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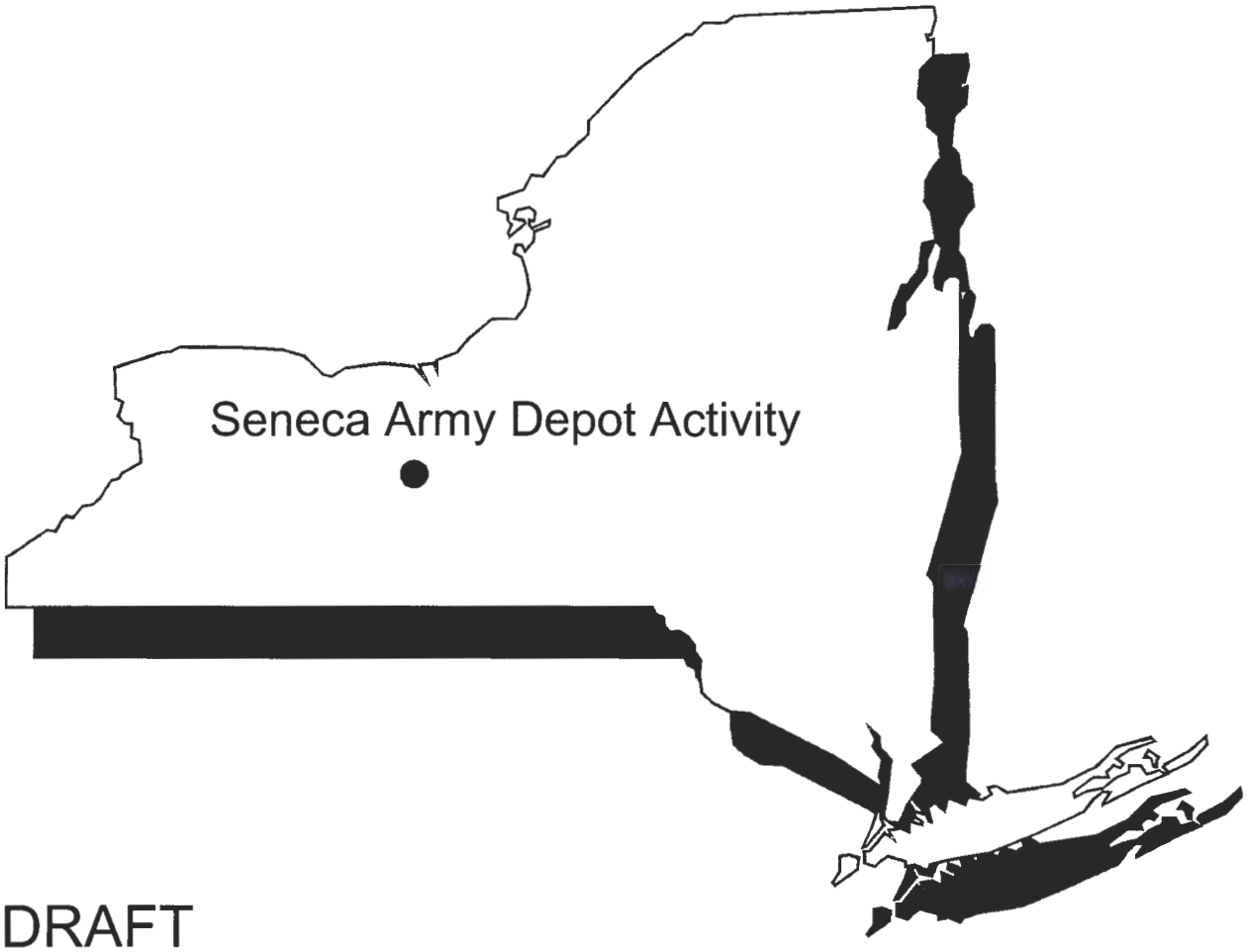
Seneca Army Depot Activity
Romulus, NY



DRAFT
FINDINGS REPORT
INVESTIGATE EBS SITES,
MOUND AREA, EBS SITE 109(7)
SENECA ARMY DEPOT ACTIVITY

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
CONTRACT NO. DACA87-02-D-0005
DELIVERY ORDER NO. 0020

October 2004

DRAFT Findings Report

Investigate EBS Sites, Mound Area, EBS Site 109(7) SEAD-121J

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK 14541

and

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Acronyms and Abbreviations

ARAR	applicable or relevant and appropriate requirements
bgs	below grade surface or below ground surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Responsibility, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
DoD	Department of Defense
DQO	Data Quality Objective
DRMO	Defense Reutilization and Materials Office
dup or DU	duplicate sample designator
e.g.,	for example
EBS	Environmental Baseline Survey
ECL	Environmental Conservation Law
EPA	Environmental Protection Agency
FB	field blank sample designator
FFA	Federal Facilities Agreement
GPS	Global Position System
i.e.,	that is
IAG	Interagency Agreement
LRA	Local Redevelopment Authority
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
mg/L	milligram or milligrams per Liter
MS	matrix spike sample designation
MSD	matrix spike duplicate sample designation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NYCRR	New York State Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PID	Planned Industrial/Office Development
ppm	part or parts per million
QA/QC	Quality Assurance/Quality Control

Acronyms and Abbreviations
(continued)

QAMS	Quality Assurance Management Staff
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
SAR	Small Arms Range
SCIDA	Seneca County Industrial Development Authority
SD	Sediment sample designation
SEDA	Seneca Army Depot Activity
SVOC	Semivolatile Organic Compound
SW	Surface Water sample designation
SWMU	Solid Waste Management Unit
TAGM	Technical and Administrative Guidance Memorandum
TAL	Target Analyte List
TB	trip blank sample designator
TBC	to be considered
TCL	Target Compound List
TIC	Tentatively Identified Compound
TOG	Technical Operating Guidance
USC	United States Code
USCS	Unified Soil Classification System
USGS	United States Geological Survey
VOC	Volatile Organic Compound
µg/Kg	microgram or micrograms per kilogram
µg/L	microgram or micrograms per liter

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1 INTRODUCTION

Parsons Engineering Science, Inc. (Parsons) was retained by the U.S. Army (Army) to develop and conduct a site investigation of an Environmental Baseline Survey (EBS) Site, 109(7), known as the Mound Area or SEAD-121J.

The objectives of the investigative study were to develop data and information that could be used to sufficiently characterize the site and determine whether there was any evidence that releases may have occurred at the Mound Area that could potentially be impacting the environment and surrounding populations.

The investigation of the Mound Area was performed according to requirements and guidance of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as set forth in the Interim Final "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (EPA, 1988). Work also complied with the latest guidance provided by the U. S. Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (NYSDEC), and the Department of Defense's (DoD's) Base Realignment and Closure (BRAC) Office. Specific details of the work proposed to evaluate the site and to assess potential environmental releases are presented in the document "Final Work Plan, Investigate EBS Sites, Mound Area, EBS Site 109(7), Seneca Army Depot Activity" (Parsons, June 2004).

The investigation consisted of excavation of test pits, collection of soil samples in the test pits, surface soil sampling, and chemical analysis of soil samples. **Section 2** presents the history of the site and a summary of work completed at the site. **Section 3** presents a summary of the results and findings of the investigation. **Section 4** presents a summary and conclusions of the investigation.

2 STUDY AREA INVESTIGATION

2.1 BACKGROUND

Seneca Army Depot Activity (SEDA or the Depot) was constructed in 1941. The 10,600-acre Depot was owned by the United States Government and operated by the Department of the Army until late 2000, when portions of the Depot were deeded over to the State of New York (Prison) and the Seneca County Industrial Development Authority (SCIDA - Adolescent Center) for redevelopment and reuse. In September 2003, nearly 7,000 acres were transferred to the SCIDA as conservation/recreation land. Prior to construction of the Depot, the site was used for farming.

SEDA was proposed for inclusion on the National Priority List (NPL) as a Federal Facility site in July of 1989; the Depot's listing was approved by Congress and its listing was finalized in August of 1990. The Depot's EPA identification number is NY0213820830. The site is also identified by NYSDEC as Inactive Hazardous Waste Site Number 8-50-006.

In accordance with requirements of Section 120 of CERCLA (Title 42, *U.S. Code*, Sec. 9620), the US Army, the EPA, and the NYSDEC negotiated and signed a Federal Facilities Agreement (FFA) or an Interagency Agreement (IAG) governing site investigation and remediation of the Depot in January 1993. This agreement determined that future investigations were to be based on CERCLA guidelines and RCRA was considered an Applicable or Relevant and Appropriate Requirement (ARAR) pursuant to Section 121 of CERCLA. In October 1995, SEDA was designated as a facility recommended for closure under the provisions of the Base Realignment and Closure (BRAC) process. In 2000, the facility was closed.

In accordance with requirements of BRAC, Woodward-Clyde Federal Services was retained to conduct and present the findings of an EBS for SEDA. Under the EBS process, Woodward-Clyde assessed all property and facilities at the Depot to classify each into one of seven standard environmental condition definitions of property area types consistent with the Community Environmental Response Facilitation Act (CERFA – Public Law 102-426), which amends Section 120 of CERCLA. Parcels of land that are classified as Level 1 through 4 are suitable for transfer or lease, while parcels that are designated as Level 5 through 7 are not considered suitable for transfer, pending the initiation and completion of necessary remedial actions or the completion of further or additional site evaluations and investigations. The results of Woodward-Clyde's effort were documented in the U.S. Army Base Realignment and Closure 95 Program Report that was issued on October 30, 1996. Data and information compiled during the preparation of this report served as part of the basis for subsequent decisions made regarding potential future land use at the Depot.

Pursuant to other requirements of BRAC, the Seneca County Board of Supervisors established the Seneca Army Depot Local Redevelopment Authority (LRA) in October 1995. The primary responsibility assigned to the LRA was to plan and oversee the redevelopment of the Depot. The

Reuse Plan and Implementation Strategy for SEDA was adopted by the LRA and approved by the Seneca County Board of Supervisors on October 22, 1996. Under this plan and subsequent amendment, areas within the Depot were classified according to their most likely future use. The proposed future use designations identified by the LRA and approved by the Board of Supervisors included:

- housing;
- institutional;
- industrial;
- warehousing;
- conservation/recreational land;
- an area designated for a future prison;
- an area for an airfield, special events, institutional, and training; and
- an area to be transferred from one federal entity to another (i.e., the area of the existing navigational LORAN transmitter).

A map showing the LRA's recommended future land use for the Depot is provided as **Figure 2-1**.

2.2 SITE DESCRIPTION AND HISTORY

The Mound Area has been briefly mentioned in two previous documents. EBS Site 109(7), the Mound Area, was first designated in the *Environmental Baseline Survey Report* (Woodward-Clyde, 1997) which was issued in accordance with requirements of the U.S. Army's BRAC 95 Program. When first listed, the environmental condition of the Mound Area was classified as a Category 7 area, which indicates that the area had not been investigated and required additional evaluation. Abutting land immediately surrounding parcel 109(7) was classified as Category 1 land, which indicates that there had been no storage, release, or disposal of hazardous substances or petroleum products in any of the abutting land; or no evidence exists for the release, disposal, or migration of hazardous substances or petroleum products, though the area has been used to store less than reportable quantities of hazardous substances or 600 or fewer gallons of petroleum products. Subsequently, the Mound Area was also discussed in the report *Investigation of Environmental Baseline Survey Non-Evaluated Sites [SEAD-119A, SEAD-122(A,B,C,D,E), SEAD-123(A,B,C,D,E,F), SEAD-46, SEAD-68, SEAD-120 (A,B,C,D,E,F,G,H,I,J), and SEAD-121(A,B,C,D,E,F,G,H,I)]* (Parsons, 1999). The Mound Area was briefly described as part of the discussion provided for SEAD-120G, however no investigations were conducted at EBS Site 109(7) as part of this study.

The Mound Area is located in the east-central portion of the Depot, northwest of the Depot's former Administration area and main entry gate off State Route 96, as shown in **Figure 2-2.** It is located in the portion of the former Depot where the future land use has been designated as Planned Industrial/Office Development (PID). Information on the Mound Area is extremely limited. The area consists of an earthen mound, or berm, that may have been related to a rumored, historic small arms range (SAR); no

documents or evidence has been found to verify that a SAR existed in this area. The boundary of the Mound Area, EBS Site 109(7), which is delineated on **Figure 2-2**, is limited to the extent of the berm.

2.3 PHYSICAL SITE CHARACTERIZATION

Based on observations made during a site inspection performed in November 2003 and verified in July 2004, the Mound Area is comprised of a pushed up berm, with estimated measurements of approximately 410 feet (ft.) in length, with a maximum height of 15 ft., a width of 60 ft. at the base and 10 ft. at the top, and side slopes at an angle of approximately 35 degrees. One end of the berm is located near the corner of East Kendaia Rd. and Bundle Ammunition Pack Rd., and it extends in a northeast direction, as shown on **Figure 2-2**. The berm is covered with brush and trees, many of which are oak. The trunks of several of the trees measure up to 18 inches in diameter. Data indicates that oak trees with trunks measuring 18 inches in diameter may be as old as 75 years of age. This would suggest that some of the trees present at the Mound Area pre-date the US Government's ownership of, and the Army's operations at, SEDA. The height of the berm is relatively consistent throughout, though it tapers off significantly at the northeastern and southwestern tips.

The Mound Area's soil cover, which, based on visual inspection, is homogeneous across the site, appears to be topsoil throughout with some shale fragments mixed into the cover. There are numerous animal burrows in the berm, some of which are up to approximately 3 ft. in depth. A visual inspection of the animal burrows suggests that there is topsoil throughout the length of the hole. There was no visual indication of contaminated soil or debris within the berm, based on the absence of staining, change in color or consistency of soil or odor.

In the areas immediately surrounding the berm, there are alternating areas of open fields, brush, and woods. There are large areas of the surrounding land covered with shale fragments, which are consistent with the type of material contained within the berm. In addition, isolated areas where water has ponded during precipitation events were observed in the vicinity of the Mound Area in November and in July; however, the wet areas are ephemeral and only seemed to form immediately after a storm event.

Based on a review of available topographic maps for this area, it is expected that the most likely surface water flow path would be towards the northeast to northwest quadrants. The regional surface topography is highest to the south of the Mound, falling off towards the north. However, the overall gradient is shallow, suggesting that most storm water would infiltrate.

The following tasks were proposed and completed to investigate EBS Site 109(7), the Mound Area:

- Surface soil sampling;
- Test pitting and collection of soil samples;
- Chemical analysis of soil, and

- Survey of test pit and sample locations with global positioning system (GPS).

2.4 METHODS AND MATERIALS

2.4.1 Surface Soil Investigation

2.4.1.1 Surface Soil Sampling

Surface soil samples were collected at 5 locations along the length of the mound at a depth of 0 to 2 inches below resident site vegetation. The surface soil sample locations were placed on the northwest side of the berm since the southeast portion of the berm was explored through the excavation of test pits (see **Section 2.4.2**). To get adequate coverage of the berm, the five surface soil sample locations are as follows (**Figure 2-3**):

- SS109-1: One surface soil sample collected from the southwestern tip of the berm;
- SS109-2: One surface soil sample collected from the center of the berm;
- SS109-3: One surface soil sample collected from the northeastern tip of the berm; and
- SS109-4 and SS109-5: Two surface soil samples collected from the northwestern side of the berm.

The exact locations of the surface soil samples were determined by measuring the coordinates with a GPS system. Surface soil samples were collected from the near-surface interval (i.e., 0 to 2-inch depth) beneath resident site vegetation. At the time of sampling, personnel marked a 1-foot by 1-foot square area on the surface of the mound and removed any obvious accumulations of vegetation, debris, rocks or stones. A decontaminated split-spoon was driven into the ground in the approximate center of the area to a final depth of roughly six 6 to 8 inches below grade using a sledge-hammer or equivalent device. The spoon was recovered and opened, and necessary volumes needed for volatile organic compound (VOC) determinations were collected immediately from the soil that was found in the split-spoon's barrel at depths of 0 to 2 inches below any vegetative cover or root ball. Samples for VOC determinations were collected from the split-spoon's barrel using a syringe-barrel sampler in accordance with procedures described in EPA's SW-846 Method 5035. Three separate sample aliquots were collected for each VOC analysis; one, required for determination of high concentration VOCs, was preserved with methanol; and two aliquots, required for determination of low level VOCs, were preserved with sodium bisulfate. The vials were delivered from the laboratory to the field pre-preserved; it was noted in the field that the vials appeared to be leaking based on observations that some labels were smeared and liquid was observed on the outside of vials. For each sample aliquot, approximately 5 grams (gms) of soil were recovered by plunging the open-end of a pre-tared and calibrated syringe barrel and plunger assembly into the undisturbed contents of the split-spoon sampler. The weight of soil in the syringe was determined using a balance. Once the sample soil was packed in the barrel of the syringe and weighed, it was transferred into an open, pre-labeled 40-mL screw-capped vial that contained the specified preservative. The screw-capped vials were closed and immediately

sealed. During sampling, small bubbles were produced when the soil was added to the sodium bisulfate. The bubbles appeared to result from an apparent reaction between the soil and the preservative.

Once needed sample aliquots for the VOC determinations were recovered, decontaminated spoons and stainless steel bowls were used to collect sufficient volume to fill all of the remaining sample bottles. All sample volumes were recovered from the remaining area of the 1-foot by 1-foot square, at depths not to exceed 2 inches below resident vegetative and root ball materials. The field geologist classified the soil according to the Unified Soil Classification System as presented in the American Society for Testing and Materials' (ASTM's) Method D 2488, Standard Practice for the Description and Identification of Soils (Visual-Manual Procedure), as modified by the Burmeister Procedure. Soil sampling forms are included in **Appendix A**.

Field quality control consisted of the collection and analysis of one rinsate blank sample and one field duplicate. One matrix spike/matrix spike duplicate (MS/MSD) was collected for chemical analysis. The location of collection of these QA/QC samples was determined in the field. Required sample containers, preservation techniques, and holding times are specified in EPA SW-846 Method 5035 for VOCs and in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" (EPA, 1996).

2.4.1.2 Sample Analysis

All soil samples were analyzed for Target Compound List (TCL) VOCs by EPA SW-846 Method 8260B, TCL SVOCs by EPA SW-846 Method 8270C, TCL pesticides and PCBs by EPA SW-846 Method 8081A/8082A, Target Analyte List (TAL) metals by EPA SW-846 Method 6010B and 7471A, and cyanide by EPA Method 9012. VOCs were analyzed using the sodium bisulfate aliquot. Results of the lab analysis are discussed in **Section 3**.

2.4.2 Test Pits Investigation

2.4.2.1 Test Pit Excavation and Soil Sampling

In preparation of the installation of test pits, clearing activities (such as surface scraping with the backhoe to remove shallow roots and vegetative growth) were performed, as necessary. Three test pits were installed within the berm at locations along the southeast side of the berm, as shown on **Figure 2-3**, in order to define and characterize the nature and composition of material comprising the mound proper. Each test pit, which ran perpendicular to the length of the berm, was excavated from the center of the berm (the highest part of the berm) to the edge of the berm. The lengths of TP109-1, TP109-2, and TP109-3, were 12.5 ft., 23.3 ft., and 17.6 ft., respectively, measured along the surface of the berm. Final excavations extended to a depth of approximately 2 ft. below ground surface to confirm that only native material was present beneath the mound. Test pits TP109-1, TP109-2, and TP109-3

were excavated to depths of 10 ft., 6 in., 14 ft. 4 in., and 11 ft. 9 in., respectively, measured at the northwestern end of each test pit, closest to the center of the berm. The width of each test pit was 24 in., the width of the backhoe bucket. Test pit logs are included in **Appendix A**. No additional shoring was used to support the excavation. The locations of the test pits were determined by measuring the coordinates with a GPS system.

Excavated soil was staged on a plastic tarp that was placed on the ground surface at a location near the berm and the excavation. The soil from the 0 to 2 in. interval was slightly darker in color than the soil excavated from greater depths, which indicates a greater amount of organic matter in the surface soil; and shale bits were observed at the bottom of the test pit. Generally, the soil throughout the test pit appeared to be consistent in color and character (with the noted exceptions above). Since the soil appeared to be relatively uniform, material from the berm at all depths were staged together and backfilled into the test pit. Backfilled soil was compacted and the surface contour of the mound was returned to the pre-existing form to the fullest extent possible when the excavation was closed.

The exposed faces of the mound proper was observed and catalogued to provide information about the nature and composition of the material immediately surrounding the excavation site. Three soil samples were collected from the exposed surfaces of each test pit for chemical analysis. Field observation and sample collection activities were conducted from the surface of the mound or outside of the test pit; there was no entrance into the test pit.

Test pitting procedures were followed according to Section 3.4.3 of Appendix A, Field Sampling and Analysis Plan in the Generic Workplan. Level D personal protection equipment (PPE) was worn by all personnel performing test pit operations. The excavated soils were monitored for volatile organic compounds (VOCs), using a PID during test pitting.

The first sample was collected from the surface (0 to 2 in. below top of berm). The second sample was collected from a depth range between 2 inches below top of berm and the ground surface. The third sample was collected below ground surface, which was comprised of native material. Each sample was collected as a composite from its appropriate depth range by collecting the sample from the bucket of the backhoe, except for samples collected for VOC analysis which were collected from a single location, as described in **Section 2.4.1.1**.

Field quality control consisted of the collection and analysis of one rinsate blank sample and one field duplicate. One matrix spike/matrix spike duplicate (MS/MSD) was collected for chemical analysis. The location of collection of these QA/QC samples was determined in the field. Required sample containers, preservation techniques, and holding times are specified in EPA SW-846 Method 5035 for VOCs and in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" (EPA, 1996).

2.4.2.2 Sample Analysis

All soil samples were analyzed for Target Compound List (TCL) VOCs by EPA SW-846 Method 8260B, TCL SVOCs by EPA SW-846 Method 8270C, TCL pesticides and PCBs by EPA SW-846 Method 8081A/8082A, Target Analyte List (TAL) metals by EPA SW-846 Method 6010B and 7471A, and cyanide by EPA Method 9012. VOCs were analyzed using the sodium bisulfate aliquot. Results of the lab analysis are discussed in **Section 3**.

2.4.3 Data Validation

Validation of analytical data resulting from analytical determinations in soil was performed in a manner that is generally consistent with procedures defined in the EPA's "National Functional Guidelines for Organic Data Review" and consistent with EPA Region 2's Standard Operating Procedures. Specific data validation procedures that were followed include:

- HW-24, Validating Volatile Organic Compounds by SW-846 Method 8260B, Revision 1, June 1999;
- HW-22, Validating Semivolatile Organic Compounds by SW-846 Method 8270, Revision 2, June 2001;
- HW-23B, Validating Pesticides/PCB Compounds by SW-846 Method 8082, Revision 1.0, May 2002 [The most current SOP for validating PCB data is HW-23B. However, until a Regional Data Validation SOP can be prepared for Pesticides (i.e., utilizing analytical method SW-846 8081a), DV SOP HW-23 should be used in conjunction with the QA/QC criteria detailed in SW-846 Method 8081A.]; and
- HW-2, Evaluation of Metals Data for the CLP Program, Revision 11, January 1992.

The data package submittal received from the laboratory for the analytical determinations in soil contained all data generated during the analyses, including mass spectral identification charts, mass spectral tuning data, spike recoveries laboratory duplicate results, method blank results, instrument calibration, and holding times documentation.

Other analyses were subjected to full data validation. Full data validation is a *qualitative* and *quantitative* review of those items evaluated during a qualitative assessment in addition to calculating sample and laboratory QC results with the instrument raw data. This level of data quality provides assurance that all sample results reported by the laboratory were transcribed, calculated, and reported correctly. Therefore, this level of data review requires laboratories to submit all environmental sample results, laboratory QC results, and instrument raw data (i.e., a full data package or "CLP-type" data deliverable).

3 RESULTS

3.1 SURFACE SOIL SAMPLE ANALYSIS

The locations of the six surface soil samples collected from five locations are shown in **Figure 2-3**. The results of these analyses are summarized in **Table 3-1**, and the complete analytical results are presented in **Appendix B**. Three volatile organic compounds (VOCs) were detected (acetone, methyl ethyl ketone, and methylene chloride) in the surface soils samples; however, methyl ethyl ketone and Methylene chloride, which are common laboratory contaminants, did not exceed their respective NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 guidance values. Additionally, methylene chloride was detected in both field blanks (2 µg/L) and trip blanks (10 µg/L). Acetone exceeded the TAGM in all six samples, with a maximum concentration estimated as 800 mg/Kg detected at SS109-3.

EPA has revised its SW-846 Method 5035 for the collection of VOCs and it is superceded by Method 5035A (EPA, 2002). Appendix A of the EPA document for Method 5035A cites findings that "acidification of certain soils with sodium bisulfate may produce a false positive acetone artifact," especially when the soil contains higher amounts of organic matter. The VOC samples from the Mound Area analyzed by the lab were preserved with sodium bisulfate. In addition, the soil sampling records documented the presence of trace organics in the sample (see **Appendix A**), and the field technicians observed bubbling when the soil sample was inserted into the sodium bisulfate vial. Furthermore, additional research demonstrated false positives of acetone generated due to the preservation of soil samples with sodium bisulfate could be detected at levels as high as 1,000 µg/Kg (Clausen, 2004). Based on site observations and information presented in Method 5035A, it is most likely that the reported acetone concentrations are an artifact of degradation due to the presence of organic material and sodium bisulfate and are not reflective of site conditions or indicative of a release.

No semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), or cyanide were detected in surface soil samples.

Twenty one metals were detected in the surface soil, and one metal, sodium, exceeded its TAGM value with an estimated concentration of 254 mg/Kg at SS109-4. This concentration is less than the maximum SEDA site-specific background concentration of sodium, 269 mg/Kg.

3.2 TEST PIT RESULTS

Three test pits were excavated to characterize the material in the berm. No staining, odors, or debris were observed in or around the test pits.

Three soil samples were collected from each test pit (plus one duplicate) for a total of 10 samples. The locations of the samples are shown in **Figure 2-3**. The results of these analyses are summarized in

Table 3-2, and the complete analytical results are presented in **Appendix B**.

Four VOCs were detected in the test pit soils (acetone, carbon disulfide, methyl ethyl ketone, and methylene chloride), which are all common laboratory contaminants. Methylene chloride was detected in both field blanks (2 µg/L) and trip blanks (10 µg/L).

Only acetone exceeded the NYSDEC TAGM in 6 samples. The maximum detection of acetone in a test pit soil sample (1000 J µg/Kg) was at TP109-2-1 at a depth range of 0 to 2 in. Acetone was detected in all 3 samples collected from test pit TP109-1, and from the 2 shallower samples from TP109-2 (depth ranges of 0 to 2 in.; and 2 in. to 11.3 ft.), as well as the surface soil sample collected from TP109-3 (TP109-3-1). The test pit log notes that roots were observed in the soils collected for sample TP109-1-2, TP109-2-1, and TP109-3-1, which reported acetone concentrations of 930 J µg/Kg, 1000 J µg/Kg, and 670 J µg/Kg, respectively, which are the three highest concentrations of acetone detected in the test pit samples. As stated above, the reported presence of acetone can be related to the sample preservative, sodium bisulfate, and to the presence of organic material (such as roots); therefore, it is not believed that acetone is a chemical of concern at SEAD-121J. In addition, acetone is highly volatile, hence it seems improbable that such high levels of acetone would be present in surface soils (test pit samples collected from the depth interval of 0 to 2 in. bgs).

Five SVOCs (benzo(b)fluoranthene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, fluoranthene, and pyrene) were detected but none exceeded their TAGM values.

No pesticides, PCBs, or cyanide were detected in surface soil samples.

Twenty one metals were detected in the test pit soil samples, and 3 metals (selenium, silver, and sodium) exceeded their TAGM standards. Selenium was detected in 8 samples and exceeded the TAGM 3 times with a maximum concentration of 3.34 mg/Kg (TP109-2-1) at a depth of 0 to 2 in. bgs. The selenium concentration decreased slightly with increasing depth with a concentration of 3.2 mg/Kg detected at (TP109-2-2), which also exceeded the TAGM value. The third selenium exceedance was detected in the surface soil sample collected from TP109-3 (TP109-3-1), with a concentration of 2.82. All selenium exceedances were less than twice the TAGM value. In addition, the Generic Soil Screening Level (SSL) for selenium (soil ingestion) is 390 mg/Kg, which is significantly higher than selenium concentrations found at the Mound Area.

Silver was detected in all 10 samples and exceeded the TAGM 5 times with a maximum concentration of 2.71 J mg/Kg (TP109-2-1) at a depth of 0 to 2 in. bgs. Exceedances of silver were co-located with the exceedances of selenium in test pits TP109-2 and TP109-3, and they followed the same trend of decreasing concentration with increasing depth. The maximum concentration of silver, 2.71 J mg/Kg, was detected in the surface soil at TP109-2 at sample location TP109-2-1. The SSL for silver (soil ingestion) is 390 mg/Kg, which is significantly higher than silver concentrations found at the Mound Area.

Sodium was detected in 9 samples and exceeded the TAGM twice, with a maximum concentration of 197 mg/Kg (TP109-2-3) at a depth range of 11 ft. 4 in. to 14 ft., 4 in. This concentration is less than the maximum SEDA site-specific background concentration of sodium, 269 mg/Kg.

The typical test pit encountered the following layers:

- 0 to 1 foot of topsoil;
- 7 ft. to 10 ft. of moist brown silt and clay with some angular gravel, and
- Native material encountered (silt, sand, and clay) with bits of shale.

There was no evidence of any contaminated fill materials, trash or other buried materials. The test pit logs are presented in **Appendix A**.

4 SUMMARY AND CONCLUSIONS

A site investigation was conducted at EBS Site 109(7), Mound Area (SEAD-121J). The investigation included surface soil sampling and analyses, the excavation of three test pits, and soil sampling and analysis of test pit samples. No debris or soil staining were observed on the berm or within any of the test pits.

Soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals, and cyanide. The results are summarized as follows:

(1) Four VOCs were detected in the soils (surface soils and test pit soils), and 1 VOC, acetone, was detected above the TAGM guidance value; however, reported acetone concentrations are not considered characteristic of site soils and are attributed to the sample preservation method;

(2) Five SVOCs were detected in the soils; however, no SVOCs exceeded TAGM guidance values;

(3) No Pesticides or PCBs were detected;

(4) Cyanide was not detected in any samples, and

(5) Three metals (sodium, selenium, and silver) exceeded their TAGM guidance values in 3 to 5 samples. The detections of these metals at the Mound Area do not appear to have a pattern, suggesting that they are not related to a release. The maximum detection of sodium was less than the maximum SEDA background concentration. The maximum detections of selenium and silver were significantly less than EPA's generic soil screening levels. Based on comparisons of these metals to guidance values, these 3 metals are not considered of concern at the Mound Area.

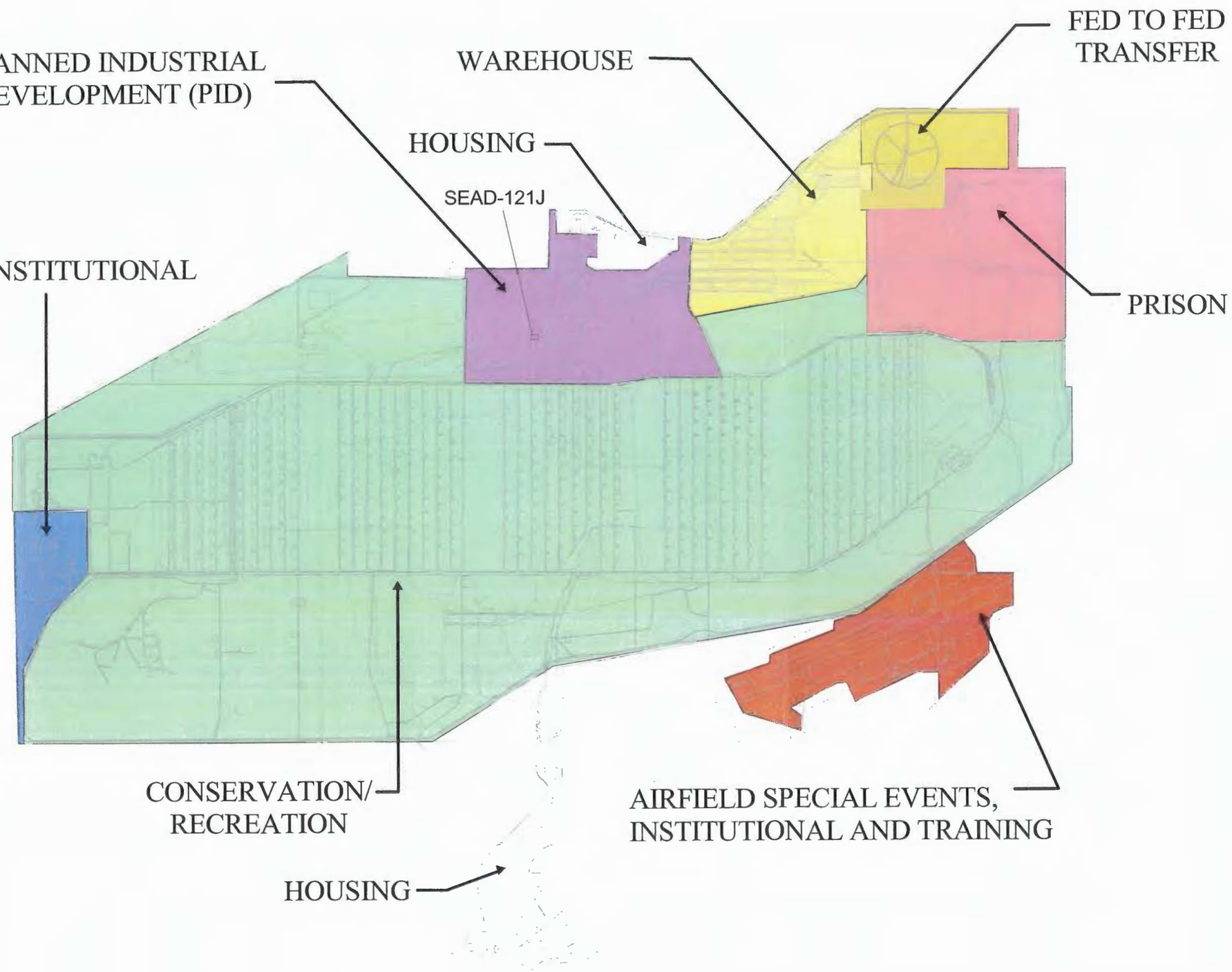
Therefore, no chemicals of concern were identified that would indicate the presence of a release at the Mound Area. The soils excavated from the test pits were consistent with soils found at the Depot. Therefore, no further action is recommended for the Mound Area. The Army does not intend to perform additional work at the site. This decision document provides the Army's basis to declare that SEAD-121J is not an area of concern and should be removed from further consideration as a Solid Waste Management Unit (SWMU) at SEDA.

Table 3-1
SUMMARY STATISTICS OF SURFACE SOIL ANALYSIS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level	Number of Exceedances	Number of Detects	Number of Analyses
Volatile Organic Compounds							
Acetone	UG/KG	800	100%	200	6	6	6
Methyl ethyl ketone	UG/KG	80	83%	300	0	5	6
Methylene chloride	UG/KG	11	33%	100	0	2	6
Metals							
Aluminum	MG/KG	13400	100%	19300	0	6	6
Arsenic	MG/KG	4.88	100%	8.2	0	6	6
Barium	MG/KG	122	100%	300	0	6	6
Beryllium	MG/KG	0.846	100%	1.1	0	6	6
Cadmium	MG/KG	0.426	100%	2.3	0	6	6
Calcium	MG/KG	4500	100%	121000	0	6	6
Chromium	MG/KG	19.8	100%	29.6	0	6	6
Cobalt	MG/KG	11.2	100%	30	0	6	6
Copper	MG/KG	20.6	100%	33	0	6	6
Iron	MG/KG	22100	100%	36500	0	6	6
Lead	MG/KG	21.3	100%	24.8	0	6	6
Magnesium	MG/KG	4440	100%	21500	0	6	6
Manganese	MG/KG	821	100%	1060	0	6	6
Mercury	MG/KG	0.1	100%	0.1	0	6	6
Nickel	MG/KG	30.9	100%	49	0	6	6
Potassium	MG/KG	1920	100%	2380	0	6	6
Selenium	MG/KG	1.31	83%	2	0	5	6
Silver	MG/KG	0.447	100%	0.75	0	6	6
Sodium	MG/KG	254	50%	172	1	3	6
Vanadium	MG/KG	23.4	100%	150	0	6	6
Zinc	MG/KG	64.7	100%	110	0	6	6

Table 3-2
SUMMARY STATISTICS OF TEST PIT SOIL ANALYSIS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

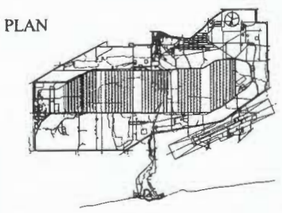
Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level	Number of Exceedances	Number of Detects	Number of Analyses
VOLATILE ORGANIC COMPOUNDS							
Acetone	UG/KG	1000	70%	200	6	7	10
Carbon disulfide	UG/KG	14	20%	2700	0	2	10
Methyl ethyl ketone	UG/KG	70	50%	300	0	5	10
Methylene chloride	UG/KG	17	70%	100	0	7	10
SEMIVOLATILE ORGANIC COMPOUNDS							
Benzo(b)fluoranthene	UG/KG	47	10%	1100	0	1	10
Bis(2-Ethylhexyl)phthalate	UG/KG	72	10%	50000	0	1	10
Butylbenzylphthalate	UG/KG	120	30%	50000	0	3	10
Fluoranthene	UG/KG	47	10%	50000	0	1	10
Pyrene	UG/KG	44	10%	50000	0	1	10
METALS							
Aluminum	MG/KG	15200	100%	19300	0	10	10
Arsenic	MG/KG	6.43	100%	8.2	0	10	10
Barium	MG/KG	141	100%	300	0	10	10
Beryllium	MG/KG	0.893	100%	1.1	0	10	10
Cadmium	MG/KG	0.577	100%	2.3	0	10	10
Calcium	MG/KG	109000	100%	121000	0	10	10
Chromium	MG/KG	21.7	100%	29.6	0	10	10
Cobalt	MG/KG	12.7	100%	30	0	10	10
Copper	MG/KG	29.1	100%	33	0	10	10
Iron	MG/KG	27900	100%	36500	0	10	10
Lead	MG/KG	23.6	100%	24.8	0	10	10
Magnesium	MG/KG	18000	100%	21500	0	10	10
Manganese	MG/KG	950	100%	1060	0	10	10
Mercury	MG/KG	0.09	100%	0.1	0	10	10
Nickel	MG/KG	38.6	100%	49	0	10	10
Potassium	MG/KG	1860	100%	2380	0	10	10
Selenium	MG/KG	3.34	80%	2	3	8	10
Silver	MG/KG	2.71	100%	0.75	5	10	10
Sodium	MG/KG	197	90%	172	2	9	10
Vanadium	MG/KG	26.1	100%	150	0	10	10
Zinc	MG/KG	85.8	100%	110	0	10	10



LEGEND

- Airfield
- Conservation
- Federal
- Industrial
- Institutional
- Prison
- Warehouse
- Housing

KEY PLAN



PARSONS

SENECA ARMY DEPOT ACTIVITY

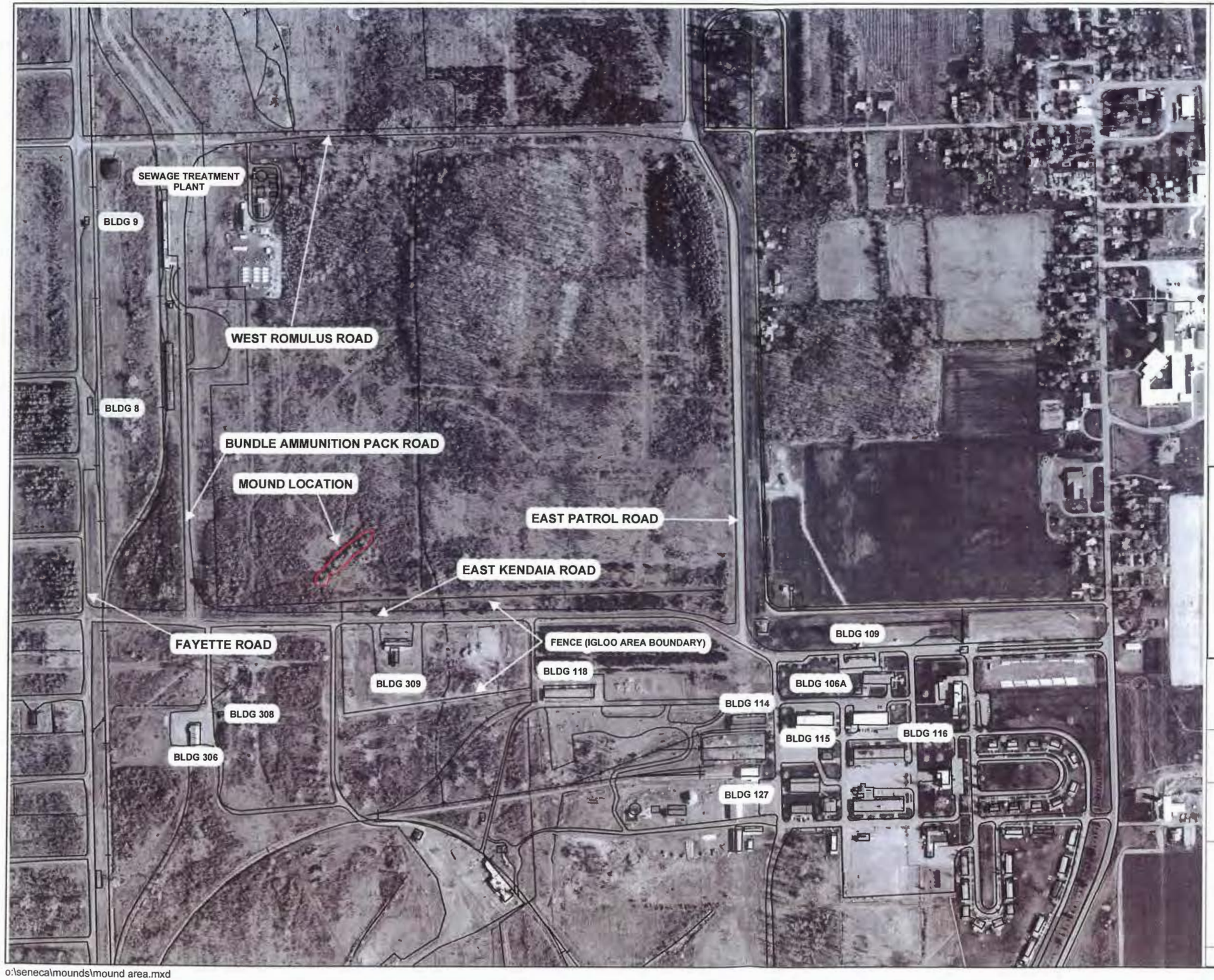
FINDINGS REPORT FOR THE MOUND AREA
EBS SITE 109 (7)

FIGURE 2-1

LAND REUSE MAP

October 2004	landuse.apr

o:/seneca/seac.../landuse.apr/sead-21J land reuse map

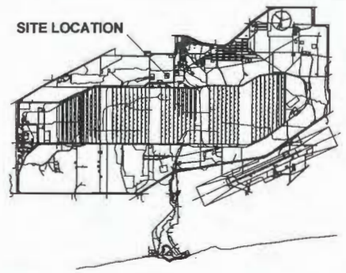


LEGEND

- Surface Water
- Railroad
- Mound Location

N

500 250 0 500 Feet



PARSONS

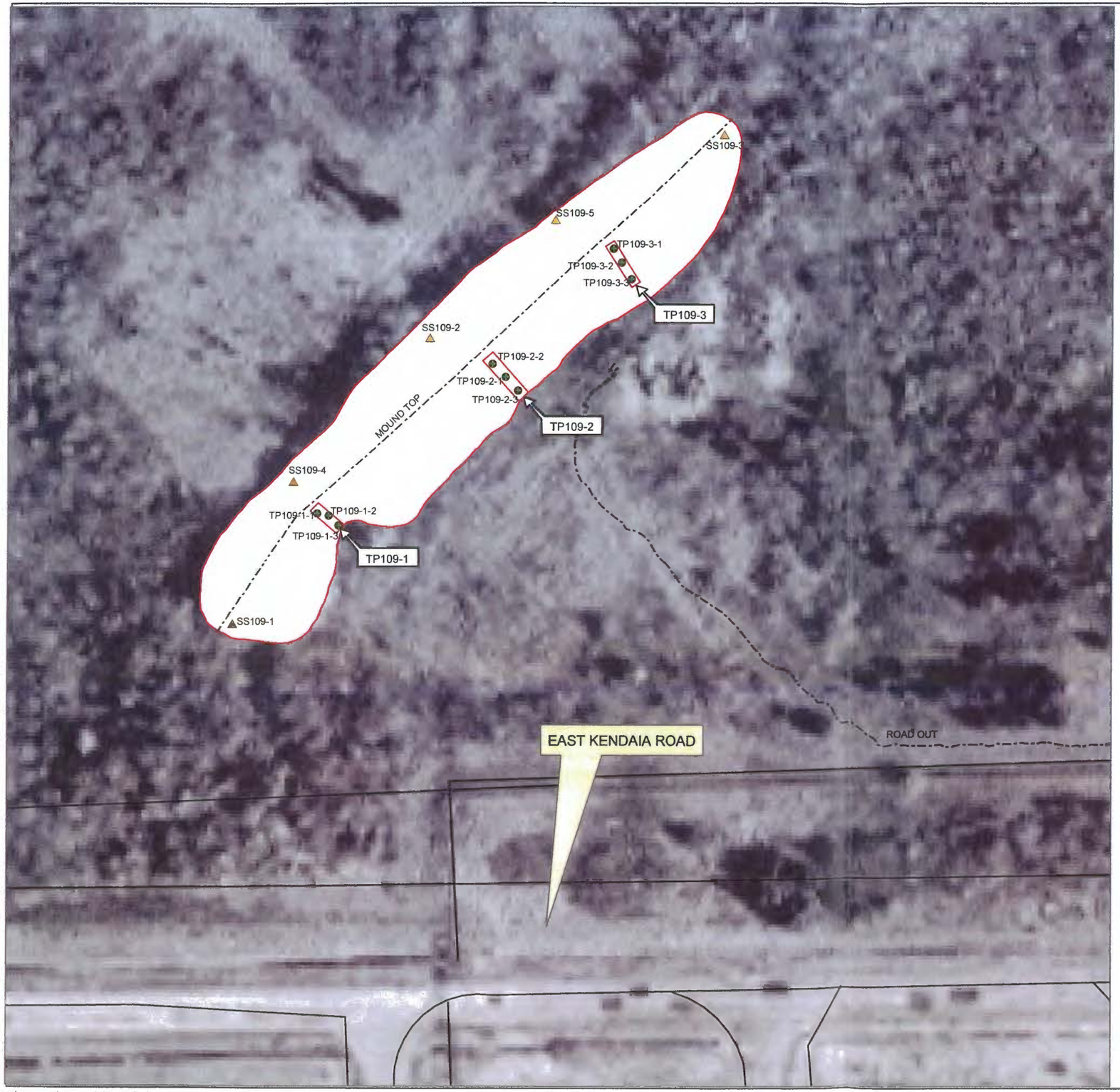
SENECA ARMY DEPOT ACTIVITY
FINDINGS REPORT FOR THE MOUND AREA
EBS SITE 109 (7)

FIGURE 2-2

LOCATION OF THE MOUND AREA SEAD-121J

October 2004	mound area.mxd

o:\seneca\mounds\mound area.mxd



Test Pit Dimensions (ft.)

Test Pit	Length	Depth	Width
TP109-1	12.5	10.6	2
TP109-2	23.3	14.4	2
TP109-3	17.6	11.8	2

Sample Depth Range in ft.

Sample ID	Depth
TP109-1-1	0-0.2
TP109-1-2	0.2-7.5
TP109-1-3	7.5-10.5
TP109-2-1	0-0.2
TP109-2-2	0.2-11.3
TP109-2-3	11.3-14.3
TP109-3-1	0-0.2
TP109-3-2	0.2-7.5
TP109-3-3	7.5-11.5

Note: Surface soil samples were collected at a depth range of 0 to 2 inches below resident site vegetation. Test pit soil samples collected from depth ranges as indicated in the table above.

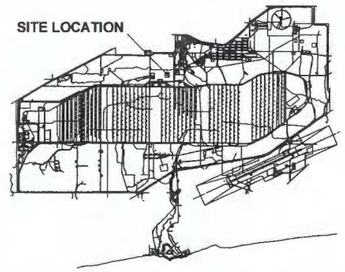
The length of each test pit was measured along the surface of the berm. The depth of each test pit was measured at the northwestern end of the test pit, closest to the center of the berm. The width of each test pit was the width backhoe bucket.

LEGEND

- Surface Water
- Railroad
- Mound Location
- Center Line of the Mound
- TP109-1-1 — Test Pit Sample Location
- SS109-1 — Surface Soil Sample Location
- TP109-1 — Test Pit Location

N

60 30 0 60 Feet



PARSONS

SENECA ARMY DEPOT ACTIVITY
FINDINGS REPORT FOR THE MOUND AREA
EBS SITE 109 (7)

FIGURE 2-3

LOCATION OF SOIL SAMPLES AND TEST PITS

October 2004 | testpit_loc.mxd

o:\seneca\mounds\testpit_loc.mxd

APPENDIX A

SOIL SAMPLING AND TEST PIT LOGS

SAMPLING RECORD - SOIL

Seneca Army Depot		DATE: 7/13/04

CONSULTANT: PARSONS
PROJECT: MOUNDS
LOCATION:

INSPECTOR: McWhirter
LABORATORY: Chemtech
SAMPLING STAFF: Wasserman
CHAIN OF CUSTODY #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (GEN.)	REL. HUMIDITY (APPRX)	WIND VELOCITY (APPRX)	WIND DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS
0900	76°	Overcast	high	0-5	180	Wet

MONITORING INSTRUMENT	DECTECTOR
PID	

LOC ID	SAMPLE #	DEPTH RANGE	DEPTH TIME	TYPE GRAB/COMP	COLOR	GRAIN SIZE	USCS CLASS	FOREIGN MAT. (Y/N)	SAMPLE DEVICE	CONTAINER SIZE/TYPE	MON. VOC/RAD	QC SPL (Y/N)	
TP1-1		0-.2'	0930	Comp	brn	Fine	ML	Y roots	Spoon	3/voa	0.6	N	0..2
TP1-2		7.6	10:18	comp	brn	fine	ML	Y roots	spoon	3/voa 4oz.	0.6	N	7.6ft
TP1-3		10.6ft	10:30	Comp	brn	fine	ML	Y roots	Spoon	3/voa 4oz.	0.6	N	10.6ft
TP2-1		0:2	11:45	Comp	brn	fine	ML	Y roots	Spoon	3/voc 4oz	0.2	N	0..2ft
TP2-2		11.4	12:40	comp	brn	fine	ML	Y roots	spoon	3/voc 4-oz	0.4	N	11.4ft
TP2-3		11.7*	13:30	Comp	brn	med	SM	N	spoon	3/voc 4oz	0.7	N	11.7ft*
TP3-1		0-.2	16:10	Comp	brn	fine	ML/CL	Y Roots	Spoon	3/voc 4oz	0.5	N	0-.2
TP3-2		7.8	16:16	comp	brn	fine	ML/CL	Y Roots	spoon	3/voc 4oz	0.0	N	
TP3-3		9.4	16:20	Comp	Yl.brn	med	SM	N	spoon	3/voc 4oz	0.4	Y	

Note: Cleaning Procedure according to SOP. *TP2-3 Collected 9 feet from top of TP.

SAMPLING RECORD - SURFACE SOIL/SEDIMENT

PARSONS | CLIENT: Seneca | INSPECTOR : McMaster | DATE: July 13

PROJECT: Mounds

SOIL TYPE: (SURFACE SOIL) SEDIMENT

COMMENTS:

MONITORING

INSTRUMENT	DETECTOR	BACKG.
PID	0.0	0.0

SAMPLE INFORMATION						SOIL INFORMATION				
LOCATION	SAMPLE NUMBER	SAMPLE DEPTH (in) TOP	SAMPLE DEPTH (in) BOTTOM	TIME (military)	GRAB or COMPOSITE SAMPLE	SAMPLE DESCRIPTION (Burmister method)	USCS Classification	VOC Screen (PPM)	QC Split (yes or no)	Other Notes
SS109-1		0	.2	11:40	G	Moist. brown Silt & Clay low Plasticity trace organic	ML	0.0	N	
SS109-4		0	.2	12:20	G	moist brown clay some Silt trace Gravel Angular	ML	0.0	N	
SS109-2		0	.2	13:00	G	moist brown CLAY some Silt trace organic little Gravel	CL/ML	0.1	N	
SS109-3		0	.2	15:26	G	moist brown Silt & Clay low Plasticity trace organic	CL/ML	0.0	N	
SS109-5		0	.2	15:30	G	moist brown Silt & Clay low Plasticity trace organic	CL/ML	0.0	Y	

TEST PIT REPORT

PARSONS	CLIENT: USACOE	TEST PIT NO.: TP-1
PROJECT: Mounds		JOB NUMBER: 743520
LOCATION: ~~TP-1~~		GROUND ELEV:
		INSPECTOR: McAllister
		CONTRACTOR: EPS
		START DATE: July 13 2004
		COMPLETION DATE: same
		CHECKED BY:

TEST PIT DATA

LENGTH	WIDTH	DEPTH	EXCAVATION METHOD
12.6	2.4m	10.6	Backhoe

MONITORING DATA

INSTRUMENT	DETECTOR	BACKGROUND	TIME/DATE
PID		0.2	July 13 2004
TP 1-1		0.6	—
TP 1-2		0.6	—
TP 1-3		0.6	—

QA/QC DUPLICATE SAMPLE: YES OR NO
Duplicate Sample Number:
MRD Sample Number:
QA/QC Rinsate Sample Number:
Comments:

DEPTH (FT)	VOC	SAMPLE NO.	SAMPLE DEPTH RANGE	STRATA	SAMPLE DESCRIPTION (As per Burmeister: color, grain size, MAJOR COMPONENT, Minor Components with amount modifiers and grain-size, density, stratification, wetness, etc.)	REMARKS
1	0.6	1	0.-.2	moist	Sample # TP 1-1 0-.2ft	0.6
				—	brown, moist, silt & clay trace gravel	OVM
2				moist		
3				TO	brown, moist, Silt and Clay. some	
				Dry	Angular gravel	ML
4						
5						0.6 OVM
6						
7					moist brown, Silt and Clay some	
8	—		TP1-2 7.6ft		Angular Gravel trace roots	
9				Dry		
10				—	weathered Shale & silt clay. Dry	
11	—		TP1-3 10.6ft	—	bottom of excavation	0.60VM
12						
13						
14						
15						

TEST PIT REPORT

PARSONS	CLIENT: USACOE	TEST PIT NO.: TP-2

PROJECT: Mounds
LOCATION: Seneca Army Depot

JOB NUMBER: 743520
GROUND ELEV:
INSPECTOR: McAllister
CONTRACTOR: EPS
START DATE: July 13 2004
COMPLETION DATE: Same
CHECKED BY:

TEST PIT DATA

LENGTH	WIDTH	DEPTH	EXCAVATION METHOD
23.4 ft	29 in	14.4 ft	Backhoe

MONITORING DATA

INSTRUMENT	DETECTOR	BACKGROUND	TIME/DATE
PID		0.2	July 11:45
TP 2-1		0.0	—
TP 2-2		0.2	—
TP 2-3		0.1	— 13:30

QA/QC DUPLICATE SAMPLE: YES OR NO
Duplicate Sample Number:
MRD Sample Number:
QA/QC Rinsate Sample Number:
Comments:

DEPTH (FT)	VOC	SAMPLE NO.	SAMPLE DEPTH RANGE	STRATA	SAMPLE DESCRIPTION (As per Burmeister: color, grain size, MAJOR COMPONENT, Minor Components with amount modifiers and grain-size, density, stratification, wetness, etc.)	REMARKS
1	0.2	TP2	0-.2ft		moist. brown silt & clay Slightly Plastic. Some roots trace gravel Angular ML-CL	sample TP2-1
2						
3						
4						
5					No Charge until 11.4ft	
6						
7						
8						
9						
10						
11						
12	11.4	TP2-2	11.4ft		moist brown Silt & clay some gravel Angular shale ML-CL	Sample TP2-2
13						
14	0.0				11.7 feet down 9 feet south of TOP. moist brown SAND some silt little Gravel	TP2-3
15					bottom of excavation	

TEST PIT REPORT

PARSONS	CLIENT: USACOE	TEST PIT NO.: TP-3

PROJECT: Mounds
LOCATION: SENECA ARMY DEPOT

JOB NUMBER: 743520
GROUND ELEV:
INSPECTOR: McAllister
CONTRACTOR: EPS
START DATE: July 13 2004
COMPLETION DATE: Same
CHECKED BY:

TEST PIT DATA

LENGTH	WIDTH	DEPTH	EXCAVATION METHOD
17.7	24 in	11.9	Backhoe

MONITORING DATA

INSTRUMENT	DETECTOR	BACKGROUND	TIME/DATE
PID	MiniRae	0.0	July 13
TP3-1		0.4	
TP3-2		0.2	
TP3-3		0.4	

QA/QC DUPLICATE SAMPLE: YES OR NO
Duplicate Sample Number:
MRD Sample Number:
QA/QC Rinsate Sample Number:
Comments:

DEPTH (FT)	VOC	SAMPLE NO.	SAMPLE DEPTH RANGE	STRATA	SAMPLE DESCRIPTION (As per Burmeister: color, grain size, MAJOR COMPONENT, Minor Components with amount modifiers and grain-size, density, stratification, wetness, etc.)	REMARKS
1	0.0		0-.2		Moist brown Silt & clay slight plasticity. some rocks trace gravel medium ML	Sample TP3-1
2						
3						
4					No change from top	
5						
6						
7					Moist brown Silt & Clay slight	Sample
8	0.0		7.6ft		plasticity - trace gravel fine ML	TP3-2
9						
10	—	—	—		— Soil Horizon —	—
11	—		—		Moist brown silt & clay - slight	
12			—		plasticity some Sand and Gravel	11.7ft
13					Medium to fine Angular	Sample
14					SC	TP3-3
15						

APPENDIX B

ANALYTICAL RESULTS

Table B-1
SURFACE SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								SS109-1	SS109-2	SS109-3	SS109-3	SS109-4	SS109-5
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1000	121J1001	121J1005	121J1002	121J1003	121J1004
Sample Depth to Top of Sample								0	0	0	0	0	0
Sample Depth to Bottom of Sample								0.2	0.2	0.2	0.2	0.2	0.2
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Volatile Organic Compounds								Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	6	0.38 UJ	0.38 UJ	0.35 UJ	0.34 UJ	0.29 UJ	0.31 UJ
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	6	0.74 UJ	0.73 UJ	0.69 UJ	0.66 UJ	0.56 UJ	0.61 UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	6	0.71 UJ	0.7 UJ	0.66 UJ	0.63 UJ	0.53 UJ	0.58 UJ
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	6	0.49 UJ	0.49 UJ	0.46 UJ	0.44 UJ	0.37 UJ	0.41 UJ
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	6	0.3 UJ	0.3 UJ	0.28 UJ	0.27 UJ	0.23 UJ	0.25 UJ
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	6	4.3 UJ	4.3 UJ	4 UJ	3.8 UJ	3.2 UJ	3.5 UJ
1,2-Dichloropropane	UG/KG	0	0%		0	0	6	0.47 UJ	0.46 UJ	0.44 UJ	0.42 UJ	0.35 UJ	0.38 UJ
Acetone	UG/KG	800	100%	200	6	6	6	[redacted] J	650 J	[redacted] J	[redacted] J	[redacted] J	[redacted] J
Benzene	UG/KG	0	0%	60	0	0	6	0.28 UJ	0.28 UJ	0.26 UJ	0.25 UJ	0.21 UJ	0.23 UJ
Bromodichloromethane	UG/KG	0	0%		0	0	6	0.46 UJ	0.46 UJ	0.43 UJ	0.42 UJ	0.35 UJ	0.38 UJ
Bromoform	UG/KG	0	0%		0	0	6	0.42 UJ	0.41 UJ	0.39 UJ	0.37 UJ	0.32 UJ	0.34 UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	6	0.14 UJ	0.14 UJ	0.13 UJ	0.13 UJ	0.11 UJ	0.12 UJ
Carbon tetrachloride	UG/KG	0	0%	600	0	0	6	0.42 UJ	0.41 UJ	0.39 UJ	0.37 UJ	0.31 UJ	0.34 UJ
Chlorobenzene	UG/KG	0	0%	1700	0	0	6	0.49 UJ	0.49 UJ	0.46 UJ	0.44 UJ	0.37 UJ	0.4 UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	6	0.41 UJ	0.4 UJ	0.38 UJ	0.36 UJ	0.31 UJ	0.33 UJ
Chloroethane	UG/KG	0	0%	1900	0	0	6	0.73 UJ	0.73 UJ	0.68 UJ	0.66 UJ	0.55 UJ	0.6 UJ
Chloroform	UG/KG	0	0%	300	0	0	6	0.33 UJ	0.33 UJ	0.31 UJ	0.3 UJ	0.25 UJ	0.27 UJ
Cis-1,2-Dichloroethene	UG/KG	0	0%		0	0	6	0.49 UJ	0.49 UJ	0.46 UJ	0.44 UJ	0.37 UJ	0.4 UJ
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	6	0.27 UJ	0.27 UJ	0.25 UJ	0.24 UJ	0.2 UJ	0.22 UJ
Ethyl benzene	UG/KG	0	0%	5500	0	0	6	0.35 UJ	0.35 UJ	0.32 UJ	0.31 UJ	0.26 UJ	0.29 UJ
Meta/Para Xylene	UG/KG	0	0%		0	0	6	0.72 UJ	0.71 UJ	0.67 UJ	0.64 UJ	0.54 UJ	0.59 UJ
Methyl bromide	UG/KG	0	0%		0	0	6	0.99 UJ	0.98 UJ	0.92 UJ	0.88 UJ	0.75 UJ	0.81 UJ
Methyl butyl ketone	UG/KG	0	0%		0	0	6	4.5 UJ	4.4 UJ	4.2 UJ	4 UJ	3.4 UJ	3.7 UJ
Methyl chloride	UG/KG	0	0%		0	0	6	0.46 UJ	0.46 UJ	0.43 UJ	0.41 UJ	0.35 UJ	0.38 UJ
Methyl ethyl ketone	UG/KG	80	83%	300	0	5	6	80 J	53 J	62 J	71 J	37 J	2.6 UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	6	3.4 UJ	3.3 UJ	3.1 UJ	3 UJ	2.5 UJ	2.8 UJ
Methylene chloride	UG/KG	11	33%	100	0	2	6	11 J	0.94 UJ	0.89 UJ	8.8 J	0.72 UJ	0.78 UJ
Ortho Xylene	UG/KG	0	0%		0	0	6	0.6 UJ	0.6 UJ	0.56 UJ	0.54 UJ	0.46 UJ	0.5 UJ
Styrene	UG/KG	0	0%		0	0	6	0.44 UJ	0.43 UJ	0.41 UJ	0.39 UJ	0.33 UJ	0.36 UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	6	0.89 UJ	0.88 UJ	0.83 UJ	0.79 UJ	0.67 UJ	0.73 UJ
Toluene	UG/KG	0	0%	1500	0	0	6	0.36 UJ	0.36 UJ	0.34 UJ	0.32 UJ	0.27 UJ	0.3 UJ
Trans-1,2-Dichloroethene	UG/KG	0	0%	300	0	0	6	0.52 UJ	0.51 UJ	0.48 UJ	0.46 UJ	0.39 UJ	0.43 UJ
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	6	0.36 UJ	0.36 UJ	0.33 UJ	0.32 UJ	0.27 UJ	0.29 UJ
Trichloroethene	UG/KG	0	0%	700	0	0	6	0.45 UJ	0.44 UJ	0.42 UJ	0.4 UJ	0.34 UJ	0.37 UJ
Vinyl chloride	UG/KG	0	0%	200	0	0	6	0.33 UJ	0.33 UJ	0.31 UJ	0.29 UJ	0.25 UJ	0.27 UJ
Semivolatile Organic Compounds													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	6	13 U	14 U	12 U	12 U	11 U	12 U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	6	24 U	26 U	23 U	22 U	22 U	23 U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	6	17 U	18 U	16 U	15 U	15 U	16 U

Table B-1
SURFACE SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								SS109-1	SS109-2	SS109-3	SS109-3	SS109-4	SS109-5
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1000	121J1001	121J1005	121J1002	121J1003	121J1004
Sample Depth to Top of Sample								0	0	0	0	0	0
Sample Depth to Bottom of Sample								0.2	0.2	0.2	0.2	0.2	0.2
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	6	19 U	20 U	18 U	17 U	17 U	18 U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	6	30 U	32 U	29 U	27 U	26 U	28 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	6	16 U	18 U	16 U	15 U	15 U	16 U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	6	16 U	17 U	15 U	14 U	14 U	15 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	6	24 U	26 U	23 U	22 U	22 U	23 U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	6	20 U	21 UJ	19 UJ	18 UJ	18 U	19 UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	6	9 U	9.6 U	8.6 U	8.2 U	8 U	8.6 U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	6	19 U	21 U	18 U	18 U	17 U	18 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	6	9.4 U	10 U	9 U	8.6 U	8.3 U	8.9 U
2-Chlorophenol	UG/KG	0	0%	800	0	0	6	19 U	21 U	19 U	18 U	17 U	19 U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	6	7.8 U	8.3 U	7.4 U	7.1 U	6.9 U	7.4 U
2-Methylphenol	UG/KG	0	0%	100	0	0	6	28 U	31 U	27 U	26 U	25 U	27 U
2-Nitroaniline	UG/KG	0	0%	430	0	0	6	16 U	18 U	16 U	15 U	15 U	16 U
2-Nitrophenol	UG/KG	0	0%	330	0	0	6	18 U	19 U	17 U	17 U	16 U	17 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	6	72 U	78 U	69 U	66 U	64 U	69 U
3-Nitroaniline	UG/KG	0	0%	500	0	0	6	73 U	78 U	70 U	67 U	65 U	69 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	6	26 U	28 U	25 U	24 U	23 U	25 U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	6	12 U	13 U	11 U	11 U	11 U	11 U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	6	13 U	14 U	13 U	12 U	12 U	13 U
4-Chloroaniline	UG/KG	0	0%	220	0	0	6	170 U	180 U	160 U	150 U	150 U	160 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	6	11 U	12 U	11 U	10 U	9.9 U	11 U
4-Methylphenol	UG/KG	0	0%	900	0	0	6	21 U	22 U	20 U	19 U	18 U	20 U
4-Nitroaniline	UG/KG	0	0%		0	0	6	35 U	38 U	34 U	32 U	31 U	34 U
4-Nitrophenol	UG/KG	0	0%	100	0	0	6	44 U	47 U	42 U	40 U	39 U	42 U
Acenaphthene	UG/KG	0	0%	50000	0	0	6	9.9 U	11 U	9.5 U	9.1 U	8.8 U	9.5 U
Acenaphthylene	UG/KG	0	0%	41000	0	0	6	13 U	14 U	13 U	12 U	12 U	13 U
Anthracene	UG/KG	0	0%	50000	0	0	6	11 U	12 U	10 U	9.8 U	9.6 U	10 U
Benzo(a)anthracene	UG/KG	0	0%	224	0	0	6	6.8 U	7.3 U	6.5 U	6.2 U	6 U	6.5 U
Benzo(a)pyrene	UG/KG	0	0%	61	0	0	6	7.8 U	8.3 U	7.4 U	7.1 U	6.9 U	7.4 U
Benzo(b)fluoranthene	UG/KG	0	0%	1100	0	0	6	24 U	26 U	23 U	22 U	21 U	23 U
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	6	20 U	21 U	19 U	18 U	17 U	19 U
Benzo(k)fluoranthene	UG/KG	0	0%	1100	0	0	6	15 U	17 U	15 U	14 U	14 U	15 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	6	21 U	22 U	20 U	19 U	18 U	20 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	6	22 U	24 UJ	21 UJ	20 UJ	20 U	21 UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	6	24 U	26 U	23 U	22 U	22 U	23 U
Bis(2-Ethylhexyl)phthalate	UG/KG	0	0%	50000	0	0	6	10 U	11 U	9.9 U	9.5 U	9.2 U	9.8 U
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	6	15 U	16 U	14 U	14 U	13 U	14 U
Carbazole	UG/KG	0	0%		0	0	6	9.9 U	11 U	9.5 U	9.1 U	8.8 U	9.5 U
Chrysene	UG/KG	0	0%	400	0	0	6	14 U	15 U	14 U	13 U	13 U	14 U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	6	6 U	6.4 U	5.7 U	5.5 U	5.3 U	5.7 U

Table B-1
SURFACE SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								SS109-1	SS109-2	SS109-3	SS109-3	SS109-4	SS109-5
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1000	121J1001	121J1005	121J1002	121J1003	121J1004
Sample Depth to Top of Sample								0	0	0	0	0	0
Sample Depth to Bottom of Sample								0.2	0.2	0.2	0.2	0.2	0.2
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Di-n-octylphthalate	UG/KG	0	0%	50000	0	0	6	11 U	12 U	10 U	9.8 U	9.6 U	10 U
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	6	13 U	14 U	13 U	12 U	12 U	13 U
Dibenzofuran	UG/KG	0	0%	6200	0	0	6	15 U	16 U	14 U	14 U	13 U	14 U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	6	14 U	15 U	14 U	13 U	13 U	13 U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	6	11 U	12 U	10 U	9.8 U	9.6 U	10 U
Fluoranthene	UG/KG	0	0%	50000	0	0	6	6.3 U	6.7 U	6 U	5.7 U	5.6 U	6 U
Fluorene	UG/KG	0	0%	50000	0	0	6	13 U	14 U	12 U	12 U	11 U	12 U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	6	8.4 U	9.1 U	8.1 U	7.7 U	7.5 U	8 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	6	16 U	17 U	15 U	14 U	14 U	15 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	6	11 U	12 UJ	11 UJ	10 UJ	10 U	11 UJ
Hexachloroethane	UG/KG	0	0%		0	0	6	22 U	23 U	21 U	20 U	19 U	20 U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	6	11 U	12 U	10 U	10 U	9.7 U	10 U
Isophorone	UG/KG	0	0%	4400	0	0	6	17 U	18 U	16 U	15 U	15 U	16 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	6	11 U	12 U	11 U	10 U	10 U	11 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	6	20 U	21 U	19 U	18 U	18 U	19 U
Naphthalene	UG/KG	0	0%	13000	0	0	6	9.8 U	11 U	9.4 U	9 U	8.7 U	9.3 U
Nitrobenzene	UG/KG	0	0%	200	0	0	6	23 U	25 U	22 U	21 U	20 U	22 U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	6	14 U	15 U	13 U	13 U	12 U	13 U
Phenanthrene	UG/KG	0	0%	50000	0	0	6	10 U	11 U	9.6 U	9.2 U	9 U	9.6 U
Phenol	UG/KG	0	0%	30	0	0	6	19 U	20 U	18 U	17 U	17 U	18 U
Pyrene	UG/KG	0	0%	50000	0	0	6	8 U	8.6 U	7.7 U	7.4 U	7.1 U	7.6 U
Pesticides/PCBs													
Aroclor-1016	UG/KG	0	0%		0	0	6	7.1 UJ	7.6 UJ	6.8 UJ	6.5 UJ	6.3 UJ	6.8 UJ
Aroclor-1221	UG/KG	0	0%		0	0	6	4.8 U	5.2 U	4.7 U	4.4 U	4.3 U	4.6 U
Aroclor-1232	UG/KG	0	0%		0	0	6	3.3 U	3.5 U	3.2 U	3 U	2.9 U	3.1 U
Aroclor-1242	UG/KG	0	0%		0	0	6	4.2 U	4.5 U	4.1 U	3.8 U	3.7 U	4 U
Aroclor-1248	UG/KG	0	0%		0	0	6	5 U	5.3 U	4.8 U	4.5 U	4.4 U	4.8 U
Aroclor-1254	UG/KG	0	0%	10000	0	0	6	1.8 U	2 U	1.8 U	1.7 U	1.6 U	1.8 U
Aroclor-1260	UG/KG	0	0%	10000	0	0	6	4 UJ	4.3 UJ	3.9 UJ	3.7 UJ	3.6 UJ	3.8 UJ
4,4'-DDD	UG/KG	0	0%	2900	0	0	6	1.4 U	1.5 U	1.3 U	1.3 U	1.2 U	1.3 U
4,4'-DDE	UG/KG	0	0%	2100	0	0	6	1.7 U	1.9 U	1.7 U	1.6 U	1.5 U	1.7 U
4,4'-DDT	UG/KG	0	0%	2100	0	0	6	2.5 UJ	2.7 UJ	2.4 UJ	2.3 UJ	2.2 UJ	2.4 UJ
Aldrin	UG/KG	0	0%	41	0	0	6	1.4 U	1.5 U	1.4 U	1.3 U	1.3 U	1.4 U
Alpha-BHC	UG/KG	0	0%	110	0	0	6	1.5 U	1.6 U	1.5 U	1.4 U	1.3 U	1.5 U
Beta-BHC	UG/KG	0	0%	200	0	0	6	1.6 U	1.7 U	1.5 U	1.4 U	1.4 U	1.5 U
Delta-BHC	UG/KG	0	0%	300	0	0	6	1.2 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U
Dieldrin	UG/KG	0	0%	44	0	0	6	1.4 U	1.5 U	1.3 U	1.3 U	1.2 U	1.3 U
Endosulfan I	UG/KG	0	0%	900	0	0	6	2 U	2.1 U	1.9 U	1.8 U	1.8 U	1.9 U
Endosulfan II	UG/KG	0	0%	900	0	0	6	1.8 U	1.9 U	1.7 U	1.6 U	1.6 U	1.7 U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	6	2 U	2.2 U	1.9 U	1.8 U	1.8 U	1.9 U

Table B-1
SURFACE SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								SS109-1	SS109-2	SS109-3	SS109-3	SS109-4	SS109-5
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1000	121J1001	121J1005	121J1002	121J1003	121J1004
Sample Depth to Top of Sample								0	0	0	0	0	0
Sample Depth to Bottom of Sample								0.2	0.2	0.2	0.2	0.2	0.2
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Endrin	UG/KG	0	0%	100	0	0	6	2.5 U	2.7 U	2.4 U	2.3 U	2.2 U	2.4 U
Endrin aldehyde	UG/KG	0	0%		0	0	6	2.1 U	2.2 U	2 U	1.9 U	1.8 U	2 U
Endrin ketone	UG/KG	0	0%		0	0	6	1.8 U	1.9 U	1.7 U	1.6 U	1.6 U	1.7 U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	6	1.7 U	1.8 U	1.6 U	1.5 U	1.5 U	1.6 U
Heptachlor	UG/KG	0	0%	100	0	0	6	1.8 U	1.9 U	1.7 U	1.6 U	1.6 U	1.7 U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	6	1.7 U	1.9 U	1.7 U	1.6 U	1.5 U	1.7 U
Methoxychlor	UG/KG	0	0%		0	0	6	1.7 U	1.8 U	1.6 U	1.6 U	1.5 U	1.6 U
Toxaphene	UG/KG	0	0%		0	0	6	4.1 U	4.4 U	3.9 U	3.7 U	3.6 U	3.9 U
Metals													
Aluminum	MG/KG	13400	100%	19300	0	6	6	11100	11400	11000	12000	12300	13400
Antimony	MG/KG	0	0%	5.9	0	0	6	0.757 U	0.816 U	0.735 U	0.701 U	0.691 U	0.745 U
Arsenic	MG/KG	4.88	100%	8.2	0	6	6	4.23	3.86	4.29	4.88	4.18	4.71
Barium	MG/KG	122	100%	300	0	6	6	95.1	105	117	116	72.9	122
Beryllium	MG/KG	0.846	100%	1.1	0	6	6	0.784	0.844	0.809	0.822	0.74	0.846
Cadmium	MG/KG	0.426	100%	2.3	0	6	6	0.296 J	0.252 J	0.346 J	0.426 J	0.154 J	0.254 J
Calcium	MG/KG	4500	100%	121000	0	6	6	3750 J	4500 J	3920 J	3750 J	2500 J	2840 J
Chromium	MG/KG	19.8	100%	29.6	0	6	6	14.8 J	16.6 J	15.6 J	17 J	17.2 J	19.8 J
Cobalt	MG/KG	11.2	100%	30	0	6	6	8.25	8.41	8.75	9.13	8.67	11.2
Copper	MG/KG	20.6	100%	33	0	6	6	17.8 J	19.6 J	20.2 J	20.6 J	17.1 J	19.2 J
Cyanide	MG/KG	0	0%	0.35	0	0	6	0.686 U	0.732 U	0.66 U	0.623 U	0.613 U	0.661 U
Iron	MG/KG	22100	100%	36500	0	6	6	16200	17500	16800	17300	18800	22100
Lead	MG/KG	21.3	100%	24.8	0	6	6	21.2	21.3	19.1	20.5	17.8	16.5
Magnesium	MG/KG	4440	100%	21500	0	6	6	3200	3370	3390	3520	3560	4440
Manganese	MG/KG	821	100%	1060	0	6	6	483	542	673	669	487	821
Mercury	MG/KG	0.1	100%	0.1	0	6	6	0.08 J	0.1 J	0.08 J	0.08 J	0.06	0.08 J
Nickel	MG/KG	30.9	100%	49	0	6	6	19.3	23.1	21.9	23	22	30.9
Potassium	MG/KG	1920	100%	2380	0	6	6	1250 J	1580 J	1740 J	1920 J	1230 J	1360 J
Selenium	MG/KG	1.31	83%	2	0	5	6	0.929 J	0.957 J	0.568 J	1.31	0.604 J	0.414 U
Silver	MG/KG	0.447	100%	0.75	0	6	6	0.353 J	0.389 J	0.413 J	0.334 J	0.447 J	0.368 J
Sodium	MG/KG	254	50%	172	1	3	6	56.9 J	53.9 U	48.5 U	46.3 U	**254** J	56.1 J
Thallium	MG/KG	0	0%	0.7	0	0	6	0.444 U	0.478 U	0.431 U	0.411 U	0.405 U	0.437 U
Vanadium	MG/KG	23.4	100%	150	0	6	6	19.4	19.5	20.1	21.6	21.4	23.4
Zinc	MG/KG	64.7	100%	110	0	6	6	55	63.8	62.4	64.1	51.7	64.7

Note(s):
U = compound was not detected
J = the reported value is an estimated concentration
UJ = the compound was not detected; the associated reporting limit is approximate
R = the data was rejected in the data validating process

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-1-1	TP109-1-2	TP109-1-3	TP109-2-1	TP109-2-2	TP109-2-3
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1006	121J1007	121J1008	121J1009	121J1010	121J1011
Sample Depth to Top of Sample								0	0.2	7.5	0	0.2	11.3
Sample Depth to Bottom of Sample								0.2	7.5	10.5	0.2	11.3	14.3
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
VOLATILE ORGANIC COMPOUNDS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	10	0.31 UJ	0.3 UJ	0.32 UJ	0.34 UJ	0.33 UJ	0.26 UJ
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	10	0.61 UJ	0.59 UJ	0.63 UJ	0.66 UJ	0.64 UJ	0.51 UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	10	0.58 UJ	0.56 UJ	0.6 UJ	0.63 UJ	0.61 UJ	0.49 UJ
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	10	0.41 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.43 UJ	0.34 UJ
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	10	0.25 UJ	0.24 UJ	0.26 UJ	0.27 UJ	0.26 UJ	0.21 UJ
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	10	3.5 UJ	3.4 UJ	3.7 UJ	3.8 UJ	3.7 UJ	3 UJ
1,2-Dichloropropane	UG/KG	0	0%		0	0	10	0.39 UJ	0.37 UJ	0.4 UJ	0.42 UJ	0.4 UJ	0.33 UJ
Acetone	UG/KG	1000	70%	200	6	7	10	660 J	[illegible] J	660 J	[illegible]1000 J	220 J	7.2 UJ
Benzene	UG/KG	0	0%	60	0	0	10	0.23 UJ	0.23 UJ	0.24 UJ	0.25 UJ	0.24 UJ	0.2 UJ
Bromodichloromethane	UG/KG	0	0%		0	0	10	0.38 UJ	0.37 UJ	0.4 UJ	0.42 UJ	0.4 UJ	0.32 UJ
Bromoform	UG/KG	0	0%		0	0	10	0.34 UJ	0.33 UJ	0.36 UJ	0.37 UJ	0.36 UJ	0.29 UJ
Carbon disulfide	UG/KG	14	20%	2700	0	2	10	0.12 UJ	0.11 UJ	0.12 UJ	0.13 UJ	5.5 J	0.1 UJ
Carbon tetrachloride	UG/KG	0	0%	600	0	0	10	0.34 UJ	0.33 UJ	0.36 UJ	0.37 UJ	0.36 UJ	0.29 UJ
Chlorobenzene	UG/KG	0	0%	1700	0	0	10	0.41 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.42 UJ	0.34 UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	10	0.34 UJ	0.32 UJ	0.35 UJ	0.36 UJ	0.35 UJ	0.28 UJ
Chloroethane	UG/KG	0	0%	1900	0	0	10	0.61 UJ	0.59 UJ	0.63 UJ	0.66 UJ	0.63 UJ	0.51 UJ
Chloroform	UG/KG	0	0%	300	0	0	10	0.27 UJ	0.26 UJ	0.28 UJ	0.3 UJ	0.29 UJ	0.23 UJ
Cis-1,2-Dichloroethene	UG/KG	0	0%		0	0	10	0.41 UJ	0.39 UJ	0.42 UJ	0.44 UJ	0.42 UJ	0.34 UJ
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	10	0.22 UJ	0.22 UJ	0.23 UJ	0.24 UJ	0.23 UJ	0.19 UJ
Ethyl benzene	UG/KG	0	0%	5500	0	0	10	0.29 UJ	0.28 UJ	0.3 UJ	0.31 UJ	0.3 UJ	0.24 UJ
Meta/Para Xylene	UG/KG	0	0%		0	0	10	0.59 UJ	0.57 UJ	0.61 UJ	0.64 UJ	0.62 UJ	0.5 UJ
Methyl bromide	UG/KG	0	0%		0	0	10	0.82 UJ	0.79 UJ	0.84 UJ	0.88 UJ	0.85 UJ	0.69 UJ
Methyl butyl ketone	UG/KG	0	0%		0	0	10	3.7 UJ	3.6 UJ	3.8 UJ	4 UJ	3.9 UJ	3.1 UJ
Methyl chloride	UG/KG	0	0%		0	0	10	0.38 UJ	0.37 UJ	0.39 UJ	0.41 UJ	0.4 UJ	0.32 UJ
Methyl ethyl ketone	UG/KG	70	50%	300	0	5	10	64 J	55 J	47 J	70 J	2.7 UJ	2.2 UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	10	2.8 UJ	2.7 UJ	2.9 UJ	3 UJ	2.9 UJ	2.3 UJ
Methylene chloride	UG/KG	17	70%	100	0	7	10	9 J	13 J	17 J	7.5 J	7.7 J	4.2 J
Ortho Xylene	UG/KG	0	0%		0	0	10	0.5 UJ	0.48 UJ	0.51 UJ	0.54 UJ	0.52 UJ	0.42 UJ
Styrene	UG/KG	0	0%		0	0	10	0.36 UJ	0.35 UJ	0.37 UJ	0.39 UJ	0.38 UJ	0.3 UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	10	0.73 UJ	0.71 UJ	0.76 UJ	0.79 UJ	0.77 UJ	0.62 UJ
Toluene	UG/KG	0	0%	1500	0	0	10	0.3 UJ	0.29 UJ	0.31 UJ	0.32 UJ	0.31 UJ	0.25 UJ
Trans-1,2-Dichloroethene	UG/KG	0	0%	300	0	0	10	0.43 UJ	0.41 UJ	0.44 UJ	0.46 UJ	0.45 UJ	0.36 UJ
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	10	0.3 UJ	0.29 UJ	0.31 UJ	0.32 UJ	0.31 UJ	0.25 UJ
Trichloroethene	UG/KG	0	0%	700	0	0	10	0.37 UJ	0.36 UJ	0.38 UJ	0.4 UJ	0.39 UJ	0.31 UJ
Vinyl chloride	UG/KG	0	0%	200	0	0	10	0.27 UJ	0.26 UJ	0.28 UJ	0.29 UJ	0.28 UJ	0.23 UJ
SEMIVOLATILE ORGANIC COMPOUNDS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	10	12 U	11 U	12 U	12 U	11 U	10 U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	10	23 U	21 U	23 U	23 U	21 U	19 U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	10	16 U	14 U	16 U	16 U	14 U	13 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-1-1	TP109-1-2	TP109-1-3	TP109-2-1	TP109-2-2	TP109-2-3
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1006	121J1007	121J1008	121J1009	121J1010	121J1011
Sample Depth to Top of Sample								0	0.2	7.5	0	0.2	11.3
Sample Depth to Bottom of Sample								0.2	7.5	10.5	0.2	11.3	14.3
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	10	18 U	16 U	18 U	18 U	16 U	15 U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	10	28 U	26 U	28 U	28 U	25 U	24 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	10	15 U	14 U	15 U	15 U	14 U	13 U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	10	15 U	14 U	15 U	15 U	13 U	12 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	10	23 U	21 U	23 U	23 U	21 U	19 U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	10	19 U	17 UJ	19 U	19 U	17 U	16 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	10	8.4 U	7.8 U	8.4 U	8.5 U	7.7 U	7.1 U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	10	18 U	17 U	18 U	18 U	16 U	15 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	10	8.8 U	8.1 U	8.8 U	8.9 U	8 U	7.4 U
2-Chlorophenol	UG/KG	0	0%	800	0	0	10	18 U	17 U	18 U	18 U	17 U	15 U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	10	7.3 U	6.7 U	7.3 U	7.3 U	6.6 U	6.1 U
2-Methylphenol	UG/KG	0	0%	100	0	0	10	27 U	25 U	27 U	27 U	24 U	22 U
2-Nitroaniline	UG/KG	0	0%	430	0	0	10	15 U	14 U	15 U	15 U	14 U	13 U
2-Nitrophenol	UG/KG	0	0%	330	0	0	10	17 U	16 U	17 U	17 U	15 U	14 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	10	68 U	63 U	68 U	68 U	62 U	57 U
3-Nitroaniline	UG/KG	0	0%	500	0	0	10	68 U	63 U	68 U	69 U	62 U	57 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	10	24 U	23 U	25 U	25 U	22 U	21 U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	10	11 U	10 U	11 U	11 U	10 U	9.4 U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	10	12 U	12 U	13 U	13 U	11 U	11 U
4-Chloroaniline	UG/KG	0	0%	220	0	0	10	160 U	140 U	160 U	160 U	140 U	130 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	10	10 U	9.7 U	10 U	11 U	9.5 U	8.8 U
4-Methylphenol	UG/KG	0	0%	900	0	0	10	19 U	18 U	19 U	20 U	18 U	16 U
4-Nitroaniline	UG/KG	0	0%		0	0	10	33 U	30 U	33 U	33 U	30 U	28 U
4-Nitrophenol	UG/KG	0	0%	100	0	0	10	41 U	38 U	41 U	42 U	38 U	35 U
Acenaphthene	UG/KG	0	0%	50000	0	0	10	9.3 U	8.6 U	9.3 U	9.4 U	8.5 U	7.9 U
Acenaphthylene	UG/KG	0	0%	41000	0	0	10	13 U	12 U	13 U	13 U	12 U	11 U
Anthracene	UG/KG	0	0%	50000	0	0	10	10 U	9.3 U	10 U	10 U	9.2 U	8.5 U
Benzo(a)anthracene	UG/KG	0	0%	224	0	0	10	6.4 U	5.9 U	6.4 U	6.4 U	5.8 U	5.4 U
Benzo(a)pyrene	UG/KG	0	0%	61	0	0	10	7.3 U	6.7 U	7.3 U	7.3 U	6.6 U	6.1 U
Benzo(b)fluoranthene	UG/KG	47	10%	1100	0	1	10	22 U	47 J	23 U	23 U	20 U	19 U
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	10	18 U	17 U	18 U	19 U	17 U	15 U
Benzo(k)fluoranthene	UG/KG	0	0%	1100	0	0	10	14 U	13 U	14 U	15 U	13 U	12 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	10	19 U	18 U	19 U	19 U	18 U	16 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	10	21 U	19 UJ	21 U	21 U	19 U	18 U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	10	23 U	21 U	23 U	23 U	21 U	19 U
Bis(2-Ethylhexyl)phthalate	UG/KG	72	10%	50000	0	1	10	9.7 U	8.9 U	9.7 U	9.8 U	8.8 U	8.2 U
Butylbenzylphthalate	UG/KG	120	30%	50000	0	3	10	120 J	42 J	14 U	58 J	13 U	12 U
Carbazole	UG/KG	0	0%		0	0	10	9.3 U	8.6 U	9.3 U	9.4 U	8.5 U	7.9 U
Chrysene	UG/KG	0	0%	400	0	0	10	13 U	12 U	13 U	14 U	12 U	11 U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	10	5.6 U	5.2 U	5.6 U	5.7 U	5.1 U	4.7 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-1-1	TP109-1-2	TP109-1-3	TP109-2-1	TP109-2-2	TP109-2-3
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1006	121J1007	121J1008	121J1009	121J1010	121J1011
Sample Depth to Top of Sample								0	0.2	7.5	0	0.2	11.3
Sample Depth to Bottom of Sample								0.2	7.5	10.5	0.2	11.3	14.3
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Di-n-octylphthalate	UG/KG	0	0%	50000	0	0	10	10 U	9.3 U	10 U	10 U	9.2 U	8.5 U
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	10	12 U	11 U	12 U	12 U	11 U	10 U
Dibenzofuran	UG/KG	0	0%	6200	0	0	10	14 U	13 U	14 U	14 U	13 U	12 U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	10	13 U	12 U	13 U	13 U	12 U	11 U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	10	10 U	9.3 U	10 U	10 U	9.2 U	8.5 U
Fluoranthene	UG/KG	47	10%	50000	0	1	10	5.9 U	47 J	5.9 U	5.9 U	5.4 U	5 U
Fluorene	UG/KG	0	0%	50000	0	0	10	12 U	11 U	12 U	12 U	11 U	10 U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	10	7.9 U	7.3 U	7.9 U	8 U	7.2 U	6.7 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	10	15 U	14 U	15 U	15 U	13 U	12 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	10	11 U	9.8 UJ	11 U	11 U	9.7 U	8.9 U
Hexachloroethane	UG/KG	0	0%		0	0	10	20 U	19 U	20 U	20 U	18 U	17 U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	10	10 U	9.4 U	10 U	10 U	9.3 U	8.6 U
Isophorone	UG/KG	0	0%	4400	0	0	10	16 U	14 U	16 U	16 U	14 U	13 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	10	11 U	9.9 U	11 U	11 U	9.8 U	9 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	10	19 U	17 U	19 U	19 U	17 U	16 U
Naphthalene	UG/KG	0	0%	13000	0	0	10	9.2 U	8.5 U	9.2 U	9.3 U	8.4 U	7.7 U
Nitrobenzene	UG/KG	0	0%	200	0	0	10	21 U	20 U	21 U	22 U	20 U	18 U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	10	13 U	12 U	13 U	13 U	12 U	11 U
Phenanthrene	UG/KG	0	0%	50000	0	0	10	9.4 U	8.7 U	9.5 U	9.5 U	8.6 U	8 U
Phenol	UG/KG	0	0%	30	0	0	10	18 U	16 U	18 U	18 U	16 U	15 U
Pyrene	UG/KG	44	10%	50000	0	1	10	7.5 U	44 J	7.5 U	7.6 U	6.9 U	6.3 U
PESTICIDES/PCBs													
Aroclor-1016	UG/KG	0	0%		0	0	10	6.6 UJ	6.2 UJ	6.6 UJ	6.7 UJ	6.1 UJ	5.6 UJ
Aroclor-1221	UG/KG	0	0%		0	0	10	4.5 U	4.2 U	4.5 U	4.6 U	4.1 U	3.8 U
Aroclor-1232	UG/KG	0	0%		0	0	10	3 U	2.8 U	3 U	3.1 U	2.8 U	2.6 U
Aroclor-1242	UG/KG	0	0%		0	0	10	3.9 U	3.7 U	3.9 U	4 U	3.6 U	3.3 U
Aroclor-1248	UG/KG	0	0%		0	0	10	4.6 U	4.3 U	4.6 U	4.7 U	4.3 U	4 U
Aroclor-1254	UG/KG	0	0%	10000	0	0	10	1.7 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U
Aroclor-1260	UG/KG	0	0%	10000	0	0	10	3.7 UJ	3.5 UJ	3.7 UJ	3.8 UJ	3.4 UJ	3.2 UJ
4,4'-DDD	UG/KG	0	0%	2900	0	0	10	1.3 U	1.2 U	1.3 U	1.3 U	1.2 U	1.1 U
4,4'-DDE	UG/KG	0	0%	2100	0	0	10	1.6 U	1.5 U	1.6 U	1.7 U	1.5 U	1.4 U
4,4'-DDT	UG/KG	0	0%	2100	0	0	10	2.3 UJ	2.2 UJ	2.4 UJ	2.4 UJ	2.2 UJ	2 UJ
Aldrin	UG/KG	0	0%	41	0	0	10	1.3 U	1.3 U	1.3 U	1.4 U	1.2 U	1.1 U
Alpha-BHC	UG/KG	0	0%	110	0	0	10	1.4 U	1.3 U	1.4 U	1.4 U	1.3 U	1.2 U
Beta-BHC	UG/KG	0	0%	200	0	0	10	1.5 U	1.4 U	1.5 U	1.5 U	1.3 U	1.2 U
Delta-BHC	UG/KG	0	0%	300	0	0	10	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.96 U
Dieldrin	UG/KG	0	0%	44	0	0	10	1.3 U	1.2 U	1.3 U	1.3 U	1.2 U	1.1 U
Endosulfan I	UG/KG	0	0%	900	0	0	10	1.9 U	1.7 U	1.9 U	1.9 U	1.7 U	1.6 U
Endosulfan II	UG/KG	0	0%	900	0	0	10	1.7 U	1.6 U	1.7 U	1.7 U	1.6 U	1.4 U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	10	1.9 U	1.8 U	1.9 U	1.9 U	1.7 U	1.6 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-1-1	TP109-1-2	TP109-1-3	TP109-2-1	TP109-2-2	TP109-2-3
Matrix								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID								121J1006	121J1007	121J1008	121J1009	121J1010	121J1011
Sample Depth to Top of Sample								0	0.2	7.5	0	0.2	11.3
Sample Depth to Bottom of Sample								0.2	7.5	10.5	0.2	11.3	14.3
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Endrin	UG/KG	0	0%	100	0	0	10	2.3 UJ	2.2 U	2.3 UJ	2.4 UJ	2.1 UJ	2 U
Endrin aldehyde	UG/KG	0	0%		0	0	10	1.9 U	1.8 U	1.9 U	2 U	1.8 U	1.7 U
Endrin ketone	UG/KG	0	0%		0	0	10	1.7 U	1.5 U	1.7 U	1.7 U	1.5 U	1.4 U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	10	1.5 U	1.4 U	1.5 U	1.6 U	1.4 U	1.3 U
Heptachlor	UG/KG	0	0%	100	0	0	10	1.7 U	1.6 U	1.7 U	1.7 U	1.5 U	1.4 U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	10	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U	1.4 U
Methoxychlor	UG/KG	0	0%		0	0	10	1.6 UJ	1.5 UJ	1.6 UJ	1.6 UJ	1.5 UJ	1.4 UJ
Toxaphene	UG/KG	0	0%		0	0	10	3.8 U	3.6 U	3.8 U	3.9 U	3.5 U	3.3 U
METALS													
Aluminum	MG/KG	15200	100%	19300	0	10	10	13400	11600	15200	13600	13200	5880
Antimony	MG/KG	0	0%	5.9	0	0	10	0.709 U	0.669 U	0.718 U	0.735 U	0.653 U	0.613 U
Arsenic	MG/KG	6.43	100%	8.2	0	10	10	4.19	4.42	4.1	6.43	6.03	3.54
Barium	MG/KG	141	100%	300	0	10	10	87.8	106	107	133	80.4	27.8
Beryllium	MG/KG	0.893	100%	1.1	0	10	10	0.82	0.8	0.893	0.625 J	0.602	0.233 J
Cadmium	MG/KG	0.577	100%	2.3	0	10	10	0.132 J	0.225 J	0.18 J	0.569 J	0.406 J	0.347 J
Calcium	MG/KG	109000	100%	121000	0	10	10	2920 J	2620 J	2540 J	3930 J	3580 J	61700 J
Chromium	MG/KG	21.7	100%	29.6	0	10	10	18.5 J	15.7 J	20.1 J	21 J	21.7 J	9.99
Cobalt	MG/KG	12.7	100%	30	0	10	10	7.98	9.06	10.9	11.1	11.8	7.49
Copper	MG/KG	29.1	100%	33	0	10	10	17.9 J	13.2 J	13.4 J	25.8 J	29.1 J	21.8 J
Cyanide	MG/KG	0	0%	0.35	0	0	10	0.642 U	0.595 U	0.638 U	0.653 U	0.586 U	0.544 U
Iron	MG/KG	27900	100%	36500	0	10	10	18700	16400	20800	27800	27900	14200
Lead	MG/KG	23.6	100%	24.8	0	10	10	15.2	13	11.9	23.6	15.5	7.78
Magnesium	MG/KG	18000	100%	21500	0	10	10	3910	2940	3890	4400	5120	18000
Manganese	MG/KG	950	100%	1060	0	10	10	392	759	950	662	518	379
Mercury	MG/KG	0.09	100%	0.1	0	10	10	0.05	0.06	0.06	0.09 J	0.04	0.01
Nickel	MG/KG	38.6	100%	49	0	10	10	25.1	20	25.7	29.7	38.6	20.4
Potassium	MG/KG	1860	100%	2380	0	10	10	1470 J	1040 J	1230 J	1620 J	1710 J	1040 J
Selenium	MG/KG	3.34	80%	2	3	8	10	0.48 J	0.372 U	0.399 U	3.34	3.2	1.01 J
Silver	MG/KG	2.71	100%	0.75	5	10	10	0.294 J	0.152 J	0.239 J	2.71 J	2.35 J	0.826 J
Sodium	MG/KG	197	90%	172	2	9	10	46.8 U	50.5 J	47.7 J	119 J	72.6 J	197 J
Thallium	MG/KG	0	0%	0.7	0	0	10	0.415 U	0.392 U	0.421 U	0.431 U	0.383 U	0.359 U
Vanadium	MG/KG	26.1	100%	150	0	10	10	22.4	19.2	22.2	26.1	25.2	11.1
Zinc	MG/KG	85.8	100%	110	0	10	10	59.2	51.1	58.6	81.5	85.8	56.1

Note(s):
U = compound was not detected
J = the reported value is an estimated concentration
UJ = the compound was not detected; the associated reporting limit is approximate
R = the data was rejected in the data validating process

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-3-1	TP109-3-2	TP109-3-3	TP109-3-3
Matrix								SOIL	SOIL	SOIL	SOIL
Sample ID								121J1012	121J1013	121J1015	121J1014
Sample Depth to Top of Sample								0	0.2	7.5	7.5
Sample Depth to Bottom of Sample								0.2	7.5	11.8	11.8
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)
VOLATILE ORGANIC COMPOUNDS											
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	10	0.34 UJ	0.35 UJ	0.28 UJ	0.28 UJ
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	10	0.67 UJ	0.69 UJ	0.54 UJ	0.55 UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	10	0.64 UJ	0.66 UJ	0.52 UJ	0.52 UJ
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	10	0.44 UJ	0.46 UJ	0.36 UJ	0.37 UJ
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	10	0.27 UJ	0.28 UJ	0.22 UJ	0.22 UJ
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	10	3.9 UJ	4 UJ	3.2 UJ	3.2 UJ
1,2-Dichloropropane	UG/KG	0	0%		0	0	10	0.42 UJ	0.43 UJ	0.34 UJ	0.35 UJ
Acetone	UG/KG	1000	70%	200	6	7	10	**670** J	56 J	7.6 UJ	7.7 UJ
Benzene	UG/KG	0	0%	60	0	0	10	0.25 UJ	0.26 UJ	0.21 UJ	0.21 UJ
Bromodichloromethane	UG/KG	0	0%		0	0	10	0.42 UJ	0.43 UJ	0.34 UJ	0.35 UJ
Bromoform	UG/KG	0	0%		0	0	10	0.38 UJ	0.39 UJ	0.31 UJ	0.31 UJ
Carbon disulfide	UG/KG	14	20%	2700	0	2	10	0.13 UJ	14 J	0.1 UJ	0.1 UJ
Carbon tetrachloride	UG/KG	0	0%	600	0	0	10	0.37 UJ	0.39 UJ	0.3 UJ	0.31 UJ
Chlorobenzene	UG/KG	0	0%	1700	0	0	10	0.44 UJ	0.46 UJ	0.36 UJ	0.36 UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	10	0.37 UJ	0.38 UJ	0.3 UJ	0.3 UJ
Chloroethane	UG/KG	0	0%	1900	0	0	10	0.66 UJ	0.68 UJ	0.54 UJ	0.54 UJ
Chloroform	UG/KG	0	0%	300	0	0	10	0.3 UJ	0.31 UJ	0.24 UJ	0.25 UJ
Cis-1,2-Dichloroethene	UG/KG	0	0%		0	0	10	0.44 UJ	0.46 UJ	0.36 UJ	0.36 UJ
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	10	0.24 UJ	0.25 UJ	0.2 UJ	0.2 UJ
Ethyl benzene	UG/KG	0	0%	5500	0	0	10	0.31 UJ	0.32 UJ	0.25 UJ	0.26 UJ
Meta/Para Xylene	UG/KG	0	0%		0	0	10	0.65 UJ	0.67 UJ	0.53 UJ	0.53 UJ
Methyl bromide	UG/KG	0	0%		0	0	10	0.89 UJ	0.92 UJ	0.72 UJ	0.73 UJ
Methyl butyl ketone	UG/KG	0	0%		0	0	10	4 UJ	4.1 UJ	3.3 UJ	3.3 UJ
Methyl chloride	UG/KG	0	0%		0	0	10	0.42 UJ	0.43 UJ	0.34 UJ	0.34 UJ
Methyl ethyl ketone	UG/KG	70	50%	300	0	5	10	61 J	3 UJ	2.3 UJ	2.4 UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	10	3 UJ	3.1 UJ	2.5 UJ	2.5 UJ
Methylene chloride	UG/KG	17	70%	100	0	7	10	6.5 J	0.88 UJ	0.7 UJ	0.7 UJ
Ortho Xylene	UG/KG	0	0%		0	0	10	0.54 UJ	0.56 UJ	0.44 UJ	0.45 UJ
Styrene	UG/KG	0	0%		0	0	10	0.39 UJ	0.41 UJ	0.32 UJ	0.32 UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	10	0.8 UJ	0.82 UJ	0.65 UJ	0.66 UJ
Toluene	UG/KG	0	0%	1500	0	0	10	0.33 UJ	0.34 UJ	0.27 UJ	0.27 UJ
Trans-1,2-Dichloroethene	UG/KG	0	0%	300	0	0	10	0.47 UJ	0.48 UJ	0.38 UJ	0.38 UJ
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	10	0.32 UJ	0.33 UJ	0.26 UJ	0.27 UJ
Trichloroethene	UG/KG	0	0%	700	0	0	10	0.4 UJ	0.42 UJ	0.33 UJ	0.33 UJ
Vinyl chloride	UG/KG	0	0%	200	0	0	10	0.3 UJ	0.3 UJ	0.24 UJ	0.24 UJ
SEMIVOLATILE ORGANIC COMPOUNDS											
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	10	12 U	11 U	10 U	10 U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	10	22 U	20 U	20 U	20 U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	10	15 U	14 U	13 U	13 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-3-1	TP109-3-2	TP109-3-3	TP109-3-3
Matrix								SOIL	SOIL	SOIL	SOIL
Sample ID								121J1012	121J1013	121J1015	121J1014
Sample Depth to Top of Sample								0	0.2	7.5	7.5
Sample Depth to Bottom of Sample								0.2	7.5	11.8	11.8
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	10	17 U	15 U	15 U	15 U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	10	27 U	25 U	24 U	24 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	10	15 U	13 U	13 U	13 U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	10	14 U	13 U	13 U	13 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	10	22 U	20 U	20 U	20 U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	10	18 U	16 U	16 U	16 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	10	8.2 U	7.4 U	7.2 U	7.2 U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	10	18 U	16 U	15 U	15 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	10	8.6 U	7.7 U	7.5 U	7.6 U
2-Chlorophenol	UG/KG	0	0%	800	0	0	10	18 U	16 U	16 U	16 U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	10	7.1 U	6.4 U	6.2 U	6.2 U
2-Methylphenol	UG/KG	0	0%	100	0	0	10	26 U	23 U	23 U	23 U
2-Nitroaniline	UG/KG	0	0%	430	0	0	10	15 U	13 U	13 U	13 U
2-Nitrophenol	UG/KG	0	0%	330	0	0	10	17 U	15 U	14 U	15 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	10	66 U	59 U	58 U	58 U
3-Nitroaniline	UG/KG	0	0%	500	0	0	10	67 U	60 U	58 U	59 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	10	24 U	21 U	21 U	21 U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	10	11 U	9.7 U	9.5 U	9.5 U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	10	12 U	11 U	11 U	11 U
4-Chloroaniline	UG/KG	0	0%	220	0	0	10	150 U	140 U	130 U	130 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	10	10 U	9.2 U	8.9 U	9 U
4-Methylphenol	UG/KG	0	0%	900	0	0	10	19 U	17 U	17 U	17 U
4-Nitroaniline	UG/KG	0	0%		0	0	10	32 U	29 U	28 U	28 U
4-Nitrophenol	UG/KG	0	0%	100	0	0	10	40 U	36 U	35 U	35 U
Acenaphthene	UG/KG	0	0%	50000	0	0	10	9.1 U	8.2 U	8 U	8 U
Acenaphthylene	UG/KG	0	0%	41000	0	0	10	12 U	11 U	11 U	11 U
Anthracene	UG/KG	0	0%	50000	0	0	10	9.8 U	8.8 U	8.6 U	8.7 U
Benzo(a)anthracene	UG/KG	0	0%	224	0	0	10	6.2 U	5.6 U	5.4 U	5.5 U
Benzo(a)pyrene	UG/KG	0	0%	61	0	0	10	7.1 U	6.4 U	6.2 U	6.2 U
Benzo(b)fluoranthene	UG/KG	47	10%	1100	0	1	10	22 U	20 U	19 U	19 U
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	10	18 U	16 U	16 U	16 U
Benzo(k)fluoranthene	UG/KG	0	0%	1100	0	0	10	14 U	13 U	12 U	12 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	10	19 U	17 U	16 U	17 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	10	20 U	18 U	18 U	18 U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	10	22 U	20 U	20 U	20 U
Bis(2-Ethylhexyl)phthalate	UG/KG	72	10%	50000	0	1	10	9.5 U	8.5 U	8.3 U	72 J
Butylbenzylphthalate	UG/KG	120	30%	50000	0	3	10	14 U	12 U	12 U	12 U
Carbazole	UG/KG	0	0%		0	0	10	9.1 U	8.2 U	8 U	8 U
Chrysene	UG/KG	0	0%	400	0	0	10	13 U	12 U	11 U	12 U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	10	5.5 U	4.9 U	4.8 U	4.8 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-3-1	TP109-3-2	TP109-3-3	TP109-3-3
Matrix								SOIL	SOIL	SOIL	SOIL
Sample ID								121J1012	121J1013	121J1015	121J1014
Sample Depth to Top of Sample								0	0.2	7.5	7.5
Sample Depth to Bottom of Sample								0.2	7.5	11.8	11.8
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Di-n-octylphthalate	UG/KG	0	0%	50000	0	0	10	9.8 U	8.8 U	8.6 U	8.7 U
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	10	12 U	11 U	11 U	11 U
Dibenzofuran	UG/KG	0	0%	6200	0	0	10	14 U	12 U	12 U	12 U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	10	13 U	12 U	11 U	11 U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	10	9.8 U	8.8 U	8.6 U	8.7 U
Fluoranthene	UG/KG	47	10%	50000	0	1	10	5.7 U	5.1 U	5 U	5 U
Fluorene	UG/KG	0	0%	50000	0	0	10	12 U	11 U	10 U	10 U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	10	7.7 U	6.9 U	6.8 U	6.8 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	10	14 U	13 U	13 U	13 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	10	10 U	9.3 U	9 U	9.1 U
Hexachloroethane	UG/KG	0	0%		0	0	10	20 U	18 U	17 U	17 U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	10	10 U	9 U	8.7 U	8.8 U
Isophorone	UG/KG	0	0%	4400	0	0	10	15 U	14 U	13 U	13 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	10	10 U	9.4 U	9.2 U	9.2 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	10	18 U	16 U	16 U	16 U
Naphthalene	UG/KG	0	0%	13000	0	0	10	9 U	8.1 U	7.8 U	7.9 U
Nitrobenzene	UG/KG	0	0%	200	0	0	10	21 U	19 U	18 U	18 U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	10	13 U	12 U	11 U	11 U
Phenanthrene	UG/KG	0	0%	50000	0	0	10	9.2 U	8.3 U	8.1 U	8.1 U
Phenol	UG/KG	0	0%	30	0	0	10	17 U	15 U	15 U	15 U
Pyrene	UG/KG	44	10%	50000	0	1	10	7.4 U	6.6 U	6.4 U	6.5 U
PESTICIDES/PCBs											
Aroclor-1016	UG/KG	0	0%		0	0	10	6.4 UJ	5.9 UJ	5.7 UJ	5.7 UJ
Aroclor-1221	UG/KG	0	0%		0	0	10	4.4 U	4 U	3.9 U	3.9 U
Aroclor-1232	UG/KG	0	0%		0	0	10	3 U	2.7 U	2.6 U	2.6 U
Aroclor-1242	UG/KG	0	0%		0	0	10	3.8 U	3.5 U	3.4 U	3.4 U
Aroclor-1248	UG/KG	0	0%		0	0	10	4.5 U	4.1 U	4 U	4 U
Aroclor-1254	UG/KG	0	0%	10000	0	0	10	1.7 U	1.5 U	1.5 U	1.5 U
Aroclor-1260	UG/KG	0	0%	10000	0	0	10	3.6 UJ	3.3 UJ	3.2 UJ	3.2 UJ
4,4'-DDD	UG/KG	0	0%	2900	0	0	10	1.3 U	1.1 U	1.1 U	1.1 U
4,4'-DDE	UG/KG	0	0%	2100	0	0	10	1.6 U	1.4 U	1.4 U	1.4 U
4,4'-DDT	UG/KG	0	0%	2100	0	0	10	2.3 UJ	2.1 UJ	2 UJ	2 UJ
Aldrin	UG/KG	0	0%	41	0	0	10	1.3 U	1.2 U	1.1 U	1.2 U
Alpha-BHC	UG/KG	0	0%	110	0	0	10	1.4 U	1.2 U	1.2 U	1.2 U
Beta-BHC	UG/KG	0	0%	200	0	0	10	1.4 U	1.3 U	1.2 U	1.3 U
Delta-BHC	UG/KG	0	0%	300	0	0	10	1.1 U	0.99 U	0.96 U	0.97 U
Dieldrin	UG/KG	0	0%	44	0	0	10	1.2 U	1.1 U	1.1 U	1.1 U
Endosulfan I	UG/KG	0	0%	900	0	0	10	1.8 U	1.6 U	1.6 U	1.6 U
Endosulfan II	UG/KG	0	0%	900	0	0	10	1.6 U	1.5 U	1.4 U	1.5 U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	10	1.8 U	1.7 U	1.6 U	1.6 U

Table B-2
TEST PIT SOIL SAMPLE RESULTS
SEAD-121J
Mound Area Findings Report
Seneca Army Depot Activity

Facility								SEAD-121J	SEAD-121J	SEAD-121J	SEAD-121J
Location ID								TP109-3-1	TP109-3-2	TP109-3-3	TP109-3-3
Matrix								SOIL	SOIL	SOIL	SOIL
Sample ID								121J1012	121J1013	121J1015	121J1014
Sample Depth to Top of Sample								0	0.2	7.5	7.5
Sample Depth to Bottom of Sample								0.2	7.5	11.8	11.8
Sample Date								7/13/2004	7/13/2004	7/13/2004	7/13/2004
QC Code								SA	SA	SA	SA
Study ID								MOUNDS	MOUNDS	MOUNDS	MOUNDS
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level**	**Number of Exceedances**	**Number of Detects**	**Number of Analyses**	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Endrin	UG/KG	0	0%	100	0	0	10	2.3 U	2 U	2 U	2 U
Endrin aldehyde	UG/KG	0	0%		0	0	10	1.9 U	1.7 U	1.7 U	1.7 U
Endrin ketone	UG/KG	0	0%		0	0	10	1.6 U	1.5 U	1.4 U	1.4 U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	10	1.5 U	1.4 U	1.3 U	1.3 U
Heptachlor	UG/KG	0	0%	100	0	0	10	1.6 U	1.5 U	1.4 U	1.4 U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	10	1.6 U	1.4 U	1.4 U	1.4 U
Methoxychlor	UG/KG	0	0%		0	0	10	1.5 UJ	1.4 UJ	1.4 UJ	1.4 UJ
Toxaphene	UG/KG	0	0%		0	0	10	3.7 U	3.4 U	3.3 U	3.3 U
METALS											
Aluminum	MG/KG	15200	100%	19300	0	10	10	14300	6910	6520	6400
Antimony	MG/KG	0	0%	5.9	0	0	10	0.707 U	0.63 U	0.611 U	0.62 U
Arsenic	MG/KG	6.43	100%	8.2	0	10	10	5.69	4.01	3.68	3.65
Barium	MG/KG	141	100%	300	0	10	10	141	54	39.9	39.3
Beryllium	MG/KG	0.893	100%	1.1	0	10	10	0.767	0.309 J	0.261 J	0.26 J
Cadmium	MG/KG	0.577	100%	2.3	0	10	10	0.577 J	0.352 J	0.264 J	0.308 J
Calcium	MG/KG	109000	100%	121000	0	10	10	4700 J	109000 J	62700 J	59600 J
Chromium	MG/KG	21.7	100%	29.6	0	10	10	21.6 J	11.2 J	11 J	10.8 J
Cobalt	MG/KG	12.7	100%	30	0	10	10	12.7	7.96	8.15	9.03
Copper	MG/KG	29.1	100%	33	0	10	10	23.6 J	20.3 J	20.3 J	20.1 J
Cyanide	MG/KG	0	0%	0.35	0	0	10	0.628 U	0.565 U	0.548 U	0.551 U
Iron	MG/KG	27900	100%	36500	0	10	10	25900	15500	15500	15000
Lead	MG/KG	23.6	100%	24.8	0	10	10	18.2	8.95	7.94	8.02
Magnesium	MG/KG	18000	100%	21500	0	10	10	4590	12200	13400	15100
Manganese	MG/KG	950	100%	1060	0	10	10	824	439	433	469
Mercury	MG/KG	0.09	100%	0.1	0	10	10	0.08 J	0.03	0.02	0.02
Nickel	MG/KG	38.6	100%	49	0	10	10	30.8	20.8	21.7	22.3
Potassium	MG/KG	1860	100%	2380	0	10	10	1860 J	1150 J	963 J	845 J
Selenium	MG/KG	3.34	80%	2	3	8	10	2.82	0.988 J	1.14	0.865 J
Silver	MG/KG	2.71	100%	0.75	5	10	10	1.29 J	0.832 J	0.677 J	0.526 J
Sodium	MG/KG	197	90%	172	2	9	10	79.4 J	190 J	146 J	169 J
Thallium	MG/KG	0	0%	0.7	0	0	10	0.415 U	0.369 U	0.358 U	0.363 U
Vanadium	MG/KG	26.1	100%	150	0	10	10	24.6	12.6	11.3	11.1
Zinc	MG/KG	85.8	100%	110	0	10	10	77.4	51.8	57.5	63.6

Note(s):
U = compound was not detected
J = the reported value is an estimated concentration
UJ = the compound was not detected; the associated reporting limit is approximate
R = the data was rejected in the data validating process