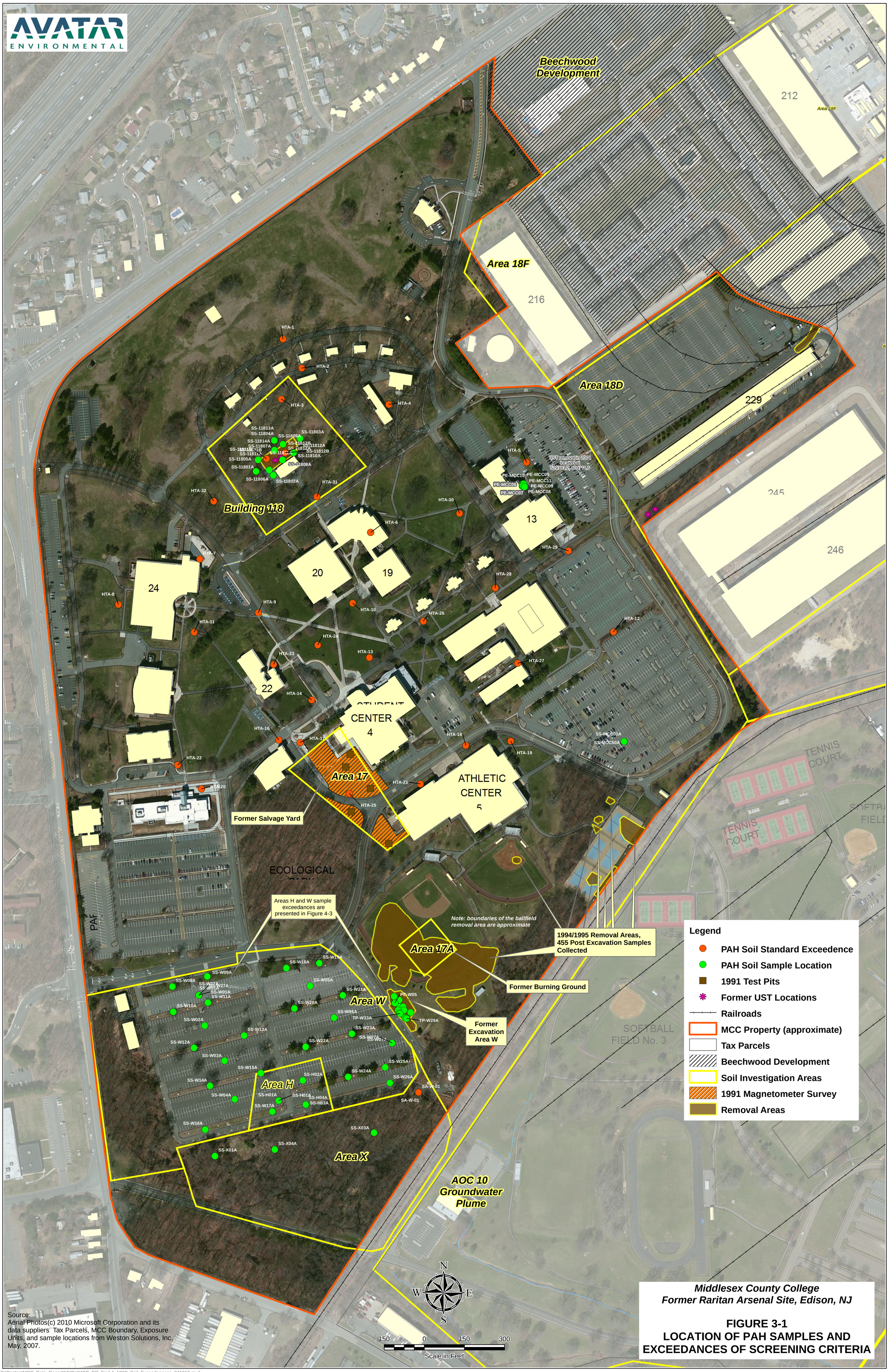
Mahler, B. J., Van Metre, P. C., Crane, J. L., Watts, A. W., Scoggins, M., and Williams, E. S. 2012. *Coal-Tar-Based Pavement Sealcoat and PAHs: Implications for the Environment, Human Health, and Stormwater Management*. Environmental Science and Technology. 2012, 46, 3039-3045.

Table

Table 3-1
Summary of PAH Sample Locations Exceeding Screening Criteria
Photo-Documentation Task - Middlesex County College
Former Raritan Arsenal

Investigation Area	Sample Type	Sample ID	Sample Date
Area W	Soil Sample	SA-W-01	11/6/1997
Building 118	Soil Sample	SS-11811A	4/12/1994
Building 118	Soil Sample	SS-11812A	4/12/1994
High Traffic Area	Soil Sample	SS-HTA-1	10/30/94
High Traffic Area	Soil Sample	SS-HTA-2	10/30/94
High Traffic Area	Soil Sample	SS-HTA-3	10/30/94
High Traffic Area	Soil Sample	SS-HTA-4	10/30/94
High Traffic Area	Soil Sample	SS-HTA-5	10/30/94
High Traffic Area	Soil Sample	SS-HTA-6	10/30/94
High Traffic Area	Soil Sample	SS-HTA-7	10/30/94
High Traffic Area	Soil Sample	SS-HTA-8	10/30/94
High Traffic Area	Soil Sample	SS-HTA-9	10/30/94
High Traffic Area	Soil Sample	SS-HTA-10	10/31/94
High Traffic Area	Soil Sample	SS-HTA-11	10/30/94
High Traffic Area	Soil Sample	SS-HTA-12	10/30/94
High Traffic Area	Soil Sample	SS-HTA-13	10/31/94
High Traffic Area	Soil Sample	SS-HTA-14	10/30/94
High Traffic Area	Soil Sample	SS-HTA-16	10/30/94
High Traffic Area	Soil Sample	SS-HTA-17	10/30/94
High Traffic Area	Soil Sample	SS-HTA-18	10/30/94
High Traffic Area	Soil Sample	SS-HTA-19	10/30/94
High Traffic Area	Soil Sample	SS-HTA-20	10/31/94
High Traffic Area	Soil Sample	SS-HTA-21	10/30/94
High Traffic Area	Soil Sample	SS-HTA-22	10/31/94
High Traffic Area	Soil Sample	SS-HTA-23	10/30/94
High Traffic Area	Soil Sample	SS-HTA-24	10/31/94
High Traffic Area	Soil Sample	SS-HTA-25	10/30/94
High Traffic Area	Soil Sample	SS-HTA-26	10/31/94
High Traffic Area	Soil Sample	SS-HTA-27	10/30/94
High Traffic Area	Soil Sample	SS-HTA-28	10/31/94
High Traffic Area	Soil Sample	SS-HTA-29	10/30/94
High Traffic Area	Soil Sample	SS-HTA-30	10/30/94
High Traffic Area	Soil Sample	SS-HTA-31	10/30/94
High Traffic Area	Soil Sample	SS-HTA-32	10/30/94
High Traffic Area	Soil Sample	SS-HTA-33	10/30/94
High Traffic Area	Soil Sample	SS-HTA-34	10/31/94

Figure



C:\Raritan\MCC_Data_Report\MXDs\MCC_DR_Fig4-1_MCC_Soil_Exceedaneces_041212.mxd

Attachment A

Photo-Documentation Form

MCC
Area W

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1905

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SA-W-01

City/State: Edison, NJ

Location Description:

Grassy, wooded area the college uses for storing mulch, sand, dirt, and scrap metal. The area is located in the back corner of a large parking lot and is fenced in. Gate seems to normally be open.

Photo-Documentation Form

MCC
Building 118

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1615

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-11811A ; SS-11812A

Location Description:

Samples were collected from within the B118 1991 removal area backfill, 10-20 ft off the parking lot for building 118.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1609

Photographer: SPECK/Robinson

Project: Raritan

Sample ID: SS - HTA - 1

City/State: Edison, NJ

Location Description:

Grassy lawn, asphalt road ~ 20 feet up hill.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1611

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-2

Location Description:

Property owner's lawn, adjacent to asphalt road and in vicinity of storm drain.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1613

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS - HTA-3

City/State: Edison, NJ

Location Description:

Grassy lawn within a group of trees, approx. 40 feet from asphalt parking lot looking N.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1622

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS-HTA-4

City/State: Edison, NJ

Location Description:

Grassy lawn.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1629

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-5

Location Description:

Grassy lawn between parking lots, approx. 10-15 feet from asphalt.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1631

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-6

Location Description:

A building occupies the location.

No photo taken.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1657

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS-HTA-7

City/State: Edison, NJ

Location Description:

Location consists of a sand-filled playground. A fence surrounds the area so access is not available. Right outside the fence line, ground consists of tanbark and grass.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1708

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-8

Location Description:

Grassy lawn, ~ 10 feet away from asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1717

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-9

Location Description:

Grassy area between concrete sidewalk, asphalt pathway, and asphalt parking lot.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1721

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-10

Location Description:

Grassy lawn looking NE.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1719

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-11

Location Description:

Grassy lawn adjacent to asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1838

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-12

Location Description:

In parking lot on an island divider. Adjacent to asphalt surface, island consists of bushes, shrubs planted in tanbark.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1723

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-13

Location Description:

Grassy lawn looking SE.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1747

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-14

Location Description:

Grassy lawn adjacent to sidewalk.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1750

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-16

Location Description:

On concrete sidewalk adjacent to asphalt road.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1752

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-17

Location Description:

On concrete sidewalk adjacent to vegetation, such as shrubs, and grassy lawn.

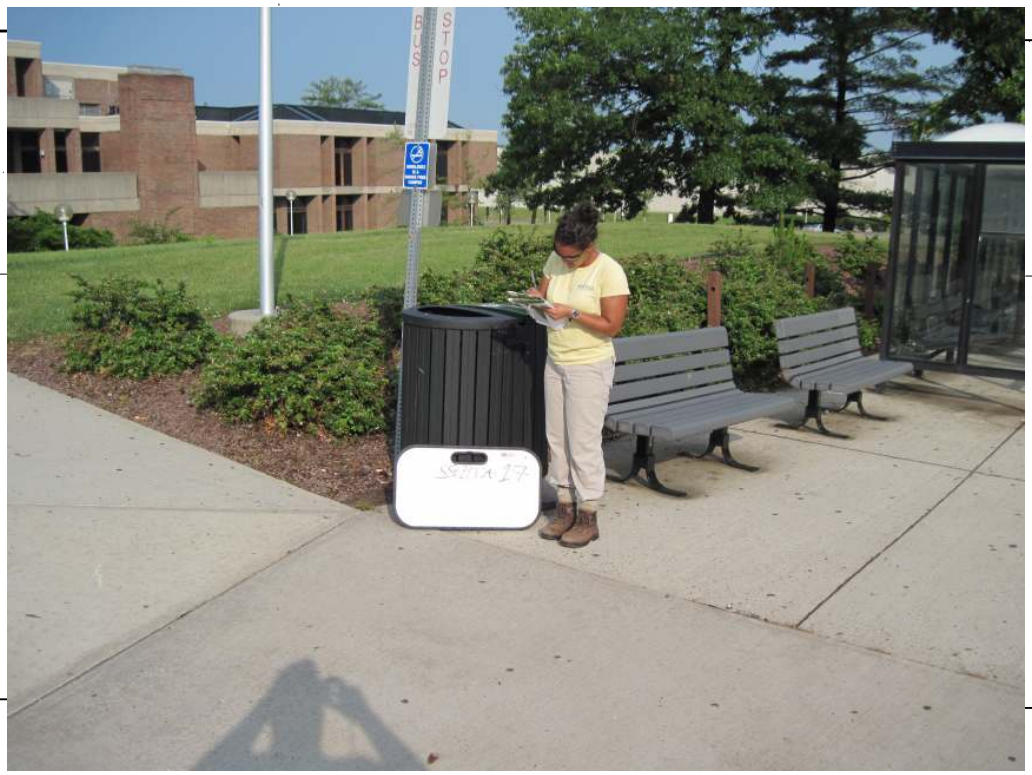


Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1847

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-18

Location Description:

Grassy area adjacent to asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1846

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-19

Location Description:

Grassy area between asphalt pathways. Two "ELECTRIC" manhole covers are also within the location.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1757

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-20

Location Description:

Grassy area between asphalt road and concrete sidewalk.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1850

Photographer: SPECK/Robinson

Project: Raritan

Sample ID: SS-HTA-21

City/State: Edison, NJ

Location Description:

Grassy lawn on hill next to building (Athletic Center). Asphalt pathway ~15 feet below.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1759

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-22

Location Description:

Grassy lawn between sidewalk and asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1806

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-23

Location Description:

Grassy lawn adjacent to sidewalk and stone path.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1724

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-24

Location Description:

Grassy area.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1856

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS-HTA-25

City/State: Edison, NJ

Location Description:

Grassy area adjacent to asphalt parking lot and roadway.

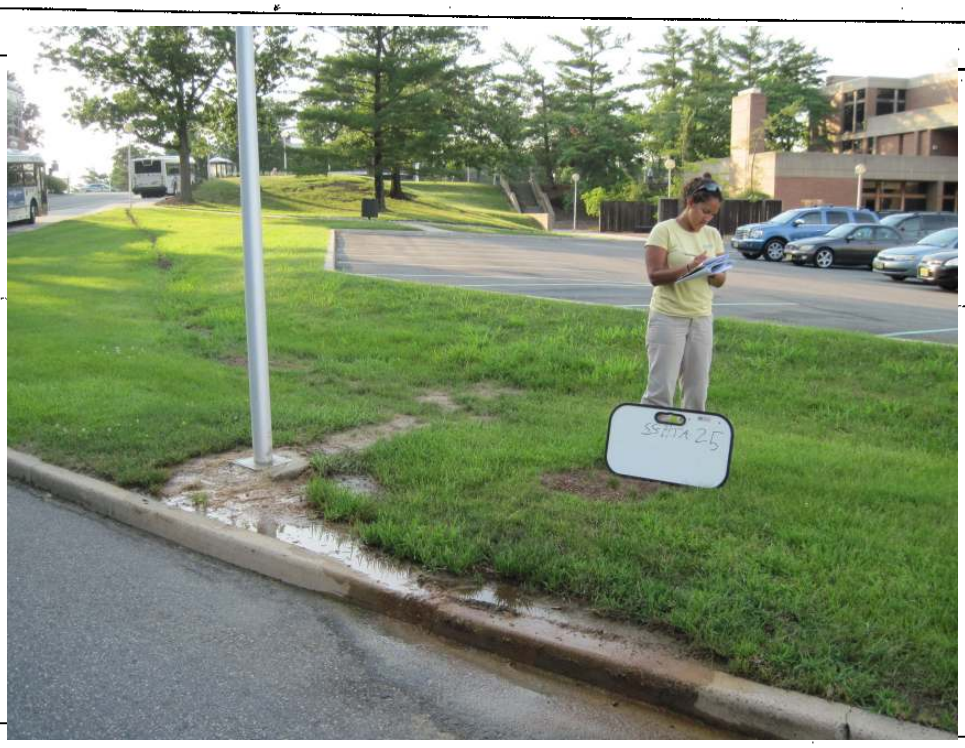


Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1831

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS-HTA-26

City/State: Edison, NJ

Location Description:

Grassy lawn adjacent to asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1843

Photographer: SPECK/Robinson

Project: Raritan

Sample ID: SS-HTA-27

City/State: Edison, NJ

Location Description:

Grassy area adjacent to asphalt pathway, soggy ground.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1833

Photographer: SPECK /Robinson

Project: Raritan

Sample ID: SS - HTA - 28

City/State: Edison, NJ

Location Description:

Grassy lawn adjacent to sidewalk and asphalt pathway.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1835

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-29

Location Description:

Grassy area adjacent to asphalt pathway and parking lot.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1915

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK/Robinson

Sample ID: SS-HTA-30

Location Description:

Grassy lawn between asphalt pathways.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1812

Project: Raritan

City/State: Edison, NJ

Photographer: SPECK / Robinson

Sample ID: SS-HTA-31

Location Description:

Grassy lawn adjacent to asphalt road.

Photo-Documentation Form

MCC

AVATAR ENVIRONMENTAL

Date/Time: 6/25/13 @ 1810

Photographer: SPECK / Robinson

Project: Raritan

Sample ID: SS-HTA-32

City/State: Edison, NJ

Location Description:

Grassy lawn, asphalt roadway ~ 30 feet away looking SW.