

U.S. Army Corps of Engineers New England Division

**NO FURTHER ACTION DECISION UNDER CERCLA
AREA REQUIRING ENVIRONMENTAL EVALUATION 63BQ**

**DEVENS RESERVE FORCES TRAINING AREA
DEVENS, MASSACHUSETTS**

**CONTRACT DACA31-94-D-0061
DELIVERY ORDER NO. 0007**

**U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DIVISION
WALTHAM, MASSACHUSETTS**

AUGUST 1997

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**ABB Environmental
Services, Inc.**

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UNDER CERCLA
AREA REQUIRING ENVIRONMENTAL EVALUATION 63BQ**

**DEVENS RESERVE FORCES TRAINING AREA
DEVENS, MASSACHUSETTS**

Prepared for:

U.S. Army Corps of Engineers
New England Division
Waltham, Massachusetts

Contract DACA31-94-D-0061

Prepared by:

ABB Environmental Services, Inc.
Portland, Maine
Project No. 8740-03

AUGUST 1997

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EXECUTIVE SUMMARY

This decision document has been prepared to support a no further action decision at Area Requiring Environmental Evaluation (AREE) 63BQ, the site of a previously removed underground storage tank (UST) in the vicinity of Building 2527, at the Devens Reserve Forces Training Area (RFTA) (formerly Fort Devens), Devens, Massachusetts.

Fort Devens was identified for cessation of operations and closure under Public Law 101-510, the Defense Base Realignment and Closure Act of 1990, and was officially closed in September 1996. Portions of the property formerly occupied by Fort Devens were retained by the Army for reserve forces training and renamed the Devens Reserve Forces Training Area. Areas not retained as part of the Devens RFTA were, or are in the process of being, transferred to new owners for reuse and redevelopment. AREE 63BQ is located within Lease Parcel A-14, which is currently leased to the Massachusetts Government Land Bank. The Army plans to transfer ownership of Lease Parcel A-14 to the Massachusetts Government Land Bank in 1997 for commercial development.

AREE 63BQ is the site of a previously-removed 1,000 gallon UST in the vicinity of Building 2527 located on the southern side of the former Main Post at Fort Devens. Building 2527, now abandoned, was one of a group of former enlisted men's barracks located near Patton Road. The UST was located on the northern side of Building 2527.

The Fort Devens Environmental Management Office identified an abandoned UST in an open area between Buildings 2527 and 2526 in 1995. The UST, and associated contaminated soil, was removed by OHM Remediation Services Corporation (OHM) under contract to the U.S. Army Corps of Engineers-New England Division (USACE-NED). The removal was conducted as a Limited Removal Action (LRA) under the Massachusetts Contingency Plan (MCP). Elevated headspace readings taken during the UST removal triggered a 72-hour notification requirement and Immediate Response Action (IRA) under the MCP. OHM removed approximately 500 cubic yards of petroleum contaminated soil under the IRA. As part of the IRA, OHM completed 17 test pits to determine the distribution of the soil contamination. Field screening sample results obtained from the test pitting program, indicated that the residual soil contamination extended from the UST grave south and east to Buildings 2527 and 2526. Due to the extent of the soil contamination and the potential for groundwater contamination, the

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Army discontinued the IRA and completed the removal action under the Superfund program in accordance with Section 2.9 of the Federal Facility Agreement. An IRA Completion Report, and required documentation, was completed by OHM and submitted to the Massachusetts Department of Environmental Protection (MADEP), documenting the transfer of the site from the MCP to CERCLA. In addition, ABB Environmental Services, Inc. (ABB-ES) completed an Action Memorandum for a time-critical removal Action under CERCLA for the site.

An additional 2,041 cubic yards of soil was removed from AREE 63BQ by OHM in an effort to remediate the soil contamination detected under the IRA. Confirmatory soil samples were collected from the bottom and three sidewalls of the excavation for field screening and off-site laboratory analysis. These samples were collected to determine if the cleanup goal of 500 micrograms per gram ($\mu\text{g/g}$) of total petroleum hydrocarbons (TPH) had been obtained. The results from the field screening samples collected from the northern, eastern, and western sidewalls of the excavation indicated that the 500 $\mu\text{g/g}$ cleanup goal had been achieved at these locations. However, the field screening results from soil samples collected from the southern sidewall adjacent to Building 2527 indicated that the TPH concentration was above 500 $\mu\text{g/g}$; therefore, a confirmatory soil sample was not collected from this sidewall. Because the contamination was apparently beneath Building 2527, and was greater than 3 feet below ground surface, the cleanup goal was increased to 2,500 $\mu\text{g/g}$; which is consistent with the S-2 soil standard under the MCP. The results of the field screening sample collected from the southern sidewall were below the new cleanup goal. Based on this information, and the results from the other confirmatory laboratory samples, OHM backfilled the excavation.

To assess the presence of groundwater contamination, OHM installed four groundwater monitoring wells in 1996. One monitoring well was installed in an apparent upgradient location, and the remaining three were installed at apparent downgradient locations. OHM collected one round of groundwater samples from each monitoring well in April 1996 and submitted each sample for off-site laboratory analysis consisting of MADEP's volatile petroleum hydrocarbons and extractable petroleum hydrocarbons (VPH/EPH) analysis. The results of the Round 1 groundwater sample indicated that no detectable concentrations of VPH or EPH were present in the samples. A second round of groundwater samples were collected from each of the monitoring wells by ABB-ES in November 1996 and also submitted to an off-site laboratory for VPH/EPH analysis. The

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results of the Round 2 groundwater sampling also showed no detectable concentrations of VPH or EPH.

Based upon the results of the soil removal and the subsequent groundwater sampling, the site requires no further action in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 120 (h)(3).

Signature of this decision document by the U.S. Army, U.S. Environmental Protection Agency, and MADEP will remove AREE 63BQ from further consideration under the U.S. Army Installation Restoration Program and CERCLA. No further response action under CERCLA will be required of the Army at AREE 63BQ.

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1.0 INTRODUCTION

This decision document was prepared to support a no further action decision at Area Requiring Environmental Evaluation (AREE) 63BQ the site of a former underground storage tank (UST) located in the vicinity of Building 2527 at the Devens Reserve Forces Training Area (Devens RFTA), Devens, Massachusetts. It was prepared by ABB Environmental Services, Inc. (ABB-ES) as a component of Task Order 007 of Contract DACA31-94-D-0061 under the direction of the U.S. Army Corps of Engineers, New England Division (USACE-NED).

Fort Devens was identified for cessation of operations and closure under Public Law 101-510, the Defense Base Realignment and Closure (BRAC) Act of 1990, and officially closed in September 1996. Portions of the property formerly occupied by Fort Devens were retained by the Army for reserve forces training and renamed the Devens RFTA. Areas not retained as part of the Devens RFTA were, or are in the process of being, transferred to new owners for reuse and redevelopment. AREE 63BQ is located within Lease Parcel A-14, which is currently leased to the Massachusetts Government Land Bank (MGLB). The Army plans to transfer ownership of Lease Parcel A-14 to the MGLB in early 1997 for commercial development.

Fort Devens was placed on the National Priority List (NPL) on December 21, 1989, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). In conjunction with the U.S. Army Installation Restoration Program, the U.S. Army Environmental Center (USAEC) developed a Master Environmental Plan (MEP) for Fort Devens in 1992. The MEP consisted of assessments of the environmental status of study areas, specified necessary investigations, and provided recommendations for response actions with the objective of identifying priorities for environmental restoration at Fort Devens. AREEs and Study Areas (SAs) were identified, and investigations were initiated to determine where removal actions were necessary.

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2.0 BACKGROUND AND PHYSICAL SETTING

2.1 DEVENS RESERVE FORCES TRAINING AREA BACKGROUND

The Devens RFTA is located within the towns of Ayer and Shirley (Middlesex County) and Harvard and Lancaster (Worcester County), approximately 35 miles northwest of Boston, Massachusetts (Figure 2-1). It was created in 1996, coincident with the closure of Fort Devens, to provide facilities for the training of reserve forces in central New England. The Devens RFTA includes portions of the former North Post and Main Post, and the entire South Post. It lies within the Ayer, Shirley, and Clinton map quadrangles (7½-minute series).

Fort Devens was established in 1917 as Camp Devens, a temporary training camp for soldiers from the New England area. In 1931, the camp became a permanent installation and was redesignated as Fort Devens. Throughout its history, Fort Devens served as a training and induction center for military personnel and a unit mobilization and demobilization site. All or portions of this function occurred during World Wars I and II, the Korean and Vietnam conflicts, and operations Desert Shield and Desert Storm.

Over 3,000 acres at Fort Devens were developed for housing, buildings, and other facilities; and the installation was reported as the largest undeveloped land holding under a single owner in north-central Massachusetts (U.S. Fish and Wildlife Service [USFWS], 1992). The North Post consisted primarily of the Moore Army Airfield and the site of the installation's wastewater treatment facility. The Main Post was the site of numerous buildings, including tracked and wheeled vehicle maintenance facilities, training and administrative buildings, barracks and other military housing, and recreational facilities. The South Post, largely undeveloped, is located south of Massachusetts Route 2 and was used for field training exercises.

Public Law 101-510, BRAC 1990, identified Fort Devens for closure. A portion of Fort Devens was retained by the Army as the Devens RFTA, while other portions were identified as reuse areas. AREE 63BQ is among the areas designated for commercial/industrial development in the Devens Reuse Plan (Vanasse Hangen Brustlin, Inc., 1994).

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2.2 REGIONAL GEOLOGY

The Devens RFTA is near the western boundary of the Seaboard Lowland Section of the New England-Maritime Physiographic province (Jahns, 1953). It is adjacent to the Worcester County Plateau of the Central Uplands province and lies partly within the province (Koteff, 1966). The land surface is almost completely covered with unconsolidated glacial outwash deposits, resulting in few bedrock outcrops. The surficial deposits are underlain by a highly complex assemblage of intensely folded and faulted metasedimentary rocks with occasional igneous intrusions. The geomorphology of the region is dominated by glacial features such as outwash plains, kames, kame terraces, drumlins, and eskers.

2.3 REGIONAL HYDROGEOLOGY

Groundwater at the Devens RFTA occurs largely in the permeable glacial-deltaic outwash deposits of sand, gravel, and boulders. Well yields within these sediments are dependent upon the hydraulic characteristics of the aquifer and can range from 2 to over 300 gallons per minute (gpm). Small amounts of groundwater can be obtained from fractured bedrock with yields ranging from 2 to 10 gpm. Minor amounts of groundwater may be found in thin, permeable glacial lenses elsewhere on the installation. The primary hydrogeologic feature at Devens RFTA is the Nashua River, which flows through the facility in a south to north direction, with an average discharge rate of 55 cubic feet per second. In addition to the Nashua River, the terrain is dissected by numerous brooks attendant wetlands. There are also several kettle ponds and one kettle lake.

2.4 SITE DESCRIPTION AND HISTORY

AREE 63BQ is the site of a previously-removed 1,000 gallon UST which was located in the vicinity of Building 2527. The site is located on the southern side of the former Main Post at Fort Devens (Figure 2-2). Building 2527, now abandoned, was one of a group of former enlisted men's barracks located on an unnamed access road near Patton Road. The UST was identified by the former Fort Devens Environmental Management Office (EMO) as abandoned in 1995. The UST did not appear to be associated with the buildings in its vicinity.

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3.0 ACTIVITIES AND INVESTIGATIONS

This section summarizes the results of soil remedial activities performed at AREE 63BQ. These investigations included the following:

- UST Removal (including a Limited Removal Action [LRA] and Immediate Response Action [IRA] under the Massachusetts Contingency Plan [MCP])
- Additional Soil Removal under CERCLA

3.1 UST REMOVAL

The abandoned 1,000-gallon UST, and associated contaminated soil, was removed on June 14, 1995 by OHM Remediation Services Corporation (OHM) under contract to the USACE-NED. The removal was conducted as a LRA under the Massachusetts Contingency Plan (MCP) and in accordance with the Final UST Removal Protocol, Fort Devens, Massachusetts (USAEC, 1993). Headspace sample readings taken on soil samples collected from below the UST, exceeded 100 parts per million (ppm). These measurements indicated that possible product had been released, and triggered a 72-hour notification requirement under the MCP. The Army notified the (MADEP) of the release and continued to remove soil as an IRA under the MCP. The MADEP verbally authorized the removal of an additional 500 cubic yards of soil and assigned Release Tracking Number 2-10823 to the removal. 500 cubic yards of soil was removed by OHM and screened for total petroleum hydrocarbons (TPH) in the field using OHM's modified Method 418.1. A total of 53 soil samples were collected from the excavation and field screened. A summary of the IRA field screening results is presented in Table 3-1. A complete summary of the data is presented in OHM's Closure Report presented in Appendix A of this report.

Based on the results of the IRA, and discussions between OHM's Licensed Site Professional (LSP) and MADEP personnel, the Army directed OHM to complete a test pit program to determine the feasibility of continuing the removal. A total of 17 test pits (TP-1 through TP -17) were completed (Figure 3-1). Field screening samples were analyzed for TPH using OHM's modification of Method 418.1. Field screening sample results

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obtained from the test pitting program indicated that the residual soil contamination extended from the UST grave south and east to Buildings 2527 and 2526 (see Table 3-1 and Figure 3-1). Due to the extent of the soil contamination and the potential for groundwater contamination, the Army discontinued the IRA and completed the action under the Superfund program in accordance with Section 2.9 of the Federal Facility Agreement. An IRA Completion Report (date August 1995), and required documentation, was completed by OHM and submitted to the MADEP, documenting the transfer of the site from the MCP to CERCLA. A summary of the test pitting program, the Release Notification Form, and IRA Completion Statement are included as Appendices A and B of OHM's Closure Report (see Appendix A).

3.2 Additional Soil Removal Under CERCLA

ABB-ES prepared an Action Memorandum for additional soil removal at AREE 63BQ in accordance with requirements for removal actions under CERCLA (ABB-ES, 1995). OHM continued soil excavation activities on October 3, 1995. Soil samples were collected continually from the sidewalls and the bottom of the excavation, and screened in the field for TPH using OHM's modification of Method 418.1 (Figure 3-2). OHM collected a total of 145 soil samples for field screening. The results are presented in Table 3-2. A complete summary of the field screening results is presented in Appendix A of the OHM Closure Report (see Appendix A).

An additional 2,041 cubic yards of soil were removed from AREE 63BQ by OHM in an effort to remediate the soil contamination detected under the IRA. OHM removed a concrete pad and telephone pole in order to continue the soil removal southward toward Building 2527 (see Figure 3-2). Dewatering of the excavation was conducted to facilitate the removal of the contaminated soil. The water removed during this phase of the soil removal program was processed through a temporary water treatment system located at Building 2613 at Devens.

A total of eight confirmatory soil samples, and two duplicates, were collected from the bottom and three sidewalls of the excavation on December 1, 1995 to determine if the cleanup goal of 500 micrograms per gram ($\mu\text{g/g}$) of TPH, had been obtained (Figure 3-3). OHM collected four composite samples (plus one duplicate), and four grab samples (plus one duplicate) (Table 3-3). The composite soil samples were submitted to an off-site

laboratory for analysis of TPH and semi-volatile organic compounds (SVOCs), while the grab samples were analyzed only for volatile organic compounds (VOCs). The TPH field screening results for the composite soil samples indicated that three of the four samples were below the 500 µg/g cleanup goal. These samples were submitted for off-site laboratory analysis. However, the field screening result for the composite soil sample collected from the southern sidewall was 1,580 µg/g (see Table 3-2). Because of this result, the southern sidewall composite soil sample was not submitted for off-site laboratory analysis.

The results of the off-site laboratory analyses showed no residual VOCs were present in the grab samples. The results for the composite soil samples indicated that residual TPH was present in the bottom soil sample (SB2527BC) at 110 µg/g. TPH was not detected in any of the other composite soil samples. Several SVOCs were also detected in sample SB2527BC; however, none of the detected concentrations exceeded the MCP S-1 GW-1 soil standards (see Table 3-3). A complete summary of the off-site soil sample results is presented in Appendix C of OHM's Closure Report (see Appendix A).

Five soil samples were collected from the stockpiled soil removed from the excavation. Each of the soil samples was submitted for off-site laboratory analysis consisting of Toxicity Characteristic Leaching Procedure (TCLP), Resource Conservation and Recovery Act (RCRA) hazardous characteristics, TPH, VOCs, SVOCs, and polychlorinated biphenyls (PCBs). These analyses were chosen to determine the appropriate disposal alternative for the stockpiled soil. The results of the off-site laboratory analyses indicated that the soil did not have to be disposed of as a hazardous waste. A complete summary of the waste characterization data is presented in Appendix D of the Closure Report (see Appendix A). Based on these results, OHM, under direction of the Army, transported approximately 2,541 cubic yards of soil to Cell A of the temporary storage facility located adjacent to Building 202. The Material Shipping Record used by OHM to document transportation of the soil to the temporary storage facility is presented in Appendix E of OHM's Closure Report (see Appendix A). Concrete debris was transported to a storage area adjacent to the former Fort Devens Defense Reuse and Marketing Office (DRMO) yard, and the UST was transported to a certified tank yard in Lawance, Massachusetts for disposal.

To assess the potential for groundwater contamination, OHM installed four groundwater monitoring wells in 1996. One monitoring well was installed in an apparent upgradient

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location and the remaining three were installed at apparent downgradient locations (Figure 3-4). OHM collected one round of groundwater samples from each monitoring well in April 1996 and submitted the samples for off-site laboratory analysis consisting of MADEP's volatile petroleum hydrocarbons and extractable petroleum hydrocarbons (VPH/EPH). A second round of groundwater samples was collected by ABB-ES in November 1996 and also submitted to an off-site laboratory for VPH/EPH analysis. The results of the VPH/EPH analysis for both rounds showed no detectable concentrations of VPH or EPH (Table 3-4). A complete presentation of the Round 1 VPH/EPH results can be found in Appendix G of the OHM Closure Report (see Appendix A). Round 2 results are presented in Appendix B of this Decision Document.

Each of the monitoring wells was surveyed and a topographic survey was completed of AREE 63BQ. Water level measurements were collected from the four monitoring wells on January 15, 1997, so that water table groundwater flow could be established (Table 3-5). Based on these water level measurements, the inferred groundwater flow direction is to the south-southwest (Figure 3-4). Survey results are presented in Appendix C.

4.0 CONTAMINATION ASSESSMENT

This contamination assessment is based on interpretation of available data, including the results of OHM's field activities reported in the Closure Report (OHM, 1996) and the Round 2 groundwater sampling event completed by ABB-ES.

4.1 SOIL

The results from the field screening completed at the end of the CERCLA soil removal at AREE 63BQ, indicated that residual soil contamination was limited to the soil beneath Building 2527. The off-site laboratory confirmatory soil samples indicated that the 500 µg/g cleanup goal had been achieved for soil on the northeast, northwest, and southeast sidewalls, and at the bottom of the excavation (see Table 3-3). However, field screening results from the confirmatory composite soil sample collected from the southern sidewall, adjacent to Building 2527, indicated that the TPH concentration was 1,580 µg/g (see Table 3-2 and Figure 3-4). This concentration was above the cleanup goal of 500 µg/g. Therefore, an off-site laboratory confirmatory soil sample was not submitted for this sidewall. Consistent with the MCP S-2 soil standard, the Army applied a 2,500 µg/g cleanup goal to this sidewall due to the fact that the residual contamination was beneath Building 2527, and was also greater than 3 feet bgs. By increasing the cleanup goal to 2,500 µg/g, the elevated TPH concentration detected in the southwestern sidewall of the excavation was below the cleanup goal. Using this information and the results from the other confirmatory soil samples, OHM backfilled the excavation.

4.2 GROUNDWATER

The results of the Round 1 and Round 2 groundwater samples indicated that no detectable concentrations of VPH or EPH were present in the samples (see Table 3-4). Based on this data, it appears that the groundwater quality downgradient of the former UST has not been adversely impacted by the releases associated with AREE 63BQ.

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5.0 HUMAN HEALTH PRELIMINARY RISK EVALUATION

A human health preliminary risk evaluation (PRE) was performed as part of this Decision Document to evaluate whether contaminants detected at AREE 63BQ pose potential risks to human receptors based on current and future commercial/industrial land use scenarios. Exposure to both soil and groundwater was evaluated. The off-site laboratory results for the confirmatory soil samples and the VPH/EPH data generated by the off-site laboratory for the two groundwater sampling rounds, were used to assess the potential human health risk. Tables 5-1 and 5-2 presents summary statistics and human health soil and groundwater standards used for the AREE 63BQ PRE.

5.1 SOIL

Based on the Contamination Assessment of Subsection 4.1, confirmatory laboratory sample results showed TPH concentrations of up to 110 µg/g exist at the bottom of the final UST excavation at AREE 63BQ. In addition, field screening results from the southern sidewall indicated that TPH is present beneath Building 2527 at 1,580 µg/g. The maximum concentration of TPH (1,580 mg/g) exceeds the MCP S-1 standard; however, the average concentration (338 µg/g) is below the MCP S-1 standard. Additionally, these concentrations are less than the applicable MCP S-2 standard of 2,500 µg/g (see Table 5-1). Several SVOCs were detected in confirmatory soil sample SB2527BC; however, the concentration of each compound was below the MCP S-2 standard (see Table 5-1). Because of this, an unacceptable human health risk from direct contact exposure is not expected.

5.2 GROUNDWATER

The groundwater PRE for this Decision Document consisted of comparing the Round 1 and 2 VPH/EPH groundwater data sets to the screening values shown in Table 5-2. All data are from off-site laboratory analysis. As shown in Table 5-2, there were no detectable concentrations of VPH or EPH in either round of groundwater sampling.

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Based on these findings, it is concluded that groundwater upgradient and downgradient of the UST at AREE 63BQ would not pose an unacceptable risk to human health due to the release of the petroleum at AREE 63BQ.

6.0 ECOLOGICAL PRELIMINARY RISK EVALUATION

Potential ecological exposure pathways were not identified at AREE 63BQ because contaminants associated with releases from the abandoned UST were confined to subsurface soil and, therefore, not available to ecological receptors. Potential ecological risks were assumed to be negligible, and an ecological PRE was not performed.


7.0 CONCLUSIONS

Upon consideration of the completed soil removal actions, the lack of groundwater contamination, and planned commercial reuse of the site, no further action is required of the Army at AREE 63BQ.

8.0 DECISION


Upon consideration of the completed soil removal actions, the lack of groundwater contamination, and planned commercial reuse of the site, no further action is required of the Army at AREE 63BQ. In accordance with CERCLA 120 (h)(3), the U.S. Army has taken all remedial actions currently required at AREE 63BQ. Signature below by the U.S. Environmental Protection Agency (USEPA) and MADEP constitutes concurrence with the same.

U.S. DEPARTMENT OF THE ARMY


JAMES C. CHAMBERS
BRAC Environmental Coordinator
Devens Reserve Forces Training Area
Devens, Massachusetts

7 AUG 97
Date

U.S. ENVIRONMENTAL PROTECTION AGENCY

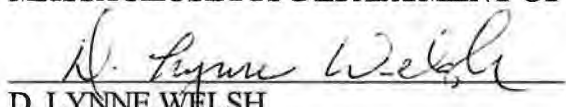

JAMES P. BYRNE
Devens Remedial Project Manager
U.S. Environmental Protection Agency, New England

8/7/97
Date

☒ Concur

☐ Non-concur (Please provide reasons for non-concurrence in writing)

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION


D. LYNNE WELSH
Section Chief, Federal Facilities - CERO
Massachusetts Department of Environmental Protection

8/7/97
Date

☒ Concur

☐ Non-concur (Please provide reasons for non-concurrence in writing)

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ABB-ES	ABB Environmental Services, Inc.
AREE	Area Requiring Environmental Evaluation
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DRMO	Defense Reuse and Marketing Office
EPH	extractable petroleum hydrocarbons
EMO	Environmental Management Office
gpm	gallons per minute
IRA	Immediate Response Action
LSP	Licensed Site Professional
MADEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MEP	Master Environmental Plan
NPL	National Priority List
OHM	OHM Remediation Services Corporation
PCB	polychlorinated biphenyl
ppm	part per million
PRE	Preliminary Risk Evaluation
RCRA	Resource Conservation and Recovery Act
RFTA	Reserve Forces Training Area
SA	study area

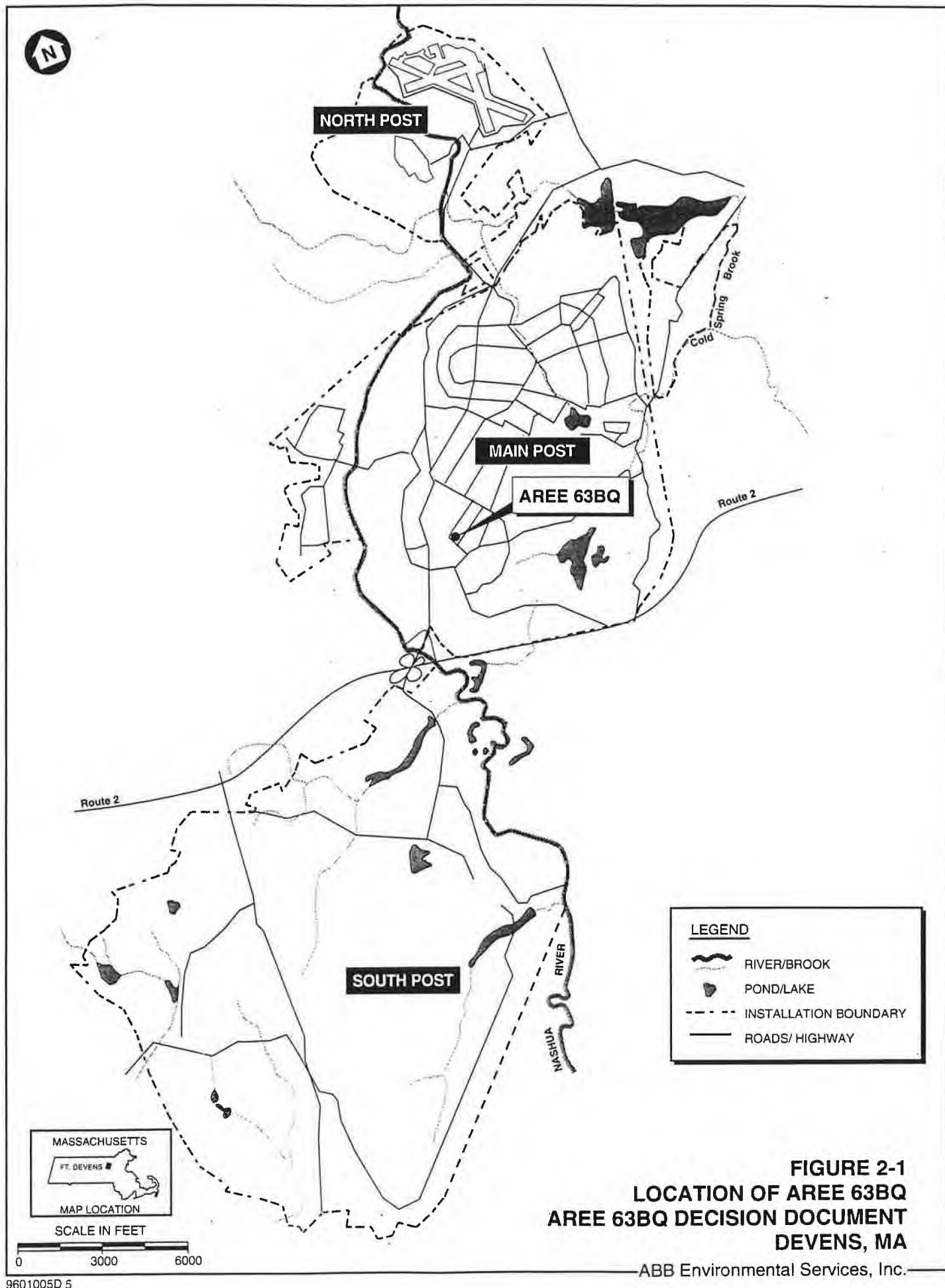
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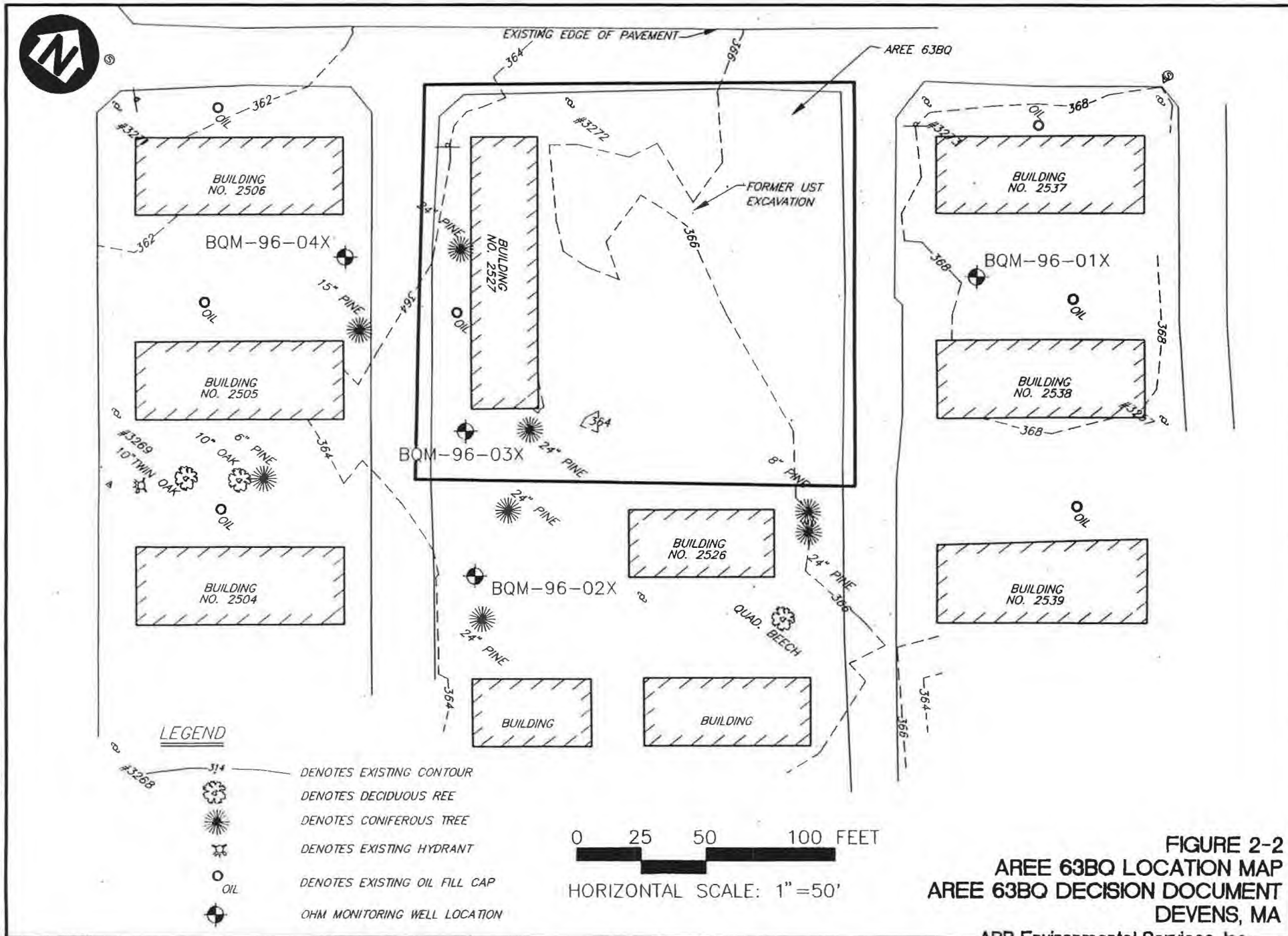
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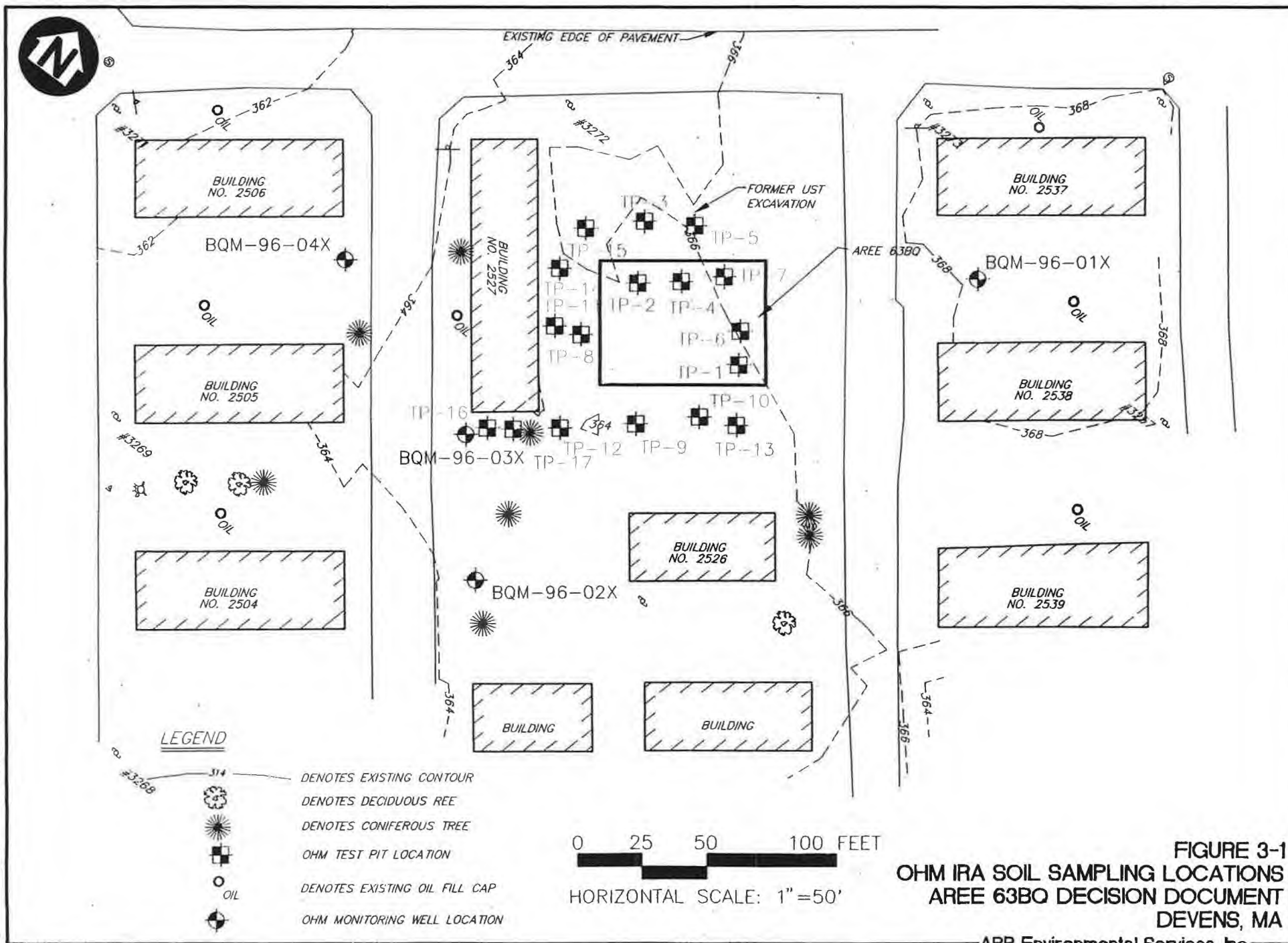
SARA	Superfund Amendments and Reauthorization Act
SVOC	semivolatile organic compound
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
USACE-NED	U.S. Army Corps of Engineers, New England Division
USAEC	U.S. Army Environmental Center
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
µg/g	micrograms per gram
VOC	volatile organic compound
VPH	volatile petroleum hydrocarbons

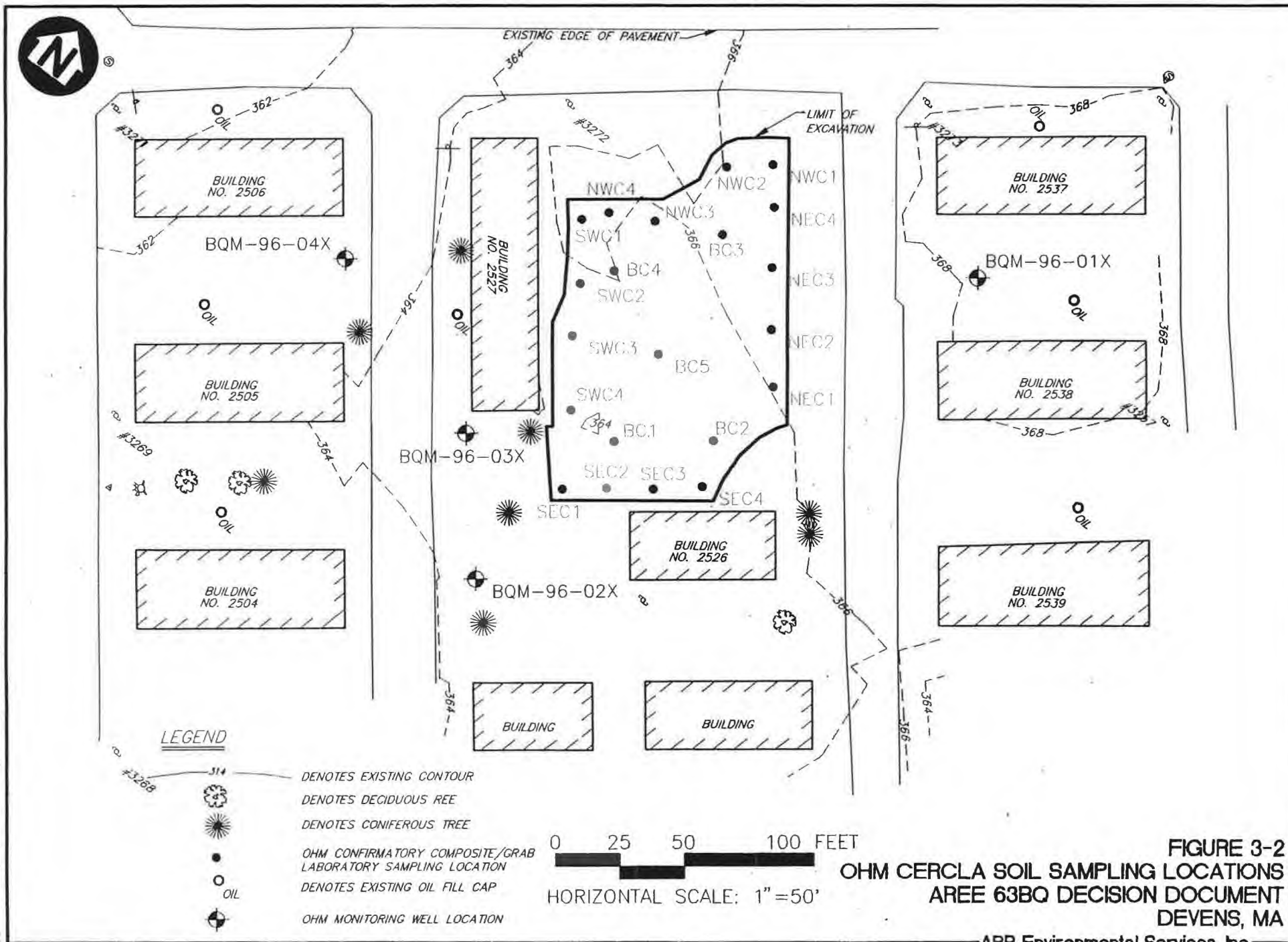
REFERENCES

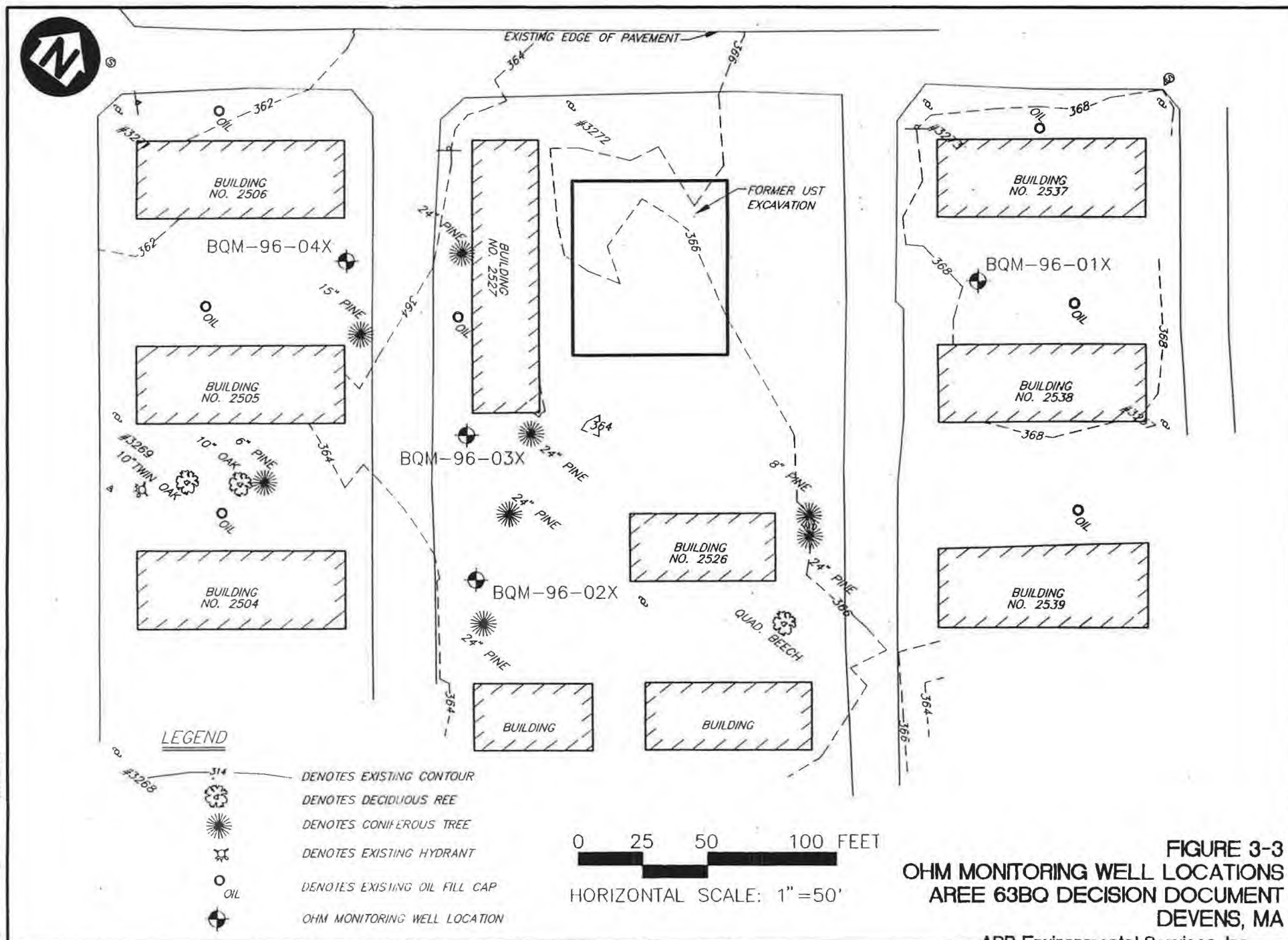
- ABB Environmental Services, Inc. (ABB-ES), 1996. "Action Memorandum for Additional Soil Removal - AREE 63BQ"; prepared for U.S. Army Corps of Engineers - New England Division; prepared by ABB-ES, Inc., Wakefield, MA.
- Jahns, R.H., 1953. "Surficial Geology of the Ayer Quadrangle, Massachusetts"; Scale 1:31,680; U.S. Geological Survey.
- Koteff, C., 1966. "Surficial Geologic Map of the Clinton Quadrangle, Worcester County, Massachusetts;" U.S. Geological Survey Map GQ-567.
- OHM Remediation Services Corp. (OHM)), 1996. "Closure Report, SA 63BQ, Devens, Massachusetts"; Prepared for the U.S. Army Corps of Engineers, NED, December.
- U.S. Army Environmental Center (USAEC), 1993. "Final UST Removal Protocol, Fort Devens, Massachusetts", USAEC.
- U.S. Fish and Wildlife Service, 1992. "Survey and Evaluation of Wetlands and Wildlife Habitat, Fort Devens, Massachusetts"; House of representatives Appropriations Committee; p. 1-10.
- Vanasse Hangen Brustlin, Inc. 1994. Devens Reuse Plan; Prepared for The Boards of Selectman for Towns of Ayer, Harvard, Lancaster, and Shirley; November 14, 1994.

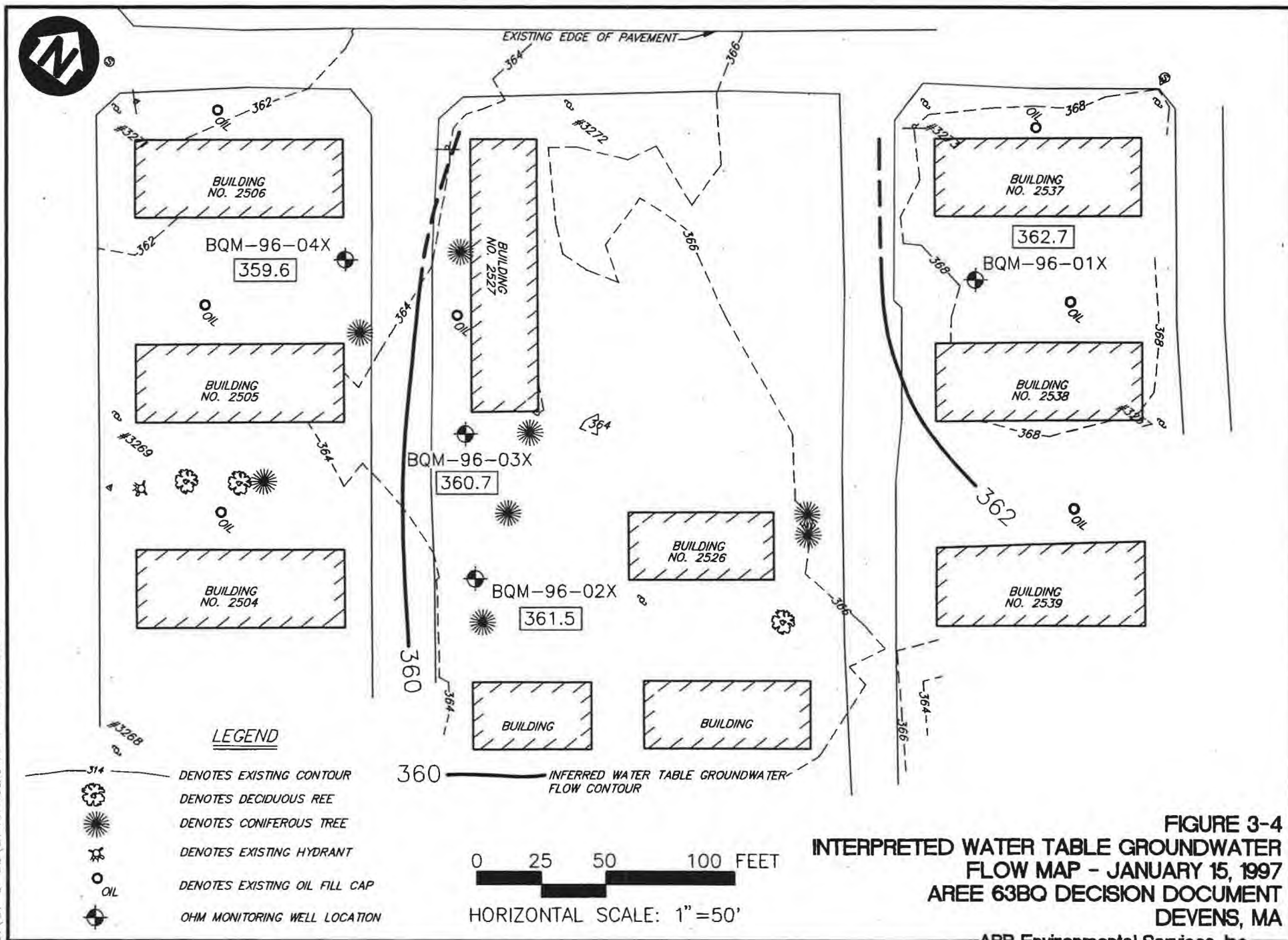












**TABLE 3-1
IRA FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W1	southwest sidewall	06/14/95	5.3	1861
SB2527W2	southwest sidewall	06/14/95	4.6	4259
SB2527W3	southeast sidewall	06/14/95	3.7	668
SB2527W4	southeast sidewall	06/14/95	3.8	459
SB2527W5	northeast sidewall	06/14/95	3.4	5792
SB2527W6	northeast sidewall	06/14/95	3.4	453
SB2527W7	northwest sidewall	06/14/95	3.8	5242
SB2527W8	northwest sidewall	06/14/95	3.9	14505
SB2527B1	bottom of excavation	06/14/95	5.5	4934
SB2527B2	bottom of excavation	06/14/95	5.6	4222
SB2527W9	northeast sidewall	06/16/95	1.2	10 J
SB2528W10	northeast sidewall	06/16/95	0.8	25 J
SB2527W11	northwest sidewall	06/16/95	2.4	84
SB2527W12	northwest sidewall	06/16/95	0.8	31325
SB2527W13	southwest sidewall	06/16/95	1.2	50
SB2527W14	southwest sidewall	06/16/95	2.3	16 J
SB2527W15	southeast sidewall	06/16/95	1.8	2448
SB2527W16	southeast sidewall	06/16/95	0.8	1502
SB2527B3	bottom of excavation	06/16/95	6.5	1304
SB2527B4	bottom of excavation	06/16/95	9.5	ND
SB2527W17	northeast sidewall	06/19/95	2.8	7J
SB2527W18	northeast sidewall	06/19/95	3	ND
SB2527W19	northeast sidewall	06/19/95	3.3	ND
SB2527W20	northeast sidewall	06/19/95	4	2847
SB2527W21	southeast sidewall	06/19/95	3	ND
SB2527W22	southwest sidewall	06/19/95	3	ND

TABLE 3-1
IRA FIELD SCREENING RESULTS

AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W23	northwest sidewall	06/19/95	3	318
EX2527A	clean pile sample	06/21/95	2	63
SB2527W24	southwest sidewall	06/21/95	7.1	1060
SB2527W25	southwest sidewall	06/21/95	6.5	2516
SB2527W26	southwest sidewall	06/21/95	7.3	6411
SB2527W27	northwest sidewall	06/21/95	6.4	1372
SB2527W28	northwest sidewall	06/21/95	6.5	2479
SB2527W29	northeast sidewall	06/21/95	6.7	3193
SB2527W30	northeast sidewall	06/21/95	6.8	6429
SB2527W31	northeast sidewall	06/21/95	7.2	3663
SB2527W32	southeast sidewall	06/21/95	6	1843
SB2527W33	southeast sidewall	06/21/95	6.4	725
SB2527B5	bottom of excavation	06/21/95	8	2684
SB2527B6	bottom of excavation	06/21/95	8	23 J
SB2527B7	test pit off southwest sidewall	06/22/95	4 - 5	374
SB2527W34	test pit off southwest sidewall	06/22/95	8 - 9	3644
SB2527B8	test pit off south corner	06/23/95	5 - 6	3282
SB2527B9	test pit off east corner	06/23/95	5 - 6	14 J
SB2527B10	test pit off north corner	06/23/95	5 - 6	13 J
SB2527B11	test pit off north corner	06/23/95	7	11 J
SB2527W35	southwest sidewall	06/23/95	7.8	824
SB2527W36	northwest sidewall	06/23/95	7.5	4434
SB2527W37	northwest sidewall	06/23/95	7.7	3000
SB2527W38	northwest sidewall	06/23/95	6.8	3141
SB2527W39	northwest sidewall	06/23/95	5.8	1020
SB2527B12	bottom of excavation	06/23/95	9.3	205

**TABLE 3-1
IRA FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527B13	bottom of excavation	06/23/95	9.3	19 J
SB2527TP1A	test pit #1	06/27/95	8	14 J
SB2527TP1B	test pit #1	06/27/95	10	ND
SB2527TP2A	test pit #2	06/27/95	6.5	ND
SB2527TP2B	test pit #2	06/27/95	8	693
SB2527TP2C	test pit #2	06/27/95	10	412
SB2527TP3A	test pit #3	06/27/95	8	11 J
SB2527TP3B	test pit #3	06/27/95	10	12 J
SB2527TP4A	test pit #4	06/2/95	6	3718
SB2527TP4B	test pit #4	06/27/95	8	2314
SB2527TP4C	test pit #4	06/27/95	10	466
SB2527TP4D	test pit #4	06/27/95	11	378
SB2527TP5A	test pit #5	06/27/95	8	15 J
SB2527TP5B	test pit #5	06/27/95	10	12 J
SB2527TP6A	test pit #6	06/28/95	7	ND
SB2527TP6B	test pit #6	06/28/95	10	ND
SB2527TP7A	test pit #7	06/28/95	8	ND
SB2527TP7B	test pit #7	06/28/95	10	18 J
SB2527TP8A	test pit #8	06/28/95	7	6651
SB2527TP8B	test pit #8	06/28/95	8.5	748
SB2527TP8C	test pit #8	06/28/95	10.5	788
SB2527TP9A	test pit #9	06/28/95	8	1979
SB2527TP9B	test pit #9	06/28/95	10.5	343
SB2527TP10A	test pit #10	06/28/95	7	3453
SB2527TP10B	test pit #10	06/28/95	10	5086
SB2527TP11A	test pit #11	06/29/95	8.5	2666

**TABLE 3-1
IRA FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527TP11B	test pit #11	06/29/95	10.5	2074
SB2527TP12A	test pit #12	06/29/95	1	31
SB2527TP12B	test pit #12	06/29/95	6	7 J
SB2527TP12C	test pit #12	06/29/95	6.5	3749
SB2527TP12D	test pit #12	06/29/95	8	128
SB2527TP12E	test pit #12	06/29/95	10	1014
SB2527TP13A	test pit #13	06/30/95	6	19 J
SB2527TP13B	test pit #13	06/30/95	10	ND
SB2527TP14A	test pit #14	06/30/95	8	ND
SB2527TP14B	test pit #14	06/30/95	10	ND
SB2527TP15A	test pit #15	07/05/95	7	12 J
SB2527TP15B	test pit #15	07/05/95	9.5	ND
SB2527TP16A	test pit #16	07/05/95	8	ND
SB2527TP16B	test pit #16	07/05/95	10.5	ND
SB2527TP17A	test pit #17	07/05/95	10	ND

NOTES:

ND = Indicates TPH was not detected at specified detection limit.
 J = Qualifier indicating estimated concentration below practical quantitation limit.
 mg/kg = milligrams per kilogram.

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527B14	excavation bottom	03-Oct-95	8.3	ND (42)
SB2527B15	excavation bottom	03-Oct-95	11.2	596
SB2527B16	excavation bottom	03-Oct-95	9.8	371
SB2527B17	excavation bottom	03-Oct-95	9.9	64
SB2527B18	excavation bottom	03-Oct-95	9.6	19 J
SB2527B19	excavation bottom	03-Oct-95	8.9	282
SB2527B20	excavation bottom	03-Oct-95	8.8	2,988
SB2527W40	southwest sidewall	03-Oct-95	8.8	ND (42)
SB2527W41	southwest sidewall	03-Oct-95	8.2	2,521
SB2527W42	southwest sidewall	03-Oct-95	8.2	3,736
SB2527W43	southeast sidewall	03-Oct-95	8.5	18,362
SB2527W44	southeast sidewall	03-Oct-95	8.5	4,654
SB2527W45	southeast sidewall	03-Oct-95	8.6	1,298
SB2527W46	northwest sidewall	03-Oct-95	8.6	3,702
SB2527W47	northwest sidewall	03-Oct-95	8.8	563
SB2527W48	northwest sidewall	03-Oct-95	7.5	3,705
SB2527W49	northwest sidewall	03-Oct-95	8.8	1,211
SB2527W50	northwest sidewall	03-Oct-95	7.6	3,477
SB2527W51	northwest sidewall	03-Oct-95	8.6	516

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W52	northwest sidewall	03-Oct-95	8.3	1,878
SB2527W53	southwest sidewall	18-Oct-95	7 - 9	2,455
SB2527W54	southwest sidewall	18-Oct-95	7 - 9	1,222
SB2527W55	southwest sidewall	18-Oct-95	7 - 9	222
SB2527W56	southwest sidewall	18-Oct-95	7 - 9	386
SB2527W57	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W58	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W59	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W60	northwest sidewall	18-Oct-95	7 - 9	32 J
SB2527B21	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B22	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B23	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B24	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527W61	northwest sidewall	19-Oct-95	7 - 9	5 J
SB2527W62	northwest sidewall	19-Oct-95	7 - 9	ND (42)
SB2527W63	northwest sidewall	19-Oct-95	7 - 9	22 J
SB2527W64	northwest sidewall	19-Oct-95	7 - 9	ND (42)
SB2527W65	northwest sidewall	19-Oct-95	7 - 9	804
SB2527W66	northeast sidewall	19-Oct-95	7 - 9	404
SB2527B25	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527B26	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527B27	excavation bottom	19-Oct-95	8 - 10	11 J
SB2527B28	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527W67	north corner sidewall	24-Oct-95	7 - 9	1,880

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W68	north corner sidewall	24-Oct-95	7 - 9	1,410
SB2527W69	north corner sidewall	24-Oct-95	7 - 9	6,633 -
SB2527W70	north corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W71	north corner sidewall	24-Oct-95	7 - 9	1,291
SB2527W72	north corner sidewall	24-Oct-95	7 - 9	3,118
SB2527B29	north corner bottom	24-Oct-95	8 - 10	21 J
SB2527W73	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W74	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W75	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W76	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527B30	south corner bottom	24-Oct-95	8 - 10	ND (42)
SB2527B31	south corner bottom	24-Oct-95	8 - 10	339
SB2527W77	northeast sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W78	northeast sidewall	24-Oct-95	7 - 9	10 J
SB2527W79	northeast sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W80	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B32	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W81	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B33	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W82	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527W83	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B34	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W84	southeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B35	northeast bottom	25-Oct-95	8 - 10	8 J

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W85	southeast sidewall	25-Oct-95	7 - 9	97
SB2527W86	southeast sidewall	25-Oct-95	7 - 9	1,754
SB2527W87	southeast sidewall	25-Oct-95	7 - 9	401
SB2527B36	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527B37	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527W88	southeast sidewall	25-Oct-95	7 - 9	892
SB2527W89	southeast sidewall	25-Oct-95	7 - 9	2,017
SB2527W90	southwest sidewall	25-Oct-95	7 - 9	14 J
SB2527B38	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527W91	southeast sidewall	25-Oct-95	7 - 9	2,627
SB2527W92	southeast sidewall	25-Oct-95	7 - 9	985
SB2527W93	southwest sidewall	25-Oct-95	7 - 9	7 J
SB2527W94	southwest sidewall	25-Oct-95	7 - 9	ND (42)
SB2527W95	east corner sidewall	27-Oct-95	7 - 9	1,990
SB2527W96	east corner sidewall	27-Oct-95	7 - 9	385
SB2527W97	east corner sidewall	27-Oct-95	7 - 9	64
SB2527W98	east corner sidewall	27-Oct-95	7 - 9	38 J
SB2527W99	east corner sidewall	27-Oct-95	7 - 9	9,108
SB2527W100	east corner sidewall	27-Oct-95	7 - 9	14 J
SB2527W101	east corner sidewall	27-Oct-95	7 - 9	11 J
SB2527W102	east corner sidewall	27-Oct-95	7 - 9	5,692
SB2527W103	east corner sidewall	27-Oct-95	7 - 9	840
SB2527W104	southeast sidewall	27-Oct-95	7 - 9	6,251
SB2527W105	southeast sidewall	27-Oct-95	7 - 9	3,461

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W106	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527W107	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527W108	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527B39	east corner bottom	27-Oct-95	8 - 10	1,596
SB2527B40	east corner bottom	27-Oct-95	8 - 10	106
SB2527B41	east corner bottom	27-Oct-95	8 - 10	710
SB2527B42	east corner bottom	27-Oct-95	8 - 10	195
SB2527B43	southeast bottom	27-Oct-95	8 - 10	1,232
SB2527W110	south corner sidewall	27-Nov-95	5.5	5 J
SB2527W111	south corner sidewall	27-Nov-95	5.5	5 J
SB2527W112	south corner sidewall	27-Nov-95	5.5	ND (42)
SB2527B44	excavation bottom	27-Nov-95	7.5	ND (42)
SB2527B45	excavation bottom	27-Nov-95	8	ND (42)
SB2527B46	excavation bottom	27-Nov-95	7.5	ND (42)
SB2527B47	excavation bottom	27-Nov-95	5.5	1,782
SB2527B48	excavation bottom	27-Nov-95	5.5	1,291
SB2527B49	excavation bottom	27-Nov-95	5.5	1,101
SB2527B50	excavation bottom	27-Nov-95	5.5	2,642
SB2527B51	excavation bottom	27-Nov-95	5.5	1,722
SB2527B52	excavation bottom	27-Nov-95	5.5	2,126
SB2527W113	northeast sidewall	27-Nov-95	7.5	29 J
SB2527W114	northeast sidewall	27-Nov-95	7.5	3,356
SB2527W115	northeast sidewall	27-Nov-95	7.5	1,465
SB2527W116	northeast sidewall	27-Nov-95	7.5	804

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W117	northeast sidewall	27-Nov-95	7.5	795
SB2527W118	northeast sidewall	27-Nov-95	7.5	2,657
SB2527B53	east corner bottom	28-Nov-95	8	ND (42)
SB2527B54	east corner bottom	28-Nov-95	8.7	ND (42)
SB2527B55	east corner bottom	28-Nov-95	8.5	2,438
SB2527B56	east corner bottom	28-Nov-95	8.3	113
SB2527B57	east corner bottom	28-Nov-95	8	ND (42)
SB2527W119	east corner sidewall	28-Nov-95	7.3	ND (42)
SB2527W120	east corner sidewall	28-Nov-95	7.3	ND (42)
SB2527W121	east corner sidewall	28-Nov-95	7.1	61
SB2527W122	east corner sidewall	28-Nov-95	7.4	1,998
SB2527W123	east corner sidewall	28-Nov-95	7.4	84
SB2527B58	east corner bottom	29-Nov-95	8.2	6 J
SB2527B59	east corner bottom	29-Nov-95	8.3	ND (42)
SB2527B60	east corner bottom	29-Nov-95	8	ND (42)
SB2527B61	east corner bottom	29-Nov-95	8.3	106
SB2527W124	east corner sidewall	29-Nov-95	7.3	58
SB2527W125	east corner sidewall	29-Nov-95	7	ND (42)
SB2527W126	east corner sidewall	29-Nov-95	7.2	51
SB2527W127	east corner sidewall	29-Nov-95	7.1	ND (42)
SB2527W128	east corner sidewall	29-Nov-95	7.5	20 J
SB2527W129	northeast sidewall	30-Nov-95	6.5	15 J
SB2527W130	northeast sidewall	30-Nov-95	6.5	ND (42)
SB2527W131	northeast sidewall	30-Nov-95	6.5	ND (42)

**TABLE 3-2
CERCLA REMOVAL ACTION FIELD SCREENING RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527B62	south corner bottom	30-Nov-95	6	3,732
SB2527B63	south corner bottom	30-Nov-95	7	ND (42)
SB2527B64	south corner bottom	30-Nov-95	7.1	9 J
SB2527B65	south corner bottom	30-Nov-95	7.5	7 J
SB2527W132	south corner sidewall	30-Nov-95	7.2	17 J
SB2527W133	south corner sidewall	30-Nov-95	6.9	736
SB2527SWC	southwest corner	01-Dec-95	6.0	1,580

NOTES: ND () = indicates TPH was not detected at specified detection limit
 J = Qualifier indicating estimated concentration below practical quantitation limit
 mg/kg = milligrams per kilogram

**TABLE 3-3
CERCLA OFF-SITE CONFIRMATORY SOIL SAMPLE RESULTS**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

Sample ID	Sample Location	Sample Date	Total VOCs (ug/g)	Total BNA (ug/g)	TPH Result (ug/g)
SB2527BC	Bottom composite	01-Dec-95	N/A	1.592	110
SB2527NEC	NE sidewall composite	01-Dec-95	N/A	0.040 J	ND (17)
SB2527NWC	NW sidewall composite	01-Dec-95	N/A	0.053 J	ND (18)
SB2527SEC	SE sidewall composite	01-Dec-95	N/A	ND	ND (18)
SB2527DUPC	SE sidewall duplicate	01-Dec-95	N/A	0.150 J	ND (23)
SB2527BG	Bottom grab	01-Dec-95	ND	N/A	N/A
SB2527NEG	NE sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527NWG	NW sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527SEG	SE sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527DUPG	SE sidewall duplicate	01-Dec-95	ND	N/A	N/A

NOTES:

µg/g = micrograms per gram
 ND = indicates that no target chemicals were detected in sample
 J = indicates estimated concentration below practical quantitation limit
 N/A = Not applicable (grab samples were analyzed for volatiles and composites were analyzed for TPH and BNAs)

TABLE 3-4
OFF-SITE LABORATORY GROUNDWATER RESULTS

AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS

		ROUND 1				ROUND 2			
ANALYTE	WELL NO.	MW-1	MW-2	MW-3	MW-4	MW-1	MW-2	MW-3	MW-4
	SAMPLE DATE	APRIL 1996	APRIL 1996	APRIL 1996	APRIL 1996	OCTOBER 1996	OCTOBER 1996	OCTOBER 1996	OCTOBER 1996
VOLATILES (ug/L)									
n-C 5 to n-C 8 Aliphatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-C 9 to n-C 12 Aliphatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-C 9 to n-C 10 Aromatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SEMIVOLATILES (ug/L)									
n-C 9 to n-C 18 Aliphatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-C 19 to n-C 36 Aliphatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-C 10 to n-C 22 Aromatics		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL

NOTES:

VPH = MADEP's volatile petroleum hydrocarbons

EPH = MADEP's extractable petroleum hydrocarbons

BRL = Below Reporting Limit

**TABLE 3-5
SUMMARY OF WATER TABLE ELEVATION DATA**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

WELL IDENTIFICATION	SOIL DRILLING METHOD	BEDROCK DRILLING METHOD	MEDIA SCREENED	DEPTH TO WATER (Feet bgs)	WATER TABLE ELEVATION (Feet NGVD)	COMPLETION DEPTH (Feet bgs)	CONSTRUCTION MATERIAL
BQM-96-01X	HOLLOW STEM AUGER	NA	SOIL	7.76	362.7	17.8	4" ID PVC
BQM-96-02X	HOLLOW STEM AUGER	NA	SOIL	6.03	361.5	17.8	4" ID PVC
BQM-96-03X	HOLLOW STEM AUGER	NA	SOIL	6.10	360.7	17.1	4" ID PVC
BQM-96-04X	HOLLOW STEM AUGER	NA	SOIL	6.68	359.6	19.9	4" ID PVC

Notes: bgs = below ground surface
 NGVD = National geodetic vertical datum
 Water levels measured on January 15, 1997.

**TABLE 5-1
HUMAN HEALTH PRELIMINARY RISK EVALUATION OF SOIL**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

ANALYTE	CONCENTRATION [a]		FREQUENCY OF DETECTION	USEPA STANDARD/GUIDELINE (ug/g)	MCP S-1 SOIL STANDARD (ug/g)	MAXIMUM EXCEEDS STANDARD/GUIDELINE?
	AVERAGE (ug/g)	MAXIMUM (ug/g)				
SEMIVOLATILE (ug/g)						
2-methylnaphthalene	0.660	0.660	1/5	NA	0.7	No
2,4-dinitrotoluene	0.150	0.150	1/5	NA	NA	NA
acenaphthalene	0.097	0.097	1/5	NA	20	No
bis(2-ethylhexyl)phthalate	0.047	0.047	1/5	NA	100	No
dibenzofuran	0.059	0.059	1/5	NA	NA	NA
fluorene	0.150	0.150	1/5	NA	400	No
phenanthrene	0.320	0.320	1/5	NA	700	No
PETROLEUM HYDROCARBONS (ug/g)						
Total Petroleum Hydrocarbons	338	1,580	2/5	--	1,000	Yes

Notes:

[a] Based on field and off-site analytical data from confirmatory soil samples collected by OHM (and their duplicates).

**TABLE 5-2
HUMAN HEALTH PRELIMINARY RISK EVALUATION OF GROUNDWATER**

**AREE 63BQ DECISION DOCUMENT
DEVENS, MASSACHUSETTS**

ANALYTE	CONCENTRATION [a]		FREQUENCY OF DETECTION	DRINKING WATER STANDARD/GUIDELINE [b] (ug/L)	MCP GROUNDWATER STANDARD [c] (ug/L)	MAXIMUM EXCEEDS STANDARD/GUIDELINE?
	AVERAGE (ug/L)	MAXIMUM (ug/L)				
VOLATILES (ug/L)						
n-C5 to n-C8 Aliphatics	0	0	0/8	NA	400	No
n-C9 to n-C12 Aliphatics	0	0	0/8	NA	4,000	No
n-C9 to n-C10 Aromatics	0	0	0/8	NA	200	No
SEMIVOLATILE (ug/L)						
n-C9 to n-C18 Aliphatics	0	0	0/8	NA	4,000	No
n-C19 to n-C36 Aliphatics	0	0	0/8	NA	40,000	No
n-C10 to n-C22 Aromatics	0	0	0/8	NA	200	No

Notes:

[a] Based on analytical data from Well No. MW-1 to MW-4 (and their duplicates).

[b] Includes the lowest of either the EPA or MA drinking water standards or guidelines, or if no federal or state standard or guideline is available, the USEPA Region III tap water concentration.

[c] Includes the lowest of the GW-1, GW-2, or GW-3 standards.

* = Total equivalent TPHC concentrations are calculated through the addition of the equivalent VPH and the equivalent EPH concentrations.

OHM CLOSURE REPORT



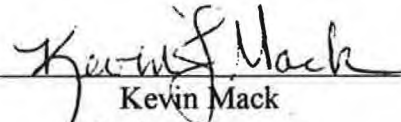
**CLOSURE REPORT
AREE 63BQ
FORT DEVENS, MASSACHUSETTS**

Prepared for:

**U.S. Army Corps of Engineers
New England Division
Waltham, Massachusetts
Contract Number DACW45-89-D-0506**

Prepared by:

**OHM Remediation Services Corp.
Hopkinton, Massachusetts**


Kevin Mack
Project Manager

**December 3, 1996
OHM Job 16208**

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CLOSURE REPORT AREE 63BQ FORT DEVENS, MASSACHUSETTS

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B	IRA Submittal Forms
C	AENI Analytical Report - Confirmation Samples
D	AENI Analytical Report - Waste Characterization Samples
E	Transportation and Disposal Documentation
F	Well Boring and Construction Logs
G	Commonwealth Analytical Report - Groundwater Samples

LIST OF ACRONYMS AND ABBREVIATIONS

ABB	ABB Environmental Services, Inc.
AENI	American Environmental Network, Inc.
AREE	Area Requiring Environmental Evaluation
BGS	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EMO	Fort Devens Environmental Management Office
EPH	Extractable Petroleum Hydrocarbons
IR	Infrared Spectroscopy
NPL	National Priority List
MADEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MSR	Material Shipping Record
NED	US Army Corps of Engineers New England Division
NPDES	National Pollutant Discharge Elimination System
OHM	OHM Remediation Services Corporation
PAHs	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SVOC	Semivolatile Organic Compounds
TCLP	Toxicity Characteristic Leachate Procedure
TPH	Total Petroleum Hydrocarbons

LIST OF ACRONYMS AND ABBREVIATIONS

(continued)

USAEC	U.S. Army Environmental Center
USACE	United States Army Corps of Engineers
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS FORT DEVENS
FORT DEVENS, MASSACHUSETTS

01433-5100



September 14, 1995

Environmental Management Office

Lynn Welsh, Section Chief
Site Management Branch
Massachusetts Department of Environmental Protection
Central Regional Office
75 Grove Street
Worcester, Massachusetts 01605

RE: Submission of RNF and IRAC
Tank Release @ Building #2527
Fort Devens, MA
RTN # 2-10823

Dear Ms. Welsh:

Please find attached completed MADEP-BWSC Forms #103 and #105, together with supporting materials, relative to the above referenced RTN. I trust the attached will prove sufficient in your management and evaluation of this matter. Should you have any questions or require additional information, please contact the undersigned.

Sincerely,

R. J. Ostrowski
Ronald J. Ostrowski
Installation Environmental
Management Officer

Copies Furnished:

OHM
TSAA

EXECUTIVE SUMMARY

Fort Devens was placed on the National Priority List (NPL) on December 21, 1989, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, Superfund Act) as amended by the Superfund Amendments and Reauthorization Act (SARA). Subsequently, under Public Law 101-510, the Defense Base Realignment and Closure Act of 1990, Fort Devens was selected for cessation of operations and closure. In accordance with these acts, numerous investigations were conducted at Areas Requiring Environmental Evaluation (AREEs), which were identified as potential sites of contamination. AREE 63BQ was established when a release was discovered from an abandoned underground storage tank (UST) in the vicinity Building 2527, located in the southern portion of the Main Post. The Fort Devens Environmental Management Office (EMO) requested the New England Division (NED) of the United States Army Corps of Engineers (USACE) to remove the 1,000 gallon UST after discovering that the tank was abandoned and that the potential of a release was high. This Closure Report summarizes the activities conducted at AREE 63BQ.

The NED contracted OHM Remediation Services Corporation (OHM) to remove the UST and associated petroleum-contaminated soil as a Limited Removal Action (LRA) under the Massachusetts Contingency Plan (MCP). Elevated soil headspace measurements taken during tank removal triggered a 72-hour notification requirement and Immediate Response Action (IRA) under the MCP. OHM removed approximately 500 cubic yards (cy) of petroleum-contaminated soil under the IRA prior to conducting a test pit investigation to determine the lateral extent of contamination. During the course of the test pit investigation, a total of 17 test pits were dug in the area surrounding the excavation. Field screening samples collected from the test pits indicated that petroleum contamination extended from the existing excavation to Buildings 2526 and 2527. Due to the extent of soil contamination, and the potential for groundwater contamination, the Army decided to close out the IRA and continue remedial activities under the Superfund program in accordance with section 2.9 of the Federal Facility Agreement. A Summary Report, dated 08/04/95, was prepared by OHM and submitted to the MADEP with the appropriate regulatory forms to document completion of the IRA. ABB Environmental Services, Inc. (ABB) prepared an Action Memorandum for the site at this time (dated October, 1995).

An additional 2,041 cy of soil were removed under CERCLA in an attempt to address the remaining petroleum contaminated soil. Confirmation soil samples were collected from the bottom and three sidewalls of the excavation to determine if the 500 ug/g cleanup goal for total petroleum hydrocarbons (TPH) had been attained. Field screening results of samples collected from the sidewall adjacent to Building 2527 indicated TPH concentrations above the 500 ug/g clean up goal, therefore a confirmation sample was not collected from this sidewall. However, since the contamination extended under the building and was at a depth greater than three feet, a clean up goal of 2,500 ug/g was selected for this area. Field screening during confirmation sampling indicated that the 2,500 ug/g clean up goal had been attained.

OHM backfilled the excavation and installed four groundwater monitoring wells to determine presence and extent of groundwater contamination in the area. The results of one round of groundwater sampling does not indicate evidence of any impact to the groundwater in the area. Based on the activities described herein, no further action is recommended at this site.

SECTION 1.0

INTRODUCTION

Fort Devens was placed on the National Priority List (NPL) on December 21, 1989, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, Superfund Act) as amended by the Superfund Amendments and Reauthorization Act (SARA). Subsequently, under Public Law 101-510, the Defense Base Realignment and Closure Act of 1990, Fort Devens was selected for cessation of operations and closure. In accordance with these acts, numerous investigations were conducted at Areas Requiring Environmental Evaluation (AREEs), which were identified as potential sites of contamination. AREE 63BQ was established when a release was discovered from an abandoned underground storage tank (UST) in the vicinity Building 2527.

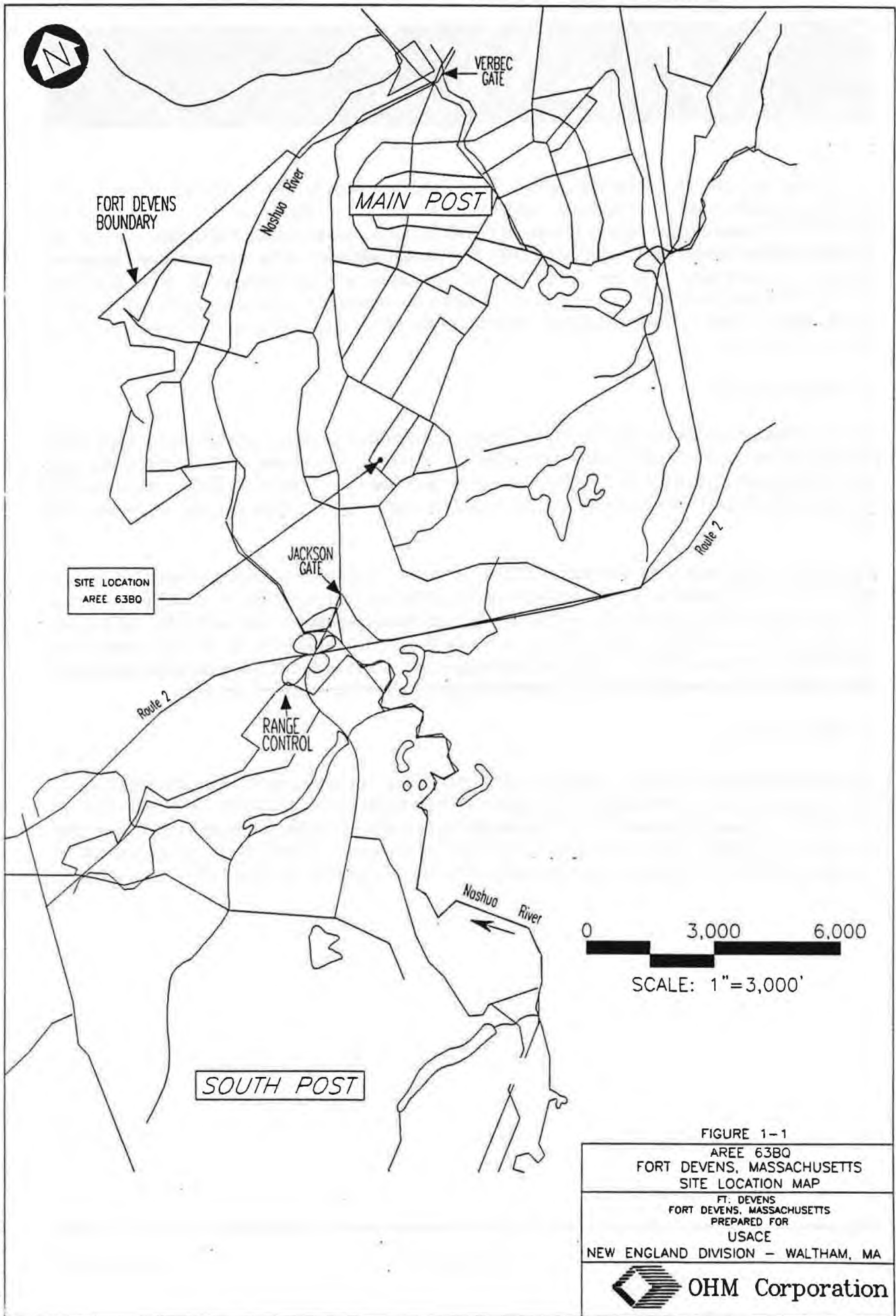
1.1 Site Background

The New England Division (NED) of the United States Army Corps of Engineers (USACE) contracted OHM Remediation Services Corporation (OHM) to remove a 1,000 gallon UST located in the vicinity of Building 2527, in the southern portion of the Main Post (Refer to Figure 1-1). The Fort Devens Environmental Management Office (EMO) discovered that the tank was abandoned and that the potential of a release was high.

The removal was conducted as an Immediate Response Action (IRA) under the Massachusetts Contingency Plan (MCP) after it became evident that petroleum had been released to the subsurface soil. OHM contracted a Licensed Site Professional (LSP) to oversee the IRA and ensure compliance with the MCP. The site was transferred from an IRA to a CERCLA Removal Action after removing 500 cubic yards (cy) of petroleum-contaminated soil under the IRA, based on screening results which indicated that a significant amount of contaminated soil still remained, and the potential for groundwater contamination was high.

1.2 Site Conditions

The area in which AREE 63BQ is located is largely blanketed by unconsolidated surficial deposits of glacial and post glacial origin. Groundwater is approximately 5-7 feet below ground surface (BGS) in the area of the former UST. Local groundwater flow is in a southerly direction across the site based on water level data gathered from the four newly installed wells. Shallow soil in the area of the UST was likely artificial fill associated with the UST, whereas the deeper material shows characteristics of glacial till.



SECTION 2.0

PETROLEUM-CONTAMINATED SOIL REMOVAL

OHM was contracted by the USACE NED to remove the 1,000 gallon UST at AREE 63BQ, excavate associated petroleum-contaminated soil, backfill and seed the site. OHM contracted Todd S. Alving, an LSP, to oversee the removal action and ensure compliance with the MCP, until the site was transferred to CERCLA.

2.1 Site Preparation Activities

OHM conducted pre-excavation activities at AREE 63BQ to ensure that contaminants would be contained at the site and to prevent the general population from coming into contact with contaminants exposed through excavation activities. An exclusion zone was established using orange fencing, and staging cells were constructed for temporary storage of contaminated soils. Sand berms were constructed at the perimeter of each staging cell and the cells were double lined with 8 ml polyethylene sheeting.

2.2 IRA Activities

The UST at Building 2527 was removed on June 14, 1995, as a Limited Removal Action (LRA) under the MCP, and in accordance with the Final UST Removal Protocol, Fort Devens, Massachusetts (USAEC 1993). Headspace sample results exceeding 100 ppm were measured from soils beneath the UST, indicating a release of product, and triggering a 72-hour release notification requirement under the MCP. The Army notified the Massachusetts Department of Environmental Protection (MADEP) of the release in accordance with MCP guidelines, and continued removing contaminated soil as an Immediate Response Action (IRA). The MADEP verbally authorized the removal of up to 500 cubic yards of soil and assigned Release Tracking Number (RNT) 2-10823 to this release. Petroleum-contaminated soil was excavated based on screening samples analyzed on site for TPH via a modified EPA method 418.1. Screening sample results are summarized in Table 2-1, and all related analytical documentation is included as Appendix A. Clean soil from shallow depths was removed in layers and staged separately from contaminated soil. Once the 500 cubic yards (cy) was stockpiled, the excavation ceased.

Based on discussions with the LSP and MADEP personnel, the Army directed OHM to conduct a test pit investigation in order to determine the feasibility of continuing the removal. A total of 17 test pits were excavated in the area surrounding the excavation. Refer to Figure 2-1 for the test pit locations. Samples collected from the test pits and screened on site indicated that petroleum contamination extended from the existing excavation to Buildings 2526 and 2527. Screening samples collected from test pits TP-2 and TP-4, located to the northwest of the existing excavation, also showed elevated TPH concentrations. However, test pits TP-3 and TP-5, located about 25 feet further from the excavation, beyond TP-2 and TP-4 respectively, were clean. TP-1, TP-6, and TP-7, located northeast and north of the excavation, did not contain elevated concentrations of TPH. The test pit sampling defined the lateral extent of contamination in the area of Building 2527. Due to the extent of soil contamination and the potential for groundwater contamination, the Army decided to close out the IRA and continue remedial activities under the Superfund program in accordance with section 2.9 of the Federal Facility Agreement.

OHM prepared an IRA Summary Report, dated August 1994, for submittal to the MADEP with the appropriate regulatory forms. Refer to Appendix B for copies of the Release Notification Form (RNF) and IRA Completion Statement.

PLOT SCALE: 1" = 30'

OHM CORPORATION HOPKINTON, MA	DRAWN BY K.J.M.	10-21-96	CHECKED BY MGQ	11-19-96	APPROVED BY NGQ	11-19-96	DRAWING NUMBER	16208\2527
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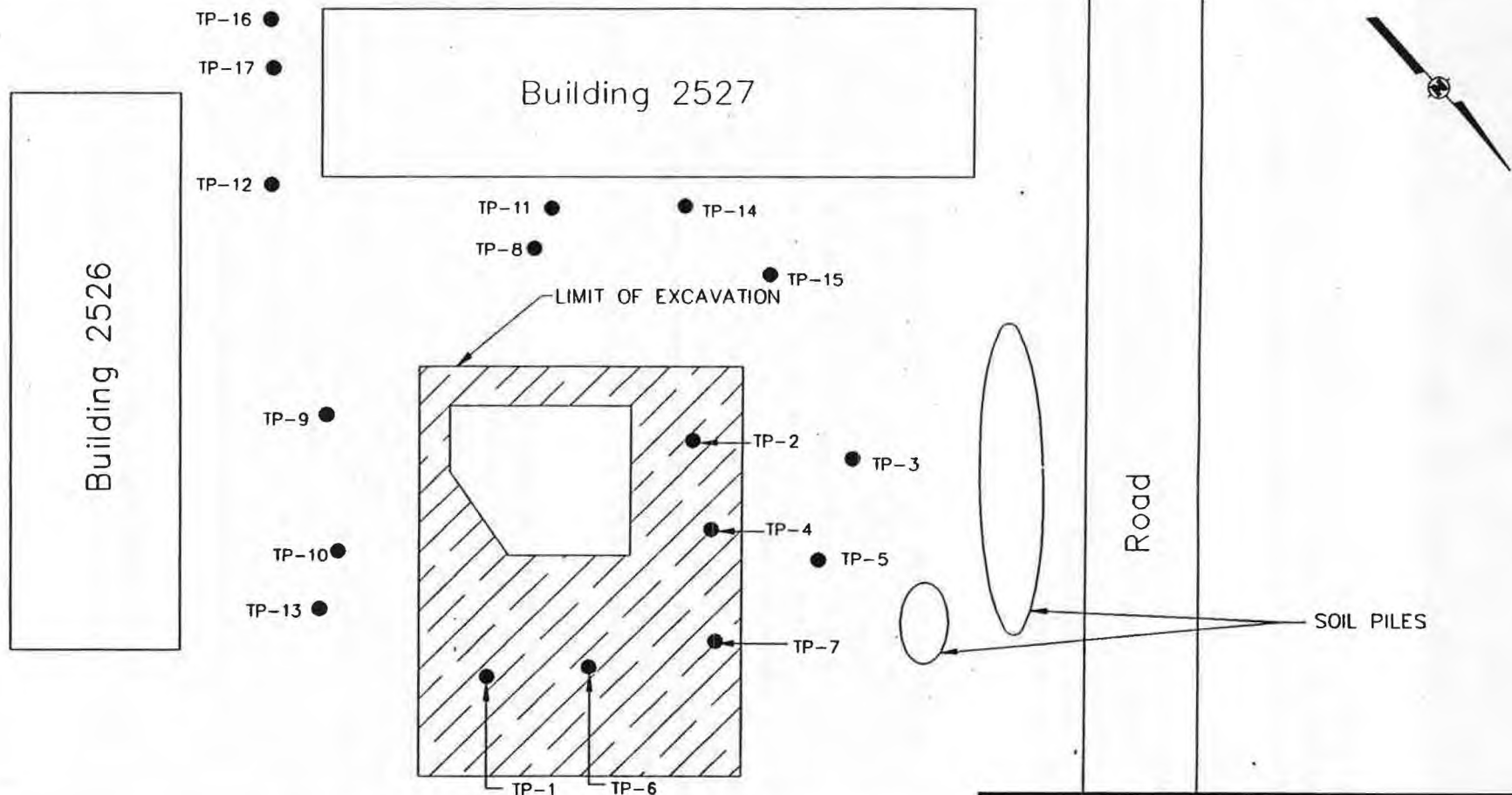


FIGURE 2-1
AREE 63BQ

TEST PIT LOCATIONS
FT. DEVENS CONTAMINATED SOIL REMOVAL
FT. DEVENS, MASSACHUSETTS
PREPARED FOR

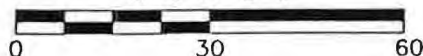
U.S. ARMY CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

LEGEND

● TP-7 = TEST PIT LOCATION

▨ = BENCHED AREA

S C A L E



OHM Corporation

Table 2-1
TPH Screening Results - Soil Samples
IRA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W1	southwest sidewall	06/14/95	5.3	1861
SB2527W2	southwest sidewall	06/14/95	4.6	4259
SB2527W3	southeast sidewall	06/14/95	3.7	668
SB2527W4	southeast sidewall	06/14/95	3.8	459
SB2527W5	northeast sidewall	06/14/95	3.4	5792
SB2527W6	northeast sidewall	06/14/95	3.4	453
SB2527W7	northwest sidewall	06/14/95	3.8	5242
SB2527W8	northwest sidewall	06/14/95	3.9	14505
SB2527B1	bottom of excavation	06/14/95	5.5	4934
SB2527B2	bottom of excavation	06/14/95	5.6	4222
SB2527W9	northeast sidewall	06/16/95	1.2	10 J
SB2528W10	northeast sidewall	06/16/95	0.8	25 J
SB2527W11	northwest sidewall	06/16/95	2.4	84
SB2527W12	northwest sidewall	06/16/95	0.8	31325
SB2527W13	southwest sidewall	06/16/95	1.2	50
SB2527W14	southwest sidewall	06/16/95	2.3	16 J
SB2527W15	southeast sidewall	06/16/95	1.8	2448
SB2527W16	southeast sidewall	06/16/95	0.8	1502
SB2527B3	bottom of excavation	06/16/95	6.5	1304
SB2527B4	bottom of excavation	06/16/95	9.5	ND
SB2527W17	northeast sidewall	06/19/95	2.8	7J
SB2527W18	northeast sidewall	06/19/95	3	ND
SB2527W19	northeast sidewall	06/19/95	3.3	ND
SB2527W20	northeast sidewall	06/19/95	4	2847

Table 2-1 (continued)
TPH Screening Results - Soil Samples
IRA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W21	southeast sidewall	06/19/95	3	ND
SB2527W22	southwest sidewall	06/19/95	3	ND
SB2527W23	northwest sidewall	06/19/95	3	318
EX2527A	clean pile sample	06/21/95	2	63
SB2527W24	southwest sidewall	06/21/95	7.1	1060
SB2527W25	southwest sidewall	06/21/95	6.5	2516
SB2527W26	southwest sidewall	06/21/95	7.3	6411
SB2527W27	northwest sidewall	06/21/95	6.4	1372
SB2527W28	northwest sidewall	06/21/95	6.5	2479
SB2527W29	northeast sidewall	06/21/95	6.7	3193
SB2527W30	northeast sidewall	06/21/95	6.8	6429
SB2527W31	northeast sidewall	06/21/95	7.2	3663
SB2527W32	southeast sidewall	06/21/95	6	1843
SB2527W33	southeast sidewall	06/21/95	6.4	725
SB2527B5	bottom of excavation	06/21/95	8	2684
SB2527B6	bottom of excavation	06/21/95	8	23 J
SB2527B7	test pit off southwest sidewall	06/22/95	4 - 5	374
SB2527W34	test pit off southwest sidewall	06/22/95	8 - 9	3644
SB2527B8	test pit off south corner	06/23/95	5 - 6	3282
SB2527B9	test pit off east corner	06/23/95	5 - 6	14 J
SB2527B10	test pit off north corner	06/23/95	5 - 6	13 J
SB2527B11	test pit off north corner	06/23/95	7	11 J
SB2527W35	southwest sidewall	06/23/95	7.8	824
SB2527W36	northwest sidewall	06/23/95	7.5	4434

Table 2-1 (continued)
 TPH Screening Results - Soil Samples
 IRA Activities
 AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W37	northwest sidewall	06/23/95	7.7	3000
SB2527W38	northwest sidewall	06/23/95	6.8	3141
SB2527W39	northwest sidewall	06/23/95	5.8	1020
SB2527B12	bottom of excavation	06/23/95	9.3	205
SB2527B13	bottom of excavation	06/23/95	9.3	19 J
SB2527TP1A	test pit #1	06/27/95	8	14 J
SB2527TP1B	test pit #1	06/27/95	10	ND
SB2527TP2A	test pit #2	06/27/95	6.5	ND
SB2527TP2B	test pit #2	06/27/95	8	693
SB2527TP2C	test pit #2	06/27/95	10	412
SB2527TP3A	test pit #3	06/27/95	8	11 J
SB2527TP3B	test pit #3	06/27/95	10	12 J
SB2527TP4A	test pit #4	06/2/95	6	3718
SB2527TP4B	test pit #4	06/27/95	8	2314
SB2527TP4C	test pit #4	06/27/95	10	466
SB2527TP4D	test pit #4	06/27/95	11	378
SB2527TP5A	test pit #5	06/27/95	8	15 J
SB2527TP5B	test pit #5	06/27/95	10	12 J
SB2527TP6A	test pit #6	06/28/95	7	ND
SB2527TP6B	test pit #6	06/28/95	10	ND
SB2527TP7A	test pit #7	06/28/95	8	ND
SB2527TP7B	test pit #7	06/28/95	10	18 J
SB2527TP8A	test pit #8	06/28/95	7	6651

Table 2-1 (continued)
TPH Screening Results - Soil Samples
IRA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527TP8B	test pit #8	06/28/95	8.5	748
SB2527TP8C	test pit #8	06/28/95	10.5	788
SB2527TP9A	test pit #9	06/28/95	8	1979
SB2527TP9B	test pit #9	06/28/95	10.5	343
SB2527TP10A	test pit #10	06/28/95	7	3453
SB2527TP10B	test pit #10	06/28/95	10	5086
SB2527TP11A	test pit #11	06/29/95	8.5	2666
SB2527TP11B	test pit #11	06/29/95	10.5	2074
SB2527TP12A	test pit #12	06/29/95	1	31
SB2527TP12B	test pit #12	06/29/95	6	7 J
SB2527TP12C	test pit #12	06/29/95	6.5	3749
SB2527TP12D	test pit #12	06/29/95	8	128
SB2527TP12E	test pit #12	06/29/95	10	1014
SB2527TP13A	test pit #13	06/30/95	6	19 J
SB2527TP13B	test pit #13	06/30/95	10	ND
SB2527TP14A	test pit #14	06/30/95	8	ND
SB2527TP14B	test pit #14	06/30/95	10	ND
SB2527TP15A	test pit #15	07/05/95	7	12 J
SB2527TP15B	test pit #15	07/05/95	9.5	ND
SB2527TP16A	test pit #16	07/05/95	8	ND
SB2527TP16B	test pit #16	07/05/95	10.5	ND
SB2527TP17A	test pit #17	07/05/95	10	ND

NOTES: ND () = indicates TPH was not detected at specified detection limit
J = Qualifier indicating estimated concentration below practical quantitation limit
mg/kg = milligrams per kilogram

2.3 CERCLA Activities

ABB-ES prepared an Action Memorandum for AREE 63BQ, dated October 1995, in accordance with requirements for removal actions under CERCLA. Excavation of petroleum-contaminated soils continued under CERCLA on October 3, 1996. Screen samples were routinely collected and analyzed for TPH on site in order to guide excavation activities. On-site laboratory documentation is included in Appendix A and TPH screening results are summarized in Table 2-2. Excavation continued until the 500 ppm action level for TPH had been attained or until the location of Building 2527 prevented the continued removal of additional contaminated soil. An additional 2,041 cy of petroleum-contaminated soil were removed under CERCLA.

Table 2-2
TPH Screening Results - Soil Samples
CERCLA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527B14	excavation bottom	03-Oct-95	8.3	ND (42)
SB2527B15	excavation bottom	03-Oct-95	11.2	596
SB2527B16	excavation bottom	03-Oct-95	9.8	371
SB2527B17	excavation bottom	03-Oct-95	9.9	64
SB2527B18	excavation bottom	03-Oct-95	9.6	19 J
SB2527B19	excavation bottom	03-Oct-95	8.9	282
SB2527B20	excavation bottom	03-Oct-95	8.8	2,988
SB2527W40	southwest sidewall	03-Oct-95	8.8	ND (42)
SB2527W41	southwest sidewall	03-Oct-95	8.2	2,521
SB2527W42	southwest sidewall	03-Oct-95	8.2	3,736
SB2527W43	southeast sidewall	03-Oct-95	8.5	18,362
SB2527W44	southeast sidewall	03-Oct-95	8.5	4,654
SB2527W45	southeast sidewall	03-Oct-95	8.6	1,298
SB2527W46	northwest sidewall	03-Oct-95	8.6	3,702
SB2527W47	northwest sidewall	03-Oct-95	8.8	563
SB2527W48	northwest sidewall	03-Oct-95	7.5	3,705
SB2527W49	northwest sidewall	03-Oct-95	8.8	1,211
SB2527W50	northwest sidewall	03-Oct-95	7.6	3,477
SB2527W51	northwest sidewall	03-Oct-95	8.6	516

Table 2-2 (continued)
TPH Screening Results - Soil Samples
CERCLA Activities
AREE63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W52	northwest sidewall	03-Oct-95	8.3	1,878
SB2527W53	southwest sidewall	18-Oct-95	7 - 9	2,455
SB2527W54	southwest sidewall	18-Oct-95	7 - 9	1,222
SB2527W55	southwest sidewall	18-Oct-95	7 - 9	222
SB2527W56	southwest sidewall	18-Oct-95	7 - 9	386
SB2527W57	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W58	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W59	northwest sidewall	18-Oct-95	7 - 9	ND (42)
SB2527W60	northwest sidewall	18-Oct-95	7 - 9	32 J
SB2527B21	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B22	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B23	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527B24	excavation bottom	18-Oct-95	8 - 10	ND (42)
SB2527W61	northwest sidewall	19-Oct-95	7 - 9	5 J
SB2527W62	northwest sidewall	19-Oct-95	7 - 9	ND (42)
SB2527W63	northwest sidewall	19-Oct-95	7 - 9	22 J
SB2527W64	northwest sidewall	19-Oct-95	7 - 9	ND (42)
SB2527W65	northwest sidewall	19-Oct-95	7 - 9	804
SB2527W66	northeast sidewall	19-Oct-95	7 - 9	404
SB2527B25	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527B26	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527B27	excavation bottom	19-Oct-95	8 - 10	11 J
SB2527B28	excavation bottom	19-Oct-95	8 - 10	ND (42)
SB2527W67	north corner sidewall	24-Oct-95	7 - 9	1,880

Table 2-2 (Continued)
TPH Screening Results - Soil Samples
CERCLA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W68	north corner sidewall	24-Oct-95	7 - 9	1,410
SB2527W69	north corner sidewall	24-Oct-95	7 - 9	6,633
SB2527W70	north corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W71	north corner sidewall	24-Oct-95	7 - 9	1,291
SB2527W72	north corner sidewall	24-Oct-95	7 - 9	3,118
SB2527B29	north corner bottom	24-Oct-95	8 - 10	21 J
SB2527W73	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W74	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W75	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W76	south corner sidewall	24-Oct-95	7 - 9	ND (42)
SB2527B30	south corner bottom	24-Oct-95	8 - 10	ND (42)
SB2527B31	south corner bottom	24-Oct-95	8 - 10	339
SB2527W77	northeast sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W78	northeast sidewall	24-Oct-95	7 - 9	10 J
SB2527W79	northeast sidewall	24-Oct-95	7 - 9	ND (42)
SB2527W80	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B32	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W81	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B33	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W82	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527W83	northeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B34	northeast bottom	25-Oct-95	8 - 10	ND (42)
SB2527W84	southeast sidewall	25-Oct-95	7 - 9	ND (42)
SB2527B35	northeast bottom	25-Oct-95	8 - 10	8 J

Table 2-2 (Continued)
TPH Screening Results - Soil Samples
CERCLA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W85	southeast sidewall	25-Oct-95	7 - 9	97
SB2527W86	southeast sidewall	25-Oct-95	7 - 9	1,754
SB2527W87	southeast sidewall	25-Oct-95	7 - 9	401
SB2527B36	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527B37	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527W88	southeast sidewall	25-Oct-95	7 - 9	892
SB2527W89	southeast sidewall	25-Oct-95	7 - 9	2,017
SB2527W90	southwest sidewall	25-Oct-95	7 - 9	14 J
SB2527B38	south corner bottom	25-Oct-95	8 - 10	ND (42)
SB2527W91	southeast sidewall	25-Oct-95	7 - 9	2,627
SB2527W92	southeast sidewall	25-Oct-95	7 - 9	985
SB2527W93	southwest sidewall	25-Oct-95	7 - 9	7 J
SB2527W94	southwest sidewall	25-Oct-95	7 - 9	ND (42)
SB2527W95	east corner sidewall	27-Oct-95	7 - 9	1,990
SB2527W96	east corner sidewall	27-Oct-95	7 - 9	385
SB2527W97	east corner sidewall	27-Oct-95	7 - 9	64
SB2527W98	east corner sidewall	27-Oct-95	7 - 9	38 J
SB2527W99	east corner sidewall	27-Oct-95	7 - 9	9,108
SB2527W100	east corner sidewall	27-Oct-95	7 - 9	14 J
SB2527W101	east corner sidewall	27-Oct-95	7 - 9	11 J
SB2527W102	east corner sidewall	27-Oct-95	7 - 9	5,692
SB2527W103	east corner sidewall	27-Oct-95	7 - 9	840
SB2527W104	southeast sidewall	27-Oct-95	7 - 9	6,251
SB2527W105	southeast sidewall	27-Oct-95	7 - 9	3,461

Table 2-2 (Continued)
 TPH Screening Results - Soil Samples
 CERCLA Activities
 AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W106	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527W107	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527W108	southeast sidewall	27-Oct-95	7 - 9	ND (42)
SB2527B39	east corner bottom	27-Oct-95	8 - 10	1,596
SB2527B40	east corner bottom	27-Oct-95	8 - 10	106
SB2527B41	east corner bottom	27-Oct-95	8 - 10	710
SB2527B42	east corner bottom	27-Oct-95	8 - 10	195
SB2527B43	southeast bottom	27-Oct-95	8 - 10	1,232
SB2527W110	south corner sidewall	27-Nov-95	5.5	5 J
SB2527W111	south corner sidewall	27-Nov-95	5.5	5 J
SB2527W112	south corner sidewall	27-Nov-95	5.5	ND (42)
SB2527B44	excavation bottom	27-Nov-95	7.5	ND (42)
SB2527B45	excavation bottom	27-Nov-95	8	ND (42)
SB2527B46	excavation bottom	27-Nov-95	7.5	ND (42)
SB2527B47	excavation bottom	27-Nov-95	5.5	1,782
SB2527B48	excavation bottom	27-Nov-95	5.5	1,291
SB2527B49	excavation bottom	27-Nov-95	5.5	1,101
SB2527B50	excavation bottom	27-Nov-95	5.5	2,642
SB2527B51	excavation bottom	27-Nov-95	5.5	1,722
SB2527B52	excavation bottom	27-Nov-95	5.5	2,126
SB2527W113	northeast sidewall	27-Nov-95	7.5	29 J
SB2527W114	northeast sidewall	27-Nov-95	7.5	3,356
SB2527W115	northeast sidewall	27-Nov-95	7.5	1,465
SB2527W116	northeast sidewall	27-Nov-95	7.5	804

Table 2-2 (Continued)
TPH Screening Results - Soil Samples
CERCLA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527W117	northeast sidewall	27-Nov-95	7.5	795
SB2527W118	northeast sidewall	27-Nov-95	7.5	2,657
SB2527B53	east corner bottom	28-Nov-95	8	ND (42)
SB2527B54	east corner bottom	28-Nov-95	8.7	ND (42)
SB2527B55	east corner bottom	28-Nov-95	8.5	2,438
SB2527B56	east corner bottom	28-Nov-95	8.3	113
SB2527B57	east corner bottom	28-Nov-95	8	ND (42)
SB2527W119	east corner sidewall	28-Nov-95	7.3	ND (42)
SB2527W120	east corner sidewall	28-Nov-95	7.3	ND (42)
SB2527W121	east corner sidewall	28-Nov-95	7.1	61
SB2527W122	east corner sidewall	28-Nov-95	7.4	1,998
SB2527W123	east corner sidewall	28-Nov-95	7.4	84
SB2527B58	east corner bottom	29-Nov-95	8.2	6 J
SB2527B59	east corner bottom	29-Nov-95	8.3	ND (42)
SB2527B60	east corner bottom	29-Nov-95	8	ND (42)
SB2527B61	east corner bottom	29-Nov-95	8.3	106
SB2527W124	east corner sidewall	29-Nov-95	7.3	58
SB2527W125	east corner sidewall	29-Nov-95	7	ND (42)
SB2527W126	east corner sidewall	29-Nov-95	7.2	51
SB2527W127	east corner sidewall	29-Nov-95	7.1	ND (42)
SB2527W128	east corner sidewall	29-Nov-95	7.5	20 J
SB2527W129	northeast sidewall	30-Nov-95	6.5	15 J
SB2527W130	northeast sidewall	30-Nov-95	6.5	ND (42)
SB2527W131	northeast sidewall	30-Nov-95	6.5	ND (42)

Table 2-2 (Continued)
TPH Screening Results - Soil Samples
CERCLA Activities
AREE 63BQ

Sample ID	Sample Location	Sample Date	Sample Depth (ft)	TPH Result (mg/kg)
SB2527B62	south corner bottom	30-Nov-95	6	3,732
SB2527B63	south corner bottom	30-Nov-95	7	ND (42)
SB2527B64	south corner bottom	30-Nov-95	7.1	9 J
SB2527B65	south corner bottom	30-Nov-95	7.5	7 J
SB2527W132	south corner sidewall	30-Nov-95	7.2	17 J
SB2527W133	south corner sidewall	30-Nov-95	6.9	736

NOTES: ND () = indicates TPH was not detected at specified detection limit
J = Qualifier indicating estimated concentration below practical quantitation limit
mg/kg = milligrams per kilogram

A concrete pad and telephone pole were removed in order to continue the excavation toward Building 2527. Dewatering of the excavation was conducted as necessary to facilitate the removal of contaminated soil. All water removed from the excavation was processed through OHM's on-site water treatment system prior to discharge. The treatment system consisted of a 12,000 gallon influent pool, a sand filter unit, a carbon unit and two 12,000 gallon effluent pools. Analytical testing was performed on each batch of treated water prior to discharge in accordance with the EPA NPDES exclusion permit issued for the site. Effluent samples were collected and submitted to the subcontract laboratory for analysis of benzene, toluene, ethylbenzene, xylenes; lead; and TPH. Any water that did not meet discharge criteria was returned to the influent pool and retreated.

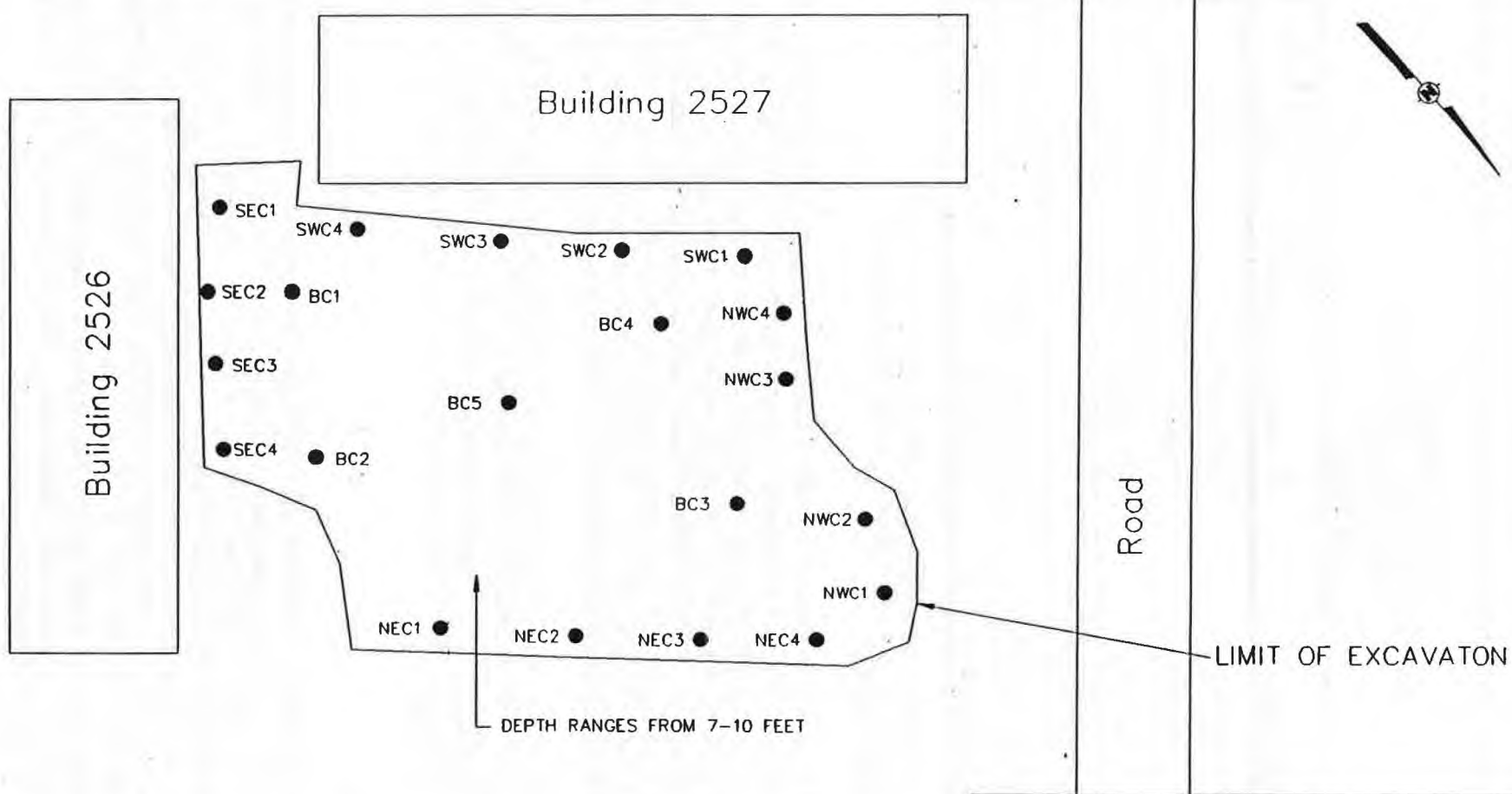
A leaking 8 inch sewer line was discovered during the course of the excavation. The leak was at one of the pipe joints and was evidently a result of a blockage somewhere else in the line. The Army was notified as the contractor (Earth Tech) responsible for drainage and sewage at the base. The pressure in the line was reduced and OHM repaired the pipe. The blockage in the sewer line was removed at a later date and final repairs were made to the sewer line.

2.4 Confirmation Sampling

Confirmation soil samples were collected on December 01, 1996 to document attainment of cleanup goals and to indicate the location of residual petroleum-contamination remaining in the UST excavation. Samples were collected from the bottom and each sidewall of the excavation (Figure 2-2). The bottom and three of the sidewall samples were submitted to an American Environmental Network, Inc. (AENI) for analysis of TPH, volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The composite sample collected from the southwest sidewall was not submitted to the off-site laboratory because on-site screening results indicated a TPH concentration of 1,580 ug/g. A 2,500 ug/g clean up goal was applied to this sidewall due to the fact that contamination extended beneath Building 2527, and was at a depth greater than 3 feet below ground surface (BGS). The results of the confirmation sample analyses are summarized in Table 2-3 and the AENI analytical report is included as Appendix C.

PLOT SCALE: 1" = 30'

OHM CORPORATION HOPKINTON, MA	DRAWN BY K.J.M.	11-19-96	CHECKED BY MGJ	11-19-96	APPROVED BY MGJ	11-19-96	DRAWING NUMBER	16208\2527
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DEPTH RANGES FROM 7-10 FEET

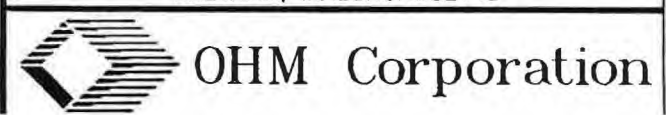
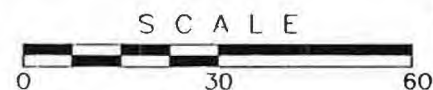
FIGURE 2-2
AREE 63BQ

CONFIRMATION SAMPLE LOCATION MAP
FT. DEVENS CONTAMINATED SOIL REMOVAL
FT. DEVENS, MASSACHUSETTS
PREPARED FOR

U.S. ARMY CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

LEGEND

- SEC1 = CONFIRMATION SAMPLE LOCATION; ALL ID'S PREFACED BY "SB2527"
- NOTE: 1. COMPOSITE SAMPLE COLLECTED FROM SOUTHWEST SIDEWALL WAS ANALYZED FOR TPH ON SITE ONLY.
- 2. DISCRETE SAMPLES WERE COLLECTED FOR VOC ANALYSIS



No TPH, VOCs or SVOCs were detected in the confirmation samples at concentrations above applicable MCP S-1, GW-1 standards. TPH was detected in the bottom sample (SB2527BC) at a concentration of 110 ug/g. In addition, the SVOCs 2-methylnaphthalene (660ug/kg), acenaphthene (97ug/kg), dibenzofuran (59ug/kg), 2,4-dinitrotoluene (170ug/kg), fluorene (150ug/kg), phenanthrene (320ug/kg) and bis (2-ethylhexyl)phthalate (47ug/kg) were detected in sample SB2527BC at concentrations below applicable MCP guidance values. Bis (2-ethylhexyl)phthalate, a common laboratory artifact, was the only SVOC compound detected in the samples collected from the northeast and northwest sidewalls, and the duplicate collected from the southeast sidewall.

Table 2-3
Confirmation Soil Sample Results
AREE 63BQ

Sample ID	Sample Location	Sample Date	Total VOCs (ug/g)	Total BNA (ug/g)	TPH Result (ug/g)
SB2527BC	Bottom composite	01-Dec-95	N/A	1.592	110
SB2527NEC	NE sidewall composite	01-Dec-95	N/A	0.040 J	ND (17)
SB2527NWC	NW sidewall composite	01-Dec-95	N/A	0.053 J	ND (18)
SB2527SEC	SE sidewall composite	01-Dec-95	N/A	ND	ND (18)
SB2527DUPC	SE sidewall duplicate	01-Dec-95	N/A	0.150 J	ND (23)
SB2527BG	Bottom grab	01-Dec-95	ND	N/A	N/A
SB2527NEG	NE sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527NWG	NW sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527SEG	SE sidewall grab	01-Dec-95	ND	N/A	N/A
SB2527DUPG	SE sidewall duplicate	01-Dec-95	ND	N/A	N/A

NOTES: ug/g = micrograms per gram
 ND = indicates that no target chemicals were detected in sample
 J = indicates estimated concentration below practical quantitation limit
 N/A = Not applicable (grab samples were analyzed for volatiles and composites were analyzed for TPH and BNAs)

2.5 Waste Characterization

Five samples (composite and grab) were collected from the stockpiled soils removed from the UST excavation and submitted to AENI laboratory to characterize the material for disposal. Samples were analyzed for Full TCLP and RCRA characteristics to verify that the material was not hazardous. In addition, samples were analyzed for TPH, RCRA metals, VOCs, PAHs and PCBs to determine if the soil could be used as daily cover in lined landfills in Massachusetts. TCLP results were all well within regulatory guidelines and RCRA characteristic parameters were all negative, with the exception of reactive sulfide which was detected in several samples at a concentration of 48 mg/kg which is well below the regulatory guideline of 500 mg/kg. The

results indicated that the soil could be used as daily cover in lined landfills in Massachusetts. Refer to Appendix D for the AENI Analytical Report for waste characterization sample results.

The contaminated soil (approximately 2,541) removed during excavation is currently stockpiled in Cell A at a temporary storage facility located adjacent to Building 202 in the northeast portion of the Main Post. Refer to Appendix E for the Material Shipping Record (MSR) used to document transportation of the soils to the temporary storage facility.

Concrete pad debris removed during excavation was transported across the Base for storage behind the DRMO. The UST was taken to the Tombarello and Sons certified tank yard, in Lawrence, Massachusetts. Refer to Appendix E for all transportation and disposal documentation.

2.6 Backfill and Site Restoration

Backfilling of the excavation was initiated in December 1995 using clean soils removed during excavation, and completed in February, 1996 using clean soils from a borrow source in the North Post. The material was tested prior to use to verify that it could be used as backfill. OHM repaired a broken sewer line that had been discovered during excavation. No additional restoration work was necessary at this site.

2.7 Groundwater Investigation

OHM contracted Geologic, Inc. of Hopkinton, MA to install four water table monitoring wells to assess groundwater conditions upgradient and downgradient of the former UST. The wells were installed and developed under the direction of a qualified OHM hydrogeologist from 22 through 26 February 1995. At the direction of the USACE, three wells were placed downgradient of the former UST location, and one was located upgradient. Figure 2-3 shows the approximate limits of excavation and the monitoring well locations.

All monitoring wells were installed using standard hollow stem auger drilling techniques. Continuous split spoon sampling was conducted to the top of groundwater at each location and at 5-foot intervals thereafter in order to describe the lithology and screen for potential vadose zone contamination. Each well was constructed of 4-inch diameter Schedule-40 PVC with 10 feet of 0.010 inch slotted well screen. All wells were developed using a combination of pumping and surging. Soil boring and well construction logs are contained in Appendix F.

The lithology generally consisted of fine-to-medium grained silty sand and sandy silt with many small pebbles and rock fragments. Till was encountered at depths ranging from 9 to 11 feet BGS. Groundwater, which appears to be perched on the top of the till, was noted at depths ranging from approximately 6 to 9 feet BGS during drilling. Due to the fine-grained lithology, groundwater recharge during well development was very slow. Wells were pumped dry from 4 to 6 times each until returns were clear and suitable for groundwater sampling. Volumes of groundwater recovered varied from 33 to 100 gallons during development. No indications of contamination were noted during drilling or well development.

The monitoring wells were sampled on 19 April 1996. Groundwater samples were submitted to Commonwealth Analytical Laboratory for analysis of volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH). VPH and EPH are draft analytical methods developed by MADEP to facilitate the chemical and toxicological characterization of petroleum-contaminated media. The sample results indicated no detectable levels of VPH or EPH. Appendix G contains the Commonwealth Analytical Report.

The relative elevation of each well head to the nearest hundredth of a foot was established on 14 November 1996 using a builders transit and stadia rod. These data, along with depth to water measurements collected during the groundwater sampling event, were used to construct a depth to groundwater map. This map is presented as Figure 2-3. Groundwater flow is to the south at a gradient of approximately 0.01. Due to recharge problems, groundwater levels measured in monitoring well MW-4 are not probably not representative of actual conditions, and this well was not used to construct the top of groundwater map.

2.8 Quality Assurance/Quality Control

Appropriate quality assurance/quality control measures were taken to ensure the collection of representative soil samples and the generation of accurate and reproducible analytical data.

2.8.1 Sample Collection Quality Control

Soil samples were collected using either a stainless steel trowel or disposable polyethylene scoops. The sampling equipment was decontaminated using the following procedure:

- 1) non-phosphate soap & water rinse;
- 2) tap water rinse;
- 3) distilled water rinse;
- 4) 10% nitric acid rinse;
- 5) distilled water rinse;
- 6) methanol rinse; and
- 7) distilled water rinse.

Sample integrity was also maintained by changing gloves between each sample location.

All samples collected on-site were entered on a chain of custody and documented on a sample collection log and a permanent logbook. Samples sent off site were properly preserved, packaged, and overnight shipped to the appropriate laboratory.

2.8.2 Laboratory Quality Control

Quality control measures were taken in the on-site laboratory to ensure the accuracy and precision of the analytical data. TPH concentrations were determined using an infrared spectrophotometer. A four-point calibration curve was developed prior to the start up of sampling activities, to establish detection limits and document linearity of the detector response. A single calibration point was run in triplicate to demonstrate measurement precision. Continuing calibrations were also performed on a daily basis thereafter to provide a check on instrument response.

Samples sent off-site were analyzed within holding times and QC sample data were within method advisory limits. A comparison of the on-site TPH screening results with AENI's results indicate a good correlation between the two laboratories.

Some of the spike data associated with the EPH analysis on groundwater samples were outside the proposed 60-140% quality control limits provided in the Draft Methods. It is important to note that the MADEP had set these limits at a time when little to no "real-world" data was available. At a recent (early 1996) Lab Association Meeting the MADEP announced that based on comments from environmental laboratories using

the draft methods, the DEP proposed limits would be changed to laboratory-defined limits. Despite the spike recovery problems and with consideration to the low detection limits for the method, there is conclusive evidence supporting the absence of petroleum contamination in these samples.

DRAWING
NUMBER BLDG2527

APPROVED BY

CHECKED BY

DRAWN BY
S. McGinn 11-29-96

OHM CORPORATION
HOPKINTON, MA

PLOT SCALE: 1" = 1"

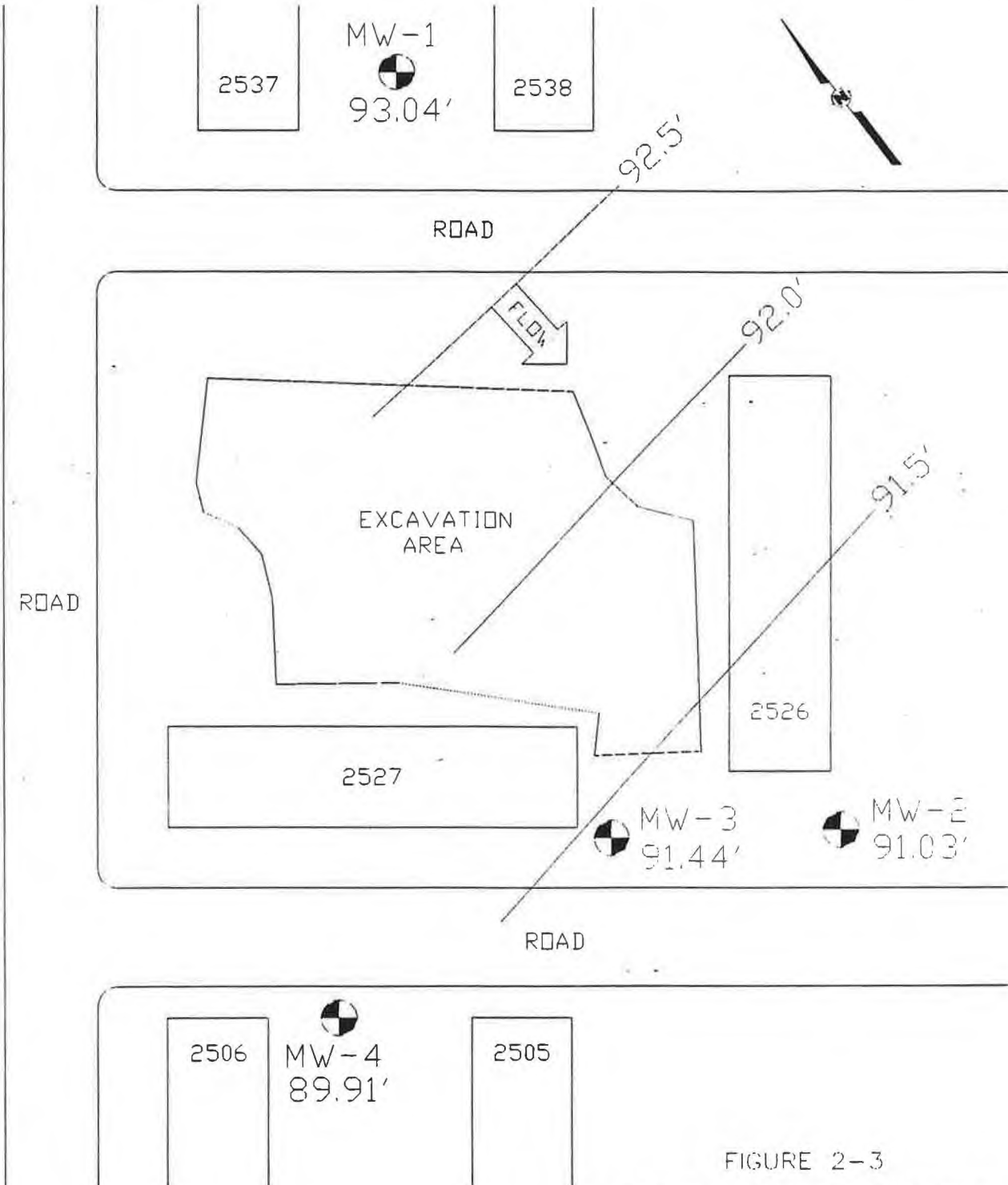



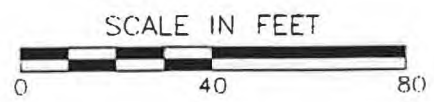
FIGURE 2-3

TOP OF GROUNDWATER MAP
19 APRIL 1996
AREA 63BQ
FORT DEVENS, MASSACHUSETTS

PREPARED FOR

U.S. ARMY CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS

 OHM Corporation



SECTION 3.0 CONCLUSIONS

The Fort Devens EMO requested the NED to remove a 1,000 gallon fuel oil UST in the vicinity of Building 2527, in the southern portion of the Main Post. The NED contracted OHM to remove the UST in accordance with the MCP and the Fort Devens UST removal protocol.

OHM discovered a release to the soil surrounding the UST during removal of the tank, which triggered an IRA under the MCP. The MADEP verbally authorized the Army to remove 500 cy of petroleum-contaminated soil under the direction of a LSP. Persistent contamination after the removal of 500 cy of material prompted the Army to request a lateral delineation of contamination. Due to the extent of contamination discovered through the test pit investigation, the Army decided to close out the IRA and continue removal activities at the site under the Superfund program in accordance with section 2.9 of the Federal Facility Agreement.

An additional 2,041 cy of petroleum-contaminated soil was removed under CERCLA before collecting confirmation samples from the bottom and three sidewalls of the excavation. Excavation activities were guided using on-site screening for TPH. Field screening results of samples collected from the sidewall adjacent to Building 2527 (southwest sidewall) indicated TPH concentrations above the 500 ug/g clean up goal, therefore a confirmation sample was not collected from this sidewall. However, since the contamination extended under the building and was at a depth greater than three feet, a clean up goal of 2,500 ug/g was selected for this area. Field screening during confirmation sampling indicated that the 2,500 ug/g clean up goal for the southwest sidewall had been attained.

Samples were collected from the excavated soil in order to characterize the material for disposal. Characterization results indicated that the material was not hazardous and could be reused as daily cover in lined landfills in Massachusetts. The soil is currently stockpiled at a temporary storage facility adjacent to Building 202 in the northeast portion of the Main Post.

Subsequent to completion of backfilling, four water table monitoring wells were installed to assess potential impact of the release on groundwater. Sample results did not indicate the presence of residual petroleum contamination in the groundwater. Based on the results of the confirmation soil and groundwater samples, and considering that remaining contamination is limited to beneath the building foundation at a depth greater than 3 feet and a concentration less than 2,500 ug/g, no further remediation is recommended at this site.

T. S. ALVING & ASSOCIATES

166 Winter Street
Hopkinton, MA 01748
(617) 894-5920
(508) 435-3679

CF: J. CHAMBERS

8/24/95
RJO

21 August 1995

Mr. Ronald J. Ostrowski
Installation Environmental Management Officer
U.S. ARMY - FORT DEVENS
AFZD-EM Box 19
Fort Devens, MA 01433

RE: Release Notification Form (RNF) and
Immediate Response Action Completion Statement (IRAC) Submittals
Tank Release @ Building #2527
Fort Devens, MA
RTN #2-10823

Dear Mr. Ostrowski:

T.S. Alving and Associates (TSAA) is pleased to provide the U.S. Army - Fort Devens (the "Client") with the following Release Notification Form (RNF) and Immediate Response Action Completion Statement (IRAC) and supporting documentation relative to the above referenced release. This document will be submitted by you to the Massachusetts Department of Environmental Protection - Central Regional Office (MADEP-CERO), in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000, the "MCP").

BWSC Forms #103 and #105 are attached for filing purposes.

In accordance with 310 CMR 40.0427, the following documentation of the IRA action is provided:

SUMMARY OF IRA

On **14 June 1994**, OHM Remediation Corporation encountered 72-hour reportable conditions during the removal of a 1,000-gallon UST, located in the vicinity of Building #2527 on the main post at Fort Devens. Total headspace volatile organic compounds (TVOCs) at levels greater than 100 ppm were measured in soils located beneath the UST at 2:30 PM. Based on our discussions with Mike Quinlan of OHM and Gail Miller of EMO, TSAA recommended that MADEP be verbally notified of conditions within 72 hours of the elevated TVOCs reading. Ms. Miller verbally notified Bill Phillips of MADEP on **15 June 1995**. A release tracking number of 2-10823 was assigned to the release at this time.

On **15 June 1995**, Mr. Todd S. Alving of TSAA discussed the nature of conditions with Dave

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16 August 1995

U.S. ARMY - FORT DEVENS

Release Notification Form (RNF) and

Immediate Response Action Completion Statement (IRAC) Submittals

Tank Release @ Building #2527; Fort Devens, MA

RTN #2-10823

Salvador of MADEP. At this time, MADEP provided a verbal approval to conduct an Immediate Response Action (IRA), involving the excavation and stockpiling of up to 200-cubic yards of soil. Soil removal, dewatering, and soil screening by OHM performed during the IRA conformed with the Final UST Removal Protocol, Fort Devens, Massachusetts (USAEC 1993).

On 16 June 1995, OHM, initiated the IRA. Between this date and 23 June 1995, OHM completed the following tasks relative to this IRA:

1. Instituted site control for health and safety and work plan procedures.
2. Installed decontamination area for equipment.
3. Conducted continuous air monitoring during excavation activities.
4. Collected grab samples of sidewall and base of excavation soil samples for TPH screening at OHM's on-site analytical laboratory. Utilized results of TPH screening, together with field observations (visual, olfactory) in directing excavation of residual #2 fuel oil contamination in soils.
5. Conducted de-watering of excavation as necessary during excavation and utility repair activities. All de-watering conducted in accordance with NPDES Exclusion Permit, already in place for Contractor's concurrent work at Fort Devens (DACW45-89-D0500).

During this period, EMO obtained verbal authorization to increase the total volume of soil which could be managed under this IRA to 500 cubic yards. Mr. Salvador of MADEP authorized this IRA modification.

During the period of 27 June 1995 and 5 July 1995, OHM conducted a test pit assessment of perimeter soil conditions. Soil samples from these test pits, selected on the basis of field observations, screening, and conditions in the soil excavation area (depth of contamination) were screened on site by OHM for TPH on site. Collectively, results of TPH screening in excavation sidewalls and in test pits in directions to the northwest, west, and south of the excavation indicate that contamination above the target clean up level of 500 ppm in soil remains.

Due to the extent of contamination, the Army has determined that the IRA action should be terminated. Future responses to this release will continue under the Superfund program in accordance with Section 2.9 of the Federal Facility Agreement.

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16 August 1995

U.S. ARMY - FORT DEVENS

Release Notification Form (RNF) and

Immediate Response Action Completion Statement (IRAC) Submittals

Tank Release @ Building #2527; Fort Devens, MA

RTN #2-10823

All above tasks are documented on OHM's "IRA Summary Report, UST 2527, Fort Devens, Massachusetts," dated 4 August 1995. This report, inclusive of field records, sampling and screening logs, and analytical laboratory analysis resultant sheets is attached to this transmittal for reference purposes.

CONCLUSIONS AND RECOMMENDATIONS

TSAA makes the following conclusions and recommendations regarding MGL Chapter 21E issues at this site:

1. An evaluation of Chapter 21E issues has been prepared for this site, relative to the outcome of a Immediate Response Action (IRA). Based on results of final sampling of soils within the former UST excavation and test pits positioned in perimeter areas, levels of total petroleum hydrocarbons in excess of the current clean up goal of 500 ppm remain.

On this basis, TSAA concludes that "significant risk" to health, public welfare, safety, or the environment may exist at the release site. This site will be adequately regulated pursuant to 310 CMR 40.0110-0114 under the CERCLA Program. This determination has been indicated on BWSC Form #105. No RAO is appropriate for closure of this release at this time.

Should additional information regarding environmental concerns at or proximate to this release site become available, the opinions and conclusions expressed in this report may require modification.

This report has been prepared by T.S. Alving and Associates on behalf of, and for the sole use of The U.S. Army - Fort Devens for use as an environmental evaluation of the site, and is meant to reflect site conditions and factual information relative to environmental concerns at this location at the time of report preparation, to the extent of the scope of the investigation. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, or used by any other party in whole or in part, without the prior written consent of TSAA. This report has been prepared in accordance with the Terms and Conditions set forth in our agreement with OHM Remediation Corporation, dated 18 July 1994, and the attached standard General Terms and Conditions and Limitation, applicable to all work performed by TSAA. No other warranties are expressed or implied.

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16 August 1995

U.S. ARMY - FORT DEVENS

Release Notification Form (RNF) and

Immediate Response Action Completion Statement (IRAC) Submittals

Tank Release @ Building #2527; Fort Devens, MA

RTN #2-10823

As this report will be made part of submittal to the Massachusetts Department of Environmental Protection (MADEP). TSAA reminds the client that its contents and the contents of any and all other submittals may be audited.

Respectfully,



Todd S. Alving, LSP #4026
Engineering Geologist

enc: BWSC Form #103
BWSC Form #105
attachments

cc: file
M. Quinlan, OHM
J. Pierce, U.S. Army
M. Applebee, U.S. Army

TSA/tsa

wp/wpfiles/ohmfdtr



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-103

Release Tracking Number

RELEASE NOTIFICATION & NOTIFICATION RETRACTION
FORM Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

2 - 10823

If assigned by DEP

A. RELEASE OR THREAT OF RELEASE LOCATION:

Street: Bldg # 2527 OFF PASTON ROAD

Location Aid: "2500" AREA

City/Town: FORT DEVENS

ZIP Code: 01433

B. THIS FORM IS BEING USED TO: (check one)

☒ Submit a Release Notification (complete all sections of this form).

☐ Submit a Retraction of a Previously Reported Notification of a Release or Threat of Release (complete Sections A, B, E, F and G of this form). You MUST attach the supporting documentation required by 310 CMR 40.0335.

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

Date and time you obtained knowledge of the Release or TOR. Date: 6.14.95 Time: 2:30 Specify: ☐ AM ☒ PM

The date you obtained knowledge is always required. The time you obtained knowledge is not required if reporting only 120 Day Conditions.

IF KNOWN, record date and time release or TOR occurred. Date: _____ Time: _____ Specify: ☐ AM ☐ PM

☒ Check here if you previously provided an Oral Notification to DEP (2 Hour and 72 Hour Reporting Conditions only).

Provide date and time of Oral Notification. Date: 6.15.95 Time: 10:00 Specify: ☒ AM ☐ PM

Check all Notification Thresholds that apply to the Release or Threat of Release: (for more information see 310 CMR 40.0310 - 40.0315)

2 HOUR REPORTING CONDITIONS

- ☐ Sudden Release
- ☐ Threat of Sudden Release
- ☐ Oil Sheen on Surface Water
- ☐ Poses Imminent Hazard
- ☐ Could Pose Imminent Hazard
- ☐ Release Detected in Private Well
- ☐ Release to Storm Drain
- ☐ Sanitary Sewer Release (Imminent Hazard Only)

72 HOUR REPORTING CONDITIONS

- ☐ Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch
- ☒ Underground Storage Tank (UST) Release
- ☐ Threat of UST Release
- ☐ Release to Groundwater near Water Supply
- ☐ Release to Groundwater near School or Residence

120 DAY REPORTING CONDITIONS

- ☐ Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s)
- ☐ Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards
- ☐ Release of Oil to Groundwater Exceeding Reportable Concentration(s)
- ☐ Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch and Less than 1/2 Inch

List below the Oils or Hazardous Materials that exceed their Reportable Concentration or Reportable Quantity by the greatest amount. If necessary, attach a list of additional Oil and Hazardous Material substances subject to reporting.

Name and Quantities of Oils (O) and Hazardous Materials (HM) Released:

O or HM Released	O HM (check one)	CAS # (if known)	Amount or Concentration	Units	Reportable Concentrations Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
TOTAL HEADSPACE VOLATILES	<input checked="" type="checkbox"/> <input type="checkbox"/>		>100	PPM	310CMR 40.0313(2)
	<input type="checkbox"/> <input type="checkbox"/>				
	<input type="checkbox"/> <input type="checkbox"/>				

D. ADDITIONAL INVOLVED PARTIES:

☐ Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

☒ Check here if attaching Licensed Site Professional (LSP) name and address (optional). (SEE FORM BWSC # 105)

You may write in names and addresses on the bottom of the second page of this form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-103

Release Tracking Number

RELEASE NOTIFICATION & NOTIFICATION RETRACTION
FORM Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

2 - 10823
If assigned by DEP

E. PERSON REQUIRED TO NOTIFY:

Name of Organization: U.S. ARMY - FORT DEVENS

Name of Contact: RONALD J. OSTROWSKI

Title: INSTALLATION ENVIRONMENTAL
MANAGEMENT OFFICER

Street: AF3D-EM BOX 19

City/Town: FORT DEVENS

State: MA

ZIP Code: 01433

Telephone: (508) 796-3665

Ext.: _____

FAX: (optional) _____

F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELEASE OR THREAT OF RELEASE: (check one)

☒ RP or PRP Specify: ☒ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Person Otherwise Required to Notify Specify Relationship: _____

G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

I, RONALD OSTROWSKI, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: R. J. Ostrowski
(signature)

Title: Chief Environmental Officer

For: US ARMY FORT DEVENS
(print name of person or entity recorded in Section E)

Date: 9/13/95

Enter address of the person providing certification, if different from address recorded in Section E:

Street: _____

City/Town: _____

State: _____

ZIP Code: _____

Telephone: _____

Ext.: _____

FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10823

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional) BUILDING # 2527

Street: _____ Location Aid: _____

City/Town: FORT DEVENS ZIP Code: _____

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

☐ Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.

Specify Program: ☒ CERCLA ☐ HSWA Corrective Action ☐ Solid Waste Management ☐ RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).

☐ Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____

☐ Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).

☐ Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).

☐ Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).

☒ Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☒ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil
☐ Wetland ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence
☐ School ☐ Unknown ☐ Other Specify: _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) ☐ 2 Hour Reporting Condition(s)

☒ 72 Hour Reporting Condition(s) ☐ Substantial Release Migration ☐ Other Condition(s)

Describe: TOTAL HEADSPACE VOLATILES GREATER THAN 100 PPM DURING
SCREENINGS OF SOILS GREATER THAN 2.0' BG, LESS THAN 10.0' FROM LIST

Identify Oils and Hazardous Materials Released: (check all that apply) ☒ Oils ☐ Chlorinated Solvents ☐ Heavy Metals
☐ Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☒ Excavation of Contaminated Soils

☒ Re-use, Recycling or Treatment

☒ On Site ☐ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☐ Store ☐ On Site ☐ Off Site Est. Vol.: _____ cubic yards

☐ Landfill ☐ Cover ☐ Disposal Est. Vol.: _____ cubic yards

☐ Removal of Drums, Tanks or Containers

Describe: _____

☐ Deployment of Absorbent or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

☐ Groundwater Treatment Systems

☐ Air Sparging

☐ Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

2 - 10823

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

☐ Removal of Other Contaminated Media

Specify Type and Volume: _____

☐ Temporary Evacuation or Relocation of Residents

☐ Fencing and Sign Posting

☐ Other Response Actions Describe: _____

☐ Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse).

Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (If Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: _____

Town and State: _____

Quantity of Remediation Waste Transported to Date: _____

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

☐ Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.

☐ Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.

☒ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.

☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

☐ Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: _____

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

• if Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and all assessment activities(y) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

• if Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

2 - 10823

H. LSP Opinion (continued):

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions.

LSP Name: TODD S. ALVING LSP #: 4026 Stamp:

Telephone: 508-435-3679 Ext.: _____

FAX: (optional) 508-435-0051

Signature: [Signature]

Date: 8-16-95



I. PERSON UNDERTAKING IRA:

Name of Organization: U.S. ARMY - FORT DEVENS

Name of Contact: RONALD J. OSTROWSKI

Title: INSTALLATION ENVIRONMENTAL
MANAGEMENT OFFICER

Street: AF2D-EM BOX 19

City/Town: FORT DEVENS

State: MA

ZIP Code: 01433

Telephone: (508) 796-3665

Ext.: _____

FAX: (optional) _____

☐ Check here if there has been a change in the person undertaking the IRA.

J. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

(check one)

☒ RP or PRP Specify: ☒ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking IRA Specify Relationship: _____

K. CERTIFICATION OF PERSON UNDERTAKING IRA:

I, RONALD OSTROWSKI, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: [Signature]
(signature)

Title: Chief Environmental Officer

For: US ARMY FORT DEVENS
(print name of person or entity recorded in Section I)

Date: 9/13/95

Enter address of the person providing certification, if different from address recorded in Section I:

Street: _____

City/Town: _____

State: _____

ZIP Code: _____

Telephone: _____

Ext.: _____

FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.



DEPARTMENT OF THE ARMY
HEADQUARTERS FORT DEVENS
FORT DEVENS, MASSACHUSETTS



REPLY TO
ATTENTION OF

October 27, 1995

Environmental Management Office

Lynn Welsh, Section Chief
MADEP-CERO
Site Management Branch
#75 Grove Street
Worcester, MA 01605

RE: Re-Submission of BWSC Forms
Various Releases
Fort Devens, MA

Dear Ms. Welsh:

Please find the attached completed sections of MADEP-BWSC Forms relative to various releases at the above referenced site. These forms were originally submitted to MADEP-CERO by the U.S. Army - Fort Devens Environmental Management Office on 14 September 1995. We understand that you received these submittals on 15 September 1995. Pursuant to our discussions, OHM and their LSP, Todd S. Alving, (#4026) have completed revisions to the forms in accordance with the Department's comments.

Please note that Section K of BWSC Form #105, IRA Plan for Release #2-10848, was originally signed by Ronald J. Ostrowski, who is no longer with EMO. I trust the attached will prove sufficient in your management and evaluation of this matter. Should you have any questions or require additional information, please contact the undersigned.

Respectfully,

Joseph F. Pierce
Chief, Environmental Division
Directorate of Public Works

cc: file
OHM
TSAA
DPW



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10848

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional) UST RELEASE - SHEBOKEN WELL - BLDG # 3628

Street: SHERIDAN ROAD Location Aid: @ MIKROE LAKE ACCESS

City/Town: FORT DEVENS ZIP Code: 01433

- ☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.
- ☐ Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.
- Specify Program: ☐ CERCLA ☐ HSWA Corrective Action ☐ Solid Waste Management ☐ RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☒ Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).
- ☐ Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____
- ☐ Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).
- ☐ Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).
- ☐ Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).
- ☐ Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☐ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil

☐ Wetland ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☒ Other Specify: POTENTIAL IMPACT TO GW IN ZONE I

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) ☐ 2 Hour Reporting Condition(s)

☒ 72 Hour Reporting Condition(s) ☐ Substantial Release Migration ☐ Other Condition(s)

Describe: GREATER THAN 100 PPM TNOCS, RESULT ON SOILS GREATER THAN 2.0' BSG, WITHIN 10.0' OF FORMER UST POSITION

Identify Oils and Hazardous Materials Released: (check all that apply) ☒ Oils ☐ Chlorinated Solvents ☐ Heavy Metals

☐ Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Assessment and/or Monitoring Only | <input type="checkbox"/> Deployment of Absorbent or Containment Materials |
| <input type="checkbox"/> Excavation of Contaminated Soils | <input type="checkbox"/> Temporary Covers or Caps |
| <input checked="" type="checkbox"/> Re-use, Recycling or Treatment | <input type="checkbox"/> Bioremediation |
| <input checked="" type="checkbox"/> On Site <input type="checkbox"/> Off Site Est. Vol.: <u>1,300</u> cubic yards | <input type="checkbox"/> Soil Vapor Extraction |
| Describe: <u>(1000 TONNAGE, 300 PROPOSED ADD'L)</u> | <input type="checkbox"/> Structure Venting System |
| <input type="checkbox"/> Store <input type="checkbox"/> On Site <input type="checkbox"/> Off Site Est. Vol.: _____ cubic yards | <input type="checkbox"/> Product or NAPL Recovery |
| <input type="checkbox"/> Landfill <input type="checkbox"/> Cover <input type="checkbox"/> Disposal Est. Vol.: _____ cubic yards | <input type="checkbox"/> Groundwater Treatment Systems |
| <input type="checkbox"/> Removal of Drums, Tanks or Containers | <input type="checkbox"/> Air Sparging |
| Describe: _____ | <input type="checkbox"/> Temporary Water Supplies |

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10848

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

☐ Removal of Other Contaminated Media

☐ Temporary Evacuation or Relocation of Residents

Specify Type and Volume: _____

☐ Fencing and Sign Posting

☒ Other Response Actions Describe: COMPLETION OF GEOPROBES / BORINGS / MWS (4.0")

☐ Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Cleaninghouse).

Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (If Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: UNKNOWN @ THIS TIME

Town and State: _____

Quantity of Remediation Waste Transported to Date: 1000 CU.YDS TO TEMPORARY STORAGE AREA (AZEE-69A)

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

☐ Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.

☐ Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.

☒ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.

☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

☐ Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: _____

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

• if Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and all assessment activities(y) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

• if Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-0135

IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10848

H. LSP Opinion (continued):

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s) or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions of the order(s) or approval(s).

LSP Name: TODD S. ALVING LSP #: 4026 Stamp:

Telephone: 508-435-3679 Ext.: _____

FAX: (optional) 508-435-0051

Signature: [Signature]

Date: 10-27-95



I. PERSON UNDERTAKING IRA:

Name of Organization: U.S. ARMY - FORT DEVENS

Name of Contact: JOE PIERCE Joseph Pierce

Title: INSTALLATION ENVIRONMENTAL
MANAGEMENT OFFICER
Chief, Environmental Division, DPW

Street: AFED - EM, BOX 19.

City/Town: FORT DEVENS

State: MA ZIP Code: 01433-5150

Telephone: (508) 796-3665

Ext.: _____

FAX: (optional) _____

☐ Check here if there has been a change in the person undertaking the IRA.

J. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

(check one)

☒ RP or PRP Specify: ☒ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking IRA Specify Relationship: _____

K. CERTIFICATION OF PERSON UNDERTAKING IRA:

I, Joseph Pierce, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/vis aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: Joseph I Pierce
(signature)

Title: INSTALLATION ENVIRONMENTAL
MANAGEMENT OFFICER
Chief, Environmental Division, DPW

For U.S. ARMY - FORT DEVENS
(print name of person or entity recorded in Section I)

Date: 10/27/95

Enter address of the person providing certification, if different from address recorded in Section I:

Street: _____

City/Town: _____

State: _____

ZIP Code: _____

Telephone: _____

Ext.: _____

FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10615

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional)

Street: ARCE GLE-BUILDING #202, CAREYST Location Aid: E ST. MICHEL STREET

City/Town: FORT DEVENS ZIP Code: 01433

- ☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.
- ☒ Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.
- Specify Program: ☒ CERCLA ☐ HSWA Corrective Action ☐ Solid Waste Management ☐ RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA Addresses:

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☐ Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).
- ☐ Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____
- ☐ Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).
- ☐ Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).
- ☐ Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).
- ☒ Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☒ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil

☐ Wetland ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☐ Other Specify: _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) ☐ 2 Hour Reporting Condition(s)

☐ 72 Hour Reporting Condition(s) ☐ Substantial Release Migration ☒ Other Condition(s)

Describe: REPORTABLE CONC. OF TPH IN SOILS SURROUNDING A
DRY WELL

Identify Oils and Hazardous Materials Released: (check all that apply) ☒ Oils ☐ Chlorinated Solvents ☐ Heavy Metals

☐ Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

- ☐ Assessment and/or Monitoring Only
- ☒ Excavation of Contaminated Soils
- ☒ Re-use, Recycling or Treatment
- ☒ On Site ☐ Off Site Est. Vol.: 200 cubic yards
- Describe: PROPOSED COVER MATERIAL, ON-SITE LANDFILL
- ☐ Store ☐ On Site ☐ Off Site Est. Vol.: _____ cubic yards
- ☐ Landfill ☐ Cover ☐ Disposal Est. Vol.: _____ cubic yards
- ☐ Removal of Drums, Tanks or Containers
- Describe: _____
- ☐ Deployment of Absorbent or Containment Materials
- ☐ Temporary Covers or Caps
- ☐ Bioremediation
- ☐ Soil Vapor Extraction
- ☐ Structure Venting System
- ☐ Product or NAPL Recovery
- ☐ Groundwater Treatment Systems
- ☐ Air Sparging
- ☐ Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2-10615

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- ☐ Removal of Other Contaminated Media
Specify Type and Volume: _____
- ☐ Temporary Evacuation or Relocation of Residents
- ☐ Other Response Actions Describe: _____
- ☐ Fencing and Sign Posting
- ☐ Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse).
Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: TO BE DETERMINED

Town and State: _____

Quantity of Remediation Waste Transported to Date: NONE

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

- ☐ Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.
- ☐ Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.
- ☒ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
- ☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

- ☒ Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: # 2-0662

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

• If Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• If Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and all assessment activities(y) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

• If Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• If Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 10823

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional) BUILDING #2527

Street: _____ Location Aid: _____

City/Town: FORT DEVENS ZIP Code: 01433

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

☒ Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.

Specify Program: ☒ CERCLA ☐ HSWA Corrective Action ☐ Solid Waste Management ☐ RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).

☐ Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____

☐ Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).

☐ Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).

☐ Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).

☒ Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☒ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil

☐ Wetland ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☐ Other Specify: _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) ☐ 2 Hour Reporting Condition(s)

☒ 72 Hour Reporting Condition(s) ☐ Substantial Release Migration ☐ Other Condition(s)

Describe: TVOCs GREATER THAN 100 PPM DURING SCREENING
OF SOILS GREATER THAN 2.0' BSS, LESS THAN 10.0' FRM LIST.

Identify Oils and Hazardous Materials Released: (check all that apply) ☒ Oils ☐ Chlorinated Solvents ☐ Heavy Metals

☐ Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☒ Excavation of Contaminated Soils

☐ Re-use, Recycling or Treatment

☒ On Site ☐ Off Site Est. Vol.: 1000 cubic yards

Describe: _____

☐ Store ☐ On Site ☐ Off Site Est. Vol.: _____ cubic yards

☐ Landfill ☐ Cover ☐ Disposal Est. Vol.: _____ cubic yards

☐ Removal of Drums, Tanks or Containers

Describe: _____

☐ Deployment of Absorbent or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

☐ Groundwater Treatment Systems

☐ Air Sparging

☐ Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

2-10823

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- ☐ Removal of Other Contaminated Media
Specify Type and Volume: _____
- ☐ Temporary Evacuation or Relocation of Residents
- ☐ Fencing and Sign Posting
- ☐ Other Response Actions Describe: _____
- ☐ Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Cleannghouse).
Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: TO BE DETERMINED

Town and State: _____

Quantity of Remediation Waste Transported to Date: NONE

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

- ☐ Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.
- ☐ Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.
- ☒ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
- ☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

- ☒ Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: 2-0662

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

- if Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;
- if Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and all assessment activities(y) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;
- if Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;
- if Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.

Appendix A

On-site Laboratory Documentation

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 6/16/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/EG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. C	Ref. Pt. D		
S3 2527 N9	0822	G	1'2"	20'9"	22'9"	Gold sand w/cobble	1240 ml - VOA
W10	0825	1	9"	24'5"	26'6"	Gold sand w/cobble	1
W11	0828		2'5"	29'5"	33'8"	Gold sand	
W12	0831		9"	29'4"	34'4"	Black clay-like soil	
W13	0834		1'2"	27'0"	34'	Brown sand w/heavy cobble	
W14	0837		2'4"	24'2"	32'3"	Gold sand w/cobble	
W15	0840		1'9"	16'11"	24'3"	Brown sand w/cobble	
W16	0843	✓	9"	14'1"	20'9"	Gold/Brown sand w/cobble	✓

Ref. Pt. C: Pole marked on map (See map)

Ref. Pt. D: " "

Map Attached: (Yes) No

Sample Type: (Screening) Confirmation Disposal/Characterization

Laboratory Destination: (Onsite Lab) AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes (No) Rinsate Taken: Yes (No)

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: (TPH) BTEX Other 0930

Relinquished by(dd/tt): A. Hansen 6/16/95 Received by(dd/tt): DNBlea 0930

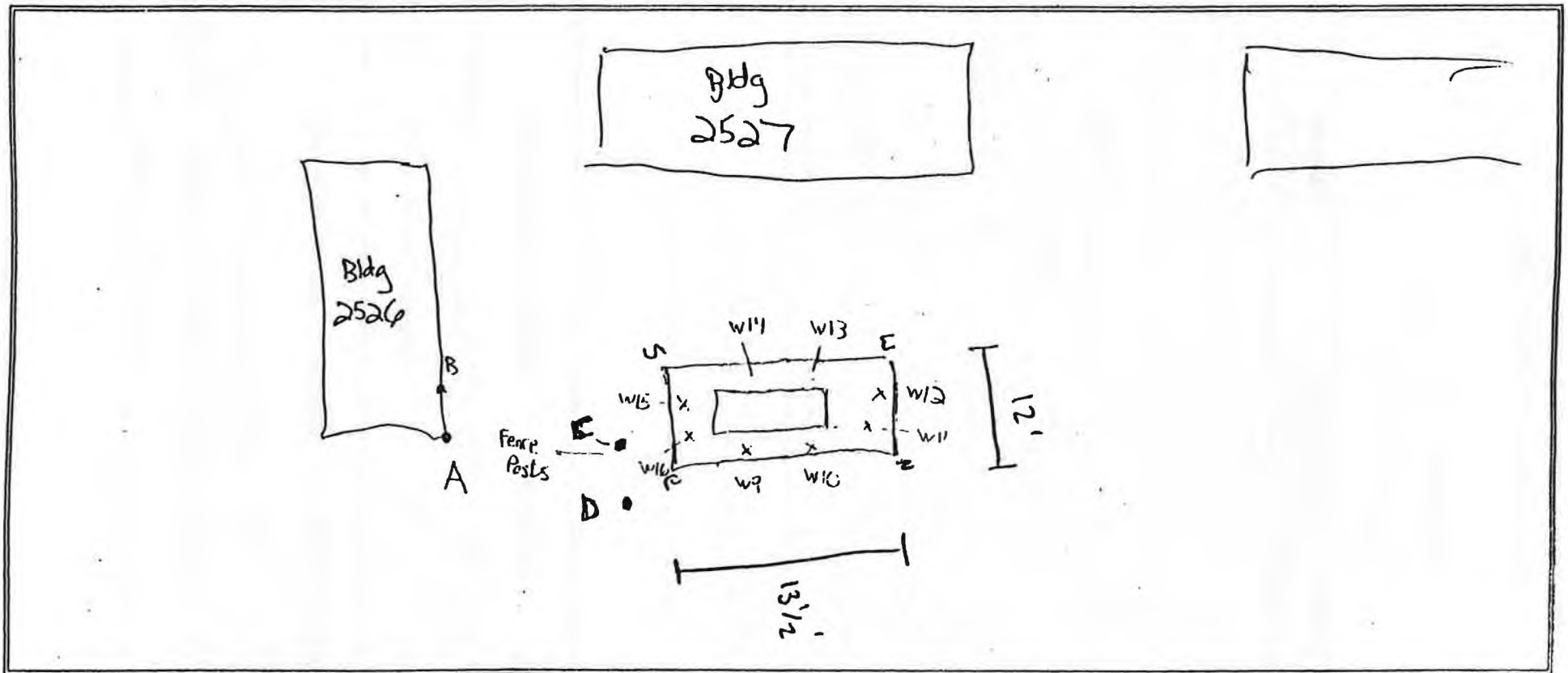
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/16/95

Site Name: Bldg 2527



Comments/Observations: A → B 6'2" along Bldg 2526 wall

• Fixed Points
x Sample locations

A → C 53'8"
A → D 52'8"
B → C 52'10"
B → D 53'3"

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 16 June 1995

Site(s): Bldg 2527, 3770, ust 3825

Analyst: MRB/GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3770HA1	84	55	19.9	20.2	1	56	
SB3770HA2	20	12	19.8	20.3	1	13	J
EX3825A	31	20	20.1	22.5	1	22	J
EX3825B	24	15	20.2	21.1	1	16	J
EX3826A	61	40	19.6	22.2	1	45	J
EX3826B	190	126	20.1	20.4	1	128	
EX3827A	213	141	20.1	18.8	1	132	
EX3827B	238	158	19.8	20.6	1	164	
SB2527B3	538	358	6.2	22.6	1	1304	
SB2527B4	ND	-1	20.0	21.3	1	ND	
SB2527W9	16	10	20.1	21.0	1	10	J
SB2527W10	37	24	20.1	21.0	1	25	J
SB2527W11	126	83	20.1	20.4	1	84	
SB2527W12	1185	789	3.3	26.2	5	31325	
SB2527W13	76	50	20.2	20.3	1	50	
SB2527W14	24	15	19.7	21.4	1	16	J
SB2527W15	694	462	19.9	21.1	5	2448	
SB2527W16	443	294	19.9	20.3	5	1502	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log

Fort Devens - Project #16208

Pg. 1012

Date: 06-16-45

Site Name: BLDG2527 EMO

Weather. Sunny

Samplers: BD, GG

[illegible]

Ref. Pt. : N/A Taken from bucket at the bottom of the excavation

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE- coc # _____

Duplicate Taken: Yes ☐ No ☒ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other

Relinquished by (dd/tt): 4/16/95 ¹⁴³⁵ Received by (dd/tt): 5/1/95 ¹⁷³⁵

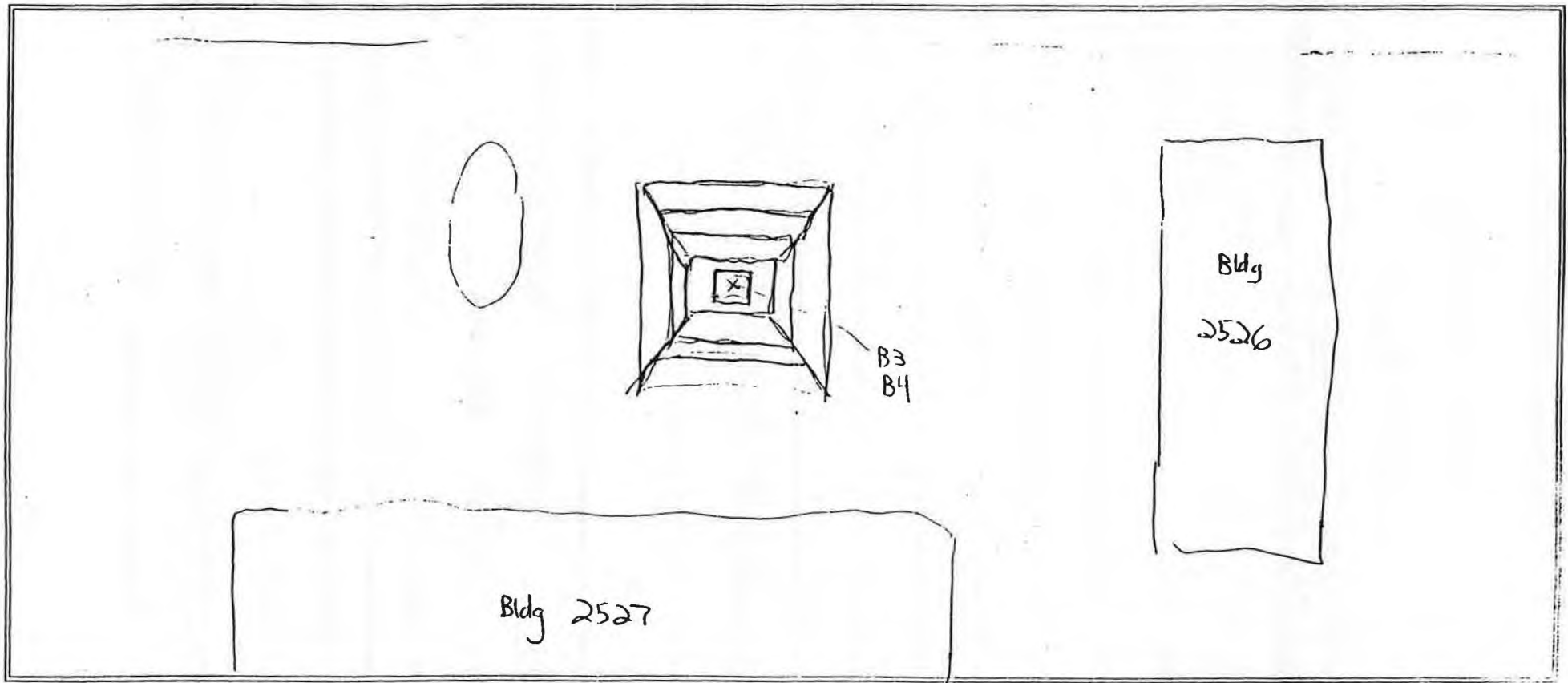
Relinquished by(dd/tt):_____ Received by (dd/tt):_____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/16/95

Site Name: Bldg 2527



Comments/Observations:

- X Sample location (taken by the bucket)
- samples labelled with prefix SB2527

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Fig. 1 of 1

Date: 16 June 1995

Site(s): Bldg 2527, 3770, ust 3825

Analyst: MRB/GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3770HA1	84	55	19.9	20.2	1	56	
SB3770HA2	20	12	19.8	20.3	1	13	J
EX3825A	31	20	20.1	22.5	1	22	J
EX3825B	24	15	20.2	21.1	1	16	J
EX3826A	61	40	19.6	22.2	1	45	J
EX3826B	190	126	20.1	20.4	1	128	
EX3827A	213	141	20.1	18.8	1	132	
EX3827B	238	158	19.8	20.6	1	164	
SB2527B3	538	358	6.2	22.6	1	1304	
SB2527B4	ND	-1	20.0	21.3	1	ND	
SB2527W9	16	10	20.1	21.0	1	10	J
SB2527W10	37	24	20.1	21.0	1	25	J
SB2527W11	126	83	20.1	20.4	1	84	
SB2527W12	1185	789	3.3	26.2	5	31325	
SB2527W13	76	50	20.2	20.3	1	50	
SB2527W14	24	15	19.7	21.4	1	16	
SB2527W15	694	462	19.9	21.1	5	2448	
SB2527W16	443	294	19.9	20.3	5	1502	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6-19-95

Site Name: Bldg 2527

Weather: Sunny, Hot

Samplers: BD, GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. C	Ref. Pt. D		
S3252W17	1100	G	2'9"	23'2"	23'7"	Brown sandy soil	1x40mL VOA
W18	1102		3'	23'3"	24'	TAN SANDY SOIL	
W19	1104		3'3"	23'3"	24'4"	Grey Brown clay	
W20	1106		4'	22'6"	24'4"	Grey black clay	
W21	1108		3'0"	22'7"	26'5"	Brown fine sand	
W22	1110		3'0"	26'7"	34'10"	Reddish coarse sand	
W23	1113	✓	3'0"	32'4"	36	Brown fine dense sand	✓

Ref. Pt. C: (See map)

Ref. Pt. D:

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # ☐ USACE - coc #

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other

Relinquished by (dd/tt): A. J. [Signature] 6-19-95 1140 Received by (dd/tt): [Signature] 6-19-95 1140

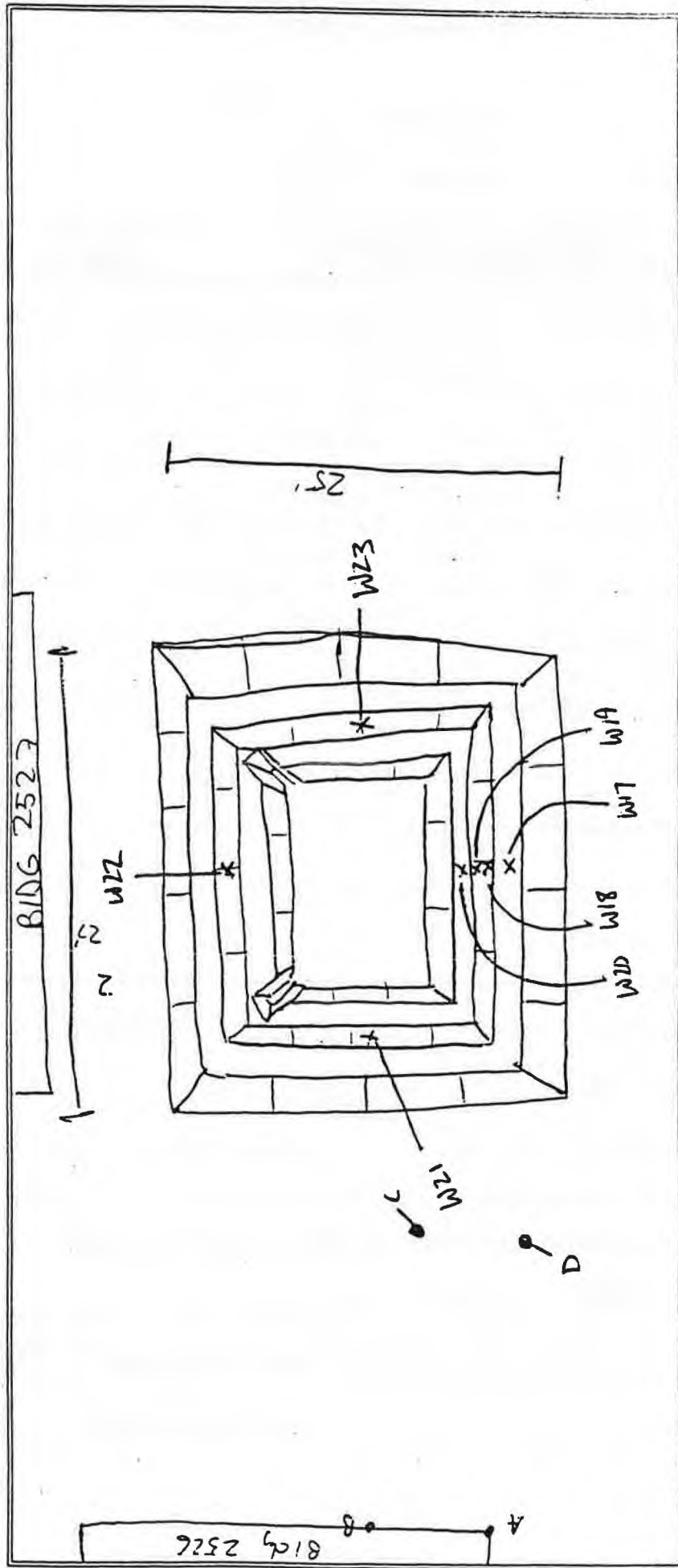
Relinquished by (dd/tt): Received by (dd/tt):

Sample Location Map Fort Devens - Project #16208

Pg. 2 of 2

Date: 06-14-95

Site Name: BLDG 2527



Comments/Observations:

- Fixed points A-B 6'2" along Bldg 2526 wall
- Sample locations A-C 52'10"
- A-D 52'10"
- B-C 52'10"

Prepared by: Bill Dak

- all sample have the attached prefix 582527

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 19 June 1995

Site(s): Bldg 2527 & 3654

Analyst: MRB/ BD/GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3654W1	ND				1	ND	
SB3654W2	ND				1	ND	
SB3654W3	ND				1	ND	
SB3654W4	11	6	20.1	21.0	1	7	J
SB3654W5	ND				1	ND	
SB3654W6	ND				1	ND	
SB3654W7	ND				1	ND	
SB3654W8	ND				1	ND	
SB3654W9	315	209	19.9	20.4	1	214	
SB3654W10	729	485	18.0	19.6	1	528	
SB3654W11	371	246	18.7	20.3	1	268	
SB3654W12	ND				1	ND	
SB3654W13	ND				1	ND	
SB3654W14	ND				1	ND	
SB3654W15	ND				1	ND	
SB3654W16	ND				1	ND	
SB3654I1	ND				1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Pg. 2 of 2

Analyst: MRB/ BD/GG

FL

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 6-21-95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/CE

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
EX3527A	1145	C	2'			Brown sandy soil w/cobble	1x40mL VCA

Ref. Pt. ____: N/A

Ref. Pt. ____: _____

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No

Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): 4 Haines 6-21-95 Received by(dd/tt): Bill Sh 6-21-95 ¹³

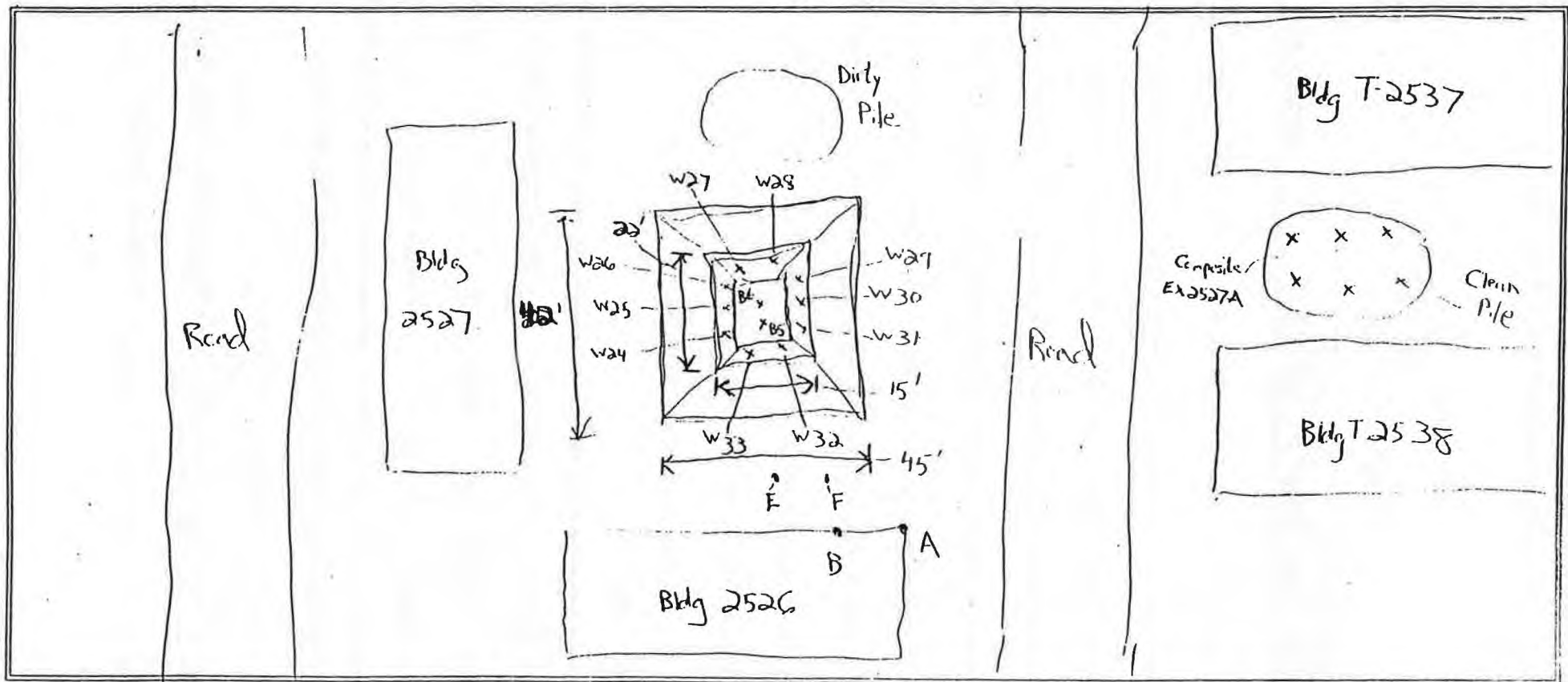
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6-21-95

Site Name: Bldg 2527



Comments/Observations:

- - Fixed Point
- x - Sample location

A → F: 38'8"
A → E: 42'2"
B → F: 38'2"
B → E: 40'

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 413.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 21 June 1995

Site(s): Bldg 3759,
 Bldg 2527, & Bldg 3654

Analyst BD,GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3759W1	ND	ND			1	ND	
SB3759W2	ND	ND			1	ND	
SB3759W3	ND	ND			1	ND	
SB3759W4	ND	ND			1	ND	
SB3759W5	27	17	20.0	20.3	1	17	J
SB3759W6	ND	ND			1	ND	
SB3759W7	171	113	19.8	20.1	1	115	
SB3759W8	ND	ND			1	ND	
SB3759W9	ND	ND			1	ND	
SB3759W10	ND	ND			1	ND	
SB3759W11	ND	ND			1	ND	
SB3759W12	ND	ND			1	ND	
SB3759B1	ND	ND			1	ND	
SB3759B2	ND	ND			1	ND	
SB3759B3	ND	ND			1	ND	
SB3759B4	27	17	20.1	22.3	1	19	J
SB3654W17	ND	ND			1	ND	
SB3654W18	ND	ND			1	ND	
SB2527W24	823	548	10.9	21.1	1	1060	
SB2527W25	438	291	11.8	20.4	5	2516	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 21 June 1995

Site(s): Bldg 3759,
 Bldg 2527, & Bldg 3654

Analyst BD,GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W26	905	602	10.9	23.2	5	6411	
SB2527W27	379	252	20.0	21.8	5	1372	
SB2527W28	404	268	11.1	20.5	5	2479	
SB2527W29	840	559	19.7	22.5	5	3193	
SB2527W30	906	603	19.7	21.0	10	6429	
SB2527W31	952	634	18.6	21.5	5	3663	
SB2527W32	500	332	19.3	21.4	5	1843	
SB2527W33	1029	685	19.1	20.2	1	725	
SB2527B5	756	503	19.4	20.7	5	2684	
SB2527B6	33	21	18.8	21.3	1	23	J
EX2527A	85	56	20.6	23.2	1	63	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 3

Date: 6-21-95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
<u>562527W24</u>	<u>1202</u>	<u>E</u>	<u>7'1"</u>	<u>30'5"</u>	<u>34'7"</u>	<u>green gray clay</u>	<u>1x40mL VCA</u>
<u>W25</u>	<u>1204</u>	<u> </u>	<u>6'6"</u>	<u>35'10"</u>	<u>39'5"</u>	<u>↓</u>	
<u>W26</u>	<u>1206</u>	<u> </u>	<u>7'3"</u>	<u>42'10"</u>	<u>46'</u>	<u>↓</u>	
<u>W27</u>	<u>1208</u>	<u> </u>	<u>6'5"</u>	<u>45'2"</u>	<u>47'6"</u>	<u>green clay</u>	
<u>W28</u>	<u>1210</u>	<u> </u>	<u>6'6"</u>	<u>44'10"</u>	<u>45'2"</u>	<u>green clay / some black</u>	
<u>W29</u>	<u>1212</u>	<u> </u>	<u>6'5"</u>	<u>42'1"</u>	<u>42'2"</u>	<u>↓</u>	
<u>W30</u>	<u>1214</u>	<u> </u>	<u>6'10"</u>	<u>36'10"</u>	<u>37'2"</u>	<u>↓</u>	
<u>W31</u>	<u>1216</u>	<u>4</u>	<u>7'2"</u>	<u>33'</u>	<u>33'10"</u>	<u>↓</u>	<u>↓</u>

Ref. Pt. E: See Map

Ref. Pt. F: _____

Map Attached: (Yes) No

Sample Type: (Screening) Confirmation Disposal/Characterization

Laboratory Destination: (Onsite Lab) AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes (No) Rinsate Taken: Yes (No)

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: (TPH) BTEX Other _____

Relinquished by (dd/tt): A. Munn ¹³⁰⁰ 6-21-95 Received by (dd/tt): U/L M 6-21-95 ¹³⁰⁰

Relinquished by (dd/tt): _____ Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of 3

Date: 6/21/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
W32	1218	G	6'	26'10"	28'6"	green clay	1x40mL VCA
W33	1220		6'5"	27'5"	30'9"	green clay	
B5	1222		8'	32'5"	34'4"	brown soil	
B6	1224	↓	8'	39'9"	42	brown soil	↓

Ref. Pt. E: See Map

Ref. Pt. F: _____

Map Attached: (Yes) No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by (dd/tt): A. Hummer ¹³⁰⁰ 6-21-95 Received by (dd/tt): W. L. L. 6-21-95

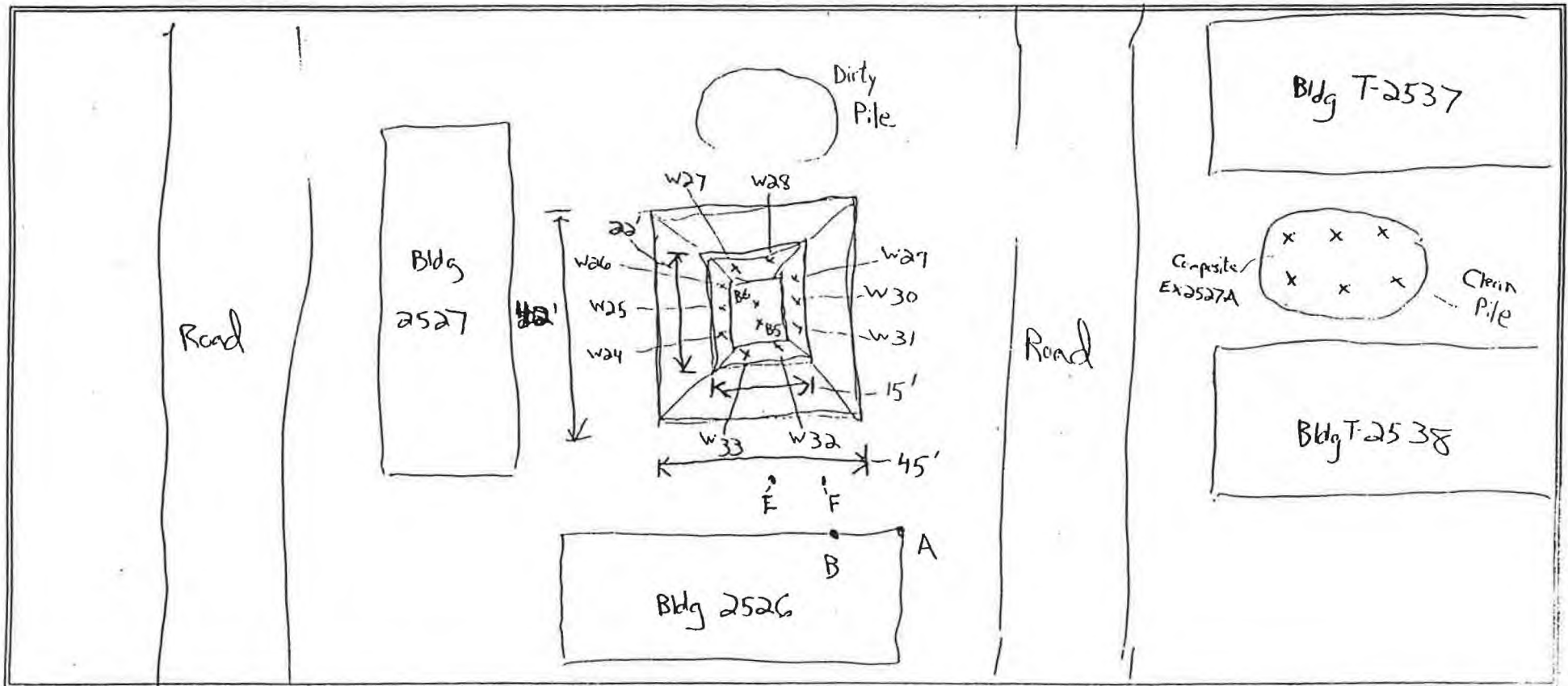
Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 3 of 3

Date: 6-21-95

Site Name: Bldg 2527



Comments/Observations:

- - Fixed Point
- x - Sample location

A → F: 38'8"
A → E: 42'2"
B → F: 38'2"
B → E: 40'

A → B: 6'2"

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 21 June 1995

Site(s): Bldg 3759,
 Bldg 2527, & Bldg 3654

Analyst BD,GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3759W1	ND	ND			1	ND	
SB3759W2	ND	ND			1	ND	
SB3759W3	ND	ND			1	ND	
SB3759W4	ND	ND			1	ND	
SB3759W5	27	17	20.0	20.3	1	17	J
SB3759W6	ND	ND			1	ND	
SB3759W7	171	113	19.8	20.1	1	115	
SB3759W8	ND	ND			1	ND	
SB3759W9	ND	ND			1	ND	
SB3759W10	ND	ND			1	ND	
SB3759W11	ND	ND			1	ND	
SB3759W12	ND	ND			1	ND	
SB3759B1	ND	ND			1	ND	
SB3759B2	ND	ND			1	ND	
SB3759B3	ND	ND			1	ND	
SB3759B4	27	17	20.1	22.3	1	19	J
SB3654W17	ND	ND			1	ND	
SB3654W18	ND	ND			1	ND	
SB2527W24	823	548	10.9	21.1	1	1060	
SB2527W25	438	291	11.8	20.4	5	2516	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 21 June 1995

Site(s): Bldg 3759,
 Bldg 2527, & Bldg 3654

Analyst BD,GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W26	905	602	10.9	23.2	5	6411	
SB2527W27	379	252	20.0	21.8	5	1372	
SB2527W28	404	268	11.1	20.5	5	2479	
SB2527W29	840	559	19.7	22.5	5	3193	
SB2527W30	906	603	19.7	21.0	10	6429	
SB2527W31	952	634	18.6	21.5	5	3663	
SB2527W32	500	332	19.3	21.4	5	1843	
SB2527W33	1029	685	19.1	20.2	1	725	
SB2527B5	756	503	19.4	20.7	5	2684	
SB2527B6	33	21	18.8	21.3	1	23	J
EX2527A	85	56	20.6	23.2	1	63	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6-22-95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/CG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
252787	1509	G	4'-5'	43'	50'	Grey/Black Clay, ^{TPH} C ₁₀ r	1x40mL V ₂ A
W341511		G	4'-5' 4'-5.9'			" "	1x40mL V ₂ A

Ref. Pt. E: (see map)

Ref. Pt. F: _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): 4 June 1530 6-22-95 Received by(dd/tt): William D. 1530 6-22-95

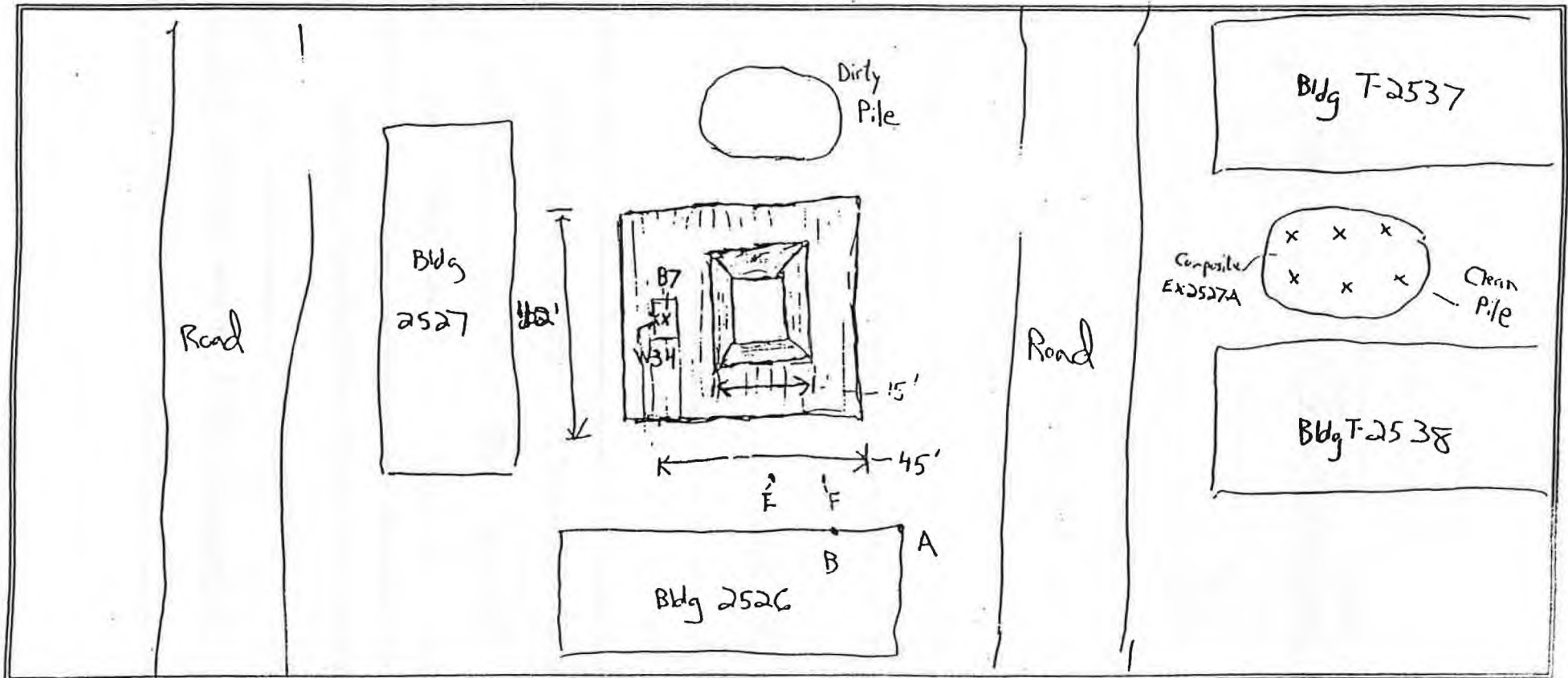
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6-22-95

Site Name: Bldg 2527



Comments/Observations:

• - Fixed Point

x - Sample location

A → F: 38'8"

A → E: 42'2"

B → F: 38'2"

B → E: 40'

A → B: 6'2"

Prepared by: Greg Guimaraes

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 2

Date: 22 June 1995

Bldg 2527, Bldg3770,
 Bldg 3654, & Bldg 3759

Analyst BD

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB3654W3A	ND	ND			1	ND	
SB3654W7A	ND	ND			1	ND	
SB3654W15A	ND	ND			1	ND	
SB3654W18A	ND	ND			1	ND	
SB3654W17A	ND	ND			1	ND	
SB3654W5A	ND	ND			1	ND	
SB3654W13A	ND	ND			1	ND	
SB3759DUPC	32	20	19.8	20.3	1	21	J
SB3759B1A	ND	ND			1	ND	
SB3759B4A	38	24	19.7	20.4	1	25	J
SB3759TRPB	342	227	20.4	20.4	1	227	
SB3759TRPA	ND	ND			1	ND	
SB3759TRPC	ND	ND			1	ND	
SB3759B3A	ND	ND			1	ND	
SB3759DUPB	250	166	20.1	20.9	1	172	
SB3759DUPA	ND	ND			1	ND	
SB3759W11A	20	13	19.7	21.1	1	13	J
SB3759W7A	341	226	20.0	21.3	1	241	
SB3759W6A	ND	ND			1	ND	
SB3770W9	ND	ND			1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

pg. ci

Analyst BD

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6-23-95

Site Name: Bldg. 2527

Weather: Sunny

Samplers: ~~BB~~/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
SB2527B8	0827	G	5'-6'	21'4"	29'4"	Black/grey clay, distinct TPH odor	1x40 mL VOA
SB2527B9	0834		5'-6'	27'9"	20'6"	Brown clay, no odor, some cobble	
SB2527B10	0840		5'-6'	50'3"	47'5"	↓	↓
SB2527B11	0844	↓	7'-8'4"	50'3"	47'5"	↓	↓

Ref. Pt. E: Fence post as marked on map (see map)

Ref. Pt. F: " " "

(Samples taken from the bucket)

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): M. Guzman 6-23-95 0940 Received by(dd/tt): M. Guzman 6-23-95 0940

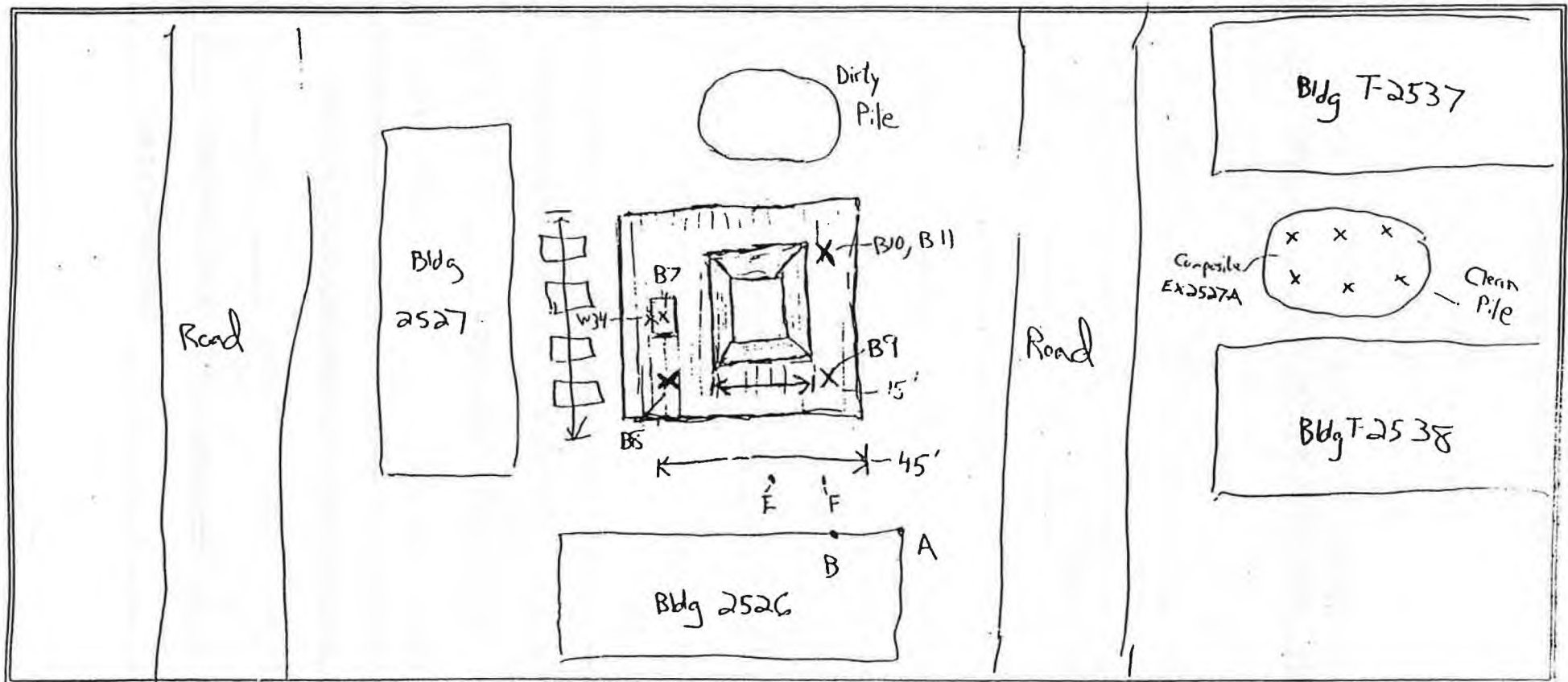
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6-23-95

Site Name: Bldg 2527



Comments/Observations:

o - Fixed Point
x - Sample location

A → F: 38'8"
A → E: 42'2"
B → F: 38'2"
B → E: 40'

A → B: 6'2"

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 23 June 1995

Site(s): Bldg 2527

Analyst GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B8	869	578	19.3	21.9	5	3282	
SB2527B9	21	13	19.5	21.4	1	14	J
SB2527B10	19	12	19.3	21.3	1	13	J
SB2527B11	18	11	20.5	20.8	1	11	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6-23-95

Site Name: S1D62527

Weather: Sunny

Samplers: 3D, 66

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. F	Ref. Pt. E		
S32527W35	1400	G	7'10"	29'3"	19'10"	Hard DK Grey Silty sand	1x40 ml V2A
W36	1405	G	7'6"	36'4"	26'11"		1x40 ml V2A
W37	1409	G	7'8"	41'4"	33'4"		1x40 ml V2A
W38	1416	G	6'10"	45'7"	37'4"		1x40 ml V2A
W39	1422	G	5'9"	45'9"	37'11"	Light grey sand	1x40 ml V2A
B12	1427	G	9'3"	36'3"	29'2"	Brown/Green soil	1x40 ml V2A
B13	1433	G	9'4"	33'3"	21'6"	Brown/Green soil	1x40 ml V2A

Ref. Pt. E: Pole as marked on map

Ref. Pt. F: Pole as marked on map

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): William Dal 06-23-95 1515 Received by (dd/tt): William Dal 06-23-95 1515

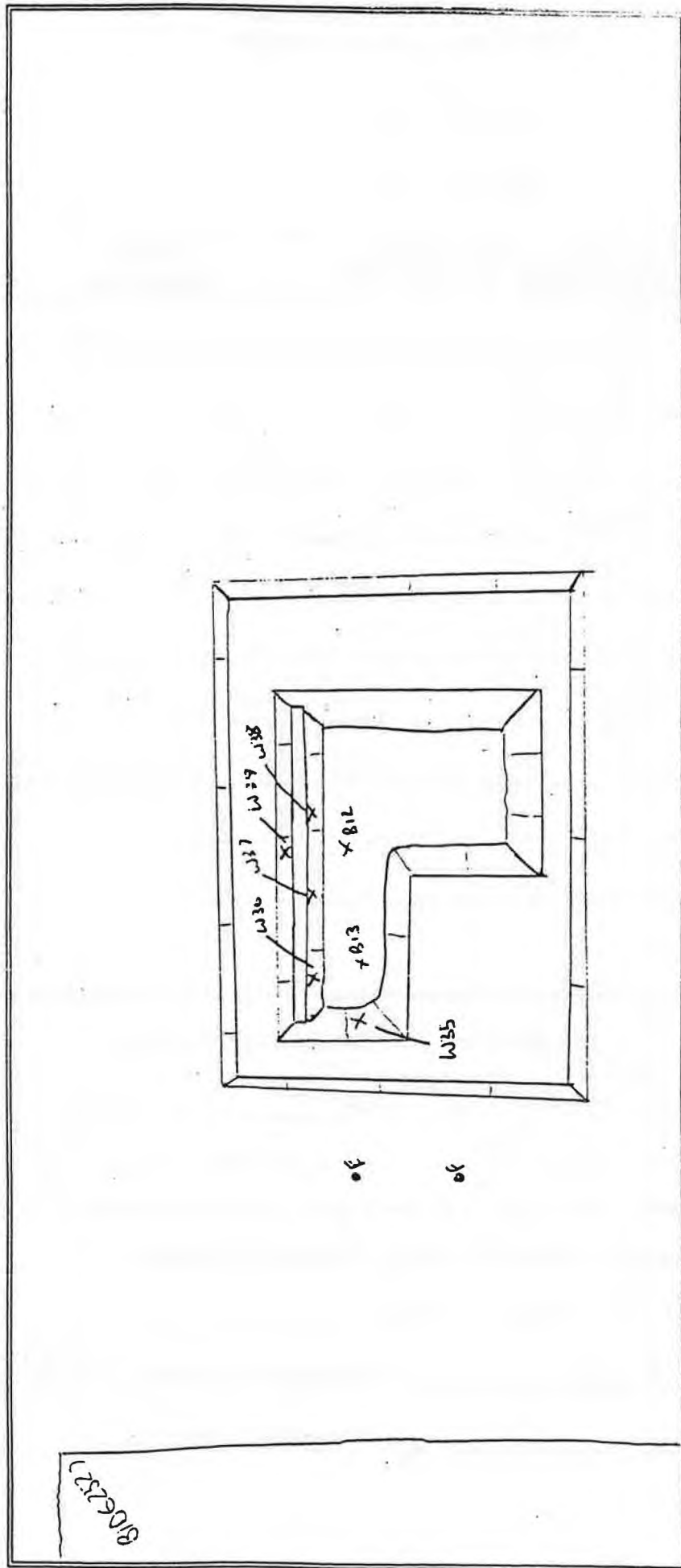
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map Fort Devens - Project #16208

Pg. 2 of 2

Date: 06-23-95

Site Name: BIG 2527



Comments/Observations:

- fixed point
- x sample location
- all samples have the attached prefix 582527

Prepared by: Bill Dalk

pg.2 of 2

Analyst: GG

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/27/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
SB2527TP1A	1055	G	8'	28'6"	20'	lt. Brown soil w/ slight odor	1x40mL VOA
SB2527TP1B	1103	G	10'	28'6"	20'	Damp. brown green clay, no odor	1x40mL VOA
SB2527TP2A	1128	G	6'6"	56'	61'	Grey/tan fine sand, no odor	1x40mL VOA
SB2527TP2B	1133	G	8'	56'	61'	Grey/clay tan sand, distinct TPH odor	1x40mL VOA
SB2527TP2C	1139	G	10'	56'	61'	wet grey clay/soil, some odor	1x40mL VOA
SB2527TP3A	1144	G	10'				1x40mL VOA

Ref. Pt. E: Fence post as marked on map

Ref. Pt. F: " " " "

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☐ Onsite Lab ☐ AEN - coc # _____ ☐ USACE- coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): A. Hummer ¹²⁰⁰ 6/27/95 Received by(dd/tt): E. N. Blum ^{6:27:45} 6/27/95

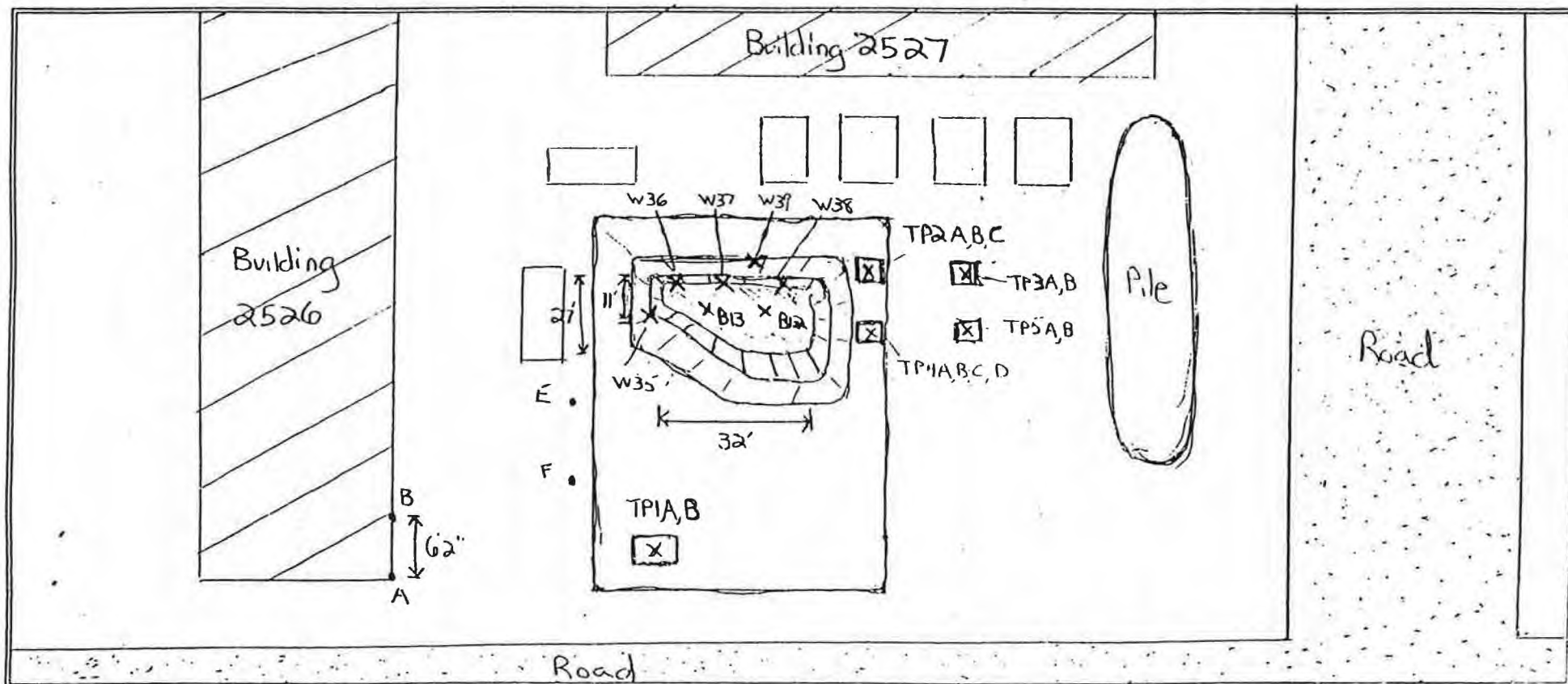
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/27/95

Site Name: Bldg 2527



Comments/Observations:

X - Sample Location

▨ - water

Samples are given the Prefix SB2527

a. Fixed Points

A → F 38'8"

B → F 3'8"2"

A → E 42'2"

B → E 40'

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 27 June 1995

Site(s): Bldg 2527

Analyst: MRB/BD

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527TP1A	22	14	19.6	20.3	1	14	J
SB2527TP1B	ND				1	ND	
SB2527TP2A	ND				1	ND	
SB2527TP2B	321	213	7.1	23.1	1	693	
SB2527TP2C	198	131	8.2	25.8	1	412	
SB2527TP3A	16	10	18.2	21.1	1	11	J
SB2527TP3B	17	10	18.3	21.3	1	12	J
SB2527TP4A	966	643	17.9	20.7	5	3718	
SB2527TP4B	481	320	14.3	20.7	5	2314	
SB2527TP4C	676	450	20.0	20.7	1	466	
SB2527TP4D	582	387	20.2	19.7	1	378	
SB2527TP5A	25	16	20.0	19.4	1	15	J
SB2527TP5B	18	11	19.6	21.5	1	12	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/27/72

Site Name: Blg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
SB2527TP3A	1311	G	8 ft	82'6"	85'6"	Brown soil w/green tint, no odor	1x40mL VOA
SB2527TP3B	1315	G	10'	82'6"	85'6"	" " " "	1x40mL VOA
SB2527TP4A	1343	G	6'	56'0"	58'0"	grey/green clay some odor	1x40mL VOA
TP4B	1350	G	8'	56'0"	58'6"	brown soil/clay, distinct odor	1x40mL VOA
TP4C	1355	G	10'	56'0"	58'0"	brown/green sand, TPH odor	1x40mL VOA
TP4D	1400	G	11' 10'6"	56'0"	58'0"	brown/green sand, some odor	1x40mL VOA
TP5A	1502	G	8' 10'6"	75'0"	76'0"	brown sand/clay, no odor	1x40mL VOA
TP5B	1507	G	10' 9'6"	75'0"	76'0"	brown sand/clay, no odor	1x40mL VOA

Ref. Pt. E: Fence Post as marked on map

Ref. Pt. F: " " " "

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): [Signature] 6/27/72 1520 Received by(dd/tt): [Signature] 6/27/72 1520

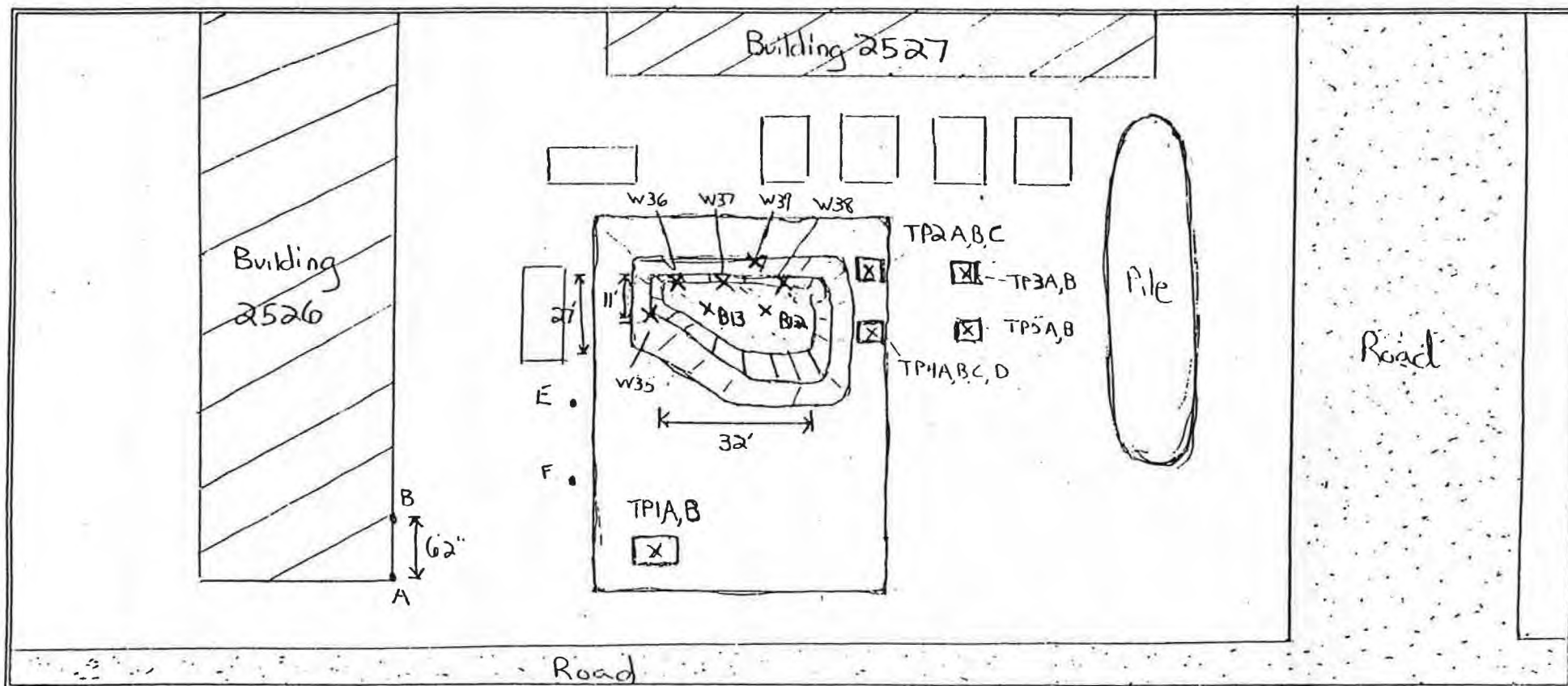
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/27/95

Site Name: Bldg 2527



Comments/Observations:

X - Sample Location

! - water

Samples are given the Prefix SB2527

g. Fixed Points

A → F 38'8"

B → F 38'2"

A → E 42'2"

B → E 40'

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 27 June 1995

Site(s): Bldg 2527

Analyst: MRB/BD

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527TP1A	22	14	19.6	20.3	1	14	J
SB2527TP1B	ND				1	ND	
SB2527TP2A	ND				1	ND	
SB2527TP2B	321	213	7.1	23.1	1	693	
SB2527TP2C	198	131	8.2	25.8	1	412	
SB2527TP3A	16	10	18.2	21.1	1	11	J
SB2527TP3B	17	10	18.3	21.3	1	12	J
SB2527TP4A	966	643	17.9	20.7	5	3718	
SB2527TP4B	481	320	14.3	20.7	5	2314	
SB2527TP4C	676	450	20.0	20.7	1	466	
SB2527TP4D	582	387	20.2	19.7	1	378	
SB2527TP5A	25	16	20.0	19.4	1	15	J
SB2527TP5B	18	11	19.6	21.5	1	12	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/28/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
SB2527TP6A	0856	G	7'0"	40'6" N 57'4" W	35'7" N 57'0" W	Brown Fine sand/clay No odor	1x40mL VOA
SB2527TP6B	0925	G	10'0"	40'6" N 57'4" W	35'7" N 57'0" W	Brown Fine sand/clay w/cobble No odor	1x40mL VOA
TP7A	0935	G	8'0"	59'4" N 70'6" W	57'1" N 35'2" W	Brown/Grey Fine sand/clay No odor	1x40mL VOA
TP7B	0941	G	10'0"	59'4" N 70'6" W	57'1" N 35'2" W	Brown/Grey Fine sand/clay No odor	1x40mL VOA
TP8A	1033	G	7'0"	60'1"	70'10"	Grey/Green clay w/distinct TPH odor	1x40mL VOA
TP8B	1041	G	8'6"	60'1"	70'10"	Black/Green clay w/distinct TPH odor	1x40mL VOA
TP8C	1100	G	10'6"	60'1"	70'10"	Black/Grey clay w/distinct TPH odor	1x40mL VOA

Ref. Pt. E: Fence Post as shown on map

Ref. Pt. F: " " " " " "

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____ c. 2895

Relinquished by(dd/tt): A. Hummel 6/28/95 Received by(dd/tt): E. Blum 1210

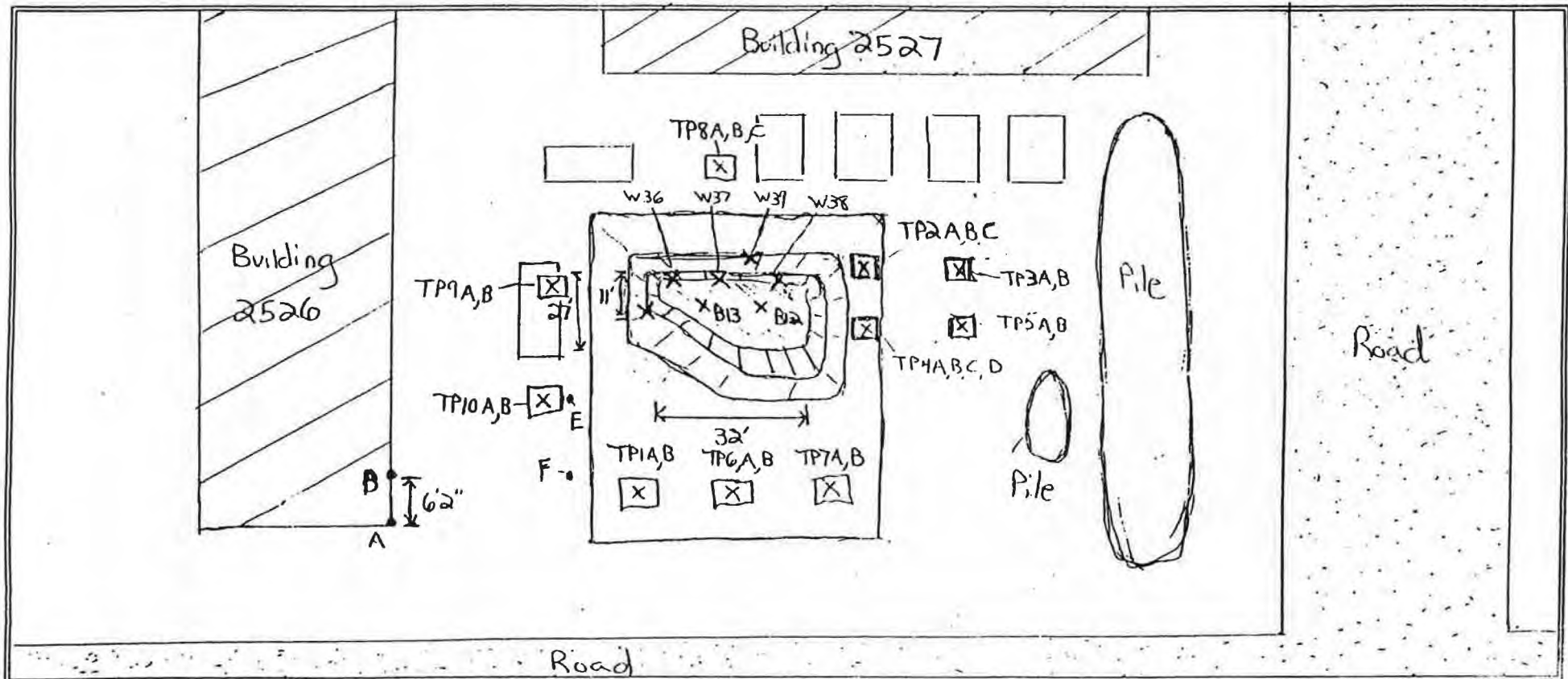
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/28/95

Site Name: Bldg 2527



Comments/Observations:

X-Sample Location.

1 - water

Samples are given the Pref. 32527

6. Fixed Points

$A \rightarrow F$ 38'8"
 $B \rightarrow F$ 38'2"
 $A \rightarrow E$ 42'2"
 $B \rightarrow E$ 40'

Prepared by: Greg Guimond

Pg. 1 of 1

Analyst GG,BD

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/28/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
SB2527TP9A	1305	G	8'0"	26'10"	37'8"	Green/Grey Moist Clay, TPH odor	1x40mL VOA
TP9B	1319	G	10'6"	26'10"	37'8"	Green/Brown Soil, slight TPH odor	1x40mL VOA
TP10A	1355	G	7'0"	10'2"	15'0"	Grey/Green Clay, TPH odor	1x40mL VOA
TP10B	1427	G	10'	10'2"	15'0"	Green/Grey Clay, TPH odor	1x40mL VOA

Ref. Pt. E: Fence post as marked on map

Ref. Pt. F: " " " "

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other 1515

Relinquished by(dd/tt): A. Hummer 6/28/95 Received by(dd/tt): ETC B/2 6.25.95

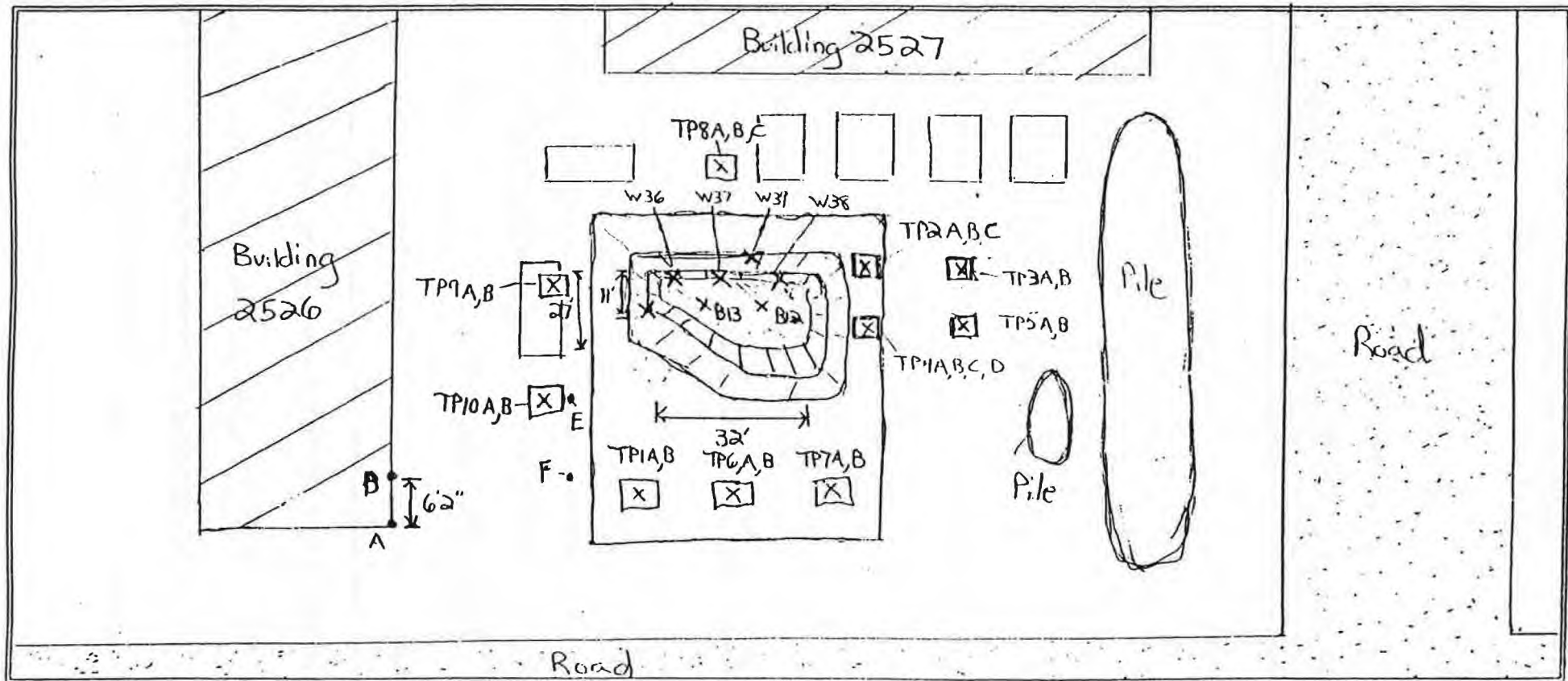
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/28/95

Site Name: Bldg 2527



Comments/Observations:

- X - Sample Location
- ! - water

Samples are given the Prefix SB2527

a. Fixed Points

A → F 38'8"
B → F 38'2"
A → E 42'2"
B → E 40'

Prepared by: Greg Guimond

Pg. 1 of 1

Analyst GG,BD

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/29/95

Site Name: Bldg 2527

Weather: Sunny

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. F		
S82527TP11A	0940	G	8'6"	66'8"	77'5"	Grey clay, distinct TPH odor	1x40mL VOA
S82527TP11B	0944	G	10'6"	66'8"	77'5"	Grey/Black clay, distinct TPH odor	1x40mL VCA
S82527TP12A	1013	G	1'0"	61'4"	72'10"	Black soil, no odor	1x40mL VCA
S82527TP12B	1058	G	6'0"	61'4"	72'10"	Dark brown wet soil, no distinct odor	1x40mL VCA
TP12C	1102	G	6'6"	61'4"	72'10"	Grey clay, distinct TPH odor	1x40mL VCA
TP12D	1115	G	8'0"	61'4"	72'10"	Grey/tan clay. Slight TPH odor	1x40mL VCA
TP12E	1124	G	10'0"	61'4"	72'10"	Black/tan clay/soil slight odor	1x40mL VCA

Ref. Pt. E: Fence post as marked on map

Ref. Pt. F: " " " "

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other 1150

Relinquished by(dd/tt): A. Hummer 6/29/95 Received by (dd/tt): _____

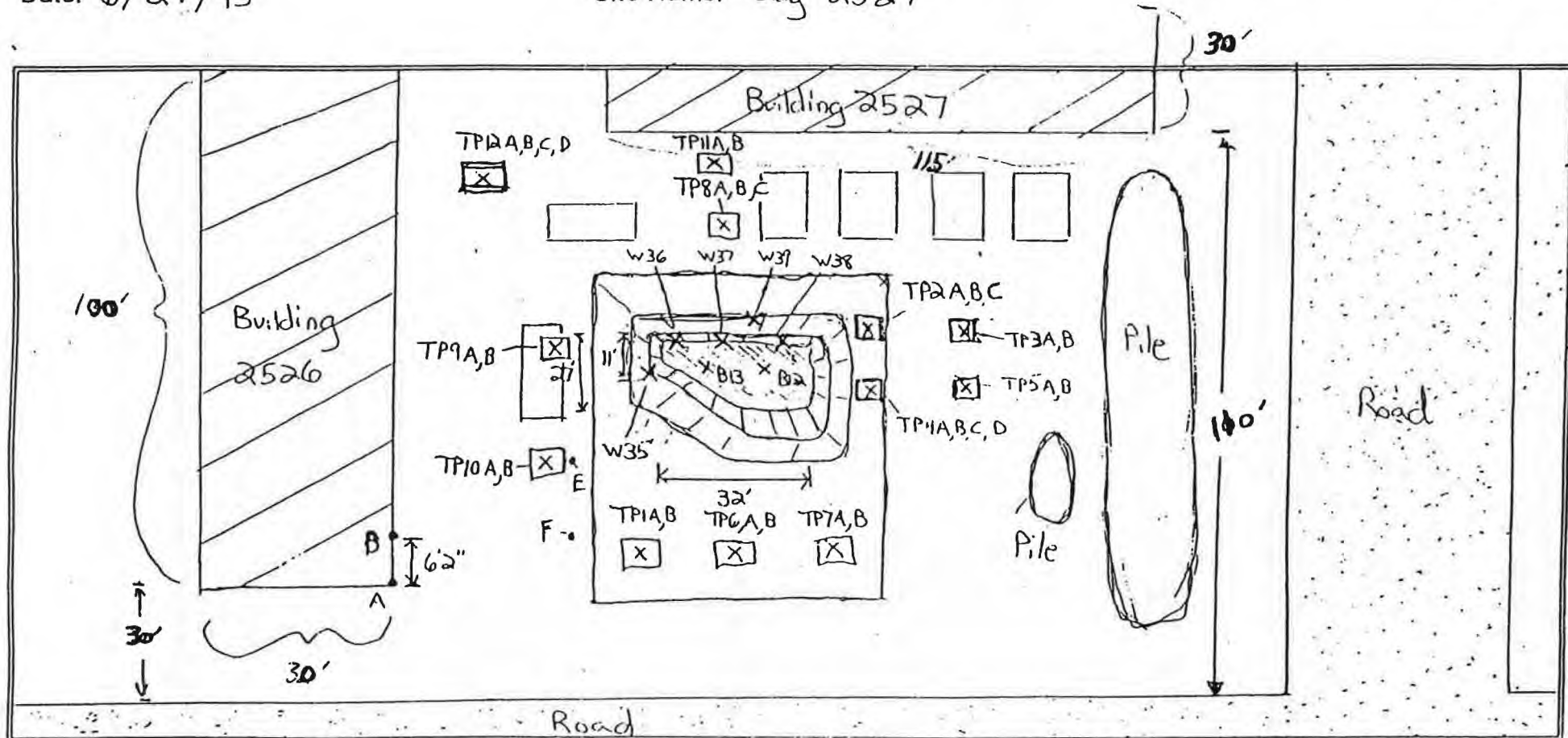
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/29/95

Site Name: Bldg 2527



Comments/Observations:

X - Sample Location

- water

Samples are given the Prefix SB2527

a - Fixed Points

A → F 38'8"
B → F 38'2"
A → E 42'2"
B → E 40'

Prepared by: Greg Guimond

Pg.1 of 1

Analyst: MRB

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 6/30/95

Site Name: Bldg 2527

Weather: Sunny, some clouds

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. A	Ref. Pt. B		
SB2527TPA	1020	G	60"	2510'	24'9'	Brown/Grey clay, no odor	1x40mL VOA
TP13B	1030	G	10'0"	2510'	24'9'	Brown/Grey sand/day, wet, no odor	1x40mL VOA
TP14A	1140	G	8'0"	G 462'	H 603'	Brown moist clay, no odor	1x40mL VOA
TP14B	1150	G	100"	G 462'	H 603'	Brown moist clay, no odor	1x40mL VOA

Ref. Pt. E : _____

Ref. Pt. F : _____

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by (dd/tt): A. Hummer 1200 6/30/95 Received by (dd/tt): SLB 1200 6.30.95

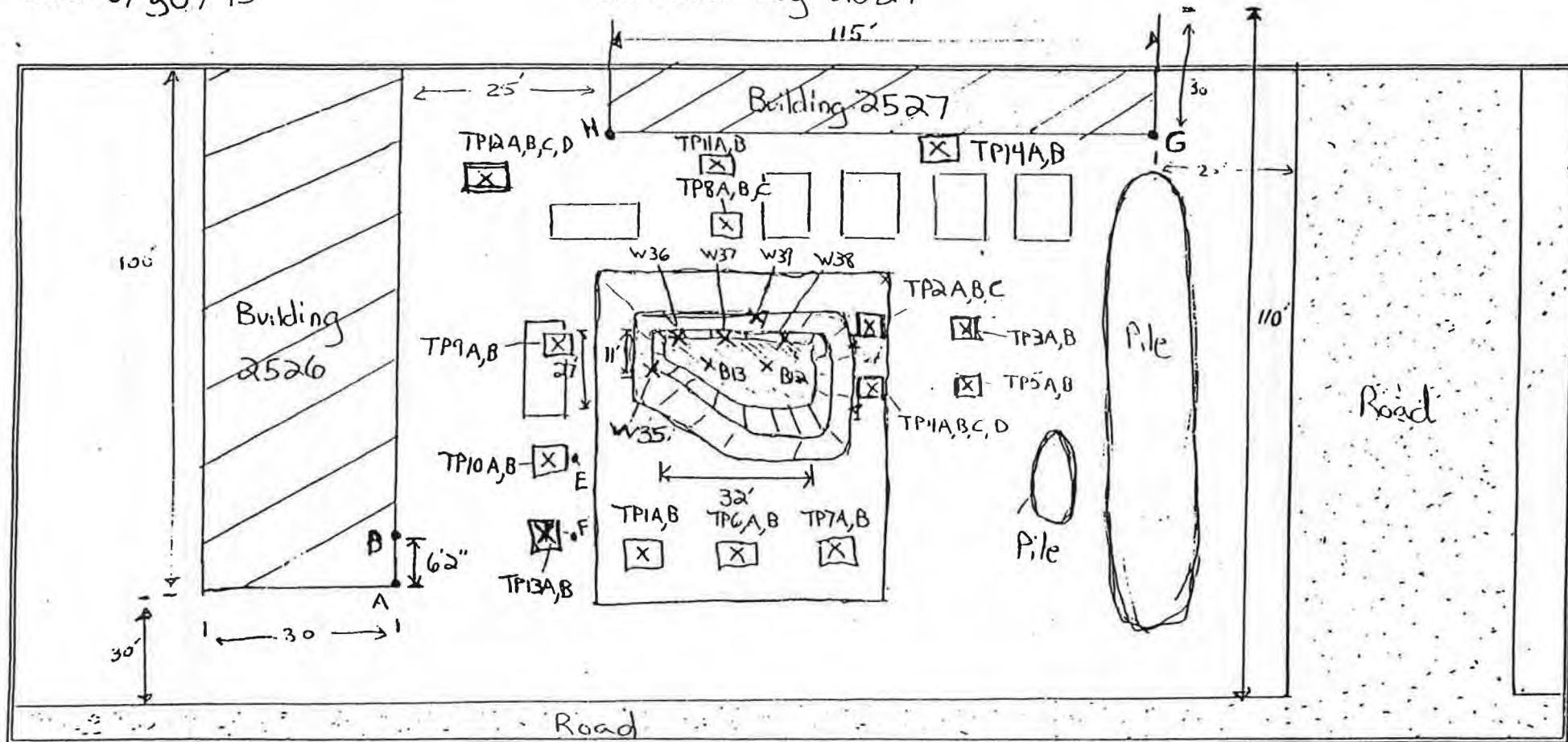
Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 6/30/95

Site Name: Bldg 2527



Comments/Observations:

X - Sample Location

▨ - water

Samples are given the Prefix SB2527

• Fixed Points

A → F 38'8"

B → F 38'2"

A → E 42'2"

B → E 40'

Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 30 June 1995

Site(s): Bldg 2527, Queenstown Spill

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SBQUEENB1	18	11	20.1	20.4	1	11	J
SBQUEENB2	46	30	20.2	20.9	1	31	J
SBQUEENB3	ND				1	ND	
SBQUEENB4	10	6	20.3	20.5	1	6	J
SBQUEENW1	ND				1	ND	
SBQUEENW2	18	11	20.0	20.5	1	11	J
SBQUEENW3	13	8	20.3	20.4	1	8	
SBQUEENW4	ND				1	ND	
SBQUEENW5	ND				1	ND	
SBQUEENW6	21	13	20.3	20.8	1	13	J
SBQUEENW7	23	14	20.2	20.3	1	15	J
SBQUEENW8	55	36	20.0	22.8	1	41	J
SBQUEENW9	16	10	20.4	21.1	1	10	J
SBQUEENW10	57	37	20.0	21.3	1	40	J
SB2527TP13A	29	18	20.2	21.0	1	19	J
SB2527TP13B	ND				1	ND	
SB2527TP14A	ND				1	ND	
SB2527TP14B	ND				1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 7/5/95

Site Name: Bldg 2527

Weather: Cloudy, some sun

Samplers: BD/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. G	Ref. Pt. H		
SB2527TP15A	0925	G	7'	G 50'6"	H 67'10"	Brown clay	1x40mL VOA
TP15B	0931	G	9'6"	G 50'6"	H 67'10"	Brown clay	1x40mL VOA
TP16A	1117	G	8'	I 16'5"	H 30'6"	Brown clay	1x40mL VOA
TP16B	1123	G	10'6"	I 16'5"	H 30'6"	Brown/grey clay	1x40mL VOA

Ref. Pt. E, H, I: Corners of Bldg 2527 (see map)

Ref. Pt. :

Map Attached: (Yes) No

Sample Type: (Screening) Confirmation Disposal/Characterization

Laboratory Destination: (Onsite Lab) AEN - coc # USACE - coc #

Duplicate Taken: Yes (No) Rinsate Taken: Yes (No)

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: (TPH) BTEX Other

Relinquished by (dd/tt): [Signature] 7/5/95 Received by (dd/tt): [Signature] 7-5-95

Relinquished by (dd/tt): Received by (dd/tt):

Pg. of

Analyst MRB/GG

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 2

Date: 7/5/95

Site Name: Bldg 2527

Weather: ~~S~~ Partly Sunny

Samplers: BY/GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. I	Ref. Pt. II		
<u>S32527TP17A</u>	<u>1340</u>	<u>G</u>	<u>10'</u>	<u>19'0"</u>	<u>24'6"</u>	<u>grey/brown clay, no odor</u>	<u>1x40mL VOA</u>

Ref. Pt. H₂I: Corners of Bldg 2527, (see map)

Ref. Pt. :

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # USACE - coc #

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other

Relinquished by (dd/tt): M Hummer 7/5/95 1415 Received by (dd/tt): DNB 7.5.95 1415

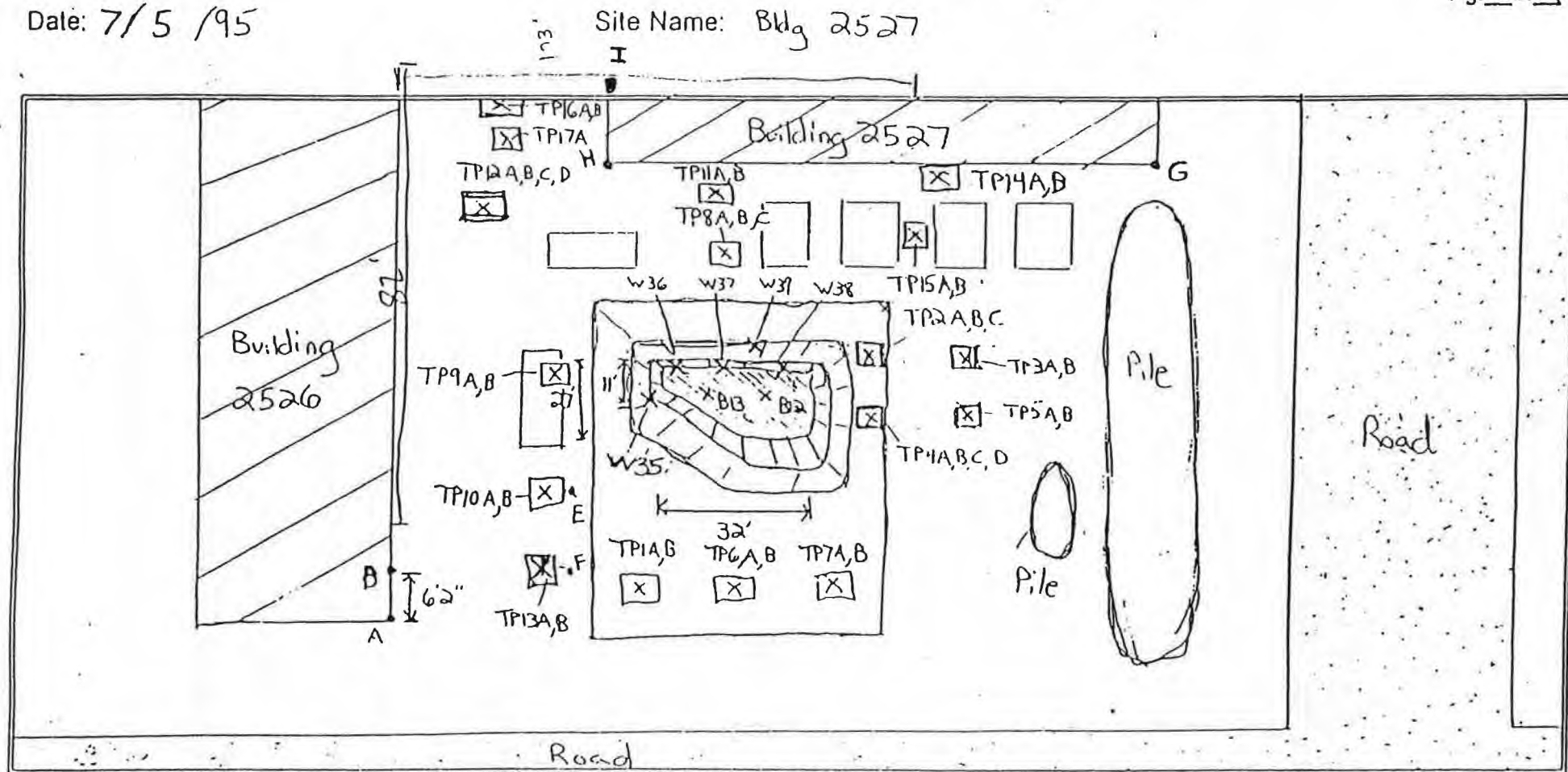
Relinquished by (dd/tt): Received by (dd/tt):

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 7/5/95

Site Name: Bldg 2527



Comments/Observations:

X - Sample Location

! - water

Samples are given the Prefix SB2527

a. Fixed Points

A → F 38'8"

B → F 33'2"

A → E 40'2"

B → E 40'

Prepared by: Greg Guimond

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 2 of 4

Date: 10-3-95

Site Name: 2527

Weather: Sunny, 78

Samplers: MJ MB

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. A	Ref. Pt. B		
SB2527W41	1053	G	8'2"	21'8"	38'9"	Rocky, Wet clay w oily odor	1 x 40ml
W42	1055		8'2"	17'2"	43'7"		
W43	1058		8'6"	15'6"	47'1"		
W44	1059		8'5"	15'6"	48'5"		
W45	1104		8'7"	17'4" 29'3"	49'1"		
W46	1108		8'7"	29'3"	31'4"		
W47	1111		8'10"	30'2"	30'9"		
W48	1430		7'6"	33'10"	33'5"		

Ref. Pt. A: Corner of bldg. See attached map

Ref. Pt. B: door of bldg. - See attached map

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by (dd/tt): Matthew Jones 10-3-95 1620 Received by (dd/tt): _____

Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 4

Date: 10-3-95

Site Name: 2527

Weather: Sunny, 78°

Samplers: MS, MB, BD

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates Ref. Pt. A	Coordinates Ref. Pt. B	Sample Description	# of Bottles
SB2527B14	1100	G	8'3"	24'5"	39'47"	Rocky Clay Soil w/ oily odor	1 x 40 ml
B15	1105		11'2"	27'4"	42'10"		
B16	1420		9'10"	30'8"	40'8"		
B17	1423		9'11"	35'1"	42'6"		
B18	1425		9'7"	40'4"	46'4"		
B19	1428		8'11"	44'8"	50'7"		
B20	1431		8'10"	49'7"	51'4"		
W40 MSB21	1050		8'10"	25'5"	35'1"		

Ref. Pt. A: Corner of bldg. - See attached map

Ref. Pt. B: Door of Bldg. See attached map

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by (dd/tt): Matthew Jones 10-3-95 1620 Received by (dd/tt): A. Guimond 10-3-95 1620

Relinquished by (dd/tt): _____ Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #1G208**

Pg. 3 of 4

Date: 10-3-95

Site Name: 2527

Weather: Sunny, 78°

Samplers: MJ MB BD

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. A	Ref. Pt. B		
SB2527-1433	1433	G	8'10"	36'2"	36'6"	Rocky Clay Soil w/ oily odor	1 x 40ml
W50	1439		7'1"	43'1"	35'10"		
W51	1443		8'7"	47'10"	46'2"		
W52	1447	↓	8'3"	52'3"	51'2"	↓	↓

Ref. Pt. A: Corner of bldg - See attached map

Ref. Pt. B: door of bldg. - See attached map

Map Attached: (Yes) No

Sample Type: (Screening) Confirmation Disposal/Characterization

Laboratory Destination: (Onsite Lab) AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes (No) Rinsate Taken: Yes (No)

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: (TPH) BTEX Other _____

Relinquished by(dd/tt): Matthew Jones 10-3-95 1620 Received by (dd/tt): _____

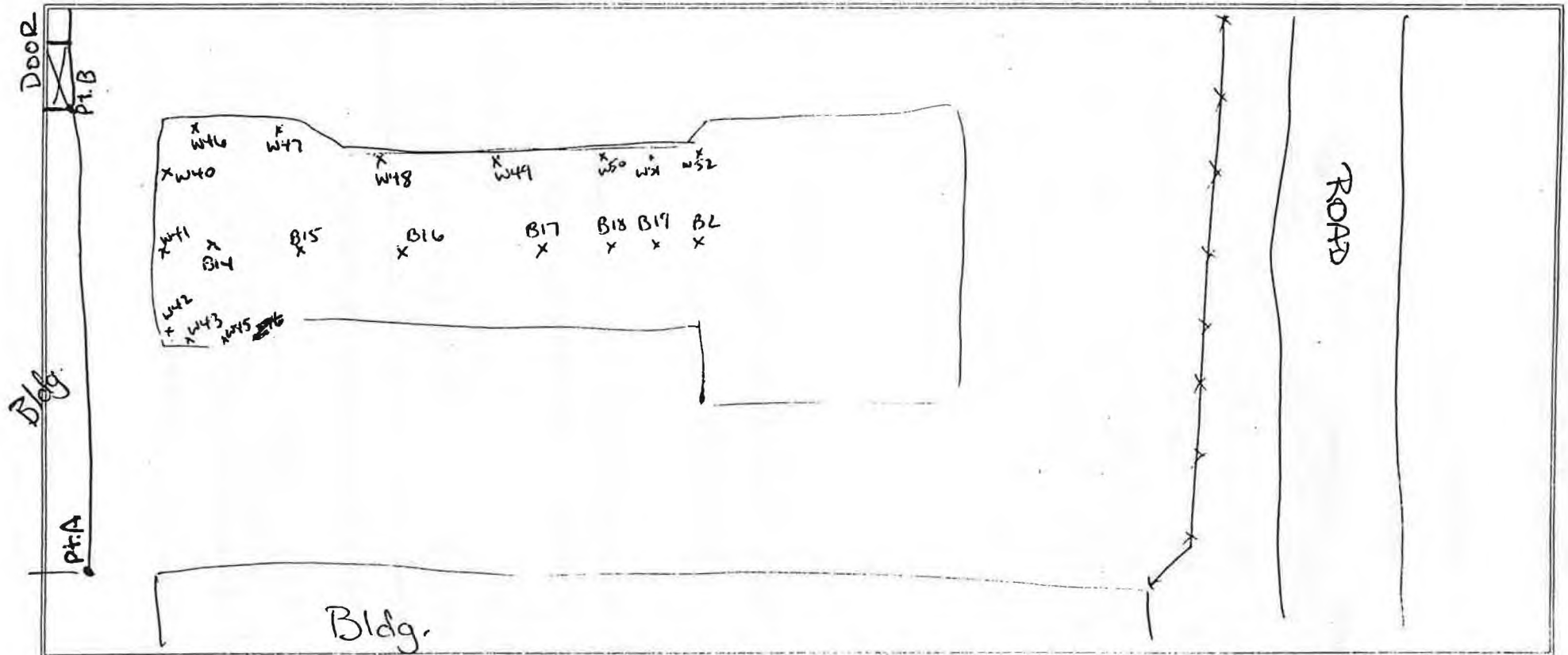
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 4 of 4

Date: 10-3-95

Site Name: 2527



Comments/Observations:

- o - Fixed point
- x - Sample location
- x x x - Fenceline

Prepared by: Mat' Jones

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 3 October 1995

Site(s): Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B14	ND	ND	19.4	20.8	1	ND	
SB2527B15	770	567	19.8	20.8	1	596	
SB2527B16	474	348	19.9	21.2	1	371	
SB2527B17	85	60	19.9	21.3	1	64	
SB2527B18	28	18	20.2	21.3	1	19	J
SB2527B19	403	296	20.4	19.5	1	282	
SB2527B20	395	290	18.9	19.5	10	2988	
SB2527W40	ND	ND	19.8	20.8	1	ND	
SB2527W41	341	250	19.9	20.1	10	2521	
SB2527W42	96	68	18.6	20.4	50	3736	
SB2527W43	253	184	11.5	22.9	50	18362	
SB2527W44	392	287	6.7	21.7	5	4654	
SB2527W45	245	178	15.2	22.1	5	1298	
SB2527W46	198	144	19.5	20.1	25	3702	
SB2527W47	735	541	20.0	20.8	1	563	
SB2527W48	415	304	18.9	23.0	10	3705	
SB2527W49	1275	941	17.1	22.0	1	1211	
SB2527W50	428	314	19.6	21.7	10	3477	
SB2527W51	670	493	19.4	20.3	1	516	
SB2527W52	255	186	19.7	19.9	10	1878	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 3 October 1995

Site(s): Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B14	ND	ND	19.4	20.8	1	ND	
SB2527B15	770	567	19.8	20.8	1	596	
SB2527B16	474	348	19.9	21.2	1	371	
SB2527B17	85	60	19.9	21.3	1	64	
SB2527B18	28	18	20.2	21.3	1	19	J
SB2527B19	403	296	20.4	19.5	1	282	
SB2527B20	395	290	18.9	19.5	10	2988	
SB2527W40	ND	ND	19.8	20.8	1	ND	
SB2527W41	341	250	19.9	20.1	10	2521	
SB2527W42	96	68	18.6	20.4	50	3736	
SB2527W43	253	184	11.5	22.9	50	18362	
SB2527W44	392	287	6.7	21.7	5	4654	
SB2527W45	245	178	15.2	22.1	5	1298	
SB2527W46	198	144	19.5	20.1	25	3702	
SB2527W47	735	541	20.0	20.8	1	563	
SB2527W48	415	304	18.9	23.0	10	3705	
SB2527W49	1275	941	17.1	22.0	1	1211	
SB2527W50	428	314	19.6	21.7	10	3477	
SB2527W51	670	493	19.4	20.3	1	516	
SB2527W52	255	186	19.7	19.9	10	1878	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208Pg. 1 of 3

Date: 10/18/95

Site Name: 2527

Weather: Sunny, 60°

Samplers: MJ

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527W53	1328	G	16"			Wet, Silty clay soil	1 x 40ml
W54	1331						
W55	1335						
W56	1338						
W57	1342					Wet, clay soil, Rocky	
W58	1346						
W59	1350						
W60	1353	✓					

Ref. Pt. ____: N/ARef. Pt. ____: N/AMap Attached: ☒ Yes ☐ NoSample Type: ☒ Screening ☐ Confirmation ☐ Disposal/CharacterizationLaboratory Destination: ☐ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____Duplicate Taken: ☐ Yes ☐ No ☐ Rinsate Taken: ☐ Yes ☐ No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): Matthew Jones 10/18/95 1600 Received by(dd/tt): A. Hummer 10/18/95 1600

Relinquished by(dd/tt): _____ Received by(dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of 3

Date: 10/18/95

Site Name: 2527

Weather: Sunny, 60°

Samplers: MJ

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
<u>582527B21</u>	<u>1355</u>	<u>G</u>				<u>Wet Soil, Rocky</u>	<u>1x40ml</u>
<u>B22</u>	<u>1358</u>	↓					
<u>B23</u>	<u>1359</u>						
<u>B24</u>	<u>1402</u>						

Ref. Pt. : ~~1017A~~

Ref. Pt. :

Map Attached: (Yes) No

Sample Type: (Screening) Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # USACE- coc #

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: (TPH) BTEX Other

Relinquished by(dd/tt): Matthew Jones 10/18/95 1600

Received by (dd/tt): A. Mumm 10/18/95 1600

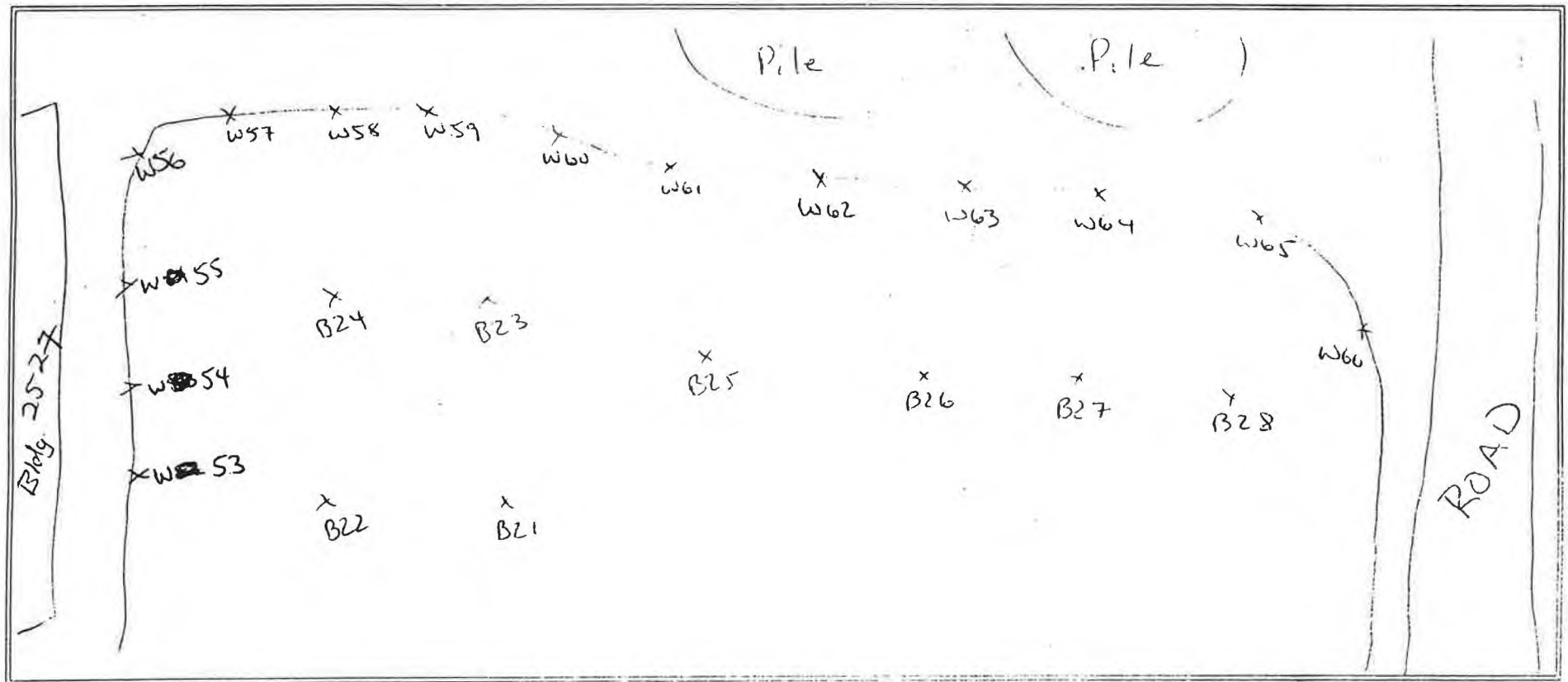
Relinquished by(dd/tt): Received by (dd/tt):

Sample Location Map
Fort Devens - Project #16208

Pg. 3 of 7

Date: 10/18/1955

Site Name: 2527



Comments/Observations:

x - indicates location of grab samples

Prepared by: Martin Jones

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: Oct-18-1995

Site(s): Bldg 2527

Analyst: MJ

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W53	801	562	5.2	22.7	1	2455	
SB2527W54	450	315	5.7	22.1	1	1222	
SB2527W55	330	231	21.3	20.5	1	222	
SB2527W56	533	374	21.1	21.8	1	386	
SB2527W57	ND	ND	21.9	22.4	1	ND	
SB2527W58	ND	ND	20.9	21.4	1	ND	
SB2527W59	ND	ND	21.0	22.1	1	ND	
SB2527W60	48	32	21.0	21.0	1	32	J
SB2527B21	ND	ND	20.7	21.1	1	ND	
SB2527B22	ND	ND	19.4	20.8	1	ND	
SB2527B23	ND	ND	19.6	21.2	1	ND	
SB2527B24	ND	ND	20.8	21.1	1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 3

Date: 10/19/95

Site Name: 2527

Weather: Sunny, 60°

Samplers: MJ

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
S2527W61	0850	G				Wet, Rocky Soil	1 x 40ml
W62	0853						
W63	0855						
W64	0857						
W65	0900					w/ Cily odor	
W66	0904					w/ Cily odor	
B25	0908						
B26	0910						

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☐ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): Matthew Jones 10/19/95 1000 Received by(dd/tt): A. Hummel 10/19/95 1000

Relinquished by(dd/tt): _____ Received by(dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of

Date: 10/19/95

Site Name: 2527

Weather: Sunny, 60°

Samplers: MJ

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
<u>502527-027</u>	<u>0915</u>	<u>G</u>	<u>7</u>				
<u>502527-028</u>	<u>0917</u>	<u>G</u>					

Ref. Pt. :

Ref. Pt. :

Map Attached: Yes ☒ No ☐

Sample Type: Screening ☒ Confirmation ☐ Disposal/Characterization ☐

Laboratory Destination: Onsite Lab ☒ AEN - coc # USACE - coc #

Duplicate Taken: Yes ☐ No ☒ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH ☒ BTEX ☐ Other ☐

Relinquished by(dd/tt): Matthew Jones 1000 ^{10/19/95} Received by (dd/tt): A. Hummer 1000 ^{10/19/95}

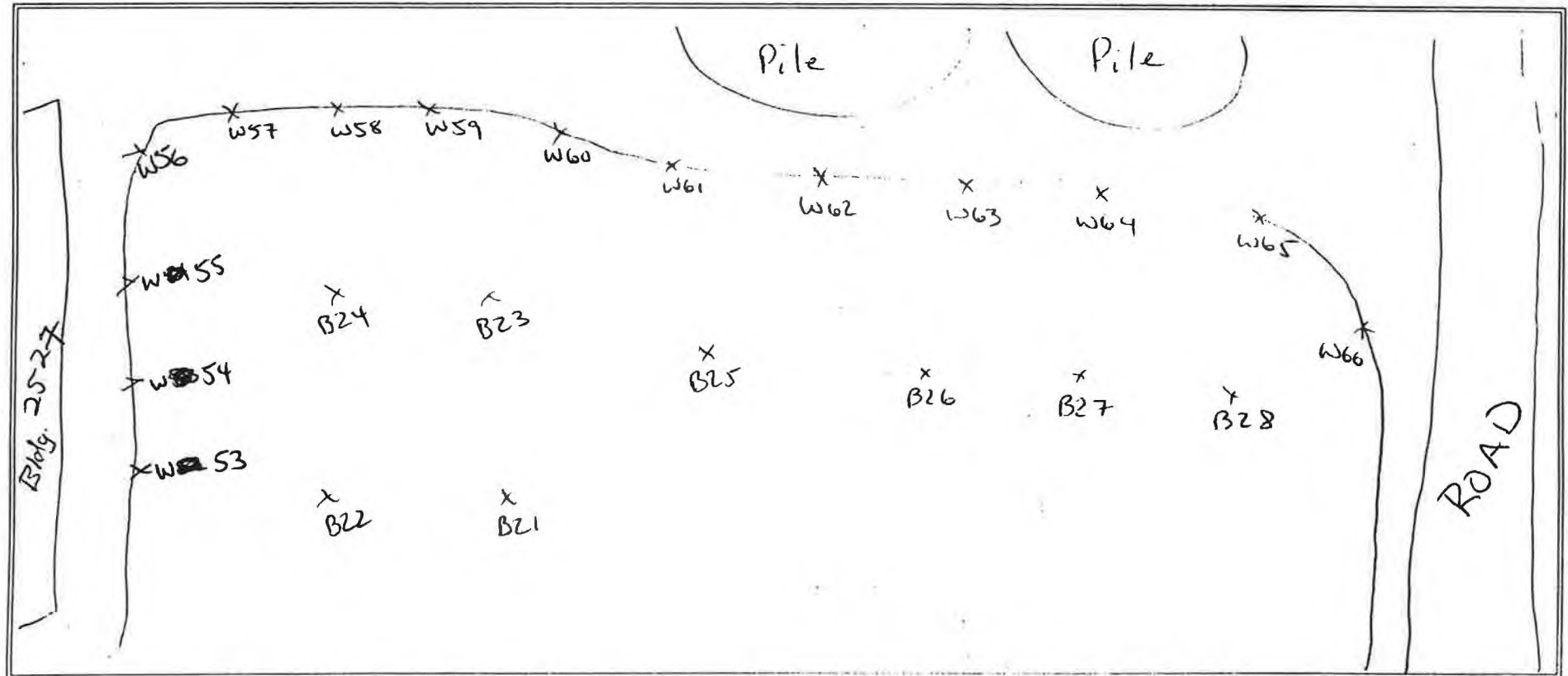
Relinquished by(dd/tt): Received by (dd/tt):

Sample Location Map
Fort Devens - Project #16208

Pg. 3 of 3

Date: 10/19/95

Site Name: 2527



Comments/Observations:

x - indicates location of grab samples

Prepared by: Matt Jones

Soil Sample Collection Log Fort Devens - Project #16208

Pg 1 of 2

Date: 10-24-95

Site Name: 2527

Weather: Sunny 70°

Samplers: MJ

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
5B2527030	1430	G				Wet, Rocky Soil	1 x 40ml
B31	1435						
W73	1440						
W74	1443						
W75	1452						
W76	1457						
W77	1501						
W78	1505						
W79	1510						
Ref. Pt							

Ref. Pt _____

Map Attached: ☒ Yes ☐ NoSample Type: ☒ Screening ☐ Confirmation ☐ Disposal/CharacterizationLaboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____Relinquished by(dd/tt): Matthew Jones 10-24-95 Received by (dd/tt): _____

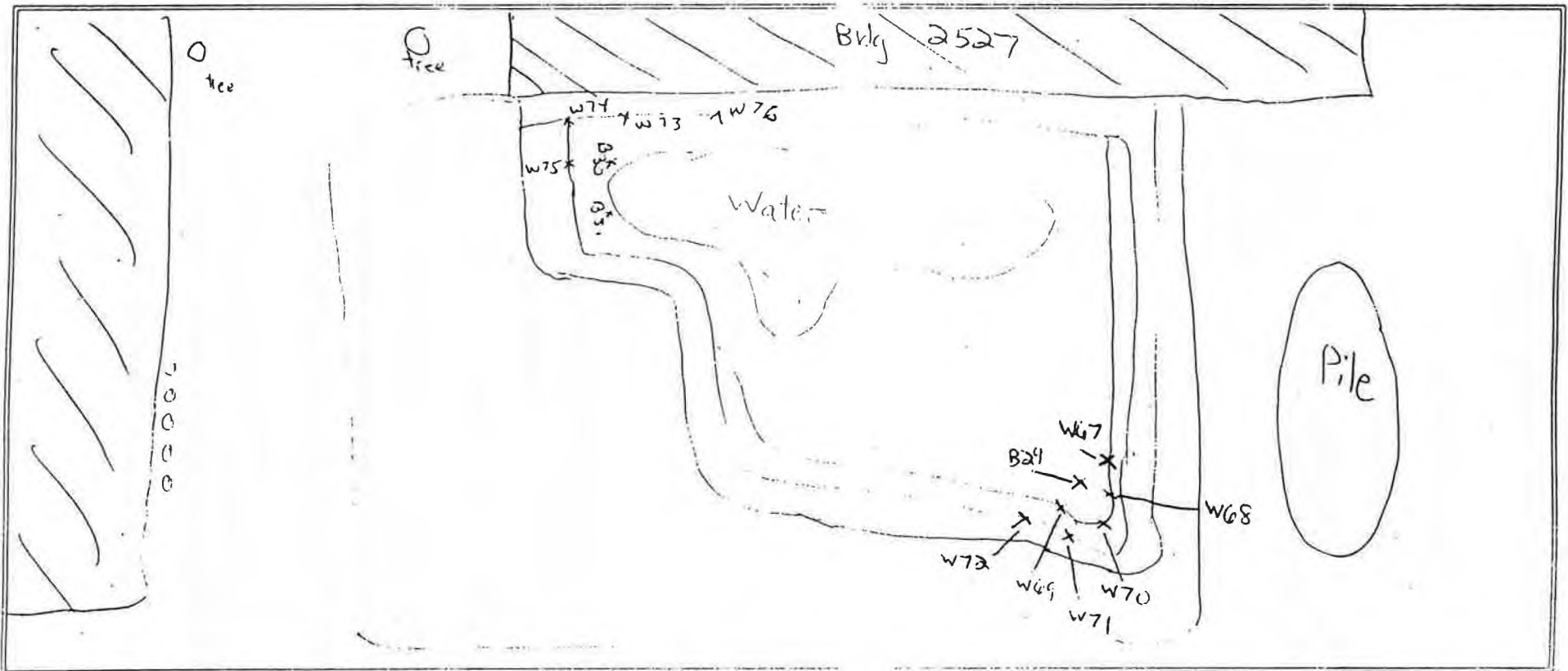
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg 2 of 2

Date: 10-24-95

Site Name: Bldg 2527 Excavation



Comments/Observations:

x- discrete sample location

Prepared by

Greg Guiraud

42

Date: Oct-24-1995.

Site(s): Bldg 2527

Analyst: MJ

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Pg. 1 of 4

Date: 10.25.95 Site Name: Bldg 2527

Weather: Sunny, 62° Samplers: GG, MJ

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates Ref. Pt. Ref. Pt.	Sample Description	# of Bottles
SB2527W80	1519	G			wet gold sand	1x40ml 100A
B32	1521				moist gold silty clay	
W81	1524				wet gold silty clay w pebbles	
B33	1526				wet gold sand	
W82	1527				gold sand w pebbles	
W83	1528				wet gold clay	
B34	1531				gold clayey sand w pebbles	
W84	1533				moist gold clay	

Ref. Pt. _____

Ref. Pt. _____

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE- coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): _____ Received by (dd/tt): SABler 1630 10.25.95

Relinquished by(dd/tt): _____ Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Date: 10.25.95

Site Name: Bay 2527

Pg. 2 of 4

Weather: Sunny, 62°e

Samplers: GG, NJ

Sample ID Number	Comp/ Time	Sample Grab Depth (ft)	Coordinates Ref. Pt. Ref. Pt.	Sample Description	# of Bottles
SB 2527 B35	1536			gold clay w pebbles	(Kuband von)
W85	1538			gold s2d, TPH odor	
W86	1541			gold clay, cy s2d	
W87	1544			brown silty clay w pebbles, TPH odor	
B36	1545			gold clay w pebbles	
B37	1548			gold silty s2d	
W88	1546			moist red brown s2d w pebbles, TPH odor	
W89	1550			moist gold s2d, TPH odor	

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): _____ Received by(dd/tt): TABLE 1630 10.25.95

Relinquished by(dd/tt): _____ Received by(dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Date: 10.25.95

Site Name: Bldg 2527

Pg. 3 of 4

Weather:

Sunny, 62°

Samplers:

GG, mJ

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527 W90	1553	G				gold sand w pebbles	1x1000 WCA
B38	1556					goldish sand	
W91	1558					dark wet clayey sand strong TPH odor	
W92	1601					wet gray gold sand, TPH odor	
W93	1604					wet gold sand w pebbles	
W94	1606					wet gold sand w pebbles	

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐

Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): _____

Received by (dd/tt): ENBLE 1630 10.25.95

Relinquished by(dd/tt): _____

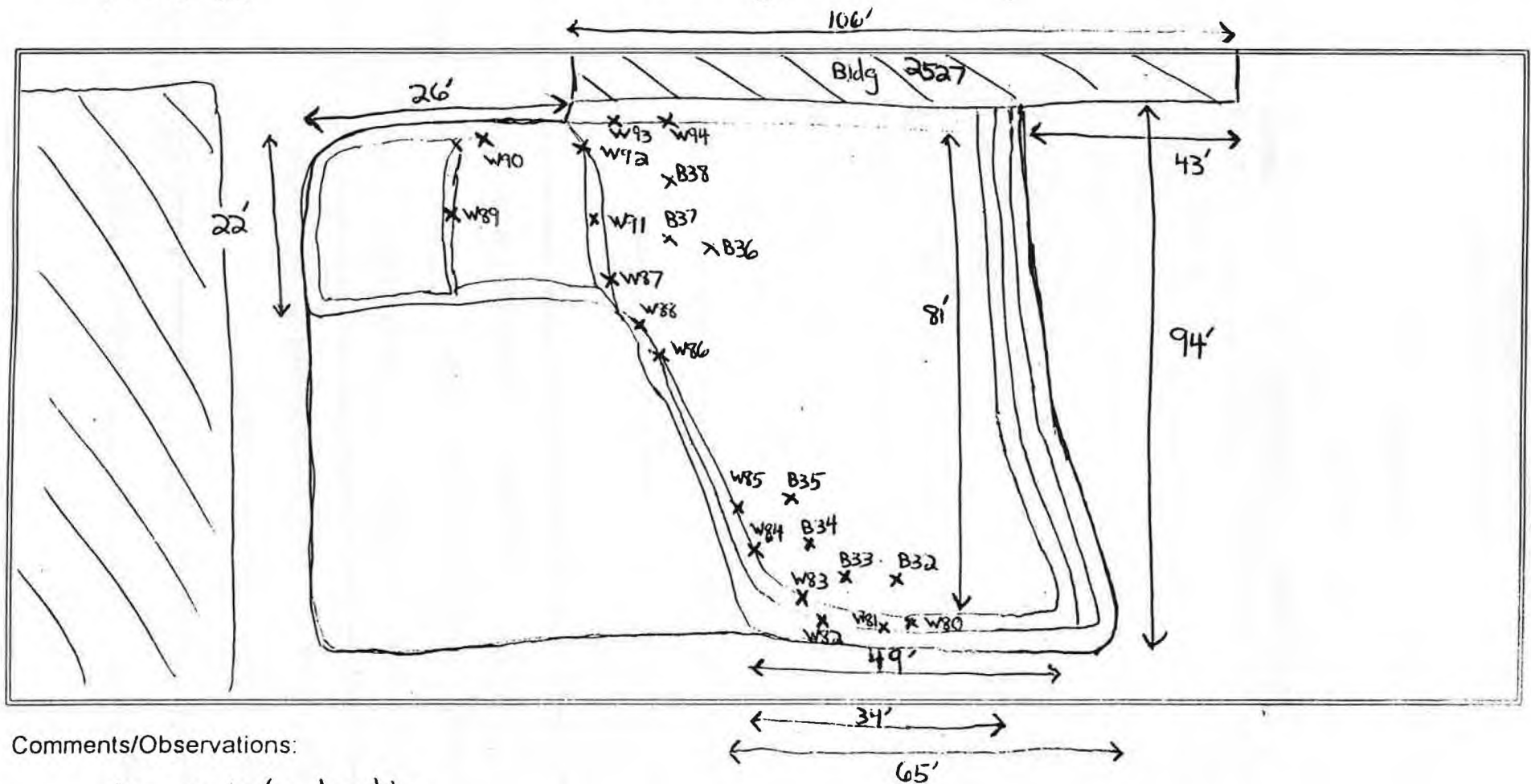
Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 4 of 4

Date: 10-25-95

Site Name: Bldg 2527



Prepared by: Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg 1 of 2

Date: Oct-25-1995

Site(s): 2527

Analyst: MJ/MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W80	ND	ND	20.2	20.2	1	ND	
SB2527W81	ND	ND	22.0	20.5	1	ND	
SB2527W82	ND	ND	19.8	21.0	1	ND	
SB2527W83	ND	ND	20.7	20.3	1	ND	
SB2527W84	ND	ND	20.0	20.5	1	ND	
SB2527W85	129	89	19.5	21.2	1	97	
SB2527W86	1034	726	9.4	22.7	1	1754	
SB2527W87	340	238	13.0	21.9	1	401	
SB2527W88	1250	879	19.3	19.6	1	892	
SB2527W89	1230	865	9.3	21.7	1	2017	
SB2527W90	21	13	18.8	20.0	1	14	J
SB2527W91	939	660	6.0	23.9	1	2627	
SB2527W92	184	128	3.0	23.1	1	985	
SB2527W93	12	7	20.3	20.0	1	7	J
SB2527W94	ND	ND	20.0	21.3	1	ND	
SB2527B32	ND	ND	17.6	20.3	1	ND	
SB2527B33	ND	ND	17.5	21.6	1	ND	
SB2527B34	ND	ND	18.8	20.8	1	ND	
SB2527B35	ND	ND	18.4	21.3	1	8	
SB2527B36	ND	ND	22.0	20.4	1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg 2 of 2

Date: Oct-25-1995

Site(s): 2527

Analyst: MJ/MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B37	ND	ND	19.3	21.0	1	ND	
SB2527B38	ND	ND	20.7	20.9	1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 4

Date: 10-27-95

Site Name: Bldg 2527

Weather: Sunny, 68°F

Samplers: GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
582527 w95	1020	G				Tan/Grey clay, moist	1x40mL VOA
w96	1023						
w97	1026						
w98	1029						
w99	1032						
w100	1035						
w101	1038						
w102	1041						

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): A. Himmelfarb 1200 10-27-95 Received by (dd/tt): _____

Relinquished by(dd/tt): _____ Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of 4

Date: 10-27-95

Site Name: Bldg 2527

Weather: Sunny, 68°F

Samplers: GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527W103	1044	G				Tan/Grey clay, moist	1x40mL VOA
W104	1047						
W105	1051						
W106	1055						
W107	1059						
W108	1104						
B339	1109						
B40	1114						

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: ☐ Yes ☐ No Rinsate Taken: ☐ Yes ☐ No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): A. Munoz 1200 10-27-95 Received by (dd/tt): _____

Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Soil Sample Collection Log
Fort Devens - Project #16208

Date: 10-27-95

Site Name: Bldg 2527

Pg. 3 of 4

Weather: Sunny, 68°F

Samplers: GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527B11	1119	G				Tan/Grey clay, moist	1x40mL VoA
B42	1123	↓				↓	↓
B43	1128	↓					

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX Other _____

Relinquished by (dd/tt): A. Hummer ¹²⁰⁰ 10-27-95 Received by (dd/tt): _____

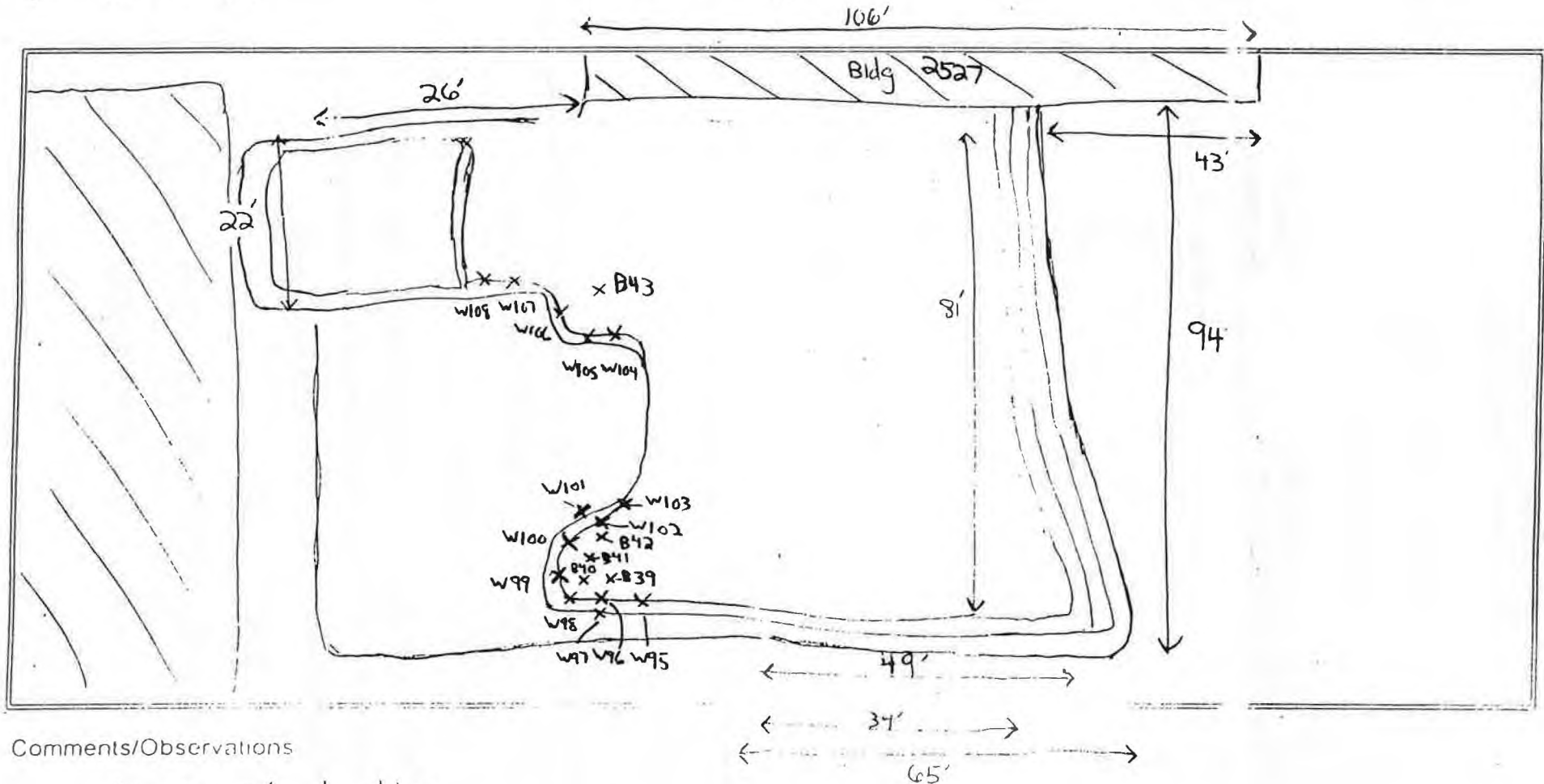
Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 4 of 4

Date: 10-27-95

Site Name: Bldg 2527



Comments/Observations

X- sample location

- samples denoted with prefix SB2527

Prepared by Greg Guimond

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg 1 of 1

Date: Oct-27-1995

Site(s): 2527

Analyst: MJ/MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B39	1320	928	11.8	20.3	1	1596	
SB2527B40	86	59	12.1	21.8	1	106	
SB2527B41	395	276	8.6	22.1	1	710	
SB2527B42	200	139	15.9	22.3	1	195	
SB2527B43	599	420	7.5	22.0	1	1232	
SB2527W95	1396	981	10.7	21.7	1	1990	
SB2527W96	456	319	18.1	21.8	1	385	
SB2527W97	59	40	13.6	21.7	1	64	
SB2527W98	36	24	13.7	22.1	1	38	J
SB2527W99	1221	858	10.6	22.5	5	9108	
SB2527W100	14	8	12.9	22.2	1	14	J
SB2527W101	13	7	16.2	23.3	1	11	J
SB2527W102	692	486	9.3	21.8	5	5692	
SB2527W103	626	439	10.2	19.5	1	840	
SB2527W104	908	638	10.1	19.8	5	6251	
SB2527W105	457	320	10.5	22.7	5	3461	
SB2527W106	ND	ND	12.3	22.1	1	ND	
SB2527W107	ND	ND	15.1	21.7	1	ND	
SB2527W108	ND	ND	16.2	22.5	1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of

Date: 10-27-95

Site(s): Bldg 2527

Analyst: GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527 B39	1320		11.8	20.3			
B40	86		12.1	21.8			
B41	395		8.6	22.1			
B42	200		15.9	22.3			
B43	599		7.5	22.0			
W95	1396		10.7	21.7			
W96	456		18.1	21.8			
W97	59		13.6	21.7			
W98	36		13.7	22.1			
W99	1221		10.6	22.5	5		
W100	14		12.9	22.2			
W101	13		16.2	23.3			
W102	692		9.3	21.8	5		
W103	626		10.2	19.5			
W104	908		10.1	19.8	5		
W105	457		10.5	22.7	5		
W106	ND		12.3	22.1			
W107	ND		15.1	21.7			
W108	ND		16.2	22.5			

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

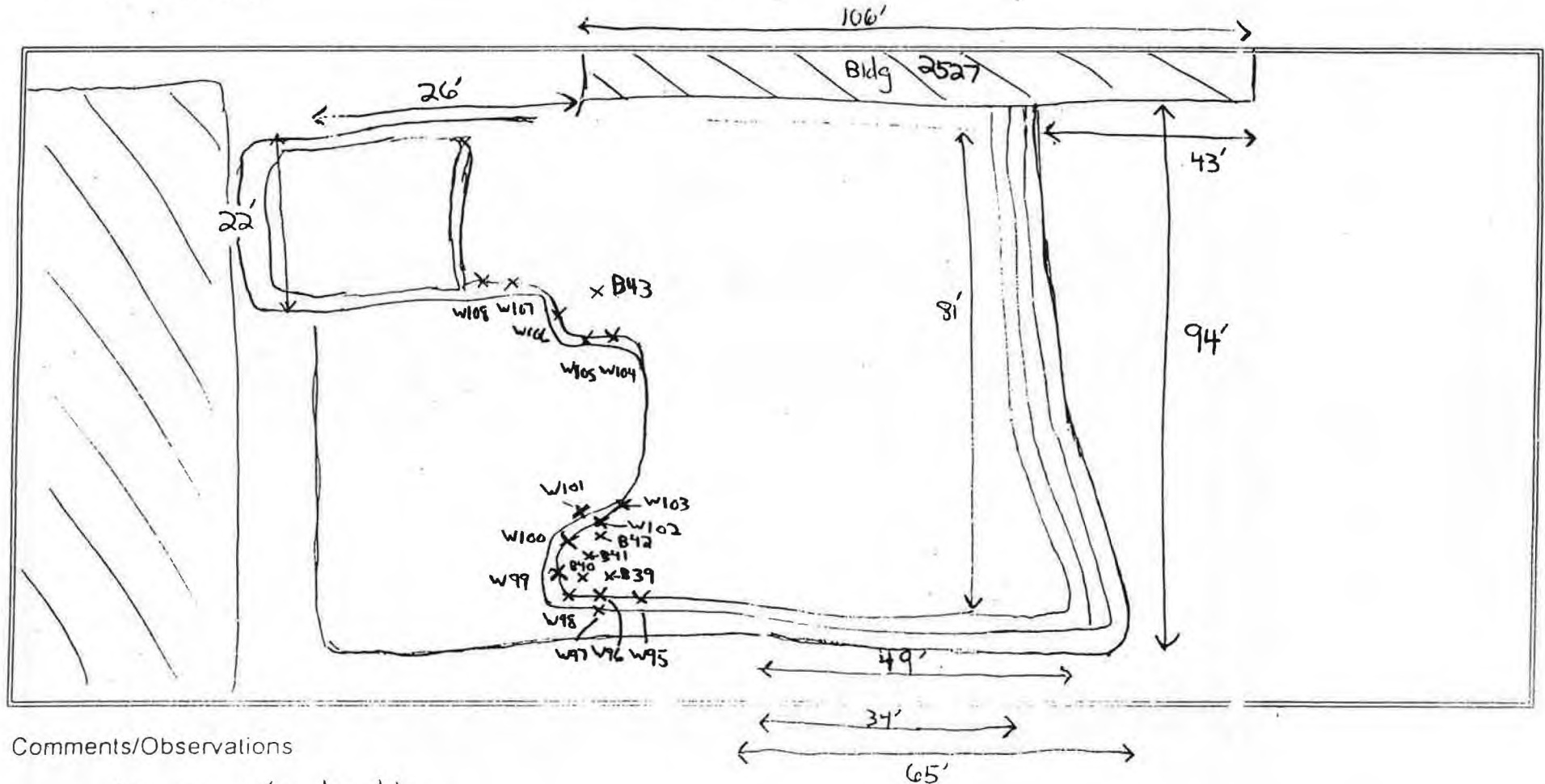
J - Indicates estimated concentration below practical quantitation limit

Sample Location Map
Fort Devens - Project #16208

Pg. 4 of 4

Date: 10-27-95

Site Name: Bldg 2527



Comments/Observations

X- sample location

- samples denoted with prefix SB2527

Prepared by Greg Guimond

**Soil Sample Collection Log
Fort Devens - Project #16208**

Date: 11-27-95

Site Name: Bldg 2527

Page 1 of 2

Weather: Overcast

Samplers: JB

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. (E)	Ref. Pt. (N)		
5B 2527 W 110	1013	G	5'6"	43'5"	64'3"	wet orange clay, some coarse sand, pebbles	1x 40ml 30A
W 111	1015		5'6"	37'3"	57'0"	coarse orange sand pebbles	
W 112	1016		5'6"	52'7"	73'2"	yellow grey clay w pebbles	
B 44	1022		7'6"	38'7"	56'1"	wet orange clay	
B 45	1018		8'0"	34'4"	53'0"	wet orange clay, dk brown sand, lots of pebbles	
B 46	1022	✓	7'6"	33'7"	52'1"	med brown clay w pebbles	↓

Ref. Pt. E: left corner of Bldg 2526

Ref. Pt. D: left corner of second window of Bldg 2526

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE- coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other 11-27-95

Relinquished by(dd/tt): JMB/1030 Received by(dd/tt): EA BL/1030

Relinquished by(dd/tt): _____ Received by(dd/tt): _____

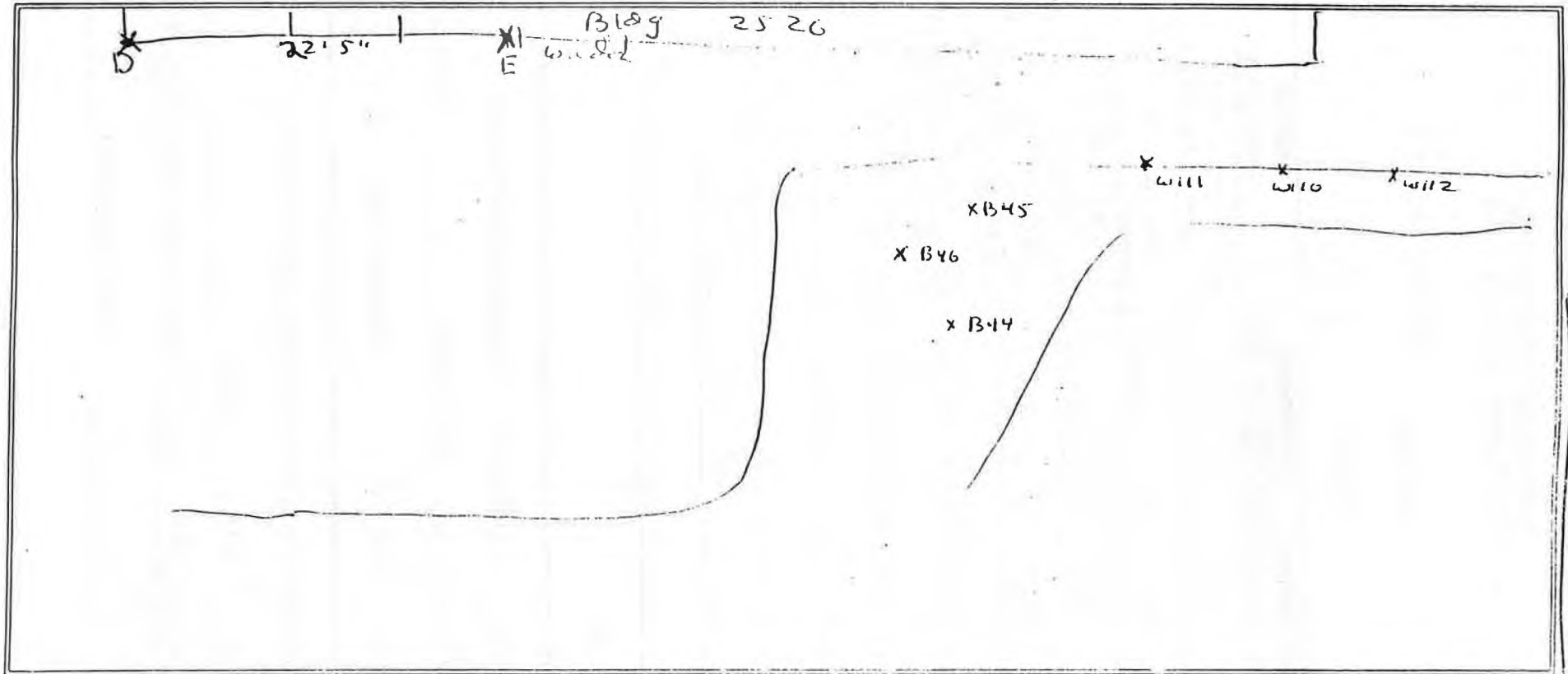
B3

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 11. 27. 95

Site Name: Blog 2527



Comments/Observations:

Not To Scale

Prepared by: MRB

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 27 November 1995

Site(s): Bldg 2628, Sheboken Well
Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SHEBW30	ND	ND	21.3	18.9	1	ND	
SHEBW31	ND	ND	20.4	18.2	1	ND	
SHEBW32	ND	ND	20.6	18.5	1	ND	
SHEBB31	41	27	20.9	19.0	1	25	J
SHEBB32	12	7	20.2	18.8	1	6	J
SB2527W110	10	5	20.1	18.4	1	5	J
SB2527W111	10	5	19.8	17.7	1	5	J
SB2527W112	ND	ND	19.9	18.7	1	ND	
SB2527B44	ND	ND	20.1	19.0	1	ND	
SB2527B45	ND	ND	20.6	20.0	1	ND	
SB2527B46	ND	ND	20.3	19.8	1	ND	
SB2527B47	1401	985	10.5	19.0	1	1782	
SB2527B48	525	368	5.7	20.0	1	1291	
SB2527B49	492	345	6.2	19.8	1	1101	
SB2527B50	1029	723	5.2	19.0	1	2642	
SB2527B51	1106	777	8.8	19.5	1	1722	
SB2527B52	1126	791	6.7	18.0	1	2126	
SB2527W113	42	28	17.9	18.3	1	29	J
SB2527W114	458	321	8.7	18.2	5	3356	
SB2527W115	703	493	6.7	19.9	1	1465	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Pg. 2 of

Analyst MRB

TPH - Total Petroleum Hydrocarbons
ND - Indicates non detect
J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 27 November 1995

Site(s): Bldg 2628, Sheboken Well
 Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SHEBW30	ND	ND	21.3	18.9	1	ND	
SHEBW31	ND	ND	20.4	18.2	1	ND	
SHEBW32	ND	ND	20.6	18.5	1	ND	
SHEBB31	41	27	20.9	19.0	1	25	J
SHEBB32	12	7	20.2	18.8	1	6	J
SB2527W110	10	5	20.1	18.4	1	5	J
SB2527W111	10	5	19.8	17.7	1	5	J
SB2527W112	ND	ND	19.9	18.7	1	ND	
SB2527B44	ND	ND	20.1	19.0	1	ND	
SB2527B45	ND	ND	20.6	20.0	1	ND	
SB2527B46	ND	ND	20.3	19.8	1	ND	
SB2527B47	1401	985	10.5	19.0	1	1782	
SB2527B48	525	368	5.7	20.0	1	1291	
SB2527B49	492	345	6.2	19.8	1	1101	
SB2527B50	1029	723	5.2	19.0	1	2642	
SB2527B51	1106	777	8.8	19.5	1	1722	
SB2527B52	1126	791	6.7	18.0	1	2126	
SB2527W113	42	28	17.9	18.3	1	29	J
SB2527W114	458	321	8.7	18.2	5	3356	
SB2527W115	703	493	6.7	19.9	1	1465	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Pg. 2 of

Analyst: MRB

TPH - Total Petroleum Hydrocarbons
ND - Indicates non detect
J - Indicates estimated concentration below practical quantitation limit

**Soil Sample Collection Log
Fort Devens - Project #16208**

Date: 11-27-95

Site Name: Bldg 2527

Page 1 of 2

Weather: overcast

Samplers: JB

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. D		
SB 2527 B47	1358	C	5'6"	41'5"	56'2"	wet Lt Brown sandy clay w pebbles TPH odor	1x 40ml vial
B48	1359		5'6"	42'6"	55'3"	grey & yellow clay, many pebbles Strong TPH odor	
B49	1403		5'6"	41'5"	47'9"	wet grey clay, TPH odor	
B50	1402		5'6"	42'5"	51'10"	grey and yellow clay, strong TPH odor	
B51	1408		5'6"	41'2"	45'2"	wet grey & yellow clay, TPH odor	
B52	1410		5'6"	40'4"	42'6"	wet grey & yellow clay, TPH odor	
W113	1356		7'6"	36'6"	49'0"	yellow clay, TPH odor	
W114	1401	✓	7'6"	40'4"	49'7"	yellow & grey sandy clay, TPH odor, pebbles	

Ref. Pt. E: left corner of Bldg 2526

Ref. Pt. D: left corner of second window of Bldg 2526

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other 11-27-95

Relinquished by (dd/tt): JMB/1430h

Received by (dd/tt): DAB/1800 11-27-95

Relinquished by (dd/tt): _____

Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Date: 11.27.95

Site Name: Bldg 2527

Page 3

Weather: overcast

Samplers: JR

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. E	Ref. Pt. D		
SB 2527 W115	1404	G	2'6"	39'5"	46'6"	Grey clay, TPH odor	1 X uoal VOA
W116	1406		2'6"	38'11"	43'8"	Grey and yellow sandy clay w pebbles, TPH odor	
W117	1409		2'6"	39'0"	41'3"	" " "	
W118	1412	✓	2'6"	40'7"	38'1"	yellow sand strong TP it odor	↓

Ref. Pt. E: see page 1 of 3

Ref. Pt. D: 2nd map

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # USACE- coc #

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other 11.27.

Relinquished by(dd/tt): Received by(dd/tt): JUB(er)

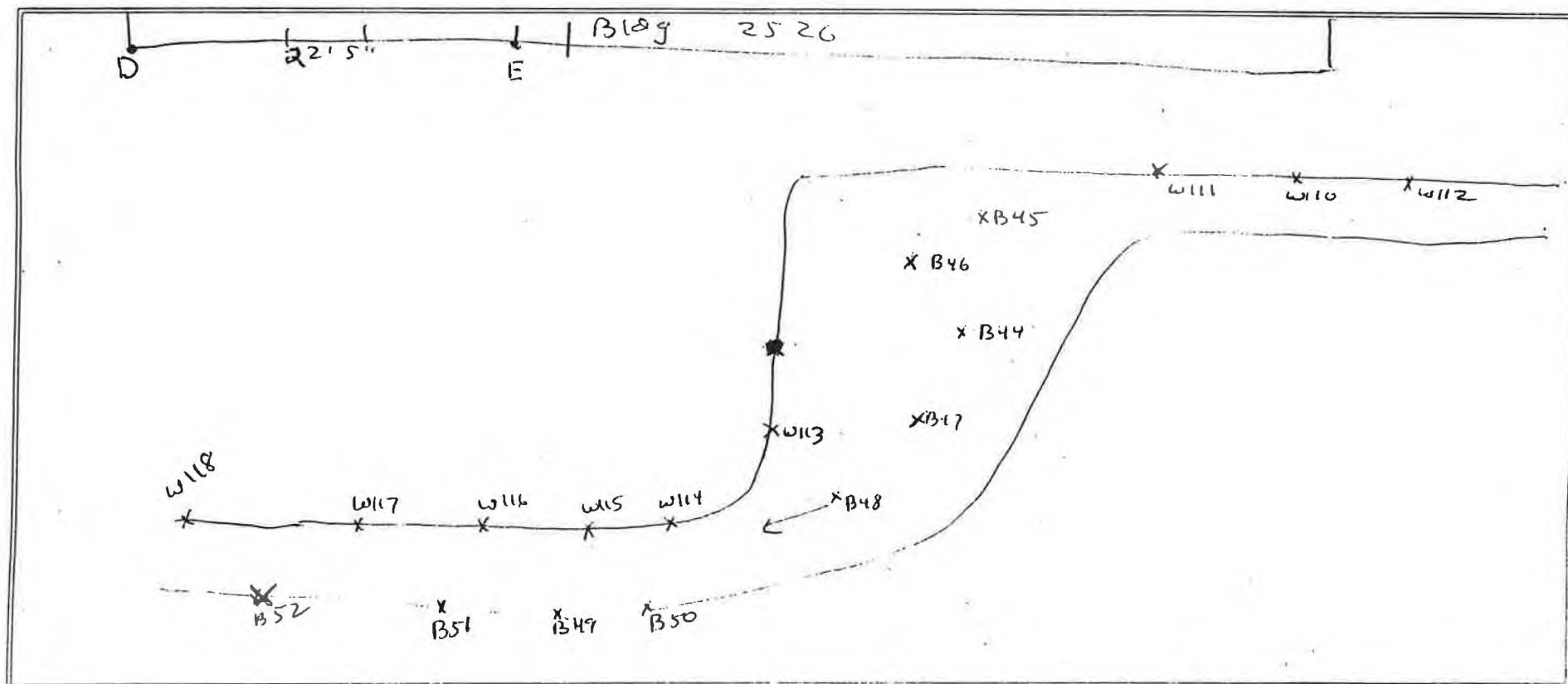
Relinquished by(dd/tt): Received by(dd/tt):

Sample Location Map
Fort Devens - Project #16208

Date: 11. 27. 95

Site Name: Bldg 2527

Pg. 3 of 3



Comments/Observations:

Not To Scale

Prepared by: MRB

151229 2527

TPH Results
On-site Laboratory - Modified Method 413.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: 27 November 1995

Site(s): Bldg 2628, Sheboken Well
 Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SHEBW30	ND	ND	21.3	18.9	1	ND	
SHEBW31	ND	ND	20.4	18.2	1	ND	
SHEBW32	ND	ND	20.6	18.5	1	ND	
SHEBB31	41	27	20.9	19.0	1	25	J
SHEBB32	12	7	20.2	18.8	1	6	J
SB2527W110	10	5	20.1	18.4	1	5	J
SB2527W111	10	5	19.8	17.7	1	5	J
SB2527W112	ND	ND	19.9	18.7	1	ND	
SB2527B44	ND	ND	20.1	19.0	1	ND	
SB2527B45	ND	ND	20.6	20.0	1	ND	
SB2527B46	ND	ND	20.3	19.8	1	ND	
SB2527B47	1401	985	10.5	19.0	1	1782	
SB2527B48	525	368	5.7	20.0	1	1291	
SB2527B49	492	345	6.2	19.8	1	1101	
SB2527B50	1029	723	5.2	19.0	1	2642	
SB2527B51	1106	777	8.8	19.5	1	1722	
SB2527B52	1126	791	6.7	18.0	1	2126	
SB2527W113	42	28	17.9	18.3	1	29	J
SB2527W114	458	321	8.7	18.2	5	3356	
SB2527W115	703	493	6.7	19.9	1	1465	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Pg. 2 of

Analyst: MRB

TPH - Total Petroleum Hydrocarbons
ND - Indicates non detect
J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log
Fort Devens - Project #16208

Date: 11.28.95

Site Name: Bldg 2527

Pg. 1 of 3

Weather: overcast, windy
63°F

Samplers: JB/mwrb

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. D	Ref. Pt. E		
SB2527 B53	1245	G	5' 10"	47'6"	33'0"	wet yellow sandy clay	1 X 400
B54	1247		8'3"	42'6"	29'6"	moist yellow clay w pebbles	
B55	1250		8'6"	38'6"	32'0"	wet grey clay, TPH odor	
B56	1253		8'3"	37'1"	34'2"	wet yellow sandy clay w pebbles TPH odor	
B57	1255		8'0"	37'9"	36'2"	wet yellow sandy clay w pebbles	
W120 19 min	1246		7'3"	45'6"	28'5"	wet yellow sandy clay w pebbles	
W120	1249		7'4"	38'3"	26'6"	wet tan sandy clay, pebbles	
W119 21	1251		7'1"	34'1"	27'9"	grey sandy clay, pebbles TPH odor	

Ref. Pt. E: For left side of Bldg 2526 (away from Bldg 2527)

Ref. Pt. F: left side of second window on left of Bldg 2526

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____
 Relinquished by(dd/tt): Jim Byly 11.28.95 1310 Received by(dd/tt): Shirley 11.28.95 1310
 Relinquished by(dd/tt): _____ Received by(dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of 3

Date: 11-28-95

Site Name: Bldg 2527

Weather: overcast, wind
63°F

Samplers: JB

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. D	Ref. Pt. E		
<u>SB 2527</u> <u>W122</u>	<u>1252</u>	<u>G</u>	<u>7'5"</u>	<u>35'6"</u>	<u>32'6"</u>	<u>wet clayey sand, lots of pebbles, TPH odor</u>	<u>1x wood</u> <u>1x 100 ml</u>
<u>W123</u>	<u>1257</u>	<u>↓</u>	<u>7'5"</u>	<u>36'</u>	<u>32'3"</u>	<u>wet sandy clay, pebbles</u> <u>TPH odor</u>	<u>↓</u>

Ref. Pt. ____:

Ref. Pt. ____:

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): _____ Received by(dd/tt): STW L 11-28-95
1316

Relinquished by(dd/tt): _____ Received by(dd/tt): _____

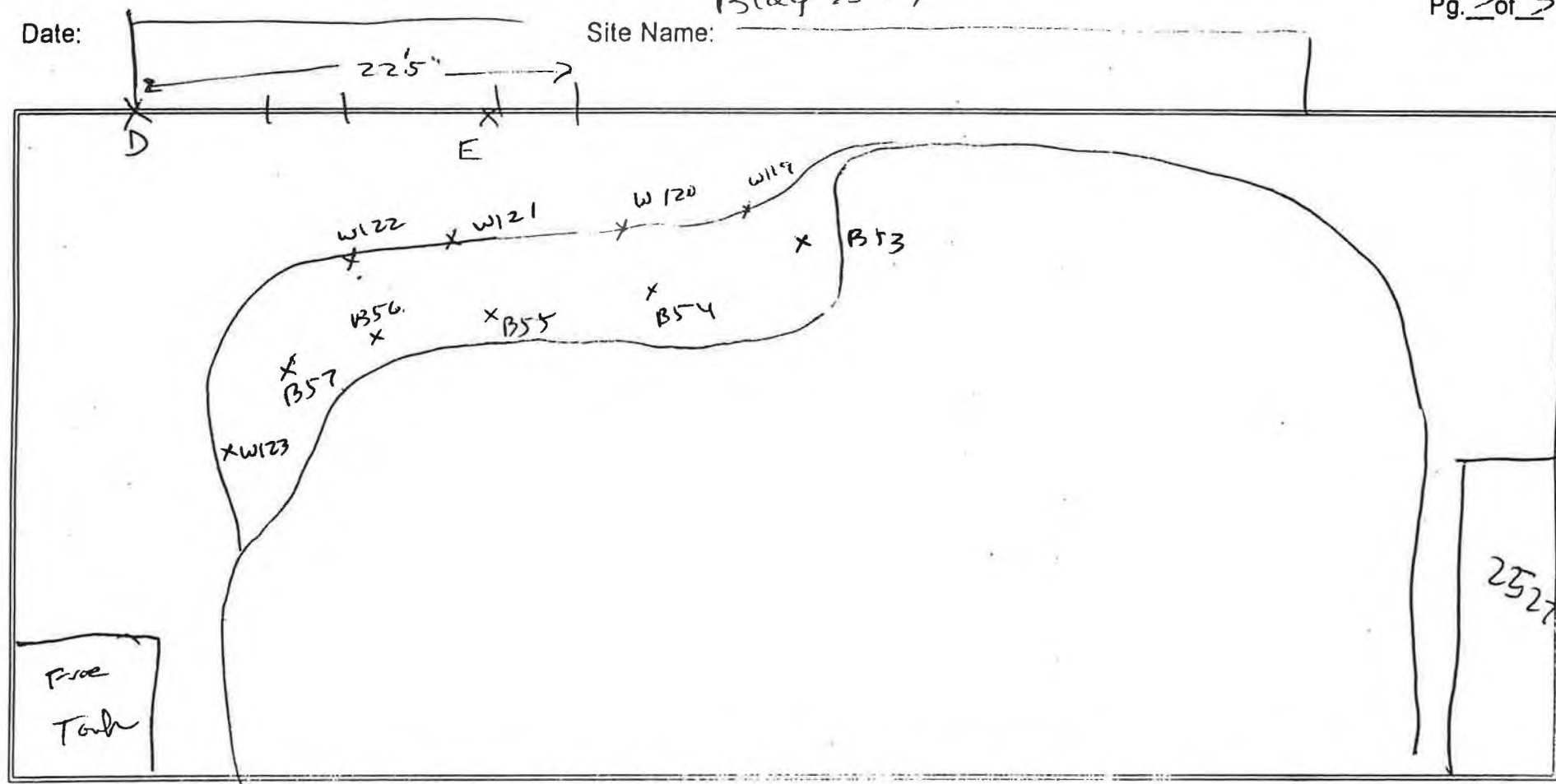
11.28.95

Sample Location Map
Fort Devens - Project #16208
Bldg 2527

Pg. 3 of 3

Date:

Site Name:



Comments/Observations:

Prepared by: MLB

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg 1 of 1

Date: Nov-28-1995

Site(s): Bldg 3628, Sheboken Well
 Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B53	ND	ND	20.4	19.7	1	ND	
SB2527B54	ND	ND	19.8	20.6	1	ND	
SB2527B55	708	497	4.3	21.1	1	2438	
SB2527B56	60	41	7.3	20.4	1	113	J
SB2527B57	ND	ND	20.1	19.5	1	ND	
SB2527W119	ND	ND	20.3	19.7	1	ND	
SB2527W120	ND	ND	20.2	19.6	1	ND	
SB2527W121	43	29	9.6	20.4	1	61	J
SB2527W122	120	83	19.9	19.2	25	1998	
SB2527W123	136	94	24.5	21.9	1	84	
SB3628BC2	54	36	19.5	18.3	1	34	J
SB3628EC2	ND	ND	19.6	17.8	1	ND	
SB3628NC	ND	ND	20.2	18.7	1	ND	
SB3628SC2	ND	ND	19.6	19.0	1	ND	
SB3628WC2	21	13	20.1	20.3	1	13	J
SB3628DUPC	ND	ND	20.0	19.4	1	ND	
SB3628TRPC	12	7	19.9	20.6	1	7	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

**Soil Sample Collection Log
Fort Devens - Project #16203**

Pg. 1 of 3

Date: 11-29-95

Site Name: Bldg 2527

Weather: overcast, cold

Samplers: A/M/RB

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. D	Ref. Pt. E		
SB 2527 B58	1423	G	8' 2"	43' 5"	29' 5"	wet grey & gold silty clay	1x40ml
SB 2527 B59	1429		8' 3"	37' 7"	26' 3"	wet gold clay w pebbles	
B60	1432		8' 6"	34' 0"	28' 6"	moist gold clay w pebbles	
B61	1435		8' 3"	34' 0"	33' 8"	moist gold clay	
W124	1424		7' 4"	35' 6"	24' 5"	moist gold clay, pit open	
W125	1426		7' 0"	28' 2"	27' 4"	moist gold clay	
W126	1427		7' 2"	27' 5"	25' 7"	Brown sandy clay, pit open	
W127	1433		7' 1"	29' 0"	29' 3"	Brown sandy clay w pebbles	

Ref. Pt. E: For left side of Bldg 2526 (away from Bldg 2527)

Ref. Pt. F: left side of second window on left Bldg 2526

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by (dd/tt): AMRB 11-29-95 1449 Received by (dd/tt): _____

Relinquished by (dd/tt): _____ Received by (dd/tt): _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 2 of 3

Date: 11-29-95

Site Name: Bldg 2527

Weather: overcast, cold

Samplers: MNB/AW

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. D	Ref. Pt. E		
<u>SD 2527</u> <u>W128</u>	<u>1438</u>	<u>G</u>	<u>7'5"</u>	<u>32'7"</u>	<u>34'6"</u>	<u>brown pebbly sand</u> <u>moist</u>	<u>1x400P</u>

Ref. Pt. ____: _____

Ref. Pt. ____: _____

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): _____ Received by (dd/tt): _____

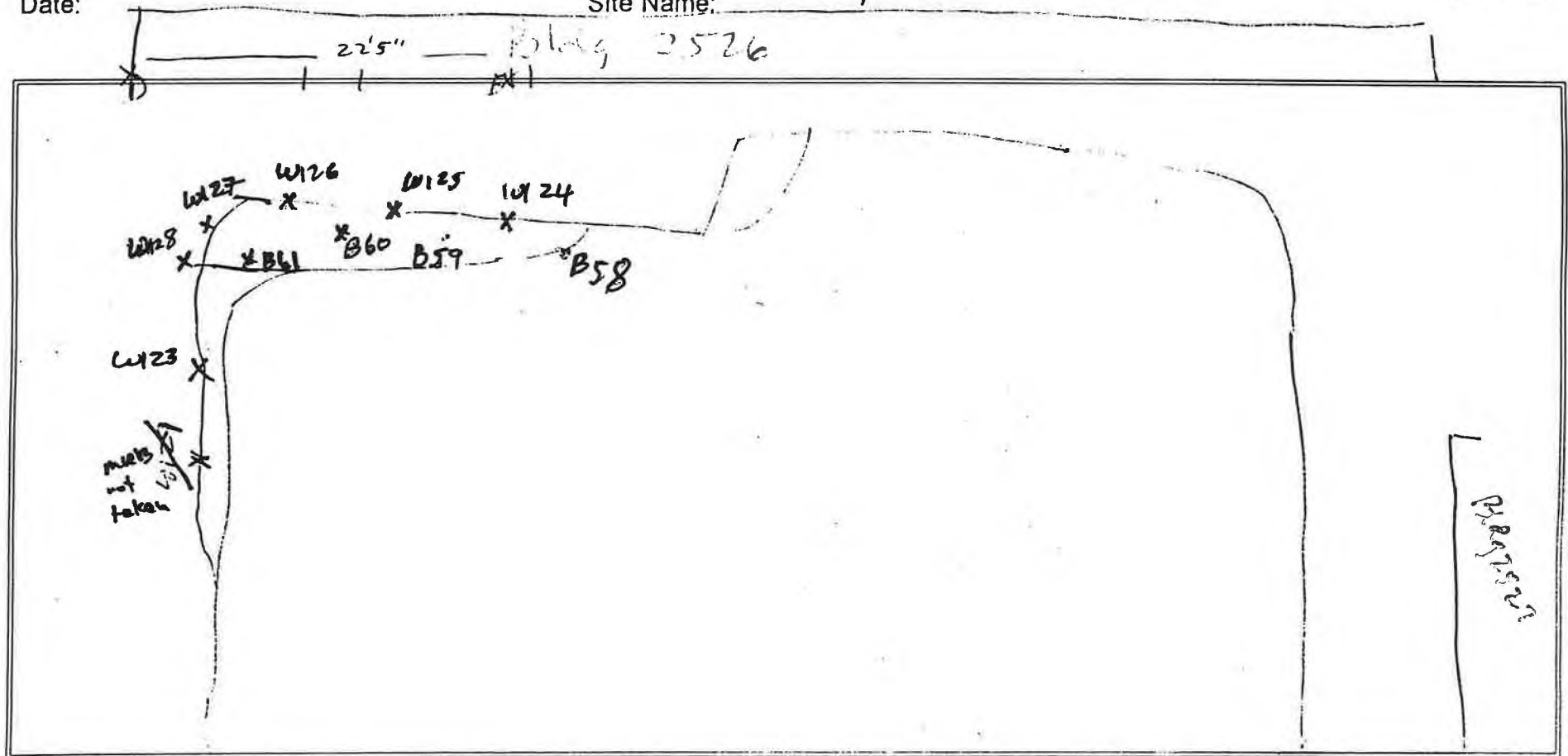
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Date: 11.29.95

Site Name: Bldg 2527

Pg. 3 of 3



Comments/Observations:

Not to
Scale

MWB

Prepared by: _____

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 10-24-95

Site Name: Bldg 2527

Weather: Sunny, 72°F

Samplers: GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
S92527 W67	1108	G				Grey/Black moist clay, odor	1x40 mL VOA
W68	1113					↓	
W69	1117					↓	
W70	1121					Grey clay	
W71	1125					Grey/Black moist clay, odor	
W72	1128					↓	
B29	1132	↓				↑ Brown clay-like material	↓

Ref. Pt. ____:

Ref. Pt. ____:

Map Attached: Yes No

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by(dd/tt): A. Hammond 1145 Received by(dd/tt): SARKE 1145
10-24-95 10-24-95

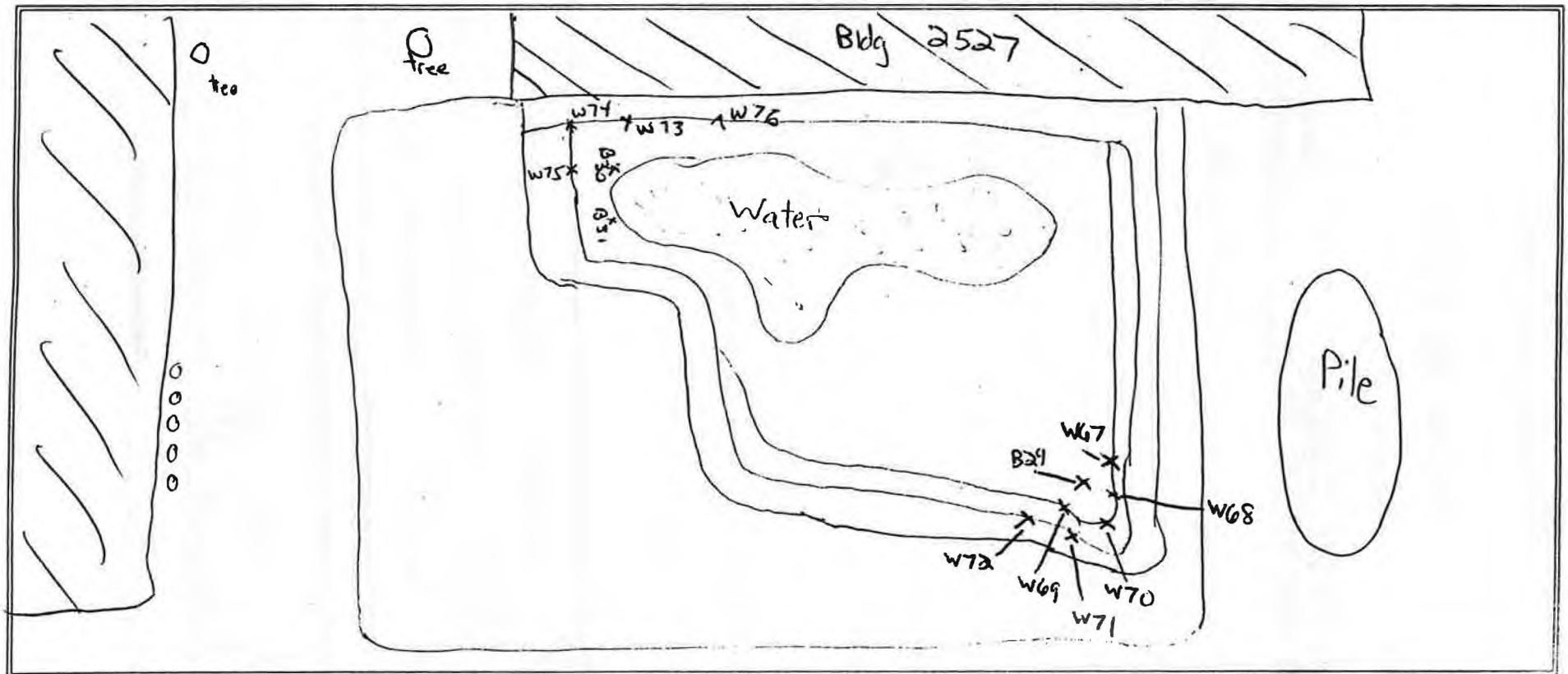
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg 2 of 2

Date: 10-24-95

Site Name: Bldg 2527 Excavation



Comments/Observations:

x- discrete sample location

Prepared by: Greg Guimond

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 10-24-95

Site Name: 2527

Weather: Sunny 70°

Samplers: MJ

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527B30	1430	G				Wet, Rocky Soil	1 x 40ml
B31	1435	↓					
W73	1440						
W74	1443						
W75	1452						
W76	1457						
W77	1501						
W78	1505	↓					
W79	1510						

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE- coc # _____

Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by(dd/tt): Matthew Jones 10-24-95 1540 Received by (dd/tt): _____

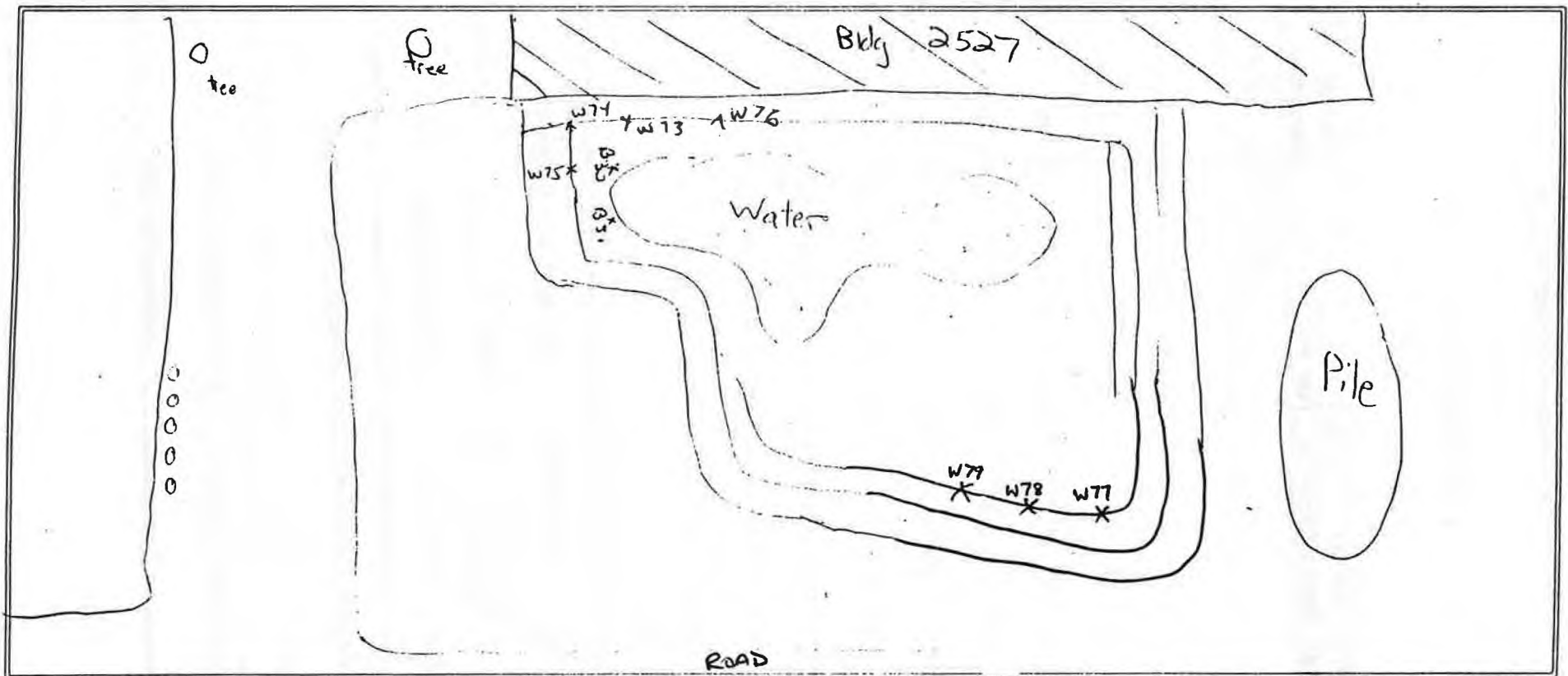
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 10-24-95

Site Name: 2527



Comments/Observations:

x-discrete sample location

Prepared by: M. Jones / G. Guimond

Pg. 1 of 1

Analyst GG

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: Oct-24-1995

Site(s): Bldg 2527

Analyst: MJ

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527B30	ND	ND	21.0	20.3	1	ND	
SB2527B31	505	354	21.3	20.4	1	339	
SB2527W73	ND	ND	20.2	20.5	1	ND	
SB2527W74	ND	ND	19.5	21.6	1	ND	
SB2527W75	ND	ND	19.1	21.4	1	ND	
SB2527W76	ND	ND	21.2	21.0	1	ND	
SB2527W77	ND	ND	19.9	20.8	1	ND	
SB2527W78	16	10	19.3	21.0	1	10	J
SB2527W79	ND	ND	21.0	20.4	1	ND	

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

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TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg. 1 of 1

Date: Oct-24-1995

Site(s): Bldg 2527

Analyst: GG

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W67	1083	761	8.3	20.5	1	1880	
SB2527W68	871	612	9.2	21.2	1	1410	
SB2527W69	636	446	7.4	22.0	5	6633	
SB2527W70	ND	ND	18.5	20.1	1	ND	
SB2527W71	649	455	6.7	19.0	1	1291	
SB2527W72	505	354	10.5	18.5	5	3118	
SB2527B29	32	21	18.0	18.5	1	21	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log Fort Devens - Project #16208

Pg. 1 of 2

Date: 10-24-95

Site Name: Bdg 2527

Weather: Sunny, 72°F

Samplers: GG

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
S2527W67	1108	G				Grey/Black moist clay, odor	1x40 mL VOA
W68	1113						
W69	1117						
W70	1121					Grey clay	
W71	1125					Grey/Black moist clay, odor	
W72	1128						
B29	1132					Brown clay-like material	

Ref. Pt. _____

Ref. Pt. _____

Map Attached: ☒ Yes ☐ NoSample Type: ☒ Screening ☐ Confirmation ☐ Disposal/CharacterizationLaboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____Duplicate Taken: Yes ☒ No ☐ Rinsate Taken: Yes ☒ No ☐

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____Relinquished by(dd/tt): A. Guzman 1145 10-24-95 Received by(dd/tt): S. B. Le 1145 10-24-95

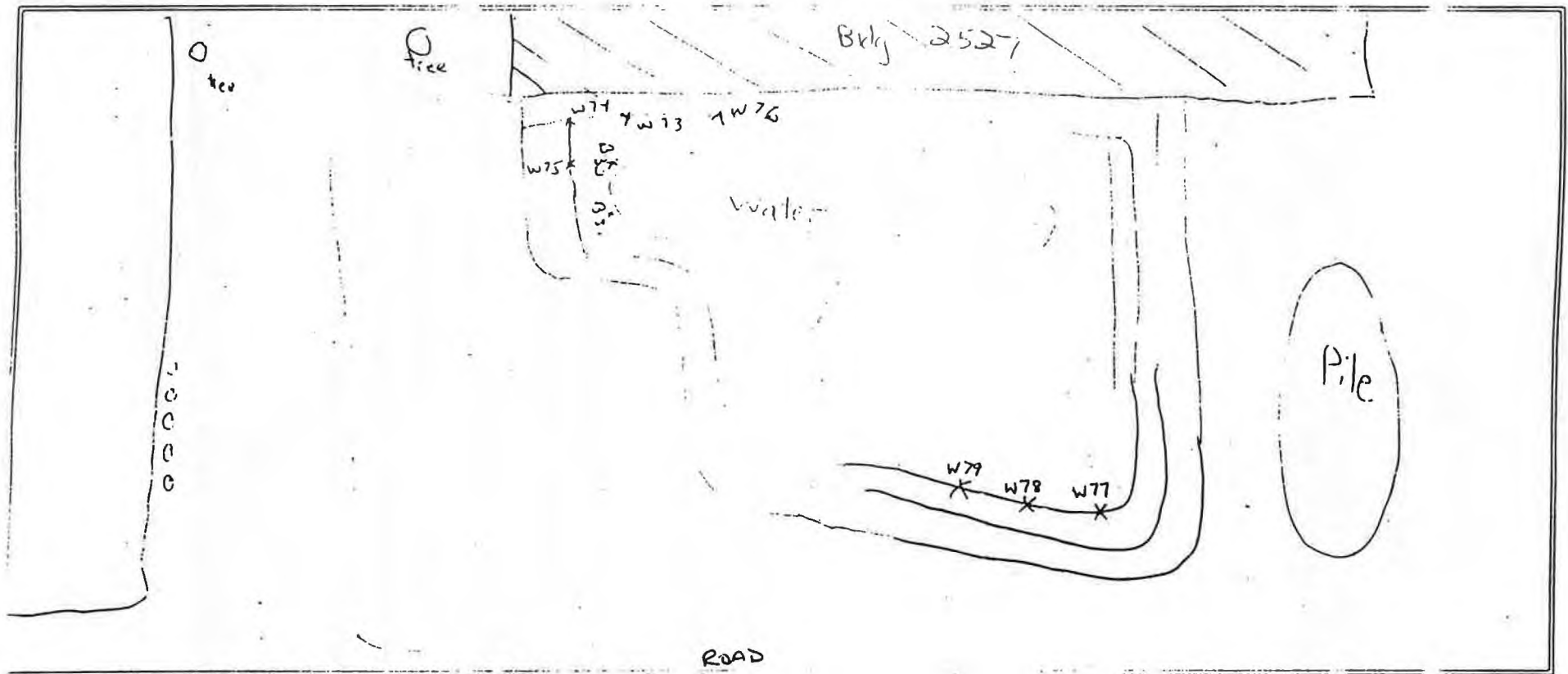
Relinquished by(dd/tt): _____ Received by(dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

pg. 2 of 2

Date: 10-24-95

Site Name: 2527



Comments/Observations

x-discrete sample location

Prepared by M. Jones / G Guimond

5

**Soil Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 11.30.95

Site Name: Bldg 2527

Weather: sunny, cold

Samplers: MURB

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. F	Ref. Pt. G		
S132527 W129	0820	G	6'6"	25'1"	25'10"	wet sandy silt brown	1x40ml
S132527 W130	0822		6'6"	14'5"	20'2"	wet coarse brown silt	
W131	0831		6'6"	14'3"	16'2"	wet brown, sandy silt	
B62	0825		6'0"	26'4"	24'6"	Black stained sand strong TPH odor	
B63	0823		7'0"	21'6"	22'8"	moist, sandy silt, TPH odor	
B64	0833		7'1"	20'4"	18'5"	wet, dark brown, gravelly coarse sand from under pipe	

Ref. Pt. F: rt front corner of Bldg 2526

Ref. Pt. G: rt bottom corner of second window on rt of Bldg 2526

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes ☐ No ☒ Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other 11.30.95

Relinquished by(dd/tt): JSUBLE Received by (dd/tt): _____

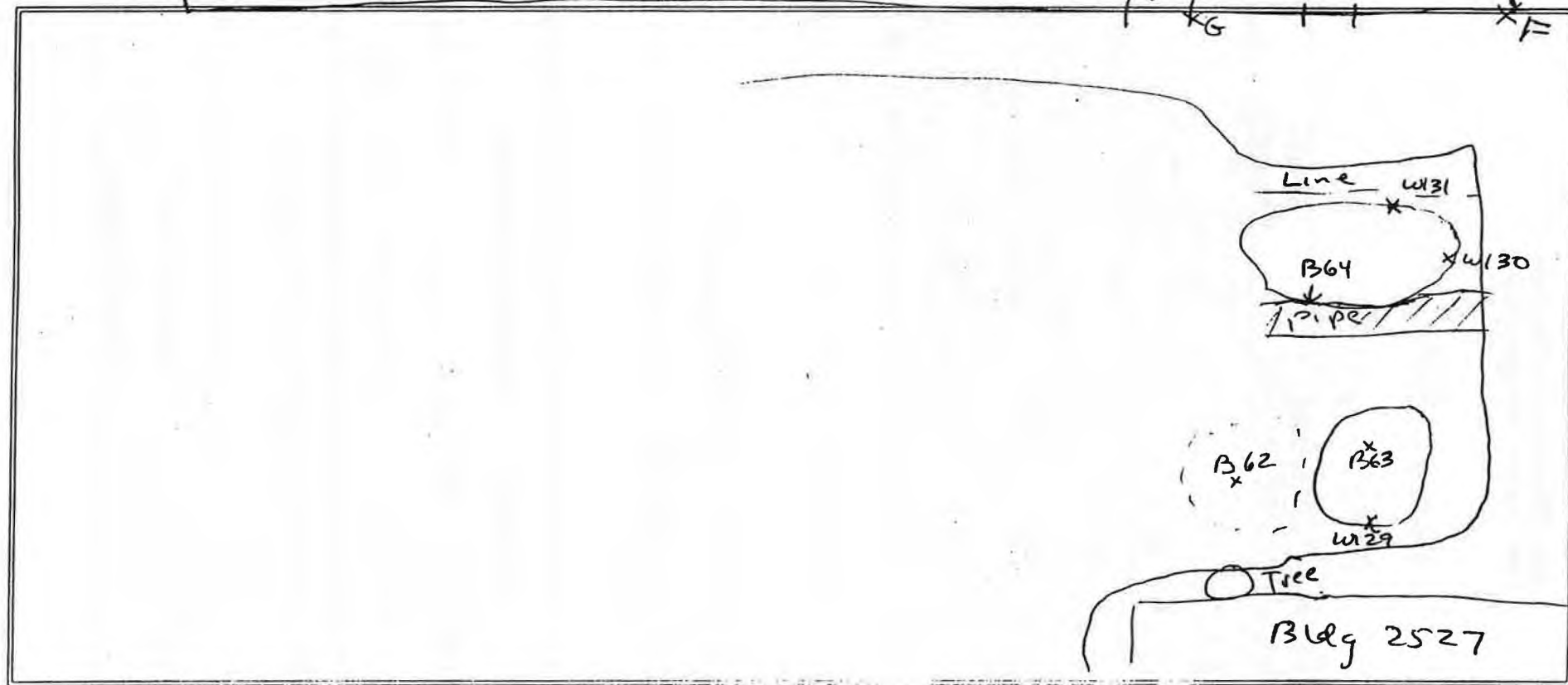
Relinquished by(dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Date: 11.30.95

Site Name: Bldg 2527
Bldg 2526

21.5 Pg. 2 of 2



Comments/Observations:

Not to scale

Prepared by: mm

**Soll Sample Collection Log
Fort Devens - Project #16208**

Pg. 1 of 2

Date: 11.30.95

Site Name: Bldg 2527

Weather: Sunny, cold

Samplers: MRB/AW

Sample ID Number	Time	Comp/ Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt F	Ref. Pt G		
<u>SB 2527</u> <u>B65</u>	<u>1527</u>	<u>7'6"</u>	<u>G</u>	<u>25'2"</u>	<u>28'0"</u>	<u>wet grey clay w pebbles</u>	<u>1 x 40ml</u>
<u>W132</u>	<u>1533</u>	<u>G</u>	<u>7'2"</u>	<u>22'0"</u>	<u>18'0"</u>	<u>grey clay many</u> <u>large small pebbles</u>	<u>↓</u>
<u>W133</u>	<u>1535</u>	<u>G</u>	<u>6'10"</u>	<u>29'1"</u>	<u>26'2"</u>	<u>wet grey sand w</u> <u>black staining</u>	<u>1 x 40ml</u>

Ref. Pt. F: rt front corner of Bldg 2526

Ref. Pt. G: rt bottom corner of second window on rt of Bldg 2526

Map Attached: ☒ Yes ☐ No

Sample Type: ☒ Screening ☐ Confirmation ☐ Disposal/Characterization

Laboratory Destination: ☒ Onsite Lab ☐ AEN - coc # _____ ☐ USACE - coc # _____

Duplicate Taken: Yes ☒ No ☐

Rinsate Taken: Yes ☐ No ☒

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX ☐ Other _____

Relinquished by (dd/tt): MRB 11.30.95 Received by (dd/tt): _____

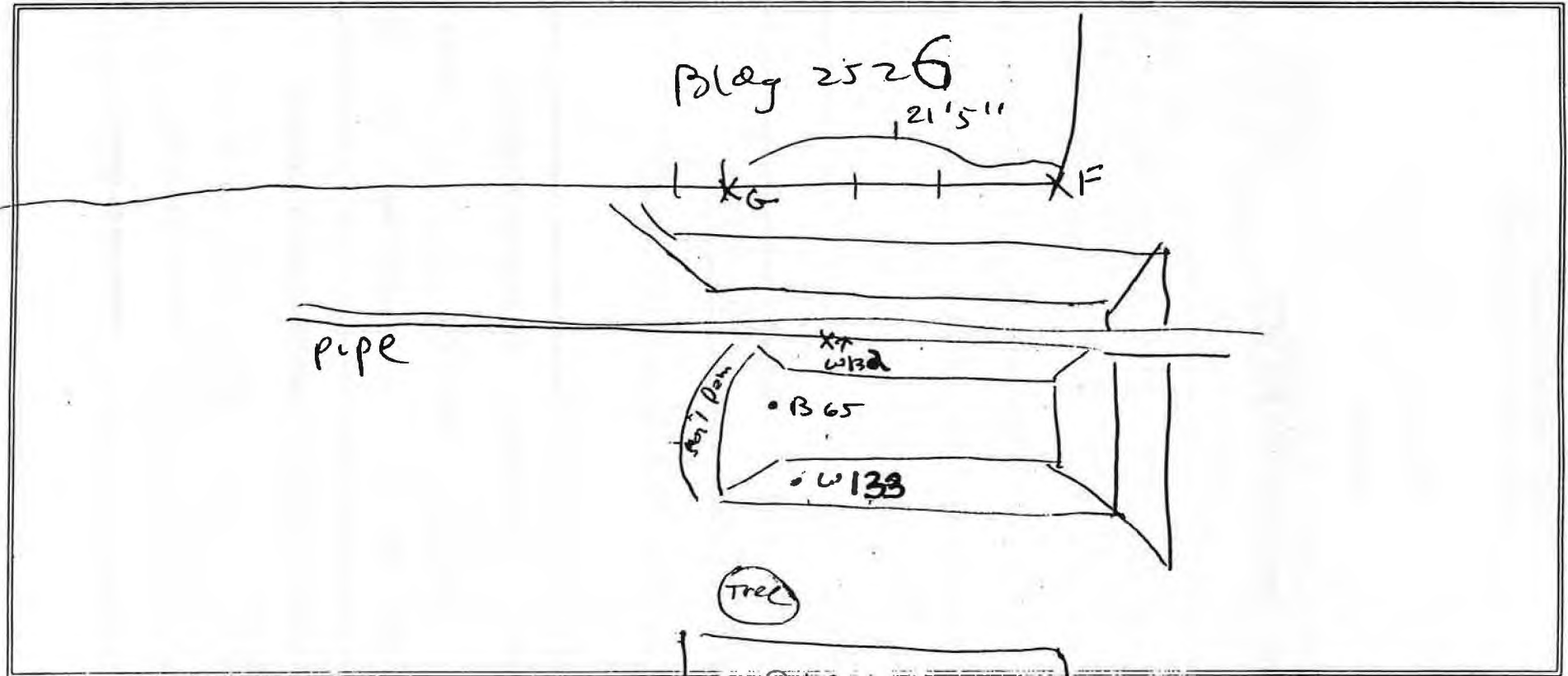
Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Pg. 2 of 2

Date: 11.30.95

Site Name: Blag 2527



Comments/Observations:

Not to
Scale

Prepared by: MRB/AW

TPH Results
On-site Laboratory - Modified Method 418.1
Fort Devens - Project #16208

Pg 1 of 1

Date: Nov-30-1995

Site(s): Bldg 2527

Analyst: MRB

Sample ID #	Instrument Response TPH (ppm)	Calibration Adjusted TPH (ppm)	Sample Weight (g)	Extract Vol. (ml)	Dilution	Final Result TPH(ppm)	Qualifier
SB2527W129	25	16	21.8	21.1	1	15	J
SB2527W130	ND	ND	20.8	20.1	1	ND	
SB2527W131	ND	ND	21.6	20.4	1	ND	
SB2527B62	644	452	3.5	28.9	1	3732	
SB2527B63	ND	ND	20.3	20.6	1	ND	
SB2527B64	15	9	20.9	20.1	1	9	J
SB2527B58	12	7	21.4	19.3	1	6	J
SB2527B59	ND	ND	20.7	21.0	1	ND	
SB2527B60	ND	ND	20.9	18.8	1	ND	
SB2527B61	160	111	20.1	19.2	1	106	
SB2527W124	76	52	16.7	18.7	1	58	
SB2527W125	ND	ND	20.4	19.7	1	ND	
SB2527W126	44	29	11.3	19.6	1	51	
SB2527W127	ND	ND	20.5	18.5	1	ND	
SB2527W128	32	21	20.0	19.3	1	20	J
SB2527W133	437	306	8.4	20.2	1	736	
SB2527W132	30	19	21.4	18.7	1	17	J
SB2527B65	14	8	22.1	17.8	1	7	J

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - Indicates estimated concentration below practical quantitation limit

Soil Sample Collection Log Fort Devens - Project #16208

Date: 12.1.95

Site Name: Bldg 2527

Pg. 1 of 3

Weather: Snowy, cold Samplers: MZ VB

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt. F	Ref. Pt. G		
W134	0834	G	6'0"	27'8"	26'7"	wet black stained clay, TPH odor	1 x 4" ml
W135	0835		6'4"	26'4"	27'7"	black stained yellow clay, some sand, TPH odor	
W136	0839		6'4"	25'3"	26'6"	Grey clay, Rusty sand, TPH odor	
W137	0843	✓	5'11"	25'0"	27'1"	Grey clay, Rusty brown sand	

Ref. Pt. F: right front corner of Bldg 2526

Ref. Pt. G: right bottom corner of second window on

Map Attached: Yes No rt of Bldg 2526

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # _____ USACE - coc # _____

Duplicate Taken: Yes No Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other _____

Relinquished by (dd/tt): S. B. 12.1.95 0555 Received by (dd/tt): _____

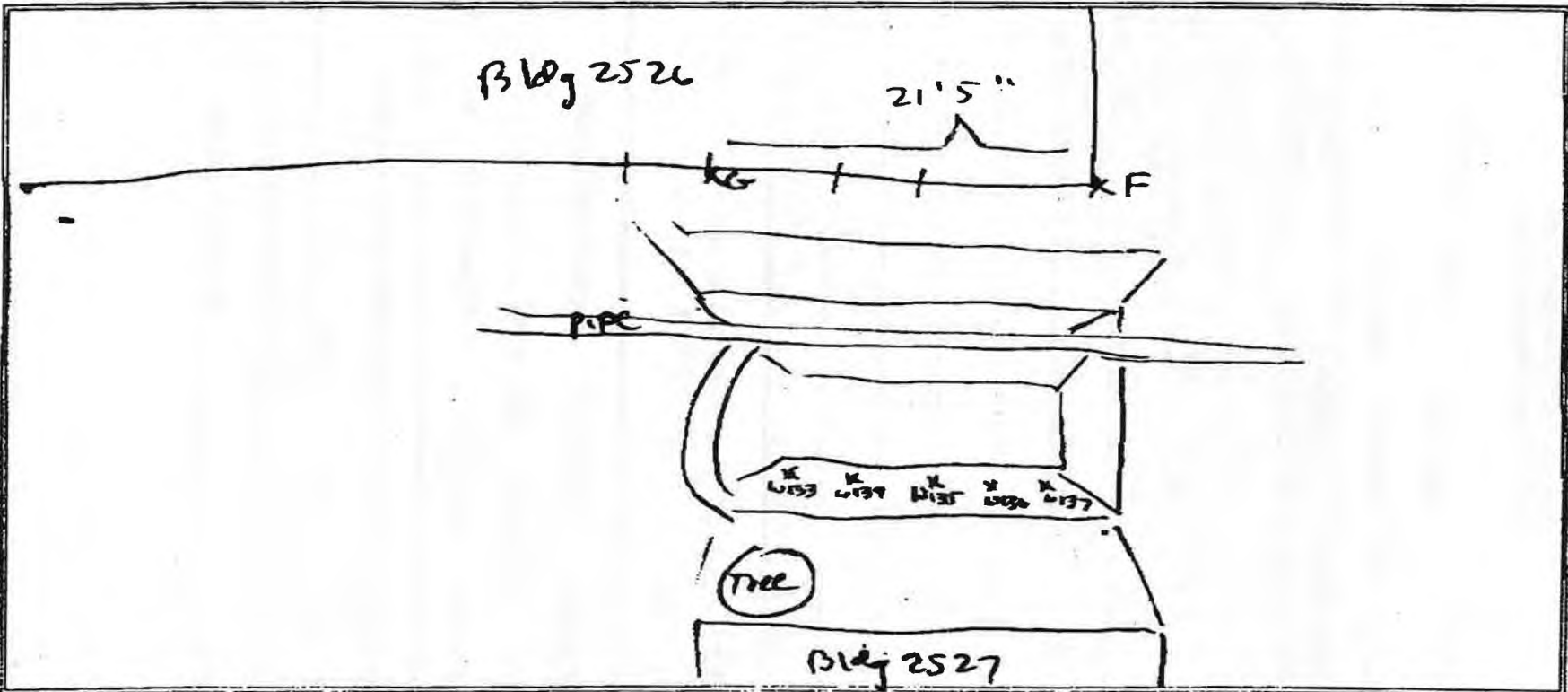
Relinquished by (dd/tt): _____ Received by (dd/tt): _____

Sample Location Map
Fort Devens - Project #16208

Date: 12-1-95

Site Name: Bldg 2527

Page 2 of 2



Comments/Observations:

Not to scale

Prepared by: mrvb

Soil Sample Collection Log Fort Devens - Project #16208

Date: 12.1.95

Site Name: SB 2527

Pg. 1 of 4

Weather: Snowy, cold

Samplers: M/R B

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates		Sample Description	# of Bottles
				Ref. Pt.	Ref. Pt.		
SB2527 NEC	1146	C				WET ROCKY CLAY	1X402
SB2527 NWC	1158					MOIST ROCKY CLAY	
SB2527 S.E.C	1241					LIGHT BROWN SANDY CLAY, ROCKS	
SB2527 SWC	1220					GRAY ROCKY, TPA GOOD	
SB2527 DC	1307					BROWNISH, MARY CLAY, ROCKY WAT	
SB2527 DUPC	1241					DUP OF SB2527 SEC	
SB2527 TRP	1241					LIGHT BROWN SANDY CLAY, ROCKS	
SB2527 NEG	1135	G				LIGHT BROWN SANDY CLAY, ROCKS	

Ref. Pt. D: Left front corner of Bldg 252C

Ref. Pt. E: Left lower corner of second window to left of Bldg 2526

Map Attached: Yes No

see next page for B and H

Sample Type: Screening Confirmation Disposal/Characterization

Laboratory Destination: Onsite Lab

AEN - coc # 157182

USACE - coc #

TRP Not Sat
will send next time

Duplicate Taken: Yes No

Rinsate Taken: Yes No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: TPH BTEX Other BNA (TCL) VOC (PPL)

Relinquished by (dd/tt): K. Blum

Received by (dd/tt):

Relinquished by (dd/tt):

Received by (dd/tt):

Soil Sample Collection Log Fort Davens - Project #16208

Date: 12.1.95

Site Name: SB 2527

Pg. 2 of 4

Weather: Snowy, cold

Samplers: M2R

Sample ID Number	Time	Comp/Grab	Sample Depth (ft)	Coordinates Ref. Pt. Ref. Pt.	Sample Description	# of Bottles
SB 2527 NB/G	1150	C			ROCKY BROWN CLAY	1 X 40 ml
SB 2527 SEG	1227				RUSTY GRAY/ ORANGE CLAY	
SB 2527 SWG	1242				GRAY/BLACK STAINING WET BROWN SAND/CLAY TPH ORR	
SB 2527 BG	1250				WET YELLOW CLAY GRAY CLAY, LOTS OF ROCKS	
SB 2527 DUPG	1257				RUSTY GRAY/ ORANGE CLAY	
SB 2527 TRPG	1257				RUSTY GRAY/ ORANGE CLAY	

Ref. Pt. B: left side of door on rt side of Bldg 2527

Ref. Pt. H: left side of concrete pad front corner away from Bldg 2527

Map Attached: ☒ Yes ☐ NoSample Type: ☒ Screening ☒ Confirmation ☐ Disposal/Characterization

Laboratory Destination: Onsite Lab AEN - coc # 157182 USACE - coc #

Duplicate Taken: ☒ Yes ☒ No M2R Rinsate Taken: Yes ☒ No

On-site Laboratory Chain of Custody/Request for Analysis

Requested Testing: ☒ TPH ☐ BTEX Other: BNA (TCL) VOC (PPL)

Relinquished by (dd/tt): Received by (dd/tt):

Relinquished by (dd/tt): Received by (dd/tt):

Sample Collection Log Supplemental Form
Composite Sample Data
Weston - Project #17836

Pg. 3 of 4

Date: 12.1.95

Site: Bldg 2527

Sampler:

MJB

Composite Sample ID	Discrete Sample ID	Sample Depth (ft)	Coordinates		Sample Description
			Ref. Pt. A	Ref. Pt. B	
NFC	1 Gnd	8'2"	E - 43'2"	D - 32'0"	Brown clay
	2	8'5"	62'1"	97'3"	Rocky Brown clay
	3	9'8"	55'4"	91'9"	wet Brown clay
	4	8'4"	44'8"	89'5"	wet Brown clay
NWC	1 Gnd	8'2"	32'0"	76'10"	Rocky Brown clay
	2	8'0"	17'8"	56'7"	Rocky Brown clay
	3	8'0"	12'4"	37'3"	Rocky Brown clay, wet
	4	8'0"	25'1"	21'10"	wet sandy clay w rocks
SWC	1 Gnd				wet brown sandy clay, grey & black staining, top 1' open
	2				Black staining sandy clay, wet strong 1'11" open
	3				wet rocky clay
	4				Rusty rocky yellow clay
SFC	1 Gnd	6'10"	E 51'0"	D 72'9"	Rusty grey & orange clay
	2	6'11"	44'1"	65'6"	wet good clay w rocks
	3	6'9"	32'2"	53'7"	lt Brown clay w rocks
	4	6'10"	25'2"	44'6"	Rusty grey clay w rocks
BC	1 Gnd				wet yellow & grey clay w rocks
	2				light brown clay
	3				wet good clay w black staining & rocks
	4				yellow & grey clay w rocks

5

yellow & grey clay w black staining rocks

1 85'6"

Sample Location Map
Fort Devens - Project #16208

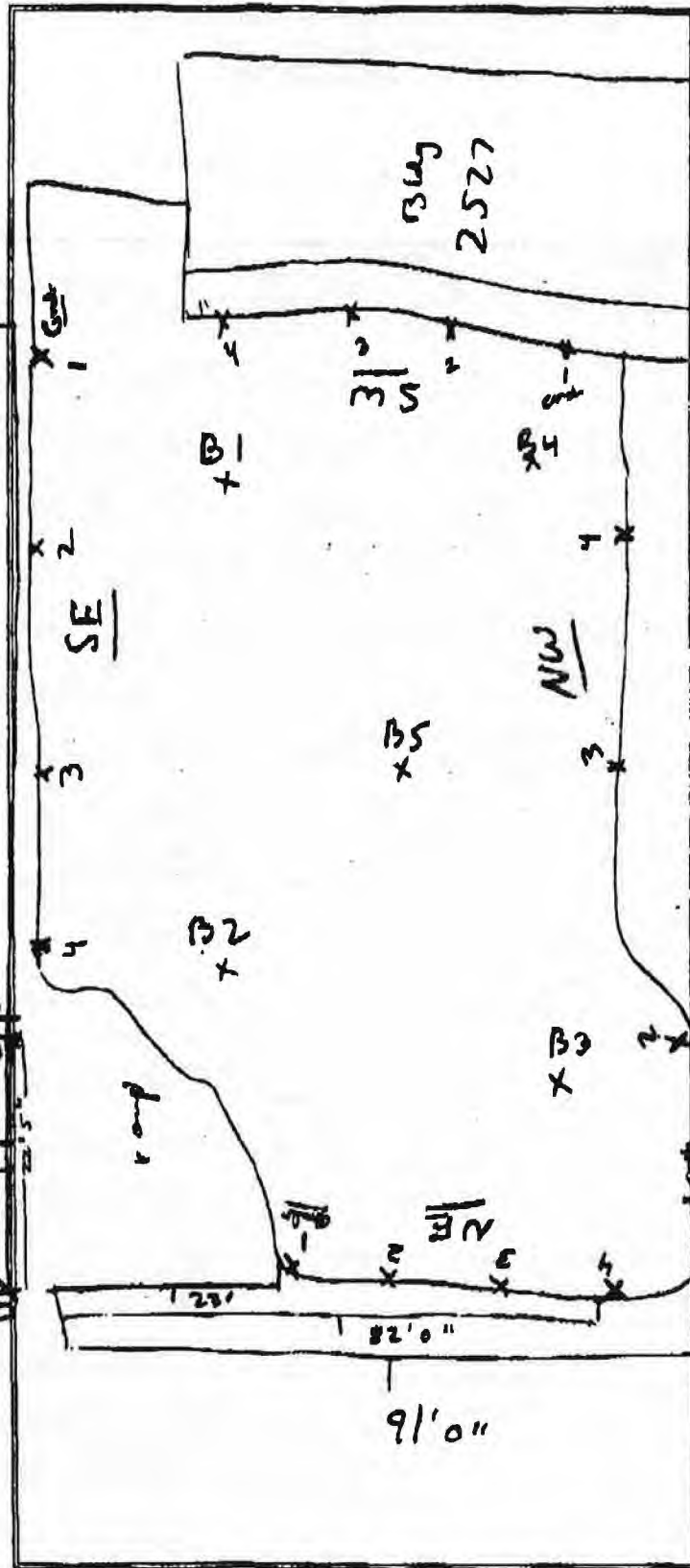
Site Name:

Bug 2526

Date:

12-1-95

Pg. 4 of 4



Comments/Observations:

Prepared by: mcb

TPH Results
On-site Laboratory - Modified Method 412.1
Fort Devens - Project #16205

Pg 1 of 1

Date: Dec-01-1998

Site(s): Bldg 2527

Analyst: MRB

[illegible]

TPH - Total Petroleum Hydrocarbons

ND - Indicates non detect

J - indicates estimated concentration below practical quantitation limit

Appendix B
IRA Submittal Forms

Appendix C

AENI Analytical Report - Confirmation Samples

CHAIN-OF-CUSTODY RECORD

11/2/95

Form 0019
Field Technical Services
Rev. 08/89
157182

9512015

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3528

PROJECT NAME		PROJECT LOCATION		ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)		NUMBER OF CONTAINERS											
PROJ. NO.		PROJECT CONTACT						PROJECT TELEPHONE NO.									
CLIENT'S REPRESENTATIVE		PROJECT MANAGER/SUPERVISOR															
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)		REMARKS									
1	SB 2527BC	12.1 95	1307 1446	✓		Brownish grey clay w rocks wet		1X40Z	✓	✓							-001
2	SB 2527NEG		1146	✓		wet brown rocky clay		1X40Z	✓	✓							-002
3	SB 2527NWC		1158	✓		moist brown rocky clay		1X40Z	✓	✓							-003
4	SB 2527SEC		1241	✓		Light Brown sandy clay w rocks		1X40Z	✓	✓							-004
5	SB 2527DUPC		1241	✓		Lt Brown sandy clay w rocks		1X40Z	✓	✓							-005
6	SB 2527BG		1250	✓		wet yellow/grey clay w lots of rocks		2X40 ml		✓							-006
7	SB 2527NEG		1135	✓		Brown wet clay		2X40 ml		✓							-007
8	SB 2527NWC		1150	✓		Rocky brown clay		2X40 ml		✓							-008
9	SB 2527SEC		1227	✓		Rusty grey and orange clay		2X40 ml		✓							-009
10	SB 2527DUPC		1227	✓		Rusty grey and orange clay		2X40 ml		✓							-010
TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY		TRANSFERS ACCEPTED BY		DATE	TIME	REMARKS									
1	1310	JMBlen		Fed Ex Airbill 379 3962 051		12.1 95	1530	• 3 day TAT • Temp blank included • preserved 4°C									
2				S. Munnell		12/04/95	10:00										
3																	
4																	
								SAMPLER'S SIGNATURE									
								JMBlen									

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525


Project Number: 9512-015
Client Name: O.H. Materials
Project Title: Fort Devens

Five soil samples were analyzed for the volatile organic compounds in the Priority Pollutant list plus Xylenes, by method 8240. Five soil samples were analyzed for the semivolatile organic compounds in the TCL list by method 8270.

All analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of the tabulated results of the samples and the method blanks, along with the QC forms II, III and IV.

Data Released


Minh-Thuy L. Nguyen
GC/MS Lab Manager

VOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Analyzed
SB2527BG	015-006	Soil	12/01/95	12/04/95	12/05/95
SB2527NEG	015-007	Soil	12/01/95	12/04/95	12/05/95
SB2527NWG	015-008	Soil	12/01/95	12/04/95	12/05/95
SB2527SEG	015-009	Soil	12/01/95	12/04/95	12/05/95
SB2527DUPG	015-010	Soil	12/01/95	12/04/95	12/05/95

Form I (Tabulated Results)

All analyses were performed within the holding time requirement. The results were reported on the basis of dry weight.

Form II (Surrogate Recoveries)

The surrogate recoveries for all method blank, QC and sample analyses were within the method specified limits.

Form III (MS Recoveries)

The MS analysis was performed on sample SB2527DUPG. All spike recoveries were within the method advisory limits.

Form IV (Method Blank Summary)

The method blank was free of target analytes.

SEMIVOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Extracted	Date Analyzed
SB2527BC	015-001	Soil	12/01/95	12/04/95	12/05/95	12/06/95
SB2527NEC	015-002	Soil	12/01/95	12/04/95	12/05/95	12/06/95
SB2527MWC	015-003	Soil	12/01/95	12/04/95	12/05/95	12/08/95
SB2527SEC	015-004	Soil	12/01/95	12/04/95	12/05/95	12/08/95
SB2527DUPC	015-005	Soil	12/01/95	12/04/95	12/05/95	12/08/95

Form I (Tabulated Results)

All analyses were performed within the holding time requirement. The results were reported on the basis of dry weight.

Form II (Surrogate Recoveries)

The surrogate recoveries for all sample, QC and method blank analyses were within the method specified limits.

Form III (BS Recoveries)

A BS analysis was reported. All spike recoveries were within the method advisory limits.

Form IV (Method Blank Summary)

The method blank was free of target analytes.

PP VOA Analysis

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENIContract: 9512015Project No.: OHM45Site: Location: Group: Level: (low/med) LOW

	SAMPLE NO.	SMC1 (DCE) #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VBLK01	108	107	111		
02	SB2527BG	92	105	110		
03	SB2527NEG	104	109	106		
04	SB2527NWG	105	106	113		
05	SB2527SEG	99	111	117		
06	SB2527DUPG	99	108	114		
07	SB2527DUPGMS	108	113	118		
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
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21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

SMC1 (DCE) - 1,2-Dichloroethane-d4

SMC2 (TOL) - Toluene-d8

SMC3 (BFB) - Bromofluorobenzene

QC LIMITS

(70-121)

(81-117)

(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Level: (low/med) LOW

4A
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VELK01

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Lab File ID: FL94.D Lab Sample ID: 951205FS

Date Analyzed: 12/5/95 Time Analyzed: 1601

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F7200

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SB2527BG	#006	FL97.D	12/5/95
02	SB2527NEG	#007	FL98.D	12/5/95
03	SB2527NWG	#008	FL99.D	12/5/95
04	SB2527SEG	#009	FL100.D	12/5/95
05	SB2527DUPG	#010	FL101.D	12/5/95
06	SB2527DUPGMS	#010MS	FL102.D	12/5/95
07				
08				
09				
10				
11				
12				
13				
14				
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25				
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27				
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29				
30				

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527BG

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL97.D

Level: (low/mid) LOW Date Received: 12/4/95

% Moisture: not dec. 10 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
			Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.6	U
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
156-60-5	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.6	U
127-18-4	Tetrachloroethene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-88-3	Toluene	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethylbenzene	5.6	U
108-38-3	m + p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U

SAMPLE NO.

[illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SG2527REG

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL98.0

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: not dec. 8 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.4	U
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
156-60-5	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.4	U
127-18-4	Tetrachloroethene	5.4	U
79-34-5	1,1,2,2-Tetrachloroethane	5.4	U
108-88-3	Toluene	5.4	U
108-90-7	Chlorobenzene	5.4	U
100-41-4	Ethylbenzene	5.4	U
108-38-3	m + p-Xylene	5.4	U
95-47-6	o-Xylene	5.4	U
541-73-1	1,3-Dichlorobenzene	5.4	U

Lab Name:	AENI		Contract:	9512015	
Project No.:	OHM45		Site:	Location: Group:	
Matrix: (soil/water)	SOIL		Lab Sample ID: #007		
Sample wt/vol:	5.0	(g/mL)	6	Lab File ID: FL98.D	
Level: (low/med)	LOW		Date Received: 12/4/95		
% Moisture: not dec.	8		Date Analyzed: 12/5/95		
GC Column:	CAP		ID: 0.53	(mm) Dilution Factor: 1.0	
Soil Extract Volume:	1 (uL)		Soil Aliquot Volume: 1 (uL)		

[illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527RWG

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL99.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: not dec. 10 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/Kg	
74-87-3	Chloromethane	11		U
74-83-9	Bromomethane	11		U
75-01-4	Vinyl Chloride	11		U
75-00-3	Chloroethane	11		U
75-09-2	Methylene Chloride	5.6		U
107-13-1	Acrylonitrile	110		U
107-2-8	Acrolein	110		U
75-69-4	Trichlorofluoromethane	5.6		U
75-35-4	1,1-Dichloroethene	5.6		U
75-34-4	1,1-Dichloroethane	5.6		U
156-60-5	trans-1,2-Dichloroethene	5.6		U
67-66-3	Chloroform	5.6		U
107-06-2	1,2-Dichloroethane	5.6		U
71-55-6	1,1,1-Trichloroethane	5.6		U
56-23-5	Carbon Tetrachloride	5.6		U
75-27-4	Bromodichloromethane	5.6		U
78-87-5	1,2-Dichloropropane	5.6		U
10061-01-5	cis-1,3-Dichloropropene	5.6		U
79-01-6	Trichloroethene	5.6		U
71-43-2	Benzene	5.6		U
124-48-1	Dibromochloromethane	5.6		U
10061-02-6	trans-1,3-Dichloropropene	5.6		U
79-00-5	1,1,2-Trichloroethane	5.6		U
110-75-8	2-Chloroethylvinylether	11		U
75-25-2	Bromoform	5.6		U
127-18-4	Tetrachloroethene	5.6		U
79-34-5	1,1,2,2-Tetrachloroethane	5.6		U
108-88-3	Toluene	5.6		U
108-90-7	Chlorobenzene	5.6		U
100-41-4	Ethylbenzene	5.6		U
108-38-3	m + p-Xylene	5.6		U
95-47-6	o-Xylene	5.6		U
541-73-1	1,3-Dichlorobenzene	5.6		U

Lab Name:	<u>AENI</u>		Contract:	<u>9512015</u>	
Project No.:	<u>OHM45</u>	Site:	<u> </u>	Location:	<u> </u>
Matrix: (soil/water)	<u>SOIL</u>		Lab Sample ID: <u>#008</u>		
Sample wt/vol:	<u>5.0</u> (g/mL)	<u>6</u>	Lab File ID: <u>FL99.0</u>		
Level: (low/med)	<u>LOW</u>		Date Received: <u>12/4/95</u>		
% Moisture: not dec.	<u>10</u>		Date Analyzed: <u>12/5/95</u>		
GC Column:	<u>CAP</u>	ID: <u>0.53</u> (mm)	Dilution Factor: <u>1.0</u>		
Soil Extract Volume:	<u>1</u> (uL)		Soil Aliquot Volume: <u>1</u> (uL)		

[illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527SE6

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL100.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: not dec. 11 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.6	U
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.6	U
75-35-4	1,1-Dichloroethane	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
156-60-5	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethane	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.6	U
127-18-4	Tetrachloroethene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-88-3	Toluene	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethylbenzene	5.6	U
108-38-3	m + p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U

SAMPLE NO.

SB2527 SET[illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527DUPG

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL101.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: not dec. 12 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
			Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.7	U
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
156-60-5	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.7	U
127-18-4	Tetrachloroethene	5.7	U
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-88-3	Toluene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethylbenzene	5.7	U
108-38-3	m + p-Xylene	5.7	U
95-47-6	o-Xylene	5.7	U
541-73-1	1,3-Dichlorobenzene	5.7	U

SB2527016

Lab Name: AENI

Contract: 9512015

Project No.: OHM45

Site:

Location: _____

Group: _____

Matrix: (soil/water) SOIL

Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FL101.D

Level: (low/med) **LOW**

Date Received: 12/4/95

% Moisture: not dec.	12
----------------------	----

Date Analyzed: 12/5/95

GC Column: CAP

ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units:

[illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBK01

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: 951205FS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FL94.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 0 Date Analyzed: 12/5/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
			Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	100	U
107-2-8	Acrolein	100	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
108-38-3	m + p-Xylene	5	U
95-47-6	o-Xylene	5	U
541-73-1	1,3-Dichlorobenzene	5	U

SAMPLE NO.

VBK01

Group:

Lab Sample ID: 951205FS

Lab File ID: FL94.D

Data Received:

Date Analyzed: 12/5/95

Dilution Factor: 1.0

Soil Aliquot Volume: 1 (uL)

Q

[illegible]

TCL BNA Analysis

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENI Contract: 9512015
 Project No.: DHM45 Site: _____ Location: _____ Group: _____
 Level: (low/med) LOW

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK01	79	86	79	89	81	84			
02	SBLK01MS	70	69	69	77	59	74			
03	SB2527BC	70	67	69	64	46	67			
04	SB2527NEC	70	68	64	70	47	69			
05	SB2527NWC	44	63	64	73	70	76			
06	SB2527SEC	60	90	92	102	113	107			
07	SB2527DUPC	64	95	90	102	116	106			
08										
09										
10										
11										
12										
13										
14										
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28										
29										
30										

S1 (2FP) - 2-Fluorophenol	QC LIMITS
S2 (PHL) - Phenol-d5	(25-121)
S3 (NBZ) - Nitrobenzene-d5	(24-113)
S4 (FBP) - 2-Fluorobiphenyl	(23-120)
S5 (TBP) - 2,4,6-Tribromophenol	(30-115)
S6 (TPH) - Terphenyl-d14	(19-122)
	(18-137)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENIContract: 9512015Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix Spike - Sample No.: _____

951205RBLevel: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC. #	QC. LIMITS REC.
Phenol	6700	0	4500	67	(26-90)
2-Chlorophenol	6700	0	4300	64	(25-102)
1,4-Dichlorobenzene	3300	0	2300	70	(28-104)
N-Nitroso-di-n-propylamine	3300	0	2400	73	(41-126)
1,2,4-Trichlorobenzene	3300	0	2500	76	(38-107)
4-Chloro-3-methylphenol	6700	0	5100	76	(26-103)
Acenaphthene	3300	0	2500	76	(31-137)
2,4-Dinitrotoluene	3300	0	2300	70	(28-89)
4-Nitrophenol	6700	0	4700	70	(11-114)
Pentachlorophenol	6700	0	3200	48	(17-109)
Pyrene	3300	0	2300	70	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC. #	% RPD #	QC LIMITS RPD REC.
Phenol					35 (26-90)
2-Chlorophenol					50 (25-102)
1,4-Dichlorobenzene					27 (28-104)
N-Nitroso-di-n-propylamine					38 (41-126)
1,2,4-Trichlorobenzene					23 (38-107)
4-Chloro-3-methylphenol					33 (26-103)
Acenaphthene					19 (31-137)
2,4-Dinitrotoluene					47 (28-89)
4-Nitrophenol					50 (11-114)
Pentachlorophenol					47 (17-109)
Pyrene					36 (35-142)

* Values outside of QC limits

Comments: _____

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SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK01

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Lab File ID: DL047.D Lab Sample ID: 951205RB

Instrument ID: MSD 1/MSD 2 Date Extracted: 12/5/95

Matrix: (soil/water) SOIL Date Analyzed: 12/6/95

Level: (low/med) LOW Time Analyzed: 1611

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK01MS	951205BS	DL048.D	12/06/95
02	SB2527BC	#001	DL052.D	12/06/95
03	SB2527NEC	#002	DL053.D	12/06/95
04	SB2527NWC	#003	CL049.D	12/08/95
05	SB2527SEC	#004	CL050.D	12/08/95
06	SB2527DUPC	#005	CL051.D	12/08/95
07				
08				
09				
10				
11				
12				
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S82527EC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 31.1 (g/mL) G Lab File ID: DL052.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U
108-95-2	Phenol	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
108-60-1	bis(2-chloroisopropyl)ether	370	U
95-48-7	2-Methylphenol	370	U
67-72-1	Hexachloroethane	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
106-44-5	4-Methylphenol	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	89	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	660	
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	910	U
208-96-8	Acenaphthylene	370	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
83-32-9	Acenaphthene	97	J
99-09-2	3-Nitroaniline	910	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB25276C

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 31.1 (g/mL) G Lab File ID: DL052.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	910	U
132-64-9	Dibenzofuran	59	J
121-14-2	2,4-Dinitrotoluene	170	J
100-02-7	4-Nitrophenol	910	U
86-73-7	Fluorene	150	J
7005-72-3	4-Chlorophenyl-phenylether	370	U
84-66-2	Diethylphthalate	370	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	n-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	320	J
120-12-7	Anthracene	370	U
84-74-2	Di-n-butylphthalate	370	U
86-74-8	Carbazole	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo[a]anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	47	J
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo[b]fluoranthene	370	U
207-08-9	Benzo[k]fluoranthene	370	U
50-32-8	Benzo[a]pyrene	370	U
193-39-5	Indeno[1,2,3-cd]pyrene	370	U
53-70-3	Dibenz[a,h]anthracene	370	U
191-24-2	Benzo[g,h,i]perylene	370	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2027KUG

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 30.7 (g/mL) G Lab File ID: DL053.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U
108-95-2	Phenol	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
108-60-1	bis(2-chloroisopropyl)ether	370	U
95-48-7	2-Methylphenol	370	U
67-72-1	Hexachloroethane	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
106-44-5	4-Methylphenol	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
208-96-8	Acenaphthylene	370	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
83-32-9	Acenaphthene	370	U
99-09-2	3-Nitroaniline	920	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527REC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 30.7 (g/mL) G Lab File ID: DL053.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	920	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
100-02-7	4-Nitrophenol	920	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
84-66-2	Diethylphthalate	370	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	n-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	920	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
84-74-2	Di-n-butylphthalate	370	U
86-74-8	Carbazole	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo[a]anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	40	J
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo[b]fluoranthene	370	U
207-08-9	Benzo[k]fluoranthene	370	U
50-32-8	Benzo[a]pyrene	370	U
193-39-5	Indeno[1,2,3-cd]pyrene	370	U
53-70-3	Dibenz[a,h]anthracene	370	U
191-24-2	Benzo[g,h,i]perylene	370	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S82527KVC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 30.2 (g/mL) G Lab File ID: CL049.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	380	U
108-95-2	Phenol	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
108-60-1	bis(2-chloroisopropyl)ether	380	U
95-48-7	2-Methylphenol	380	U
67-72-1	Hexachloroethane	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
106-44-5	4-Methylphenol	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	940	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	940	U
208-96-8	Acenaphthylene	380	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
83-32-9	Acenaphthene	380	U
99-09-2	3-Nitroaniline	940	U

**1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

SAMPLE NO.

SB2527NWC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 30.2 (g/mL) G Lab File ID: CLO49.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 12 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	940	U
132-84-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
100-02-7	4-Nitrophenol	940	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
84-66-2	Diethylphthalate	380	U
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	U
86-30-6	n-Nitrosodiphenylamine	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
84-74-2	Di-n-butylphthalate	380	U
86-74-8	Carbazole	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo[a]anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	53	J
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo[b]fluoranthene	380	U
207-08-9	Benzo[k]fluoranthene	380	U
50-32-8	Benzo[a]pyrene	380	U
193-39-5	Indeno[1,2,3-cd]pyrene	380	U
53-70-3	Dibenz[a,h]anthracene	380	U
191-24-2	Benzo[g,h,i]perylene	380	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527/SEC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 30.7 (g/mL) G Lab File ID: CLO50.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 13 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U
108-95-2	Phenol	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
108-60-1	bis(2-chloroisopropyl)ether	370	U
95-48-7	2-Methylphenol	370	U
67-72-1	Hexachloroethane	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
106-44-5	4-Methylphenol	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	940	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	940	U
208-96-8	Acenaphthylene	370	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
83-32-9	Acenaphthene	370	U
99-09-2	3-Nitroaniline	940	U

18
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527SEC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 30.7 (g/mL) G Lab File ID: CL050.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 13 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	940	U
132-84-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
100-02-7	4-Nitrophenol	940	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
84-66-2	Diethylphthalate	370	U
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	U
86-30-6	n-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
84-74-2	Di-n-butylphthalate	370	U
86-74-8	Carbazole	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno[1,2,3-cd]pyrene	370	U
53-70-3	Dibenz(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SB2527DUIC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 30.2 (g/mL) G Lab File ID: CL051.D

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 32 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	490	U
108-95-2	Phenol	490	U
95-57-8	2-Chlorophenol	490	U
541-73-1	1,3-Dichlorobenzene	490	U
106-46-7	1,4-Dichlorobenzene	490	U
95-50-1	1,2-Dichlorobenzene	490	U
108-60-1	bis(2-chloroisopropyl)ether	490	U
95-48-7	2-Methylphenol	490	U
67-72-1	Hexachloroethane	490	U
621-64-7	N-Nitroso-di-n-propylamine	490	U
106-44-5	4-Methylphenol	490	U
98-95-3	Nitrobenzene	490	U
78-59-1	Isophorone	490	U
88-75-5	2-Nitrophenol	490	U
105-67-9	2,4-Dimethylphenol	490	U
111-91-1	bis(2-Chloroethoxy)methane	490	U
120-83-2	2,4-Dichlorophenol	490	U
120-82-1	1,2,4-Trichlorobenzene	490	U
91-20-3	Naphthalene	490	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	490	U
59-50-7	4-Chloro-3-methylphenol	490	U
91-57-6	2-Methylnaphthalene	490	U
77-47-4	Hexachlorocyclopentadiene	490	U
88-06-2	2,4,6-Trichlorophenol	490	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	490	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	490	U
131-11-3	Dimethylphthalate	490	U
606-20-2	2,6-Dinitrotoluene	490	U
83-32-9	Acenaphthene	490	U
99-09-2	3-Nitroaniline	1200	U

**1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

SAMPLE NO.

S8252700FC

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 30.2 (g/mL) 6 Lab File ID: CL051.0

Level: (low/med) LOW Date Received: 12/4/95

% Moisture: 32 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	490	U
121-14-2	2,4-Dinitrotoluene	490	U
100-02-7	4-Nitrophenol	1200	U
86-73-7	Fluorene	490	U
7005-72-3	4-Chlorophenyl-phenylether	490	U
84-66-2	Diethylphthalate	490	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	n-Nitrosodiphenylamine	490	U
101-55-3	4-Bromophenyl-phenylether	490	U
118-74-1	Hexachlorobenzene	490	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	490	U
120-12-7	Anthracene	490	U
84-74-2	Di-n-butylphthalate	490	U
86-74-8	Carbazole	490	U
206-44-0	Fluoranthene	490	U
129-00-0	Pyrene	490	U
85-68-7	Butylbenzylphthalate	490	U
91-94-1	3,3'-Dichlorobenzidine	490	U
56-55-3	Benzo[a]anthracene	490	U
218-01-9	Chrysene	490	U
117-81-7	bis(2-Ethylhexyl)phthalate	150	J
117-84-0	Di-n-octylphthalate	490	U
205-99-2	Benzo[b]fluoranthene	490	U
207-08-9	Benzo[k]fluoranthene	490	U
50-32-8	Benzo[a]pyrene	490	U
193-39-5	Indeno[1,2,3-cd]pyrene	490	U
53-70-3	Dibenz[a,h]anthracene	490	U
191-24-2	Benzo[g,h,i]perylene	490	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 951205RB

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: DL047.D

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	330	U
108-95-2	Phenol	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
108-60-1	bis(2-chloroisopropyl)ether	330	U
95-48-7	2-Methylphenol	330	U
67-72-1	Hexachloroethane	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
106-44-5	4-Methylphenol	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
208-96-8	Acenaphthylene	330	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
83-32-9	Acenaphthene	330	U
99-09-2	3-Nitroaniline	830	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: AENI Contract: 9512015

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 951205RB

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL047.D

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/5/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/6/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
51-28-5	2,4-Dinitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
100-02-7	4-Nitrophenol	830	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
84-66-2	Diethylphthalate	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	n-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-butylphthalate	330	U
86-74-8	Carbazole	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo[a]anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo[b]fluoranthene	330	U
207-08-9	Benzo[k]fluoranthene	330	U
50-32-8	Benzo[a]pyrene	330	U
193-39-5	Indeno[1,2,3-cd]pyrene	330	U
53-70-3	Dibenz[a,h]anthracene	330	U
191-24-2	Benzo[g,h,i]perylene	330	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9512015
Report To: OHM Corporation
Project: Ft. Devens
Date: December 12, 1995
Analysis: Total Petroleum Hydrocarbons, EPA 418.1M

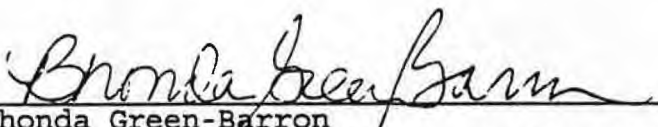
<u>Client ID</u>	<u>AENI ID</u>	<u>Date Sampled</u>	<u>Date Received</u>
SB2527BC	9512015-001	12/01/95	12/04/95
SB2527NEC	9512015-002	12/01/95	12/04/95
SB2527NWC	9512015-003	12/01/95	12/04/95
SB2527SEC	9512015-004	12/01/95	12/04/95
SB2527DUPC	9512015-005	12/01/95	12/04/95

Five soil samples were received and analyzed for Total Petroleum Hydrocarbons. The samples were extracted on 12/04/95 and analyzed on 12/05/95.

All quality control met standard laboratory criteria.

This report consists specifically of tabulated sample results.

Report Released By:


Rhonda Green-Barron
General Chemistry Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21046-1992
(410) 730-8525 Fax (410) 997-2588

Report Number: 9512015
Report To: OHM Corporation
Project: Ft. Devens
Date: December 12, 1995
Analysis: Total Petroleum Hydrocarbons, EPA 418.1M

<u>Client ID</u>	<u>AENI ID</u>	<u>%Solids</u>	<u>Result, mg/Kg</u>
SB2527BC	9512015-001	87.7	110
SB2527NEC	9512015-002	87.7	<17
SB2527NWC	9512015-003	87.8	<18
SB2527SEC	9512015-004	86.6	<18
SB2527DUPC	9512015-005	68.4	<23
	Method Blank	100	<15

(1) Results reported on a dry weight basis.

Appendix D

AENI Analytical Report - Waste Characterization Samples

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 9, 1995

Client: OHM CORPORATION

Case: 9510310

Project: FORT DEVENS

Analysis: TCLP Pesticides by SW-846 Method 8080

<u>Client ID</u>	<u>AENI#</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>
EX2527DP1	9510310-013	10/27/95	10/30/95	11/06/95	11/09/95
EX2527DP2	9510310-014	10/27/95	10/30/95	11/06/95	11/09/95
EX2527DP3	9510310-015	10/27/95	10/30/95	11/06/95	11/09/95
EX2527DP4	9510310-016	10/27/95	10/30/95	11/06/95	11/09/95
EX2527DP5	9510310-017	10/27/95	10/30/95	11/06/95	11/09/95
EX2527DP-DUP	9510310-018	10/27/95	10/30/95	11/06/95	11/09/95

Six soil samples were leached in accordance with 40 CFR 261, Appendix II. The leachates were analyzed for pesticides by SW-846 method 8080.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), and matrix spike recoveries (Form III).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The samples were prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

Nineteen out of thirty-six surrogate recoveries were within EPA CLP advisory limits (60-150%). The other seventeen recoveries were below criteria. The moderate nature of the failures coupled with acceptable blank spike recovery indicates no problem with the sample preparation process.

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

Data Released By

Noble Naniaboka
Noble Naniaboka
GC/LC Acting Lab Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number

EC2527DP1

AENI # 9510310-013

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Conc/Dil Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-0	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - 500

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number:

EX2527DP2

AENI # 9510310-014

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Conc/Dil Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

V1 - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - 500

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number:

EX2527DP3

AENI # 9510310-015

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Conc/Dil Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

V_i - Volume of extract injected (ul) - 1V_e - Volume of Water extracted (ml) - 500W_s - Weight of sample extracted (g) - N/AV_t - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number:

EC2527DP4

AENI # 9510310-018

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Concentration Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

Vl - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - 500

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number:

EX2527DP5

AEN # 9510310-017

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Conc/Dil Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

V_i - Volume of extract injected (ul) - 1V_e - Volume of Water extracted (ml) - 500W_s - Weight of sample extracted (g) - N/AV_t - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310
Account #: OHM45
Client Name: OHM CORPORATION

Sample Number:
EX2527DP-DUP

AENI # 9510310-018

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Ext Prepared: 11/6/95
Date Analyzed: 11/9/95
Conc/Dil Factor: 1
Method: 8080

GPC Cleanup ☐ Yes ☒ No
Separatory Funnel Extraction ☒ Yes
Continuous Liquid - Liquid Extraction ☒ Yes
Percent Moisture N/A
Metric: LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

V_i - Volume of extract injected (ul) - 1
V_s - Volume of Water extracted (ml) - 500
W_s - Weight of sample extracted (g) - N/A
V_t - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: OHM45

Client Name: OHM CORPORATION

Sample Number:

PBL001

AENI # BLK951106RB

Concentration: Low

Date Sampled: N/A

Date Received: N/A

Date Ext Prepared: 11/8/95

Date Analyzed: 11/8/95

Conc/Dil Factor: 1

Method: 8060

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
56-80-9	gamma-BHC (Lindane)		0.10	U
75-44-8	Heptachlor		0.050	U
1024-57-3	Heptachlor epoxide		0.050	U
72-20-8	Endrin		0.10	U
72-43-5	Methoxychlor		0.50	U
5103-71-3	alpha-Chlordane		0.050	U
5103-74-2	gamma-Chlordane		0.050	U
8001-35-2	Toxaphene		5.0	U

V1 - Volume of extract injected (ul) - 1

Ve - Volume of Water extracted (ml) - 1000

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.: 9510310

Account #: CHM45

Client Name: CHM CORPORATION

Sample Number:

TBL001

AEN # TCLPBK951108PB

Concentration: Low

Date Sampled: N/A

Date Received: N/A

Date Ext Prepared: 11/6/95

Date Analyzed: 11/9/95

Conc/Dil Factor: 1

Method: 8080

GPC Cleanup

Yes

X No

Separatory Funnel Extraction

X Yes

Continuous Liquid - Liquid Extraction

Yes

Percent Moisture

N/A

Matrix:

LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
56-59-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

Vl - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - 500

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCUP PESTICIDES

Case No.: 8510310
Account #: OHM45
Client Name: OHM CORPORATION

Sample Number

88

AEN # TCUPBS851108PB

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Ext Prepared: 11/6/95
Date Analyzed: 11/9/95
Conc/Dil Factor: 1
Method: 8080

GPC Cleanup ☒ Yes ☒ No
Separatory Funnel Extraction ☒ Yes
Continuous Liquid - Liquid Extraction ☒ Yes
Percent Moisture N/A
Matrix: LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)	0.24	0.20	
75-44-8	Heptachlor	0.24	0.10	
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin	0.81	0.20	
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

VI - Volume of extract injected (ul) - 1
Vs - Volume of Water extracted (ml) - 500
Ws - Weight of sample extracted (g) - N/A
Vt - Volume of total extract (ul) - 10,000

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc.

Contract: 8513210

Lab Code: NA Case No.: NA

SAS No.: NA

Instrument ID: GC-F

GC Column(1): DB-5

D: 0.53 mm

GC Column(2):

DB 608 ID: 0.53 mm

Dates of Analyses:

11/8/95

to

11/9/95

Method: 6080

[illegible]

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene

(60-150)

DCB= Decachlorobiphenyl

(60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES

* VALUES OUTSIDE OF QC LIMITS

D SURROGATE DILUTED OUT

3E
WATER BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc.

Contract: 8310310

Lab Code: NA

Case No.: NA

SAS No.: NA

Matrix Spike - EPA Sample No.: TCLP88951106R8

Method: 8080

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	0.40	0.0	0.24	60		56 - 123
Heptachlor	0.40	0.0	0.24	60		40 - 131
Aldrin	0.40	0.0	0.28	70		40 - 120
Dieldrin	1.0	0.0	0.75	75		52 - 128
Endrin	1.0	0.0	0.81	81		56 - 121
4,4'-DDT	1.0	0.0	0.70	70		36 - 127

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-1

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 11, 1995

Client: OHM CORPORATION

Case: 9510310

Project: FORT DEVENS

Analysis: TCLP Herbicides by Method 8150

<u>Client ID</u>	<u>AENI#</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>
EX2527DP1	9510310-013	10/27/95	10/30/95	11/08/95	11/10/95
EX2527DP2	9510310-014	10/27/95	10/30/95	11/08/95	11/10/95
EX2527DP3	9510310-015	10/27/95	10/30/95	11/08/95	11/10/95
EX2527DP4	9510310-016	10/27/95	10/30/95	11/08/95	11/10/95
EX2527DP5	9510310-017	10/27/95	10/30/95	11/08/95	11/10/95
EX2527DP-DUP	9510310-018	10/27/95	10/30/95	11/08/95	11/10/95

Six soil samples were leached according to 40 CFR 261, Appendix II. The leachates were analyzed for 2,4-D and Silvex using SW-846 Method 8150.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), and matrix spike recoveries (Form III).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The samples were prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

All surrogate recoveries were within specified criteria (50-150%).

Form III (Matrix Spike Recoveries)

A blank spike (BS) was prepared with this sample delivery group. BS recoveries were within laboratory criteria.

Data Released By

Noble Nemieboka
Noble Nemieboka
GC/LC Acting Lab Manager

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number EX2527DP1

AENI # 9510310-013

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted): N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
Vw - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number EX2527DP2

AENI # 9510310-014

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number
EX2527DP3

AENI # 9510310-015

Concentration: Low
Date Sampled: 10/27/85
Date Received: 10/30/85
Date Extract Prepared: 11/8/85
Date Analyzed: 11/10/85
Conc/Dil Factor: 1
Matrix LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

V_i - Volume of extract injected (ul) 1
V_e - Volume of water extracted (ml) 500
W_s - Mass of soil extracted (g) N/A
V_t - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
 Client Name: OHM CORPORATION
 Project Name: OHM45

Sample Number EX2527DP4

AENI # 9510310-016

Concentration: Low
 Date Sampled: 10/27/95
 Date Received: 10/30/95
 Date Extract Prepared: 11/8/95
 Date Analyzed: 11/10/95
 Conc/Dil Factor: 1
 Matrix: LEACH

GPC Cleanup No
 Separatory Funnel Ext.: Yes
 Continuous Liq-Liq Ext.: No
 Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
 Vs - Volume of water extracted (ml) 500
 Ws - Mass of soil extracted (g) N/A
 Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number EX2527DP5

AENI # 9510310-017

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number EX2527DP-DUP

AENI # 9510310-018

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8130

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number
SBL001

AENI # BLK951106JA

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: WATER

GPC Cleanup: No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted): N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.25	U
SILVEX		0.25	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 1000
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number TBLK01

AENI # TCLPBLK951108JA

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: LEACH

GPC Cleanup: No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted): N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510310
Client Name: OHM CORPORATION
Project Name: OHM45

Sample Number BS

AENI # TCLPBS951106JA

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/8/95
Date Analyzed: 11/10/95
Conc/Dil Factor: 1
Matrix: LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted): N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D	4.0	0.25	
SILVEX	3.6	0.25	

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 1000
Ws - Mass of soil extracted (g) N/A
Vt - Volume of total extract (ul) 5000

FORM I

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No.:

9510310

Laboratory Name:

American Environmental Network Inc.

[illegible]

CONTROL LIMITS = 50-150%

* - Values are outside of contract required QC limits.
M-Matrix interference. D-Surrogate diluted out.

0 out of 18
outside QC limits.

AMERICAN ENVIRONMENTAL NETWORK, INC.
HERBICIDE MATRIX SPIKE RECOVERIES

Case No.: 9510310

Client Sample ID: TCLPBS951108JA

Client Name: OHM CORPORATION

Date of Analysis: 11/10/95

Project Name: OHM45

Instrument ID: GC-H

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONC (ug/L)	BS % REC	BSD CONC (ug/L)	BSD % REC	QC LIMITS REC
2,4-D	5.03	0.0	4.04	80	N/A	N/A	50-150
Silvex	5.29	0.0	3.62	68	N/A	N/A	50-150

Spike Recovery: 0 out of 2 outside QC limits.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

November 8, 1995

Client: OHM Corporation

Project: Ft. Devens

Case: 9510310


Analysis: RCRA Metals, TCLP Metals

<u>Client ID</u>	<u>AENI ID</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Analyzed</u>
EX2527DP1	9510310-001	10/27/95	10/30/95	11/01,06/95
EX2527DP2	9510310-003	10/27/95	10/30/95	11/01,06/95
EX2527DP3	9510310-005	10/27/95	10/30/95	11/01,06/95
EX2527DP4	9510310-007	10/27/95	10/30/95	11/01,06/95
EX2527DP5	9510310-009	10/27/95	10/30/95	11/01,06/95
EX2527DP-DUP	9510310-011	10/27/95	10/30/95	11/01,06/95
EX2527DP1	9510310-013	10/27/95	10/30/95	11/03/95
EX2527DP2	9510310-014	10/27/95	10/30/95	11/03/95
EX2527DP3	9510310-015	10/27/95	10/30/95	11/03/95
EX2527DP4	9510310-016	10/27/95	10/30/95	11/03/95
EX2527DP5	9510310-017	10/27/95	10/30/95	11/03/95
EX2527DP-DUP	9510310-018	10/27/95	10/30/95	11/03/95

Six soil samples were received and analyzed for RCRA Metals per SW846 methodology. Results are reported in units of mg/Kg dry weight. Six soil samples were received and analyzed for TCLP Metals per SW846 methodology. Results are reported in units of ug/L in the leachate.

All QC data were within normal control limits. This report consists specifically of tabulated sample and QC results.

Report Released By



Christopher Baggett
Metals Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 07-Nov-95

AEMI ID #: 9510310-001

SAMPLE ID #: EX2527DF1

% SOLIDS: 91.1

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT
ARSENIC	6010	1.1	14
BARIUM	6010	22	27
CADMIUM	6010	0.44	< 0.44
CHROMIUM	6010	1.1	17
LEAD	6010	1.1	9.1
MERCURY	7471	0.1	0.13
SELENIUM	6010	0.55	< 0.55
SILVER	6010	1.1	< 1.1

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 07-Nov-95

AENI ID #: 9510310-003

SAMPLE ID #: EX2527DP2

% SOLIDS: 90.6

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT

ARSENIC	6010	1.1	15
BARIUM	6010	22	25
CADMIUM	6010	0.44	< 0.44
CHROMIUM	6010	1.1	16
LEAD	6010	1.1	36
MERCURY	7471	0.1	< 0.1
SELENIUM	6010	0.55	< 0.55
SILVER	6010	1.1	< 1.1

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 08-Nov-95

AENI ID #: 9510310-005

SAMPLE ID #: EX2527DF3

% SOLIDS: 89.7

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT
ARSENIC	6010	1.1	13
BARIUM	6010	22	25
CADMIUM	6010	0.45	< 0.45
CHROMIUM	6010	1.1	16
LEAD	6010	1.1	10
MERCURY	7471	0.09	< 0.09
SELENIUM	6010	0.56	< 0.56
SILVER	6010	1.1	< 1.1

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 08-Nov-95

AENI ID #: 9510310-007

SAMPLE ID #: EX2527DP4

% SOLIDS: 91.4

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT	

ARSENIC	6010	1.1	15	
BARIUM	6010	22	28	
CADMIUM	6010	0.44	<	0.44
CHROMIUM	6010	1.1	15	
LEAD	6010	1.1	9.0	
MERCURY	7471	0.11	0.11	
SELENIUM	6010	0.55	<	0.55
SILVER	6010	1.1	<	1.1

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 08-Nov-95

AMNI ID #: 9510310-009

SAMPLE ID #: EK2527DPS

% SOLIDS: 90.2

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT
ARSENIC	6010	1.1	15
BARIUM	6010	22	< 22
CADMIUM	6010	0.44	< 0.44
CHROMIUM	6010	1.1	15
LEAD	6010	1.1	10
MERCURY	7471	0.09	< 0.09
SELENIUM	6010	0.55	< 0.55
SILVER	6010	1.1	< 1.1

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS

CLIENT: OHM Corporation

DATE: 08-Nov-95

AENI ID #: 9510310-011

SAMPLE ID #: EX2527DP-DUP % SOLIDS: 89.6

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	REPORTING LIMIT	SAMPLE RESULT	
ARSENIC	6010	1.1	12	
BARIUM	6010	22	23	
CADMIUM	6010	0.45	< 0.45	
CHROMIUM	6010	1.1	14	
LEAD	6010	1.1	10	
MERCURY	7471	0.06	< 0.06	
SELENIUM	6010	0.56	< 0.56	
SILVER	6010	1.1	< 1.1	

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METHOD BLANK / LCS & RECOVERY

CLIENT: OHM Corporation

DATE: 07-Nov-95

UNITS: mg/Kg DRY WEIGHT

ANALYTE	METHOD	METHOD BLANK	% RECOVERY LCS
ARSENIC	6010	< 1	88
BARIUM	6010	< 20	102
CADMIUM	6010	< 0.4	96
CHROMIUM	6010	< 1	101
LEAD	6010	< 1	98
MERCURY	7471	< 0.1	105
SELENIUM	6010	< 0.5	85
SILVER	6010	< 1	93

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS
DUPLICATES

CLIENT: OHM Corporation
AENI ID #: 9511017-001(ICP)/9510304-006(Hg)
SAMPLE ID #: AENI

DATE: 07-Nov-95

UNITS: mg/Kg DRY WEIGHT

ANALYTE	SAMPLE RESULTS	DUPLICATE RESULTS	RPD
ARSENIC	2.4	3	NA
BARIUM	57	62	NA
CADMIUM	< 0.45	0.52	NA
CHROMIUM	16	16	1
LEAD	255	210	19
MERCURY	0.55	0.52	NA
SELENIUM	< 0.56	< 0.56	NA
SILVER	< 1.1	< 1.1	NA

OC = PERCENT REPRODUCIBILITY EXCEEDS 20%

NA = NOT APPLICABLE BECAUSE SAMPLE OR DUPLICATE CONCENTRATION < 5 x REPORT LIMIT

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS
SPIKED SAMPLE RECOVERY

CLIENT: OHM Corporation
AENI ID #: 9511017-001(ICP)/9510304-006(Hg)
SAMPLE ID #: AENI

DATE: 08-Nov-95

UNITS: mg/Kg DRY WEIGHT

ANALYTE	SAMPLE RESULT	SPIKED RESULTS	SPIKE ADDED	%RECOVERY

ARSENIC	2.4	11.35	11.02	81
BARIUM	57	262.66	220.35	93
CADMIUM	< 0.45	5.40	5.51	98
CHROMIUM	16	33.60	22.03	79
LEAD	255	250.32	55.09	NA
MERCURY	0.55	1.57	1.12	92
SELENIUM	< 0.56	8.37	11.02	76
SILVER	< 1.1	9.70	11.16	87

NA = NOT APPLICABLE BECAUSE SAMPLE CONCENTRATION > 4 TIMES SPIKE LEVEL
OC = OUT OF CONTROL LIMITS OF 75-125%

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS
SPIKED SAMPLE RECOVERY

CLIENT: OHM Corporation

DATE: 08-Nov-95

AENI ID #: 9511017-001 (ICP)/9510304-002 (Hg) MSD

SAMPLE ID #: AENI

UNITS: mg/Kg DRY WEIGHT

ANALYTE	SAMPLE RESULT	SPIKED RESULTS	SPIKE ADDED	%RECOVERY
ARSENIC	2.4	10.85	10.74	78
BARIUM	57	262.21	214.84	96
CADMIUM	< 0.45	5.16	5.37	96
CHROMIUM	16	32.55	21.48	76
LEAD	255	233.31	53.71	NA
MERCURY	0.55	1.53	1.12	88
SELENIUM	< 0.56	8.27	10.74	77
SILVER	< 1.1	9.45	11.16	85

NA = NOT APPLICABLE BECAUSE SAMPLE CONCENTRATION > 4 TIMES SPIKE LEVEL
OC = OUT OF CONTROL LIMITS OF 75-125%

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OHM Corporation

DATE: 06-Nov-95

AGENT SAMPLE #: 9510310-013

CLIENT SAMPLE #: EX2527DP1

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT
---------	--------	-----------------	------------------

ARSENIC	6010	500	<500
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BARIUM	6010	1,000	<1000
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CADMIUM	6010	40	<40
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CHROMIUM	6010	100	<100
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LEAD	6010	100	<100
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MERCURY	7470	1	<1
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SELENIUM	6010	250	<250
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SILVER	6010	500	<500
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AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OHM Corporation

DATE: 06-Nov-95

AENI SAMPLE #: 9510310-014

CLIENT SAMPLE #: EX2527DP2

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT
---------	--------	-----------------	------------------

ARSENIC	6010	500	<500
BARIUM	6010	1,000	<1000
CADMIUM	6010	40	<40
CHROMIUM	6010	100	<100
LEAD	6010	100	<100
MERCURY	7470	1	<1
SELENIUM	6010	250	<250
SILVER	6010	500	<500

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OHM Corporation
AENI SAMPLE #: 9510310-015
CLIENT SAMPLE #: EX2527DP3

DATE: 06-Nov-95

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT

ARSENIC	6010	500	<500
BARIUM	6010	1,000	<1000
CADMIUM	6010	40	<40
CHROMIUM	6010	100	<100
LEAD	6010	100	<100
MERCURY	7470	1	<1
SELENIUM	6010	250	<250
SILVER	6010	500	<500

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OHM Corporation
AENI SAMPLE #: 9510310-016
CLIENT SAMPLE #: EX2527DP4

DATE: 06-Nov-95

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT

ARSENIC	6010	500	<500
BARIUM	6010	1,000	<1000
CADMIUM	6010	40	<40
CHROMIUM	6010	100	<100
LEAD	6010	100	<100
MERCURY	7470	1	<1
SELENIUM	6010	250	<250
SILVER	6010	500	<500

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OHM Corporation

DATE: 06-Nov-95

AENI SAMPLE #: 9510310-017

CLIENT SAMPLE #: EX2527DP5

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT
ARSENIC	6010	500	<500
BARIUM	6010	1,000	<1000
CADMIUM	6010	40	<40
CHROMIUM	6010	100	<100
LEAD	6010	100	<100
MERCURY	7470	1	<1
SELENIUM	6010	250	<250
SILVER	6010	500	<500

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
TCLP METALS

CLIENT: OMM Corporation

DATE: 06-Nov-95

AENI SAMPLE #: 9510310-018

CLIENT SAMPLE #: EX2527DP-DUP

UNITS: ug/L in LEACHATE

ANALYTE	METHOD	REPORT LIMIT	SAMPLE RESULT
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ARSENIC	6010	500	<500
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BARIUM	6010	1,000	<1000
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CADMIUM	6010	40	<40
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CHROMIUM	6010	100	<100
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LEAD	6010	100	<100
------	------	-----	------

MERCURY	7470	1	<1
---------	------	---	----

SELENIUM	6010	250	<250
----------	------	-----	------

SILVER	6010	500	<500
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AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METHOD BLANK AND %RECOVERY LCS

CLIENT: OHM Corporation

DATE: 06-Nov-95

UNITS: ug/L IN LEACHATE

ANALYTE	METHOD	METHOD BLANK	% RECOVERY LABORATORY CONTROL SAMPLE
ARSENIC	6010	<500	89
BARIUM	6010	<1000	107
CADMIUM	6010	<40	95
CHROMIUM	6010	<100	101
LEAD	6010	<100	102
MERCURY	7470	<1.0	103
SELENIUM	6010	<250	93
SILVER	6010	<500	106

AMERICAN ENVIRONMENTAL NETWORK OF MARYLAND
METALS DATA ANALYSIS
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS

CLIENT: OHM Corporation
AENI SAMPLE #: 9511020(ICP)/9511006(Hg)
CLIENT SAMPLE #: AENI

DATE: 06-Nov-95

UNITS: ug/L IN LEACHATE

ANALYTE	SAMPLE RESULT	SPIKED SAMPLE RESULT	DUPLICATE SPIKED RESULTS	SPIKE ADDED	%RECOVERY SPIKE	%RECOVERY DUPLICATE SPIKE	RPD MS/MSD
ARSENIC	<500	2570	2600	2500	102	104	1.16
BARIUM	<1000	5060	5030	5000	101	101	0.59
CADMIUM	<40	521	549	500	104	110	5.23
CHROMIUM	<100	2520	2540	2500	101	102	0.79
LEAD	3980	9060	9360	5000	101	108	3.26
MERCURY	<1	2.12	2.07	2	106	104	2.39
SELENIUM	<250	1350	1380	1250	108	110	2.20
SILVER	<500	2460	2380	2500	98	95	3.31

NA = NOT APPLICABLE BECAUSE SAMPLE CONCENTRATION > 4 TIMES SPIKE LEVEL

AMERICAN ENVIRONMENTAL NETWORK INC.

8151 Rumsey Road Suite 180, Columbia, MD 21045-1992
(410) 730-8526 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Analysis: General Chemistry Parameters

<u>Client ID</u>	<u>AENI ID</u>	<u>Date Sampled</u>	<u>Date Received</u>
EX2527DP1	9510310-001	10/27/95	10/30/95
EX2527DP2	9510310-003	10/27/95	10/30/95
EX2527DP3	9510310-005	10/27/95	10/30/95
EX2527DP4	9510310-007	10/27/95	10/30/95
EX2527DP5	9510310-009	10/27/95	10/30/95
EX2527DP-DUP	9510310-011	10/27/95	10/30/95

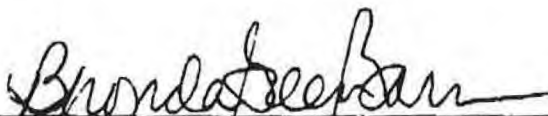
Six soil samples were received and analyzed for General Chemistry Parameters.

The samples were extracted for Total Petroleum Hydrocarbons on 11/03/95 and analyzed on 11/05/95.

All quality control met standard laboratory criteria.

This report consists specifically of tabulated sample results.

Report Released By:


Rhonda Green-Barron
General Chemistry Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP1, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	7.2	11/08/95
Flashpoint, °F	SW846 1010	>203	11/07/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	48	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	92	11/05/95

(1) SW846 Chapter 7.3.3

(2) SW846 Chapter 7.3.4

(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP2, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	6.4	11/08/95
Flashpoint, °F	SW846 1010	>203	11/07/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	<40	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	1100	11/05/95

- (1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP3, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	6.7	11/08/95
Flashpoint, °F	SW846 1010	>203	11/07/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	48	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	280	11/05/95

(1) SW846 Chapter 7.3.3

(2) SW846 Chapter 7.3.4

(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP4, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	6.9	11/08/95
Flashpoint, °F	SW846 1010	>203	11/08/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	48	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	170	11/05/95

- (1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP5, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	7.0	11/08/95
Flashpoint, °F	SW846 1010	>203	11/08/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	48	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	320	11/05/95

- (1) SW846 Chapter 7.3.3
- (2) SW846 Chapter 7.3.4
- (3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: EX2527DP-DUP, dated 10/27/95

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Corrosivity (as pH)	SW846 9045	7.1	11/08/95
Flashpoint, °F	SW846 1010	>203	11/08/95
Reactive Cyanide, mg/Kg	(1)	<2	11/08/95
Reactive Sulfide, mg/Kg	(2)	<40	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	380	11/05/95

(1) SW846 Chapter 7.3.3

(2) SW846 Chapter 7.3.4

(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510310
Report To: OHM Corporation
Project: Ft. Devens
Date: November 09, 1995
Sample ID: Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Date Analyzed</u>
Reactive Cyanide, mg/L	(1)	<0.02	11/08/95
Reactive Sulfide, mg/L	(2)	<1	11/07/95
Total Petroleum Hydrocarbons, mg/Kg (3)	EPA 418.1M	<16	11/05/95

- (1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) Total Petroleum Hydrocarbon results reported as mg/Kg on a dry weight basis.

9510310

CHAIN-OF-CUSTODY RECORD

H E I N

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Form 0019
Field Technical Services
Rev. 08/89

158389

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526																		
PROJECT NAME Ft. Devens		PROJECT LOCATION Ayer, MA				NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)							REMARKS				
PROJ. NO. 16208	PROJECT CONTACT Mike Quinlan			PROJECT TELEPHONE NO. (508) 772-2019			<div style="display: flex; justify-content: space-around;"> <div>TCLP</div> <div>PCBs</div> <div>TPH</div> <div>PCPA Char.</div> <div>PCPA metals</div> <div>PAH's</div> <div>to VOC's</div> </div>											
CLIENT'S REPRESENTATIVE USACE					PROJECT MANAGER/SUPERVISOR Kevin Mack													
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB										SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)			
1	EX2527DP1	10-27-95	1015	X		Brown Rocky Soil w/ clay	1x1.2 3x8oz	X	X	X	X	X	X	-001, -013				
2	EX2527DP1A	10-27-95	1017		X	Brown Rocky Soil w/ clay	2x40oz						X	-002				
3	EX2527DP2	10-27-95	1020	X		Brown Rocky Soil w/ clay	1x1.2 3x8oz	X	X	X	X	X	X	-003, -014				
4	EX2527DP2A	10-27-95	1022		X	Brown Rocky Soil w/ clay	2x40oz						X	-004				
5	EX2527DP3	10-27-95	1024	X		Brown Rocky Soil w/ clay	1x1.2 3x8oz	X	X	X	X	X	X	-005, -015				
6	EX2527DP3A	10-27-95	1026		X	Brown Rocky Soil w/ clay	2x40oz						X	-006				
7	EX2527DP4	10-27-95	1027	X		Brown Rocky Soil w/ clay	1x1.2 3x8oz	X	X	X	X	X	X	-007, -016				
8	EX2527DP4A	10-27-95	1029		X	Brown Rocky Soil w/ clay	2x40oz						X	-008,				
9	EX2527DP5	10-27-95	1032	X		Brown Rocky Soil w/ clay	1x1.2 3x8oz	X	X	X	X	X	X	-009, -017				
10	EX2527DP5A	10-27-95	1035		X	Brown Rocky Soil w/ clay	2x40oz						X	-010				

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS	
1	-10	Matthew Jones	Feder Air 44# 316 8975 265	10-27-95	1530		- 5 Day TAT - Temp Blank included - Preserved at 4°C
2			S. Munnell	10/30/95	14:00		
3							
4							

SAMPLER'S SIGNATURE Matthew Jones					
---	--	--	--	--	--

CHAIN-OF-CUSTODY RECORD

AEN

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

158390

9510310

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME Ft. Devens		PROJECT LOCATION Ayer, MA		ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)				
PROJ. NO. 16208	PROJECT CONTACT Mike Quinlan	PROJECT TELEPHONE NO. (508) 772-2019						
CLIENT'S REPRESENTATIVE USACE		PROJECT MANAGER/SUPERVISOR Kevin Mack						
ITEM NO.	SAMPLE NUMBER	DATE	TIME			COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)
1	EX2527DP-DUP	10-27-95	1032	X		Brown Rocky Soil w/ clay	3x8oz 1x12	X X X X X X X X -011, -018
2	EX2527DP-DUPA	10-27-95	1005		X	Brown Rocky Soil w/ clay	2x40ml	X X X X X X X X -012
3	EX2527DP-TRP	10-27-95	1034	X		Brown Rocky Soil w/ clay	3x8oz 1x12	X X X X X X X X -013
4	EX2527DP-TRPA	10-27-95	1005					
5								
6								
7								
8								
9								
10								

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-2	Matthew Jones	Fed-Ex Airbill # 316-8975065	10-27-95	1530	-5 day TAT
2			317 4009 027 S. Mussell	10/30/95	14:00	-Temp. blank included
3						- Preserved at 4°C
4						SAMPLER'S SIGNATURE <i>Matthew Jones</i>

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525

Project Number: 9510-310
Client Name: OHM Corporation
Project Title: Fort Devens
Ayer, MA

Six soil samples were analyzed for the volatile organic compounds in the priority pollutant list, by method 8240.

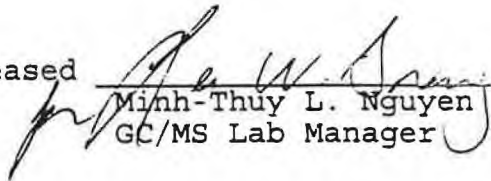
Six soil samples were analyzed for the polynuclear aromatic (PAH) compounds by method 8270.

Six soil samples were TCLP leached according to the SW846 guidelines, and analyzed for the volatile and semivolatile organic compounds in the list of Toxic Characteristic Constituents, by methods 8240 and 8270, respectively.

The analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of tabulated results of the samples and the method blanks, along with the QC forms II, III and IV.

Data Released


Minh-Thuy L. Nguyen
GC/MS Lab Manager

(3/6/95)

VOLATILES Section:

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Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date TCLP Leached	Date Analyzed
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=====

PP Analysis:

EX2527DP1A	310-002	Soil	10/27/95	10/30/95	N.A.	11/10/95
EX2527DP2A	310-004	Soil	10/27/95	10/30/95	N.A.	11/10/95
EX2527DP3A	310-006	Soil	10/27/95	10/30/95	N.A.	11/10/95
EX2527DP4A	310-008	Soil	10/27/95	10/30/95	N.A.	11/10/95
EX2527DP5A	310-010	Soil	10/27/95	10/30/95	N.A.	11/10/95
EX2527DP-DUPA	310-012	Soil	10/27/95	10/30/95	N.A.	11/10/95

TCLP Analysis:

EX2527DP1	310-013	Soil	10/27/95	10/30/95	11/01/95	11/15/95
EX2527DP2	310-014	Soil	10/27/95	10/30/95	11/01/95	11/15/95
EX2527DP3	310-015	Soil	10/27/95	10/30/95	11/01/95	11/15/95
EX2527DP4	310-016	Soil	10/27/95	10/30/95	11/01/95	11/15/95
EX2527DP5	310-017	Soil	10/27/95	10/30/95	11/01/95	11/15/95
EX2527DP-DUP	310-018	Soil	10/27/95	10/30/95	11/01/95	11/15/95

Form I (Tabulated Results)

All sample preparation and analyses were performed within the holding time requirement.

The results of the PP analyses were reported on the basis of dry weight.

The leachates were analyzed at a 1:10 dilution to minimize background interference.

Form II (Surrogate Recoveries)

The surrogate recoveries for the samples and the method blanks were within the method specified criteria.

Form III (MS/MSD Recoveries)

PP Analysis: A batch MS/MSD analysis was reported. All spike recoveries and all %RPD were within the method advisory limits.

TCLP Analysis: A batch MS analysis was reported. All spike recoveries were within the method advisory limits.

Form IV (Method Blank Summary)

The method blanks were free of target analytes. However methylene chloride detected in the PP analysis could be viewed as lab contamination.

SEMIVOLATILES Section:

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Client ID	AENI ID	Matrix	Date Sampl.	Date Recevd	Date TCLP	Date Extracted BNA	Date Analz
--------------	------------	--------	----------------	----------------	--------------	-----------------------	---------------

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PAH Analysis:

EX2527DP1	310-001	Soil	10/27	10/30	N.A.	11/08	11/11
EX2527DP2	310-003	Soil	10/27	10/30	N.A.	11/08	11/11
EX2527DP3	310-005	Soil	10/27	10/30	N.A.	11/08	11/11
EX2527DP4	310-007	Soil	10/27	10/30	N.A.	11/08	11/11
EX2527DP5	310-009	Soil	10/27	10/30	N.A.	11/08	11/11
EX2527DP-DUP	310-011	Soil	10/27	10/30	N.A.	11/08	11/11

TCLP Analysis:

EX2527DP1	310-013	Soil	10/27	10/30	11/03	11/06	11/10
EX2527DP2	310-014	Soil	10/27	10/30	11/03	11/06	11/10
EX2527DP3	310-015	Soil	10/27	10/30	11/03	11/06	11/10
EX2527DP4	310-016	Soil	10/27	10/30	11/03	11/06	11/11
EX2527DP5	310-017	Soil	10/27	10/30	11/03	11/06	11/11
EX2527DP-DUP	310-018	Soil	10/27	10/30	11/03	11/06	11/11

Form I (Tabulated Results)

All sample preparation and analyses were performed within the holding time requirement.

The PAH results were reported on the basis of dry weight.

The leachates were analyzed at a 1:2 dilution to minimize background interference.

Form II (Surrogate Recoveries)

The surrogate recoveries for all samples, method blanks and QC were within criteria. Note that the TCLP analysis was flagged with 'D' due to the dilution.

Form III (BS Recoveries)

PAH Analysis: A BS analysis was included. All recoveries were within limits.

TCLP Analysis: A TCLP BLK LCS analysis was reported. All recoveries were within criteria.

Form IV (Method Blank Summary)

The method blanks were free of target analytes.

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Level: (low/med) LOW

	SAMPLE NO.	SMC1 (DCE) #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	101 001
01	VBLK01	109	104	106		
02	EX252DP1A	117	113	118		
03	EX252DP2A	118	91	89		
04	EX252DP3A	107	104	105		
05	EX252DP4A	98	96	98		
06	EX252DP5A	116	97	107		
07	EX252DP-DUPA	98	109	106		
08						
09						
10						
11						
12						
13						
14						
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16						
17						
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19						
20						
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23						
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25						
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27						
28						
29						
30						

SMC1 (DCE) = 1,2-Dichloroethane-d4

SMC2 (TOL) = Toluene-d8

SMC3 (BFB) = Bromofluorobenzene

QC LIMITS

(70-121)

(81-117)

(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERYLab Name: AENI

Contract: 9510310

Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix Spike - Sample No.: 9510031-008

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	83	166	(59-172)
Trichloroethene	50	0	63	126	(62-137)
Benzene	50	0	68	136	(66-142)
Toluene	50	0	66	132	(59-139)
Chlorobenzene	50	0	66	132	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	50	80	160	4	22	(59-172)
Trichloroethene	50	60	120	5	24	(62-137)
Benzene	50	69	138	1	21	(66-142)
Toluene	50	66	132	0	21	(59-139)
Chlorobenzene	50	62	124	6	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

- Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

Comments: _____

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Lab File ID: FK183.DLab Sample ID: 951110FSDate Analyzed: 11/10/95Time Analyzed: 1424GC Column: CAP.ID: 0.53 (mm)Heated Purge: (Y/N) YInstrument ID: F7200

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EX252DP1A	#002	FK191.D	11/10/95
02	EX252DP2A	#004	FK192.D	11/10/95
03	EX252DP3A	#006	FK193.D	11/10/95
04	EX252DP4A	#008	FK194.D	11/10/95
05	EX252DP5A	#010	FK195.D	11/10/95
06	EX252DP-DUPA	#012	FK196.D	11/10/95
07				
08				
09				
10				
11				
12				
13				
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30				

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2527DP1A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK191.D

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 9 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.1	JB
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	5.5	U
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.5	U
127-18-4	Tetrachloroethene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-88-3	Toluene	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2527012A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK192.D

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 11 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/Kg	
74-87-3	Chloromethane	11		U
74-83-9	Bromomethane	11		U
75-01-4	Vinyl Chloride	11		U
75-00-3	Chloroethane	11		U
75-09-2	Methylene Chloride	12		B
107-13-1	Acrylonitrile	110		U
107-2-8	Acrolein	110		U
75-69-4	Trichlorofluoromethane	5.6		U
75-35-4	1,1-Dichloroethene	5.6		U
75-34-4	1,1-Dichloroethane	5.6		U
156-60-5	trans-1,2-Dichloroethene	5.6		U
67-66-3	Chloroform	5.6		U
107-06-2	1,2-Dichloroethane	5.6		U
71-55-6	1,1,1-Trichloroethane	5.6		U
56-23-5	Carbon Tetrachloride	5.6		U
75-27-4	Bromodichloromethane	5.6		U
78-87-5	1,2-Dichloropropane	5.6		U
10061-01-5	cis-1,3-Dichloropropene	5.6		U
79-01-6	Trichloroethene	4.5		J
71-43-2	Benzene	5.6		U
124-48-1	Dibromochloromethane	5.6		U
10061-02-6	trans-1,3-Dichloropropene	5.6		U
79-00-5	1,1,2-Trichloroethane	5.6		U
110-75-8	2-Chloroethylvinylether	11		U
75-25-2	Bromoform	5.6		U
127-18-4	Tetrachloroethene	5.2		J
79-34-5	1,1,2,2-Tetrachloroethane	5.6		U
108-88-3	Toluene	5.6		U
108-90-7	Chlorobenzene	5.6		U
100-41-4	Ethylbenzene	5.6		U
541-73-1	1,3-Dichlorobenzene	5.6		U
106-46-7	1,4-Dichlorobenzene	5.6		U
95-50-1	1,2-Dichlorobenzene	5.6		U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2527013A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK193.D

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 10 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	B
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
156-60-5	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.6	U
127-18-4	Tetrachloroethene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-88-3	Toluene	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethylbenzene	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U
106-46-7	1,4-Dichlorobenzene	5.6	U
95-50-1	1,2-Dichlorobenzene	5.6	U

FORM I VOA

8240/PP List

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2527DF-4A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) 6 Lab File ID: FK194.D

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 9 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7	B
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	5.5	U
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.5	U
127-18-4	Tetrachloroethene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-88-3	Toluene	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2527D15A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) 6 Lab File ID: FK195.D

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 9 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.4	JB
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	5.5	U
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.5	U
127-18-4	Tetrachloroethene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-88-3	Toluene	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX252701-001A

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK196.0

Level: (low/med) LOW Date Received: 10/30/95

% Moisture: not dec. 8 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	9.9	B
107-13-1	Acrylonitrile	110	U
107-2-8	Acrolein	110	U
75-69-4	Trichlorofluoromethane	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
156-60-5	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
110-75-8	2-Chloroethylvinylether	11	U
75-25-2	Bromoform	5.4	U
127-18-4	Tetrachloroethene	5.4	U
79-34-5	1,1,2,2-Tetrachloroethane	5.4	U
108-88-3	Toluene	5.4	U
108-90-7	Chlorobenzene	5.4	U
100-41-4	Ethylbenzene	5.4	U
541-73-1	1,3-Dichlorobenzene	5.4	U
106-46-7	1,4-Dichlorobenzene	5.4	U
95-50-1	1,2-Dichlorobenzene	5.4	U

FORM I VOA

8240/PP List

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLK01

Lab Name: AENI Contract: 9510310

Project No.: OHM45 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 951110FS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK183.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. 0 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/Kg
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3.7	J
107-13-1	Acrylonitrile	100	U
107-2-8	Acrolein	100	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

	SAMPLE NO.	SMC1 (DCE) #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VLK02	89	93	94		
02	TBLK01	95	99	89		
03	EX2527DP1	95	97	90		
04	EX2527DP2	90	98	87		
05	EX2527DP3	94	95	84		
06	EX2527DP4	92	98	87		
07	EX2527DP5	96	97	87		
08	EX2527DP-DUP	90	94	82		
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

SMC1 (DCE) = 1,2-Dichloroethane-d4

SMC2 (TOL) = Toluene-d8

SMC3 (BFB) = Bromofluorobenzene

QC LIMITS

(76-114)

(88-110)

(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Lab Name: AENI Contract: 9510310
Project No.: OHM45 Site: Location: Group:
Matrix Spike - Sample No.: 9511116-002

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC. LIMITS REC.
1,1-Dichloroethene	50	0	37	74	(61-145)
Trichloroethene	50	0	38	76	(71-120)
Benzene	50	0	42	84	(76-127)
Toluene	50	0	47	94	(76-125)
Chlorobenzene	50	0	41	82	(75-130)

Comments: _____

VOLATILE METHOD BLANK SUMMARY

Lab Name: AENIContract: 9510310

TBK02

Project No.: OHM45

Site: _____

Location: _____

Group: _____

Lab File ID: FK256.DLab Sample ID: 951115FWDate Analyzed: 11/15/95Time Analyzed: 1158GC Column: CAP.ID: 0.53 (mm)Heated Purge: (Y/N) NInstrument ID: F7200

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	TBLK01	951110TCLP	FK266.D	11/15/95
02	EX2527DP1	#013	FK267.D	11/15/95
03	EX2527DP2	#014	FK268.D	11/15/95
04	EX2527DP3	#015	FK269.D	11/15/95
05	EX2527DP4	#016	FK270.D	11/15/95
06	EX2527DP5	#017	FK271.D	11/15/95
07	EX2527DP-DUP	#018	FK272.D	11/15/95
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
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21				
22				
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25				
26				
27				
28				
29				
30				

COMMENTS:

Lab Name: AENI

Contract: 9510310

EX2527DP2

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

LEACH

Lab Sample ID: #014

Sample wt/vol:

5.0

(g/mL)

ML

Lab File ID: FK268.D

Level: (low/med)

Date Received: 10/30/95

% Moisture: not dec.

Date Analyzed: 11/15/95

GC Column: CAP.

ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

Lab Name: AENI

Contract: 9510310

EX252701's

Project No.: OHM45

Site: _____

Location: _____

Group:

Matrix: (soil/water) LEACH

Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: FK269.D

Level: (low/med)

Date Received: 10/30/95

% Moisture: not dec.

Date Analyzed: 11/15/95

GC Column: CAP.

ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	

[illegible]

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX2527016

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water) LEACH

Lab Sample ID: #017

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: FK271.D

Level: (low/med)

Date Received: 10/30/95

% Moisture: not dec.

Date Analyzed: 11/15/95

GC Column: CAP. ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

Lab Name:	AENI		Contract:	9510310	
Project No.:	OHM45		Site:	Location: Group:	
Matrix: (soil/water)	WATER		Lab Sample ID: 951115FW		
Sample wt/vol:	5.0	(g/mL)	ML	Lab File ID: FK256.D	
Level: (low/med)			Date Received:		
% Moisture: not dec.			Date Analyzed: 11/15/95		
GC Column:	CAP.	ID:	0.53	(mm)	Dilution Factor: 1.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	

[illegible]

Lab Name: AENI

Contract: 9510310

ГЛАВА I

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

LEACH

Lab Sample ID: 951110TCLP

Sample wt/vol:

5.0

(g/mL)

ML

Lab File ID: FK266.D

Level: (low/med)

Date Received:

% Moisture: not dec.

Date Analyzed: 11/15/95

GC Column: CAP.

ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

0

[illegible]

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Level: (low/med) LOW

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	101 OUT
01	SBLK02	63	66	89						
02	SBLK02MS	75	71	82						
03	EX2527DP1	64	62	86						
04	EX2527DP2	81	86	72						
05	EX2527DP3	65	63	91						
06	EX2527DP4	64	72	87						
07	EX2527DP5	76	70	90						
08	EX2527DP-DUP	69	69	89						
09										
10										
11										
12										
13										
14										
15										
16										
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24										
25										
26										
27										
28										
29										
30										

S1 (NBZ) - Nitrobenzene-d5
 S2 (FBP) - 2-Fluorobiphenyl
 S3 (TPH) - Terphenyl-d14

QC LIMITS
 (23-120)
 (30-115)
 (18-137)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix Spike - Sample No.: 951108VBLevel: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	3300	0	2400	73	(28-104)
N-Nitroso-di-n-propylamine	3300	0	2900	88	(41-126)
1,2,4-Trichlorobenzene	3300	0	2300	70	(41-126)
Acenaphthene	3300	0	2300	70	(31-137)
2,4-Dinitrotoluene	3300	0	2600	79	(28-89)
Pyrene	3300	0	2500	76	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,4-Dichlorobenzene					27 (28-104)
N-Nitroso-di-n-propylamine					38 (41-126)
1,2,4-Trichlorobenzene					38 (41-126)
Acenaphthene					19 (31-137)
2,4-Dinitrotoluene					47 (28-89)
Pyrene					36 (35-142)

* Values outside of QC limits

Comments: _____

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: AENIContract: 9510310

SBLK02

Project No.: OHM45

Site: _____

Location: _____

Group: _____

Lab File ID: DK180.DLab Sample ID: 951108VBInstrument ID: MSD 1Date Extracted: 11/8/95Matrix: (soil/water) SOILDate Analyzed: 11/11/95Level: (low/med) LOWTime Analyzed: 1741

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK02MS	951108BS	DK181.D	11/11/95
02	EX2527DP1	#001	DK182.D	11/11/95
03	EX2527DP2	#003	DK183.D	11/11/95
04	EX2527DP3	#005	DK184.D	11/11/95
05	EX2527DP4	#007	DK185.D	11/11/95
06	EX2527DP5	#009	DK186.D	11/11/95
07	EX2527DP-DUP	#011	DK187.D	11/11/95
08				
09				
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30				

COMMENTS:

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	AEM		Contract:	9510310	
Project No.:	OHM45	Site:	Location:	Group:	
Matrix: (soil/water)	SOIL		Lab Sample ID: #001		
Sample wt/vol:	30.0	(g/mL)	G	Lab File ID: DK182.D	
Level: (low/med)	LOW		Date Received: 10/30/95		
% Moisture:	9	decanted: (Y/N):	N		
Concentrated Extract Volume:	1000	(uL)	Date Analyzed: 11/11/95		
Injection Volume:	1.0	(uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N)	N	pH:			

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX2527DP3

Project No.: OHM45

Site: _____

Location:

Group:

Matrix: (soil/water)

SOIL

Lab Sample ID: #003

Sample wt/vol:

30.6

(g/mL) G

Lab File ID: DK183.D

Level: (low/med)

LOW

Date Received: 10/30/95

% Moisture: 9

9

decanted: (Y/N):

N

Date Extracted: 11/8/95

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/11/95

Injection Volume:

1.0

(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N)

N

pH:

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	AENI		Contract:	9510310	
Project No.:	OHM45	Site:	Location:	Group:	
Matrix: (soil/water)	SOIL		Lab Sample ID: #005		
Sample wt/vol:	30.1	(g/mL)	G	Lab File ID: DK184.D	
Level: (low/med)	LOW		Date Received: 10/30/95		
% Moisture:	10	decanted: (Y/N):	N		
Concentrated Extract Volume:	1000	(uL)	Date Analyzed: 11/11/95		
Injection Volume:	1.0	(uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N)	N	pH:			

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	AENI		Contract:	9510310	
Project No.:	OHM45		Site:		
			Location:		
Matrix: (soil/water)	SOIL		Lab Sample ID:	#007	
Sample wt/vol:	30.4 (g/mL)		Lab File ID:	DK185.D	
Level: (low/med)	LOW		Date Received:	10/30/95	
% Moisture:	9		Date Extracted:	11/8/95	
	decanted: (Y/N):		N		
Concentrated Extract Volume:	1000 (uL)		Date Analyzed:	11/11/95	
Injection Volume:	1.0 (uL)		Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N		pH:		

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX2527(D)P

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

SOIL

Lab Sample ID: #009

Sample wt/vol:

30.6

(g/mL) G

Lab File ID: DK186.D

Level: (low/med)

LOW

Date Received: 10/30/95

% Moisture: 10

10

decanted: (Y/N): N

Date Extracted: 11/8/95

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/11/95

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N)

N

pH:

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX252701A-BB

Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix: (soil/water) SOIL

Lab Sample ID: #011

Sample wt/vol: 30.2 (g/mL) G

Lab File ID: DK187.D

Level: (low/med) LOW

Date Received: 10/30/95

% Moisture: 10 **decanted: (Y/N):** N

Date Extracted: 11/8/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/11/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	AENI		Contract:	9510310	
Project No.:	OHM45		Site:	Location: Group:	
Matrix: (soil/water)	SOIL		Lab Sample ID: 951108VB		
Sample wt/vol:	30.0 (g/mL) G		Lab File ID: DK180.D		
Level: (low/med)	LOW		Date Received:		
% Moisture:	0		decanted: (Y/N):	N	
Concentrated Extract Volume:	1000 (uL)		Date Analyzed: 11/11/95		
Injection Volume:	1.0 (uL)		Dilution Factor: 1.0		
GPC Cleanup: (Y/N)	N		pH:		

[illegible]

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK01	48	72	81	72	78	85			
02	TCLPBLK	52	77	80	65	73	74			
03	TCLPBLKMS	57	44	109	70	75	71			
04	EX2527DP1	67 D	85 D	85 D	91 D	84 D	102 D			
05	EX2527DP2	66 D	72 D	79 D	86 D	83 D	99 D			
06	EX2527DP3	55 D	70 D	86 D	83 D	77 D	97 D			
07	EX2527DP4	63 D	67 D	82 D	89 D	74 D	107 D			
08	EX2527DP5	64 D	69 D	79 D	86 D	76 D	100 D			
09	EX2527DP-DUP	63 D	74 D	83 D	86 D	78 D	103 D			
10										
11										
12										
13										
14										
15										
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26										
27										
28										
29										
30										

S1 (2FP) - 2-Fluorophenol
 S2 (PHL) - Phenol-d5
 S3 (NBZ) - Nitrobenzene-d5
 S4 (FBP) - 2-Fluorobiphenyl
 S5 (TBP) - 2,4,6-Tribromophenol
 S6 (TPH) - Terphenyl-d14

QC LIMITS
 (21-100)
 (10-94)
 (34-114)
 (43-116)
 (10-123)
 (33-141)

Column to be used to flag recovery values
 • Values outside of contract required QC limits
 D Surrogate diluted out

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix Spike - Sample No.: TCLPBLK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	200	0	28	14	(12-89)
2-Chlorophenol	200	0	106	53	(27-123)
1,4-Dichlorobenzene	100	0	84	84	(36-97)
N-Nitroso-di-n-propylamine	100	0	101	101	(41-116)
1,2,4-Trichlorobenzene	100	0	90	90	(39-98)
4-Chloro-3-methylphenol	200	0	160	80	(23-97)
Acenaphthene	100	0	78	78	(46-118)
2,4-Dinitrotoluene	100	0	87	87	(24-96)
4-Nitrophenol	200	0	150	75	(10-80)
Pentachlorophenol	200	0	140	70	(9-103)
Pyrene	100	0	63	63	(26-127)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol					42 (12-89)
2-Chlorophenol					40 (27-123)
1,4-Dichlorobenzene					28 (36-97)
N-Nitroso-di-n-propylamine					38 (41-116)
1,2,4-Trichlorobenzene					28 (39-98)
4-Chloro-3-methylphenol					42 (23-97)
Acenaphthene					31 (46-118)
2,4-Dinitrotoluene					38 (24-96)
4-Nitrophenol					50 (10-80)
Pentachlorophenol					50 (9-103)
Pyrene					31 (26-127)

(1) N-Nitroso-di-n-propylamine

• Values outside of QC limits

Comments: _____

SEMIVOLATILE METHOD BLANK SUMMARY

SGLK01

Lab Name: AENIContract: 9510310Project No.: OHM45

Site: _____

Location: _____

Group: _____

Lab File ID: DK151.DLab Sample ID: 951106JAInstrument ID: MSD 1Date Extracted: 11/6/95Matrix: (soil/water) WATERDate Analyzed: 11/10/95

Level: (low/med) _____

Time Analyzed: 1331

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	TCLPBLK	1103TBLK	DK153.D	11/10/95
02	TCLPBLKMS	1103BS	DK154.D	11/10/95
03	EX2527DP1	#013	DK155.D	11/10/95
04	EX2527DP2	#014	DK156.D	11/10/95
05	EX2527DP3	#015	DK157.D	11/10/95
06	EX2527DP4	#016	DK177.D	11/11/95
07	EX2527DP5	#017	DK178.D	11/11/95
08	EX2527DP-DUP	#018	DK179.D	11/11/95
09				
10				
11				
12				
13				
14				
15				
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30				

COMMENTS:

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX2527b1a

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

LEACH

Lab Sample ID: #013

Sample wt/vol:

500.0

(g/mL)

ML

Lab File ID: DK155.D

Level: (low/med)

Date Received: 10/30/95

% Moisture:

decanted: (Y/N):

N

Date Extracted: 11/6/95

Concentrated Extract Volume:

1000

(uL)

Date Analyzed: 11/10/95

Injection Volume:

1.0

(uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N)

N

pH:

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

LY2527012

Lab Name:	AENI		Contract:	9510310	
Project No.:	OHM45		Site:	Location: Group:	
Matrix: (soil/water)	LEACH		Lab Sample ID: #014		
Sample wt/vol:	500.0 (g/mL) ML		Lab File ID: DK156.D		
Level: (low/med)			Date Received: 10/30/95		
% Moisture:	decanted: (Y/N): N		Date Extracted: 11/6/95		
Concentrated Extract Volume:	1000 (uL)		Date Analyzed: 11/10/95		
Injection Volume:	1.0 (uL)		Dilution Factor: 2.0		
GPC Cleanup: (Y/N)	N		pH:		

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX-2527013

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

LEACH

Lab Sample ID: #015

Sample wt/vol:

500.0

(g/mL)

ML

Lab File ID: DK157.D

Level: (low/med)

Date Received: 10/30/95

% Moisture:

decanted: (Y/N): N

Date Extracted: 11/6/95

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/10/95

Injection Volume:

1.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N)

N

pH:

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/l

Q

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX2527015

Project No.: OHM45

Site: _____

Location: _____

Group: _____

Matrix: (soil/water) LEACH

Lab Sample ID: #017

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: DK178.D

Level: (low/med) _____

Date Received: 10/30/95

% Moisture: _____ **decanted: (Y/N):** **N**

Date Extracted: 11/6/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/11/95

Injection Volume: 1.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

EX-2527 DEB-DEB

Project No.: OHM45

Site:

Location:

Group: _____

Matrix: (soil/water) LEACH

Lab Sample ID: #018

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: DK179.D

Level: (low/med)

Date Received: 10/30/95

% Moisture: decanted: (Y/N): N

Date Extracted: 11/6/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/11/95

Injection Volume: 1.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI

Contract: 9510310

51101

Project No.: OHM45

Site:

Location:

Group:

Matrix: (soil/water)

LEACH

Lab Sample ID: 951106JA

Sample wt/vol:

1000.0

(g/mL) ML

Lab File ID: DK151.D

Level: (low/med)

Date Received:

% Moisture:

decanted: (Y/N):

N

Date Extracted: 11/6/95

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/10/95

Injection Volumes:

1.0

(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N)

N

pH:

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TCLP:ELK

Lab Name: AENI

Contract: 9510310

Project No.: OHM45

Site: _____

Location:

Group: _____

Matrix: (soil/water) LEACH

Lab Sample ID: 1103TBLK

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: DK153.D

Level: (low/med)

Date Received: _____

% Moisture: _____ **decanted: (Y/N):** **N**

Date Extracted: 11/6/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/10/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

CAS No.

Compound

(ug/L or ug/Kg)

ug/L

Q

[illegible]

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 2, 1995

Client: OHM CORPORATION

Case: 9510310

Project: FORT DEVENS

Analysis: PCBs by SW-846 Method 8080

<u>Client ID</u>	<u>AENI#</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>
EX2527DP1	9510310-001	10/27/95	10/30/95	11/01/95	11/01/95
EX2527DP2	9510310-003	10/27/95	10/30/95	11/01/95	11/01/95
EX2527DP3	9510310-005	10/27/95	10/30/95	11/01/95	11/01/95
EX2527DP4	9510310-007	10/27/95	10/30/95	11/01/95	11/02/95
EX2527DP5	9510310-009	10/27/95	10/30/95	11/01/95	11/02/95

Five soil samples were extracted and analyzed for PCB's by SW-846 method 8080.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), and lab control sample recovery (Form III).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected at or above the detection limit. The samples were extracted and analyzed within the method recommended holding time.

Form II (Surrogate Spike Recoveries)

All recoveries are based on a single column analysis.

All surrogate recoveries were within EPA CLP criteria (60-150%).

Form III (Matrix Spike Recoveries)

A blank spike (BS) was prepared with this sample delivery group. BS recovery was within SW-846 method 8080 criteria (29-131%).

Data Released By

Noble Nemeboka
Noble Nemeboka

GC/LC Acting Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: EX2527DP1

AENI #: 9510310-001

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/01/95
Date Analyzed: 11/01/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		39	U
AR1260		39	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.43

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: EX2527DP2

AENI #: 9510310-003

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/01/95
Date Analyzed: 11/01/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		39	U
AR1260		39	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.61

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.

ORGANIC ANALYSIS DATA SHEET

PCBs BY 8080

Contract Number: 9510310

Client Name: OHM CORPORATION

Project: FORT DEVENS

CLIENT NUMBER: EX2527DP3

AENI #: 9510310-005

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Extract Prepared: 11/01/95

Date Analyzed: 11/01/95

Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]

Sonication Ext: [X]

Soxhlett Ext: []

Matrix: SOIL

Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		40	U
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected
at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.06

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: EX2527DP4

AENI #: 9510310-007

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/01/95
Date Analyzed: 11/02/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		19	U
AR1221		19	U
AR1232		19	U
AR1242		19	U
AR1248		19	U
AR1254		39	U
AR1260		39	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.87

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.

ORGANIC ANALYSIS DATA SHEET

PCBs BY 8080

Contract Number: 9510310

Client Name: OHM CORPORATION

Project: FORT DEVENS

CLIENT NUMBER: EX2527DP5

AENI #: 9510310-009

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/30/95

Date Extract Prepared: 11/01/95

Date Analyzed: 11/02/95

Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]

Sonication Ext: [X]

Soxhlett Ext: []

Matrix: SOIL

Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		19	U
AR1221		19	U
AR1232		19	U
AR1242		19	U
AR1248		19	U
AR1254		39	U
AR1260		39	U

U-Indicates that a compound was analyzed for but not detected
at or above the detection limit.

Vl - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 31.05

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.

ORGANIC ANALYSIS DATA SHEET

PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: PBLK01

AENI #: BLK951101VA

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/01/95
Date Analyzed: 11/02/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		40	U
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected
at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: BS

AENI #: BS951101VA

Concentration: Low
Date Sampled : N/A
Date Received : N/A
Date Extract Prepared : 11/01/95
Date Analyzed: 11/02/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254	150	40	
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30

Vt - Volume of total extract (ul) - 10000

ORGANIC ANALYSIS DATA SHEET
AMERICAN ENVIRONMENTAL NETWORK, Inc.

Case Number: 9510310
Method: PCB 6060
Matrix: Soil
Analysis Date: 11/2/95

Units of AR 1254 in ug/kg

CLIENT ID.	AENI ID.	Spike Added	Sample Results	Conc. BS	% Rec.
BS	BS951101VA	170	0	150	88

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 16, 1995

Client: OHM CORPORATION

Case: 9510310

Project: FORT DEVENS

Analysis: PCBs by SW-846 Method 8080

<u>Client ID</u>	<u>AENI#</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>
EX2527DP-DUP	9510310-011	10/27/95	10/30/95	11/14/95	11/15/95

One soil sample was extracted and analyzed for PCB's by SW-846 method 8080.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), and lab control sample recovery (Form III).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected at or above the detection limit. The sample was extracted outside of holding time.

Form II (Surrogate Spike Recoveries)

All recoveries are based on a single column analysis.

All surrogate recoveries were within EPA CLP advisory criteria (60-150%).

Form III (Matrix Spike Recoveries)

A blank spike (BS) was prepared with this sample delivery group. BS recovery was within SW-846 method 8080 criteria (29-131%).

Data Released By

Noble Nemigoka
Noble Nemigoka
GC/LC Acting Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHM CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: EX2527DP-DUP

AENI #: 9510310-011

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/30/95
Date Extract Prepared: 11/14/95
Date Analyzed: 11/15/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 10

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		22	U
AR1221		22	U
AR1232		22	U
AR1242		22	U
AR1248		22	U
AR1254		44	U
AR1260		44	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vl - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.39

Vt - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OHN CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: PBLK01

AENI #: BLK951114LC

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/14/95
Date Analyzed: 11/15/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Saxhiatt Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		40	U
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

V_i - Volume of extract injected (ul) - 1

V_s - Volume of water extracted (ml) - N/A

W_s - Mass of soil extracted (g) - 30

V_t - Volume of total extract (ul) - 10000

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9510310
Client Name: OMN CORPORATION
Project: FORT DEVENS

CLIENT NUMBER: BS

AENI #: BS951114LC

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 11/14/95
Date Analyzed: 11/15/95
Conc/Dil Factor: 1

GPC Cleanup: Yes [] No [X]
Sonication Ext: [X]
Soxhlett Ext: []
Matrix: SOIL
Percent Moisture: 0

ug/Kg			
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254	110	40	
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

V_i - Volume of extract injected (ul) - 1

V_s - Volume of water extracted (ml) - N/A

W_s - Mass of soil extracted (g) - 30

V_t - Volume of total extract (ul) - 10000

SOIL SURROGATE PERCENT RECOVERY PCB'S BY SW-846 METHOD 8080

Case no: 9510310

Laboratory: American Environmental Network, Inc.

[illegible]

DCB - Decachlorobiphenyl

* - Surrogate outside control limits.

D - Surrogate diluted out

M - Surrogate masked by interfering peaks

ORGANIC ANALYSIS DATA SHEET
AMERICAN ENVIRONMENTAL NETWORK, Inc.

Case Number:	9510310
Method:	PCB 8080
Matrix:	Soil
Analysis Date:	11/15/85

Units of AR 1254 in ug/kg

[illegible]

Appendix E

Transportation and Disposal Documentation

- **MSR - Temporary Soil Storage**
- **UST Disposal**



Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

IMPORTANT:
This form is **NOT**
to be used for the
shipment of
materials subject to
management
under section 310
CMR 40.0035 of
the Massachusetts
Contingency
Plan nor is it to be
used in lieu of a
manifest for
hazardous waste
recyclable
materials subject
to the Massachu-
setts Hazardous
Waste Regula-
tions 310 CMR
000.

A Location Information

1. Provide the following information on the location where the waste was generated:

Bldg 2527 (EMO UST)

AREE 63 BQ

Release name (optional)

road off of Patton Road, near the new Golf Course Club House

Street

Fort Devens

Location and

MA

01433

City/Town

State

Zip code

2. Date/Period of generation:

6/14/95

11-30-95

From

To

5. List additional tracking documents associated with this document:

3. U.S. EPA ID number:

MA7210025154

4. 21E release:

☒ yes☐ no

B Generator Information

1. Provide the following generator information:

U.S. Army - Fort Devens

Name of organization

James C. Chambers

BRAC Environmental Officer

Contact name

Title

AFZD-BEO-Box 1

Street address

Fort Devens

MA

01433

City/Town

State

Zip code

(508) 796-3114

Telephone number and extension

C Owner and/or Operator Information

1. If the owner and/or operator is different from the generator as indicated in Section B, provide the following information:

Check applicable:

☐ owner☐ operator

U.S. Army - Fort Devens

Name of organization

James C. Chambers

BRAC Environmental Officer

Contact name

Title

AFZD-BEO-Box 1

Street address

Fort Devens

MA

01433

City/Town

State

Zip code

(508) 796-3114

Telephone number and extension



Material Shipping Record & Log

6-10867
Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials **not** subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

D Transporter/Common Carrier Information

1. Provide the following information:

P.J. Keating Company	N/A	N/A
<small>Transporter/Common carrier name</small> Mark Nikitas	<small>Hazardous waste license number (if applicable)</small>	<small>Licensing state (if applicable)</small>
<small>Contact person</small> 998 Reservoir Road	<small>Title</small>	
<small>Street</small> Lunenburg	<small>State</small> MA	<small>Zip code</small> 01462
<small>City/Town</small> (508) 582-9931	<small>State</small>	<small>Zip code</small>
<small>Telephone number and extension</small>		

E Receiving Facility Information

1. Provide the following information on the receiving facility:

U.S. Army - Fort Devens - Building 202		
<small>Operator/Facility name</small> James C. Chambers	<small>BRAC Environmental Officer</small>	
<small>Contact person</small> AFZD-BEO-Box 1	<small>Title</small> Fort Devens, MA	<small>Zip code</small> 01433
<small>Street</small> (508) 796-3114	<small>State</small>	<small>Zip code</small>
<small>Telephone number and extension</small>		

2. Type of facility:

- ☐ asphalt batch/cold mix ☐ landfill/disposal ☐ thermal processing
☐ asphalt batch/hot Mix ☐ landfill/daily cover ☐ landfill/structural fill
☒ other: Temporary Storage Facility

3. Permit number: N/A

F Description of Material

Check all that apply:

1. a. ☒ soil ☐ dredge material ☐ fill

b. Description:

BREN. Floc SAND + GRAVEL,
w/ COBBLES -

c. Classification: ☐ MIT ☐ USDA
☐ USAEC ☐ ASEE

2. ☒ Other:

MOD. BLEM.

describe

3. Type of contamination:

a. ☐ gasoline ☒ diesel fuel ☒ #2 oil ☐ #4 oil
☐ #6 oil ☐ waste oil ☐ kerosene ☐ jet fuel

b. ☐ Debris:

☐ demolition ☐ vegetative ☐ inorganic

c. ☐ Other:describe



2-10823

Tracking Number

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

F Description of Material (cont.)

4. Constituents of concern (check all that apply):

- ☒ As ☐ Cd ☒ Cr ☒ Pb ☒ Hg ☐ Na ☐ PCBs
☐ HVOCs ☐ PATH ☒ VOCs ☒ PAHs ☐ BNAs
☒ TPH ☐ Other:

describe

7. Estimated volume of materials:

2541

Cubic Yards

3811.5

Tons

Other

5. Analyses performed (check all that apply):

- ☒ As ☒ Cd ☒ Cr ☒ Pb ☒ Hg ☐ Na ☒ PCBs
☐ HVOCs ☐ PATH ☒ VOCs ☒ PAHs ☒ BNAs
☒ TPH ☐ TCLP (inorganic) ☐ TCLP (organic)
☒ Other:

describe

PCRA CHAK, PH, FP, RENC

8. Contaminant source (check one/specify):

- ☐ transportation accident ☒ lost ☐ other

describe

6. Screening performed

Type

Instrument Used

Constituents

9. Indicate which waste characterization support documentation is attached

- ☐ site history information
☐ sampling and analytical methods/procedure
☐ laboratory data ☐ field screening data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to the facility.

G Qualified Environmental Professional Opinion

T.S. Alving & Associates

Name of organization

Todd Alving

Licensed Site Professional

Name of professional

(508) 435-3679

Title

Telephone number and address

"I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the waste, and that the facility or location can accept wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete."

Signature

Date

License number

Seal





Material Shipping Record & Log


Tracking Number

C-102507

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."


Signature

1/24/96
Date

Name (print)

Acknowledgment of Receipt by Receiving Facility

U.S. Army - Fort Devens - Bldg 202

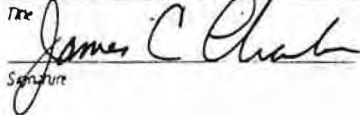
Receiving Facility

James C. Chambers

Representative (print)

BRAC Environmental Officer

The


Signature

1/24/96

Date



Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials **not** subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 647

x Mike

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1103

Time received

11/09/95

Date of shipment

Time of shipment

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

60460 lbs/30.23 tons

Load size (cubic feet/tons)

LOAD #: 649

x J. Elroy

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1110

Time received

11/09/95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

53840 lbs/26.92

Load size (cubic feet/tons)

LOAD #: 648

x Steve Sunda

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1107

Time received

11/09/95

Date of shipment

Time of shipment

NH 4252AP

Truck/Tractor registration

NH 7208 TJ

Trailer registration

52720 lbs/26.36 tons

Load size (cubic feet/tons)

LOAD #: 650

x J. Elroy

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1115

Time received

11/09/95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

59680 lbs/29.84 tons

Load size (cubic feet/tons)

K Log Sheet Volume Information

226,700 lbs/113.35 tons

Total volume this page (cubic feet/tons)

Total carried forward (cubic feet/tons)

226,700 lbs/113.35 tons

Total carried forward and this page (cubic feet/tons)

Page 1 of 38

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of this
is neces-



Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 651

x DAN

Signature of transporter

Bldg 202- Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1120

Time received

11/09/95

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

54220 lbs / 27.11 tons

Load size (cubic yards/tons)

LOAD #: 655

x Val Hogan

Signature of transporter

Bldg 202- Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1143

Time received

11/09/95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

53440 lbs / 26.72 tons

Load size (cubic yards/tons)

LOAD #: 654

x Mike

Signature of transporter

Bldg 202- Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1141

Time received

11/09/95

Date of shipment

Time of shipment

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

52380 lbs / 26.19 tons

Load size (cubic yards/tons)

LOAD #: 657

x DAN

Signature of transporter

Bldg 202- Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1148

Time received

11/09/95

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

52800 lbs / 26.4 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

212,840 lbs / 106.42 tons

Total volume this page (cubic yards/tons)

226,700 lbs / 113.35 tons

Total carried forward (cubic yards/tons)

439,540 lbs / 219.77 tons

Total carried forward and this page (cubic yards/tons)

Page 2 of 38



Material Shipping Record & Log

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 659

x Val Rogers
Signature of transporter
Bldg 202- Soil Staging Area, Cell A
Receiving facility

11/09/95

Date received
1218Time received
11/09/95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

57180 lbs/ 28.59 tons

Load size (cubic yards/tons)

LOAD #: 663

x Mike
Signature of transporter
Bldg 202- Soil Staging Area, Cell A
Receiving facility

11/09/95

Date received
1245Time received
11/09/95

Date of shipment

Time of shipment

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

56080 lbs/ 28.04 tons

Load size (cubic yards/tons)

LOAD #: 661

x DAN
Signature of transporter
Bldg 202- Soil Staging Area, Cell A
Receiving facility

11/09/95

Date received
1225Time received
11/09/95

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

53580 lbs/ 26.79 tons

Load size (cubic yards/tons)

LOAD #: 665

x DAN
Signature of transporter
Bldg 202- Soil Staging Area, Cell A
Receiving facility

11/09/95

Date received
1257Time received
11/09/95

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

52880 lbs/ 26.44 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

219,720 lbs/ 109.86 tons

Total volume this page (cubic yards/tons)

439,540 lbs/ 219.77 tons

Total carried forward (cubic yards/tons)

659,260 lbs/ 329.63 tons

Total carried forward and this page (cubic yards/tons)

Page 3 of 38



Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

2527

J Load Information

LOAD #: 667

x

Mike

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11/09/95

Date received

1313

Time received

11/09/95

Date of shipment

Truck/Tractor registration

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

55860 lbs / 27.93 tons

Load size (cubic yards/tons)

LOAD #: 668

x

Ned Moss

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11.9.95

Date received

1323

Time received

11.9.95

Date of shipment

Truck/Tractor registration

MAC 34867

Truck/Tractor registration

MA 10207

Trailer registration

53,360 lbs / 24.68 tons

Load size (cubic yards/tons)

LOAD #: 670

x

Mike

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11.9.95

Date received

1343

Time received

Date of shipment

11.9.95

Truck/Tractor registration

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

63,360 lbs / 31.68 tons

Load size (cubic yards/tons)

LOAD #: 671

x

Ned Moss

Signature of transporter

Bldg 202 - Soil Staging Area, Cell A

Receiving facility

11.9.95

Date received

1350

Time received

Date of shipment

11.9.95

Truck/Tractor registration

MAC 34867

Truck/Tractor registration

MAC 34867

Trailer registration

53,840 lbs / 26.92 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

226,420 lbs / 113.21 tons

Total volume this page (cubic yards/tons)

659,260 lbs / 329.63 tons

Total carried forward (cubic yards/tons)

885,680 lbs / 442.84 tons

Total carried forward and this page (cubic yards/tons)

Page 4 of 38



Material Shipping Record & Log

Tracking Number

227

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 672

DIAN

Signature of transporter

Bldg 202, Soil Storage Area, Cell A

Receiving facility

11.9.95

Date received

1353

Time received

Date of shipment

11.9.95

Time of shipment

MA B 44609

Truck/Tractor registration

MA 21421

Trailer registration

48,540 lbs / 24.72 tons

Load size (cubic feet/tons)

LOAD #: 676

Mike

Signature of transporter

Bldg 202, Soil Storage Area, Cell A

Receiving facility

11.9.95

Date received

1442

Time received

Date of shipment

11.9.95

Time of shipment

MA E 40038

Truck/Tractor registration

MA 12363

Trailer registration

64,480 lbs / 32.24 tons

Load size (cubic feet/tons)

LOAD #: 677

Val Hogan

Bldg 202, Soil Storage Area, Cell A

Receiving facility

11.9.95

Date received

1425

Time received

11.9.95

Date of shipment

Time of shipment

MA C 34867

Truck/Tractor registration

MA 10207

Trailer registration

54,620 lbs / 27.31 tons

Load size (cubic feet/tons)

LOAD #: 678

~~DIAN~~

DIAN

Receiving facility

11.9.95

Date received

1429

Time received

11.9.95

Date of shipment

Time of shipment

MA B 44609

Truck/Tractor registration

MA 21421

Trailer registration

52,660 lbs / 26.33 tons

Load size (cubic feet/tons)

K Log Sheet Volume Information

220,700 lbs / 110.35 tons

Total volume this page (cubic feet/tons)

885,680 lbs / 442.84 tons

Total carried forward (cubic feet/tons)

1,106,380 lbs / 553.19 tons

Total carried forward and this page (cubic feet/tons)

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Material Shipping Record & Log

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 681

Mike

Signature of transporter

Bldg 202 Storage Area cell A

Receiving facility

11.10.95

Date received

0812

Time received

11.10.95

Date of shipment

MAE40038

Trailer registration

MA 12363

Truck/Tractor registration

Trailer registration

43,780 lbs / 21.9 tons

Load size (cubic feet/tons)

LOAD #: 684

Nat

Bldg 202 soil storage area cell A

Receiving facility

11.10.95

Date received

0820

Time received

11.10.95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

45,780 lbs / 22.9 tons

Load size (cubic feet/tons)

LOAD #: 682

DAN

Signature of transporter

Bldg 202 soil storage area cell A

Receiving facility

11.10.95

Date received

0815

Time received

11.10.95

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

46,260 lbs / 23.1 tons

Load size (cubic feet/tons)

LOAD #:

Bldg 202 soil storage area cell A

Receiving facility

11.10.95

Date received

Time received

11.10.95

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic feet/tons)

K Log Sheet Volume Information

135,820 lbs / 67.9 tons

Total volume this page (cubic feet/tons)

1,106,380 lbs / 553.19 tons

Total carried forward (cubic feet/tons)

124,220 / 621.1 tons

Total carried forward and this page (cubic feet/tons)

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Material Shipping Record & Log

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 688
 Signature of transporter Miller
 Receiving facility Blag 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 0903
 Date of shipment 11.10.95
 Name of shipper MAE 40038
 Truck/Trailer registration MA 12363
 Trailer registration 49,300 lbs / 24.7 tons
 Load size (cubic yards/tons)

LOAD #: 689
 Signature of transporter DAN
 Receiving facility Blag 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 0905
 Date of shipment 11.10.95
 Name of shipper MA B 44609
 Truck/Trailer registration MA 21421
 Trailer registration 47,220 lbs / 23.6 tons
 Load size (cubic yards/tons)

LOAD #: 691
 Signature of transporter Nel Hoyle
 Receiving facility Blag 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 0909
 Date of shipment 11.10.95
 Name of shipper MA C 34867
 Truck/Trailer registration MA 10207
 Trailer registration 48,980 lbs / 24.5 tons
 Load size (cubic yards/tons)

LOAD #: 692
 Signature of transporter Steve
 Receiving facility Blag 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 0940
 Date of shipment 11.10.95
 Name of shipper NH 4252 AP
 Truck/Trailer registration NH 7208 JT
 Trailer registration 52,540 lbs / 26.3 tons
 Load size (cubic yards/tons)

K Log Sheet Volume Information

198020 lbs / 99.0 tons
 Total volume this page (cubic yards/tons)
1242220 lbs / 621.1 tons
 Total carried forward (cubic yards/tons)
1440220 lbs / 720.1 tons
 Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 693
 Signature of transporter: Mike
 Receiving facility: Bldg 202 soil storage area, CCHA
 Date received: 11.10.95
 Time received: 0944
 Date of shipment: 11.10.95
 Truck/Tractor registration: MAE40038
 Trailer registration: MA 12363
 Load size (cubic feet): 47,620 lbs / 23.8 tons

LOAD #: 695
 Signature of transporter: Mel Roy
 Receiving facility: Bldg 202 soil storage area, CCHA
 Date received: 11.10.95
 Time received: 1004
 Date of shipment: 11.10.95
 Truck/Tractor registration: MAC34867
 Trailer registration: MA 10207
 Load size (cubic feet): 61,500 lbs / 32.8 tons

LOAD #: 697
 Signature of transporter: DAN
 Receiving facility: Bldg 202 soil storage area, CCHA
 Date received: 11.10.95
 Time received: 1014
 Date of shipment: 11.10.95
 Truck/Tractor registration: MAB44609
 Trailer registration: MA 21421
 Load size (cubic feet): 61,260 lbs / 30.6 tons

LOAD #: 698
 Signature of transporter: Steve
 Receiving facility: Bldg 202 soil storage area, CCHA
 Date received: 11.10.95
 Time received: 1033
 Date of shipment: 11.10.95
 Truck/Tractor registration: NH 4252AV
 Trailer registration: NH 7208JT
 Load size (cubic feet): 61,720 lbs / 30.8 tons

K Log Sheet Volume Information

232100 lbs / 116.1 tons
 Total volume this page (cubic feet): 1,440,220 lbs / 720.1 tons
 Total carried forward (cubic feet): 1,672,300 / 836.2 tons
 Total carried forward and this page (cubic feet):

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Material Shipping Record & Log

2-10825

Tracking Number

2227

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 700

Signature of transporter: Mike

Receiving facility: Bldg 202 Soil Storage Area, cell A

Date received: 11.10.95

Time received: 1042

Time of shipment:

11.10.95

Date of shipment:

Time of shipment:

MA E 40038

Truck/Tractor registration:

MA 12363

Trailer registration:

64,050 lbs / 31.6 tons

Load size (cubic feet/tons):

LOAD #: 701

Signature of transporter: Val Hogg

Receiving facility: Bldg 202 Soil Storage Area, cell A

Date received: 11.10.95

Time received: 1044

Time of shipment:

11.10.95

Date of shipment:

Time of shipment:

MA G 34867

Truck/Tractor registration:

MA 10207

Trailer registration:

59,820 lbs / 29.5 tons

Load size (cubic feet/tons):

LOAD #: 702

Signature of transporter: DAN

Receiving facility: Bldg 202 Soil Storage Area, cell A

Date received: 11.10.95

Time received: 1049

Time of shipment:

11.10.95

Date of shipment:

MA B 44609

Time of shipment:

Truck/Tractor registration:

MA 2421

Trailer registration:

62,360 lbs / 30.7 tons

Load size (cubic feet/tons):

LOAD #: 703

Signature of transporter: Steve

Receiving facility: Bldg 202 Soil Storage Area, cell A

Date received: 11.10.95

Time received: 1113

Time of shipment:

11.10.95

Date of shipment:

Time of shipment:

NH 4252AP

Truck/Tractor registration:

NH 7208 JT

Trailer registration:

72,140 lbs / 36.1 tons

Load size (cubic feet/tons):

K Log Sheet Volume Information

258,400 lbs / 129.2 tons

Total volume this page (cubic feet/tons):

1,672,300 lbs / 836.2 tons

Total carried forward (cubic feet/tons):

1,930,500 / 965.4 tons

Total carried forward and this page (cubic feet/tons):

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**Material Shipping Record & Log**

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 704

Signature of transporter

Bldg 202 Soil Storage Area, COLPA

Receiving facility

11.10.95

Date received

1115

Time received

11.10.95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

71,120 lbs / 35.6 tons

Load size (cubic yards/tons)

LOAD #: 705

Signature of transporter

Bldg 202 Soil Storage Area, COLPA

Receiving facility

11.10.95

Date received

1134

Time received

11.10.95

Date of shipment

Time of shipment

MA E40038

Truck/Tractor registration

MA 12363

Trailer registration

68,500 lbs / 34.3 tons

Load size (cubic yards/tons)

LOAD #: 706

Signature of transporter

Bldg 202 Soil Storage Area, COLPA

Receiving facility

11.10.95

Date received

1137

Time received

11.10.95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

57,340 lbs / 28.7 tons

Load size (cubic yards/tons)

LOAD #:

Signature of transporter

Bldg 202 Soil Storage Area, COLPA

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

K Log Sheet Volume Information

196,960 lbs / 98.5 tons

Total volume this page (cubic yards/tons)

1930,800 lbs / 836.2 tons

Total carried forward (cubic yards/tons)

2069400 lbs / 1034.7 tons

Total carried forward and this page (cubic yards/tons)

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Note:
Make additional
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**Material Shipping Record & Log**

Tracking Number

AD-1564 AL

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 707

Signature of transporter

Bldg 202 Soil Storage, etc. etc.

Receiving facility

11.10.95

Date received

1151

Time received

11.10.95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

54,620 lbs / 27.3 tons

Load size (cubic yards/tons)

LOAD #: _____

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: _____

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: _____

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

K Log Sheet Volume Information

54,620 lbs / 27.3 tons

Total volume this page (cubic yards/tons)

54,620 lbs / 27.3 tons

Total carried forward (cubic yards/tons)

Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #:

708

THE MAN

Signature of transporter

Bldg 202, Soil Storage area, Cell 11

Receiving facility

Date received

11.10.95

Time received

1154

Date of shipment

Time of shipment

MA B44609

Truck/Tractor registration

MA 21421

Trailer registration

57,680 lbs / 28.8 tons

Load size (cubic yards/tons)

LOAD #:

710

Signature of transporter

Receiving facility

Bldg 202, Soil Storage area, Cell 11

Date received

11.10.95

Time received

1217

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

60,220 lbs / 30.1 tons

Load size (cubic yards/tons)

LOAD #:

709

Signature of transporter

Bldg 202, Soil Storage area, Cell 11

Receiving facility

Date received

11.10.95

Time received

1214

Date of shipment

Time of shipment

MA E40038

Truck/Tractor registration

MA 1712363

Trailer registration

68,020 lbs / 34.0 tons

Load size (cubic yards/tons)

LOAD #:

711

Signature of transporter

Receiving facility

Bldg 202, Soil Storage area, Cell 11

Date received

11.10.95

Time received

1225

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

63,700 lbs / 31.9 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

249620 lbs / 124.8 tons

Total volume this page (cubic yards/tons)

2,069,400 lbs / 1034.7 tons

Total carried forward (cubic yards/tons)

2,317620 lbs / 1158.8 tons

Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

 2-10067
 Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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copies of this
page as neces-
sary.

LOAD #: 712
 Signature of transporter [Signature]
 Receiving facility Bldg 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 1231
 Date of shipment 11.10.95
 Time of shipment NH 4252AP
 Truck/Tractor registration NH 7208JT
 Trailer registration 57,540 lbs / 28.8 tons
 Load size (cubic yards/tons)

LOAD #: 713 2527
 Signature of transporter [Signature]
 Receiving facility Bldg 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 1242
 Date of shipment 11.10.95
 Time of shipment MA B44609
 Truck/Tractor registration MA 21421
 Trailer registration 58,760 lbs / 29.4 tons
 Load size (cubic yards/tons)

LOAD #: 714
 Signature of transporter [Signature]
 Receiving facility Bldg 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 1258
 Date of shipment 11.10.95
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration 45,240 lbs / 22.6 tons
 Load size (cubic yards/tons)

LOAD #: 715
 Signature of transporter [Signature]
 Receiving facility Bldg 202 Soil Storage Area, Cell A
 Date received 11.10.95
 Time received 1308
 Date of shipment 11.10.95
 Time of shipment NH 4252AP
 Truck/Tractor registration NH 7708JT
 Trailer registration 41,580 lbs / 20.8 tons
 Load size (cubic yards/tons)

K Log Sheet Volume Information

202120 lbs / 101.6
 Total volume this page (cubic yards/tons)
2317,620 lbs / 1038.8 tons
 Total carried forward (cubic yards/tons)
2,519,740 lbs / 1260.4 tons
 Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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copies of this
page as neces-
sary.

LOAD #: 716

Signature of transporter

Bldg 202 Soil Storage area, Cella

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: 717

Signature of transporter

Bldg 202 Soil Storage area, Cella

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: 718

Signature of transporter

Bldg 202 Soil Storage area, Cella

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: 719

Signature of transporter

Bldg 202 Soil Storage area, Cella

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

K Log Sheet Volume Information

173920 lbs / 87.0 tons

Total volume this page (cubic yards/tons)

2519,740 lbs / 1260.4 tons

Total carried forward (cubic yards/tons)

2,693,660 lbs / 1346.8 tons

Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #: 719

Val Boguen

Signature of transporter

Blg 202 Soil Storage area, CDPH

Receiving facility

11.13.95

Date received

0815

Time received

11.13.95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

56,820 lbs / 28.4 tons

Load size (cubic yards/tons)

LOAD #: 720

Rich

Signature of transporter

Blg 202 Soil Storage area, CDPH

Receiving facility

11.13.95

Date received

0833

Time received

11.13.95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

59,900 lbs / 30.0 tons

Load size (cubic yards/tons)

LOAD #: 721

Michael

Signature of transporter

Blg 202 Soil Storage area, CDPH

Receiving facility

11.13.95

Date received

0835

Time received

11.13.95

Date of shipment

Time of shipment

MA 40038

Truck/Tractor registration

MA 12363

Trailer registration

56,480 lbs / 28.2 tons

Load size (cubic yards/tons)

LOAD #: 722

Val Boguen

Signature of transporter

Blg 202 Soil Storage area, CDPH

Receiving facility

11.13.95

Date received

0844

Time received

11.13.95

Date of shipment

Time of shipment

MA C34867

Truck/Tractor registration

MA 10207

Trailer registration

62,400 lbs / 31.2 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

235600 lbs / 117.8 tons

Total volume this page (cubic yards/tons)

2693660 lbs / 1346.8 tons

Total carried forward (cubic yards/tons)

2,929,260 lbs / 1464.6 tons

Total carried forward and this page (cubic yards/tons)

Page *15* of *38*



Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

2-10813
Tracking Number
2527

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #: 723
Signature of transporter: Mike
Receiving facility: Bldg 202 storage area, cell A
Date received: 11.13.95
Time received: 1005
Date of shipment: 11.13.95
Time of shipment: MAE40038
Truck/Tractor registration: MA12363
Trailer registration: 58200 lbs / 29.1 tons
Load size (cubic yards/tons)

LOAD #: 724
Signature of transporter: [Signature]
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1006
Date of shipment: 11.13.95
Time of shipment: MA22655
Truck/Tractor registration: MA47499
Trailer registration: 59,160 lbs / 29.6 tons
Load size (cubic yards/tons)

LOAD #: 725
Signature of transporter: [Signature]
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1012
Date of shipment: 11.13.95
Time of shipment: MAC34867
Truck/Tractor registration: MA10207
Trailer registration: 50800 lbs / 25.4 tons
Load size (cubic yards/tons)

LOAD #: 726
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1044
Date of shipment: 11.13.95
Time of shipment: MAE40038
Truck/Tractor registration: MA12363
Trailer registration: 46,560 lbs / 23.3 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

214,720 lbs / 107.4 tons
Total volume this page (cubic yards/tons)
2,929,260 lbs / 1464.6 tons
Total carried forward (cubic yards/tons)
3,143,980 lbs / 1572 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

 2-10-05
 Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

 Note:
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 copies of this
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 sary.

LOAD #: 727

Signature of transporter

B 202 Soil Staging area, cell A

Receiving facility

11.13.95

Date received

1053

Time received

11.13.95

Date of shipment

Time of shipment

M A 22685

Truck/Tractor registration

M A 47499

Trailer registration

60,420 lbs / 3.2 tons

Load size (cubic yards/tons)

LOAD #: 729

Signature of transporter

B 202 Soil Staging area, cell A

Receiving facility

11.13.95

Date received

1121

Time received

11.13.95

Date of shipment

Time of shipment

M A E 40038

Truck/Tractor registration

M A 12363

Trailer registration

44,360 lbs / 2.2 tons

Load size (cubic yards/tons)

LOAD #: 728

Signature of transporter

B 202 Soil Staging area, cell A

Receiving facility

11.13.95

Date received

1103

Time received

11.13.95

Date of shipment

Time of shipment

M A C 34867

Truck/Tractor registration

M A 16207

Trailer registration

54,780 lbs / 2.4 tons

Load size (cubic yards/tons)

LOAD #: 730

Signature of transporter

B 202 Soil Staging area, cell A

Receiving facility

11.13.95

Date received

1142

Time received

11.13.95

Date of shipment

Time of shipment

M A 22685

Truck/Tractor registration

M A 47499

Trailer registration

54,360 lbs / 2.2 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

213,820 lbs / 106.9

Total volume this page (cubic yards/tons)

3,143,980 lbs / 15.72 tons

Total carried forward (cubic yards/tons)

3,357,800 lbs / 16.78 tons

Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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page as neces-
sary.

LOAD #: 731
Signature of transporter: *Michael*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1155
Date of shipment: 11.13.95
Time of shipment: MAE 40038
Truck/Tractor registration: MA 12363
Trailer registration: 59,150 lbs / 27.6 tons
Load size (cubic yards/tons)

LOAD #: 732
Signature of transporter: *Val Page*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1200
Date of shipment: 11.13.95
Time of shipment: MAC 34867
Truck/Tractor registration: MA 10207
Trailer registration: 60,900 lbs / 30.5 tons
Load size (cubic yards/tons)

LOAD #: 733
Signature of transporter: *Michael*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1235
Date of shipment: 11.13.95
Time of shipment: MAE 40038
Truck/Tractor registration: MA 12363
Trailer registration: 53,100 lbs / 26.6 tons
Load size (cubic yards/tons)

LOAD #: 734
Signature of transporter: *Val Page*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.13.95
Time received: 1237
Date of shipment: 11.13.95
Time of shipment: MAC 34867
Truck/Tractor registration: MA 10207
Trailer registration: 59,720 lbs / 27.9 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

232900 lbs / 116.5 tons
Total volume this page (cubic yards/tons)
3,357,800 lbs / 1678.9 tons
Total carried forward (cubic yards/tons)
3,590,800 lbs / 1795.4 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
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sary.

LOAD #: 735
Signature of transporter: Val Ros
Receiving facility: B202 soil storage area, cell A
Date received: 11.13.95
Time received: 1308
Date of shipment: 11.13.95
Time of shipment: MAC 34867
Truck/Tractor registration: MA 10207
Trailer registration: 60260 lbs / 3.1 tons
Load size (cubic yards/tons)

LOAD #: 736
Signature of transporter: Val Magnus
Receiving facility: B202 soil storage area, cell A
Date received: 11.13.95
Time received: 1335
Date of shipment: 11.13.95
Time of shipment: MAC 34867
Truck/Tractor registration: MA 10207
Trailer registration: 58,780 lbs / 29.7 tons
Load size (cubic yards/tons)

LOAD #: 737
Signature of transporter: Michel
Receiving facility: B202 soil storage area, cell A
Date received: 11.13.95
Time received: 1345
Date of shipment: 11.13.95
Time of shipment: MAE 40038
Truck/Tractor registration: MA 12303
Trailer registration: 61,100 lbs / 30.6 tons
Load size (cubic yards/tons)

LOAD #: 738
Signature of transporter: Val Magnus
Receiving facility: B202 soil storage area, cell A
Date received: 11.13.95
Time received: 1415
Date of shipment: 11.13.95
Time of shipment: MAC 34867
Truck/Tractor registration: MA 10207
Trailer registration: 58,000 lbs / 29.0 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

235,140 lbs / 119.1 tons
Total volume this page (cubic yards/tons)
3,590,800 lbs / 1795.4 tons
Total carried forward (cubic yards/tons)
3,828,940 lbs / 1914.5 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-1087

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #: 739
Michael
Signature of transporter
B202 Soil Storage Area, cell A
Receiving facility
11.13.95
Date received
1420
Time received
11.13.95
Date of shipment

Time of shipment
MAE 40038
Truck/Tractor registration
MA 12363
Trailer registration
61,900 lbs / 31.0 tons
Load size (cubic yards/tons)

LOAD #: 740

Signature of transporter
B202 Soil Storage Area, cell A
Receiving facility
11.13.95
Date received

Time received
11.13.95
Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: 741

Signature of transporter
B202 Soil Storage Area, cell A
Receiving facility
11.13.95
Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #: 742

Signature of transporter
B202 Soil Storage Area, cell A
Receiving facility
11.13.95
Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

K Log Sheet Volume Information

61,900 lbs / 31.0 tons
Total volume this page (cubic yards/tons)
3,828,940 lbs / 1914.5 tons
Total carried forward (cubic yards/tons)
3,890,840 lbs / 1945.5 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

210823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
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page as neces-
sary.

LOAD #: 740
Signature of transporter: *Val Hogg*
Receiving facility: B202 Soil Storage area, cell 11
Date received: 11.14.95
Time received: 0800
Date of shipment: 11.14.95
Time of shipment: MA C34867
Truck/Tractor registration: MA 10207
Trailer registration: 49,940 lbs / 25.0 tons
Load size (cubic yards/tons)

LOAD #: 741
Signature of transporter: *Michael*
Receiving facility: B202 Soil Storage area, cell 11
Date received: 11.14.95
Time received: 0817
Date of shipment: 11.14.95
Time of shipment: MA E 40038
Truck/Tractor registration: MA 12363
Trailer registration: ~~MA~~ 50,120 lbs / 25.1
Load size (cubic yards/tons)

LOAD #: 742
Signature of transporter: *Manuel H*
Receiving facility: B202 Soil Storage area, cell 11
Date received: 0819
Time received: 11.14.95
Date of shipment: 11.14.95
Time of shipment: MA 32589
Truck/Tractor registration: MA 27020
Trailer registration: 49,590 lbs / 24.8 tons
Load size (cubic yards/tons)

LOAD #: 743
Signature of transporter: *JACK*
Receiving facility: B202 Soil Storage area, cell 11
Date received: 0825
Time received: 11.14.95
Date of shipment: 11.14.95
Time of shipment: MA 22685
Truck/Tractor registration: MA 47499
Trailer registration: 59,950 lbs / 30.0 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

209630 lbs / 104.8 tons
Total volume this page (cubic yards/tons)
3,890,840 lbs / 19.455 tons
Total carried forward (cubic yards/tons)
4,100,470 lbs / 2050.2 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10685

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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copies of this
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sary.

LOAD #: 744
Signature of transporter: Val Bogdan
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0845
Date of shipment: 11.14.95
Time of shipment: MA C 34867
Truck/Tractor registration: MA 10207
Trailer registration: 49960 lbs / 25.0 tons
Load size (cubic yards/tons):

LOAD #: 745
Signature of transporter: Michael
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0857
Date of shipment: 11.14.95
Time of shipment: MA E 40038
Truck/Tractor registration: MA 12363
Trailer registration: 55020 lbs / 27.5 tons
Load size (cubic yards/tons):

LOAD #: 746
Signature of transporter: Michael Bogdan
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0907
Date of shipment: 11.14.95
Time of shipment: MA E 40038 32588
Truck/Tractor registration: MA 12363 27020
Trailer registration: 54,030 lbs / 27.0 tons
Load size (cubic yards/tons):

LOAD #: 747
Signature of transporter: Val Bogdan
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0912
Date of shipment: 11.14.95
Time of shipment: MA C 34867
Truck/Tractor registration: MA 10207
Trailer registration: 50,840 lbs / 25.4 tons
Load size (cubic yards/tons):

K Log Sheet Volume Information

209,850 lbs / 104.9 tons
Total volume this page (cubic yards/tons)
4,100,470 lbs / 2050.2 tons
Total carried forward (cubic yards/tons)
4,310,320 lbs / 2155.2 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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copies of this
page as neces-
sary.

LOAD #: 248
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0931
Date of shipment: 11.14.95
Time of shipment: MAE40038
Truck/Tractor registration: MA 12363
Trailer registration: 48,820 lbs / 24.4 tons
Load size (cubic yards/tons):

LOAD #: 749
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0942
Date of shipment: 11.14.95
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 50,490 lbs / 25.2 tons
Load size (cubic yards/tons):

LOAD #: 750
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 0944
Date of shipment: 11.14.95
Time of shipment: MA C34867
Truck/Tractor registration: MA 10207
Trailer registration: 51,720 lbs / 25.9 tons
Load size (cubic yards/tons):

LOAD #: 751
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage area, cell A
Date received: 1014
Time received: 11.14.95
Date of shipment: MAE40038
Truck/Tractor registration: MA 12363
Trailer registration: 52,740 lbs / 26.4 tons
Load size (cubic yards/tons):

K Log Sheet Volume Information

203,770 lbs / 101.9 tons
Total volume this page (cubic yards/tons)
4,310,320 lbs / 2155.2 tons
Total carried forward (cubic yards/tons)
4,514,090 lbs / 2257.0 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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copies of this
page as neces-
sary.

LOAD #: 752
Signature of transporter: *M. Marshman*
Receiving facility: *Blag 202 soil storage area, cell 11*
Date received: *11.14.95*
Time received: *1015*
Date of shipment: *11.14.95*
Time of shipment: *MA 32588*
Truck/Tractor registration: *MA 27020*
Trailer registration: *51,530 lbs / 25.8 tons*
Load size (cubic yards/tons)

LOAD #: 753
Signature of transporter: *Tim Noyes*
Receiving facility: *Blag 202 soil storage area, cell 11*
Date received: *11.14.95*
Time received: *1017*
Date of shipment: *11.14.95*
Time of shipment: *MA C 34867*
Truck/Tractor registration: *MA 10207*
Trailer registration: *56,040 lbs / 28.0 tons*
Load size (cubic yards/tons)

LOAD #: 754
Signature of transporter: *Michael*
Receiving facility: *Blag 202 soil storage area, cell 11*
Date received: *11.14.95*
Time received: *1041*
Date of shipment: *11.14.95*
Time of shipment: *MA C 34867*
Truck/Tractor registration: *MA 12363*
Trailer registration: *57,040 lbs / 28.5 tons*
Load size (cubic yards/tons)

LOAD #: 755
Signature of transporter: *Marvin*
Receiving facility: *Blag 202 soil storage area, cell 11*
Date received: *11.14.95*
Time received: *1046*
Date of shipment: *11.14.95*
Time of shipment: *MA 32588*
Truck/Tractor registration: *MA 27020*
Trailer registration: *54,750 lbs / 27.4 tons*
Load size (cubic yards/tons)

K Log Sheet Volume Information

219,360 lbs / 109.7 tons Page 24 of 38
Total volume this page (cubic yards/tons)
4,514,090 lbs / 2257.0 tons
Total carried forward (cubic yards/tons)
4,733,450 lbs / 2366.7 tons
Total carried forward and this page (cubic yards/tons)



Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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LOAD #: 756
Signature of transporter: Nat Hozuen
Receiving facility: Bldg 202 Soil Storage Area, Cell 04
Date received: 11.14.95
Time received: 1047
Date of shipment: 11.14.95
Time of shipment: MA C34867
Truck/Tractor registration: MA 10207
Trailer registration: 56,820 lbs / 28.4 tons
Load size (cubic yards/tons):

LOAD #: 757
Signature of transporter: Michael
Receiving facility: Bldg 202 Soil Storage Area, Cell 04
Date received: 11.14.95
Time received: 1112
Date of shipment: 11.14.95
Time of shipment: MA E40038
Truck/Tractor registration: MA 12303
Trailer registration: 54,100 lbs / 27.2 tons
Load size (cubic yards/tons):

LOAD #: 758
Signature of transporter: Manuel Mouni
Receiving facility: Bldg 202 Soil Storage Area, Cell 04
Date received: 11.14.95
Time received: 1114
Date of shipment: 11.14.95
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 51,320 lbs / 25.7 tons
Load size (cubic yards/tons):

LOAD #: 759
Signature of transporter: [Signature]
Receiving facility: Bldg 202 Soil Storage Area, Cell 04
Date received: 11.14.95
Time received: 1115
Date of shipment: 11.14.95
Time of shipment: MA 22685
Truck/Tractor registration: MA 47499
Trailer registration: 50,740 lbs / 25.4 tons
Load size (cubic yards/tons):

K Log Sheet Volume Information

213330 lbs / 106.7
Total volume this page (cubic yards/tons)
4,733.450 lbs / 2366.7 tons
Total carried forward (cubic yards/tons)
4,946,780 / 2473.4 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

2527

J Load Information

Note:
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LOAD #: 760
Signature of transporter: Val Moquem
Receiving facility: B202 soil storage area, cell 11
Date received: 11.14.95
Time received: 1119
Date of shipment: 11.14.95
Time of shipment: MAC34867
Truck/Tractor registration: MA 1710207
Trailer registration: 52,360 lbs / 26.2 tons
Load size (cubic yards/tons)

LOAD #: 761
Signature of transporter: Michael
Receiving facility: B202 soil storage area, cell 11
Date received: 11.14.95
Time received: 1144
Date of shipment: 11.14.95
Time of shipment: MA 1540038
Truck/Tractor registration: MA 12363
Trailer registration: 55,400 lbs / 27.7 tons
Load size (cubic yards/tons)

LOAD #: 762
Signature of transporter: [Signature]
Receiving facility: B202 soil storage area, cell 11
Date received: 11.14.95
Time received: 1148
Date of shipment: 11.14.95
Time of shipment: MA 22685
Truck/Tractor registration: MA 47499
Trailer registration: 55,760 lbs / 27.9 tons
Load size (cubic yards/tons)

LOAD #: 763
Signature of transporter: Val Moquem
Receiving facility: B202 soil storage area, cell 11
Date received: 11.14.95
Time received: 1230
Date of shipment: 11.14.95
Time of shipment: MAC34867
Truck/Tractor registration: MA 10207
Trailer registration: 50,480 lbs / 25.2 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

214000 lbs / 605 tons
Total volume this page (cubic yards/tons): 2473.4 tons
4946780 lbs / 2366.7 tons
Total carried forward (cubic yards/tons)
5160780 lbs / 2580.4 tons
Total carried forward this page (cubic yards/tons)

107.0

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Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
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sary.

LOAD #: 764
Signature of transporter: *M. M. M.*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 1245
Date of shipment: 11.14.95
Time of shipment: MA 325-85
Truck/Tractor registration: MA 122020
Trailer registration: 50, 290 lbs / 25.1 tons
Load size (cubic yards/tons)

LOAD #: 765
Signature of transporter: *M. M. M.*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 1248
Date of shipment: 11.14.95
Time of shipment: MA 15 40-35
Truck/Tractor registration: MA 12363
Trailer registration: 54020 lbs / 22.0 tons
Load size (cubic yards/tons)

LOAD #: 766
Signature of transporter: *Nal Nogue*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 1248
Date of shipment: 11.14.95
Time of shipment: MA C 34867
Truck/Tractor registration: MA 40038 min
Trailer registration: MA 12363 min
Trailer registration: 57, 060 lbs / 28.5 tons
Load size (cubic yards/tons)

LOAD #: 767
Signature of transporter: *M. M. M.*
Receiving facility: B 202 Soil Storage area, cell A
Date received: 11.14.95
Time received: 1312
Date of shipment: 11.14.95
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 57 330 lbs / 28.7 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

218,700 lbs / 109.3
Total volume this page (cubic yards/tons)
5160, 780 lbs / 2580.4 tons
Total carried forward (cubic yards/tons)
5379480 lbs / 2689.7 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
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page as neces-
sary.

LOAD #: 768
Signature of transporter: Michael
Receiving facility: B202 Soil Storage, cell A
Date received: 11.17.95
Time received: 1322
Date of shipment: 11.14.95
Time of shipment: MA E40038
Truck/Tractor registration: MA 12363
Trailer registration: 55740 lbs / 27.9 tons
Load size (cubic yards/tons)

LOAD #: 769
Signature of transporter: Hal Maguen
Receiving facility: B202 Soil Storage, cell A
Date received: 11.17.95
Time received: 1325
Date of shipment: 11.14.95
Time of shipment: MA C34867
Truck/Tractor registration: MA 10207
Trailer registration: 57,240 lbs / 28.6 tons
Load size (cubic yards/tons)

LOAD #: 770
Signature of transporter: Mike
Receiving facility: B202 Soil Storage, cell A
Date received: 11.14.95
Time received: 1343
Date of shipment: 11.14.95
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 60350 lbs / 30.2 tons
Load size (cubic yards/tons)

LOAD #: 771
Signature of transporter: Mike
Receiving facility: B202 Soil Storage, cell A
Date received: 11.14.95
Time received: 1357
Date of shipment: 11.14.95
Time of shipment: MA E40038
Truck/Tractor registration: MA 12363
Trailer registration: 60,000 lbs / 30.1 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

233,430 lbs / 116.7 tons
Total volume this page (cubic yards/tons)
5,379,480 lbs / 2689.7 tons
Total carried forward (cubic yards/tons)
5,612,910 lbs / 2806.5 tons
Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

2-10823

Tracking Number

2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #:

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #:

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #:

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

LOAD #:

Signature of transporter

Receiving facility

Date received

Time received

Date of shipment

Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

K Log Sheet Volume Information

208690 lbs / 104.3 tons

Total volume this page (cubic yards/tons)

5612910 lbs / 2806.5 tons

Total carried forward (cubic yards/tons)

5821600 lbs / 2910.8 tons

Total carried forward and this page (cubic yards/tons)

Page 29 of 38



Material Shipping Record & Log

Tracking Number

6-10023
Bldg 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load InformationNote:
Make additional
copies of this
page as neces-
sary.

LOAD #:

801

Signature of transporter

B202 soil storage, cell A

Receiving facility

11-27-95

Date received

Time received

11-27-95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

43,080 lbs / 21.6 tons

Load size (cubic yards/tons)

LOAD #:

802

Signature of transporter

B202 soil storage, cell A

Receiving facility

11-27-95

Date received

Time received

11-27-95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

65,880 lbs / 32.9 tons

Load size (cubic yards/tons)

LOAD #:

803

Signature of transporter

B202 soil storage, cell A

Receiving facility

11-27-95

Date received

Time received

11-27-95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

71,320 lbs / 35.6 tons

Load size (cubic yards/tons)

LOAD #:

804

Signature of transporter

B202 soil storage, cell A

Receiving facility

11-27-95

Date received

Time received

11-27-95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

54,820 lbs / 27.4 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information235,100 lbs / 117.6 tons
Total volume this page (cubic yards/tons)5,821,600 lbs / 2910.8 tons
Total carried forward (cubic yards/tons)6,056,700 lbs / 3028.4 tons
Total carried forward and this page (cubic yards/tons)

Page 30 of 38



Material Shipping Record & Log

2-10823
Tracking Number
Bldg 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load InformationNote:
Make additional
copies of this
page as neces-
sary.

LOAD #: 805 *LP*

Signature of transporter
B 202 Soil Storage, cell A

Receiving facility
11.28.95

Date received

Time received
11.28.95

Date of shipment

Time of shipment
M A 22685

Truck/Tractor registration
M A 47499

Trailer registration
57,360 lbs / 28.7 tons

Load size (cubic yards/tons)

LOAD #: 806 *LP*

Signature of transporter
B 202 Soil Storage, cell A

Receiving facility
11.28.95

Date received

Time received
11.28.95

Date of shipment

Time of shipment
M A 22685

Truck/Tractor registration
M A 47499

Trailer registration
51,880 lbs / 25.9 tons

Load size (cubic yards/tons)

LOAD #: 807 *LP*

Signature of transporter
B 202 Soil Storage, cell A

Receiving facility
11.28.95

Date received

Time received
11.28.95

Date of shipment

Time of shipment
M A 22685

Truck/Tractor registration
M A 47499

Trailer registration
61,100 lbs / 30.6 tons

Load size (cubic yards/tons)

LOAD #: 808 *LP*

Signature of transporter
B 202 Soil Storage, cell A

Receiving facility
11.28.95

Date received

Time received
11.28.95

Date of shipment

Time of shipment
M A 22685

Truck/Tractor registration
M A 47499

Trailer registration
57,820 lbs / 28.9 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

228,160 lbs / 114.1 tons

Total volume this page (cubic yards/tons)

6,056,700 lbs / 3028.4 tons

Total carried forward (cubic yards/tons)

6,284,860 lbs / 3142.4 tons

Total carried forward and this page (cubic yards/tons)

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Material Shipping Record & Log

Tracking Number

6-10065
B-Log 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

LOAD #: 809 JPS
 Signature of transporter
 Receiving facility B202 soil storage, cell A
 Date received 11-28-95
 Date received
 Time received 11-28-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration 66,720 lbs / 33.7 tons
 Load size (cubic yards/tons)

LOAD #: 810 JPS
 Signature of transporter
 Receiving facility B202 soil storage, cell A
 Date received 11-28-95
 Date received
 Time received 11-25-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration 62,446 lbs / 31.2 tons
 Load size (cubic yards/tons)

LOAD #: 811 JPS
 Signature of transporter
 Receiving facility B202 soil storage, cell A
 Date received 11-28-95
 Date received
 Time received 11-28-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration 81,260 lbs / 42.6 tons
 Load size (cubic yards/tons)

LOAD #: 812 JPS
 Signature of transporter
 Receiving facility B202 soil storage, cell A
 Date received 11-28-95
 Date received
 Time received 11-28-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration 69,380 lbs / 34.7 tons
 Load size (cubic yards/tons)

K Log Sheet Volume Information

279800^{lbs} / 139.9 tons
 Total volume this page (cubic yards/tons)
 6,284,860 lbs / 314.2 tons
 Total carried forward (cubic yards/tons)
 6,564,660 lbs / 328.3 tons
 Total carried forward and this page (cubic yards/tons)

Page 32 of 38

Note:
 Make additional
 copies of this
 page as neces-
 sary.

**Material Shipping Record & Log**

Tracking Number

6-10505
Blag 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load InformationNote:
Make additional
copies of this
page as neces-
sary.

LOAD #: 813

Signature of transporter

Blag 202 soil storage, cell A

Receiving facility

11-30-95

Date received

Time received

11.30.95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

39300 lbs / 19.7 tons

Load size (cubic yards/tons)

LOAD #: 815

Signature of transporter

Blag 202 soil storage, cell A

Receiving facility

11-30-95

Date received

Time received

11.30.95

Date of shipment

MA 22685

Time of shipment

MA 47499

Truck/Tractor registration

Trailer registration

45960 lbs / 22.0 tons

Load size (cubic yards/tons)

LOAD #: 814

Signature of transporter

Blag 202 soil storage, cell A

Receiving facility

11-30-95

Date received

Time received

11.30.95

Date of shipment

Time of shipment

MA 22685

Truck/Tractor registration

MA 47499

Trailer registration

43980 lbs / 22.9 tons

Load size (cubic yards/tons)

LOAD #: 816

Signature of transporter

Blag 202 soil storage, cell A

Receiving facility

11-30-95

Date received

Time received

11.30.95

Date of shipment

MA 22685

Time of shipment

MA 47499

Truck/Tractor registration

Trailer registration

42300 lbs / 21.2 tons

Load size (cubic yards/tons)

K Log Sheet Volume Information

171,540 lbs / 85.8 tons

Total volume this page (cubic yards/tons)

6564600 lbs / 3282.3 tons

Total carried forward (cubic yards/tons)

6,736,200 lbs / 3368.1 tons

Total carried forward and this page (cubic yards/tons)

Page 33 of 38



Material Shipping Record & Log

Tracking Number

Bldg 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #: 817
 Signature of transporter [Signature]
 Receiving facility B202 Soil Storage, cell A
11-30-95
 Date received
 Time received 11-30-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration
44,300 lbs / 22.2 tons
 Load size (cubic yards/tons)

LOAD #: 818
 Signature of transporter [Signature]
 Receiving facility B202 Soil Storage, cell A
11-30-95
 Date received
 Time received 11-30-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration
42,320 lbs / 21.2 tons
 Load size (cubic yards/tons)

LOAD #: 819
 Signature of transporter [Signature]
 Receiving facility B202 Soil Storage, cell A
11-30-95
 Date received
 Time received 11-30-95
 Date of shipment
 Time of shipment MA 22685
 Truck/Tractor registration MA 47499
 Trailer registration
44,480 lbs / 22.2 tons
 Load size (cubic yards/tons)

LOAD #: _____
 Signature of transporter _____
 Receiving facility _____
 Date received _____
 Time received _____
 Date of shipment _____
 Time of shipment _____
 Truck/Tractor registration _____
 Trailer registration _____
 Load size (cubic yards/tons) _____

K Log Sheet Volume Information

131,100 lbs / 65.6 tons
 Total volume this page (cubic yards/tons)
6,736,200 lbs / 3368.1 tons
 Total carried forward (cubic yards/tons)
6,867,300 lbs / 3433.7 tons
 Total carried forward and this page (cubic yards/tons)

Page 34 of 38



Material Shipping Record & Log

2-10823

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Bldg 2527

J Load Information

Note:
Make additional
copies of this
page as neces-
sary.

LOAD #: 820
Signature of transporter: *[Signature]*
Receiving facility: B202 Soil Storage area, cell H
12.6.95
Date received: 0854
Time received: 12-6-95
Date of shipment:
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 50, 290 lbs / 25.1 tons
Load size (cubic yards/tons)

LOAD #: 821
Signature of transporter: *[Signature]*
Receiving facility: B202 Soil Storage area, cell H
12.6.95
Date received: 0908
Time received: 12-6-95
Date of shipment:
Time of shipment: MA 32583
Truck/Tractor registration: MA 61635
Trailer registration: 64, 460 lbs / 32.2 tons
Load size (cubic yards/tons)

LOAD #: 822
Signature of transporter: *[Signature]*
Receiving facility: B202 Soil Storage area, cell H
12.6.95
Date received: 0932
Time received: 12-6-95
Date of shipment:
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration: 52, 210 lbs / 26.1 tons
Load size (cubic yards/tons)

LOAD #: 823
Signature of transporter: *[Signature]*
Receiving facility: B202 Soil Storage area, cell H
12.6.95
Date received: 0939
Time received: 12-6-95
Date of shipment:
Time of shipment: MA 32583
Truck/Tractor registration: MA 61635
Trailer registration: 64, 860 lbs / 32.4 tons
Load size (cubic yards/tons)

K Log Sheet Volume Information

231,640 lbs / 115.8 tons
Total volume this page (cubic yards/tons)
7,107,630 lbs / 3553.8 tons
Total carried forward (cubic yards/tons)
7,339,270 lbs / 3669.6 tons
Total carried forward and this page (cubic yards/tons)

Page 35 of 38



Material Shipping Record & Log

2-10823

Tracking Number

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Bldg 2527

J Load Information

LOAD #: 824
 Signature of transporter: [Signature]
 Receiving facility: B202 Soil storage area, cell 4
 Date received: 12-6-95
 Time received: 1012
 Date of shipment: 12-6-95
 Time of shipment: 1432583
 Truck/Tractor registration: M4 61635
 Trailer registration: 60,680 lbs / 30.3 tons
 Load size (cubic yards/tons):

LOAD #: 825
 Signature of transporter: [Signature]
 Receiving facility: B202 Soil storage area, cell 4
 Date received: 12-6-95
 Time received: 1023
 Date of shipment: 12-6-95
 Time of shipment: 1432588
 Truck/Tractor registration: M4 27020
 Trailer registration: 53,000 lbs / 26.5 tons
 Load size (cubic yards/tons):

LOAD #: 826
 Signature of transporter: [Signature]
 Receiving facility: B202 Soil storage area, cell 4
 Date received: 12-6-95
 Time received: 1047
 Date of shipment: 12-6-95
 Time of shipment: 1432583
 Truck/Tractor registration: M4 61635
 Trailer registration: 68,120 lbs / 34.1 tons
 Load size (cubic yards/tons):

LOAD #: 827
 Signature of transporter: [Signature]
 Receiving facility: B202 Soil storage area, cell 4
 Date received: 12-6-95
 Time received: 1055
 Date of shipment: 12-6-95
 Time of shipment: 1432588
 Truck/Tractor registration: M4 27020
 Trailer registration: 58,530 lbs / 29.3 tons
 Load size (cubic yards/tons):

K Log Sheet Volume Information

240,330 lbs / 120.2 tons
 Total volume this page (cubic yards/tons)
 6,867,300 lbs / 3433.7 tons
 Total carried forward (cubic yards/tons)
 7,107,630 lbs / 3553.8 tons
 Total carried forward and this page (cubic yards/tons)

Page 35 of 38

Note:
 Make additional
 copies of this
 page as neces-
 sary.

**Material Shipping Record & Log**

2-10823

Tracking Number

Bldg 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load InformationNote:
Make additional
copies of this
page as neces-
sary.

LOAD #: 828
Signature of transporter: *[Signature]*
Receiving facility: B 202 Soil Storage, Cella
Date received: 12-6-95
Time received: 1121
Date of shipment:
Time of shipment: MA 32583
Truck/Tractor registration: MA 61635
Trailer registration:
Load size (cubic yards/tons): 64,840 lbs / 32.4 tons

LOAD #: 829
Signature of transporter: *[Signature]*
Receiving facility: B 202 Soil Storage, Cella
Date received: 12-6-95
Time received: 1133
Date of shipment:
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration:
Load size (cubic yards/tons): 55,610 lbs / 27.8 tons

LOAD #: 830
Signature of transporter: *[Signature]*
Receiving facility: B 202 Soil Storage, Cella
Date received: 12-6-95
Time received: 1157
Date of shipment:
Time of shipment: MA 32583
Truck/Tractor registration: MA 61635
Trailer registration:
Load size (cubic yards/tons): 70,600 lbs / 35.3 tons

LOAD #: 831
Signature of transporter: *[Signature]*
Receiving facility: B 202 Soil Storage, Cella
Date received: 12-6-95
Time received: 1210
Date of shipment:
Time of shipment: MA 32588
Truck/Tractor registration: MA 27020
Trailer registration:
Load size (cubic yards/tons): 60,330 lbs / 30.2 tons

K Log Sheet Volume Information

251,380 lbs / 125.7 tons
Total volume this page (cubic yards/tons)
7,339,270 lbs / 3669.6 tons
Total carried forward (cubic yards/tons)
7,590,650 lbs / 3795.3 tons
Total carried forward and this page (cubic yards/tons)

Page 37 of 38



Material Shipping Record & Log

Tracking Number
610865
Bldg 2527

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

J Load InformationNote:
Make additional
copies of this
page as neces-
sary.

LOAD #: 837
Signature of transporter: [Signature]
Receiving facility: 6207 Soil Storage, cell A
Date received: 12-6-95
Time received: 1300
Date of shipment: 12-6-95
Time of shipment: 1300
Truck/Tractor registration: MA 61635
Trailer registration: MA 32583
Load size (cubic yards/tons): 32,380 lbs / 16.2 tons

LOAD #: _____

Signature of transporter: _____

Receiving facility: _____

Date received: _____

Time received: _____

Date of shipment: _____

Time of shipment: _____

Truck/Tractor registration: _____

Trailer registration: _____

Load size (cubic yards/tons): _____

LOAD #: _____

Receiving facility: _____

Date received: _____

Time received: _____

Date of shipment: _____

Time of shipment: _____

Truck/Tractor registration: _____

Trailer registration: _____

Load size (cubic yards/tons): _____

LOAD #: _____

Receiving facility: _____

Date received: _____

Time received: _____

Date of shipment: _____

Time of shipment: _____

Truck/Tractor registration: _____

Trailer registration: _____

Load size (cubic yards/tons): _____

K Log Sheet Volume Information

32,380 lbs / 16.2 tons
Total volume this page (cubic yards/tons)
7,590,650 lbs / 3725.3 tons
Total carried forward (cubic yards/tons)
7,623,030 lbs / 3811.5 tons
Total carried forward and this page (cubic yards/tons)

Page 38 of 38

**JOHN C. TOMBARELLO & SONS, Inc.**

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	9501121		
	9501122 } 1000 each		n/c
	9501123		
	9501124		
	9501125		
	Yirm fort Dexens		
	Site T 3654		
	T 3618		
	T 3601		
	T 2527		
	Blag 3770 - Grove Pond Well Treatment		
	T 1423		
	Kevin Hammer		

Appendix F

Well Boring & Construction Logs

PART 1

PAGE 1 OF 1

JOB NO. 16208

BORE HOLE NO. 1

PROJECT FT. DEVENS

LOCATION UST-2527 SITE

DRILLING CONTRACTOR GEOLOGIC

DRILLING EQUIPMENT MOBILE 657

HYDROGEOLOGIST S. MCGINN

DRILLER RAY EASTON / TIM TUCKER / TIM GALVIN

DATE START/TIME 2/26/96 0754 DATE FINISH/TIME 2/26/96 0955

SURFACE ELEVATION TOTAL DEPTH 17.0'

WELL/CASING 4" PVC SCREEN TYPE 4" PVC

LENGTH 10' SLOT 10

GROUND WATER				CASING	CORE	SAMPLER	TUBE
DATE	TIME	DEPTH	WEATHER	TYPE	-	SS	
				DIAMETER		2"	
				HAMMER WEIGHT		300#	
				FALL		30"	

REMARKS

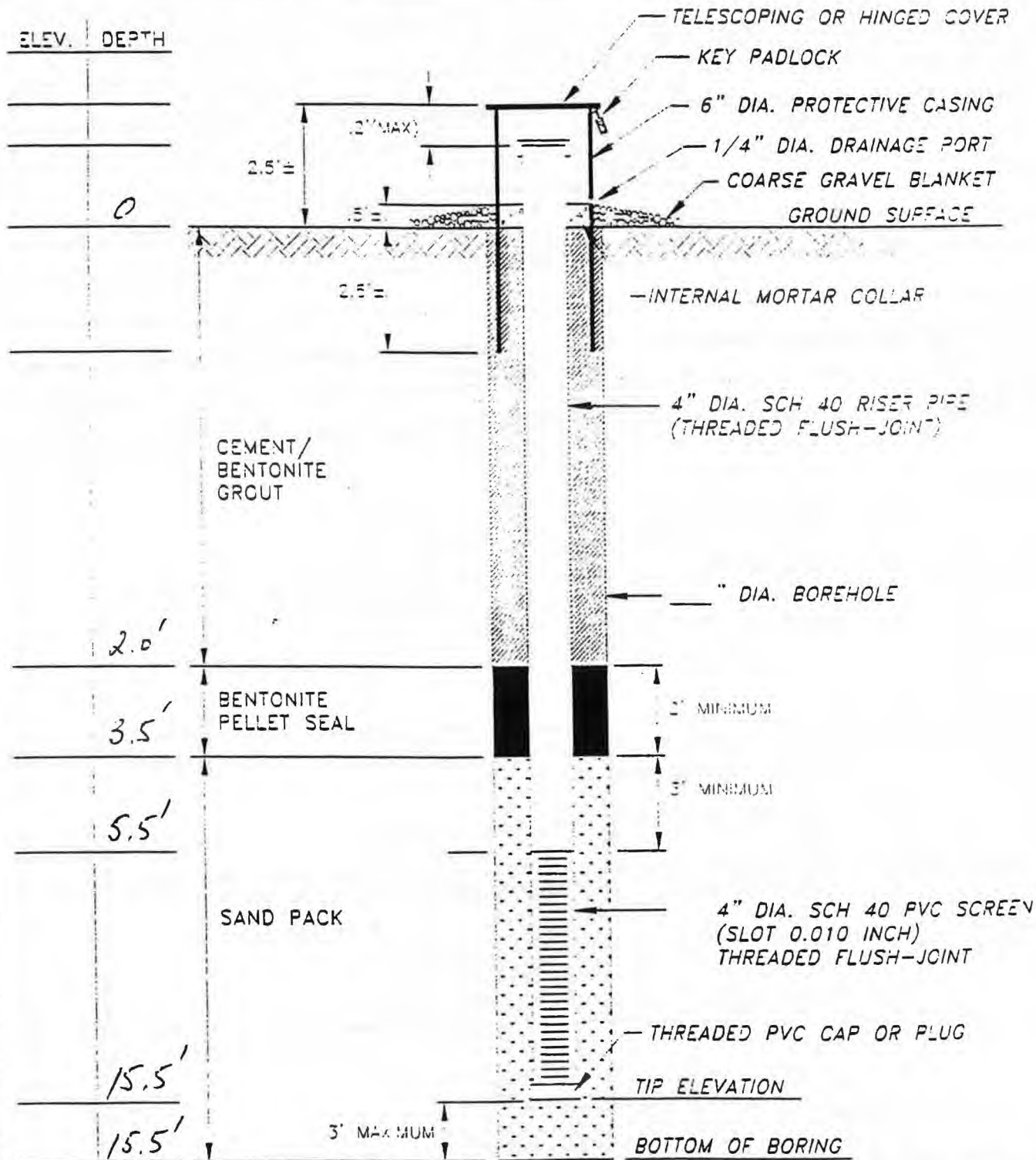
DEPTH	SAMPLE NO.	BLOW COUNT PER 6"	RECOVERY	BORE HOLE LOG		GRAPHIC LOG
				LITHOLOGIC DESCRIPTION	REMARKS	
2	1-1	4/5 5/7	1.0'	0.4' BLK-BRN F-C SILTY SAND W/MANY PEBBLES, MOIST 0.6' RED-BRN F-C SILTY SAND W/MANY PEBBLES & RX FRAGS; RX FRAG IN NOSE	NO ODOR/STAIN	
4	1-2	7/8 6/7	0.3'	0.3' LT GREY F-M SAND W/SILT, MANY PEBBLES; RX FRAGS BLOCKING TUBE DRY - SL. MOIST	NO ODOR/STAIN	
6	1-3	5/5 6/6	1.8'	0.5' BRN M SAND W/SOME SILT & SMALL PEBBLES; MOIST - V. MOIST 1/3' GREY SANDY SILT W/MANY SMALL PEBBLES, MOIST	NO ODOR/STAIN	
8	1-4	7/9 11/13	1.3'	0.2' BRN M SILTY SAND W/PEBBLES WET 0.1' GREY SANDY SILT W/MANY SMALL PEBBLES; THIN OXIDIZED HORIZONS 1.0' OLIVE GREEN SANDY SILT W/PEBBLES	NO ODOR/STAIN TOW 6-7'	
15.5'				AUGER TO 15.5' - TOP OF TILL AT 10-11', VERY SLOW PENETRATION; REACH 15.5' AT 0955, PREP TO SPOON - F. SILTY SAND W/MANY PEBBLES	NO ODOR/STAIN	
17.0'	1-5	20/23 130 FEB 6"	1.2'	0.8' OLIVE GREEN SILT W/SOME F. SAND & MANY SMALL PEBBLES; RX FRAGS 0.4' RX FRAGS - FRACTURED PIECES OF RX (PHYLLITE?) SUSPECTED BED ROCK -RX WEATHERED AT TOP, FRESH AT BASE	NO ODOR/STAIN MOIST - V. MOIST W/FEW WET ZONES BOB = 17' BGS	



OHM Remediation
Services Corp.

MONITORING WELL INSTALLATION DETAIL (UNCONSOLIDATED)

Project Number 16208
Project Name FT. DEVENS - 2527
Monitoring Well Number 1



Start of Well Installation 2/24/96 AM Completion of Well Installation 2/26/96 AM
Date Time Date Time

Notes: SS SAMPLE 15.5-17.5'; REFUSAL AT 17.0' ON SUSPECTED BEDROCK

PART 1

OHM

PAGE 1 OF 2

JOB NO. 16208

BORE HOLE NO. 2

PROJECT	FT. DEVENS	LOCATION	UST-2527 SITE
DRILLING CONTRACTOR	GEOLOGIC	DRILLING EQUIPMENT	MOBILE B57
HYDROGEOLOGIST	S. MCGINN	DRILLER	RAY EASTON / TIM TUCKER / TIM GALVIN
DATE START TIME	2/22/96 1425	DATE FINISH TIME	2/23/96 1030
WELL CASING	4" PVC	SCREEN TYPE	4" PVC
SURFACE ELEVATION		TOTAL DEPTH 17.5'	
LENGTH 10'		SLOT 10	

GROUND WATER				CASING	CORE	SAMPLER	TUBE
DATE	TIME	DEPTH	WEATHER	TYPE		55	
				DIAMETER		2"	
				HAMMER WEIGHT		300*	
				FALL		30"	

REMARKS

DEPTH	SAMPLE NO.	BLOW COUNT	PER C.	RECOVER	BORE HOLE LOG		GRAPHIC LOG
					LITHOLOGIC DESCRIPTION	REMARKS	
2	2-1	5/3 2/1	1.8'		0.9' BLK SILTY F-M GRB-RICH SAND w/FEW PEBBLES, MOIST 0.9' RED-BRN MED SAND w/FEW PEBBLES AND SOME SILT, SL. MOIST	NO ODOR/STAIN	
4	2-2	1/1 2/7	1.1'		0.9' SAME AS ABOVE (SAA) 0.2' GREY SANDY SILT w/FEW SMALL PEBBLES, SL. MOIST	NO ODOR/STAIN	
6	2-3	5/10 14/16	1.9'		0.2' SAA 1.7' GREY-BRN SILTY SAND w/MANY SMALL PEBBLES AND 1 LARGE QTZ FRAG.; MOIST THROUGHOUT	NO ODOR/STAIN	
8	2-4	8/8 8/8	1.7'		1.7' GREY w/BROWN MOTTLING, F. SANDY SILT w/MANY V. SMALL PEBBLES MOIST TO V. MOIST	NO ODOR/STAIN	
10	2-5	4/16 30/25	1.8'		0.8' GREY & BRN SANDY SILT w/MANY V. SMALL ANGULAR PEBBLES & RX FRAGS 0.1' RX FRAG 0.9' GREY & BRN SANDY SILT w/MANY SMALL ANGULAR PEBBLES & RX FRAGS, DENSE	NO ODOR/STAIN MOIST - V. MOIST	
					AUGER TO 10', END OF DAY 2/23/96, 0753 - TOP OF WATER AT 7.1' BGS IN AUGERS AUGER TO 15.5', PREP TO SPOON	NO ODOR/STAIN	

PART 2

O H MPAGE 2 OF 2JOB NO 16208BORE HOLE NO. 2PROJECT FT. DEVENSLOCATION UST-2527 SITE

REMARKS

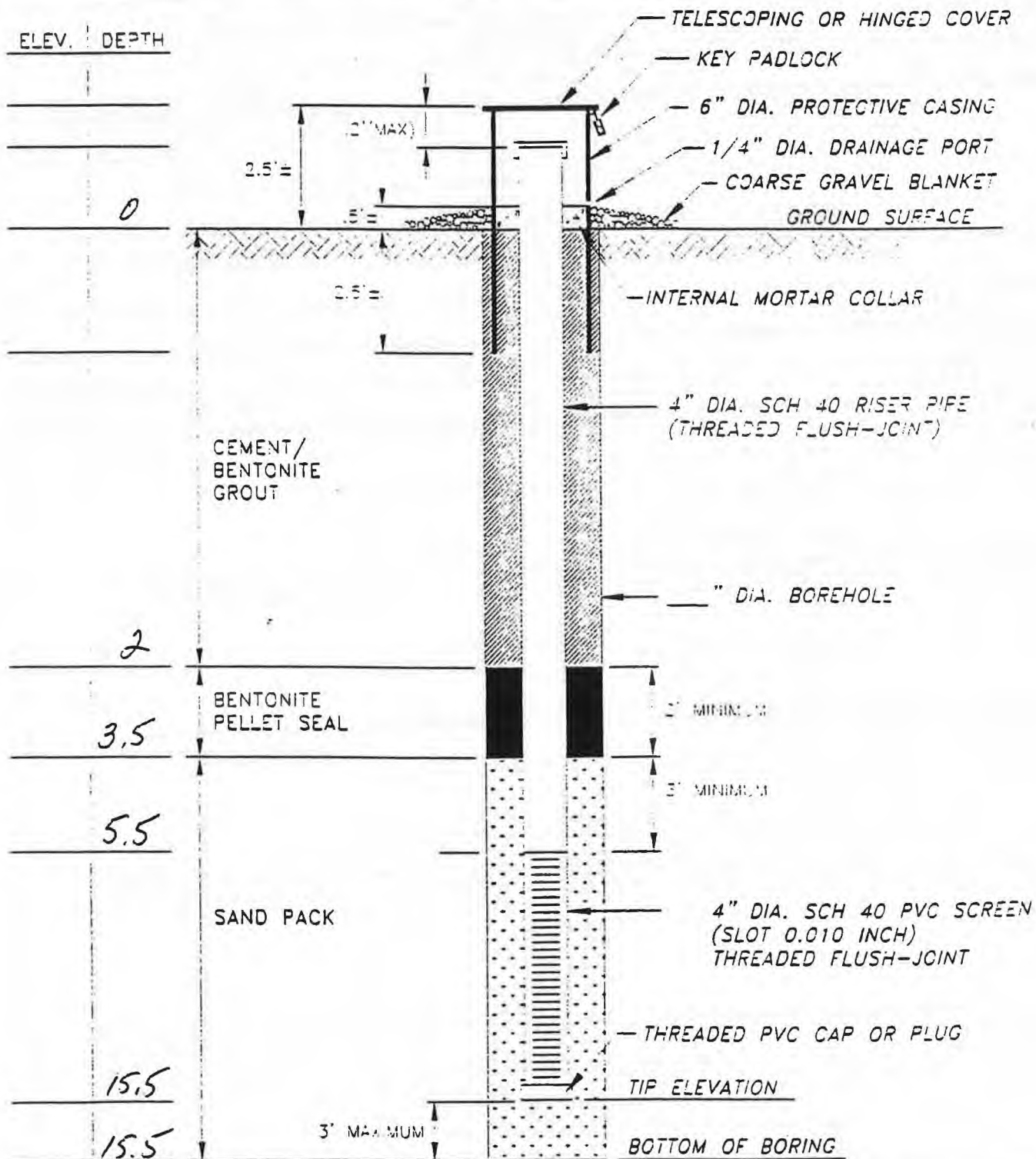
DEPTH	SAMPLE NO.	BLOW COUNT PER FT.	RECOVERY	LITHOLOGIC DESCRIPTION	REMARKS	GRAPHIC LOG
15.5				VERY SLOW PENETRATION THROUGH DENSE SECTION, ENCOUNTERED LARGE ROCK AT ~12.5' BGS, REACH 15.5' BGS AT 0920	-	
17.5	2-6	17/32 31/42	2.0'	0.6' BRN SANDY SILT W/FEW SMALL PEBBLES; SL. MOIST 1.4' OLIVE GREEN SILT W/SOME F. SAND AND MANY V. SMALL ANGULAR PEBBLES & RX FRAGS; HARD, DENSE, SL. MOIST	NO ODCR/STAIN	
				BOB = 17.5' BGS		



OHM Remediation
Services Corp.

MONITORING WELL INSTALLATION DETAIL (UNCONSOLIDATED)

Project Number 16208
Project Name FT. DEVENS - 2527
Monitoring Well Number 2



Start of Well Installation 2/23/96 AM Completion of Well Installation 2/23/96 AM
Date Time Date Time

Notes: BORING BEGUN ON 2/22/96, COMPLETED ON 2/23/96; AUGER TO
15.5' BGS, SAMPLE 15.5-17.5' BGS.

PART 1

OHMPAGE 1 OF 2JOB NO. 16208BORE HOLE NO. 3

PROJECT <u>FT. DEVENS</u>		LOCATION <u>UST-2527 SITE</u>	
DRILLING CONTRACTOR <u>GEOLOGIC</u>		DRILLING EQUIPMENT <u>MOBILE B57</u>	
HYDROGEOLOGIST <u>S. MCGINN</u>		DRILLER <u>RAY EASTON / TIM TUCKER / TIM GALVIN</u>	
DATE START/TIME <u>3/22/96 0825</u>	DATE FINISH/TIME <u>3/22/96 1245</u>	SURFACE ELEVATION	TOTAL DEPTH <u>18'</u>
WELL CASING <u>4" PVC</u>	SCREEN TYPE <u>4" PVC</u>	LENGTH <u>10'</u>	SLOT <u>10</u>

GROUND WATER				CASING	CORE	SAMPLER	TUBE
DATE	TIME	DEPTH	WEATHER	TYPE	-	SS	
				DIAMETER		2"	
				HAMMER WEIGHT		300*	
				FALL		30"	

REMARKS COLD, WET, RAIN DURING DAY, HIGH HUMIDITY

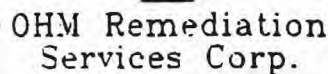
DEPTH	SAMPLE NO.	BLOW COUNT PER 6"	RECOVERY	BORE HOLE LOG		GRAPHIC LOG
				LITHOLOGIC DESCRIPTION	REMARKS	
2	3-1	13/17 13/8	2.0'	0.3' BRN F-C SAND W/SILT & PEBBLES, WET 0.1' SAA W/COAL FRAGS, WET 1.5' BRN, F-C SAND W/PEBBLES & RX FRAGS, SILT, FROZEN 0.3' BRN M. SAND W/FEW SMALL PEBBLES	NO ODOR/STAIN	
4	3-2	5/4 3/3	1.2'	0.6' BRN M. SAND W/FEW SMALL PEBBLES, DRY 0.6' BRN F-C SILTY SAND W/MANY PEBBLES & RX FRAGS, MOIST DENSE GREY SILT W/PEBBLES IN NOSE	NO ODOR/STAIN	
6	3-3	3/7 7/8	1.8'	0.2' CAVE 1.2' BRN V. SILTY F. SAND W/STRT PEBBLES 0.1' RX FRAG 0.3' RD-BRN F-C SAND W/PEBBLES & SOME SILT, MOIST	NO ODOR/STAIN	
8	3-4	5/8 6/7	1.7'	1.7' GREY V. SILTY F-C SAND W/MANY PEBBLES & RX FRAGS, MOIST - V. MOIST	NO ODOR/STAIN	
10	3-5	3/19 21/63	1.7'	0.9 SAA, V. MOIST - WET 0.8' TILL - GREY SANDY SILT TO SILTY F-M SAND W/MANY PEBBLES & RX FRAGS, WET AT TOP, MOIST AT BASE	NO ODOR/STAIN TOW ~8-9'	
15				AUGER TO 15' - V. SLOW PENETRATION V. SILTY F-M SAND W/MANY PEBBLES & RX FRAGS PREP TO SPOON 15-17'	NO ODOR/STAIN	

PART 2

OHMPAGE 2 OF 2JOB NO 16208BORE HOLE NO. 3PROJECT FT. DEJENSLOCATION UST-2527 SITE

REMARKS

DEPTH	SAMPLE NO.	BLOW COUNT PER 6"	RECOVER - ERY			GRAPHIC LOG
				LITHOLOGIC DESCRIPTION	REMARKS	
17	3-6	23/38 46/50	2.0'	2.0' GREY SILT W/CLAY AND MANY V. SMALL PEBBLES - DRY, DENSE, HARD	NO ODOR/STAIN	
18						
				BOB = 18' BGS		

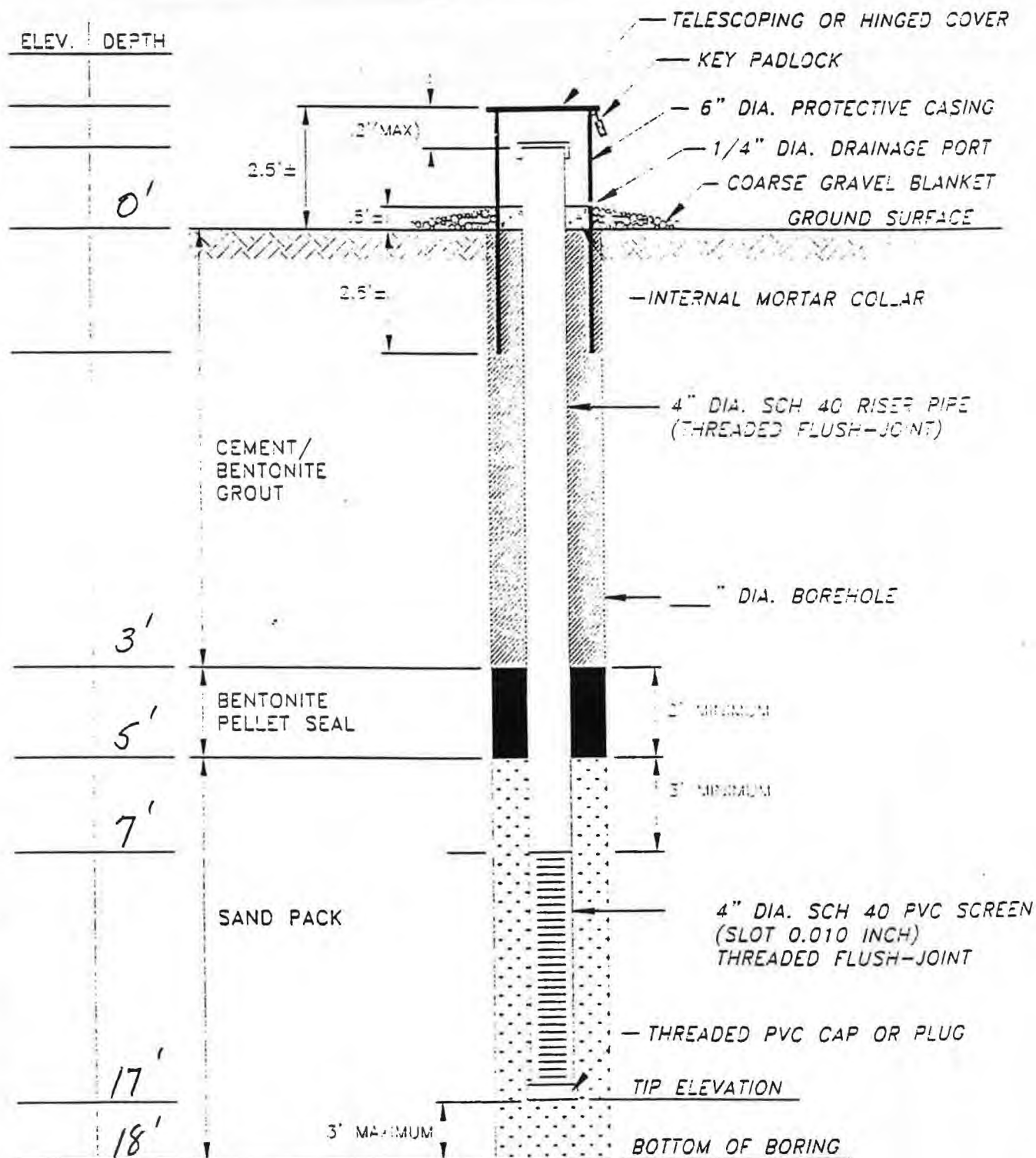


MONITORING WELL
INSTALLATION DETAIL
(UNCONSOLIDATED)

Project Number 16208

Project Name FT. DEVENS - 2527

Monitoring Well Number 3



Start of Well Installation 2/22/96 PM Completion of Well Installation 2/22/96 PM
Date Time Date Time

FIRST OHM WELL INSTALLED AT SITE

PART 1

O H MPAGE 1 OF JOB NO. 16208BORE HOLE NO. 4PROJECT FT. DEVENSLOCATION UST-2527 SITEDRILLING CONTRACTOR GEOLOGICDRILLING EQUIPMENT MOBILE 657HYDROGEOLOGIST S MCGINNDRILLER RAY EASTON / TM TUCKER / TOM GALVIN

DATE START/TIME

DATE FINISH/TIME

SURFACE

TOTAL DEPTH

2/23/96 11152/23/96 1415

ELEVATION

17.5'WELL CASING 4" PVCSCREEN TYPE 4" PVCLENGTH 10'SLOT 10

GROUND WATER

CASING

CORE

SAMPLER

TUBE

DATE

TIME

DEPTH

WEATHER

TYPE

-

SS

DIAMETER

2"HAMMER
WEIGHT300#

FALL

30"

REMARKS

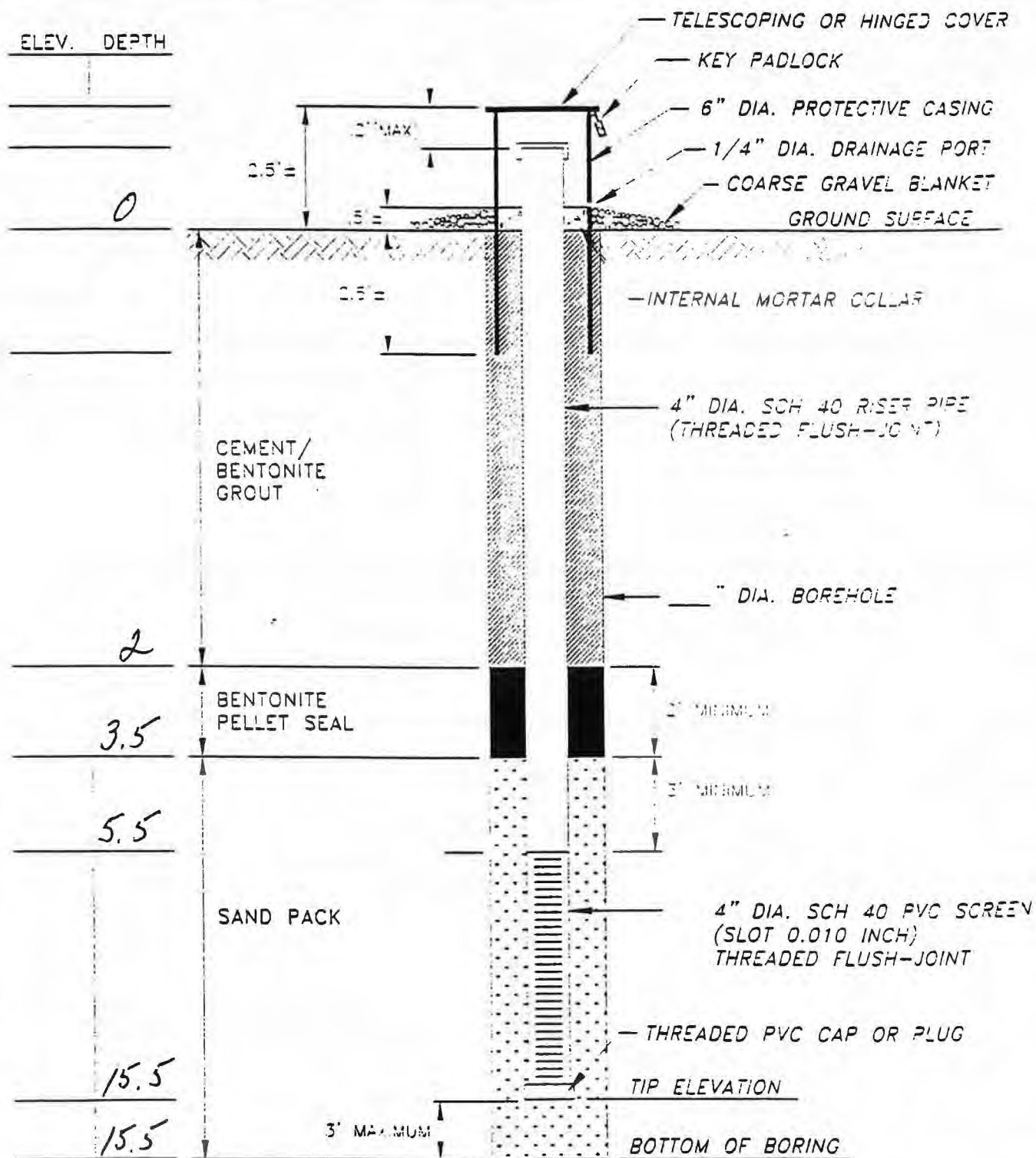
DEPTH	SAMPLE NO.	BLOW COUNT PER 6"	RECOVERY	BORE HOLE LOG		GRAPHIC LOG
				LITHOLOGIC DESCRIPTION	REMARKS	
2	4-1	3/3	1.6'	0.4' SOIL-BLK ORG-RICH F-M SILTY SAND 0.5' BRN ORG-RICH F-M SILTY SAND 0.7' RED F-M SAND W/SILT & FEW SMALL PEBBLES CORE WET AT TOP MOIST AT BASE	NO ODOR/STAIN	
4	4-2	3/2	1.1'	1.1' JAA W/SEVERAL LG. PEBBLES & RX FRAGS, MOIST TO SLIGHTLY MOIST	NO ODOR/STAIN	
6	4-3	4/5	1.8'	0.3' JAA, MOIST 0.6' YEL-BRN SANDY SILT W/MANY SMALL PEBBLES, MOIST 0.9' YEL-TAN F. SILTY SAND W/MANY PEBBLES & RX FRAGS, MOIST - V. MOIST	NO ODOR/STAIN	
8	4-4	9/7	1.0'	1.0' JAA; V. MOIST AT TOP, WET AT BASE	NO ODOR/STAIN TOW ~ 7-8'	
15.5'				Auger to 15.5', prep to spoon 15.5' to 17.5' BGS F-M SAND W/SILT & MANY PEBBLES & RX FRAGS; RX 12-13' 14-15'; SATURATED RETURNS 11-15.5' BGS	NO ODOR/STAIN	
17.5'	4-5	38/42	2.0'	2.0' DK GREY SANDY SILT W/MANY SMALL ANGULAR PEBBLES & RX FRAGS; SL. MOIST BOB = 17.5' BGS	NO ODOR/STAIN	



OHM Remediation
Services Corp.

MONITORING WELL INSTALLATION DETAIL (UNCONSOLIDATED)

Project Number 16208
Project Name FT. DEVENS - 2527
Monitoring Well Number 4



Start of Well Installation 2/23/96 PM Date Time Completion of Well Installation 2/23/96 PM Date Time

Notes: AUGER TO 15.5' BGS, SPOON 15.5-17.5' BGS



OHM Corporation

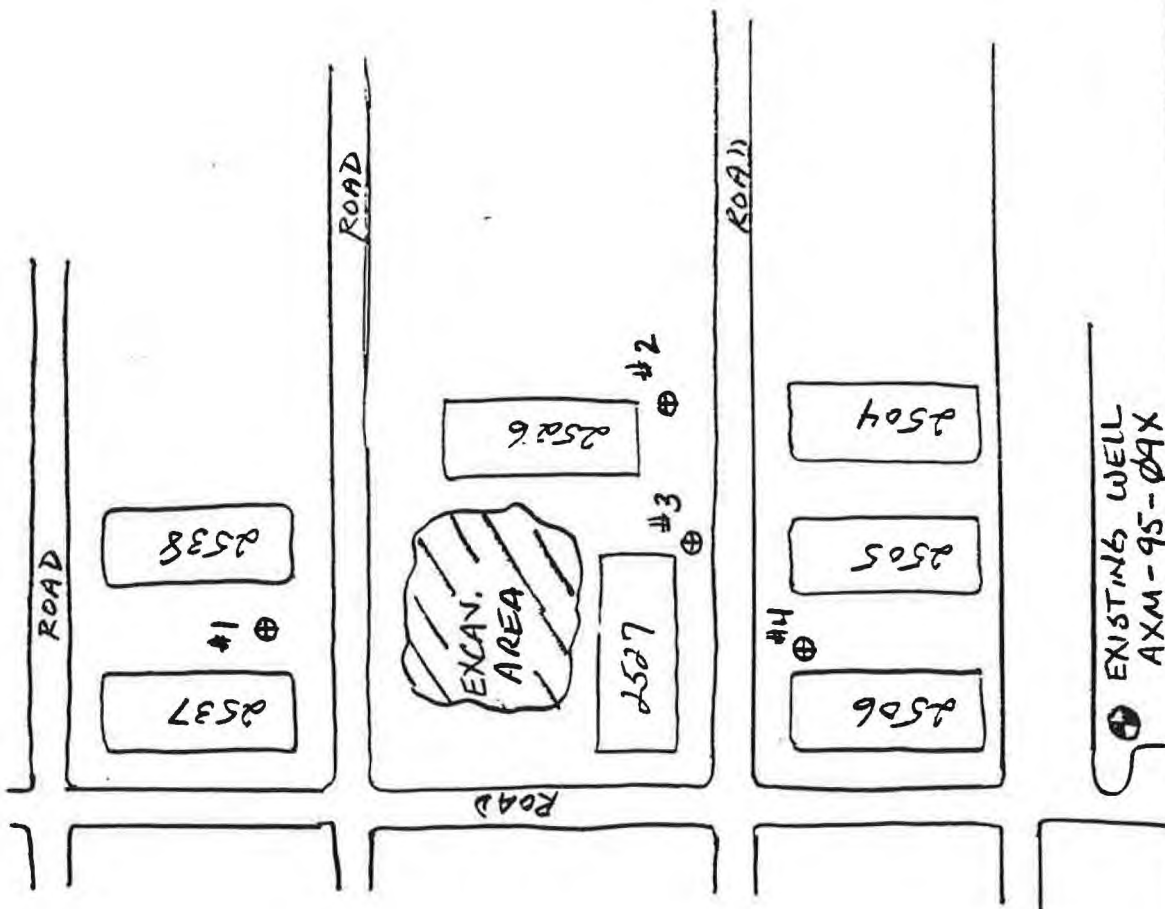
COMPUTATION SHEET

Form No. 0048
Midwest Tech. Servs.
Rev. 08/89

Page 1 of 1

Proj. No. 16208	Client USACE	Location FT. DEVENS	Subject VST-2527 SITE		
Preparer's Initials SM	Date 2/29/96	Reviewer's Initials	Date	Approver's Initials	Date

APPROXIMATE WELL LOCATIONS



Appendix G

Commonwealth Analytical Report - Groundwater Samples

**Fort Devens
Monitoring Well Data Sheet
Project # 16208**

Well/Sample ID #: MW-1 1130 Samplers: Bill Dale #7630, Greg Guimond #7379, Jon Nichols #7860

Sample Date/Time: 4/19/96

Well Diameter: 0.33 ft
Depth to Water: 7.24 ft
Floaters: no ft
Depth to Bottom: 18.1 ft
Sinkers: no ft

Water Column: 10.86 ft
Well Volume: 28.36 gal
Volume Purged: 85.08 gal
HNU PID: - ppm
LEL/O2 - / - %

Condition of Well: Good

Field Measurements

I. Purge Data

Parameter	Start	Volume 1	Volume 2	Volume 3
pH:	<u>6.6</u>	<u>6.7</u>	<u>7.0</u>	<u>6.9</u>
Temperature:	<u>9.7</u>	<u>9.4</u>	<u>10.0</u>	<u>9.8</u>
Conductivity:	<u>0.314</u>	<u>0.297</u>	<u>0.320</u>	<u>0.299</u>

II. Sample Data

Parameters	
pH:	<u>6.8</u>
Temperature:	<u>9.8</u>
Conductivity:	<u>0.301</u>
Dissolved Oxygen:	<u>-</u>
Turbidity:	<u>-</u>
eH:	<u>-</u>

Note: Please indicate units for field measurements

Sample Container/Preservative Information

Parameters	Container type	Preservative	Filtered (Y/N)
Petroleum Hydrocarbons by VPH & EPH	3x 40 ml VOA 1x 1 liter	HCl pH=2 None	<u>N</u>
_____	_____	_____	_____
_____	_____	_____	_____

Additional Information

Purging Device: Bailer Submersible pump Other: _____

Sample Bailer Type: Polyethylene Teflon

Equipment Decon Procedure: Submersible Pump is washed with Iquinox and thoroughly rinsed with DI water. All other sampling equipment is dedicated to the well.

Comments: 6156 2507

Fort Devens
Monitoring Well Data Sheet
Project # 16208

Well/Sample ID #: MW-2 Samplers: Bill Dale #7630, Greg Guimond #7379, Jon Nichols #7860

Sample Date/Time: 4/19/96 1215

Well Diameter: 0.33 ft
Depth to Water: 5.25 ft
Floaters: N ft
Depth to Bottom: 20.5 ft
Sinkers: N ft

Water Column: 15.25 ft
Well Volume: 39.83 gal
Volume Purged: 119.46 gal
HNU PID: - ppm
LEL/O2: - 1 - %

Condition of Well: Good

Field Measurements

I. Purge Data

Parameter	Start	Volume 1	Volume 2	Volume 3
pH:	<u>7.88</u>	<u>7.96</u>	<u>8.10</u>	<u>7.98</u>
Temperature:	<u>9.0</u>	<u>9.3</u>	<u>8.9</u>	<u>9.0</u>
Conductivity:	<u>0.262</u>	<u>0.310</u>	<u>0.302</u>	<u>0.297</u>

II. Sample Data

Parameters	
pH:	<u>8.0</u>
Temperature:	<u>9.3</u>
Conductivity:	<u>0.306</u>
Dissolved Oxygen:	<u>-</u>
Turbidity:	<u>-</u>
eH:	<u>-</u>

Note: Please indicate units for field measurements

Sample Container/Preservative Information

Parameters	Container type	Preservative	Filtered (Y/N)
Petroleum Hydrocarbons by VPH & EPH	3x 40 ml VOA 1x 1 liter	HCl pH=2 None	<u>N</u>

Additional Information

Purging Device: Bailer Submersible pump Other:

Sample Bailer Type: Polyethylene Teflon

Equipment Decon Procedure: Submersible Pump is washed with liquinox and thoroughly rinsed with DI water. All other sampling equipment is dedicated to the well.

Comments: BIDG 2507

Fort Devens
Monitoring Well Data Sheet
Project # 16208

Well/Sample ID #: MW-3 Samplers: Bill Dale #7630, Greg Guimond #7379, Jon Nichols #7860

Sample Date/Time: 4/19/96 1240

Well Diameter:	<u>0.33</u> ft	Water Column:	<u>13.12</u> ft
Depth to Water:	<u>4.98</u> ft	Well Volume:	<u>35.04</u> gal
Floater:	<u>N</u> ft	Volume Purged:	<u>105.12</u> gal
Depth to Bottom:	<u>18.4</u> ft	HNU PID:	<u>-</u> ppm
Sinkers:	<u>N</u> ft	LEL/O2	<u>- 1 -</u> %

Condition of Well: Good

Field Measurements

I. Purge Data

Parameter	Start	Volume 1	Volume 2	Volume 3
pH:	<u>7.03</u>	<u>6.98</u>	<u>7.36</u>	<u>7.25</u>
Temperature:	<u>8.7</u>	<u>8.6</u>	<u>9.0</u>	<u>9.1</u>
Conductivity:	<u>0.117</u>	<u>0.212</u>	<u>0.250</u>	<u>0.233</u>

II. Sample Data

Parameters	
pH:	<u>7.17</u>
Temperature:	<u>8.9</u>
Conductivity:	<u>0.344</u>
Dissolved Oxygen:	<u>-</u>
Turbidity:	<u>-</u>
eH:	<u>-</u>

Note: Please indicate units for field measurements

Sample Container/Preservative Information

Parameters	Container type	Preservative	Filtered (Y/N)
Petroleum Hydrocarbons by VPH & EPH	3x 40 ml VOA 1x 1 liter	HCL pH2 None	<u>N</u>

Additional Information

Purging Device: Bailer Submersible pump Other: _____

Sample Bailer Type: Polyethylene Teflon

Equipment Decon Procedure: Submersible Pump is washed with liquinox and thoroughly rinsed with DI water. All other sampling equipment is dedicated to the well.

Comments: BLDG 2527

Fort Devens
Monitoring Well Data Sheet
Project # 16208

Well/Sample ID #: MW-4

Samplers: Bill Dale #7630, Greg Guimond #7379, Jon Nichols #7860

Sample Date/Time: 4/14/96 1300

Well Diameter: 0.33 ft
Depth to Water: 5.4 ft
Floaters: N ft
Depth to Bottom: 17.3 ft
Sinkers: N ft

Water Column: 11.9 ft
Well Volume: 31.03 gal
Volume Purged: 10.36 gal
HNU PID: — ppm
LEL/O2: - / - %

Condition of Well: Good

Field Measurements

I. Purge Data

Parameter	Start	Volume 1	Volume 2	Volume 3
pH:	<u>6.81</u>	<u>6.99</u>	<u>7.02</u>	<u>7.10</u>
Temperature:	<u>8.5</u>	<u>8.5</u>	<u>9.1</u>	<u>8.9</u>
Conductivity:	<u>0.190</u>	<u>0.316</u>	<u>0.315</u>	<u>0.319</u>

II. Sample Data

Parameters

pH: 6.97
Temperature: 8.6
Conductivity: 0.302
Dissolved Oxygen: —
Turbidity: —
eH: —

Note: Please indicate units for field measurements

Sample Container/Preservative Information

Parameters	Container type	Preservative	Filtered (Y/N)
Petroleum Hydrocarbons by VPH & EPH	3x 40 ml VOA 1x 1 liter	HCl pH 2 None	<u>N</u>
_____	_____	_____	_____
_____	_____	_____	_____

Additional Information

Purging Device: Bailer Submersible pump Other: _____

Sample Bailer Type: Polyethylene Teflon

Equipment Decon Procedure: Submersible Pump is washed with liquinox and thoroughly rinsed with DI water. All other sampling equipment is dedicated to the well.

Comments: BIDG 2527



Commonwealth Analytical

MEMORANDUM

TO: Mike Quinlan, Project Manager, OHM Corp.
FROM: Stephen Knollmeyer, Laboratory Director
DATE: June 7, 1996

RE: **YPH/EPH Analytical Data**
Fort Devens Project
CA Workorder #9604324

Attached are the spike data for the above-mentioned analytical results. As I mentioned in our conversation, the recoveries for the aliphatics were generally low and the surrogates were also low, therefore, we estimated all the detection limits as we did not detect any analytes. The spike data for the aromatics was much better with only 3 of 10 %R values outside the control limits of 60-140%. The two samples that did have the O-Terphenyl surrogate outside the limits were estimated for the aromatics. Unfortunately, not all the individual PAHs received the J flag and we are enclosing herein the revised copies. (Originals will be sent via overnight mail).

Please note the DEP has set many of the control limits in this method at 60-140% because little or no "real-world" data was available when the method was written. At a recent Lab Association Meeting, the DEP announced that based on comments from labs using the draft method, these limits would be changed to lab-defined limits. The bottom line is that these recoveries may be acceptable when the QC limits are better defined. Consequently, we did not feel it was necessary to reject these data based on the surrogate and spike recovery data and we are informing all data users that this method is a draft method that is still undergoing review.

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WATER EPH-AROMATIC METHOD SPIKE/METHOD SPIKE DUPLICATE RECOVERY

Lab Name: COMMONWEALTH ANALYTICAL Contract: NAProject No.: NA Site: NA Location: FORT DEVENS Group: 9604324Matrix Spike - Sample No.: METHOD SPIKE Level: (low/med) LOW

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC #	QC. LIMITS REC.
NAPHTHALENE	25	0	13.2	53 *	60-140
ACENAPHTHENE	25	0	13.2	53 *	60-140
ANTHRACENE	25	0	20.2	81	60-140
PYRENE	25	0	21.4	86	60-140
CHRYSENE	25	0	18.8	75	60-140

Matrix Spike - Sample No.: METHOD SPIKE DUPLICATE

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MS % REC #	% RPD #	QC LIMITS RPD REC.
NAPHTHALENE	25	14.6	58 *	10	40 60-140
ACENAPHTHENE	25	16.3	65	21	40 60-140
ANTHRACENE	25	22.3	89	10	40 60-140
PYRENE	25	22.3	89	4	40 60-140
CHRYSENE	25	18.1	72	4	40 60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike recovery: 3 out of 10 outside QC limits

RPD: 0 out of 5 outside QC limits

Comments: RPD limits are temporary until method limits are established.

WATER EPH-ALIPHATIC METHOD SPIKE/METHOD SPIKE DUPLICATE RECOVERY

Lab Name: COMMONWEALTH ANALYTICAL Contract: NAProject No.: NA Site: NA Location: FORT DEVENS Group: 9604324Matrix Spike - Sample No.: METHOD SPIKE Level: (low/med) LOW

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC #	QC. LIMITS REC.
C9 - ALIPHATIC	25	0	5.2	20 *	60-140
C14 - ALIPHATIC	25	0	9.8	39 *	60-140
C19 - ALIPHATIC	25	0	12.9	52 *	60-140
C20 - ALIPHATIC	25	0	16.5	66	60-140
C28 - ALIPHATIC	25	0	16.5	66	60-140

Matrix Spike - Sample No.: METHOD SPIKE DUPLICATE

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MS % REC #	% RPD #	QC LIMITS RPD REC.
C9 - ALIPHATIC	25	6.6	26 *	24	40 60-140
C14 - ALIPHATIC	25	9.3	37 *	5	40 60-140
C19 - ALIPHATIC	25	1.3	5 *	160 *	40 60-140
C20 - ALIPHATIC	25	14.1	56 *	16	40 60-140
C28 - ALIPHATIC	25	11.4	45 *	37	40 60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike recovery: 8 out of 10 outside QC limits

RPD: 1 out of 5 outside QC limits

Comments: RPD limits are temporary until method limits are established.

Workorder #: 9604324-05
Matrix: Aqueous

Sample ID: MW-SW1

Collection Date: 04/19/96

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/25/96	1	NDJ	0.2
Naphthalene	04/25/96	05/25/96	1	NDJ	0.01
2-Methylnaphthalene	04/25/96	05/25/96	1	NDJ	0.01
Acenaphthylene	04/25/96	05/25/96	1	NDJ	0.01
Acenaphthene	04/25/96	05/25/96	1	NDJ	0.01
Fluorene	04/25/96	05/25/96	1	NDJ	0.01
Phenanthrene	04/25/96	05/25/96	1	NDJ	0.01
Anthracene	04/25/96	05/25/96	1	NDJ	0.01
Fluoranthene	04/25/96	05/25/96	1	NDJ	0.01
Pyrene	04/25/96	05/25/96	1	NDJ	0.01
Benzo(a)Anthracene	04/25/96	05/25/96	1	NDJ	0.01
Chrysene	04/25/96	05/25/96	1	NDJ	0.01
Benzo(b)Fluoranthene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(k)Fluoranthene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(a)pyrene	04/25/96	05/25/96	1	NDJ	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/25/96	1	NDJ	0.02
Dibenzo(a,h)anthracene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(g,h,i)Perylene	04/25/96	05/25/96	1	NDJ	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	2*	60-140
Ortho-terphenyl	55*	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-07

Sample ID: SKP-93-01A

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/25/96	1	NDJ	0.2
Naphthalene	04/25/96	05/25/96	1	NDJ	0.01
2-Methylnaphthalene	04/25/96	05/25/96	1	NDJ	0.01
Acenaphthylene	04/25/96	05/25/96	1	NDJ	0.01
Acenaphthene	04/25/96	05/25/96	1	NDJ	0.01
Fluorene	04/25/96	05/25/96	1	NDJ	0.01
Phenanthrene	04/25/96	05/25/96	1	NDJ	0.01
Anthracene	04/25/96	05/25/96	1	NDJ	0.01
Fluoranthene	04/25/96	05/25/96	1	NDJ	0.01
Pyrene	04/25/96	05/25/96	1	NDJ	0.01
Benzo(a)Anthracene	04/25/96	05/25/96	1	NDJ	0.01
Chrysene	04/25/96	05/25/96	1	NDJ	0.01
Benzo(b)Fluoranthene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(k)Fluoranthene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(a)pyrene	04/25/96	05/25/96	1	NDJ	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/25/96	1	NDJ	0.02
Dibenzo(a,h)anthracene	04/25/96	05/25/96	1	NDJ	0.02
Benzo(g,h,i)Perylene	04/25/96	05/25/96	1	NDJ	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	13*	60-140
Ortho-terphenyl	55*	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL



Commonwealth Analytical

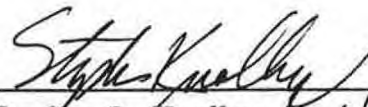
**O.H. MATERIALS CORPORATION
2613 LAKE GEORGE STREET
AYER, MA 01433**

Attention: MIKE QUINLAN

**Work ID: FORT DEVENS - AYER, MA
Project # 400096_4_50**

Workorder # 9604324

Authorized Signature


Stephen L. Knollmeyer 6/5/96

**Massachusetts Certificate MA014
Connecticut Certificate PH-0494
New Hampshire DES 253993 - A + C
New Jersey DEP Certificate 59845
New York Department of Health 10843
Rhode Island Department of Health 57
North Carolina Certificate 408
US Army Corps of Engineers**

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A Division of Environmental Sciences

Laboratory Results Prepared For :

O.H. MATERIALS CORPORATION
2613 LAKE GEORGE STREET
AYER, MA 01433

Company : O.H. MATERIALS CORPORATION

Facility : FINDLAY, OHIO 45839-0551

Contact : CFR

Attention : MIKE QUINLAN

Laboratory Results Prepared By :

Commonwealth Analytical
53 Southampton Rd.
Westfield, MA 01085

Attention : Stephen L. Knollmeyer
(413) 572-3200

Work ID : FORT DEVENS - AYER, MA

Taken : 04/19/96

Transported : FED X

Type : WASTEWATER

PO # : LP 42122

6/5/96 CFR

Certified by

Workorder Comments

The VPH & EPH methods are draft methods released by the MADEP in August 1995. Because inter-laboratory studies have not been completed and QC parameters have not been fully established, the data should be used with due consideration.

Client:	OHM Remediation Services Corp.
Client Sample ID Number (s):	MW-1
Laboratory ID Numbers (s):	96-04-324-01

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	MW-2
Laboratory ID Numbers (s):	96-04-324-02

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH ≤ 2 <input type="checkbox"/> pH ≥ 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

SUMMARY SHEET

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	MW-3
Laboratory ID Numbers (s):	96-04-324-03

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

SUMMARY SHEET

Client:	OHM Remediation Service Corp
Client Sample ID Number (s):	MW-4
Laboratory ID Numbers (s):	9604324-04

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

Client:	OHM Remediation Service Corp
Client Sample ID Number (s):	MW-SW1
Laboratory ID Numbers (s):	96-04-324-05

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4 °C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	SKP-93-02A
Laboratory ID Numbers (s):	9604324-06

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

SUMMARY SHEET

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	SKP-93-01A
Laboratory ID Numbers (s):	96-04-324-07

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

SUMMARY SHEET

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	ERO41996
Laboratory ID Numbers (s):	96-04-324-08

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	0.012	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

SUMMARY SHEET

Client:	OHM Remediation Services Corp
Client Sample ID Number (s):	MW-SW2
Laboratory ID Numbers (s):	96-04-324-09

SAMPLE INFORMATION

Sample Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Analysis Performed	<input checked="" type="checkbox"/> VPH <input checked="" type="checkbox"/> EPH <input type="checkbox"/> VPH & EPH (E-TPH Duplicate)		
Condition of Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/> Other:		
Sample Preservative	Aqueous	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH \leq 2 <input type="checkbox"/> pH \geq 2	
	Soil/Sediment (VPH only)	<input type="checkbox"/> N/A <input type="checkbox"/> Samples received in Methanol	
		<input type="checkbox"/> Methanol added by Laboratory	
Sample Temperature	<input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received at 4°C <input type="checkbox"/> Other:		

ANALYTICAL RESULTS *

Parameter	Results	Units
Volatile Petroleum Hydrocarbons (VPH)	ND	mg/L
Extractable Petroleum Hydrocarbons (EPH)	ND	mg/L

* Results do not reflect toxicologically-weighted values.

Matrix:GROUNDWATER Organic Results for MW-1 Collected on 04/19/96 11:30:00

	Analyte	Result	Units	Test Date	Analyst
01A	Extractable hydrocarbons	*	mg/kg		
01B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for MW-2 Collected on 04/19/96 12:15:00

	Analyte	Result	Units	Test Date	Analyst
02A	Extractable hydrocarbons	*	mg/kg		
02B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for MW-3 Collected on 04/19/96 12:40:00

	Analyte	Result	Units	Test Date	Analyst
03A	Extractable hydrocarbons	*	mg/kg		
03B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for MW-4 Collected on 04/19/96 13:00:00

	Analyte	Result	Units	Test Date	Analyst
04A	Extractable hydrocarbons	*	mg/kg		
04B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for MW-SW1 Collected on 04/19/96 14:20:00

	Analyte	Result	Units	Test Date	Analyst
05A	Extractable hydrocarbons	*	mg/kg		
05B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for SKP-93-02A Collected on 04/19/96 14:35:00

	Analyte	Result	Units	Test Date	Analyst
06A	Extractable hydrocarbons	*	mg/kg		
06B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for SKP-93-01A Collected on 04/19/96 15:00:00

	Analyte	Result	Units	Test Date	Analyst
07A	Extractable hydrocarbons	*	mg/kg		
07B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for ERO41996

Collected on 04/19/96 15:15:00

	Analyte	Result	Units	Test Date	Analyst
08A	Extractable hydrocarbons	*	mg/kg		
08B	Volatile hydrocarbons	*	mg/kg		

Matrix:GROUNDWATER Organic Results for MW-SW2

Collected on 04/19/96 15:20:00

	Analyte	Result	Units	Test Date	Analyst
09A	Extractable hydrocarbons	*	mg/kg		
09B	Volatile hydrocarbons	*	mg/kg		

Matrix:LAB_WATER Organic Results for TRIP BLANK

Collected on 04/18/96 13:00:00

	Analyte	Result	Units	Test Date	Analyst
10A	Volatile hydrocarbons	*	mg/kg		

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 96-04-324

Sample ID: MW-1

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/23/96	1	ND	0.2
Naphthalene	04/25/96	05/23/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/23/96	1	ND	0.01
Acenaphthylene	04/25/96	05/23/96	1	ND	0.01
Acenaphthene	04/25/96	05/23/96	1	ND	0.01
Fluorene	04/25/96	05/23/96	1	ND	0.01
Phenanthrene	04/25/96	05/23/96	1	ND	0.01
Anthracene	04/25/96	05/23/96	1	ND	0.01
Fluoranthene	04/25/96	05/23/96	1	ND	0.01
Pyrene	04/25/96	05/23/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/23/96	1	ND	0.01
Chrysene	04/25/96	05/23/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/23/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/23/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/23/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/23/96	1	ND	0.02

ND = Not detected

J = Estimate

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	56*	60-140
Ortho-terphenyl	65	60-140

* Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 96-04-324-01

Sample ID: MW-1

Collection Date: 04/19/96

Matrix: Aqueous

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	110	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 96-04-324-02

Sample ID: MW-2

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/23/96	1	ND	0.2
Naphthalene	04/25/96	05/23/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/23/96	1	ND	0.01
Acenaphthylene	04/25/96	05/23/96	1	ND	0.01
Acenaphthene	04/25/96	05/23/96	1	ND	0.01
Fluorene	04/25/96	05/23/96	1	ND	0.01
Phenanthrene	04/25/96	05/23/96	1	ND	0.01
Anthracene	04/25/96	05/23/96	1	ND	0.01
Fluoranthene	04/25/96	05/23/96	1	ND	0.01
Pyrene	04/25/96	05/23/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/23/96	1	ND	0.01
Chrysene	04/25/96	05/23/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/23/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/23/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/23/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/23/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	57*	60-140
Ortho-terphenyl	68	60-140

* Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 96-04-324-02

Sample ID: MW-2

Collection Date: 04/19/96

Matrix: Aqueous

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	103	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-03

Sample ID: MW-3

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/23/96	1	ND	0.2
Naphthalene	04/25/96	05/23/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/23/96	1	ND	0.01
Acenaphthylene	04/25/96	05/23/96	1	ND	0.01
Acenaphthene	04/25/96	05/23/96	1	ND	0.01
Fluorene	04/25/96	05/23/96	1	ND	0.01
Phenanthrene	04/25/96	05/23/96	1	ND	0.01
Anthracene	04/25/96	05/23/96	1	ND	0.01
Fluoranthene	04/25/96	05/23/96	1	ND	0.01
Pyrene	04/25/96	05/23/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/23/96	1	ND	0.01
Chrysene	04/25/96	05/23/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/23/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/23/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/23/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/23/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/23/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	52*	60-140
Ortho-terphenyl	61	60-140

* Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-03

Sample ID:MW-3

Collection Date:04/19/96

Matrix: Aqueous

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	95	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-04
Matrix: Aqueous

Sample ID: MW-4

Collection Date: 04/19/96

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/25/96	1	ND	0.2
Naphthalene	04/25/96	05/25/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/25/96	1	ND	0.01
Acenaphthylene	04/25/96	05/25/96	1	ND	0.01
Acenaphthene	04/25/96	05/25/96	1	ND	0.01
Fluorene	04/25/96	05/25/96	1	ND	0.01
Phenanthrene	04/25/96	05/25/96	1	ND	0.01
Anthracene	04/25/96	05/25/96	1	ND	0.01
Fluoranthene	04/25/96	05/25/96	1	ND	0.01
Pyrene	04/25/96	05/25/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/25/96	1	ND	0.01
Chrysene	04/25/96	05/25/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/25/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/25/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/25/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/25/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	56*	60-140
Ortho-terphenyl	65	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-04

Sample ID: MW-4

Collection Date: 04/19/96

Matrix: Aqueous

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	86	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

Workorder #: 9604324-05
Matrix: Aqueous

Sample ID: MW-SW1

Collection Date: 04/19/96

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/25/96	1	ND	0.2
Naphthalene	04/25/96	05/25/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/25/96	1	ND	0.01
Acenaphthylene	04/25/96	05/25/96	1	ND	0.01
Acenaphthene	04/25/96	05/25/96	1	ND	0.01
Fluorene	04/25/96	05/25/96	1	ND	0.01
Phenanthrene	04/25/96	05/25/96	1	ND	0.01
Anthracene	04/25/96	05/25/96	1	ND	0.01
Fluoranthene	04/25/96	05/25/96	1	ND	0.01
Pyrene	04/25/96	05/25/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/25/96	1	ND	0.01
Chrysene	04/25/96	05/25/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/25/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/25/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/25/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/25/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	2*	60-140
Ortho-terphenyl	55*	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

Workorder #: 9604324-05
Matrix: Aqueous

Sample ID:MW-SW1

Collection Date:04/19/96

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	94	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

Workorder #:9604324-06
Matrix: Aqueous

Sample ID: SKP-93-02A

Collection Date: 04/19/96

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/24/96	1	ND	0.2
Naphthalene	04/25/96	05/24/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/24/96	1	ND	0.01
Acenaphthylene	04/25/96	05/24/96	1	ND	0.01
Acenaphthene	04/25/96	05/24/96	1	ND	0.01
Fluorene	04/25/96	05/24/96	1	ND	0.01
Phenanthrene	04/25/96	05/24/96	1	ND	0.01
Anthracene	04/25/96	05/24/96	1	ND	0.01
Fluoranthene	04/25/96	05/24/96	1	ND	0.01
Pyrene	04/25/96	05/24/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/24/96	1	ND	0.01
Chrysene	04/25/96	05/24/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/24/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/24/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/24/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/24/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	39*	60-140
Ortho-terphenyl	75	60-140

* Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

Workorder #: 9604324-06
Matrix: Aqueous

Sample ID: SKP-93-02A

Collection Date: 04/19/96

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	98	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-07

Sample ID: SKP-93-01A

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/25/96	1	NDJ	0.2
Naphthalene	04/25/96	05/25/96	1	NDJ	0.01
2-Methylnaphthalene	04/25/96	05/25/96	1	ND	0.01
Acenaphthylene	04/25/96	05/25/96	1	ND	0.01
Acenaphthene	04/25/96	05/25/96	1	ND	0.01
Fluorene	04/25/96	05/25/96	1	ND	0.01
Phenanthrene	04/25/96	05/25/96	1	ND	0.01
Anthracene	04/25/96	05/25/96	1	ND	0.01
Fluoranthene	04/25/96	05/25/96	1	ND	0.01
Pyrene	04/25/96	05/25/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/25/96	1	ND	0.01
Chrysene	04/25/96	05/25/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/25/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/25/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/25/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/25/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/25/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	13*	60-140
Ortho-terphenyl	55*	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter**Workorder #:** 9604324-07**Sample ID:**SKP-93-01A**Collection Date:** 04/19/96**Matrix:** Aqueous**Volatile Petroleum Hydrocarbons (VPH)**

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	92	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-08

Sample ID: ERO41996

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/24/96	1	ND	0.2
Naphthalene	04/25/96	05/24/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/24/96	1	ND	0.01
Acenaphthylene	04/25/96	05/24/96	1	ND	0.01
Acenaphthene	04/25/96	05/24/96	1	ND	0.01
Fluorene	04/25/96	05/24/96	1	ND	0.01
Phenanthrene	04/25/96	05/24/96	1	ND	0.01
Anthracene	04/25/96	05/24/96	1	ND	0.01
Fluoranthene	04/25/96	05/24/96	1	ND	0.01
Pyrene	04/25/96	05/24/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/24/96	1	ND	0.01
Chrysene	04/25/96	05/24/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/24/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/24/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/24/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/24/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	54*	60-140
Ortho-terphenyl	76	60-140

*Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-08
Matrix: Aqueous

Sample ID:ERO41996

Collection Date:04/19/96

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	0.012	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	107	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-09

Sample ID: MW-SW2

Collection Date: 04/19/96

Matrix: Aqueous

Extractable Petroleum Hydrocarbons (EPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C ₉ - C ₁₈ aliphatic	04/25/96	05/26/96	1	NDJ	0.3
C ₁₉ - C ₃₆ aliphatic	04/25/96	05/26/96	1	NDJ	0.1
C ₉ - C ₂₂ aromatic	04/25/96	05/24/96	1	ND	0.2
Naphthalene	04/25/96	05/24/96	1	ND	0.01
2-Methylnaphthalene	04/25/96	05/24/96	1	ND	0.01
Acenaphthylene	04/25/96	05/24/96	1	ND	0.01
Acenaphthene	04/25/96	05/24/96	1	ND	0.01
Fluorene	04/25/96	05/24/96	1	ND	0.01
Phenanthrene	04/25/96	05/24/96	1	ND	0.01
Anthracene	04/25/96	05/24/96	1	ND	0.01
Fluoranthene	04/25/96	05/24/96	1	ND	0.01
Pyrene	04/25/96	05/24/96	1	ND	0.01
Benzo(a)Anthracene	04/25/96	05/24/96	1	ND	0.01
Chrysene	04/25/96	05/24/96	1	ND	0.01
Benzo(b)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(k)Fluoranthene	04/25/96	05/24/96	1	ND	0.02
Benzo(a)pyrene	04/25/96	05/24/96	1	ND	0.02
Indeno(1,2,3-cd)Pyrene	04/25/96	05/24/96	1	ND	0.02
Dibenzo(a,h)anthracene	04/25/96	05/24/96	1	ND	0.02
Benzo(g,h,i)Perylene	04/25/96	05/24/96	1	ND	0.02

ND = Not detected

J = Estimated

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Chloro-octadecane (COD)	31*	60-140
Ortho-terphenyl	75	60-140

* Outside QC limits

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP ORS, August 1995.

COMMONWEALTH ANALYTICAL

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-09

Sample ID:MW-SW2

Collection Date:04/19/96

Matrix: Aqueous

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	103	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

MA-DEP Health-Based Total Petroleum Hydrocarbon (TPH) Parameter

Workorder #: 9604324-10

Sample ID: TRIP BLANK

Matrix: LAB WATER

Volatile Petroleum Hydrocarbons (VPH)

ANALYTE	EXTRACTION DATE	ANALYSIS DATE	DILUTION FACTOR	RESULT (mg/L)	DETECTION LIMIT
C5 - C8 aliphatic	NA	05/03/96	1	ND	0.005
C9 - C10 aromatic	NA	05/03/96	1	ND	0.005
C9 - C12 aliphatic	NA	05/03/96	1	ND	0.005
Benzene	NA	05/03/96	1	ND	0.005
Ethylbenzene	NA	05/03/96	1	ND	0.005
Toluene	NA	05/03/96	1	ND	0.005
Xylenes	NA	05/03/96	1	ND	0.005

SURROGATE RECOVERY

Surrogate	Percent Recovery	Control Limits
Bromofluorobenzene	96	60-140

Method Reference: Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP ORS, August 1995.

COOLER RECEIPT FORM

Workorder # 7604 324Contractor Cooler: NOMRD Cooler #: -Number of Coolers: 2Project Name: Fort Devens, Ayer - MADate Received: 4-22-96

USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS.

A. PRELIMINARY EXAMINATION PHASE: Date cooler was opened: 4/22/96by (print) Ria Haworth (sign) Ria Haworth1. Did cooler come with a shipping slip (air bill, etc.)? YES NO
If yes, enter carrier name & air bill number here: Fed X 81152369052. Were custody seals on outside of cooler? YES NO
How many & where: 2 - Top Front / Top Back seal date: 4-19-96 seal name: No Name3. Were custody seals unbroken and intact at the date and time of arrival? YES NO4. Did you screen samples for radioactivity using the Geiger Counter? YES NO5. Were custody papers sealed in a plastic bag & taped inside to the lid? YES NO6. Were custody papers filled out properly (ink, signed, etc.)? YES NO7. Did you sign custody papers in the appropriate place? YES NO8. Was project identifiable from custody papers? YES NO
If YES, enter project name at the top of this form.9. If required, was enough ice used? ? Type of ice: bagged ice YES NO *10. Have designated person initial here to acknowledge receipt of cooler: RT (date) 4/22/96B. LOG-IN PHASE: Date samples were logged-in: 4-22-96by (print) Ria Haworth (sign) Ria Haworth11. Describe type of packing in cooler: Felt Wrapping12. Were all bottles sealed in separate plastic bags? YES NO13. Did all bottles arrive unbroken & were labels in good condition? YES NO14. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? YES NO15. Did all bottle labels agree with custody papers? YES NO16. Were correct containers used for the tests indicated? YES NO17. Were correct preservatives added to samples? YES NO18. Was a sufficient amount of sample sent for tests indicated? YES NO19. Were bubbles absent in VOA samples? If NO, list by QA#: YES NO20. Was the project manager called and status discussed? YES NO
If YES, give details on the back of this form.21. Who was called? CFR By whom? Ria Haworth (date) 4-22-96



OHM Remediation
Services Corp.

CHAIN-OF-CUSTODY RECORD

TRANSFER

Form 001

Field Technical Service

Rev. 08/01

174147

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526										
PROJECT NAME Fort Devens					PROJECT LOCATION Ayer, MA					ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)
PROJ. NO. 16208		PROJECT CONTACT Mike Quinlan			PROJECT TELEPHONE NO. 800 242-4644					
CLIENT'S REPRESENTATIVE USACE					PROJECT MANAGER/SUPERVISOR Kevin Mack					
ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	REMARKS		
1	MW-1	4-19-96	1130		X	Monitoring well MW-1	1 x 1L 3 x 40ml	X		
2	MW-2	4-19-96	1215		X	Monitoring well MW-2	1 x 1L 3 x 40ml	X		
3	MW-3	4-19-96	1240		X	Monitoring well MW-3	1 x 1L 3 x 40ml	X		
4	MW-4	4-19-96	1300		X	Monitoring well MW-4	1 x 1L 3 x 40ml	X		
5	Trip Blank	-	-			Trip Blank	3 x 40ml (X)		Note only VPII is necessary Do not run EDII on Trip Blank	
6										
7										
8										
9										
10										

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-5	William Dale	2115036705 Federal Express Tracking #	4-19-96	1800	* 3-4 week TAT.
2			Mike Quinlan	4/22	8:00	* Note, only run VPII on item 5
3				96		
4						Building 0507 SAMPLER'S SIGNATURE William Dale

CHAIN-OF-CUSTODY RECORD

7604 34

TRANSFER

Form 001

Field Technical Service

Rev. 08/84

172496

O.H. MATERIALS CORP.		P.O. BOX 551		FINDLAY, OH 45839-0551		419-423-3526	
PROJECT NAME Fort Stevens				PROJECT LOCATION Arlington			
PROJ. NO. 16003		PROJECT CONTACT Mike Dunbar		PROJECT TELEPHONE NO. 419-242-4600			
CLIENT'S REPRESENTATIVE USACE				PROJECT MANAGER/SUPERVISOR Kevin Mack			
ITEM NO.	SAMPLE NUMBER	Time DATE	Date TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)
1	MW-SW1	1420	4-19-96		X	OHM installed monitoring well MW-SW1	1 x IL 3x40ml
2	SUP-93-01A	1435	4-19-96		X	existing monitoring well SUP-93-01A	1 x IL 3x40ml
3	SUP-93-01A	1500	4-19-96		X	existing monitoring well SUP-93-01A	1 x IL 3x40ml
4	ERO41996	1515	4-19-96		X	Equipment Release	1 x IL 3x40ml
5	MW-SW2	1520	4-19-96		X	OHM installed monitoring well MW-SW2	1 x IL 3x40ml
6							
7							
8							
9							
10							

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME	REMARKS
1	1-5	William Dale	811 503 6905 Frederick Express Trucking	4-19-96	1500	* 3-4 week TAT
2				4/22/96	8:00	
3						
4						

Shelley L. Hill
SAMPLER'S SIGNATURE
William Dale

* 7up sink included on car # 174047 no proof right

ROUND 2 GROUNDWATER RESULTS

ABB Environmental Services, Inc.

**GROUNDWATER
ANALYTICAL****EPA METHOD 8100 (MA DEP Modified)
Extractable Petroleum Hydrocarbons (GC/FID)**

Field ID: **MDBQ03X2**
Project: **Devens/ESPS Taks 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **1L Glass/H2SO4 Cool**
Matrix: **Aqueous**

Lab ID: **14915-01**
Batch ID: **EP-0136-F**
Sampled: **11-12-96**
Received: **11-12-96**
Extracted: **11-19-96**
Analyzed: **11-21-96**

Extractable Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
2-Methylnaphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	19	16	82 %	60 - 140 %
o-Terphenyl	19	14	71 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8100 (MA DEP Modified)
Extractable Petroleum Hydrocarbons (GC/FID)**

Field ID: **MXBQ01X2**
Project: **Devens/ESPS Taks 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **1L Glass/H2SO4 Cool**
Matrix: **Aqueous**

Lab ID: **14915-02**
Batch ID: **EP-0136-F**
Sampled: **11-12-96**
Received: **11-12-96**
Extracted: **11-19-96**
Analyzed: **11-22-96**

Extractable Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
2-Methylnaphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	19	16	82 %	60 - 140 %
o-Terphenyl	19	13	71 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8100 (MA DEP Modified)
Extractable Petroleum Hydrocarbons (GC/FID)**

Field ID: **MXBQ02X2**
Project: **Devens/ESPS Taks 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **1L Glass/H2SO4 Cool**
Matrix: **Aqueous**

Lab ID: **14915-03**
Batch ID: **EP-0136-F**
Sampled: **11-12-96**
Received: **11-12-96**
Extracted: **11-19-96**
Analyzed: **11-22-96**

Extractable Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
2-Methylnaphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	19	16	83 %	60 - 140 %
o-Terphenyl	19	16	84 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8100 (MA DEP Modified)
Extractable Petroleum Hydrocarbons (GC/FID)**

Field ID: MXBQ04X2
Project: Devens/ESPS Taks 7 (DV5)/8740.02
Client: ABB
Cont/Prsv: 1L Glass/H2SO4 Cool
Matrix: Aqueous

Lab ID: 14915-04
Batch ID: EP-0136-F
Sampled: 11-12-96
Received: 11-12-96
Extracted: 11-19-96
Analyzed: 11-22-96

Extractable Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
2-Methylnaphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	19	14	75 %	60 - 140 %
o-Terphenyl	19	14	72 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8100 (MA DEP Modified)
Extractable Petroleum Hydrocarbons (GC/FID)**

Field ID: MXBQ03X2
Project: Devens/ESPS Taks 7 (DV5)/8740.02
Client: ABB
Cont/Prsv: 1L Glass/H2SO4 Cool
Matrix: Aqueous

Lab ID: 14915-05
Batch ID: EP-0136-F
Sampled: 11-12-96
Received: 11-12-96
Extracted: 11-19-96
Analyzed: 11-22-96

Extractable Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
2-Methylnaphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	20	16	80 %	60 - 140 %
o-Terphenyl	20	15	74 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: MDBQ03X2
Project: Devens/ESPS Task 7 (DV5)/8740.02
Client: ABB
Cont/Prsv: 40mL VOA Vial/Cool HCl
Matrix: Aqueous

Lab ID: 14915-06
Batch ID: VG1-0080-W
Sampled: 11-12-96
Received: 11-12-96
Analyzed: 11-22-96

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	13	0.5	6	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			6	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl tert-butyl Ether	BRL		25	
Benzene	BRL		5	
Toluene	BRL		5	
Ethylbenzene	BRL		5	
meta- and para-Xylene	BRL		5	
ortho-Xylene	BRL		5	
Naphthalene	BRL		10	
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	43	85 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: **MXBQ01X2**
Project: **Devens/ESPS Task 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **40mL VOA Vial/Cool HCl**
Matrix: **Aqueous**

Lab ID: **14915-07**
Batch ID: **VG1-0080-W**
Sampled: **11-12-96**
Received: **11-12-96**
Analyzed: **11-22-96**

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	BRL	0.5	BRL	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			BRL	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl <i>tert</i> -butyl Ether	BRL		25	
Benzene	BRL		5	
Toluene	BRL		5	
Ethylbenzene	BRL		5	
<i>meta</i> - and <i>para</i> -Xylene	BRL		5	
<i>ortho</i> -Xylene	BRL		5	
Naphthalene	BRL		10	
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	44	87 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: **MXBQ02X2**
Project: **Devens/ESPS Task 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **40mL VOA Vial/Cool HCl**
Matrix: **Aqueous**

Lab ID: **14915-08**
Batch ID: **VG1-0080-W**
Sampled: **11-12-96**
Received: **11-12-96**
Analyzed: **11-22-96**

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	5	0.5	3	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			3	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl <i>tert</i> -butyl Ether		BRL		25
Benzene		BRL		5
Toluene		BRL		5
Ethylbenzene		BRL		5
<i>meta</i> - and <i>para</i> -Xylene		BRL		5
<i>ortho</i> -Xylene		BRL		5
Naphthalene		BRL		10
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	45	90 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: **MXBQ04X2**
Project: **Devens/ESPS Task 7 (DV5)/8740.02**
Client: **ABB**
Cont/Prsv: **40mL VOA Vial/Cool HCl**
Matrix: **Aqueous**

Lab ID: **14915-09**
Batch ID: **VG1-0080-W**
Sampled: **11-12-96**
Received: **11-12-96**
Analyzed: **11-22-96**

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	BRL	0.5	BRL	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			BRL	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl <i>tert</i> -butyl Ether		BRL		25
Benzene		BRL		5
Toluene		BRL		5
Ethylbenzene		BRL		5
<i>meta</i> - and <i>para</i> -Xylene		BRL		5
<i>ortho</i> -Xylene		BRL		5
Naphthalene		BRL		10
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	44	88 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: MXBQ03X2
Project: Devens/ESPS Task 7 (DV5)/8740.02
Client: ABB
Cont/Prsv: 40mL VOA Vial/Cool HCl
Matrix: Aqueous

Lab ID: 14915-10
Batch ID: VG1-0080-W
Sampled: 11-12-96
Received: 11-12-96
Analyzed: 11-22-96

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	15	0.5	8	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			8	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl tert-butyl Ether		BRL		25
Benzene		BRL		5
Toluene		BRL		5
Ethylbenzene		BRL		5
meta- and para-Xylene		BRL		5
ortho-Xylene		BRL		5
Naphthalene		BRL		10
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	45	90 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****EPA METHOD 8015 (MA DEP Modified)
Volatile Petroleum Hydrocarbons (GC/PID/FID)**

Field ID: TBK96207
Project: Devens/ESPS Task 7 (DV5)/8740.02
Client: ABB
Cont/Prsv: 40mL VOA Vial/Cool HCl
Matrix: Aqueous

Lab ID: 14915-11
Batch ID: VG1-0080-W
Sampled: 11-12-96
Received: 11-12-96
Analyzed: 11-22-96

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	BRL	0.5	BRL	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			BRL	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl tert-butyl Ether	BRL		25	
Benzene	BRL		5	
Toluene	BRL		5	
Ethylbenzene	BRL		5	
meta- and para-Xylene	BRL		5	
ortho-Xylene	BRL		5	
Naphthalene	BRL		10	
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	45	89 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons. MA DEP, Public Comment Draft 1.0 (1995).

Project: Devens/ESPS Task 7 (DV5)/8740.02
Client: ABB

Lab ID: 14915
Received: 11-12-96

A. Physical Condition of Sample(s)

This project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged in appropriate containers with the correct preservation.

B. Project Documentation

This project was accompanied by Chain of Custody documentation, with the following amendments or corrections:

1. Samples 14915-01 through -05 were received preserved with H₂SO₄.
2. Samples 14915-06 through -11 were received preserved with HCl.

C. Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples. All data contained within this report are released without qualification.

ABB Environmental Services, Inc. JOB: DEVENS CLIENT: ESPS TASK 7 (DV5)
CHAIN OF CUSTODY

PROJECT #
8740.02

LAB NUMBER	DATE SAMPLED	SITE TIME ID	FIELD SAMPLE ID	QTY TOTAL	QTY EACH	CONTAINER TYPE	MATRIX	LAB FRACT CODE
	11/12/96	1405	NEC-6380 BQM-96-03X	MDBQ03X2	5	14915- 2 1L-AG - 01 3 40mL-AG - 06	Aqueous Aqueous	EPH-W VPH-W
	11/12/96	1200	BQM-96-01X	MXBQ01X2	5	2 1L-AG - 02 3 40mL-AG - 07	Aqueous Aqueous	EPH-W VPH-W
	11/12/96	1145	BQM-96-02X	MXBQ02X2	5	2 1L-AG - 03 3 40mL-AG - 08	Aqueous Aqueous	EPH-W VPH-W
	11/12/96	1415	BQM-96-04X	MXBQ04X2	5	2 1L-AG - 04 3 40mL-AG - 09	Aqueous Aqueous	EPH-W VPH-W
	11/12/96	1405	BQM-96-03X	MXBQ03X2	5	2 1L-AG - 05 3 40mL-AG - 10	Aqueous Aqueous	EPH-W VPH-W
	11/12/96	1200	TBK-96-207	TBK96207	3	3 40mL-AG 11	Aqueous	VPH-W

Relinquished by: [Signature] Date: 11/12/96 Time: 1:30 PM Received by: Alan Maddy Date: 11/12/96 Time: 5:10 PM

Relinquished by: Alan Maddy Date: 11/12/96 Time: 7:40 PM Received by: [Signature] Date: 11/12/96 Time: 7:30 PM

Relinquished by: _____ Date: / / Time: _____ Received by: _____ Date: / / Time: _____

Relinquished by: _____ Date: / / Time: _____ Received by: _____ Date: / / Time: _____

Remarks: P.O. # NE 646 206 G

GROUNDWATER ANALYTICAL

QUALITY ASSURANCE QA/QC Program Statement

Groundwater Analytical conducts an active Quality Assurance program to ensure the production of high quality, valid data. This program closely follows the guidance provided by *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans*, US EPA QAMS-005/80 (1980), and *Test Methods for Evaluating Solid Waste*, US EPA SW-846, Third Edition (Revised 1992).

Quality Control protocols include Standard Operating Procedures (SOPs) developed for each analytical method. SOPs are derived from US EPA methodologies and other established references. Equipment and facility maintenance conform to Good Laboratory Practices (GLPs). Standards are prepared from commercially obtained reference materials of certified purity, and documented for traceability.

Quality Assessment protocols for most organic analyses include a minimum of one calibration standard, one method blank, one laboratory control sample, and one matrix spike and one sample duplicate for each sample batch. All samples, standards, blanks, laboratory control samples and matrix spikes are spiked with internal standards and surrogate compounds. GC/MS systems are tuned to BFB ion abundance criteria daily, or for each 12 hour operating period, whichever is more frequent.

Quality Assessment protocols for most inorganic analyses include a minimum of one calibration standard, one method blank, one laboratory control sample, one matrix spike and one sample duplicate for each sample batch. Standard curves are derived from one reagent blank and four concentration levels. Curve validity is verified by standard recoveries within plus or minus ten percent of the curve.

Batches are used as the basic unit for Quality Assessment. A Batch is defined as twenty or fewer samples which are analyzed together with the same method sequence and the same lots of reagents and with the same manipulations common to each sample within the same continuum of time within a 24 hour period.

Method Blanks are used to assess the level of contamination present in the analytical system. Method Blanks consist of reagent water or an aliquot of sodium sulfate. Method Blanks are taken through all the appropriate steps of an analytical method. Sample data reported is not corrected for blank contamination.

Laboratory Control Samples are used to assess the accuracy of the analytical method. A Laboratory Control Sample consists of reagent water or sodium sulfate spiked with a group of target compounds representative of the method analytes. Accuracy is defined as the degree of agreement of a measured value with the true or expected value. Percent Recoveries for the Laboratory Control Sample are calculated to assess accuracy.

Surrogate Compounds are used to assess the effectiveness of the method in dealing with each sample matrix. Surrogate Compounds are organic compounds which are similar to organic analytes of interest in chemical behavior, but which are not normally found in environmental samples. Percent Recoveries are calculated for each Surrogate Compound.

GROUNDWATER ANALYTICAL

QUALITY ASSURANCE Laboratory Control Sample Recovery

Category: EPA Method 8100 (MA DEP Modified)
Batch ID: EP-0136-F
Matrix: Aqueous
Units: ug/L

Laboratory Control Sample

ANALYTE	SPIKE ADDED	SPIKED RESULT	PERCENT RECOVERY	QC LIMITS
n-C 9	25	8	33 %	17-69
n-C 14	25	15	61 %	33-96
n-C 19	25	19	76 %	59-105
n-C 20	25	20	79 %	55-123
n-C 28	25	21	85 %	60-100
Naphthalene	25	13	52 %	D-113
Acenaphthene	25	15	61 %	22-115
Anthracene	25	18	73 %	62-113
Pyrene	25	19	76 %	67-119
Chrysene	25	21	86 %	69-118

All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

QUALITY ASSURANCE Laboratory Control Sample Recovery

Category: EPA Method 8015 (MA DEP Modified)
Batch ID: VG1-0080-WL
Matrix: Aqueous
Units: ug/L

Laboratory Control Sample

ANALYTE	SPIKE ADDED	SPIKED RESULT	PERCENT RECOVERY	QC LIMITS
Methyl tert-Butyl Ether	50	58	116 %	80-120
Benzene	50	56	112 %	80-120
Toluene	50	53	105 %	80-120
Ethylbenzene	50	58	115 %	80-120
meta- and para-Xylene	100	120	116 %	80-120
ortho-Xylene	50	59	118 %	80-120
Naphthalene	50	51	103 %	80-120

All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

**GROUNDWATER
ANALYTICAL**QUALITY ASSURANCE
Method BlankCategory: EPA Method 8100 (MA DEP Modified)
Batch ID: EP-0136-F
Matrix: Aqueous**Extractable Petroleum Hydrocarbons**

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 9 to n-C 18 Aliphatics	BRL	0.05	BRL	25
n-C 19 to n-C 36 Aliphatics	BRL	0.005	BRL	2.5
n-C 10 to n-C 22 Aromatics *	BRL	1.0	BRL	500
Extractable Petroleum Hydrocarbons (EPH)			BRL	2.5

Targeted Polynuclear Aromatic Hydrocarbon Analytes

PARAMETER	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Naphthalene	BRL	10
Acenaphthylene	BRL	10
Acenaphthene	BRL	10
Fluorene	BRL	10
Phenanthrene	BRL	10
Anthracene	BRL	10
Fluoranthene	BRL	10
Pyrene	BRL	10
Benzo(a)anthracene	BRL	10
Chrysene	BRL	10
Benzo(b)fluoranthene	BRL	10
Benzo(k)fluoranthene	BRL	10
Benzo(a)pyrene	BRL	10
Indeno(1,2,3-c,d)pyrene	BRL	10
Dibenzo(a,h)anthracene	BRL	10
Benzo(g,h,i)perylene	BRL	10
2-Methylnaphthalene	BRL	10

QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
Chloro-octadecane	20	17	83 %	60 - 140 %
o-Terphenyl	20	17	83 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Polynuclear Aromatic Hydrocarbon analytes. Method Reference: Method 8100 (Modified) - Polynuclear Aromatic Hydrocarbons, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

**GROUNDWATER
ANALYTICAL****QUALITY ASSURANCE
Method Blank**

Category: EPA Method 8015 (MA DEP Modified)
Batch ID: VG1-0080-W
Matrix: Aqueous

Volatile Petroleum Hydrocarbons

PARAMETER	CONCENTRATION (ug/L)	TOXICITY MULTIPLIER	EQUIVALENT CONCENTRATION (ug/L)	ADJUSTED REPORTING LIMIT (ug/L)
n-C 5 to n-C 8 Aliphatics *	BRL	0.5	BRL	2.5
n-C 9 to n-C 12 Aliphatics	BRL	0.05	BRL	0.25
n-C 9 to n-C 10 Aromatics	BRL	1.0	BRL	5.0
Volatile Petroleum Hydrocarbons (VPH)			BRL	0.25

Targeted Volatile Organic Analytes

PARAMETER	CONCENTRATION (ug/L)		REPORTING LIMIT (ug/L)	
Methyl <i>tert</i> -butyl Ether	BRL		25	
Benzene	BRL		5	
Toluene	BRL		5	
Ethylbenzene	BRL		5	
<i>meta</i> - and <i>para</i> -Xylene	BRL		5	
<i>ortho</i> -Xylene	BRL		5	
Naphthalene	BRL		10	
QC SURROGATE COMPOUND	SPIKED	MEASURED	RECOVERY	QC LIMITS
2,5-Dibromotoluene	50	44	88 %	60 - 140 %

BRL = Below Reporting Limit. * = Reported concentration excludes targeted Volatile Organic analytes. Method Reference: Method 8015 (Modified) - Nonhalogenated Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, US EPA SW-846, Third Edition (1986). Modified in accordance with the Method for the Determination of Volatile Petroleum Hydrocarbons, MA DEP, Public Comment Draft 1.0 (1995).

GROUNDWATER ANALYTICAL

QUALITY ASSURANCE State Certification

CONNECTICUT

Department of Health Services

Certificate Number

PH-0586

Potable Water, Wastewater/Trade Waste, Sewage/Effluent, and Soil: Purgeable Halocarbons, Purgeable Aromatics, Pesticides, Phenols, Oil and Grease, Aluminum, Antimony, Arsenic, Beryllium, Cadmium, Chromium-T, Chromium-VI, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Cyanide, TDS, Ammonia, TKN, Nitrate, Ortho-Phosphate, Alkalinity, Hardness, Chloride, Fluoride, pH, Conductivity

MAINE

Department of Human Services

Certificate Number

N/A

Reciprocal certification in accordance with Massachusetts certification for drinking water parameters.

MASSACHUSETTS

Department of Environmental Protection

Certificate Number

MA103

Potable Water: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Nitrate-N, Fluoride, Cyanide, Calcium, Total Alkalinity, Total Dissolved Solids, pH, Langelier Index, Trihalomethanes, Volatile Organic Compounds, 1,2-Dibromoethane, 1,2-Dibromo-3-chloropropane. Non-Potable Water: Aluminum, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Titanium, Vanadium, Zinc, pH, Specific Conductivity, Total Dissolved Solids, Total Hardness, Calcium, Magnesium, Sodium, Potassium, Total Alkalinity, Chloride, Fluoride, Ammonia-N, Nitrate-N, Kjeldahl-N, Orthophosphate, Total Cyanide, Oil and Grease, Total Phenolics, Volatile Halocarbons, Volatile Aromatics, Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, Polychlorinated Biphenyls (Water), Polychlorinated Biphenyls (Oil).

MICHIGAN

Department of Public Health

Certificate Number

N/A

Drinking Water: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Silver, Sodium, Sulfate, Thallium, Total Trihalomethanes, Regulated and Unregulated Volatile Organic Chemicals.

NEW HAMPSHIRE

Department of Environmental Services

Certificate Number

202791-A/B

Drinking Water: Lead, Selenium, Silver, Thallium, Trihalomethanes, Volatile Organics, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Mercury, Nickel, Fluoride, Total Filterable Residue, Calcium, Alkalinity, pH, Corrosivity, Total Cyanide, Vinyl Chloride, DBCP and EDB. Wastewater: Arsenic, Beryllium, Cadmium, Cobalt, Copper, Iron, Mercury, Manganese, Nickel, Lead, Selenium, Zinc, Antimony, Silver, Thallium, Molybdenum, Strontium, pH, Total Hardness, Calcium, Sodium, Potassium, Total Alkalinity, Chloride, Fluoride, Nitrate-N, TKN, Orthophosphates, Total Phenolics, Oil & Grease, PCBs in Oil, Pesticides, Volatile Organics, Titanium, Total Cyanide, PCBs in Water.

RHODE ISLAND

Department of Health

Certificate Number

A54

Potable Water: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Nitrate, Nitrite, Fluoride, Turbidity, Chlorine, Total Filterable Solids, Calcium, pH, Alkalinity, Sodium, Corrosivity, Sulfate, Cyanide, Trihalomethanes, Chlorinated Hydrocarbon Pesticides, PCBs, Herbicides, Volatile Organic Compounds (EPA 524.2 and 504) and PAHs. Non-potable and Waste Waters: Aluminum, Arsenic, Beryllium, Cadmium, Cobalt, Chromium, Copper, Iron, Mercury, Manganese, Nickel, Lead, Selenium, Vanadium, Zinc, Antimony, Silver, Thallium, Molybdenum, Strontium, Titanium, pH, Conductance, TDS, Hardness, Calcium, Magnesium, Sodium, Potassium, Alkalinity, Chloride, Fluoride, Sulfate, Ammonia, Nitrate, Orthophosphate, TKN, Total Phosphorous, Cyanide, Non-filterable solids, Oil and Grease, Total Phenolics, Chlorine, PCBs in Water, PCBs in Oil, Chlorinated Hydrocarbon Pesticides, Volatile Halocarbons, Volatile Aromatics, Acid Extractables and Base/Neutral Extractables.

SURVEY DATA

MONITOR WELL LOCATION SUMMARY

WELL IDENTIFICATION	COORDINATES		TOP OF METAL	TOP OF PVC	GROUND
<u>STATION NUMBER</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>WELL CASING</u>	<u>WELL CASING</u>	<u>ELEVATION</u>
BQM-96-01X	557972.4236	566507.1632	371.37	371.14	368.20
BQM-96-02X	557762.6903	566421.6486	367.31	367.11	364.55
BQM-96-03X	557805.2668	566385.0181	367.71	367.25	364.88
BQM-96-04X	557831.3207	566307.2041	366.44	366.14	363.97