Technical Report
Underground Storage Tank Closures
UST Nos. 0016 - 0018, Buildings 605, 606, and 614 Respectively
Fort Devens, Massachusetts

ATEC File: 37.07.91.00451
Contract No. DAK31-91-D-0015

Prepared for:

United States Army
Directorate of Contracting
Building 227
Fort Devens, Massachusetts

UST 93/22 ATEC

Attn: Ms. Steven Dijack
Contracting Officer

December 31, 1993

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Solid & Hazardous Waste Site Assessments
Remedial Design & Construction
Underground Tank Management
Asbestos Surveys & Analysis
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Industrial Hygiene / Hazard Communication
Environmental Audits & Permitting
Exploratory Drilling & Monitoring Wells

December 31, 1993

Mr. Steven Dijack, Contracting Officer
United States Army
Directorate of Contracting
Building 227
Fort Devens, Massachusetts 01433-5340

RE: Technical Report
Underground Storage Tank Closures
UST Nos. 0016 - 0018, Buildings 605, 606, and 614 Respectively
Fort Devens, Massachusetts
ATEC File: 37.07.91.00451

Mr. Dijack:

Attached is a Technical Report by ATEC Associates, Inc. (ATEC), detailing the closure of three underground storage tanks (USTs) referenced as UST Nos. 0016 - 0018, located at Fort Devens, Massachusetts (the site). The Technical Report covers work conducted under Contract No. DAKF31-91-D-0015 as part of Removal of Underground Storage Tanks in the New England Area, US Army Project No. EQ-19027-9P.

ATEC appreciates the opportunity to be of service in this matter. If you have any questions or comments, please do not hesitate to contact our office.

Sincerely,

ATEC Associates, Inc.

Jeffrey E. Picard
Environmental Scientist

James B. O'Brien
Division Manager

Ronald Lawson
Assistant Vice President

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TECHNICAL REPORT

UST Nos. 0016 - 0018

United States Army

Fort Devens, Massachusetts

ATEC Project No. 37.07.91.00451

1.0 INTRODUCTION

This Technical Report details the removal of three underground storage tanks (USTs) referenced as UST Nos. 0016 - 0018 for the United States Army, located at buildings 605, 606, and 614 respectively, Fort Devens, Massachusetts (the site). The Technical report covers work conducted under Contract No. DAKF31-91-D-0015 as part of Removal of Underground Storage Tanks in the New England Area, United States Army Project No. EQ-19027-9P.

The basic Project Work Scope included:

- Excavation and removal of 69 USTs at various buildings located at Fort Devens, Massachusetts and throughout New England.

- Remedial excavation and disposal of contaminated soil.

- Hydrogeological services to include installation of monitoring wells, sampling and analysis of soil/groundwater, and determination of groundwater flow direction.

- Backfilling and surface restoration of excavations.

- Preparation of a Technical Report to include assimilation of information gathered, major findings, and conclusions.

2.0 UST No. 0016

2.1 POST REMOVAL REPORT

2.1.1 Introduction

This Post Removal Report details the results of the closure of one 10,000-gallon, single wall, steel, diesel underground storage tank (UST) referenced as UST No. 0016, located at property known as Building 605, Fort Devens, Massachusetts (the site). The purpose of the closure was to excavate and remove the UST and evaluate the potential for the presence of oil and hazardous material at the site. The closure of this UST was conducted on April 29 and 30, 1992.

It should be noted that UST Nos. 0016, 0084, and 0089 were removed from a common excavation at Building 605. The removal of UST Nos. 0084 and 0089 are not documented in this report.

The basic Project Work Scope included:

- Procurement/administration of all federal, state and local permits, manifests, regulations, etc., associated with UST system closure.

- Excavating, venting, cleaning, transporting, and disposing of one 10,000-gallon UST by appropriately licensed contractors/facilities.

- Disposal of residual UST materials at a licensed facility.

- Field screening and analysis of soil in the excavations by Photoionization Detector (PID) and field analyzed with a portable Non-Dispersive Infrared (NDIR) analyzer, to identify evidence of the release of oil and hazardous materials from the UST, if any.

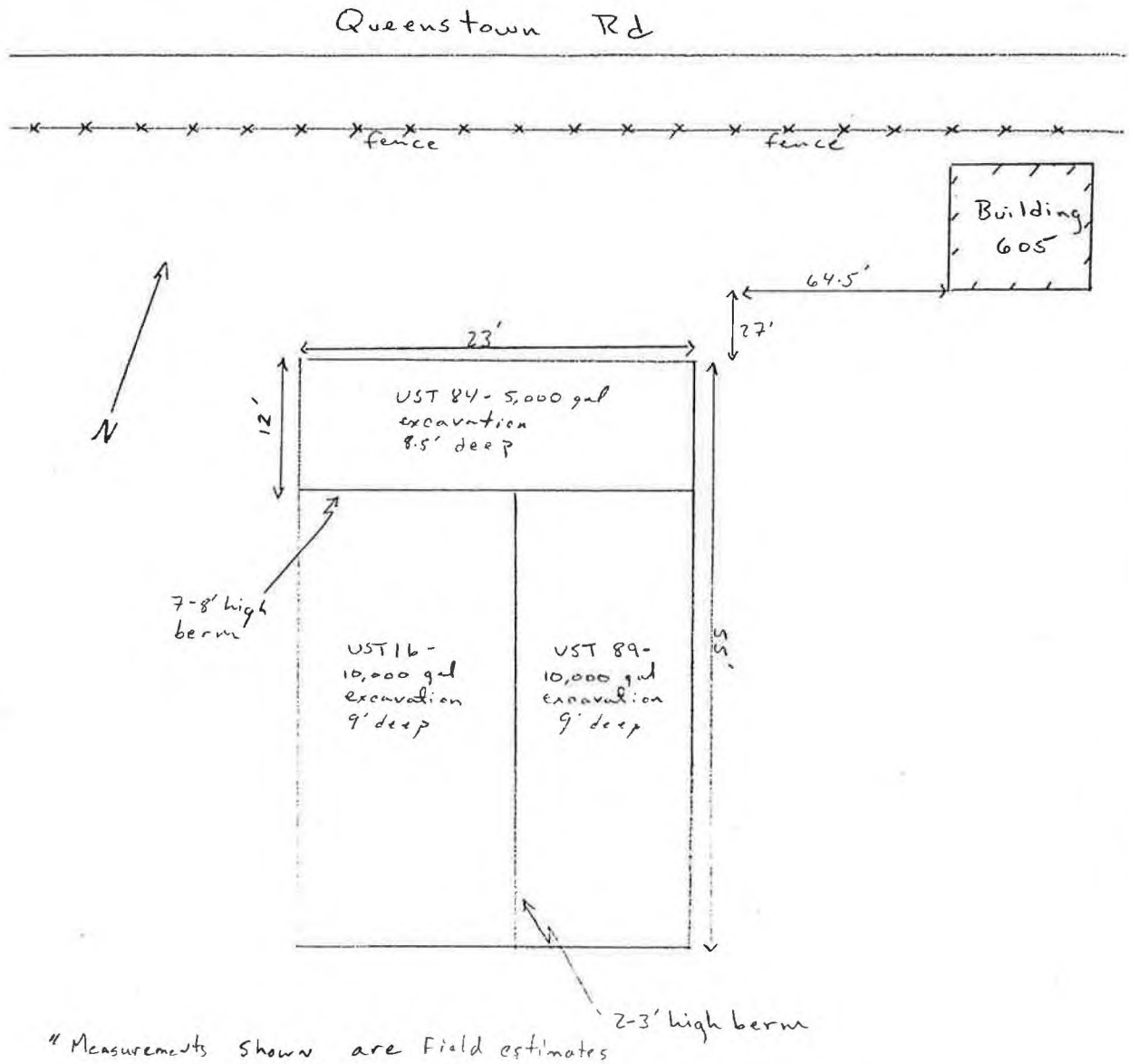
- Laboratory analysis of soil sampled from the UST excavation by a USEPA certified laboratory for Total Petroleum Hydrocarbons (TPH) (USEPA Method 418.1).

- Preparation of a Technical Report, to include assimilation of information gathered, major findings and conclusions.

2.1.2 Subsurface Storage Tank Excavation and Removal

On April 29, and 30, 1992, one 10,000-gallon, subsurface, diesel fuel, storage tank was excavated and removed from the site. The UST was located approximately 85 feet south of Building 605 (see Figure 2.1, UST Location Plan), and adjacent to two other UST's (Nos. 0084 and 0089) also associated with Building 605. Surface cover at the site consisted of asphalt.

The tank was covered by approximately 2 feet of soil. Staining of surface soil and excavated soil required to free the tank was observed in the vicinity of the spill containment at the center of the UST. From grade level to a depth of approximately 1 foot below grade, soil was observed to consist primarily of brown fine sand with little medium to coarse sand and some medium to coarse gravel. From a depth of approximately 1 to 9 feet below grade, soil consisted primarily of light brown, fine sand with little fine to coarse gravel and a trace of cobbles. Traces of the tank's asphalt coating were observed within the excavation. The bottom of the excavation was approximately 9 feet below grade. Groundwater was not encountered within the excavation. Soil within the excavation was observed to be visibly stained at the center



"Measurements shown are field estimates only and should not be used as exact measurements."

UST LOCATION PLAN 1-5,000/2-10,000 gallon UST excavations relative to: Building 605 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 2.1	ATEC©

in the vicinity of the spill containment manway, and at the northwest end in the vicinity of the fill pipe. The tank removal and excavation were inspected by Mr. David Salvadore, representing the Commonwealth of Massachusetts Department of Environmental Protection (DEP).

The associated piping was drained and tank connections were removed. UST No. 0016 was estimated to contain approximately 1,290 gallons of diesel fuel and residual materials. Approximately 1,250 gallons of diesel fuel were removed from the tank on April 16, 1992 and transported to a licensed Treatment Storage and Disposal Facility (Olson's Greenhouses, Raynham, MA). See section 2.10 for copies of the appropriate Hazardous Waste Manifests.

Tank openings were then capped and the tank was removed from the excavation. Upon excavation and removal, the tank was observed to be in fair condition with no holes or perforations. Following venting of the tank, an access way was cut in the end of the tank to allow entry for cleaning. The tank was then entered and vacuumed/wiped clean of any residual materials. Approximately 40 gallons of residual materials were drummed on April 30, 1992 for transportation at a later date. Drummed material was disposed of at Cyn Environmental, Stoughton, MA, on June 5, 1992, and at Pollution Solutions of Vermont, Williston, VT, on July 6, 1992. Copies of the appropriate hazardous waste manifests are included in Section 2.10.

The scrap tank was disposed at Tombarello & Sons, a licensed Massachusetts tank yard, located in Lawrence, MA, on May 1, 1992. A copy of the disposal receipt is included in Section 2.11, Permits and Certifications.

2.1.3 Sampling and Analysis Plan

Ten soil samples were obtained from the excavation for field screening with a Photoionization Detector (PID) and field analyzed with a Non-Dispersive Infrared (NDIR)

analyzer. The PID field screening for Total Organic Vapors (TOVs) was conducted with an HNu photoionizer utilizing the jar headspace screening procedures outlined in the Hazardous Materials Containment Plan. The NDIR field screening for Total Petroleum Hydrocarbons (TPH) was conducted with a Horiba OCMA 220, utilizing the procedures outlined in the Hazardous Materials Containment Plan.

Four of the samples (SS-1 to SS-4) were obtained from the excavation walls at a depth of approximately 3 to 4.5 feet below grade. Two of the samples (SS-5 and SS-6) were obtained at a depth of 3 to 4.5 feet below grade from the berm separating the excavations associated with UST Nos. 0016 and 0084. Two samples (SS-7 and SS-8) were obtained from a depth of 6 to 7 feet below grade from the berm separating the excavation associated with UST Nos. 0016 and 0089. Two samples (SS-9 and SS-10) were obtained from the excavation bottom at a depth of approximately 9 feet below grade.

Three composite soil samples (Stock-1, Stock-2, and Stock-3) were obtained for PID and NDIR field screening from stockpiled soils required to free UST No. 0016. Stock-1 was obtained from a stockpile located southeast of the excavation. Stock-2 and Stock-3 were collected from a stockpile located north of the excavation.

One soil sample (Spill-1) was obtained from the segregated, visibly contaminated surface soil associated with the spill containment for PID and NDIR analysis.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for laboratory analysis. Soil Sample LSS-1 was obtained from the southwest sidewall of the excavation at a depth of approximately 3 to 4.5 feet below grade. Soil sample LSS-2 was obtained from the bottom of the excavation at a depth of 9 feet below grade. These samples were analyzed for TPH utilizing USEPA Method 418.1.

Sampling locations are depicted on the Sampling Schematic as Figure 2.2. The appropriate chain of custodies are included in Section 2.9, Chain of Custody Forms.

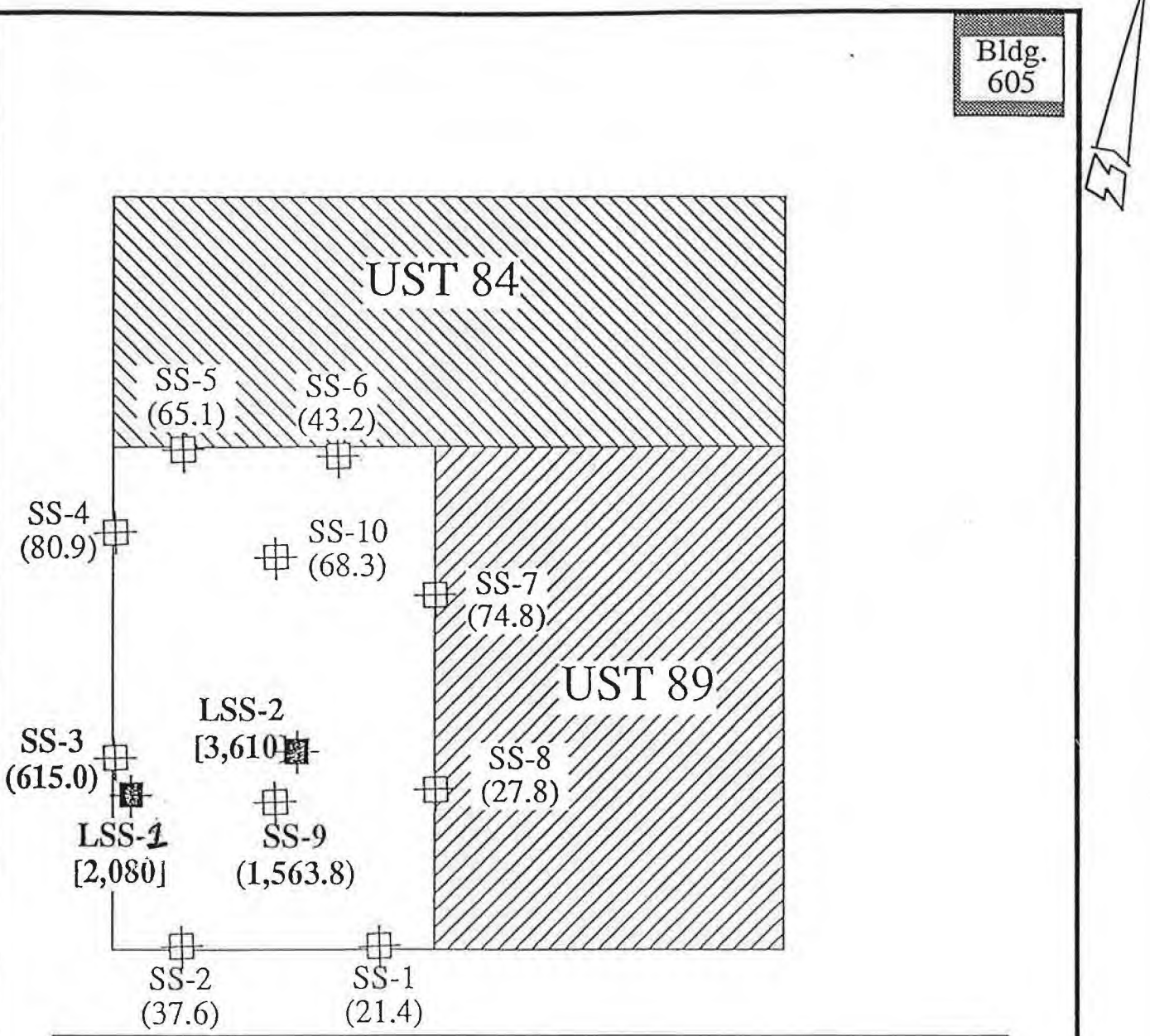
2.1.4 Analytical Results

The PID screening and the NDIR analysis of the soil samples obtained from the excavation, the stockpiled soil, and the segregated surface soil sample are as follows in Table 2.1:

TABLE 2.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOV)	NDIR (ppm TPH)
SS-1	0.0.	21.4
SS-2	0.2	37.6
SS-3	18.6	615.0
SS-4	1.0	80.9
SS-5	0.4	65.1
SS-6	0.2	43.2
SS-7	5.8	74.8
SS-8	1.0	27.8
SS-9	14.2	1,563.8
SS-10	1.8	68.3
Stock-1	1.0	45.8
Stock-2	2.8	70.7
Stock-3	10.2	455.8
Spill-1	46.0	5,005.0

Laboratory analytical results of the two soil samples obtained from the excavation revealed TPH concentrations of 2,080 ppm in LSS-1 and 3,610 ppm in LSS-2. A copy of the laboratory analytical report is included in Section 2.8. A copy of the OCMA 220 Data Sheet is included in Section 2.7.



LEGEND:

- Field Screened Soil Sample
- Lab Analyzed Soil Sample
- ( ) NDIR Results in ppm
- [ ] Lab Analysis Results in ppm

Results in bold denote levels in excess of MA DEP Remedial Goal Level (100 ppm)

SAMPLING SCHEMATIC 10,000 gallon UST excavation (UST No. 0016) at: Building 605 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 2.2	ATEC©

2.1.5 Conclusions and Recommendations

ATEC's conclusions are as follows:

Upon excavation and removal, the tank was observed to be in good condition with no holes or perforations.

Groundwater was not encountered within the excavation.

Surface soil around the spill containment was observed to be contaminated, and was segregated. Excavated soils required to free the tank did not appear contaminated. Soils located within the excavation were observed to be stained.

Ten soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR analyzer. PID readings revealed TOV concentrations ranging from 0.0 ppm to 18.6 ppm. NDIR results revealed TPH concentrations ranging from 21.4 ppm to 1,563.8 ppm.

Two soil samples were obtained from the excavation for laboratory analysis for TPH utilizing USEPA Method 418.1. Analytical results for LSS-1 obtained from the southwest sidewall of the excavation revealed a TPH concentration of 2,080 ppm. Analytical results for LSS-2 obtained from the bottom of the excavation revealed a TPH concentration of 3,610 ppm.

Three composite soil samples (Stock-1, Stock-2, and Stock-3) were obtained from the stockpiled soils for PID and NDIR screening. PID screening revealed TOV concentrations of 1.0 ppm, 2.8 ppm, and 10.2 ppm for Stock-1, Stock-2, and Stock-3, respectively. NDIR analysis revealed TPH concentrations of 45.8 ppm, 70.7 ppm, and 455.8 ppm for Stock-1, Stock-2, and Stock-3, respectively. One soil sample (Spill-1) was obtained from visibly contaminated stockpiled surface soil excavated from the vicinity of

the spill containment manway for PID and NDIR screening. PID screening revealed a TOV concentration of 46 ppm, and NDIR analysis revealed a TPH concentration of 5,005.0 ppm.

ATEC's recommendations were as follows:

Conduct remedial excavation until background levels of <100 ppm TPH by laboratory analysis are attained. Field screening of soil should be conducted during excavation utilizing a PID until background levels of <1 ppm are attained prior to obtaining samples for laboratory analysis.

Advance soil borings and install groundwater monitoring wells to determine the vertical and horizontal extent of contamination. Continuous split spoon sampling and analysis will be conducted utilizing field analysis techniques, i.e. PID and NDIR analysis and laboratory analysis to document soil contamination levels as specified in the Hazardous Waste Containment Plan.

Stockpiled soils should be laboratory analyzed for TPHs, VOCs, PCBs, 13 TCLP Metals, Flashpoint, Corrosivity, Sulfide Reactivity, and Cyanide Reactivity for disposal classification.

2.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

2.2.1 Site Remediation

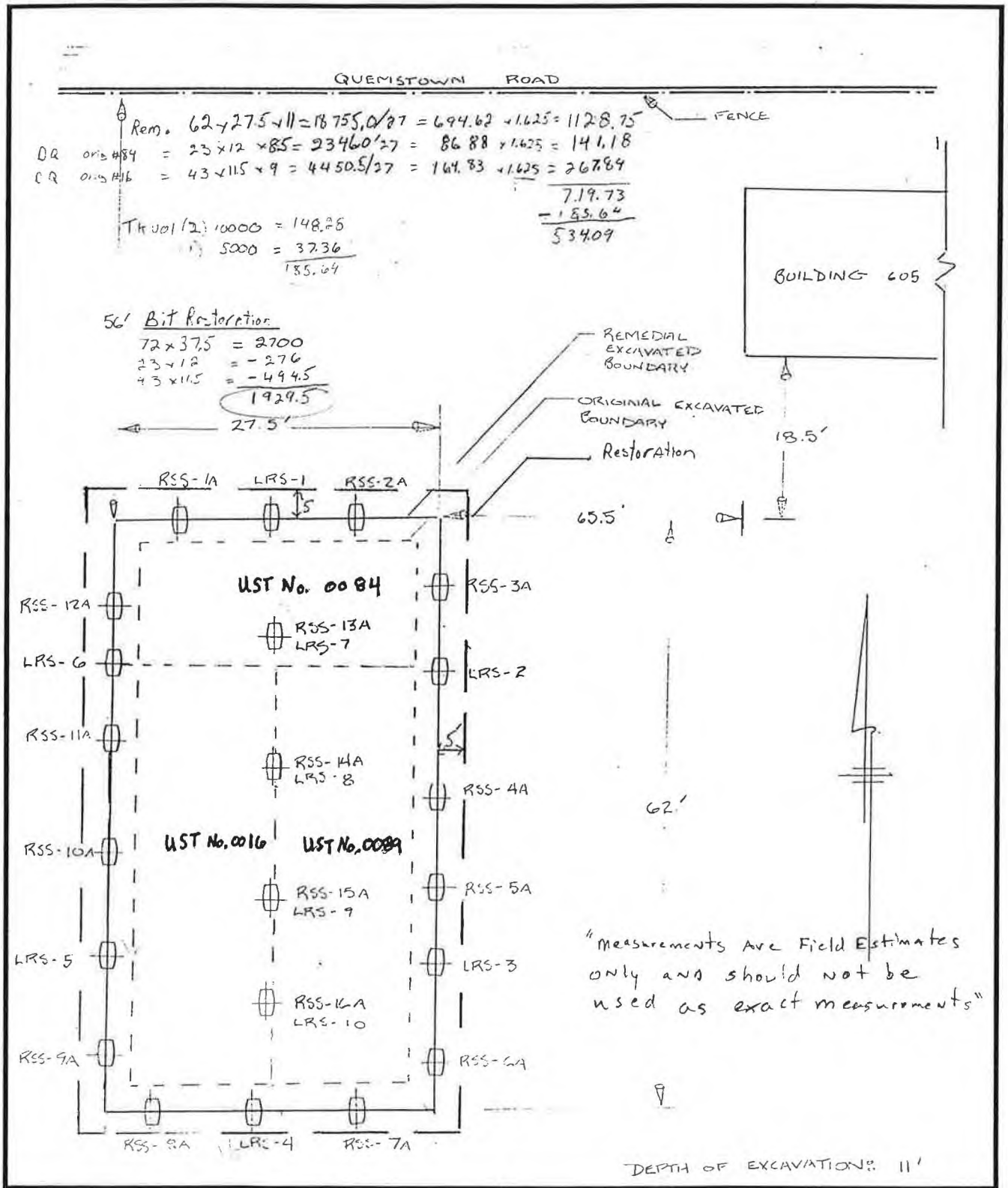
Following review of field screening and laboratory analytical results, additional excavation of USTs Nos. 0016, 0084, and 0089 was initiated. The remediation was conducted to remove contaminated soil and to reach background levels by PID (<1 ppm), per order of the Contracting Officer's Representative and David Salvadore of the Massachusetts Department of Environmental Protection (DEP). Approximately 452 tons of contaminated

soil were removed from the excavation floor and the sidewalls during the remedial excavation of USTs 0016, 0084, and 0089. The estimated volume of removed soil was calculated from field drawings produced during the closure and remediation of USTs 0016, 0084, and 0089 (see Remedial Excavation Plan, Figure 2.3).

Sixteen soil samples (RSS-1 to RSS-16) were obtained from the post-remedial excavations associated with UST Nos. 0016, 0084, and 0089 for PID field screening and NDIR analysis. RSS-1 to RSS-12 were obtained from the sidewalls at a depth of approximately five to seven feet below grade. RSS-13 to RSS-16 were obtained from the bottom of the excavation, approximately eleven feet below grade. NDIR and PID results are shown in the following Table 2.2:

TABLE 2.2 - PID RESULTS

SAMPLE NUMBER	PID (ppm TOV)	NDIR (ppm TPH)
RSS-1	0.1	88.4
RSS-2	3.7	10.1
RSS-3	2.6	44.7
RSS-4	2.0	42.4
RSS-5	4.0	15.2
RSS-6	3.8	34.2
RSS-7	2.5	65.9
RSS-8	4.2	16.0
RSS-9	15.0	3.5
RSS-10	0.4	18.0
RSS-11	0.8	65.8
RSS-12	2.8	13.9
RSS-13	1.8	148.7
RSS-14	11.4	15.8
RSS-15	20.0	1,384.7
RSS-16	3.2	14.9



REMEDIAL EXCAVATION PLAN

Building 605
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 2.3

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A total of ten soil samples (LRS-1 to LRS-10) were obtained for laboratory TPH analysis (USEPA Method 418.1). Soil samples LRS-1 and LRS-7 was also tested for Benzene, Toluene, Ethyl-Benzene, and Xylene (BTEX), and LRS-7 was additionally tested for 13 Metals by Toxicity Characteristic Leachate Procedure (TCLP) (USEPA Method 6010). Soil sample LRS-9 was additionally tested for VOCs (USEPA Method 8240). Soil samples LRS-1 through LRS-6 were collected from the excavation sidewalls at a depth of approximately 6 feet below grade. Soil samples LRS-7 to LRS-10 were obtained from the excavation bottom at a depth of approximately 11 feet below grade. Laboratory analysis results are shown in Table 2.3 as follows:

TABLE 2.3 - LABORATORY ANALYSIS

SAMPLE NUMBER	TPH (ppm)	VOA (ppb)	13 TCLP METALS (ppm)	LOCATION
LRS-1	17	ND	NA	north sidewall (4.5' depth)
LRS-2	ND	NA	NA	east sidewall (4.5' depth)
LRS-3	ND	NA	NA	east sidewall (4-5' depth)
LRS-4	20	NA	NA	south sidewall (4.5' depth)
LRS-5	408	NA	NA	west sidewall (4.5' depth)
LRS-6	57	NA	NA	west sidewall (4.5' depth)
LRS-7	220	ND	Copper = 0.05 Nickel = 0.05 Zinc = 0.40	bottom (9.0' depth)
LRS-8	50	NA	NA	bottom (9.0' depth)
LRS-9	3,560	ND	NA	bottom (9.0' depth)
LRS-10	36	NA	NA	bottom (9.0' depth)

LRS = Laboratory Remediation Sample
ND = Not Detected Above Method Reporting Limit
NA = Not Applicable

A copy of the laboratory analytical report is included in Section 2.8.

2.2.2 Soil Stratigraphy

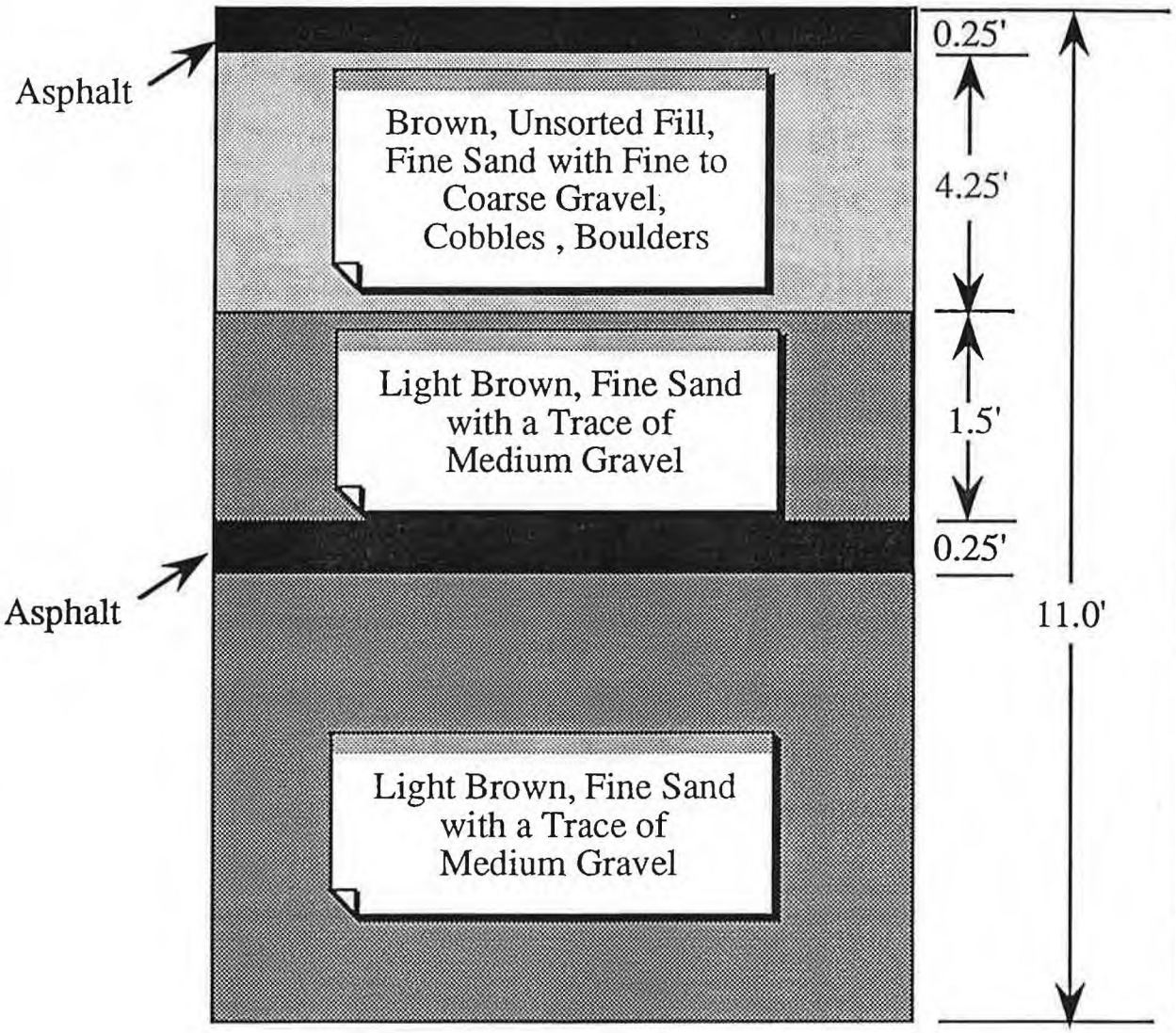
Soil stratigraphy of the excavation consisted of a layer of asphalt from grade to a depth of 3 inches below grade, a layer of brown, unsorted fill, fine sand, fine to coarse gravel, cobbles, and boulders from a depth of 3 inches to 4.5 feet below grade. From 4.5 to 6 feet below grade, soil consisted of light brown fine sand with a trace of medium gravel. A 3 inch layer of asphalt was located at a depth of 6 feet below grade. A layer of light brown fine sand with a trace of medium gravel was located at a depth of 6.5 to 11 feet below grade (see Figure 2.4, Soil Stratigraphy).

2.2.3 Contaminated Soil Disposal

Prior to disposal, contaminated soil was laboratory analyzed for disposal classification purposes. One composite soil sample (Stkpl-16) was obtained from the stockpiled soil associated with the removal of the UST Nos. 0016. Laboratory analyses of Stkpl-16 included VOCs, TPHs, 13 Metals by Toxicity Characteristic Leachate Procedure (TCLP), Polychlorinated Biphenyls (PCBs), Reactive Sulfide, Reactive Cyanide, Flashpoint, and Corrosivity for characterization and disposal purposes. Laboratory analytical results revealed a pH of 7.4, 3 ppm PCB's, and a TPH concentration of 108 ppm. All other analytical results were below the Method Reporting Limits (MRL).

A total of seven stockpile soil samples (Stock 605.1 to Stock 605.7) were obtained from the seven stockpiles associated with the soils required to free UST's Nos. 0016, 0084, and 0089, and the soil remediation conducted at the site. These samples were laboratory analyzed for PCB's. Stock 605.2 to 605.7 revealed no detectable PCB concentrations above the 1 ppm Method Reporting Limit. A 1 ppm PCB concentration was detected in Stock 605.1.

Approximately 480 tons of petroleum hydrocarbon contaminated soil was removed and stockpiled during removal and remediation of the excavation. Refer to Section 2.11 Bills



SOIL STRATIGRAPHY

UST Post remedial excavation at:
Building 605
Ft. Devens, Massachusettes

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 2.4

ATEC

of Lading and Weight Disposal Receipts. Contaminated soil was disposed for recycling at Trimount Bituminous Products Company, Shrewsbury, Massachusetts.

2.3 BACKFILL

The excavation of UST Nos. 0016, 0084, and 0089 was backfilled with approximately 695 cubic yards of imported uncontaminated fill material. Backfilling was conducted with the approval of the Contracting Officer's Representative and the DEP.

2.4 SURFACE RESTORATION

Approximately 2,206 square feet of disturbed area was re-asphalted.

2.5 HYDROGEOLOGICAL SERVICES

Hydrogeological Services were not performed relative to UST No. 0016.

2.6 PHOTOGRAPHIC DOCUMENTATION

The following photographs are of the removed UST from the excavation and a post removal view of the excavation.

A-1: One side of removed tank.

A-2: Opposite side of removed tank.

A-3: Excavation as viewed from southeast, facing northwest.

A-4: Excavation as viewed from northwest, facing southeast.

A-1

A-2

PHOTO DOCUMENTATION 10,000 gallon UST excavation at: Building 605 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451	ATEC

2.7 OCMA 220 DATA SHEETS

The following information was organized from the data collected from the Non-Dispersive Infrared analyzer.

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 UST !6

DATE: May 1, 1992

OPERATOR: Charles Langenhagen

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	0.1	0.0	0.0	0.0	0.0	0.0	27.7
SPAN:	37.6	40.0	44.0	40.0	40.5	40.0	
ZERO:	5.8	0.0	-5.0	0.0	0.2	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	INSTRUMENT RESULTS (ppm) 2nd	INSTRUMENT RESULTS (ppm) 3rd	CONCENTRATION mg/l
STOCK-1	83.5	75.0	17.5	3.0	----	----	2.1	1.9	--	45.8
STOCK-2	83.9	75.2	17.5	3.0	----	----	3.1	3.0	--	70.7
STOCK-3	83.5	75.0	17.5	3.0	----	----	18.9	18.9	--	455.8
SS-1	82.6	75.9	17.5	3.0	----	----	0.7	0.7	--	21.4
SS-2	81.0	75.0	17.5	3.0	----	----	0.6	1.1	--	37.6
SS-3	81.8	75.5	17.5	3.0	--	--	18.4	18.9	--	615.0
SS-4	83.7	76.1	17.5	3.0	--	--	2.9	3.0	--	80.9
SS-5	81.7	75.4	17.5	3.0	----	----	2.0	2.0	--	65.1
SS-6	82.6	75.0	17.5	3.0	--	--	1.5	1.6	--	43.2
SS-7	82.4	75.0	17.5	3.0	----	----	2.9	2.7	--	74.8
SS-8	80.4	74.5	17.5	3.0	--	--	0.8	0.8	--	27.8
SS-9	82.1	74.3	17.5	3.0	--	--	58.5	59.5	--	1563.8
SS-10	82.5	74.1	17.5	3.0	----	----	2.7	2.8	--	68.3
SPILL-1	81.3	75.3	20.0	2.0	25.0	1.0	78.9	39.5	38.5	5005.0

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 USTs 0016, 0084, 0089

DATE: Aug 4, 1992

OPERATOR: Charles Langenhagen

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	1.8	0.0	0.5	0.0	-0.7	0.0	27.3
SPAN:	34.0	40.0	47.0	40.0	40.5	40.0	
ZERO:	6.2	0.0	-5.8	0.0	-0.6	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	INSTRUMENT RESULTS (ppm) 2nd	INSTRUMENT RESULTS (ppm) 3rd	CONCENTRATION mg/l
RS-1A	79.8	74.7	17.5	3.0	--	--	1.8	2.2	--	88.4
RS-2A	80.6	74.5	17.5	3.0	----	----	0.4	0.3	--	10.1
RS-3A	80.0	74.5	17.5	3.0	--	--	0.9	1.2	--	44.7
RS-4A	80.7	74.9	17.5	3.0	--	--	1.2	1.2	--	42.4
RS-5A	80.2	74.8	17.5	3.0	--	--	0.2	0.4	--	15.2
RS-6A	81.3	74.7	17.5	3.0	--	--	1.0	1.1	--	34.2
RS-7A	80.2	74.6	17.5	3.0	--	--	1.5	1.8	--	65.9
RS-8A	81.4	75.0	17.5	3.0	----	----	0.6	0.5	--	16.0
RS-9A	80.7	74.9	17.5	3.0	--	--	0.3	0.1	--	3.5
RS-10A	80.7	75.0	17.5	3.0	----	----	0.6	0.5	--	18.0
RS-11A	80.2	74.9	17.5	3.0	--	--	1.4	1.7	--	65.8
RS-12A	80.8	74.9	17.5	3.0	--	--	0.2	0.4	--	13.9
RS-13A	79.7	74.6	17.5	3.0	--	--	3.2	3.7	--	148.7
RS-14A	81.3	74.8	17.5	3.0	--	--	0.5	0.5	--	15.8
RS-15A	80.3	75.0	17.5	3.0	--	--	35.7	35.8	--	1384.7
RS-16A	80.2	74.7	17.5	3.0	----	----	0.6	0.4	--	14.9

2.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports were organized and provided by Environmental Science Services Inc. Results are included for:

- LSS-1 and LSS-2: Soil samples obtained from original excavation. Laboratory analyzed for TPH.

- LRS-1 to LRS-10: Soil samples obtained from Post-remedial excavation. Laboratory analyzed for TPH. LRS-1 and LRS-7 were also analyzed for BTEX. LRS-7 was additionally analyzed for 13 Metals by TCLP. LRS-9 was also analyzed for VOC's.

- Stkpl-16: Soil sample obtained from stockpiled soil for disposal classification from soils required to free UST No. 0016. Lab analyzed for VOCs, TPH, 13 Metals by TCLP, PCBs, Reactive Sulfide, Reactive Cyanide, Flashpoint and Corrosivity for characterization and disposal purposes.

- Stock 605.1 - 605.7: Stockpile soil samples obtained from soils required to free UST's Nos. 0016, 0084, and 0089. Laboratory analyzed for PCB's.

In Response To The Future

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON-IR
Method 418.1

Client: ATEC Environmental Consultants

Client Project ID: Ft. Devens, UST 16, Bldg 605 ESS Project ID: 921180

Date Samples Received: 5/7/92 Date Reported: 5/14/92

Client ID	Lab ID	Results	Units	MRL	% Solids
LSS-1	921180-01	2,080	mg/Kg	105	95%
LSS-2	921180-02	3,610	mg/Kg	104	96

MRL = Method Reporting Limit

Note: Results reported on a dry weight basis.

Approved by: David Dickinson
Laboratory Director

Date: 14 May 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax. (401) 421-5731
101 Rue N... Wa... Connecticut 06880 (203) 221-2753 Fax (203) 454-3070

In Response To The Future

CERTIFICATE OF ANALYSIS

Bldg 605

Client: ATEC Environmental Consultants

Client Project ID: Ft. Devens Stockpiles — ESS Project ID: 921847

Client Sample ID: Stkpl-16 — ESS Sample ID: 921847-04

Date Sample Received: 7/17/92 — Date Reported: 7/31/92

Parameter	Results	Units	MRL	Method
pH (Corrosivity)	7.4	S.U.	N/A	9045
Flashpoint	No Flash	°F	200	1010
Percent Solids	96	% w/w	1	160.3
Polychlorinated Biphenyls				
Arochlor 1254	3	mg/Kg	Attached	8080
Reactive Cyanide	ND	mg/Kg	2	7.3.3.2
Reactive Sulfide	ND	mg/Kg	2	7.3.4.1
Total Petroleum Hydrocarbon-IR	108	mg/Kg	10	418.1
Volatile Organics	ND	ug/Kg	Attached	8240
Toxicity Characteristic Leaching Procedure				1311
Metals	ND	mg/L	Attached	6010

N/A = Not Applicable

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson, Laboratory Director

Date: 31 Jul 1992

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax. (401) 421-5731

PRINTED ON RECYCLED PAPER

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-1 | ESS Sample ID: 921998-01

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	95	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	17	mg/Kg	10	418.1
Volatile Organics	ND	ug/Kg	Attached	8020

TPHIR reported on dry weight basis

ND = Not Detected above the Method Reporting Limit(MRL)

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

001

In Response To The Future

CERTIFICATE OF ANALYSIS

VOLATILE ORGANICS
METHOD 8020

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 ESS Project ID: 921998

Client Sample ID: LRS-1 ESS Sample ID: 921998-01

Date Sample Received: 8/3/92 Date Reported: 8/17/92

Parameter	Result (ug/Kg)	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Toluene	ND	1
Total Xylenes	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 17 Aug 92
David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-2 | ESS Sample ID: 921998-02

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	96	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	ND	mg/Kg	10	418.1

TPHIR reported on dry weight basis

ND = Not Detected above the Method Reporting Limit(MRL)

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

003

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-3 | ESS Sample ID: 921998-03

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	88	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	ND	mg/Kg	11	418.1

TPHIR reported on dry weight basis

ND = Not Detected above the Method Reporting Limit(MRL)

Approved by: _____ Date: _____

David Dickinson
Laboratory Director

004

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-4 | ESS Sample ID: 921998-04

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	95	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	20	mg/Kg	10	418.1

TPHIR reported on dry weight basis

MRL = Method Reporting Limit

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

005

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89

ESS Project ID: 921998

Client Sample ID: LRS-5

ESS Sample ID: 921998-05

Date Sample Received: 8/3/92

Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	94	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	408	mg/Kg	10	418.1

TPHIR reported on dry weight basis

MRL = Method Reporting Limit

Approved by: David Dickinson
Laboratory Director

Date: 17 Aug 92

006

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-6 | ESS Sample ID: 921998-06

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	95	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	57	mg/Kg	10	418.1

TPHIR reported on dry weight basis

MRL = Method Reporting Limit

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

007

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-7 | ESS Sample ID: 921998-07

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	94	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	220	mg/Kg	10	418.1
Volatile Organics	ND	ug/Kg	Attached	8020
Toxicity Characteristic Leaching Procedure				1311
Metals				
Copper	0.05	mg/L	Attached	6010
Nickel	0.05	mg/L	Attached	6010
Zinc	0.40	mg/L	Attached	6010

TPHIR reported on dry weight basis

ND = Not Detected above the Method Reporting Limit(MRL)

Approved by: David Dickinson
Laboratory Director

Date: 17 Aug 92

008

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-8 | ESS Sample ID: 921998-08

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	91	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	50	mg/Kg	11	418.1

TPHIR reported on dry weight basis

MRL = Method Reporting Limit

Approved by: David Dickinson
Laboratory Director

Date: 17 Aug 92

011

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84,89 | ESS Project ID: 921889

Client Sample ID: LRS-9 | ESS Sample ID: 921998-09

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	87	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	3,560	mg/Kg	114	418.1
Volatile Organics	ND	ug/Kg	Attached	8240

TPHIR reported on dry weight basis

ND = Not Detected above the Method Reporting Limit(MRL)

Approved by: David Dickinson
Laboratory Director

Date: 17 Aug 92

012

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-10 | ESS Sample ID: 921998-10

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Results	Units	MRL	Method
Percent Solids	96	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	36	mg/Kg	10	418.1

TPHIR reported on dry weight basis

MRL = Method Reporting Limit

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

014

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.1 ESS Sample ID: 922162-01

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	1	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	121%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sep 92

0001

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.2 ESS Sample ID: 922162-02

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	100%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sep 92

0002

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.3 ESS Sample ID: 922162-03

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	105%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0003

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.4 ESS Sample ID: 922162-04

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	106%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0004

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.5 ESS Sample ID: 922162-05

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	137%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0005

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.6 ESS Sample ID: 922162-06

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	103%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sep 92

0008

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 Bldg 605 ESS Project ID: 922162

Client Sample ID: Stock-605.7 ESS Sample ID: 922162-07

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	146%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0007

In Response To The Future

CERTIFICATE OF ANALYSIS

VOLATILE ORGANICS
METHOD 8020

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 ESS Project ID: 921998

Client Sample ID: LRS-7 ESS Sample ID: 921998-07

Date Sample Received: 8/3/92 Date Reported: 8/17/92

Parameter	Result (ug/Kg)	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Toluene	ND	1
Total Xylenes	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson
Laboratory Director

Date: 17 Aug 92

009

Environmental Science Services

In Response To The Future

CERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants

Client Project ID: UST# 16, 84, 89

Client Sample ID: LRS-7

ESS Sample ID: 921998-07

Date Sampled: 7/28/92

Date TCLP Performed: 8/6/92

Date Leachate Extracted: 8/7/92

Date Extract Analyzed: 8/10/92

	Actual		Adjusted*	
Target Analyte	Sample Result (mg/L)	Method Reporting Limit	Sample Result (mg/L)	Method Reporting Limit
Antimony	ND	0.2	ND	0.3
Arsenic	ND	0.2	ND	0.2
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.05
Lead	ND	0.1	ND	0.1
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.07
Copper	0.05	0.02	0.05	0.02
Nickel	0.05	0.04	0.05	0.04
Zinc	0.40	0.02	0.40	0.02
Beryllium	ND	0.02	ND	0.03
Thallium	ND	0.3	ND	0.4

* Actual sample result adjusted for matrix bias. Refer to matrix spike analysis summary form.

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 | ESS Project ID: 921998

Client Sample ID: LRS-9 | ESS Sample ID: 921998-09

Date Sample Received: 8/3/92 | Date Reported: 8/17/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	ND	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 17 Aug 92

David Dickinson
Laboratory Director

QUALITY CONTROL SECTION

In Response To The Future

CERTIFICATE OF ANALYSIS

VOA SOIL SURROGATE RECOVERY

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89

Date Sample Analyzed: 8/12/92

ESS Project ID: 921998

SAMPLE ID	1,2 DICHLOROETHANE-D4 (70-121%)*	TOLUENE-D8 (81-117%)*	BFB (74-121%)*
VS0812B1	80%	91%	91%
921998-09	78	92	86

* Acceptance criteria

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

016

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 16, 84, 89 — ESS Project ID: 921998

Client Sample ID: Method Blank — ESS Sample ID: VS0812B1

Date Sample Received: NA — Date Reported: 8/12/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	ND	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)
NA = Not Applicable

Approved by: _____ Date: 12 Aug 92
David Dickinson
Laboratory Director

017

In Response To The Future

CERTIFICATE OF ANALYSIS

MATRIX SPIKE ANALYSIS SUMMARY

TCLP METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants Matrix: Solid

TCLP Batch ID: 202301 Concentration in: mg/L

Target Analyte	Result	Spike Added	Spiked Result	Percent Recovery
Antimony	ND	*	ND	76%
Arsenic	ND	2.00	2.26	113
Cadmium	ND	0.5	0.39	78
Chromium	ND	1.0	1.22	122
Lead	ND	1.0	1.12	112
Mercury	ND	0.02	0.020	100
Selenium	ND	2.00	2.13	107
Silver	ND	1.0	0.76	76
Copper	ND	1.0	1.14	114
Nickel	ND	1.0	1.07	107
Zinc	ND	1.0	1.09	109
Beryllium	ND	*	ND	76
Thallium	ND	*	ND	76

This matrix spike analysis summary applies to the following samples: 921998-07

ND = Not Detected above Method Reporting Limit (MRL)

* Matrix spike recovery is based on the lowest spike recovery of the spiked analytes.

Approved by: David Dickinson, Laboratory Director Date: 17 Aug 92

2.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil samples which were laboratory analyzed. Please see laboratory reports for date analyzed or date sample was received, if not on chain of custody form.

CHAIN OF CUSTODY RECORD

PROJ. NO. 37.07451

PROJECT NAME UST 16 - Bldg 605

CLIENT Ft. Devens P.O. 72289

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E. Baldi

SAMPLING METHOD grab

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LSS-1	5/1			X		X						1				X							
LSS-2	5/1			X		X						1				X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E. Baldi	5/5	[illegible]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

PROJ. NO. 07451

PROJECT NAME UST 16 - Bldg 605

CLIENT Ft. Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E Ballard

SAMPLING METHOD grab

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LSS-1	5/1			X		X						1				X							Split
LSS-2	5/1			X		X						1				X							Split

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E Ballard	5/8	[illegible]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

CHAIN OF CUSTODY RECORD

PROJECT NAME: [illegible] Bldg [illegible]

PROJ. NO.: [illegible]

CLIENT: [illegible]

LAB PROJ. NO.:

SAMPLERS: *(Signature)*

SAMPLING METHOD: [illegible]

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
[illegible]	[illegible]		X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						
[illegible]			X	X		X				X		1					X						

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
[illegible]	[illegible] / 7:20				

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

PROJ. NO. 07.451

PROJECT NAME UST 16, 84, 87 (Bldg 605)

CLIENT Ft. Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E Zaldi

SAMPLING METHOD

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS (8240)	BTX & E	TOTAL HYDROCARBONS	PCB'S	TCLP ~~EP TOXIC~~	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LRS-1	7/28	3:00		X		X				X		3			X	X							
LRS-2	7/28	3:00		X		X				X		1				X							
LRS-3	7/28	3:00		X		X				X		1				X							
LRS-4	7/28	3:00		X		X				X		1				X							
LRS-5	7/28	3:00		X		X				X		1				X							
LRS-6	7/28	3:00		X		X				X		1				X							
LRS-7	7/28	3:00		X		X				X		4			X	X		X					
LRS-8	7/28	3:00		X		X				X		1				X							
LRS-9	7/28	3:00		X		X				X		1		X		X							
LRS-10	7/28	3:00		X		X				X		1				X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E Zaldi	7/30 12:00	Mark Sowd			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

2.10 HAZARDOUS WASTE MANIFEST

UST No. 0016 was estimated to contain approximately 1,290 gallons of diesel fuel and residuals. Approximately 1,250 gallons of diesel fuel were removed from the tank on April 16, 1992 and transported to a licensed Treatment Storage and Disposal Facility (Olson's Greenhouses, Raynham, MA). The Hazardous Waste Manifest quantity of 2,500-gallons includes the 1,250-gallons pumped from UST No. 0089. Approximately 40 gallons of residual materials were drummed on April 30, 1992 for transportation at a later date. Drummed material was disposed of at Cyn Environmental, Stoughton, MA, on June 5, 1992, and at Pollution Solutions of Vermont, Williston, VT, on July 6, 1992. Please review attached letter dated July 14, 1992, regarding Fort Devens drum disposal.

The following Hazardous Waste Manifest was generated from residual tank materials.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

FOR IN-STATE WASTE OIL ONLY OR IN-STATE VSQG HW/WO

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA 1 2 1 0 8 8 5 6 4 1 1 9 9 8 6 — Manifest Document No.

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: HRGGTR Kent DEVEL Fort DEVENS MA 01433 (BLDG 605) AFZD-Em Box19

4. Generator's Phone: 508-796-2117

A. State Manifest Document Number: MA F419986

B. State Gen. ID: SAME

5. Transporter 1 Company Name: MAYFLOWER SALVAGE CO.

6. US EPA ID Number: MAD000846188

C. State Trans. ID: MA8D1415111

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone: 508 880-6002

E. State Trans. ID

9. Designated Facility Name and Site Address: OLSON'S GREENHOUSES, 590 SOUTH STREET – EAST, RAYNHAM, MA 02767

10. US EPA ID Number: MAD059733378

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone: (508) 822-1151

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE PETROLEUM OIL N.O.S. COMBUSTIBLE LIQUID NA 1270	001	TT	2500	G	MA98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.): a. WASTE OIL DIESEL FUEL MB

K. Handling Codes for Wastes Listed Above: a. c. b. d.

15. Special Handling Instructions and Additional Information: LAB. NO. MATERIAL TESTED ON TRUCK - BEING MARKETED AS MA98 Pre TESTED For Recycle

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Mark Boser — Signature — Date: Month 04 Day 16 Year 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John R McLaren — Signature — Date: Month 04 Day 16 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Date: Month Day Year

Approved OMB No. 2050-0039, Expires 9-30-91

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY>1: FACILITY MAILS TO GENERATOR

MA F419986 COPY>1: FACILITY MAILS TO GENERATOR

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

4043R

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA7210010254 — Manifest Document No. FD12KD

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
U.S. Army Ft. Devens 508-796-3002
AFZD-EN, Box 19, Ft. Devens, Ma. 01433-5190

4. Generator's Phone (508) 796-3002

5. Transporter 1 Company Name: Lincoln Environmental, Inc.
6. US EPA ID Number: RI1D981211261217

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
CYN Environmental Services
1771 Washington St.
Stoughton, Ma. 02072
10. US EPA ID Number: MAD031371771

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ, Waste Oil, n.o.s., Combustible Liquid, NA1270	34	DM	13600	P
b. 935 gls				
c.				
d.				

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. Waste Oil Water
b. d.

K. Handling Codes for Wastes Listed Above
a. 3102 b. T15D
b. d.

15. Special Handling Instructions and Additional Information
In Case Of Emergency 24 Hour Contact Chemtrec 1-800-424-9300 OR Lincoln Environmental 1-800-659-3353 ERG# 27 Attached
24HR 508-796-2117

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Mark Boser — Signature: [signature] — Date: Month 06 Day 05 Year 92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Randall Griffin — Signature: [signature] — Date: Month 06 Day 25 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space
REJECT 17 DRUMS TO GENERAL CHEMICAL CO (508) 872-5200
MAD 019371079 33 CELCIUS ST Framingham MA 01701

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Alan E. Stepp — Signature: [signature] — Date: Month 06 Day 05 Year 92

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

Form Approved OMB No. 2050-0039, Expires 9-30-92
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 1: FACILITY MAILS TO DESTINATION STATE

2.11 BILLS OF LADING AND WEIGHT RECEIPTS

BILL OF LADING
POLICY # WSC- 400-89

'LL OF LADING #: 151 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? ___Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline ___ #2 oil ___ #4 oil ___ #6 oil ___ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y ___N TPH: ✓Y ___N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 952325
TRAILER REGISTRATION 29733
LEFT SITE AT 2/4 DATE 9/22
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	31.55	
REMAINING TO BE SHIPPED		

Ticket # R76367

TRANSPORTER'S SIGNATURE [signature] DATE 9/22/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/22/92 ARR TIME 3:12

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

RECEIVED
SEP 11 1992
DEP
Central - Rec.

ALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY NALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 150 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX. 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? PCB's - Yes
Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92

(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39223
LEFT SITE AT 200 DATE 9-22-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	3/-9?	
REMAINING TO BE SHIPPED		

Ticket #R76364

TRANSPORTER'S SIGNATURE Ron [signature] DATE 9/22/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/22/92 ARR TIME 2:55

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

ALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY NALTIES.

EXCLUDES PILE #1

149

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: _____ DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16.84.89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION AJ185 MA
TRAILER REGISTRATION 40870 MA
LEFT SITE AT 2:00pm DATE 9-22-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: [signature]

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	32.79	
REMAINING TO BE SHIPPED		

Ticket # R 76360

TRANSPORTER'S SIGNATURE [signature] DATE 9-22-92

RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/22/92 ARR TIME 2:47

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

RECEIVED
SEP 11 1992
DEP
Central - Rec.

ALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY NALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 1 A-B DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK # 5 16, 84, 89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 578-111 MA
TRAILER REGISTRATION _____
LEFT SITE AT _____ DATE 9/22/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	36.53	
REMAINING TO BE SHIPPED		

Ticket # R76356

TRANSPORTER'S SIGNATURE [signature] DATE 9/22/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/22/92 ARR TIME 2:30

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

RECEIVED
SEP 11 1992
DEP
Central - Rec.

LSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF
.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY
ALTIES.

EXCLUDES PILE # 1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 162 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: Ronald J. [illegible] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [illegible] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 895-673 MA
TRAILER REGISTRATION 39414 MA
LEFT SITE AT 1:30 DATE 9/23/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	37.36	
REMAINING TO BE SHIPPED		

Ticket # R 76539

TRANSPORTER'S SIGNATURE [illegible] DATE 9/23/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [illegible] DATE 9/23/92 ARR TIME 2:53

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

ALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF .G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY :NALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 160 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39283
LEFT SITE AT 1/25 DATE 9 23 92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	33.73	
REMAINING TO BE SHIPPED		

Ticket # R-76531

TRANSPORTER'S SIGNATURE [signature] DATE 9/23/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 2:41

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 157 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16.84.89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 895-673 MA
TRAILER REGISTRATION 39414 MA
LEFT SITE AT 1.2 SQ. DATE 9/23/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	37.79	
REMAINING TO BE SHIPPED		

Ticket R7647

TRANSPORTER'S SIGNATURE [signature] DATE 9/23/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 11:55

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 156 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39223
LEFT SITE AT 1025 DATE 9 23 92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	34.33	
REMAINING TO BE SHIPPED		

Ticket # R76469

TRANSPORTER'S SIGNATURE RON DATE 9/23/92

RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 11:30

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

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EXCLUDES PILE #1

154

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: _____ DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16.84.89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 895-673 MA
TRAILER REGISTRATION 39414 MA
LEFT SITE AT BOC DATE 9/23/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	36.47	
REMAINING TO BE SHIPPED		

Ticket # R 76470

TRANSPORTER'S SIGNATURE [signature] DATE 9/23/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 8:57

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

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EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 153 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16.84.89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39223
LEFT SITE AT 7:50 DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	36.96	
REMAINING TO BE SHIPPED		

Ticket R 76417

TRANSPORTER'S SIGNATURE Ron [signature] DATE 9/22/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/22/92 ARR TIME 8:50

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 167 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX. 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: Ronald J. [illegible] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [illegible] DATE: 17 Sept 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION MA AK 167
TRAILER REGISTRATION 42237
LEFT SITE AT 8:30 DATE 9-24-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: _____

QUANTITY SHIPPED: wt (tons) vol (cu yds)
TOTAL PROJECTED ___ ___
SHIPPED TO DATE ___ ___
THIS LOAD (estimated) 34.07 ___
REMAINING TO BE SHIPPED ___ ___
Ticket # 76597

TRANSPORTER'S SIGNATURE [illegible] DATE 9-24-92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE [illegible] DATE 9/24/92 ARR TIME 9:36

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

LL OF LADING #: 166 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16.84.89
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)
AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 511695
TRAILER REGISTRATION 7 7270
LEFT SITE AT _____ DATE 9/24/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	27.8	
REMAINING TO BE SHIPPED		

Ticket # R 76596

TRANSPORTER'S SIGNATURE Bob Willey DATE 9/24/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 9/24/92 ARR TIME 9:28

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

RECEIVED
SEP 11 1992
DEP
Central - Rec.

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EXCLUDES PILE #1

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 165 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/GAS @ 5K
STREET BLDG. 605 ; TANK #5 16,84,89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? ___Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline ___ #2 oil ___ #4 oil ___ #6 oil ___ other (specify) DIESEL
ANALYSES ATTACHED?
Volatiles: ✓Y ___N TPH: ✓Y ___N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION AJ185 MA
TRAILER REGISTRATION 40670 MA
LEFT SITE AT 8:15 Am DATE 9-24-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	33.87	___
REMAINING TO BE SHIPPED	___	___

Ticket # 76592

TRANSPORTER'S SIGNATURE [signature] DATE 9-24-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/24/92 ARR TIME 9:04

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

RECEIVED
SEP 11 1992
DEP
Central - Rec.

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EXCLUDES PILE #1

164

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: _____ DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US ARMY
AFZD-EM, BOX. 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 2 DIES @ 10K 1 DIES/6NS @ 5K
STREET BLDG. 605 ; TANK #s 16, 84, 89
TOWN FORT DEVENS
STATE MA 01432
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 350 wt (tons) 525 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
vol (cu yds) speedy dri _____ other (specify) _____

TYPE OF CONTAMINATION:
✓ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N PCB's - Yes

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221-8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE STREET
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 9/10/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): [signature] DATE: 17 Sep 92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39223
LEFT SITE AT 755 DATE 92492
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	33.30	
REMAINING TO BE SHIPPED		

Ticket # 76588

TRANSPORTER'S SIGNATURE Ron DATE 9/24/92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE [signature] DATE 9/24/92 ARR TIME 8:57

RECEIVED
SEP 11 1992
DEP
Central - Rec.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL Protection
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

EXCLUDES PILE #1

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN
ARRIVED JOB
LEFT JOB

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY
CARRIER

TICKET #R 76362

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG
FORT DEVENS, MA 01433
PO# 076106

MIX # 475 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:47:31	31300	65480	96780	32.74

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
2	69.27	2:47:31 pm Sep 22, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY 149

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN
ARRIVED JOB
LEFT JOB

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY
CARRIER

TICKET #R 76364

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16+84 +85
FORT DEVENS, MA 01433
PO# 076106

MIX # 475 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:55:38	31000	63980	94980	31.99

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
3	101.26	2:55:39 pm Sep 22, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY 150

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK #
CARRIER

TICKET #R 76588

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16 + 84 + 85
FORT DEVENS, MA 01433
PO# 076121

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
8:57:40	31000	66600	97600	33.30

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
1	33.30	8:57:41 am Sep 24, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 164

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK #
CARRIER

TICKET #R 76592

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG
FORT DEVENS, MA 01433
PO# 076121

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
9:04:47	31300	67740	99040	33.87

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
2	67.17	9:04:48 am Sep 24, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 165

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY H[illegible]RIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB _____
CHECK #

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY ___

CARRIER

TICKET #R 076136596

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16+84+85
FORT DEVENS, MA 01433
PO# 076121

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
9:28:39	32500	59640	92140	29.82

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
3	96.99	9:26:39 am Sep 24, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY BW 166

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY H[illegible]RIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB _____
CHECK #

[illegible]ash ☐ C.O.D. ☐ Charge ☑
CHECKED BY _____

CARRIER

TICKET #R 076136697

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG
FORT DEVENS, MA 01433
PO# 076121

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
9:36:58	31000	68180	99180	34.09

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
4	131.08	9:36:58 am Sep 24, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY BW 167

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
ANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB _____

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY _____
CHECK #
CARRIER

TICKET #R 76417

Customer # ATE001 Job # BLDGFD MIX # #75 MIX NAME GAS SOIL TRUCK# 9

ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

US ARMY
BLDG 605 Tank 16 + 84 + 89
FORT DEVENS, MA 01433
PO# 076106

Time	Tare	Net	Gross	Total
8:50:27	31000	72920	103920	36.46

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
1	36.46	8:50:28 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 153

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
NVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB _____

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY _____
CHECK #
CARRIER

TICKET #R 76420

stomer # ATE001 Job # BLDGFD MIX # #75 MIX NAME GAS SOIL TRUCK# 9

TEC ASSOC.
2 ACCORD PARK DRIVE
ORWELL, MA 02061
17-878-6200

US ARMY
BLDG 605 Tank 16 + 84 + 89
FORT DEVENS, MA 01433
PO# 076106

Time	Tare	Net	Gross	Total
8:57:22	27000	72840	99840	36.42

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
2	72.88	8:57:22 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

154

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
DANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK # CARRIER

TICKET #R 76469

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16+84+85
FORT DEVENS, MA 01433
PO# 076116

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
11:31:39	31000	68660	99660	34.33

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
4	142.84	11:31:39 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 15

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
DANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK # CARRIER

TICKET #R 76471

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG
FORT DEVENS, MA 01433
PO# 076116

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
11:38:11	27000	75580	102580	37.79

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
5	180.63	11:38:12 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 15

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB ~~CHECK #~~
CARRIER

TICKET #R P.O. P076 H6539

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16 + 84 + 85
FORT DEVENS, MA 01433
PO# 076116

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:53:40	27000	74720	101720	37.36

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost
	6				

Load#	Job Total	Time & Date	Fob/Del
7	251.92	2:53:40 pm Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY BB 162

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB ~~CHECK #~~
CARRIER

TICKET #R P.O. P076 H6537

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16 + 84 + 85
FORT DEVENS, MA 01433
PO# 076116

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:44:27	31000	67860	98860	33.93

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost
	6				

Load#	Job Total	Time & Date	Fob/Del
6	214.56	2:44:27 pm Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY 160

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
DANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB ~~CHECK #~~

Cash ☐ C.O.D. ☐ Charge ☑

CHECKED BY _____

CARRIER

TICKET #P.O. 076106367

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG
FORT DEVENS, MA 01433
PO# 076106

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
3:12:39	27960	63100	91060	31.55

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
4	132.81	3:12:39 pm Sep 22, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY RED 151

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
ANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN
ARRIVED JOB
LEFT JOB ~~CHECK #~~

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY
CARRIER

TICKET #R 76356

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-378-6200

Job # BLDGFD
US ARMY
BLDG 605 Tank 16+84 +85
FORT DEVENS, MA 01433
PO# 076106

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:30:08	27500	73060	100560	36.53

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
1	36.53	2:30:08 pm Sep 22, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY 148

2.12 PERMITS AND CERTIFICATIONS

The following permit was obtained for the proper closure of a UST. Following the permit there is a disposal receipt for the steel UST.

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

_____ 19

C.32 S.40 M.G.L.
DIG SAFE NUMBER
92160232
Start Date 4/16/92

In accordance with the provisions of Chapter 148, G.L. as provided in Section 38A this permit is granted to

Name: ATEC ENVIRONMENTAL ASSOCIATES INC
Full name of person, firm or Corporation

To transport underground steel storage tank(s) to Approved tank yard# 14901

BLDG # 605
TANK # 16
10,000 GAL
DIESEL

State clearly type of inert gas used in steel storage tank

steel tank: DRY ICE
method

FDID# 17919

Name and address of contractor disposing tank SAME AS ABOVE

Fee paid $ N/A

Location to which tank will be transported

14901
Approved tank yard#

This permit will expire 5-13 1992

Signature of official granting permit (TITLE) Asst Fire Chief
(Head of Fire Dept.)

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD: JOHN C. TOMBARELLO & SONS, 207 ALDRSTON ST., LAWRENCE, MASS. 01841

APPROVED TANK YARD NO. 1 4 9 0 1

Tank Yard Ledger 502 CMR 3.03(4) Number: 9 2 0 0 7 2 4

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership Atec Environmental and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FDID# 1 7 9 1 9 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

James Morando	CPW	5-1-92
SIGNATURE	TITLE	DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 1 7 9 1 9 pursuant to 502 CMR 3:00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)

FORM F.P. 291 (rev. 9/88) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

DIMENSIONS

	Width (feet)		Length (feet)
Tank 1	8'4"	X	35'7"
Tank 2	-----	X	-----
Tank 3	-----	X	-----
Tank 4	-----	X	-----
Tank 5	-----	X	-----

Tank Removed From

Ft. Devens Bldg. #605: tank #16
(no. street)

Ayer
(city or town)

Fire Department Permit # None-listed
(if applicable)

2.13 UST CLOSURE CHECKLIST

The following closure checklist was produced by ATEC Associates Inc., to ensure quality control of the proper abandonment of a UST.

POST-CLOSURE Q/C CHECK LIST				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Remove tank, piping, pumps, and hardware.	4/30/92	11:00	Photographic Descriptions:	Soil Description: 0-1' mixed brown fine sand
Photograph excavation; note descriptions.			Photo 1: Tank	w/little [illegible] sand [illegible]
Sketch Schematic			Photo 2: Tank	[illegible] 1'-9' light brown fine
			Photo 3: excavation SE face	sand, little fine-coarse gravel, trace
			Photo 4: NW face SE	pebble boulder
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	4/30/92	11:05		Depth of Excavation: 9'
				local area of [illegible] at center
Secure tanks transport off-site	5/1/92	8:00		[illegible] NW end [illegible]
				2-3' high berm sep from adj 10,000 gal UST
Obtain 10 soil samples from	5/1/92	3:30	PID (ppm) NDIR (ppm)	Sample locations: see schematic (3.0-4.5 deg.)
excavation walls/bottom: Note PID/NDIR			SS1: 0.0	S wall
readings and sample locations.			SS2: 0.2	S wall
			SS3: 18.6	W wall ⇒ stained
			SS4: 1.0	W wall
			SS5: 0.4	N wall (berm)
			SS6: 0.2	N wall (berm)
			SS7: 5.8	E wall (berm) ⇒ stained
			SS8: 1.0	E wall (berm)
			SS9: 14.2	bottom ⇒ stained
			SS10: 1.8	bottom
			Formations of [illegible] USTs 16, 84, &	1-10,000 gal tested as [illegible]
			excavation. See schematic	
Obtain 2 soil samples & 1 water samples	5/1/92	3:45		Sample Locations:
for laboratory analysis. Note sample locations.				LSS1: ≈ SS3
				LSS2: ≈ SS7
				LWS1:

UST-CLOSURE O/C CHECK LIST	UST 16	- 10,000	gal diesel PID, [illegible]	
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Calibrate PID & LEL/O2 meters	4/30/92			Site Topography: level mod downgrade
				rng - E ≈ 350 SE of site
Drain & flush piping & pumps	4/30/92	8:30		
Excavate to top of tank	4/29/92	9:00-11:00		Depth to tank: 2'
				Asphalt surface cover
ent tank note LEL/O2 levels & times	4/30/92		LEL / O2	
		T1: 11:30	0 / 20.9	
		T2: 11:40	0 / 20.9	
		T3: 11:50	0 / 20.9	
		T4: 12:00	0 / 20.9	
		T5: 1:00	0 / 20.9	
		T6: 1:15	0 / 20.9	
		T7: 1:30	0 / 20.9	
		T8: 1:45	0 / 20.9	
		T9: 2:00	0 / 20.9	
		T10: 2:15	0 / 20.9	
		T11: 2:30	0 / 20.9	
		T12:		
Pump & clean tank:	4/30/92	10:00	1250 gal. liquid	Tank Dimensions: 35L x 7D
Note quantities liquid (gal) & sludge (lbs)	4/29/92		40 ~~lbs.~~ sludge	good condition, no holes, perf or
				rust. Asphalt coating intact
Remove all tank connections, and cap openings	4/30/92	9:00		trace sheen on crown. Piping
				good condition
Excavate soils to free tank	4/30/92	10:30		
Segregate stained soils: Note PID readings			PID (ppm) / NDIR (ppm)	
(if >10 ppm NDIR also) ⇒ soils around			46	spill-1A (visible contam)
spill containment (visible contam)			1.0	stock-1 (not vis contam)
dark stained ⇒ segreg ⇒ (≤1 cy)			2.8	stock-2 (not vis contam)
other soil [illegible]			10.2	stock-3 (not vis contam)
not visibly contam ⇒ slight				
odor				Stock 1, 2 ⇒ soil reg to free with
				UST No. 16 & add 10,000 gal diesel

CLOSURE Q/C CHECK LIST

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
				____ tons of backfill
Backfill excavation (if clean): Not completed as of 5/15/92				Backfill description:
Note amount & type of backfill				
Close open excavation (if applicable) Not completed as of 5/15/92				
Restore surface and rope off	4/30/92	3:00	roped off surface/not surface restored	
Remove rubbish/debris	4/30/92	3:15		
Transport hazardous material off-site:				Amount / Classification
Note amount/classification	4/16/92	11:00		1250 gal / NH R70
Make copies of manifests, permits,				
and disposal receipts.				

2.14 INSTALLATION

The installation of a replacement UST No. 0016 was not performed.

3.0 UST No. 0017

3.1 POST REMOVAL REPORT

3.1.1 Introduction

This Post Removal Report details the results of the closure of one 5,000-gallon, single wall, steel, underground storage tank (UST) referenced as UST No. 0017, located at property known as Building 606, Fort Devens, Massachusetts (the site). The purpose of the closure was to excavate the UST and to evaluate the potential for the presence of oil and hazardous material at the site. The closure of this UST was conducted on May 26, 1992.

The basic Project Work Scope included:

- Procurement/administration of all federal, state and local permits, manifests, regulations, etc., associated with UST system closure.

- Excavating, venting, cleaning, transporting, and disposing of one 5,000-gallon UST by appropriately licensed contractors/facilities.

- Disposal of residual UST materials at a licensed facility.

- Field screening and analysis of soil in the excavations by a Photoionization Detector (PID) and field analyzed with a portable Non-Dispersive Infrared (NDIR) Analyzer, to identify evidence of the release of oil and hazardous materials from the UST, if any.

- Laboratory analysis of soil sampled from the UST excavation by a USEPA certified laboratory for Total Petroleum Hydrocarbons (TPHs) (USEPA Method 418.1).

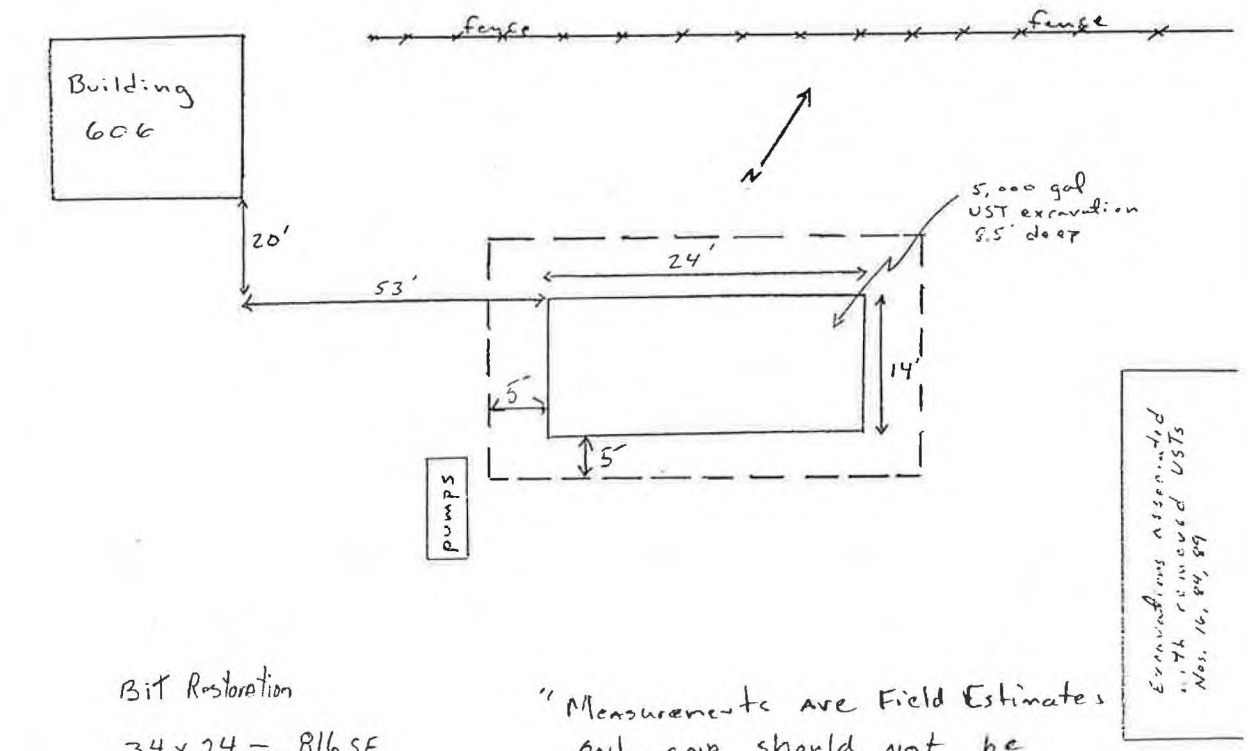
- Preparation of a Technical Report, to include assimilation of information gathered, major findings and conclusions.

3.1.2 Subsurface Storage Tank Excavation and Removal

On May 26, 1992, one 5,000-gallon, subsurface, diesel fuel storage tank was excavated and removed from the site. The UST was located approximately 57 feet southeast of the southeast corner of Building 606. Topography on the site appeared level. Surface cover at the site consists of asphalt. A Site Plan has been provided as Figure 3.1.

The tank was covered by approximately 1.5 feet of soil. Soil required to free the tank was visibly contaminated. Staining was noted in the west end of the tank in the vicinity of the fill pipe, at the east end by associated piping, and in the tank center by the spill containment manway. This soil was segregated from other stockpiled soils. Soil within the excavation consisted primarily of light brown, fine to medium sand with traces of coarse sand, some fine to coarse gravel, and a trace of cobbles and boulders. Some of the tanks asphalt coating and the asphalt surface cover at the site were noted within the excavation. The bottom of the excavation was approximately 8.5 feet below grade. Groundwater was not encountered within the excavation.

The associated piping was drained and tank connections were removed. Piping inspection revealed corrosion, and some areas of leakage were observed near the east end of the tank. UST No. 0017 was estimated to contain approximately 5,000 gallons of diesel fuel and residuals. Approximately 4,875 gallons of diesel fuel were removed on May 21, 1992 and transported to a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Hitchcock Gas Engine Company, Bridgeport, Connecticut).



Bit Restoration

34 x 24 = 816 SF

"Measurements are Field Estimates only and should not be used for exact measurements"

UST LOCATION PLAN 5,000 gallon UST relative to: Building 606 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 3.1	ATEC

Following venting of the tank, an access way was cut in the end of the tank to allow entry for cleaning. The tank was then entered and vacuumed/wiped clean of any residual material. Approximately 125 gallons of diesel fuel and tank residuals were removed from the tank and drummed on May 26, 1992, and transported to Cyn Environmental Services, Inc., Stoughton, MA, on June 5, 1992 and to Pollution Solutions of Vermont, Williston, VT, on July 6, 1992. See Section 3.10 for copies of the appropriate hazardous waste manifests. A copy of the Commonwealth of Massachusetts Tank Removal Permit is included in Section 3.11.

Tank openings were then capped and the tank was removed from the excavation. Upon excavation and removal, the tank was observed to be in good condition with no holes, perforations, or severe corrosion.

The scrap tank was disposed at Tombarello & Sons, a licensed Massachusetts tank yard, located in Lawrence, MA, on June 2, 1992. A copy of the disposal receipt is included in Section 3.11.

3.1.3 Sampling and Analysis Plan

Ten soil samples were obtained from the excavation for field screening with a Photoionization Detector (PID) and field analyzed with a Non-Dispersive Infrared (NDIR) Analyzer. The PID field screening for Total Organic Vapors (TOVs) was conducted with an HNu photoionizer utilizing the jar headspace screening procedures outlined in the Hazardous Materials Containment Plan. The NDIR field screening for Total Petroleum Hydrocarbons (TPH) was conducted with a Horiba OCMA 220, utilizing the procedures outlined in the Hazardous Materials Containment Plan.

Building 606

LEGEND:

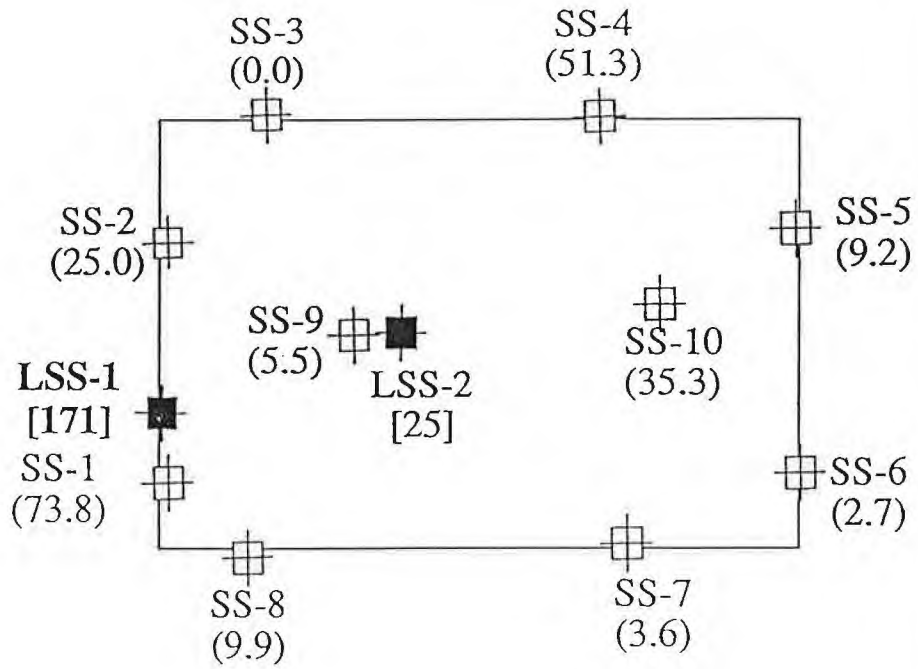
Field Screened Soil Sample

Lab Analyzed Soil Sample

( ) NDIR Results in ppm

[ ] Lab Analysis Results in ppm

Results in bold denote levels in excess of MA DEP Remedial Goal Level (100 ppm)



SAMPLING SCHEMATIC 5,000 gallon UST excavation at: Building 606 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 3.2	ATEC

Eight of the samples (SS-1 to SS-8) were obtained from the excavation walls at a depth of approximately 3 to 5 feet below grade. Two of the samples (SS-9 and SS-10) were obtained from the bottom of the excavation at a depth of approximately 8.5 feet below grade.

Three composite soil samples (Stock-1, Stock-2, and Stock-3) were obtained from stockpiled soils for PID and NDIR field screening. Stockpile soil sample Stock-1 was obtained from visually uncontaminated areas of stockpiled soil. Stock-2 was obtained from visually contaminated areas of stockpiled soil. Stock-3 was obtained from segregated soil obtained in the vicinity of the fill pipe, spill containment manway, and tank piping near the east end of the former UST.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for TPH laboratory analysis. Soil sample LSS-1 was obtained from the southeast wall of the excavation. Soil sample LSS-2 was obtained from the bottom of the excavation at a depth of 8.5 feet below grade. These samples were analyzed for TPH utilizing USEPA Method 418.1.

Sampling locations are depicted on the Sampling Schematic attached as Figure 3.2. The appropriate chain of custodies are included in Section 3.9, Chain of Custody Forms.

3.1.4 Analytical Results

The results from analysis with the PID and the NDIR analyzer of the ten soil samples obtained from the excavation, and the two composite samples obtained from stockpiled soil are shown in Table 3.1 as follows:

TABLE 3.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOV)	NDIR (ppm TPH)
SS-1	3.7	73.8
SS-2	0.0	25.0
SS-3	0.2	N.D.
SS-4	0.8	51.3
SS-5	0.0	9.2
SS-6	0.1	2.7
SS-7	0.1	3.6
SS-8	0.2	9.9
SS-9	1.0	5.5
SS-10	0.1	35.3
Stock-1	2.2	102.5
Stock-2	9.8	129.2
Stock-3	15.8	272.4

Laboratory analytical results of the two soil samples obtained from the excavation revealed TPH concentrations of 171 ppm for LSS-1 and 25 ppm for LSS-2. (See Section 3.8, Laboratory Analytical Results).

3.1.5 Conclusions and Recommendations

ATEC's conclusions are as follows:

Upon excavation and removal, the tank was observed to be in good condition with no holes, perforations, or severe corrosion. Inspection revealed associated piping to be corroded; evidence of leakage was observed in the vicinity of piping located at the east end of the tank.

Groundwater was not encountered within the excavation.

Excavated soils required to free the tank appeared to be visibly uncontaminated. Soil staining was noted at the west end of the tank in the vicinity of the fill pipe, at the east end in the vicinity of associated piping, and in the center of the tank in the vicinity of the spill containment manway. This soil was segregated. Other excavated soil required to free the tank was also noted to have a slight petroleum odor, and was separately stockpiled. Soil within the excavation was not visibly contaminated.

Ten soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR analysis respectively. PID readings revealed TOV concentrations ranging from 0.0 to 3.7 ppm. NDIR results revealed TPH concentrations ranging from 0.0 to 73.8 ppm.

Two soil samples were obtained from the excavation for laboratory analysis for TPH utilizing USEPA Method 418.1. Analytical results for LSS-1 obtained from the southwest wall of the excavation revealed a TPH concentration of 171 ppm. Analytical results for LSS-2 obtained from the excavation bottom revealed a TPH concentration of 25 ppm.

Three composite stockpile soil samples (Stock-1, Stock-2, and Stock-3) were obtained from excavated stockpiled soils required to free the tank for PID and NDIR screening. Stock-1 was obtained from visually and olfactory uncontaminated stockpiled soil. Stock-2 was obtained from segregated olfactory contaminated stockpiled soil. Stock-3 was obtained from visibly contaminated segregated soil from the vicinity of the fill pipe, spill containment manway, and piping located at the east end of the tank. PID results revealed TOV concentrations of 2.2 ppm, 9.8 ppm, and 15.8 ppm for Stock-1, Stock-2, and Stock-3, respectively. NDIR results revealed TPH concentrations of 102.5 ppm, 129.2 ppm, and 272.4 ppm for Stock-1, Stock-2, and Stock-3, respectively.

ATEC's recommendations are as follows:

Conduct remedial excavation until background levels of <100 ppm TPH by laboratory analysis is attained. Field screening of soil should be conducted during excavation utilizing a Photoionizing Detector until background levels of <1 ppm are attained prior to obtaining samples for laboratory analysis.

Advance soil borings and install groundwater monitoring wells to determine the vertical and horizontal extent of contamination. Continuous split spoon sampling and analysis will be conducted utilizing field analysis techniques, i.e. PID and NDIR Analysis, and laboratory analysis to document soil contamination levels as specified in the Hazardous Waste Containment Plan.

Stockpiled soils should be laboratory analyzed for Total Petroleum Hydrocarbons, Volatile Organic Compounds, PCBs, 13 TCLP Metals, Flashpoint, Sulfide Reactivity, Cyanide Reactivity, and Corrosivity for disposal classification.

3.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

3.2.1 Site Remediation

Site remediation was not performed relative to UST No. 0017.

3.2.2 Soil Stratigraphy

Soil stratigraphy was not determined relative to UST No. 0017.

3.2.3 Contaminated Soil Disposal

Soil excavated during the removal of UST No. 0017 was utilized as backfill for the former UST No. 0017 excavation.

3.3 BACKFILL

The excavation was backfilled with native soil removed in excavation activities.

3.4 SURFACE RESTORATION

Approximately 329 square feet of bituminous concrete was replaced to complete surface restoration.

3.5 HYDROGEOLOGICAL SERVICES

Hydrogeological services were not performed relative to UST No. 0017.

3.7 PHOTOGRAPHIC DOCUMENTATION

The following photographs are of the removed UST and of the excavation:

A-1: One side of removed tank.

A-2: Opposite side of removed tank.

A-3: Excavation as viewed from east, facing west.

A-4: Excavation as viewed from west, facing east.

A-1

A-2

PHOTO DOCUMENTATION 5,000 gallon UST removal at: Building 606 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451	ĀTEC

3.7 OCMA 220 DATA SHEETS

The following information was organized from the data collected from the Non-Dispersive Infrared analyzer.

ATEC Associates, Inc.

Consulting Geotechnical, Materials and Environmental Engineers

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 UST 0017

DATE: May 29, 199

OPERATOR: Charles Langenhagen

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	2.6	0.0	-1.0	0.0	-0.2	0.0	26.8
SPAN:	31.1	40.0	45.0	40.0	40.8	40.0	
ZERO:	7.8	0.0	-7.0	0.0	-0.9	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	2nd	3rd	CONCENTRATION mg/l
STOCK-1	86.2	79.8	17.5	3.0	–	–	3.2	3.2	–	102.5
STOCK-2	87.2	79.9	17.5	3.0	–	–	4.4	4.6	–	139.2
STOCK-3	87.5	80.5	17.5	3.0	–	–	8.8	9.3	–	272.4
SS-1	87.6	80.1	17.5	3.0	–	–	2.5	2.7	–	73.8
SS-2	88.7	80.5	17.5	3.0	–	–	0.9	1.0	–	25.0
SS-3	86.1	80.2	17.5	3.0	–	–	0.0	0.0	–	0.0
SS-4	86.2	80.2	17.5	3.0	–	–	1.6	1.5	–	51.3
SS-5	87.0	80.3	17.5	3.0	–	–	0.1	0.3	–	9.2
SS-6	87.1	79.6	17.5	3.0	–	–	0.3	0.1	–	2.7
SS-7	86.4	80.7	17.5	3.0	–	–	0.1	0.1	–	3.6
SS-8	85.7	79.5	17.5	3.0	–	–	0.2	0.3	–	9.9
SS-9	87.3	79.9	17.5	3.0	–	–	0.2	0.2	–	5.5
SS-10	85.6	79.8	17.5	3.0	–	–	1.2	1.0	–	35.3

3.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports were organized and provided by Environmental Science Services Inc. Results are included for:

- LSS-1 and LSS-2: Soil samples obtained from original excavation. Laboratory analyzed for TPH.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON-IR
Method 418.1

Client: ATEC Environmental Consultants

Client Project ID: Fort Devens, UST 17 Bldg 606

ESS Project ID: 921370

Date Samples Received: 5/27/92

Date Reported: 6/3/92

Client ID	Lab ID	Results	Units	MRL	% Solids
LSS #1	921370-01	171	mg/Kg	10	96%
LSS #2	921370-02	25	mg/Kg	10	97%

N/A = Not Applicable

MRL = Method Reporting Limit

Note: Results reported on a dry weight basis.

Approved by: _____
David Dickinson
Laboratory Director

Date: 4 June 92

3.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil samples which were laboratory analyzed. Please see laboratory reports for date analyzed or date sample was received, if not on chain of custody form.

PO 3707723 32

CHAIN OF CUSTODY RECORD

PROJ. NO. 07.451

PROJECT NAME UST 17 - Bldg 606

CLIENT Ft. Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E Zalik

SAMPLING METHOD grab

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER			VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY		SAMPLE LOCATION / REMARKS
LSS-1	5/26/92			X		X				X		1						X						
LSS-2	5/26/92			X		X				X		1						X						

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E Zalik	5/26/92	[illegible] 5/27			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

CHAIN OF CUSTODY RECORD

PROJ. NO. 67-451

PROJECT NAME [illegible]

CLIENT [illegible]

LAB PROJ. NO.

SAMPLERS: *(Signature)* [illegible]

SAMPLING METHOD [illegible]

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
[illegible]-1	5/12/92			✓		✓				✓		1				✓							split
[illegible]-2	5/12/92			✓		✓				✓		1				✓							split

Relinquished by: *(Signature)* [illegible] — Date / Time 1/12 1510 — Received by: *(Signature)* [illegible]

Relinquished by: *(Signature)* — Date / Time — Received by: *(Signature)*

Relinquished by: *(Signature)* — Date / Time — Received for Laboratory by: *(Signature)* — Date / Time — Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

3.10 HAZARDOUS WASTE MANIFEST

UST No. 0017 was estimated to contain approximately 5,000 gallons of diesel fuel. Approximately 4,875 gallons of diesel fuel were removed on May 21, 1992, and transported to a licensed Transportation and Storage Disposal Facility (TSDF) (Hitchcock Gas Engine Company) on May 21, 1992. Approximately 125 gallons of diesel fuel and tank residuals were removed from the tank and drummed on May 26, 1992. Some of the drums were transported to Cyn Environmental Services, Inc., Stoughton, MA, on June 5, 1992. The remaining drums were transported to Pollution Solutions of Vermont, Williston, VT, on July 6, 1992. Please review attached letter dated July 14, 1992, regarding Fort Devens drum disposal.

The following Hazardous Waste Manifests were generated from tank materials.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

4043R

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA7210010215154 — Manifest Document No. FD12620

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: U.S. Army Ft. Devens 508-796-3002, AFZD-EN, Box 19, Ft. Devens, Ma. 01433-5190

4. Generator's Phone: 508-796-3002

5. Transporter 1 Company Name: Lincoln Environmental, Inc.

6. US EPA ID Number: RI1D981211921627

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address: CYN Environmental Services, 1771 Washington St., Stoughton, Ma. 02072

10. US EPA ID Number: MAD031371771

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ, Waste Oil, n.o.s., Combustible Liquid, NA1270	34	DM	13600	P
b. 955 gls				
c.				
d.				

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. Waste Oil Water

K. Handling Codes for Wastes Listed Above
a. S01 b. T15D

15. Special Handling Instructions and Additional Information: In Case Of Emergency 24 Hour Contact Chemtrec 1-800-424-9300 OR Lincoln Environmental 1-800-659-3353 ERG# 27 Attached
24HR 508-796-2117

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Mark Bosse — Signature — Date: Month 06 Day 05 Year 92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RANDALL GRIFFIN — Signature — Date: Month 06 Day 25 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space: REJECT 17 DRUMS TO GENERAL CHEMICAL CO (508) 872-5200 33 CELCOM ST FRAMINGHAM, MA 01701 MAD 019371079

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Alan E. Steen — Signature — Date: Month 06 Day 05 Year 92

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

Form Approved OMB No. 2050-0039, Expires 9-30-92
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 1: FACILITY MAILS TO DESTINATION STATE

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA 7 2 1 0 0 2 5 1 5 4 — Manifest Document No. FD 7 4 7

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: U.S. Army Ft. Devens — 508-796-3002
~~AFZD-EN~~, Box 19, Ft. Devens, Ma. 01433-5190
4. Generator's Phone 508-796-3002

A. State Manifest Document Number: MA 6113102
B. State Gen. ID: Bldg. 2613

5. Transporter 1 Company Name: Lincoln Environmental, Inc. — 6. US EPA ID Number: R I D 9 8 2 1 9 2 6 2 7
C. State Trans. ID: RI 49456
D. Transporter's Phone: (401) 232-3353

7. Transporter 2 Company Name — 8. US EPA ID Number
E. State Trans. ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CYN Environmental Services, 1771 Washington St., Stoughton, Ma. 02072 — 10. US EPA ID Number: M A D 0 8 2 3 0 3 7 7 7
G. State Facility's ID: Not Required
H. Facility's Phone: (617) 344-0265

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Waste Oil, n.o.s., Combustible Liquid, NA1270	34	DM	13600	P	STATE MA01
b.					
c.					

Additional Descriptions for Materials Listed Above (include physical state and hazard code): a. Waste oil - Water

K. Handling Codes for Wastes Listed Above: a. c. b. d.

15. Special Handling Instructions and Additional Information: In Case Of Emergency 24 Hour Contact Chemtrec 1-800-424-9300 OR Lincoln Environmental 1-800-659-3353 ERG# 27 Attached
24HR 508-796-2117

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Mark Boser — Signature: [signature] — Date: Month 06 Day 05 Year 92

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RANDALL GRIFFIN — Signature: [signature] — Date: Month 06 Day 05 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Date: Month Day Year

Approved OMB No. 2050-0039, Expires 9-30-92
Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

MA 6113102 COPY 1: FACILITY MAILS TO DESTINATION STATE

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA 7 2 1 8 8 2 5 1 5 4 — Manifest Document No. FD 7 1 6 5

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: U.S. ARMY, FT. DEVENS (MB) (MA) AF-ZB-EM, Box 19, Fort Devens ~~Devens~~ Ma. 01433-5190 FT. DEVENS

4. Generator's Phone (508) 796-3002

A. State Manifest Document Number: MA G113114

B. State Gen. ID: Same

5. Transporter 1 Company Name: Lincoln Environmental, Inc.

6. US EPA ID Number: R I D 9 8 2 1 9 2 6 2 7

C. State Trans. ID: RI 4 9 4 5 6 4 2 9 6 5

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (401) 232-3353

E. State Trans. ID

9. Designated Facility Name and Site Address: Pollution Solutions of Vermont Inc, 2 Avenue D, Williston, VT. 05495

10. US EPA ID Number: V T D 9 8 2 7 6 6 5 3 7

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (802) 860-1200

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) (MB)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Liquid, n.o.s., ORM-E, NA 9189 (oil sludge, 111 Tri) F002	014	DM	07000	G	F 0 0 2
b. Hazardous Waste Solid, n.o.s., ORM-E, NA 9189 (freon, TPH Soil) F002	006	DM	01800	P	F 0 0 2
c. Non RCRA, Non D.O.T. Regulated Oily Solids (PPE, Rags, Pads)	003	DM	00900	P	state VT09 ~~VT06~~ (MB)
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.) (MB)

a. Vermont code ~~VT06~~ VT09 — c. Non Hazardous Solids

b. VT. Code ~~VT06~~ VT04 Solid (MB) — d.

K. Handling Codes for Wastes Listed Above: a. c. b. d.

15. Special Handling Instructions and Additional Information: 24 Hour Emergency Contact U.S. MRC at 508-796-2117 or Lincoln Environmental at 800-659-3353

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: Mark Boser — Signature: [signature] — Date: Month 07 Day 06 Year 92

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: DANIEL L. LONGLEY — Signature: [signature] — Date: Month 07 Day 06 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date: Month Day Year

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Printed/Typed Name — Signature — Date: Month Day Year

Form Approved OMB No. 2050-0039, Expires 9-30-92
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY>1: FACILITY MAILS TO DESTINATION STATE

MA G113114 COPY>1: FACILITY MAILS TO DESTINATION STATE

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. MA7210025154	Manifest Document No. FD729	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
U.S. ARMY, HQS, FORT DEVENS
AFZD-EM, BOX 19, FT. DEVENS, MA-01433-5190
4. Generator's Phone (508) 796-3002

A. State Manifest Document Number: CT F 0124257
B. G.S.I. (Gen. Site Address): Bldg #606

5. Transporter 1 Company Name: Hitchcock Gas Engine Co
6. US EPA ID Number: CTD002593887
7. Transporter 2 Company Name
8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) CT-99362
D. Tran. Phone (800) 688-0093

9. Designated Facility Name and Site Address
Hitchcock Gas Engine Co
50 Crop Street
Bridgeport, CT 06610
10. US EPA ID Number: CTD002593887

E. S.T.I. (Trans. Lic. Plate #)
F. Tran. Phone ( )
G. State Facility's ID (Not Required)
H. Facility's Phone (203) 334-4812

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NA1993 RQ, Waste Fuel Oil, Combustible Liquid	001	TT	0487.5	G	EPA D001 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above: Interim	Final	Interim	Final
a. Diesel Fuel + WATER	c. non-RCRA hazardous	a.		c.	
b. D001	d.	b.		d.	

15. Special Handling Instructions and Additional Information
24 hr. Emergency Contact # - (508) 796-2220 DAKF90 C0013 (ATEC) UST Removal
ERG #27 ATTACHED (FOR recycle)
Point of Departure: Ayer (Ft Devens) MA

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
Mark Boser	Mark Boser	05 21 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Dennis J. White	Dennis J White	05 21 92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

COPY 1: FACILITY MAILS TO DESTINATION STATE

CT F 0124257

Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039. Expires 9/30/94. Previous edition is obsolete.

3.11 BILLS OF LADING AND WEIGHT RECEIPTS

Contaminated soil disposal was not required at this site.

3.12 PERMITS AND CERTIFICATIONS

The following permit was obtained for the proper closure of a UST. Following the permit there is a disposal receipt for the steel UST.

F.P. 292

The Commonwealth of Massachusetts

Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

5-8-92 (Date) 1992

C.82 S.40 M.G.L.

DIG SAFE NUMBER
92194390
Start Date 5/8/92

To: HEAD OF FIRE DEPARTMENT
Fort Devens
City or Town

In accordance with the provisions of Chapter 148, G.L. as provided in Section 38A Application is hereby made by ATEC Environmental
(Name of Person, Firm or Corporation)

62 Accord Park Dr, Norwell MA
Address

For permission to remove and transport underground steel storage tank(s) from

Bldg 6016 Quinceystown Fort Devens
Street address (city or town)

FDID# 12919 to approved Tank Yard# 14901

State clearly type of inert gas used in steel storage tank: CO_2 - Dry Ice
Type of inert gas used

Name of Person, Firm, Corporation disposing tank ATEC

Date issued - ~~rejected~~ 5/13 1992 By: [signature]
Date of expiration _____ 19 paid/due Signature of Applicant
Fee _____ (MGL C-148, S-10A)

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

5-8 (Date) 1992

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

C.82 S.40 M.G.L.
DIG SAFE NUMBER
92194390
Start Date 5/8/92

In accordance with the provisions of Chapter 148, G.L. as provided in Section 38A this permit is granted to

Name: ATEC Environmental
Full name of person, firm or Corporation

To transport underground steel storage tank(s) to Approved tank yard# 14901

State clearly type of inert gas used in steel storage tank: steel tank: Dry Ice
method

FDID# 12919

Fee paid $ _____

Name and address of contractor disposing tank ATEC

Location to which tank will be transported

14901
Approved tank yard#

This permit will expire 7/13 1992

[signature]
Signature of official granting permit (TITLE)
(Head of Fire Dept.)

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD: JOHN C. TOMBARELLO & SONS, 207 MARSTON ST., LAWRENCE, MASS. 01841

APPROVED TANK YARD NO. 1 4 9 0 1

Tank Yard Ledger 502 CMR 3.03(4) Number: 9 2 0 1 0 7 5

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership Atec Environmental and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FDID# 1 7 9 1 9 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

James Maurato	CPW	6-02-92
SIGNATURE	TITLE	DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 1 7 9 1 9 pursuant to 502 CMR 3:00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)

FORM F.P. 291 (rev. 9/88) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

DIMENSIONS

	Width		Length
Tank 1	72"	X	23'10" (5,000 gal)
Tank 2	-----	X	-----
Tank 3	-----	X	-----
Tank 4	-----	X	-----
Tank 5	-----	X	-----
	(feet)		(feet)

Tank Removed From

Ft. Devens: Bldg # 606 (Queenstown) - tank # 17
(no. street)

Ayer
(city or town)

Fire Department Permit # None-Listed
(if applicable)

3.13 UST CLOSURE CHECKLIST

The following closure checklist was produced by ATEC Associates Inc., to ensure quality control of the proper abandonment of a UST.

UST CLOSURE O/C CHECK LIST	UST	17 - 5,000 gal diesel Bldg 606		
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Calibrate PID & LEL/O2 meters	[illegible]	[illegible]		Site Topography: level [illegible]
Drain & flush piping & pumps	5/26/92	5:15		
Excavate to top of tank	5/26/92	8:30		Depth to tank: [illegible]
Vent tank note LEL/O2 levels & times	5/26/92		LEL / O2	
		T1: 1:30	0 / 20.9	
		T2: 1:45	0 / 20.9	
		T3: 2:00	0 / 20.9	
		T4: 2:15	0 / 20.9	
		T5: 2:30	0 / 20.9	
		T6:		
		T7:		
		T8:		
		T9:		
		T10:		
		T11:		
		T12:		
Pump & clean tank:	5/27/92	10:30	4875 gal. liquid	Tank Dimensions/Conditions: 17'8"L x 7'D
Note quantities liquid (gal) & sludge (lbs)	5/26/92	2:30	125 lbs. sludge	good [illegible]
				[illegible]
.nove all tank connections, and cap openings	5/26/92	8:45		[illegible]
				Piping to E end UST to tank [illegible]
Excavate soils to free tank	5/26/92	9:00		[illegible]
Segregate stained soils: Note PID readings	5/26/92	9:45	PID (ppm) / NDIR (ppm)	
(if >10 ppm NDIR also)			2.2	[illegible] (not via manifold)
[illegible] (slight vis contam)			9.5	[illegible]
[illegible] (<1 cy) also still cont & other			15.8	Tank 3 [illegible]
solid soil rep to free UST has [illegible]				
[illegible] segregg				

UST CLOSURE O/C CHECK LIST				
DEFINABLE FEATURE	**DATE**	**TIME**	**MEASUREMENTS**	**NOTES**
Remove tank, piping, pumps, and hardware.	5/26/92	11:00	Photographic Descriptions:	Soil Description: [illegible] light brown
Photograph excavation; note descriptions.			Photo 1: tank	dense coarse sand, some f. c.
Sketch Schematic			Photo 2: tank	gravel, trace silt/clay boulder.
			Photo 3: excav E face W	Coarse sand, cobbles, boulders more
			Photo 4: excav W, face E	prevalent. [illegible] well
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	5/26/92	11:05		Depth of Excavation/Conditions: 8.5'
				Soil in excav not visibly
Secure tanks transport off-site	6/2/92	2:00	to Tankwell No.	no-[illegible] [illegible]
				covered [illegible]
Obtain 10 soil samples from	5/26/92		PID (ppm) NDIR (ppm)	Sample locations: 3.0-5.0' below top schematic,
excavation walls/bottom: Note PID/NDIR			SS1: 3.7	W wall
readings and sample locations.			SS2: 0.0	[illegible]
			SS3: 0.2	N wall
			SS4: 0.8	[illegible]
			SS5: 0.0	[illegible]
			SS6: 0.1	[illegible]
			SS7: 0.1	[illegible]
			SS8: 0.2	
			SS9: 1.0	
			SS10: 0.1	[illegible]
Obtain 2 soil samples & 1 water samples	5/26/92			Sample Locations:
for laboratory analysis. Note sample locations.				LSS1: [illegible]
				LSS2: [illegible]
				LWS1:

UST CLOSURE Q/C CHECK LIST				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
				____ tons of backfill
Backfill excavation (if clean): not completed as of		6/8/92		Backfill description:
Note amount & type of backfill				
Close open excavation (if applicable) not completed as of		6/8/92		
Restore surface and rope off	5/26/92	3:30	roped off, surface not restored	
Remove rubbish/debris	5/26/92	3:30		
Transport hazardous material off-site:				Amount / Classification
Note amount/classification	5/21/92	10:30		4875 gal / NA 1993
Make copies of manifests, permits,				
and disposal receipts.				

3.14 INSTALLATION

The installation of a replacement UST No. 0017 was not performed.

4.0 UST No. 0018

4.1 POST REMOVAL REPORT

4.1.1 Introduction

This Post Removal Report details the results of the closure of one 10,000-gallon, single wall, steel, diesel underground storage tank (UST) referenced as UST No. 0018, located at property known as Building 614, Fort Devens, Massachusetts (the site). The purpose of the closure was to excavate the UST and evaluate the potential for the presence of oil and hazardous material at the site. The closure of this UST was conducted on April 14, and 23, 1992.

It should be noted that UST Nos. 0018, 0085, and 0086 were removed from a common excavation at Building 605. The removal of UST Nos. 0085 and 0086 are not documented in this volume.

The basic Project Work Scope included:

- Procurement/administration of all federal, state and local permits, manifests, regulations, etc., associated with UST system closure.

- Excavating, venting, cleaning, transporting, and disposing of one 10,000-gallon UST by appropriately licensed contractors/facilities.

- Disposal of residual UST materials at a licensed facility.

- Field screening and analysis of soil in the excavations by a Photoionization Detector (PID) and field analyzed with a portable Non-Dispersive Infrared (NDIR) analyzer, to identify evidence of the release of oil and hazardous materials from the UST, if any.

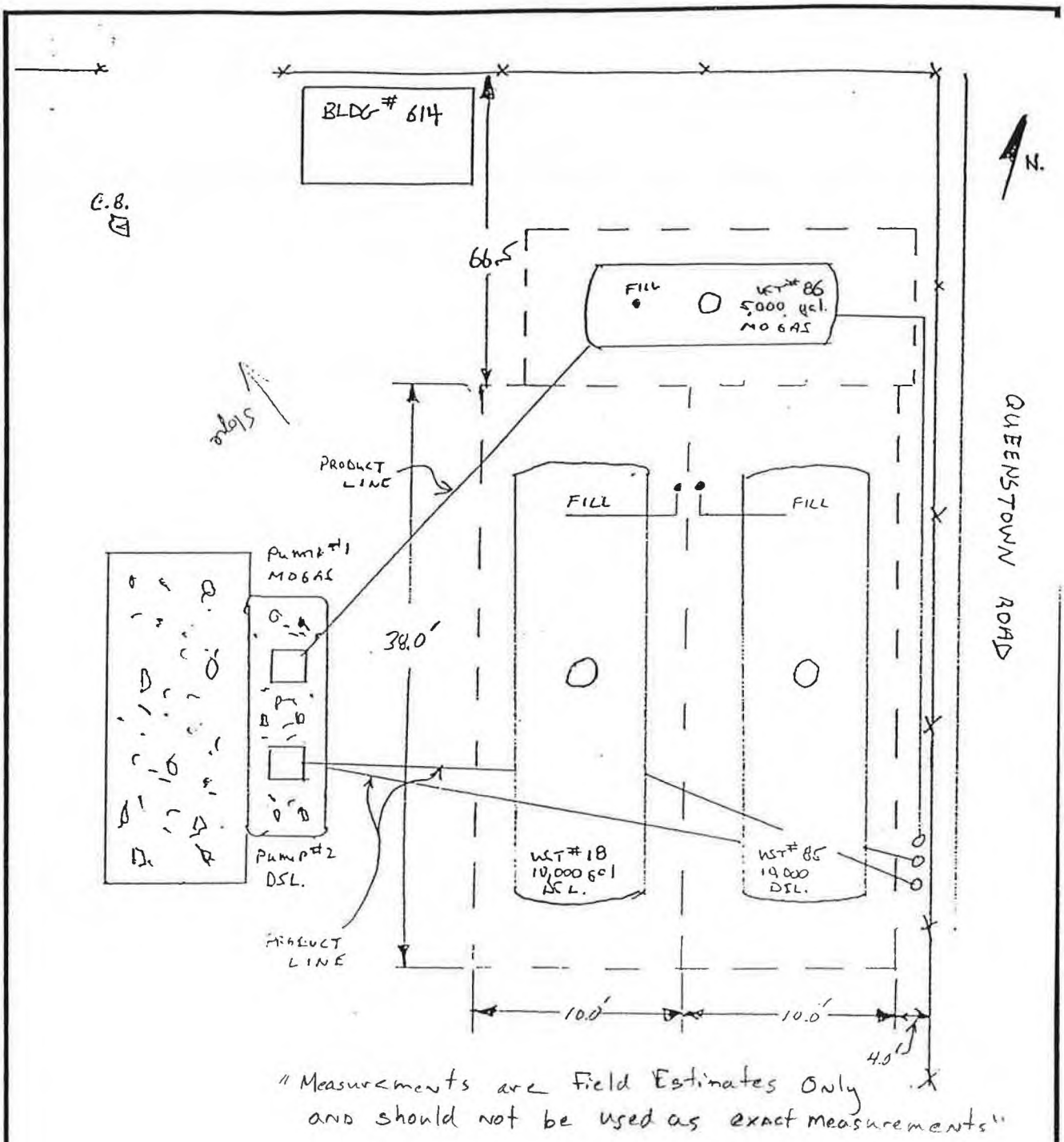
- Laboratory analysis of soil sampled from the UST excavation by a USEPA certified laboratory for Total Petroleum Hydrocarbons (TPH) (USEPA Method 418.1).

- Preparation of a Technical Report to include assimilation of information gathered, major findings and conclusions.

4.1.2 Subsurface Storage Tank Excavation and Removal

On April 14 and 23, 1992, one 10,000-gallon, subsurface, diesel fuel, storage tank was excavated and removed from the site. The UST was located adjacent to the south side of Building 614 (see UST Location Plan, Figure 4.1). Site topography gently slopes downgradient to the northwest. Surface cover at the site consisted of asphalt. The tank excavation and removal were inspected by Mr. David Salvadore representing the Commonwealth of Massachusetts Department of Environmental Protection (DEP). Prior to removal activities, approximately 1,600 gallons of diesel fuel were pumped from the tank on April 15, 1992.

The tank was covered by approximately 2.25 feet of soil. The bottom of the excavation was approximately 9.5 feet below grade. Soils in the excavation consisted primarily of light brown, fine to medium sand with some medium to coarse gravel and cobbles. Soil staining was observed in soils required to free the tank. Soil within the excavation was olfactory and visually contaminated. Groundwater was encountered within the excavation along the south wall at a depth of approximately 9.5 below grade.



UST LOCATION PLAN 10,000 gallon UST relative to: Building 614 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 4.1	ATEC©

The associated piping was drained and tank connections were removed. Inspection revealed piping to be in good condition. UST 0018 was estimated to contain approximately 1,655 gallons of diesel fuel and residuals. Approximately 1,600 gallons of diesel fuel were removed and transported to a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Olson's Greenhouses, Raynham, MA). See Section 4.10 for copies of the appropriate hazardous waste manifests.

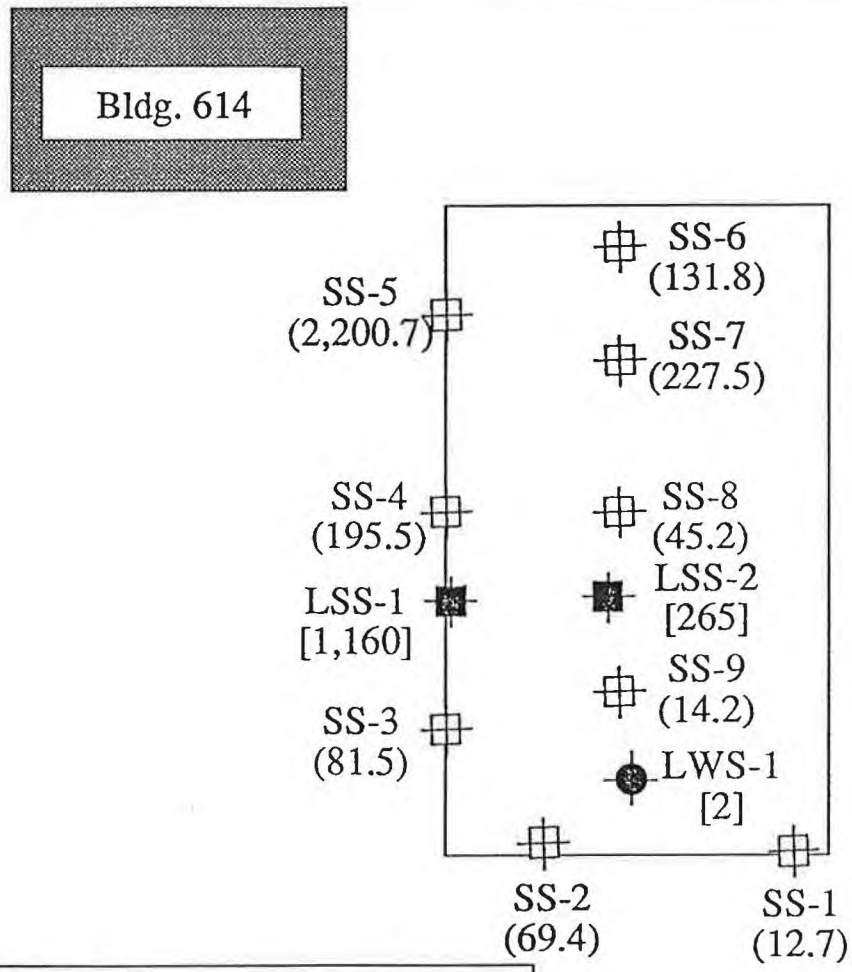
Tank openings were then capped and the tank was removed from the excavation. Upon excavation and removal, the tank was observed to be in good condition with no holes or perforations. Following venting of the tank, an access way was cut in the end of the tank to allow entry for cleaning. The tank was then entered and vacuumed/wiped clean of any residual materials.

Approximately 55 gallons of diesel fuel and tank residuals were removed and drummed on April 23, 1992 and transported to Pollution Solutions of Vermont, Inc., Williston, Vermont, on July 23, 1992. The appropriate hazardous waste manifests are included in Section 4.10.

The scrap tank was disposed at Tombarello & Sons, a licensed Massachusetts tank yard, located in Lawrence, MA on April 24, 1992. A copy of the disposal receipt is included Section 4.11, Permits and Certifications.

4.1.3 Sampling and Analysis Plan

Nine soil samples were obtained from the excavation for field screening with a Photoionization Detector (PID) and field analyzed with a Non-Dispersive Infrared (NDIR) analyzer. The PID field screening for Total Organic Vapors (TOVs) was conducted with an HNu photoionizer utilizing the jar headspace screening protocol outlined in the Hazardous Materials Containment Plan. The NDIR field screening for Total Petroleum



LEGEND:

Field Screened Soil Sample

Lab Analyzed Soil Sample

Lab Analyzed Water Sample

( ) NDIR Results in ppm

[ ] Lab Analysis Results in ppm

Results in bold denote levels in excess of MA DEP Remedial Goal Level (100 ppm)

SAMPLING SCHEMATIC 10,000 gallon UST excavation at: Building 614 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451 NOT TO SCALE FIGURE: 4.2	ATEC©

Hydrocarbons (TPH) was conducted with a Horiba OCMA 220, utilizing the procedures outlined in the Hazardous Materials Containment Plan.

Five of the samples (SS-1 to SS-5) were obtained from the excavation walls at a depth of approximately 4 to 5 feet below grade. Four of the samples (SS-6 and SS-9) were obtained from the bottom of the excavation at a depth of approximately 9.5 feet below grade. One composite soil sample (Stock-1) was obtained from stockpiled soils for PID and NDIR field screening.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for laboratory analysis. Soil sample LSS-1 was obtained from the west sidewall of the excavation at a depth of approximately 4 to 5 feet below grade. Soil sample LSS-2 was obtained from the bottom of the excavation at a depth of approximately 9.5 feet below grade. One groundwater sample (LWS-1) was obtained from the excavation. These samples were analyzed for TPH utilizing USEPA Method 418.1.

Sampling locations are depicted on the Sampling Schematic as Figure 4.2. The appropriate chain of custodies are included in Section 4.9, Chain of Custody Forms.

4.1.4 Analytical Results

The results from analysis with the PID and the NDIR analyzer of the nine soil samples obtained from the excavation, and the composite sample obtained from stockpiled soil are shown in Table 4.1 as follows:

TABLE 4.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOV)	NDIR (ppmTPH)
SS-1	0.0	12.7
SS-2	0.0	69.4
SS-3	0.0	31.5
SS-4	1.2	195.5
SS-5	0.2	2,200.7
SS-6	1.0	131.8
SS-7	0.8	227.5
SS-8	3.5	45.2
SS-9	0.2	14.2
Stock-1	19.0	176.9

Laboratory analytical results of the two soil samples obtained from the excavation revealed TPH concentrations of 1,160 ppm in LSS-1 and 265 ppm for LSS-2. Laboratory analysis of the groundwater sample revealed a TPH concentration of 2 ppm (See Section 4.8, Laboratory Analytical Results).

4.1.5 Conclusions and Recommendations

ATEC's conclusions are as follows:

Upon excavation and removal, the tank was observed to be in good condition with no holes, perforations, or severe corrosion.

Groundwater was encountered within the excavation.

Excavated soils required to free the tank appeared visibly contaminated. Within the excavation, soils observed were also visibly and olfactory contaminated.

Nine soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR analysis respectively. PID readings revealed TOV concentrations ranging from 0.0 ppm to 3.5 ppm. NDIR results revealed TPH concentrations ranging from 14.2 ppm to 2,200.7 ppm.

Two soil samples were obtained from the excavation for TPH laboratory analysis utilizing USEPA Method 418.1. Analytical results for LSS-1 obtained from the west wall of the excavation revealed a TPH concentration of 1,160 ppm. Analytical results for LSS-2 obtained from the excavation bottom revealed a TPH concentration of 265 ppm.

One groundwater sample (LWS-1) was obtained from the excavation for TPH laboratory analysis by USEPA Method 418.1. Analysis revealed a TPH concentration of 2 ppm.

One composite stockpile soil sample (Stock-1) was obtained from stockpiled soils for PID and NDIR screening. PID screening revealed a TOV concentration of 19.0 ppm, and NDIR analysis revealed a TPH concentration of 176.9.

ATEC's recommendations are as follows:

Conduct remedial excavation of until background levels of <100 ppm TPH by laboratory analysis are attained. Field screening of soil should be conducted during excavation utilizing a PID until background levels of <1 ppm are attained prior to obtaining samples for laboratory analysis.

Advance soil borings and install ground water monitoring wells to determine the vertical and horizontal extent of contamination. Continuous split spoon sampling and analysis will be conducted utilizing field analysis techniques, i.e. PID and NDIR Analysis, and

laboratory analysis to document soil contamination levels as specified in the Hazardous Waste Containment Plan.

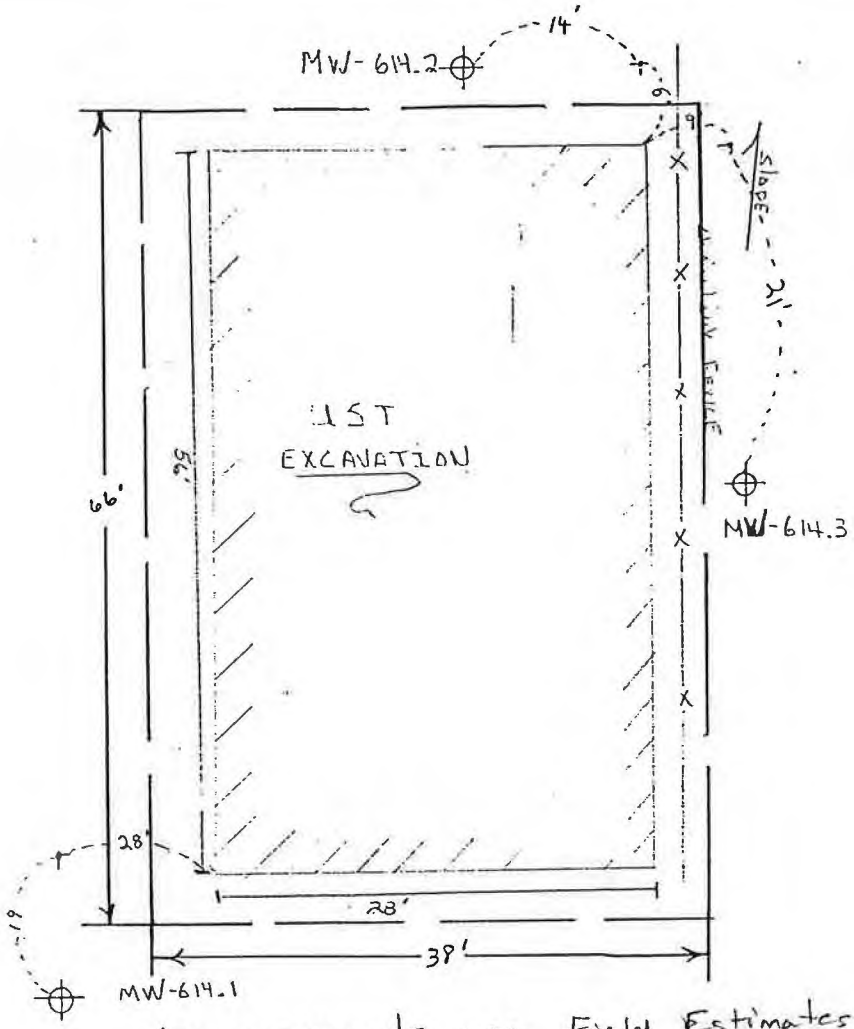
Stockpiled soils should be laboratory analyzed for Total Petroleum Hydrocarbons, Volatile Organic Compounds, PCBs, 13 TCLP Metals, Flashpoint, Corrosivity, Sulfide Reactivity, and Cyanide Reactivity for disposal classification.

4.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

4.2.1 Site Remediation

Following review of field screening and laboratory analytical results, additional excavation to remove contaminated soil and reach background levels by PID (<1 ppm) was conducted per order of the Contracting Officer's Representative and David Salvadore of the Massachusetts DEP. Approximately 376.52 tons of contaminated soil were removed from the excavation floor and sidewalls during remedial excavation of UST Nos. 0018, 0085, and 0086 on July 29, 1992. The estimated volume of removed soil was calculated from field drawings produced during the closure and remediation of UST Nos. 0018, 0085, and 0086 (see Remedial Excavation Plan, Figure 4.3).

Nine soil samples (RSS-1 to RSS-9) were obtained from the post-remedial excavation associated with UST Nos. 0018, 0085, and 0086 for PID field screening. RSS-1 to RSS-6 were obtained from the sidewalls at a depth of approximately 8 feet below grade. RSS-7 to RSS-9 were obtained from the excavation bottom at a depth of approximately 12 feet below grade. PID results revealed TOV concentrations ranging from 0.1 to 116.0 ppm. NDIR analysis revealed TPH concentrations ranging from 10.3 to 15,570.0 ppm. Results of PID screening and NDIR analysis are shown in Table 4.2 as follows:



"measurements are Field Estimates only and should not be used as exact measurements"

REMEDIAL of all Three TNs

DEPTH OF 1 EXCAVATION = 9.5'

56 x 28 x 9.5 = 14896/27 = 551.70 x 1.625 = 896.52 Ton
- 48 x 20 x 9.0 = 8640/27 = 320.00 x 1.625 = 520.00 Ton

376.52

(741.42 ÷ 27.36) Tank 001 185.64

190.88

38 * 66 = 2508
38 * 24 = 912

1596

REMEDIAL EXCAVATION PLAN Excavation of UST Nos 0018, 0085, & 0086: Building 614 Fort Devens, Massachusetts	PROJECT: 37.07.91.00451 NOT TO SCALE FIGURE: 4.3	ATEC

TABLE 4.2 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	NDIR (ppm TPH)	LOCATION
RSS-1	104.0	447.2	North sidewall
RSS-2	62.0	15,570	East sidewall
RSS-3	1.0	81.0	East sidewall
RSS-4	0.1	36.9	South sidewall
RSS-5	0.5	33.5	West sidewall
RSS-6	29.0	636.2	West sidewall
RSS-7	116.0	1,898.3	Excavation Bottom
RSS-8	0.8	23.5	Excavation Bottom
RSS-9	0.6	10.3	Excavation Bottom

Three soil samples (LRS-1 to LRS-3) and one groundwater sample (LWS-1) were obtained for TPH laboratory analysis. Soil sample LRS-1 and LWS-1 were also laboratory analyzed for Volatile Organic Compounds (VOCs). Sample LRS-1 was additionally analyzed for 13 Metals by Toxicity Characteristic Leachate Procedure (TCLP). Table 4.3 lists laboratory results as follows:

TABLE 4.3 - LABORATORY ANALYSIS

SAMPLE NUMBER	TPH (ppm)	VOA (ppb)	13 TCLP METALS (ppm)	LOCATION
LRS-1	78.0	97.0 Ethyl Benzene 40.0 Xylene	0.87 Zinc 0.13 Copper	Bottom
LRS-2	1,330.0	N.A.	N.A.	Bottom
LRS-3	15.0	N.A.	N.A.	Bottom
LWS-1	4.0	N.D.	N.A.	Bottom

LRS = Laboratory Remediation Sample
N.A.= Not Applicable
N.D. = None Detected

A copy of the laboratory analytical report is included in Section 4.8. The appropriate Chain of Custodies are included in Section 4.9.

4.2.2 Soil Stratigraphy

Soil stratigraphy at the site consisted of a layer of asphalt from grade to 3 inches below grade. A layer of gravel was located from 3 to 6 inches below grade. A layer of brown fine to medium sand and medium to coarse gravel with cobbles was located from 6 inches to 3 feet below grade. From 3 feet to 10 feet below grade was a layer of light brown fine to medium sand with little medium and coarse gravel and cobbles. A Soil Stratigraphy figure is attached as Figure 4.4.

4.2.3 Contaminated Soil Disposal

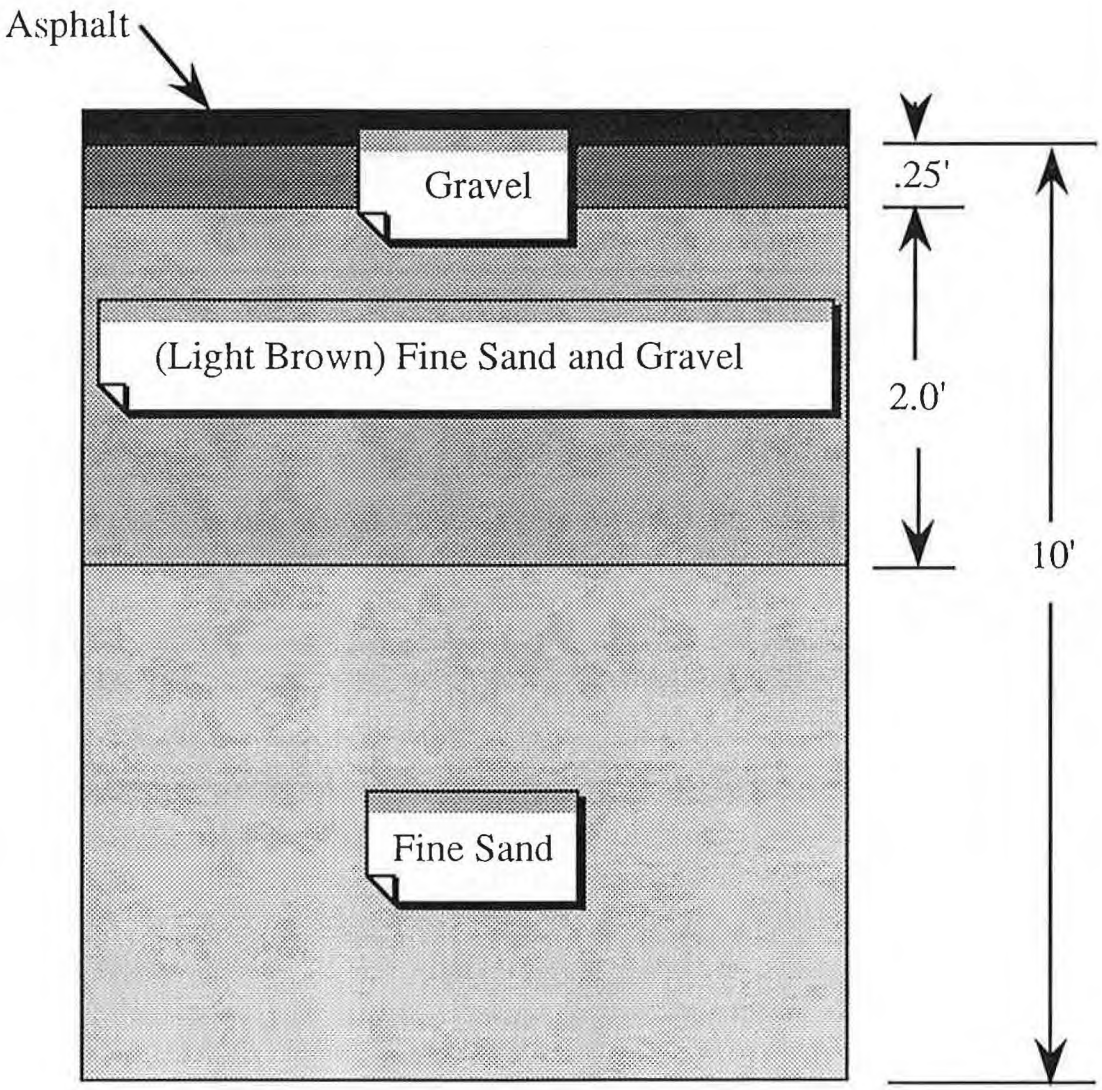
Approximately 310 tons of contaminated soil were removed and stockpiled during the removals and remediations of UST Nos. 0018, 0085, and 0086. Refer to Section 4.11 Bills of Lading and Weight Disposal Receipts. Contaminated soil was disposed for recycling at Trimount Bituminous Products Company, Shrewsbury, Massachusetts on September 23, and 24, 1992.

4.3 BACKFILL

The excavation associated with the removal of UST's Nos. 0018, 0085, and 0086 was backfilled with approximately 883 tons of uncontaminated fill material, as estimated through field drawings.

4.4 SURFACE RESTORATION

Approximately 547 square feet were re-asphalted to complete surface restoration.



SOIL STRATIGRAPHY

Excavation of UST Nos. 0018, 0085, & 0086:
Building 614
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 4.4

ATEC

4.5 HYDROGEOLOGICAL SERVICES

4.5.1 General Explanation of Procedures

Prior to advancing soil borings at the site, "Dig-safe" was contacted. Dig-Safe contacts various utilities to mark their service connections on public ground surfaces. The Fort Devens Plumbing Department was contacted and site plans were reviewed that depicted underground utilities (i.e. water, gas, and sewer). Ron Defilipo, Contracting Officer Representative (COR) met with Craig D. Trombly, Project Manager with ATEC, to lay-out the monitoring well locations. Geosearch, Inc. of Leominister, Massachusetts, was subcontracted by ATEC to install the monitoring wells at the site. Monitoring well borings were advanced on August 28, 1992, utilizing hollow-stem auger drilling techniques. Split spoon samplers were utilized to collect subsurface soil samples and determine soil types at 5 foot intervals.

4.5.2 Explanation of Materials Encountered in Explorations

Monitoring well MW-1 was installed approximately 108 feet southeast of Building 614, approximately 34 feet south of the excavation, and hydrogeologically crossgradient of the historical USTs utilized to store gasoline and diesel fuel (see Figure 4.5 - Monitoring Well Locations). MW-1 was advanced to a depth of 23.5 feet to assess the potential release of gasoline and diesel fuel. Soil types encountered from a depth of 4 to 6 feet below grade consisted primarily of medium dense to dense, grey, weathered rock. Some medium brown, fine to medium gravel, and traces of iron oxide were observed. Auger refusal was encountered at a depth of 7 feet below grade. Rock coring was performed from a depth of 7 feet to 23.5 feet below grade. Groundwater was not encountered during coring procedures.

Monitoring well MW-2 was installed approximately 39 feet east of building 614, approximately six feet north and hydrogeologically upgradient of the former UST

excavations (see Figure 4.5). MW-2 was advanced to a depth of 15 feet to assess the potential release from the former USTs. Soil types encountered consisted primarily of loose to very loose and medium sand, and little fine to medium gravel. Petroleum odors were evident in a soil sample obtained from a depth of 9 to 11 feet below grade, and PID screening revealed a TOV concentration of 4.0 ppm. Groundwater was encountered at approximately 9 feet below grade.

Monitoring well MW-3 was installed approximately 73 feet east of Building 614 and hydrogeologically downgradient of the former UST excavations (see Figure 4.5). MW-3 was advanced to a depth of 16 feet to assess the potential release from the historical USTs. Soil types encountered from a depth of grade to 2 feet below grade consisted primarily of loose to very loose, medium brown topsoil, with some fine and medium sand. Soil types encountered from a depth of 3 to 5 feet below grade consisted primarily of medium dense fine and medium sand, with little fine gravel. Soil types encountered from a depth of 7 to 11 feet below grade consisted of grey phyllite-schist-type bedrock. No olfactory evidence of petroleum hydrocarbon contamination was present. Groundwater was encountered at approximately 10 feet below grade.

Monitoring well MW-4 was installed approximately 59 feet northwest of Building 614 (see Figure 4.5). MW-4 was advanced to a depth of 15 feet to assess the potential release of waste oil from the historical USTs. Soil types encountered from a depth of grade to 4.25 feet below grade consisted primarily of dark brown, fine and medium sand and silt with some medium and coarse gravel. Soil types encountered from a depth of 4.25 feet to 4.5 feet below grade consisted primarily of black coal. Soil types encountered from a depth of 4.5 to 6 feet below grade consisted primarily of tan/brown silt with some coarse gravel and boulders. Soil types encountered from a depth of 9 to 11 feet below grade consisted primarily of loose, brown, medium and coarse sand with some coarse gravel and cobbles, and boulders. Soil types encountered from a depth of 14 to 15 feet below grade consisted primarily of very loose brown medium and coarse sand. Soil types encountered from a depth of 15 to 16 feet below grade consisted primarily of medium

dense, tan/brown silt with a trace of medium and coarse gravel. Petroleum odors were not noted. Groundwater was encountered at approximately 9 feet below grade.

4.5.3 Standard Type Survey and Determination of Groundwater Gradient

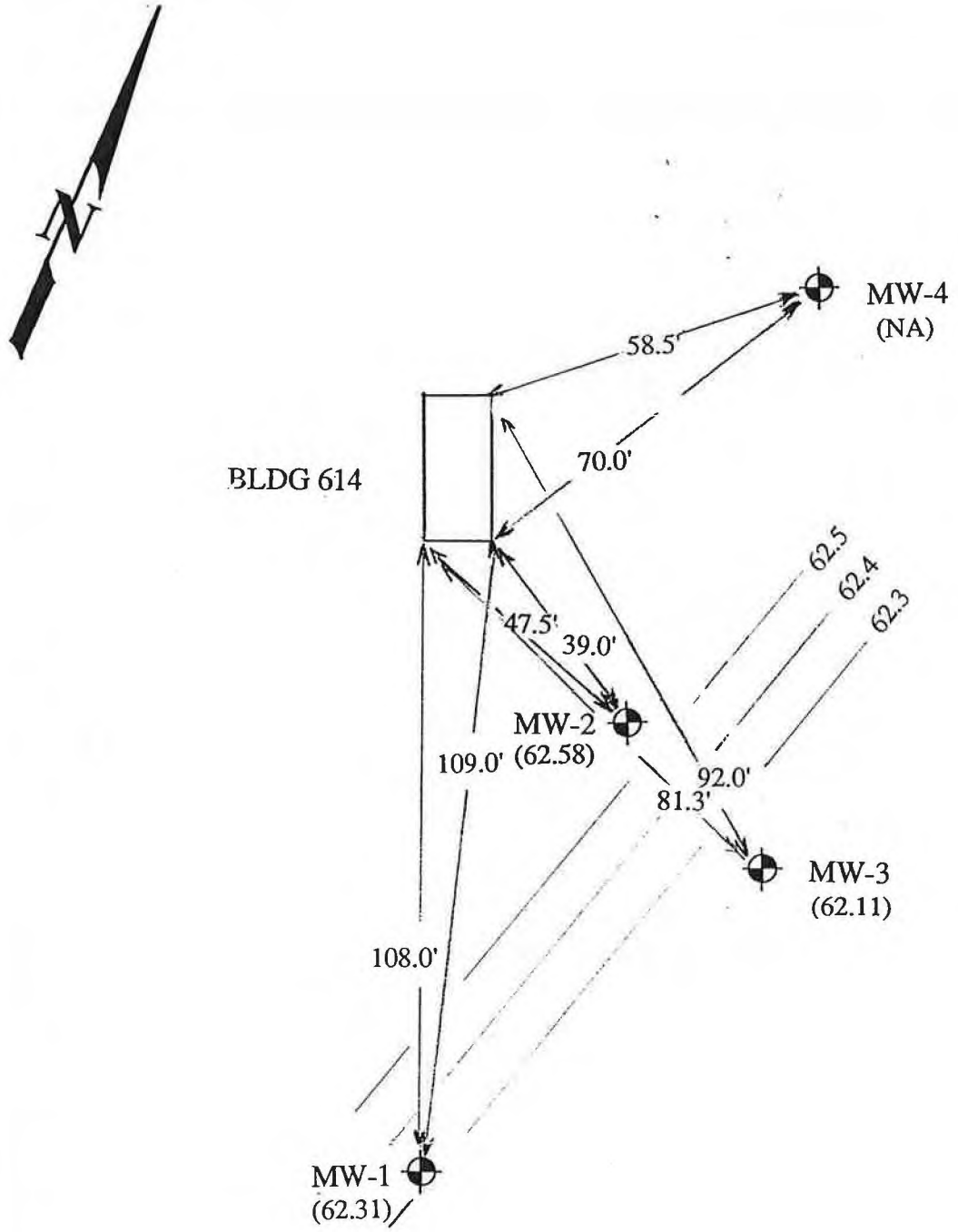
An instrument survey was conducted by Glen Harrington, Scientist II, and Robert Segnatelli, Engineer, to determine the relative locations and elevations of the groundwater monitoring wells and significant surficial features. The monitoring wells were gauged utilizing an electronic water level meter prior to sampling to determine the groundwater elevations at each well.

The survey data revealed that groundwater in the area flows in a general direction across the site at a lateral hydraulic gradient of 0.09 percent. Groundwater at the site occurs at depths ranging from 10 to 17 feet below grade. Groundwater contours are depicted on Figure 4.6.

Table 4.4 summarizes groundwater elevations measured at the four monitoring wells installed at the site.

TABLE 4.4 - SUMMARY OF GROUNDWATER ELEVATIONS

Monitoring Well	Depth to Groundwater (ft)	Rim Elevation (ft)	Groundwater Elevation (ft)
MW-1	12.25	74.56	62.31
MW-2	9.92	72.50	62.58
MW-3	15.20	77.31	62.11
MW-4	17.05	70.09	53.04



SITE PLAN GROUNDWATER MONITORING WELLS Relative to: UST #s 18,85,86 Building 2446 Fort Devens, Massachusetts	PROJECT: 37.07.92.00451 SCALE: 1 IN. = 30 FT. FIGURE: 4.5	ATEC

4.5.4 Results of Soil Screenings and Chemical Analyses

Soil screening and chemical analysis of soil obtained during the advancement of soil borings was not conducted.

4.5.5 Results of Groundwater Chemical Analyses

Groundwater monitoring wells MW-1, MW-2, and MW-3 were sampled on October 30, 1992. Groundwater monitoring well MW-4 was sampled on December 17, 1992. The groundwater samples were analyzed for TPH by IR (Method 418.1). Prior to sampling, approximately three well volumes of groundwater were purged from the well. Groundwater samples were placed directly into pre-labelled, pre-cleaned 500-ml amber glass jars and placed on ice for immediate shipment to the laboratory. The samples were analyzed by Environmental Science Services (ESS) of Providence, Rhode Island. Chain-of-custody forms were completed and included in the shipment.

Levels of TPH were not detected in the groundwater samples. Laboratory analytical results are attached in Section 4.8.

4.5.6 Details of Monitoring Well Construction

Monitoring wells were typically constructed of a length of bottom plugged 2 inch diameter Polyvinyl Chloride (PVC) well screen (0.010 inch slot) followed by a length of 2 inch diameter PVC solid riser to grade level. Number 2 washed silica sand was packed to approximately 1 foot above the screen followed by a 1 to 2 foot thick bentonite grout packing. The remainder of the boring was backfilled with washed silica sand and concrete surface seal to grade. Monitoring wells were fitted with a water tight 6 inch diameter flush mount cast iron roadbox. However, monitoring wells MW-3 was fitted with a stand pipe approximately 3.5 feet above grade level.

4.5.7 Summary of Findings

TPH was not detected in the groundwater samples collected from the MW-1, MW-2, MW-3, and MW-4. There are no regulatory levels for TPH in groundwater in the state of Massachusetts. However, there are regulatory levels for some Volatile Organic Compounds (VOC) that may exist in petroleum hydrocarbons.

4.5.8 BORING LOGS

The following soil boring logs were completed at the time of the hydrogeological investigation. If some boring log writing is illegible please see Section 4.5.2 Explanation of Materials Encountered in Exploration. These are field notes and should not be written over.

ĀTEC ENVIRONMENTAL CONSULTANTS

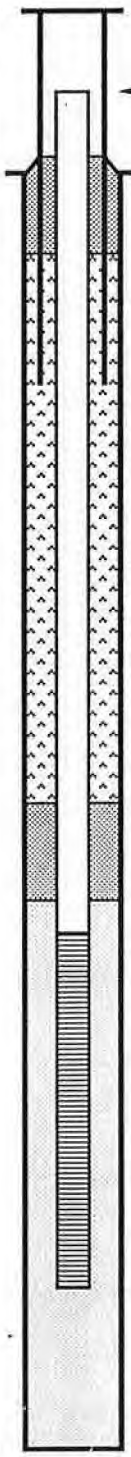
GROUND WATER MONITORING WELL BORING/INSTALLATION LOG

LOG OF BORING/WELL: MW 4

PROJECT NAME: Multi-site
PROJECT NUMBER: 37.07.451
PROJECT LOCATION: UST, 18,85,86 Bldg 614, Ft Devens
BORING LOCATION: See Site Schematic

FOREMAN: Matt Bovenzi, Geosearch Inc
INSPECTOR: M. Bulk, ATEC
DATE: 8/24/92

SOIL/ROCK DESCRIPTION	DEPTH FEET	SAMP. NO.	S.P.T.
mid dk brown, f-m sand and silt w/some m-c gravel PID= 0.0	0-2'	SS 4.1	9-10 16-6
4-4.25' mid dk brown, f-m sand and silt w/some m-c gravel 4.25-4.5' black coal slag 4.5-6' dk brown silt w/some coarse gravel, boulders. PID=0.1	4-6'	SS 4.2	[illegible]
——— H2O table ———	8'		
loose wet, brown, m-c sand w/some coarse, gravel, cobbles, boulders PID= 0.2	9-11'	SS 4.3	10-2 9-9
14-15' very loose, brown, m-c sand. 15-16' mid dense, dk brown silt w/trace m-c gravel PID= 0.3	14-16'	SS 4.4	4.5 12.24



- Length of Protect. Casing Above Surface Elevation: 0
- Length of Riser Pipe Above Surface Elevation: 6
- Surface Elevation
- Type/Thickness of Surface Seal: 1' concrete
- ID/Type of Protect. Casing: flushmount CI buffalo box
- Depth Bottom of Casing: 2'
- ID/OD/Type of Riser Pipe: 2" PVC
- Diameter of Borehole: 8"
- Type of Backfill Around Riser Pipe: common
- Depth/Type of Bottom Seal: 4-5' Bentonite
- Depth Top of Pervious Pipe: 5'
- ID/OD/Type of Pervious Pipe: 2" PVC .01 slot
- Type of Backfill Around Pervious Pipe: washed sand
- Depth Bottom of Pervious Pipe: 15'
- Type of Backfill Below Pervious Pipe: [illegible]

ATEC ENVIRONMENTAL CONSULTANTS

GROUND WATER MONITORING WELL BORING/INSTALLATION LOG

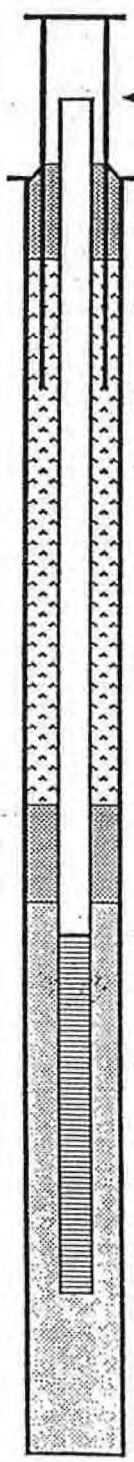
LOG OF BORING/WELL: MW 614-1

PROJECT NAME: Fort Devens
PROJECT NUMBER: 37.09 92.451
PROJECT LOCATION: Building 614
BORING LOCATION: See Site Schematic

FOREMAN: MAH Bovenzi
INSPECTOR: Kevin C. Trombly
DATE: 8-21-92

SOIL/ROCK DESCRIPTION	DEPTH FEET	SAMP. NO.	S.P.T.
Asphalt 1.5"			
Binder 3.0"	4.5'		
Medium brown/Dark Gray Sand little gravel F-M	9.5-2.5'		9-12-100 (Refusal)
	2.45'		
Medium dense-dense WEATHERED Rock Gray, some soil medium brown little gravel F-M, trace Iron oxide - Moist (Above Weathered rock) No odor	4.0' 4-6' 6.0'	24" Rec	16-19-40-40
Refusal - (Bedrock) - begin to core - see notes below - end core	7.0' 23.5'		

Notes:
- Refusal @ 7.0'
  - cored to 23.5'
- Est. Rock type = Schist/Quartz Inclusions, Platey
- Iron oxide Recovered @ various depths throughout all core
  - 9-11' Approx 4 min per foot
  - 9-14' " 5.0 min per foot
  - 14-19' " 6.5 min per foot
  - 19-23.5' " 7.5 min per foot



Length of Protect. Casing Above Surface Elevation	0
Length of Riser Pipe Above Surface Elevation	0
Surface Elevation	
Type/Thickness of Surface Seal	2' concrete
ID/Type of Protect. Casing	7" Steel Road Box
Depth Bottom of Casing	10'
ID/OD/Type of Riser Pipe	2" PVC
Diameter of Borehole	4 1/4"
Type of Backfill Around Riser Pipe	# 2 washed silica sand
Depth/Type of Bottom Seal	1-2'
Depth Top of Pervious Pipe	3.5'
ID/OD/Type of Pervious Pipe	2" PVC slotted
Type of Backfill Around Pervious Pipe	# 2 washed silica sand
Depth Bottom of Pervious Pipe	23.5'
Type of Backfill Below Pervious Pipe	NONE

ATEC ENVIRONMENTAL CONSULTANTS

GROUND WATER MONITORING WELL BORING/INSTALLATION LOG

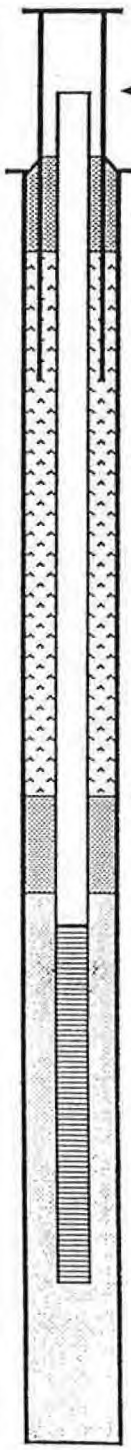
LOG OF BORING/WELL: MW-614-2

PROJECT NAME: Fort Devens
PROJECT NUMBER: 37.07.92.451
PROJECT LOCATION: Building 614
BORING LOCATION: See Site Schematic

FOREMAN: Matt Bovenzi
INSPECTOR: Kevin C. Trombly
DATE: 8-21-92

SOIL/ROCK DESCRIPTION	DEPTH FEET	SAMP. NO.	S.P.T.
Asphalt 1.5"			
Binder 3"	4.5"		
Very loose - Medium dense Topsoil - Dark Brown Black - Some gravel M-C.	4.5"-2.0'	13" Rec	14-11-8-4
Dry -No odor	2.0'		
Very loose - Loose - Medium brown sand F-M, little - F-M gravel.	4.0 4-6'	8" Rec	3-2-2-6
Dry No odor	6.0		
Very loose - Loose - Brown sand - M-, trace F gravel.	9.0 9-11'	2" Rec	10-18-10-8
Wet -Petroleum odor	11.0'	HNU-4.0ppm	

Notes:
- Groundwater @ Approx 9'
- Set well @ 15'



- Length of Protect. Casing Above Surface Elevation: ø
- Length of Riser Pipe Above Surface Elevation: ø
- Surface Elevation: See table 2
- Type/Thickness of Surface Seal: 2" Concrete
- ID/Type of Protect. Casing: 7" Steel Road Box
- Depth Bottom of Casing: 10"
- ID/OD/Type of Riser Pipe: 2" PVC
- Diameter of Borehole: 4 1/4"
- Type of Backfill Around Riser Pipe: # 2 washed silica sand
- Depth/Type of Bottom Seal: 1-2'
- Depth Top of Pervious Pipe: 5'
- ID/OD/Type of Pervious Pipe: 2" PVC
- Type of Backfill Around Pervious Pipe: # 2 washed silica sand
- Depth Bottom of Pervious Pipe: 15'
- Type of Backfill Below Pervious Pipe: None

ATEC ENVIRONMENTAL CONSULTANTS

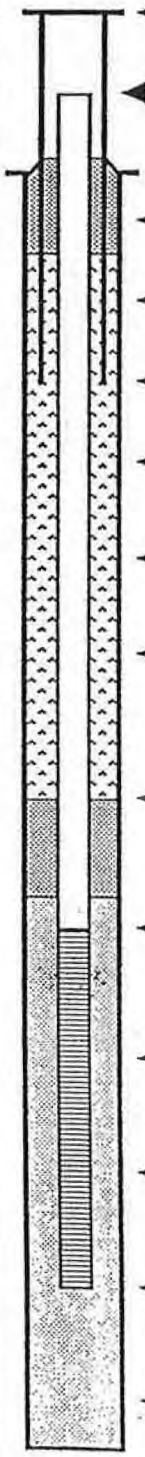
GROUND WATER MONITORING WELL BORING/INSTALLATION LOG

LOG OF BORING/WELL: MW-614.3

PROJECT NAME: Fort Devens
PROJECT NUMBER: 37 08.92 451
PROJECT LOCATION: Building 614
BORING LOCATION: See Site Schematic

FOREMAN: Matt Bovenzi
INSPECTOR: Kevin C. Trombly
DATE: 8-21-92

SOIL/ROCK DESCRIPTION	DEPTH FEET	SAMP. NO.	S.P.T.
VERY loose - loose top soil MEDIUM brown SOME sand F-M	0		5-5-6-6
Dry No odor	0-2'		24" REC
MEDIUM DENSE soil - medium coarse SOME sand F-M	2'		12-13-14-13
Dry No odor	3-5'		3" REC
gray, metasedimentary (phyllite schist) bedrock	5.0'		
gray, metasedimentary (phyllite schist) bedrock	9.0		
	16'		



- Length of Protect. Casing Above Surface Elevation 3.0'
- Length of Riser Pipe Above Surface Elevation 3'
- Surface Elevation
- Type/Thickness of Surface Seal 1' concrete
- ID/Type of Protect. Casing standpipe
- Depth Bottom of Casing 2'
- ID/OD/Type of Riser Pipe 2" PVC
- Diameter of Borehole 6 5/8" 1/2"
- Type of Backfill Around Riser Pipe common
- Depth/Type of Bottom Seal 4-5' Bentonite
- Depth Top of Pervious Pipe 6'
- ID/OD/Type of Pervious Pipe 2" PVC 10 slot
- Type of Backfill Around Pervious Pipe washed silica
- Depth Bottom of Pervious Pipe 16'
- Type of Backfill Below Pervious Pipe Bedrock

4.6 PHOTOGRAPHIC DOCUMENTATION

The following photographs are of the removed UST, and a post removal view of the excavation of UST Nos. 0018, 0085, and 0086.

A-1: Photograph depicts the removed tank.

A-2: Removed tank.

A-3: Photograph depicts the excavation of UST No. 0018. UST No. 0085 is depicted adjacent to the removed UST.

A-4: Opposite view of tank excavation.

A-5: Remedial excavation of UST Nos. 0018, 0085, and 0086.

A-6: Remedial excavation as viewed from opposite end of excavation.

A-1

A-2

PHOTO DOCUMENTATION

10,000 gallon UST excavation at:
Building 614
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ATEC

4.7 OCMA 220 DATA SHEETS

The following information was organized from the data collected from the Non-Dispersive Infrared analyzer.

ATEC Associates, Inc.

Consulting Geotechnical, Materials and Environmental Engineers

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 UST 0018

DATE: Apr 24, 1992

OPERATOR: Charles Langenhagen

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	0.1	0.0	0.0	0.0	0.0	0.0	27.7
SPAN:	37.6	40.0	44.0	40.0	40.5	40.0	
ZERO:	5.8	0.0	-5.0	0.0	0.2	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	INSTRUMENT RESULTS (ppm) 2nd	INSTRUMENT RESULTS (ppm) 3rd	CONCENTRATION mg/l
STOCK-1	83.0	75.7	17.5	3.0	—	—	7.3	5.8	6.3	176.9
–	–	–	–	–	—	—	–	–	–	–
SS-1	84.3	75.4	17.5	3.0	—	—	0.9	0.9	–	12.7
SS-2	81.5	75.3	17.5	3.0	—	—	2.0	2.1	–	69.4
SS-3	82.8	75.0	17.5	3.0	—	—	0.8	1.2	–	31.5
SS-4	82.4	75.9	17.5	3.0	–	–	6.1	6.2	–	195.5
SS-5	80.7	75.1	17.5	3.0	25.0	1.0	15.9	15.8	–	2200.7
SS-6	82.6	75.6	17.5	3.0	—	—	4.6	4.5	–	131.8
SS-7	82.8	75.5	17.5	3.0	–	–	8.2	8.1	–	227.5
SS-8	82.6	75.8	17.5	3.0	—	—	1.5	1.5	–	45.2
SS-9	82.7	75.5	17.5	3.0	–	–	0.6	0.5	–	14.2

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 USTs 0018, 0085, 0086

DATE: Jul 31, 1992

OPERATOR: Charles Langenhagen

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	1.8	0.0	0.5	0.0	-0.7	0.0	27.3
SPAN:	34.0	40.0	47.0	40.0	40.5	40.0	
ZERO:	6.2	0.0	-5.8	0.0	-0.6	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	INSTRUMENT RESULTS (ppm) 2nd	INSTRUMENT RESULTS (ppm) 3rd	CONCENTRATION mg/l
RS-1	80.4	75.0	20.0	3.0	--	--	9.3	10.5	--	447.2
RS-2	80.1	75.0	25.0	0.5	----	----	49.0	51.9	--	15570.0
RS-3	80.1	75.1	25.0	2.0	--	--	1.0	1.0	--	81.0
RS-4	80.2	75.2	17.5	3.0	--	--	1.0	0.9	--	36.9
RS-5	80.2	75.3	17.5	3.0	--	--	0.9	0.8	--	33.5
RS-6	81.0	75.2	17.5	3.0	--	--	16.8	18.0	--	636.2
RS-7	80.8	75.4	25.0	0.5	--	--	7.1	6.7	--	1898.3
RS-8	81.4	75.3	17.5	3.0	----	----	0.8	0.7	--	23.5
RS-9	81.4	75.4	17.5	3.0	--	--	0.4	0.3	--	10.3

TPH SOIL ANALYSES BY NON-DISPERSIVE INFRARED ANALYZER - MODIFIED EPA STANDARD TEST METHOD 418.1

PROJECT NAME, NUMBER, TANK: U.S. ARMY - FORT DEVENS 37.07.91.451 UST 18.85.86

DATE: Aug 18, 199:

OPERATOR: William McCONNELL

CALIBRATION DATA

TYPE CALIBRATION	FIRST READING INITIAL	FIRST READING FINAL	SECOND READING INITIAL	SECOND READING FINAL	THIRD READING INITIAL	THIRD READING FINAL	SPAN CHECK
ZERO:	1.2	0.0	-0.3	0.0	-3.0	0.0	26.0
SPAN:	33.7	40.0	45.3	40.0	40.8	40.0	
ZERO:	5.2	0.0	-4.8	0.0	-0.5	0.0	

ANALYTICAL DATA

SAMPLE NUMBER	WEIGHT (g) GROSS	WEIGHT (g) TARE	1st DILUTION RATIO (ml) F-113	1st DILUTION RATIO (ml) SAMPLE	2nd DILUTION RATIO (ml) F-113	2nd DILUTION RATIO (ml) SAMPLE	INSTRUMENT RESULTS (ppm) 1st	INSTRUMENT RESULTS (ppm) 2nd	INSTRUMENT RESULTS (ppm) 3rd	CONCENTRATION mg/l
MW1.1	81.0	71.4	17.5	3.0	--	--	1.6	1.3	--	27.8
MW1.2	81.4	73.1	17.5	3.0	--	--	0.4	0.5	--	12.3
MW1.3	93.1	75.8	17.5	3.0	--	--	0.9	0.5	--	5.9
MW2.1	85.0	78.2	17.5	3.0	----	----	0.8	0.7	--	21.1
MW2.2	86.2	78.5	17.5	3.0	--	--	1.6	1.3	--	34.6
MW2.3	80.8	73.2	17.5	3.0	--	--	0.4	0.5	--	13.5
MW3.1	68.4	61.9	17.5	3.0	--	--	0.9	0.5	--	15.8
MW3.2	79.9	72.1	17.5	3.0	----	----	0.8	0.7	--	18.4
MW3.3	75.4	69.2	17.5	3.0	----	----	0.8	0.7	--	23.1

4.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports were organized and provided by Environmental Science Services Inc. Results are included for:

- LSS-1 and LSS-2: Soil samples obtained from original excavation. Laboratory analyzed for TPH.

- LRS-1, LRS-2, LRS-3: Soil samples obtained from remedial excavation. Laboratory analyzed for TPH, VOC's (LRS-1), and 13 Metals by TCLP (LRS-1).

- LWS-1: Groundwater sample obtained from remedial excavation. Laboratory analyzed for TPH and VOC's.

- Stock 614.1 to 614.3: Soil sample obtained from stockpiled soil for disposal classification. Laboratory analyzed for PCB's.

- MW-1 to MW-4: Groundwater samples obtained from groundwater monitoring wells. Laboratory analyzed for TPH.

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18-Bldg 614 | ESS Project ID: 921088

Client Sample ID: LSS #1 | ESS Sample ID: 921088-01

Date Sample Received: 4/28/92 | Date Reported: 5/6/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbons-IR	1,160	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=89%

Approved by: David Dickinson
Laboratory Director

Date: 6 MAY 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 454-[illegible] Fax [illegible]
[illegible]

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18-Bldg 614 | ESS Project ID: 921088

Client Sample ID: LSS #2 | ESS Sample ID: 921088-02

Date Sample Received: 4/28/92 | Date Reported: 5/6/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbons-IR	265	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=91%

Approved by: David Dickinson
Laboratory Director

Date: 6 MAY 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18-Bldg 614 | ESS Project ID: 921088

Client Sample ID: LWS-1 | ESS Sample ID: 921088-03

Date Sample Received: 4/28/92 | Date Reported: 5/6/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbons-IR	2	mg/L	1	418.1

MRL = Method Reporting Limit

Approved by: David Dickinson
Laboratory Director

Date: 6 MAY 92

Environmental Science Services
552 Atwells Avenue, Providence, Rhode Island 02909-1401

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LRS-1 ESS Sample ID: 921976-01

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Results	Units	MRL	Method
Percent Solids	85	% w/w	1	160.3
Total Petroleum Hydrocarbon-IR	78	mg/Kg	12	418.1
Volatile Organics				
Ethyl Benzene	97	ug/Kg	Attached	8240
Xylenes (Total)	40	ug/Kg	Attached	8240
Toxicity Characteristic Leaching Procedure				1311
Metals				
Copper	0.13	mg/L	Attached	6010
Zinc	0.87	mg/L	Attached	6010

MRL = Method Reporting Limit

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LRS-1 ESS Sample ID: 921976-01

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	**97**	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	**40**	10

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson, Laboratory Director Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants

Client Project ID: UST 18,85,86 (Bldg 614)

Client Sample ID: LRS-1

ESS Sample ID: 921976-01

Date Sampled: 7/29/92

Date TCLP Performed: 8/6/92

Date Leachate Extracted: 8/7/92

Date Extract Analyzed: 8/10/92

	Actual		Adjusted*	
Target Analyte	Sample Result (mg/L)	Method Reporting Limit	Sample Result (mg/L)	Method Reporting Limit
Antimony	ND	0.2	ND	0.4
Arsenic	ND	0.2	ND	0.2
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.05
Lead	ND	0.1	ND	0.1
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.07
Copper	0.13	0.02	0.13	0.02
Nickel	ND	0.04	ND	0.04
Zinc	0.87	0.02	0.87	0.02
Beryllium	ND	0.02	ND	0.04
Thallium	ND	0.3	ND	0.4

* Actual sample result adjusted for matrix bias. Refer to matrix spike analysis summary form.

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LRS-2 ESS Sample ID: 921976-02

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	1,330	mg/Kg	12	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=85%

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

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In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LRS-3 ESS Sample ID: 921976-03

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	15	mg/Kg	12	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=84%

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

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In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LWS-1 ESS Sample ID: 921976-04

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	4	mg/L	1	418.1
Volatile Organics	ND	ug/L	Attached	8240

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: LWS-1 ESS Sample ID: 921976-04

Date Sample Received: 7/30/92 Date Reported: 8/12/92

Parameter	Result (ug/L)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	ND	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax. (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 Bldg 614 ESS Project ID: 922171

Client Sample ID: Stock 614.1 ESS Sample ID: 922171-01

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	104%	50 - 150%

Approved by: David Dickinson, Laboratory Director

Date: 4 Septm 2

0001

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 Bldg 614 ESS Project ID: 922171

Client Sample ID: Stock 614.2 ESS Sample ID: 922171-02

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	107%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0002

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 Bldg 614 ESS Project ID: 922171

Client Sample ID: Stock 614.3 ESS Sample ID: 922171-03

Date Sample Received: 8/19/92 Date Reported: 9/4/92

Parameter	Result (mg/Kg)	MRL
Arochlor 1016	ND	1
Arochlor 1221	ND	1
Arochlor 1232	ND	1
Arochlor 1242	ND	1
Arochlor 1248	ND	1
Arochlor 1254	ND	1
Arochlor 1260	ND	1

ND = Not Detected above Method Reporting Limit (MRL)

Surrogate Recovery Data	% Recovery	QC Limit
Dibutylchlorendate	113%	50 - 150%

Approved by: David Dickinson
Laboratory Director

Date: 4 Sept 92

0003

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0308 Fax (401) 421-5731

QUALITY CONTROL SECTION

In Response To The Future

CERTIFICATE OF ANALYSIS

VOA SOIL SURROGATE RECOVERY

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614)

Date Sample Analyzed: 8/6/92

ESS Project ID: 921976

SAMPLE ID	1,2 DICHLOROETHANE-D4 (70-121%)*	TOLUENE-D8 (81-117%)*	BFB (74-121%)*
VS0806B2	90%	103%	100%
921976-01	90	104	100

* Acceptance criteria

Approved by: David Dickinson, Laboratory Director

Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: Method Blank ESS Sample ID: VW0806B2

Date Sample Received: N/A Date Reported: 8/12/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	ND	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)
N/A = Not Applicable

Approved by: David Dickinson, Laboratory Director

Date: 12 Aug 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

VOA AQUEOUS SURROGATE RECOVERY

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614)

Date Sample Analyzed: 8/6/92

ESS Project ID: 921976

SAMPLE ID	1,2 DICHLOROETHANE-D4 (76-114%)*	TOLUENE-D8 (86-110%)*	BFB (86-115%)*
VW0806B1	106%	96%	93%
921976-04	88	93	100

* Acceptance criteria

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 92

Environmental Science Services

532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: UST 18, 85, 86 (Bldg 614) ESS Project ID: 921976

Client Sample ID: Method Blank ESS Sample ID: VW0806B1

Date Sample Received: N/A Date Reported: 8/12/92

Parameter	Result (ug/L)	MRL
Methylene Chloride	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloropropane	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
Chlorobenzene	ND	5
1,2-Dichloroethane	ND	5
1,1,1-Trichloroethane	ND	5
Bromodichloromethane	ND	5
Trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Benzene	ND	5
Toluene	ND	5
Ethyl Benzene	ND	5
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
1,1-Dichloroethene	ND	5
1,2-Dichloroethene (Total)	ND	5
Trichloroethene	ND	5
Acetone	ND	10
Carbon Disulfide	ND	5
2-Butanone	ND	10
Cis-1,3-Dichloropropene	ND	5
4-Methyl-2-Pentanone	ND	10
2-Hexanone	ND	10
Styrene	ND	5
Xylenes (Total)	ND	10

ND = Not Detected above Method Reporting Limit (MRL)
N/A = Not Applicable

Approved by: David Dickinson, Laboratory Director Date: 12 Aug 92

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

MATRIX SPIKE ANALYSIS SUMMARY

TCLP METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants Matrix: Solid

TCLP Batch ID: 202301 Concentration in: mg/L

Target Analyte	Result	Spike Added	Spiked Result	Percent Recovery
Antimony	ND	*	ND	76%
Arsenic	ND	2.00	2.26	113
Cadmium	ND	0.5	0.39	78
Chromium	ND	1.0	1.22	122
Lead	ND	1.0	1.12	112
Mercury	ND	0.02	0.020	100
Selenium	ND	2.00	2.13	107
Silver	ND	1.0	0.76	76
Copper	ND	1.0	1.14	114
Nickel	ND	1.0	1.07	107
Zinc	ND	1.0	1.09	109
Beryllium	ND	*	ND	76
Thallium	ND	*	ND	76

This matrix spike analysis summary applies to the following samples:
921976-01

ND = Not Detected above Method Reporting Limit (MRL)

* Matrix spike recovery is based on the lowest spike recovery of the spiked analytes.

Approved by: David Dickinson
Laboratory Director

Date: 12 Aug 96

Environmental Science Services
532 Atwells Avenue, Providence, Rhode Island 02909 (401) 421-0398 Fax (401) 421-5731

In Response To The Future

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON-IR
Method 418.1

Client: ATEC Environmental Consultants

Client Project ID: UST #18, 85, 86, Bldg 614 ESS Project ID: 922992

Date Samples Received: 11/3/92 Date Reported: 11/4/92

Client ID	Lab ID	Results	Units	MRL
MW-1	922992-01	ND	mg/L	1
MW-2	922992-02	ND	mg/L	1
MW-3	922992-03	ND	mg/L	1

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: _____

In Response To The Future

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON-IR
Method 418.1

Client: ATEC Environmental Consultants

Client Project ID: Ft. Devens, UST 18, Bldg 614 ESS Project ID: 923461

Date Samples Received: 12/18/92 Date Reported: 12/22/92

Client ID	Lab ID	Results	Units	MRL
MW-4	923461-01	ND	mg/L	1

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: [signature] Date: 12/22/92

4.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil and groundwater samples which were laboratory analyzed. Please see laboratory reports for date analyzed or date sample was received, if not on chain of custody form.

1.0.# 1220

CHAIN OF CUSTODY RECORD

PROJ. NO. 37.07 451

PROJECT NAME / CLIENT: FT. DEVONS BLDG # 614 UST # 18

LAB PROJ. NO.

SAMPLERS: (Signature) Craig D. Tromly

SAMPLING METHOD: GRAB

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LSS #1	4-23-92			✓		✓				✓		1				✓							
																~~✓~~							
LSS #2	4-23-92			✓		✓				✓		1				✓							
LYVS -1	4-23-92			✓	1					✓		1				✓							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Craig D. Tromly	4-27-92 4:00	[signature]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

PROJ. NO. 37.07.451

PROJECT NAME UST #18 Bldg 614

CLIENT F. + Dennis

LAB PROJ. NO.

SAMPLERS: *(Signature)* [illegible]

SAMPLING METHOD Bailer

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
UST #18	1/16				X							2			X								

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
[illegible]	1/16 3:00				

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

PROJ. NO.: 37.07.451

PROJECT NAME / CLIENT: FT. DEVONS BLDG. 614 UST # 18

LAB PROJ. NO.:

SAMPLERS: (Signature) Craig D. Tomlky

SAMPLING METHOD: GRAB

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LSS #1	4-23-92	4p		✓		✓				✓		1											SPLIT
LSS # 2	4-23-92			✓		✓				✓		1											SPLIT

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E Zaldi	4/30 1515	[illegible]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

P.O.# 37.07.72477

PROJ. NO. 07.451

PROJECT NAME UST 18, 85, 86 - Bldg 614

CLIENT Ft Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E Zaldi

SAMPLING METHOD grab

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
stock-614.1	8/14		X	X		X				X		1					X						
stock-614.2	8/14		X	X		X				X		1					X						
stock-614.3	8/14		X	X		X				X		1					X						

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Mark E Zaldi	8/14 3:30	[illegible]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

PO# 37.07.076050

CHAIN OF CUSTODY RECORD

PROJ. NO. 37.07.451

PROJECT NAME Bldg 614 UST 18,85,86

CLIENT USARMY Fort Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Derek M. Witt

SAMPLING METHOD

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
MW-1	10/30				X					X		1				X							
MW-2	10/30				X					X		1				X							
MW-3	10/30				X					X		1				X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Derek Witt	10/30/92	Manuel Ferreira 11/3/92 (15:35)			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

CHAIN OF CUSTODY RECORD

PROJ. NO.: 37.07.451

PROJECT NAME: Ft. Devens UST #18

CLIENT: U.S. Army

LAB PROJ. NO.:

SAMPLERS: *(Signature)*

SAMPLING METHOD

LABORATORY ANALYSIS

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
MW-4	12-17-92	10:00		X	X					X		1				X							Bldg 614

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	12-17 5:00	12/18/92			

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, MA 02061
(617) 878-6200

4.10 HAZARDOUS WASTE MANIFEST

UST No. 0018 was estimated to contain approximately 1,600 gallons of diesel fuel. Approximately 1,600 gallons of diesel fuel were removed on April 15, 1992. Approximately 55 gallons of diesel fuel and tank residuals were removed from the tank following removal on April 23, 1992, and transported on July 23, 1992.

The following Hazardous Waste Manifests were generated from tank materials.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No.: MA7210025154 — Manifest Document No.: 06

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: U.S. Army Ft. Devens, AFZD-EM Box 19, Ft. Devens Ma 01433 — 508/796-3002 — FD785
~~PO Box 19 Ayers, Ma~~ 01433-5190
4. Generator's Phone ( ) 24HR 508-796-2117

A. State Manifest Document Number: MA G113119
B. State Gen. ID: Bldg. ATEC Trailer Ayers, MA

5. Transporter 1 Company Name: LINCOLN ENVIRONMENTAL, INC. — 6. US EPA ID Number: RID982192627
C. State Trans. ID: RI 494056
D. Transporter's Phone: (401) 232-3353

7. Transporter 2 Company Name — 8. US EPA ID Number
E. State Trans. ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: POLLUTION SOLUTIONS OF VT, INC., 2 AVENUE D, WILLISTON VT 05495 — 10. US EPA ID Number: VTD981716537
G. State Facility's ID: Not Required
H. Facility's Phone: (802) 860-1200

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non RCRA, Non DOT Regulated Oily Solids (Oily pads, wipes, PPE)	012	DM	01200	P	MA01
	001	DM	00035	G	None
b. Fuel Oil, No. 4, Combustible Liquid, NA 1993 (No. 4 Fuel Oil Tank Bottoms)	001	DM	000935	G	None
c. RQ, Hazardous Waste, Liquid, n.o.s., ORM-E, NA 9189 (D018, D008) (Benzene, lead)	001	DM	000575	G	MA01 D018, D008
d. Fuel Oil, No. 2, Combustible liquid, NA 1993 (No. 2 fuel oil)	0016	DM	002510	G	MA01 None

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. WIP # 10903, Oily Solids VT MA01
b. WIP#10912, 100% #4 fuel oil Tank bottom VT 09
c. WIP10913, Waste Oil ~~VT 11~~ VT11 MA01
d. WIP#10916, 100% #2 fuel oil tank bottoms VT 09 MA01

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information: In case of emergency call 401/232-3353 (Lincoln) or 800-424-9300 (Chemtrec)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Mark Boser — Signature: [signature] — Date: Month 07 Day 31 Year 92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DANIEL L. Longley — Signature: [signature] — Date: Month 07 Day 31 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Date: Month Day Year

Form Approved OMB No. 2050-0039. Expires 8-30-92
EPA Form 8700-22 (Rev. 9-80) Previous editions are obsolete.

COPY 1: FACILITY MAILS TO DESTINATION STATE

MA G113119 COPY 1: FACILITY MAILS TO DESTINATION STATE

4.11 BILLS OF LADING AND WEIGHT RECEIPTS

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 152 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK # 18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil ✓ other (specify) DIESEL
ANALYSES ATTACHED?
Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Cloppell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION AJ185 MA
TRAILER REGISTRATION 40670 MA
LEFT SITE AT ____ DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	34.83	
REMAINING TO BE SHIPPED		

Ticket # 76412

TRANSPORTER'S SIGNATURE [signature] DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 8:41

RECEIVED
AUG 06 1992
DEP
Central - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 155 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796 3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK # 18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __ Y ✓ N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL

ANALYSES ATTACHED?
Volatiles: ✓ Y __ N TPH: ✓ Y __ N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION Ma AK167
TRAILER REGISTRATION 42132
LEFT SITE AT 8:15 DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	____	____
SHIPPED TO DATE	____	____
THIS LOAD (estimated)	33.63	____
REMAINING TO BE SHIPPED	____	____

Ticket R 76425

TRANSPORTER'S SIGNATURE [signature] DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE ____ DATE 9/23/92 ARR TIME 8:14

RECEIVED
AUG 06 1992
DEP
Central - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

158

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: _____ DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-EM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK #18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: _____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil ✓ other (specify) DIESEL

ANALYSES ATTACHED?
Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION AJ185 MA
TRAILER REGISTRATION 4067D MA
LEFT SITE AT 11:00 AM DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	34.46	
REMAINING TO BE SHIPPED		

Ticket RJ6478

TRANSPORTER'S SIGNATURE [signature] DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE _____ DATE 9/23/92 ARR TIME 11:55

RECEIVED
AUG 06 1992
DEP
Central - Recy

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 159 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK # 18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __ Y ✓ N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____
vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED?
Volatiles: ✓ Y __ N TPH: ✓ Y __ N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8900

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION MA BK167
TRAILER REGISTRATION 42237 MA Semi
LEFT SITE AT 11:25 DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	30.08	
REMAINING TO BE SHIPPED		

Ticket # R 76485

TRANSPORTER'S SIGNATURE [signature] DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/23/92 ARR TIME 12:21

RECEIVED
AUG 06 1992
DEP
Central - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 161 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796 3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK #18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
710 BLANCHARD RD.
BURLINGTON, MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION: AJ185 MA
TRAILER REGISTRATION: 40670 MA
LEFT SITE AT ____ DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	35.84	
REMAINING TO BE SHIPPED		

Ticket # R76358

TRANSPORTER'S SIGNATURE [signature] DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE [signature] DATE 9/23/92 ARR TIME 2:50

RECEIVED
AUG 06 1992
DEP
Central - Reg.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

Shld be R76538
Transposed #. Same Date

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPRO PENALTIES.

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 1/3 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK # 18
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __ Y ✓ N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil ✓ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓ Y __ N TPH: ✓ Y __ N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION Ma AK-167
TRAILER REGISTRATION 47232
LEFT SITE AT 2:05 pm DATE 9-23-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	37.97	
REMAINING TO BE SHIPPED		

Ticket # R 78511

TRANSPORTER'S SIGNATURE B Hinnes DATE 9-23-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE ____ DATE 9/23/92 ARR TIME 3:03

RECEIVED
AUG 06 1992
DEP
Central - Reg

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

FALSIFICATION OR MISREPRESENTATION OF ANY OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF M.G.L. C. 21C AND 310 CMR 30.006 AND 30.007 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY PENALTIES.

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 169 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:	SITE OF GENERATION:
U.S. ARMY AFZD-FM, BOX 19 FORT DEVENS, MA 01433 CONTACT/TEL #: (508) 796 3809	STREET BUILDING 614 10K DIESEL TANK # 18 TOWN FORT DEVENS STATE MA 01433 TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____ vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION: __ gasoline __ #2 oil __ #4 oil __ #6 oil ✓ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:	DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS 70 BLANCHARD RD. BURLINGTON MA 01803 CONTACT/TEL #: DAVID PETER (617) 221 8400	TRIMOUNT BITUMINOUS PRODUCTS 651 LAKE ST. SHREWSBURY, MA TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION C11695
TRAILER REGISTRATION 42270
LEFT SITE AT ____ DATE 9/24/92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: Bob Willey

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED		
SHIPPED TO DATE		
THIS LOAD (estimated)	29.75	
REMAINING TO BE SHIPPED		

Ticket # R 76650

TRANSPORTER'S SIGNATURE AIFB DATE 9/29/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE ____ DATE 9/24/92 ARR TIME 12:15

RECEIVED
AUG 06 1992
DEP
Central - Reg

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

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BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 170 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION:
STREET: BUILDING 614 10K DIESEL TANK # 18
TOWN: FORT DEVENS
STATE: MA 01433
TRANSPORTATION ACCIDENT? ___Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ___ # absorbent booms ___ vol (cu yds) sparsely dri ___ other (specify) ___

TYPE OF CONTAMINATION:
___ gasoline ___ #2 oil ___ #4 oil ___ #6 oil ✓ other (specify) DIESEL

ANALYSES ATTACHED?
Volatiles: ✓Y ___N TPH: ✓Y ___N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ___ DATE: ___

TRUCK/TRACTOR REGISTRATION 5099
TRAILER REGISTRATION 39223
LEFT SITE AT 11:15 DATE 9 24 92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: ___

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE		___
THIS LOAD (estimated)	32.80	___
REMAINING TO BE SHIPPED	___	___

Tc 60th R 7665

TRANSPORTER'S SIGNATURE Ron DATE 9/24/92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE [signature] DATE 9/24/92 ARR TIME ___

RECEIVED
AUG 06 1992
DEP
Central - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

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BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 171 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796 3809

SITE OF GENERATION:
STREET BUILDING 614 10K DIESEL TANK # 15
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __ Y ✓ N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ____ wt (tons) 250 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____
vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil ✓ other (specify) DIESEL
ANALYSES ATTACHED? Volatiles: ✓ Y __ N TPH: ✓ Y __ N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD.
BURLINGTON MA 01803
CONTACT/TEL #: DAVID PETER (617) 221 8400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: [signature] DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): ____ DATE: ____

TRUCK/TRACTOR REGISTRATION MA HK 167
TRAILER REGISTRATION 42232
LEFT SITE AT 11:13 DATE ____
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES SIGNATURE: ____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	____	____
SHIPPED TO DATE	____	____
THIS LOAD (estimated)	____	____
REMAINING TO BE SHIPPED	____	____

Ticket R 78657

TRANSPORTER'S SIGNATURE B. Harris DATE 9-24-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 9/24/92 ARR TIME ____

RECEIVED
AUG 06 1992
DEP
Central - Reg.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/EMERGENCY RESPONSE BRANCH
ONE WINTER STREET, 5th FLOOR
BOSTON, MA 02108
AND
THE ORIGINATING REGIONAL OFFICE

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TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK # _____ CARRIER

TICKET #R 76412

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18,85 + 86
FORT DEVENS, MA 01433
PO# 076106

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
8:41:32	31300	69660	100960	34.83

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
1	34.83	8:41:32 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 152

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK # _____ CARRIER

TICKET #R 76425

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076106

MIX # #75 MIX NAME GAS SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
9:14:14	31000	71260	102260	35.63

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
3	108.51	9:14:15 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY _____ 15

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB ~~CHECK #~~

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY _____
CARRIER

TICKET #R 76478

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076116

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
11:55:06	31300	69960	101260	34.98

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
2	69.81	11:55:07 am Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY DA 15

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB ~~CHECK #~~

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY _____
CARRIER

TICKET #R 76485

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076116

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
12:21:12	31000	70160	101160	35.08

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
3	104.89	12:21:12 pm Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY 15

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
DANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB ~~CHECK #~~ CARRIER

TICKET #P 76541

Customer # ATE001 Job # B1BOFD Mix # 575 Mix Name OIL SOIL TRUCK# 9
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 070116

Time	Tare	Net	Gross	Total
3:03:55	31000	74980	105980	37.49

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
5	178.22	3:03:55 pm Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY DW 163

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089

MAIN OFFICE:
DANVERS 750-4200

SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CARRIER

TICKET #P 76630

Customer # ATE001 Job # B1BOFD Mix # 575 Mix Name OIL SOIL TRUCK# 9
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 070121

Time	Tare	Net	Gross	Total
12:15:49	42500	59500	102000	29.75

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
2	63.37	12:15:49 pm Sep 24, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY DW 189

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK #
CARRIER

TICKET #: 76651

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076121

MIX # 876 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
12:19:19	31000	65500	96600	33.00

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest charge	Total Cost

Load#	Job Total	Time & Date	Pop/Del
3	96.17	12:19:19 pm Sep 24, 1992	P

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY Ron 170

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
DANVERS 750-4200

TIME
FMN _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB _____ CHECK #
CARRIER

TICKET #: 76657

Customer # ATE001
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076121

MIX # 876 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
12:38:06	31000	67800	98800	33.90

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Pop/Del
4	130.07	12:38:06 pm Sep 24, 1992	P

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

TRIMOUNT BITUMINOUS PRODUCTS CO.
6 CHERRY HILL DRIVE
P.O. BOX 2089
DANVERS, MA 01923-5089
SHREWSBURY DIVISION
651 LAKE STREET AT RTE. 20
SHREWSBURY, MA 01545
OFFICE 881-1430 PLANT 754-4709

MAIN OFFICE:
NVERS 750-4200

TIME
FMN
ARRIVED JOB
LEFT JOB ~~CHECK #~~

Cash ☐ C.O.D. ☐ Charge ☑
CHECKED BY
CARRIER

TICKET #R 76538

stomer # ATE001
TEC ASSOC.
62 ACCORD PARK DRIVE
ORWELL, MA 02061
17-878-6200

Job # BLDGFD
US ARMY
BLDG 614 Tank 18, 85 + 86
FORT DEVENS, MA 01433
PO# 076116

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:50:13	31300	71680	102980	35.84

Cost/Ton	Percent Tax	Load Cost	Amount Tax	Dest Charge	Total Cost

Load#	Job Total	Time & Date	Fob/Del
4	140.73	2:50:13 pm Sep 23, 1992	F

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY TRUCKS DELIVERING MATERIAL BEYOND STREET PAVEMENT.

RECEIVED BY

4.12 PERMITS AND CERTIFICATIONS

The following permit was obtained for the proper closure of a UST. Following the permit there is a disposal receipt for the steel UST.

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

_____ 19

C.93 §.40 M.G.L.
DIG SAFE NUMBER
92160232
Start Date 4/16/92

In accordance with the provisions of Chapter 148, G.L. as provided in Section 38A this permit is granted to

Name: ATEC ENVIRONMENTAL ASSOCIATES, INC
Full name of person, firm or Corporation

To transport underground steel storage tank(s) to Approved tank yard# 14901

State clearly type of inert gas used in steel storage tank — steel tank: DRY ICE
method

FDID# 17919

Name and address of contractor disposing tank SAME AS ABOVE

10,000 DIESEL

Fee paid $ N/A

Location to which tank will be transported

14901
Approved tank yard#

This permit will expire 5-13 1992

[signature], Ass't Fire Chief
Signature of official granting permit (TITLE)
(Head of Fire Dept.)

BKD 6#614
TANK # 18

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD: JOHN C. TOMBARELLO & SON 207 MARSTON ST. LAWRENCE, MASS. 01841

APPROVED TANK YARD NO. 4 9 0

Tank Yard Ledger 502 CMR 3.03(4) Number: 9 2 0 0 6 2 0

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership ATEC ENVIRONMENTAL and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FDID# 1 7 9 1 9 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

James Marconto	CPW	4-24-92
SIGNATURE	TITLE	DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 1 7 9 1 9 pursuant to 502 CMR 3:00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)

FORM F.P. 291 (rev. 9/88) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

DIMENSIONS

	Width		Length	
Tank 1	84"	X	35'7"	(10,000 gal.)
Tank 2	-----	X	-----	
Tank 3	-----	X	-----	
Tank 4	-----	X	-----	
Tank 5	-----	X	-----	
	(feet)		(feet)	

Tank Removed From

FT. DEVENS Bldg. 614 : tank #18
(no. street)

AYER.
(city or town)

Fire Department Permit # None Listed
(if applicable)

4.13 UST CLOSURE CHECKLIST

The following closure checklist was produced by ATEC Associates Inc., to ensure quality control of the proper abandonment of a UST.

SUR CH LIS

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Remove tank, piping, pumps, and hardware.	4-23-92	—	Photographic Descriptions:	Soil Description: SAND AND COARSE
Photograph excavation; note descriptions.	4-23-92	2:50	Photo 1: EMPTY EXC. (South SIDE)	AGGREGATE
Sketch Schematic	4-23-92	2:50	Photo 2: EMPTY EXC (North SIDE)	
	4-23-92	"	Photo 3: EMPTY EXC. (WEST SIDE)	
	4-23-92	"	Photo 4: VIEW OF TANK OUT OF EXC.	
	4-23-92	"	Photo 5: VIEW OF TANK OUT OF EXC	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	4-23-92	1:30		Depth of Excavation/Conditions: 9.5'
Secure tanks transport off-site				
Obtain 10 soil samples from	4-23-92		PID (ppm) NDIR (ppm)	Sample locations:
excavation walls/bottom: Note PID/NDIR	4-23-92	3:20	SS1: 0.0	S. SIDE, EXC WALL (4.5' DEEP)
readings and sample locations.	"	3:20	SS2: 0.0	" " "
	"	3:25	SS3: 0.0	W. SIDE, EXC. WALL "
	"	3:25	SS4: 1.2	" "
	"	3:30	SS5: 0.2	" "
	"	3:30	SS6: 1.0	S. SIDE - UNDER TANK
	"	3:35	SS7: 0.8	MIDDLE - UNDER TANK
	"	3:35	SS8: 3.5	" "
	"	3:40	SS9: 0.2	N. SIDE: UNDER TANK
			SS10:	" "
Obtain 2 soil samples & 1 water samples				Sample Locations:
for laboratory analysis. Note sample locations.	4-23-92	4:00		LSS1: W. SIDE - EXC. WALL (SS#4)
	4-23-92	4:00		LSS2: MIDDLE (N) UNDER TANK (SS#8)
	4-23-92	4:16		LWS1: S. SIDE - UNDER TANK (9.0')

OSU UST C CHECK LIST

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
				____ tons of backfill
Backfill excavation (if clean):	—	—		Backfill description:
Note amount & type of backfill	—	—		
Close open excavation (if applicable)	—	—		
~~Restore surface~~ and rope off	4-23-92	3:00		
Remove rubbish/debris	4-23-92	3:15		
Transport hazardous material off-site:	5- -92	—		Amount Classification
Note amount/classification	5- -92	—		(1) 55 gal. Drum TOXIC
Make copies of manifests, permits,	5-7-92	4:30		
and disposal receipts.	—	—		

CHECK LIST

EFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
alibrate PID & LEL/O2 meters	4-23-92	8:15		Site Topography: SLOPES SLIGHTLY
				TOWARDS THE NORTHWEST
rain & flush piping & pumps	4-23-92			NOTE: AREA IS COVERED W/FINISHED BLACKTOP
xcavate to top of tank	4-23-92	12:30		Depth to tank: 1.1/4
ent tank note LEL/O2 levels & times			LEL O2	
		T1:		VENT LINE (PIPE) 2.1/4" - GALV.
		T2:		
		T3:		PRODUCT LINE (PIPE) 2.0" - GALV. - ASPH. COATI
		T4:		
		T5:		FILL LINE (PIPE) 3.1/2" GAL.
		T6:		
		T7:		
		T8:		
		T9:		
		T10:		
		T11:		
		T12:		
			1600 gal. 55 gals. was drained.	
Pump & clean tank:	4-32-92	2:00	___ gal. liquid	Tank Dimensions/Conditions:
Note quantities liquid (gal) & sludge (lbs)			___ lbs. sludge	
Remove all tank connections, and cap openings	4-23-92			7.0'
Excavate soils to free tank	4-23-92	12:30		
Segregate stained soils: Note PID readings			PID (ppm) NDIR (ppm)	35.0'
(if >10 ppm NDIR also)				
				NO EVIDENCE OF CORROSION
				NO PINHOLES OF LIGHT
Stockpile	4-23-92	3:30	19.0	COMPOSITE

4.14 INSTALLATION

The installation of a replacement UST No. 0018 was not performed.

ATEC Promises

- To be totally responsive to our clients' wants and needs with a constant sense of urgency.
- To perform high quality services with technically superior personnel.
- To perform all assignments for a reasonable fee and within budget.
- To communicate with our clients frequently so there will be no surprises.
- To complete our assignments and deliver reports when promised.
- To review reports with our clients to be sure there are no misunderstandings.
- To deliver accurate invoices to our clients within seven (7) days after the completion of the assignment or as required by the clients.
- To follow up with the clients to be sure services completely satisfied their wants and needs.

ATEC Associates, Inc.
Corporate Headquarters
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(317) 577-1761

At ATEC, "Client satisfaction with a constant sense of urgency" is our goal. If you have concerns with an ATEC project or service that your local ATEC Representative has not resolved, please call 1-800-800-ATEC, a "hot line" to my office. We will do everything possible to satisfy your concerns. If you have received quality service, we would appreciate knowing that as well. Thank you for allowing us to work on your team.

Sincerely,

Gerald D. Mann
President
ATEC Associates, Inc.

Corporate Headquarters – Client Satisfaction Hot Line
1-800-800-ATEC
(1-800-800-2832)