UST 93125 ATEC

Technical Report
Underground Storage Tank Closure
UST Nos. 0019 - 0021
Fort Devens, Massachusetts

ATEC File: 37.07.91.00451
Contract No. DAKF31-91-D-00015

Prepared for:

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

Attn: Mr. Steven Dijack
Contracting Officer

December 20, 1993

December 20, 1993

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

RE: Technical Report, Volume 3
Underground Storage Tank Closure
UST Nos. 0019 - 0021
Fort Devens, Massachusetts
ATEC File: 37.07.91.00451

Mr. Dijack:

Attached is Volume 3 of the Technical Report by ATEC Associates, Inc. (ATEC), detailing the closure of three underground storage tanks (USTs) referenced as UST Nos. 0019 - 0021, located at Fort Devens, Massachusetts (the site). The Technical Report covers work conducted under Contract No. DAKF31-91-D-00015 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.

James M. Carr
Project Manager

James B. O'Brien
Division Manager

Ronald Lawson
Assistant Vice President & District Manager

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UNDERGROUND STORAGE TANK INDEX (Volume 3)

UST No.	SIZE (gal)	PRODUCT	LOCATION
0019	1,500	No. 2 Fuel Oil	Building 631, Fort Devens, MA
0020	5,000	Diesel Fuel	Building 1404, Fort Devens, MA
0021	4,000	Kerosene	Building 1419, Fort Devens, MA

TECHNICAL REPORT

Volume 3

UST Nos. 0019 - 0021

United States Army

Fort Devens, Massachusetts

ATEC Project No. 37.07.91.00451

1.0 INTRODUCTION

This volume (Volume 3) of the Technical Report details the removal of three underground storage tank (USTs) referenced as UST Nos. 0019 - 0021 at various buildings located at Fort Devens, Massachusetts (the site). The Technical Report covers work conducted under Contract No. DAKF31-91-D-00015 as part of Removal of Underground Storage Tanks in the New England Area, US Army Project No. EQ-19027-9P.

The basic Project Work Scope of Contract No. DAKF31-91-D-00015 included:

- Excavation and removal of 69 USTs at various buildings located at Fort Devens, Massachusetts.
- Remedial excavation, if required, 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. 0019

2.1 POST REMOVAL REPORT

2.1.1 Introduction

This Post-Removal Report details the results of the closure of one 1,500 gallon, single wall, steel, underground storage tank (UST) referenced as UST No. 0019, located at property known as Building 631, Fort Devens, Massachusetts. The purpose of the closure was to excavate the UST, evaluate the potential for the presence of oil and hazardous material at the site. The closure of this UST was conducted on January 30, 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 1,500 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.

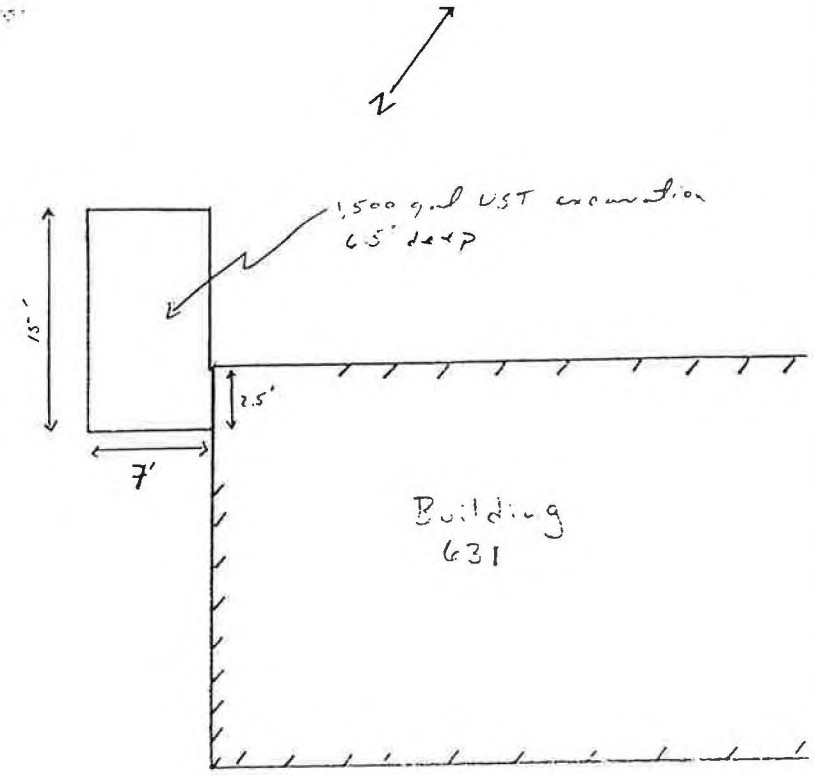
2.1.2 Subsurface Storage Tank Excavation and Removal

On January 30, 1992, one 1,500 gallon, underground, No. 2 fuel oil storage tank was excavated and removed from the site. The UST was located adjacent to the west corner of Building 631. Site topography is relatively level with a gentle upward slope to the north.

Soils in the excavation consisted primarily of medium brown, fine sand and silt with fine to coarse gravel, cobbles, and boulders. The tank was covered by asphalt and approximately 2 feet of soil. The bottom of the excavation was approximately 7 feet below grade. Groundwater was not encountered within the excavation. The excavated soil required to free the tank did not appear contaminated. However, contaminated soil was noted within the southeast corner of the excavation.

Associated piping was drained, and tank connections were removed. UST No. 0019 was estimated to contain 200 gallons of No. 2 fuel oil and residual tank materials. The fuel oil and residual materials were removed and drummed on January 30, 1992 for transportation at a later date. 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. 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.

The scrap tank was removed from the site on January 30, 1992 and transported to the Contractor's yard, Lake George Street, Fort Devens for temporary storage. The tank was disposed at Tombarello & Sons in Lawrence, Massachusetts, a licensed Massachusetts tank yard, on February 19, 1992 (see Section 2.11, Permits and Certifications).



UST LOCATION PLAN 1,500 gallon UST relative to: Building 631 Fort Devens, Massachusetts	PROJECT: 37.07.91.0451 NOT TO SCALE FIGURE: 2.1	ATEC

On February 27, 1992, the waste fuel oil and residual sludge was transported to Beede Waste Oil Corp in Plastow, New Hampshire for recycling. See Section 2.10 Hazardous Waste Manifest for a copy of the appropriate manifest.

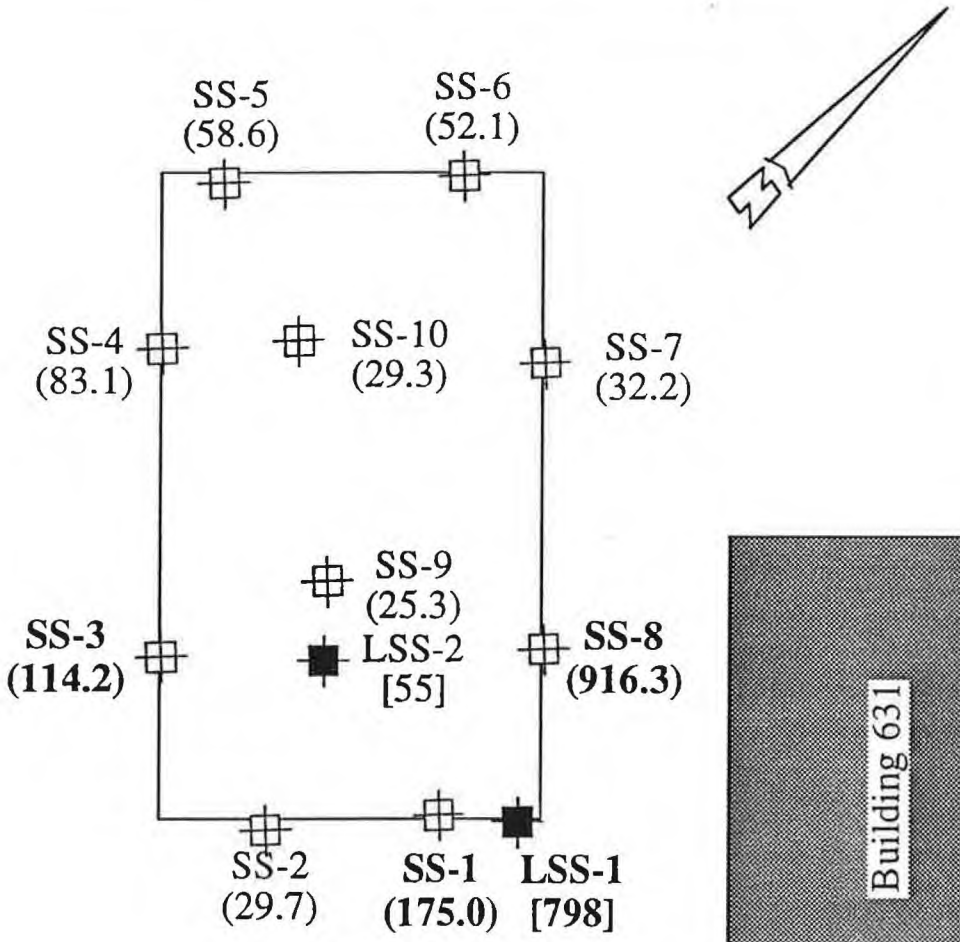
2.1.3 Sampling and Analysis Plan

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 protocol 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.

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 7 feet below grade. Two composite soil samples (Stock-1 and Stock-2) were obtained from stockpiled soils for PID screening and NDIR field analysis. Sampling locations for the excavation are depicted on the Sampling Schematic, as Figure 2 .2.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for 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. These samples were analyzed for TPH utilizing USEPA Method 418.1. Sampling locations are depicted on the Sampling Schematic, attached as Figure 2.2.

The appropriate chain of custody forms are included in Section 2.9.



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

1,500 gallon UST excavation at:
Building 631
Fort Devens, Massachusetts

PROJECT: 37.07.91.0451

NOT TO SCALE

FIGURE: 2.2

ATEC©

2.1.4 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 as follows:

TABLE 2.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	NDIR (ppm TPH)
SS-1	2.8	175.0
SS-2	0.4	29.7
SS-3	0.4	114.2
SS-4	0.2	83.1
SS-5	0.1	58.6
SS-6	0.2	52.1
SS-7	0.4	32.2
SS-8	2.6	916.3
SS-9	1.4	25.3
SS-10	0.2	29.3
Stock-1	2.1	75.4
Stock-2	1.9	94.8

N.D. = None Detected

Laboratory analytical results of the two soil samples obtained from the excavation revealed a TPH concentration of 798 ppm for LSS-1, and 55 ppm for LSS-2. See Section 2.8, Laboratory Analytical Results.

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, perforations, or severe corrosion.

Groundwater was not encountered within the excavation.

Excavated soil required to free the tank did not appear contaminated. Contaminated soil was noted at the southeast corner, of the excavation.

Ten soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR analysis respectively. PID screening for TOVs ranged from 0.1 to 2.8 ppm. NDIR analysis results revealed levels of TPH ranging from 25.3 to 916.3 ppm.

Two soil samples were obtained from the excavation for laboratory analysis for TPH. Analytical results for LSS-1 obtained from the southeast wall of the excavation revealed TPH concentrations of 798 ppm. Analytical results for LSS-2 obtained from the bottom of the excavation revealed a TPH concentration of 55 ppm.

ATEC's recommendations are as follows:

Conduct remedial excavation of the southern end of the excavation until laboratory analysis reveal background TPH levels of <100 ppm. Field screening of soil should be conducted during excavation utilizing a PID until background TOV 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.

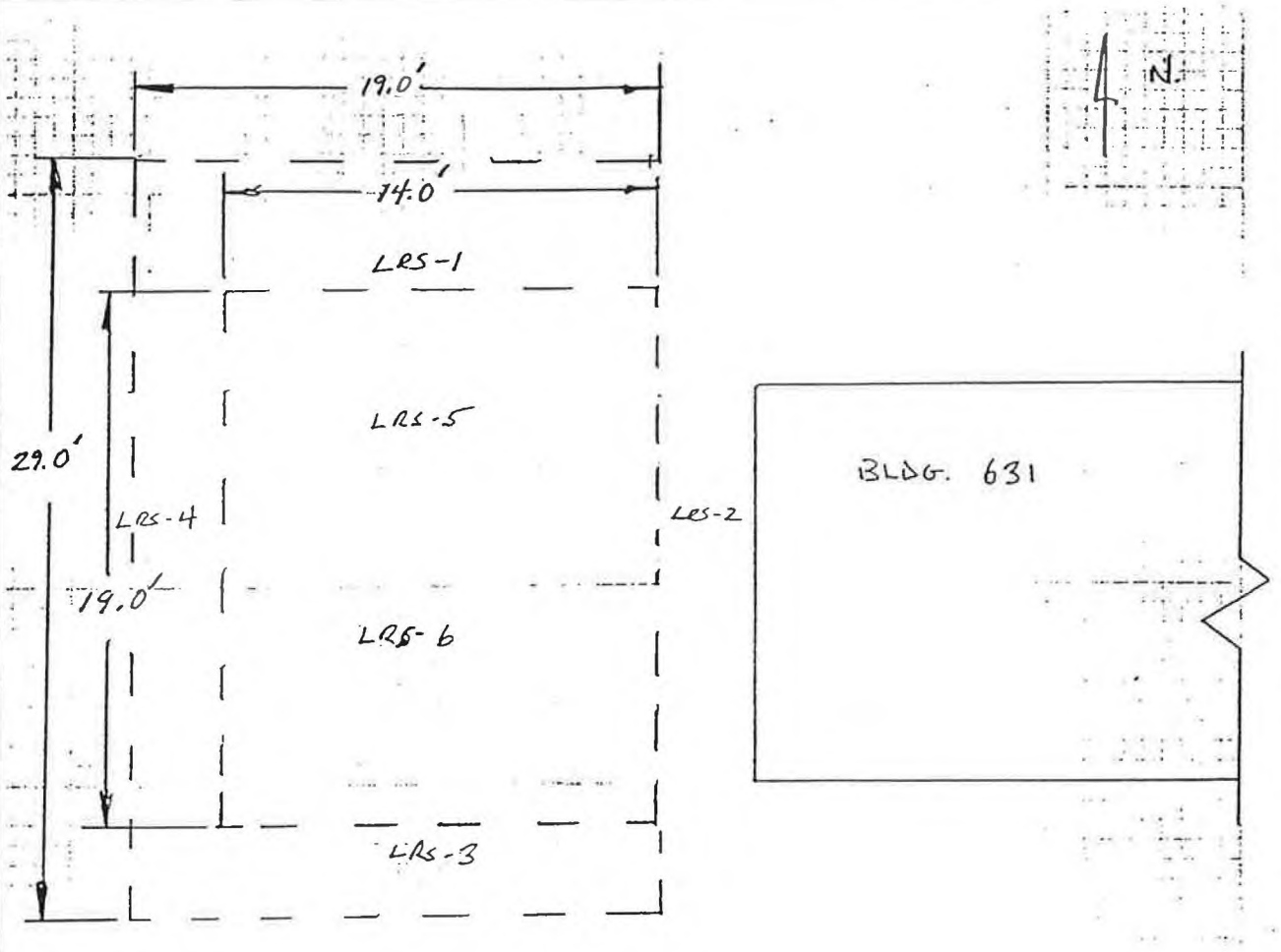
Stockpiled soils should be laboratory analyzed for TPH, Volatile Organic Compounds (VOCs), Polychlorinated Biphenyls (PCBs), 13 Metals by Toxicity Characteristics Leachate Procedure (TCLP), Flashpoint, Corrosivity, sulfide reactivity, and cyanide reactivity for disposal classification.

2.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

2.2.1 Site Remediation

Following initial PID screening, additional excavation to remove contaminated soil to reach background TOV levels by PID (<1 ppm) was conducted per order the Contracting Officer's Representative and David Salvadore of the Massachusetts Department of Environmental Protection (DEP). Approximately 109 tons of contaminated soil were removed from excavation floor and all sidewalls during remedial excavation on the August 20 and 21, 1992.

Six soil samples (RSS-1A to RSS-6A) were obtained from the post-remedial excavation for PID field screening. RSS-1A to RSS-4A were obtained from the sidewalls at a depth of approximately 4 feet below grade. RSS-5A and RSS-6A were obtained from the bottom of the excavation. PID results ranged from 0.0 to 1.0 ppm.



DEPTH OF EXCAV. = 7.5'

19 * 14 * 7.5 = 1995/27 : 73.89 * 1.625 = 120.07
15 * 7 * 6.5 = 682.5/27 = 25.27 * 1.625 = 41.06

79.01
7.44 (TK VOL)
71.57

REMEDIAL EXCAVATION PLAN 1,500 gallon UST relative to: Building 631 Fort Devens, Massachusetts	PROJECT: 37.07.91.0451 NOT TO SCALE FIGURE: 2.3	ATEC

Additional soil was removed from the sidewalls and bottom of the excavation. Six soil samples were obtained from the excavation for PID field screening. RSS-1B to RSS-4B were obtained from the sidewalls at a depth of approximately 5 feet below grade. RSS-5B and RSS-6B were obtained from the bottom of the excavation at a depth of approximately 7.5 feet below grade. Final PID results ranged from 0.0 to 0.1 ppm.

TABLE 2.2.1 - PID SCREENING RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	LOCATION
RSS-1A	5.0	north sidewall (4' depth)
RSS-2A	3.0	east sidewall (4' depth)
RSS-3A	2.0	south sidewall (4' depth)
RSS-4A	10.0	west sidewall (4' depth)
RSS-5A	1.0	bottom (7' depth)
RSS-6A	0.8	bottom (7' depth)
RSS-1B	0.6	north sidewall (5' depth)
RSS-2B	0.0	east sidewall (5' depth)
RSS-3B	0.0	south sidewall (5' depth)
RSS-4B	0.2	west sidewall (5' depth)
RSS-5B	1.0	bottom (7.5' depth)
RSS-6B	0.8	bottom (7.5' depth)

RSS = Remediation Soil Sample

Six soil samples (LRS-1 to LRS-6) were obtained for laboratory analysis for TPH (modified USEPA Method 418.1), with samples LRS-1 and LRS-5 being additionally analyzed for VOCs (USEPA Method 8260) and 13 TCLP Metals (USEPA Method 6010).

The following table contains levels revealed by laboratory analysis:

TABLE 2.2.2 - LABORATORY ANALYSIS

SAMPLE NUMBER	TPH (ppm)	VOCs (ppm)	13 TCLP Metals	LOCATION
LRS-1	41	N.D.	0.35 zinc	north sidewall (5' depth)
LRS-2	289	N.A.	N.A.	east sidewall (5' depth)
LRS-3	N.D.	N.A.	N.A.	south sidewall (5' depth)
LRS-4	N.D.	N.A.	N.A.	west sidewall (5' depth)
LRS-5	39	N.D.	0.34 zinc	bottom (7.5' depth)
LRS-6	15	N.A.	N.A.	bottom (7.5' depth)

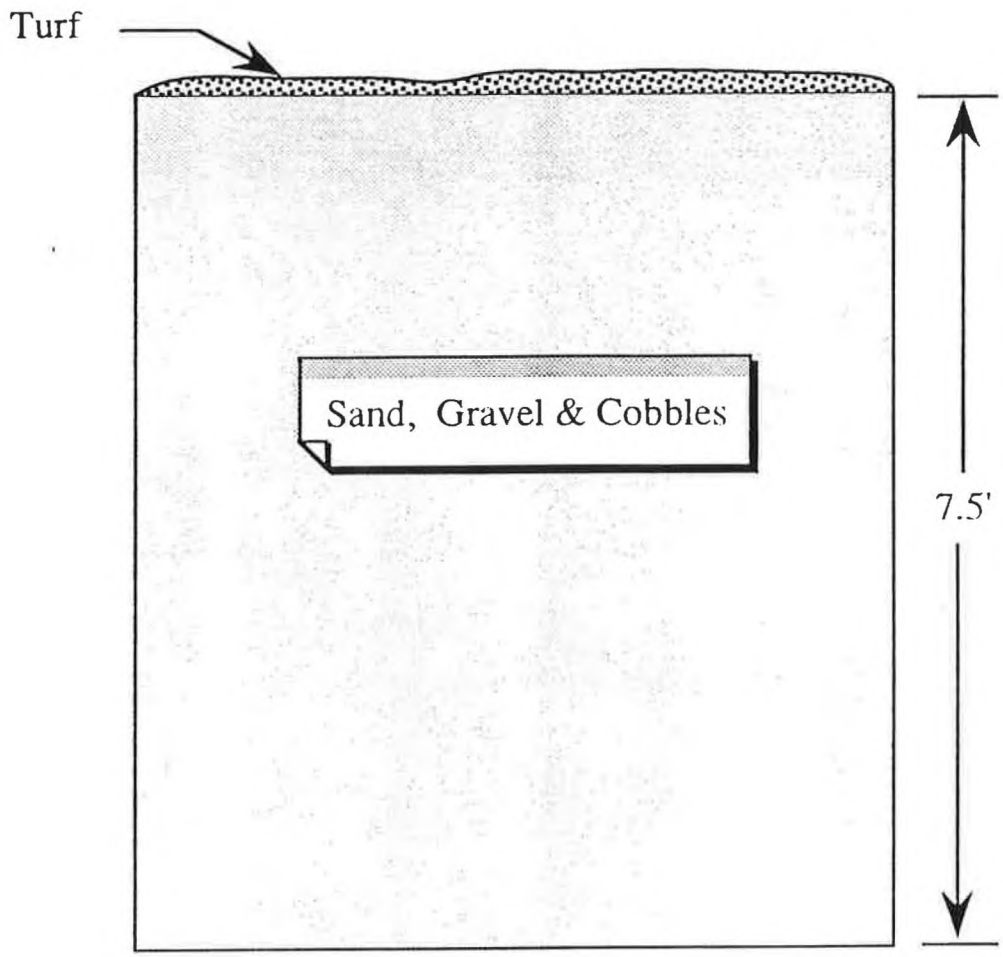
LRS = Laboratory Remediation Sample
N.D. = Not Detected above the Method Reporting Limit (MRL)
N.A. = Not Applicable

2.2.2 Soil Stratigraphy

The soil stratigraphy of the excavation consisted entirely of fine sand mixed with coarse aggregate and cobbles to a depth of approximately 7.5 feet below grade (see Figure 2.4, Soil Stratigraphy).

2.2.3 Contaminated Soil Disposal

Contaminated soil removed from the excavation for UST No. 0019 was transported to Trimount Bituminous Products Company in Shrewsbury, Massachusetts. The weight of contaminated soil was determined at the time of disposal. Based on weight disposal receipts, 109.1 tons of # 2 fuel oil contaminated soil was removed and disposed.



SOIL STRATIGRAPHY

1,500 gallon UST excavation at:
Building 631
Fort Devens, Massachusetts

PROJECT: 37.07.91.0451

NOT TO SCALE

FIGURE: 2.4

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2.3 HYDROGEOLOGICAL SERVICES

Hydrogeological services were not performed relative to UST No. 0019.

2.4 BACKFILL

On August 24, 1992, approximately 176.6 tons of bank run sand was used to backfill the excavation associated with the removal of UST No. 0019. Backfill material consisted of 73.89 cubic yards of bank run sand. Bank run sand contained particles which were less than 3 inches in diameter which was free of roots and debris, as per Section 4, Paragraph 5 of the contract. Backfill material was compacted to contract specifications. The excavation was backfilled to subgrade level prior to site restoration.

2.5 SURFACE RESTORATION

Following backfill of the excavation, approximately 266 square feet of loam was distributed over the excavated area and seeded.

2.6 PHOTOGRAPHIC DOCUMENTATION

The following photographs are of the removed UST, the excavation and a post remedial view of the excavation:

A-1: One side of removed tank.

A-2: Opposite side of removed tank.

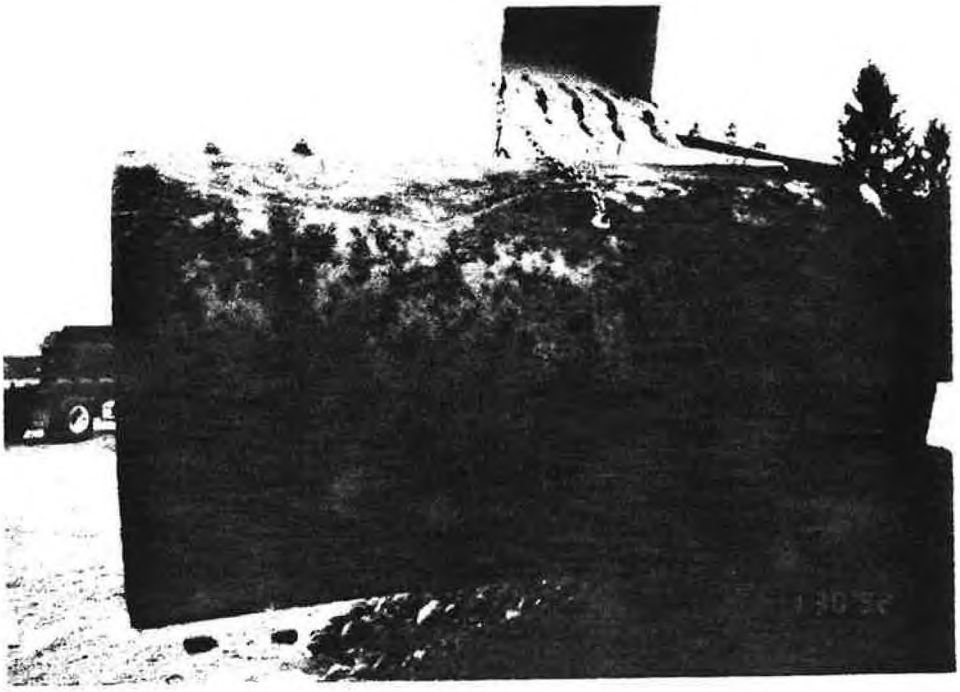
A-3: Excavation as viewed from east , facing west.

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

A-5: Post-remedial excavation as viewed from end to end.

A-6: Opposite view of post-remedial excavation as viewed from end to end.

A-1



A-2

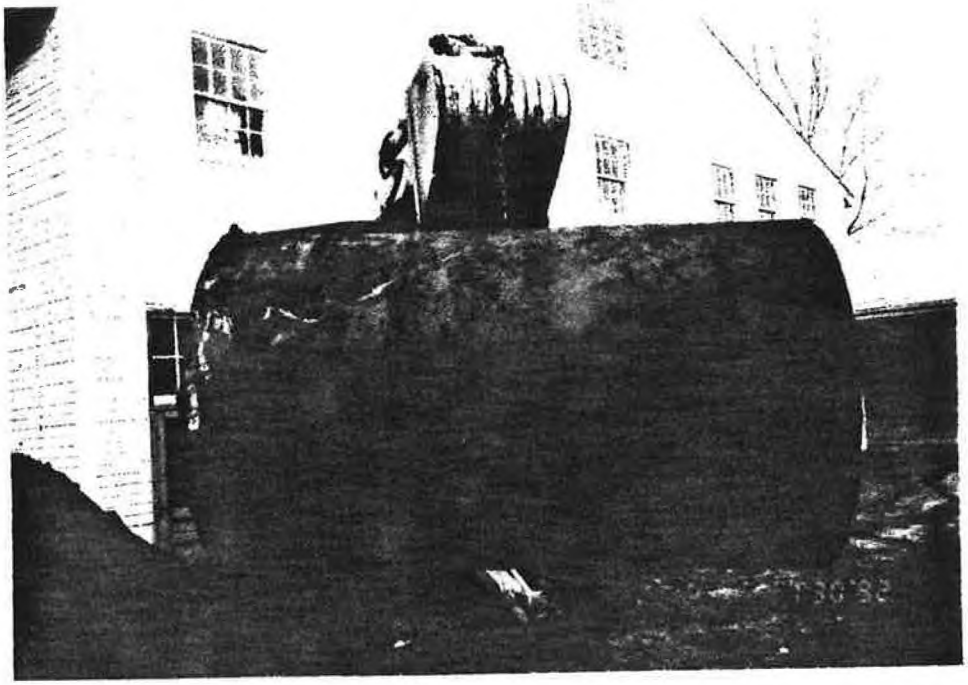


PHOTO DOCUMENTATION 1,000 gallon UST excavation at: Building 631 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451	ĀTEC

A-3



A-4

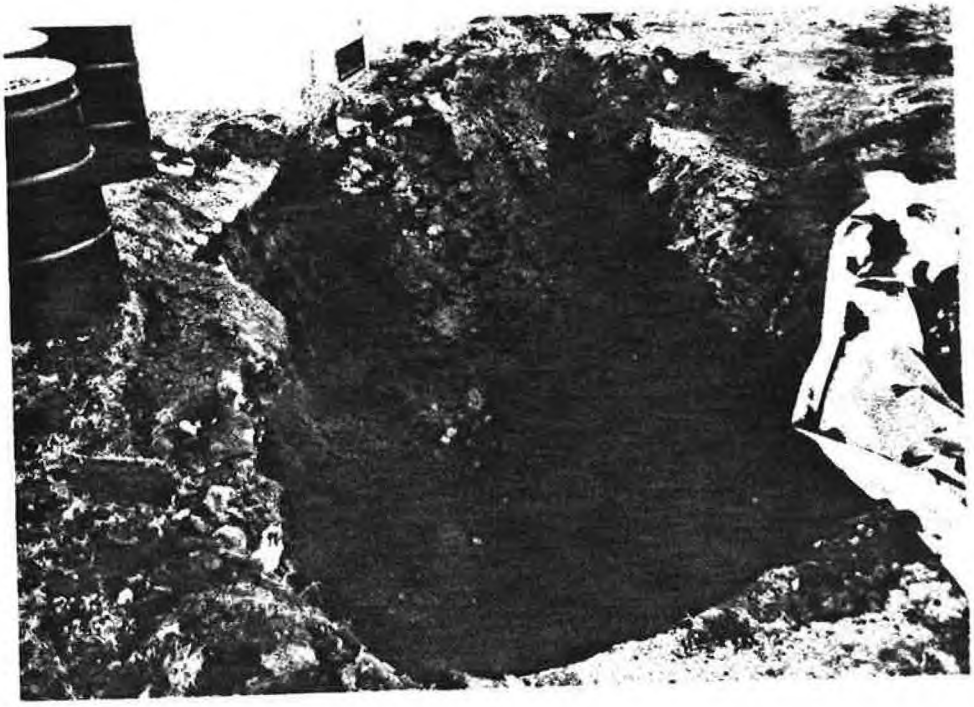


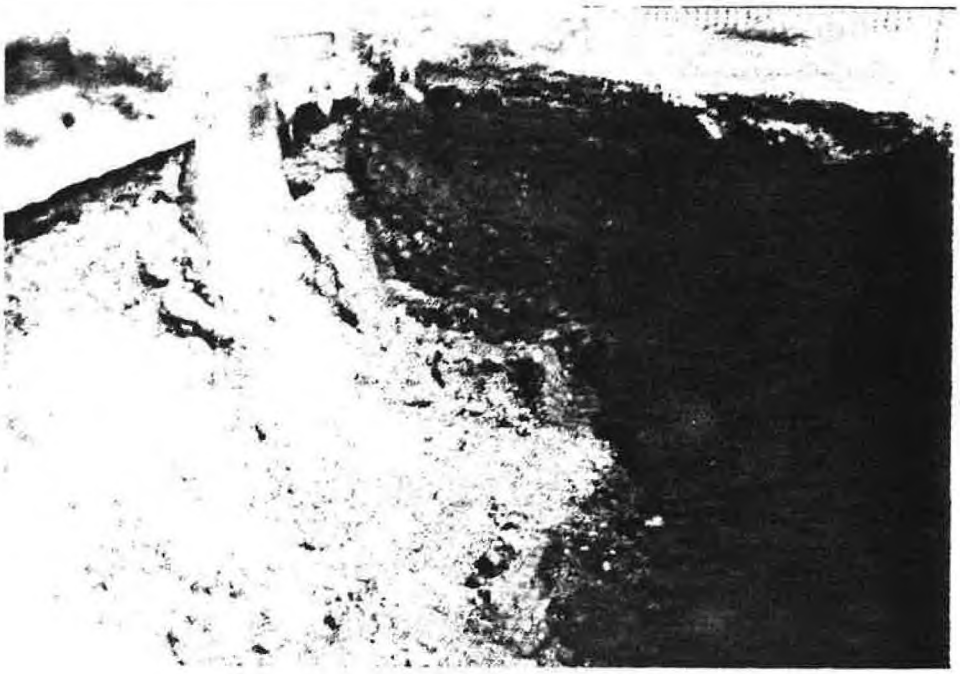
PHOTO DOCUMENTATION

1,000 gallon UST excavation at:
Building 631
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ĀTEC

A-5



A-6

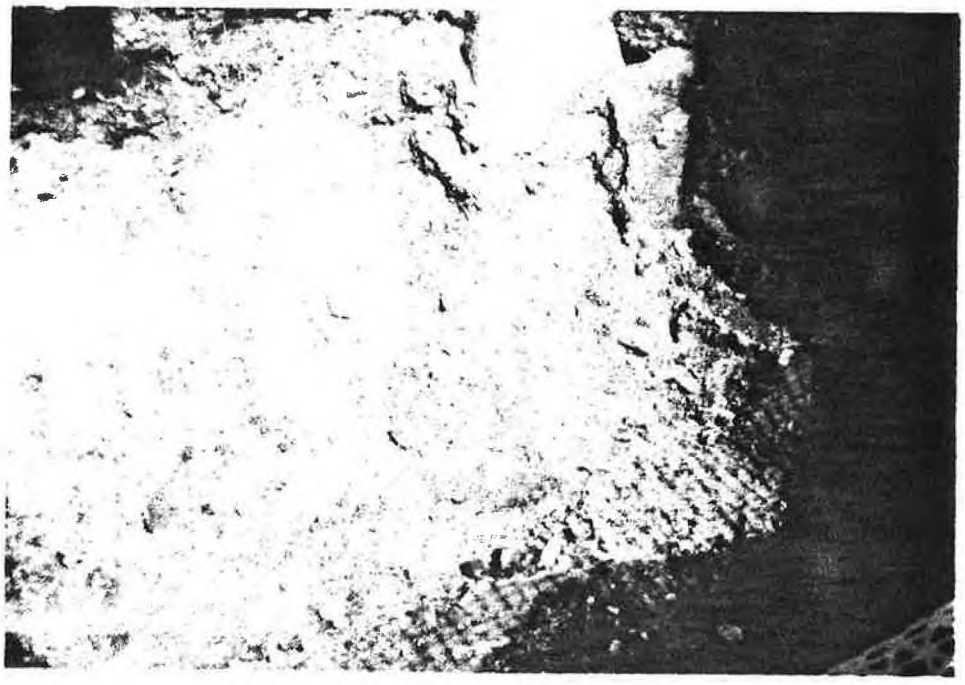


PHOTO DOCUMENTATION 1,000 gallon UST excavation at: Building 631 Fort Devens, Massachusetts	PROJECT: 37.04.91.0451	ĀTEC

2.7 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 0019

DATE: Jan 31, 1992

OPERATOR: RICHARD W. GERMAN

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:	3.2	0.0	-3.2	0.0	-0.7	0.0	30.6
SPAN:							
ZERO:							

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	81.9	75.1	17.5	3.0	—	—	2.5	2.5	--	75.4
STOCK-2	85.3	76.0	17.5	3.0	—	—	4.3	4.3	--	94.8
SS-1	83.8	75.6	17.5	3.0	—	—	6.9	7.0	--	175.0
SS-2	83.0	75.4	17.5	3.0	—	—	1.0	1.1	--	29.7
SS-3	82.2	75.2	17.5	3.0	—	—	3.8	3.9	--	114.2
SS-4	81.7	74.3	17.5	3.0	—	—	2.9	3.0	--	83.1
SS-5	81.0	75.4	17.5	3.0	—	—	1.5	1.6	--	58.6
SS-6	79.1	73.2	17.5	3.0	—	—	1.5	1.5	--	52.1
SS-7	83.2	76.2	17.5	3.0	—	—	1.0	1.1	--	32.2
SS-8	81.7	75.1	17.5	3.0	—	—	29.6	29.5	--	916.3
SS-9	83.8	75.7	17.5	3.0	—	—	0.9	1.0	--	25.3
SS-10	84.8	75.7	17.5	3.0	—	—	1.2	1.3	--	29.3
—	—	—	—	—	—	—	—	—	--	—
—	—	—	—	—	—	—	—	—	--	—

2.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports are associated with the removal, remedial excavation and stockpile soil. These reports were organized and provided by Environmental Science Services Inc (ESS).

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

- Stock-19: Soil sample obtained form stockpiled soil for disposal classification. Laboratory analyzed for VOCs, Semi-volatile, TPH, 13 TCLP Metals, PCBs, reactive sulfide, reactive cyanide, flashpoint, and corrosivity for classification purposes.

- LRS-1 to LRS-6: Soil samples obtained from the remedial excavation of UST No. 0019. Laboratory analyzed for TPH.

- LRS-1 and LRS-5: Soil samples obtained from the remedial excavation additionally analyzed for VOCs and 13 TCLP Metals.

In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

Parameter	Results	Units	MRL	Method
pH (Corrosivity)	4.9	S.U.	N/A	9045
Flashpoint	No Flash	°F	200	1010
Polychlorinated Biphenyls	ND	mg/Kg	Attached	8080
Reactive Cyanide	ND	mg/Kg	2	7.3.3.2
Reactive Sulfide	ND	mg/Kg	2	7.3.4.1
Semivolatile Organics	ND	ug/Kg	Attached	8270
Total Petroleum Hydrocarbons-IR	399	mg/Kg	11	418.1
Volatile Organics	ND	ug/Kg	Attached	8240
Toxicity Characteristic Leaching Procedure				1311
Metals				
Lead	0.2	mg/L	Attached	6010
Copper	0.04	mg/L	Attached	6010
Zinc	0.31	mg/L	Attached	6010

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92

David Dickinson
Laboratory Director

001

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 | **ESS Project ID:** 922281

Client Sample ID: LRS-1 | **ESS Sample ID:** 922281-01

Date Sample Received: 8/28/92 | **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Percent Solids	91	% w/w	1	160.3
Total Petroleum Hydrocarbons-IR	41	mg/Kg	11	418.1
Volatile Organics	ND	ug/Kg	Attached	8260
Toxicity Characteristic Leaching Procedure				1311
Metals				
Zinc	0.35	mg/L	Attached	6010

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 — ESS Project ID: 922281

Client Sample ID: LRS-1 — ESS Sample ID: 922281-01

Date Sample Received: 8/28/92 — Date Reported: 9/11/92

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: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: UST #19 Bldg 631
Client Sample ID: LRS-1
ESS Sample ID: 922281-01

Date Sampled: 8/25/92
Date TCLP Performed: 9/1/92
Date Leachate Extracted: 9/3/92
Date Extract Analyzed: 9/4/92

	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	0.3
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.06
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.05
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.06
Zinc	0.31	0.02	0.34	0.03
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: _____ Date: 11 Sept 92
David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 | **ESS Project ID:** 922281

Client Sample ID: LRS-2 | **ESS Sample ID:** 922281-02

Date Sample Received: 8/28/92 | **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	289	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=92%

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 — **ESS Project ID:** 922281

Client Sample ID: LRS-3 — **ESS Sample ID:** 922281-03

Date Sample Received: 8/28/92 — **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	ND	mg/Kg	11	418.1

ND = Not Detected above Method Reporting Limit (MRL)

Results reported on a dry weight basis, % solids=90%

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 **ESS Project ID:** 922281

Client Sample ID: LRS-4 **ESS Sample ID:** 922281-04

Date Sample Received: 8/28/92 **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	ND	mg/Kg	11	418.1

ND = Not Detected above Method Reporting Limit (MRL)

Results reported on a dry weight basis, % solids=88%

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 | **ESS Project ID:** 922281

Client Sample ID: LRS-5 | **ESS Sample ID:** 922281-05

Date Sample Received: 8/28/92 | **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Percent Solids	94	% w/w	1	160.3
Total Petroleum Hydrocarbons-IR	39	mg/Kg	10	418.1
Volatile Organics	ND	ug/Kg	Attached	8260
Toxicity Characteristic Leaching Procedure				1311
Metals				
Zinc	0.34	mg/L	Attached	6010

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 — ESS Project ID: 922281

Client Sample ID: LRS-5 — ESS Sample ID: 922281-05

Date Sample Received: 8/28/92 — Date Reported: 9/11/92

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: 11/9/92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: UST #19 Bldg 631
Client Sample ID: LRS-5
ESS Sample ID: 922281-05

Date Sampled: 8/25/92
Date TCLP Performed: 9/1/92
Date Leachate Extracted: 9/3/92
Date Extract Analyzed: 9/4/92

	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	0.3
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.06
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.05
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.06
Zinc	0.31	0.02	0.34	0.03
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: _____ Date: 11 Sept 92
David Dickinson
Laboratory Director



In Response To The Future

CERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 **ESS Project ID:** 922281

Client Sample ID: LRS-6 **ESS Sample ID:** 922281-06

Date Sample Received: 8/28/92 **Date Reported:** 9/11/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	15	mg/Kg	11	418.1

ND = Not Detected above Method Reporting Limit (MRL)

Results reported on a dry weight basis, % solids=92%

Approved by: _____ Date: 11 Sept 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 #19 Bldg 631

Date Sample Analyzed: 9/8/92

ESS Project ID: 922281

SAMPLE ID	1,2 DICHLOROETHANE-D4 (70-121%)*	TOLUENE-D8 (81-117%)*	BFB (74-121%)*
VS0908B1	99%	89%	97%
922281-01	102	89	97
922281-05	102	91	97

* Acceptance criteria

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #19 Bldg 631 — ESS Project ID: 922278

Client Sample ID: Method Blank — ESS Sample ID: VS0908B1

Date Sample Received: N/A — Date Reported: 9/11/92

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: _____ Date: 11 Sept 92
David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

MATRIX SPIKE ANALYSIS SUMMARY

TCLP METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants Matrix: Solid

TCLP Batch ID: 227701 Concentration in: mg/L

Target Analyte	Result	Spike Added	Spiked Result	Percent Recovery
Antimony	ND	*	ND	78%
Arsenic	ND	2.00	1.69	85
Cadmium	ND	0.5	0.43	86
Chromium	ND	1.0	0.91	91
Lead	ND	1.0	0.79	79
Mercury	ND	0.02	0.022	110
Selenium	ND	2.00	2.11	105
Silver	ND	1.0	0.95	95
Copper	ND	1.0	0.78	78
Nickel	ND	1.0	0.78	78
Zinc	0.13	1.0	1.05	92
Beryllium	ND	*	ND	78
Thallium	ND	*	ND	78

This matrix spike analysis summary applies to the following samples: 922281-01, -05

ND = Not Detected above Method Reporting Limit (MRL)

* Matrix Spike Recovery based on the lowest spike recovery of the spiked element.

Approved by: _____ Date: 11 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

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	78%	50 - 150%

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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

In Response To The Future

ERTIFICATE OF ANALYSIS

ACID EXTRACTABLES
EPA 8270

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens | ESS Project ID: 921516

Client Sample ID: Stock-19 | ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 | Date Reported: 6/26/92

Parameter	Result (ug/Kg)	MRL*
2-Chlorophenol	ND	1,650
2-Nitrophenol	ND	1,650
Phenol	ND	1,650
2,4-Dimethylphenol	ND	1,650
2,4-Dichlorophenol	ND	1,650
2,4-Dinitrophenol	ND	8,250
Pentachlorophenol	ND	8,250
4-Nitrophenol	ND	8,250
2,4,6-Trichlorophenol	ND	1,650
2,4,5-Trichlorophenol	ND	8,250
2-Methylphenol	ND	1,650
4-Methylphenol	ND	1,650
4-Chloro-3-Methylphenol	ND	1,650
4,6-Dinitro-2-Methylphenol	ND	8,250

* Sample diluted due to matrix interference.

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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

In Response To The Future

ERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

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	78%	50 - 150%

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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vironmental Science Services
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In Response To The Future

ERTIFICATE OF ANALYSIS

ACID EXTRACTABLES
EPA 8270

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens
ESS Project ID: 921516

Client Sample ID: Stock-19
ESS Sample ID: 921516-01

Date Sample Received: 6/10/92
Date Reported: 6/26/92

Parameter	Result (ug/Kg)	MRL*
2-Chlorophenol	ND	1,650
2-Nitrophenol	ND	1,650
Phenol	ND	1,650
2,4-Dimethylphenol	ND	1,650
2,4-Dichlorophenol	ND	1,650
2,4-Dinitrophenol	ND	8,250
Pentachlorophenol	ND	8,250
4-Nitrophenol	ND	8,250
2,4,6-Trichlorophenol	ND	1,650
2,4,5-Trichlorophenol	ND	8,250
2-Methylphenol	ND	1,650
4-Methylphenol	ND	1,650
4-Chloro-3-Methylphenol	ND	1,650
4,6-Dinitro-2-Methylphenol	ND	8,250

* Sample diluted due to matrix interference.

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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vironmental Science Services
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In Response To The Future

ERTIFICATE OF ANALYSIS

BASE NEUTRAL EXTRACTABLES
EPA 8270

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

Parameter	Result (ug/Kg)	MRL*
Acenaphthylene	ND	1,650
1,2,4-Trichlorobenzene	ND	1,650
Hexachlorobenzene	ND	1,650
Bis(2-chloroethyl)ether	ND	1,650
2-Chloronaphthalene	ND	1,650
1,2-Dichlorobenzene	ND	1,650
1,3-Dichlorobenzene	ND	1,650
1,4-Dichlorobenzene	ND	1,650
3,3-Dichlorobenzidine	ND	3,300
2,4-Dinitrotoluene	ND	1,650
2,6-Dinitrotoluene	ND	1,650
Fluoranthene	ND	1,650
4-Chlorophenyl phenyl ether	ND	1,650
Bis(2-chloroisopropyl) ether	ND	1,650
Bis(2-chloroethoxy) methane	ND	1,650
Hexachlorobutadiene	ND	1,650
Hexachlorocyclopentadiene	ND	1,650
Isophorone	ND	1,650
Naphthalene	ND	1,650
Nitrobenzene	ND	1,650
N-nitrosodiphenylamine	ND	1,650
N-nitrosodi-n-propylamine	ND	1,650
Bis(2-ethylhexyl)phthalate	ND	1,650
Di-n-butylphthalate	ND	1,650
Di-n-octylphthalate	ND	1,650
Diethyl phthalate	ND	1,650
Dimethyl phthalate	ND	1,650
Benzo(a)anthracene	ND	1,650

* Sample diluted due to matrix interference.
ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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vironmental Science Services
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In Response To The Future

ERTIFICATE OF ANALYSIS

BASE NEUTRAL EXTRACTABLES cont.
EPA 8270

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

Parameter	Result (ug/Kg)	MRL*
Benzo(a)pyrene	ND	1,650
Benzo(b)fluoranthene	ND	1,650
Benzo(k)fluoranthene	ND	1,650
Chrysene	ND	1,650
Acenaphthene	ND	1,650
Anthracene	ND	1,650
Benzo(ghi)perylene	ND	1,650
Fluorene	ND	1,650
Phenanthrene	ND	1,650
Dibenzo(a,h)anthracene	ND	1,650
Indeno(1,2,3-cd)pyrene	ND	1,650
Pyrene	ND	1,650
Hexachloroethane	ND	1,650
4-Bromophenyl-phenylether	ND	1,650
Benzyl Alcohol	ND	1,650
Benzoic Acid	ND	8,250
Bis(2-Chloroethoxy)methane	ND	1,650
4-Chloroaniline	ND	1,650
2-Methylnaphthalene	ND	1,650
2-Nitroaniline	ND	8,250
3-Nitroaniline	ND	1,650
Dibenzofuran	ND	1,650
4-Nitroaniline	ND	8,250
Butylbenzylphthalate	ND	1,650

* Sample diluted due to matrix inteference.
ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

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In Response To The Future

ERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8240

Client: ATEC Environmental Consultants

Client Project ID: U.S. Army-Ft. Devens — ESS Project ID: 921516

Client Sample ID: Stock-19 — ESS Sample ID: 921516-01

Date Sample Received: 6/10/92 — Date Reported: 6/26/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	ND	1,000
1,1-Dichloroethane	ND	1,000
Chloroform	ND	1,000
Carbon Tetrachloride	ND	1,000
1,2-Dichloropropane	ND	1,000
Dibromochloromethane	ND	1,000
1,1,2-Trichloroethane	ND	1,000
Tetrachloroethene	ND	1,000
Chlorobenzene	ND	1,000
1,2-Dichloroethane	ND	1,000
1,1,1-Trichloroethane	ND	1,000
Bromodichloromethane	ND	1,000
Trans-1,3-Dichloropropene	ND	1,000
Bromoform	ND	1,000
1,1,2,2-Tetrachloroethane	ND	1,000
Benzene	ND	1,000
Toluene	ND	1,000
Ethyl Benzene	ND	1,000
Chloromethane	ND	1,000
Bromomethane	ND	1,000
Vinyl Chloride	ND	1,000
Chloroethane	ND	1,000
1,1-Dichloroethene	ND	1,000
1,2-Dichloroethene (Total)	ND	1,000
Trichloroethene	ND	1,000
Acetone	ND	1,000
Carbon Disulfide	ND	1,000
2-Butanone	ND	1,000
Cis-1,3-Dichloropropene	ND	1,000
4-Methyl-2-Pentanone	ND	1,000
2-Hexanone	ND	1,000
Styrene	ND	1,000
Xylenes (Total)	ND	1,000

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92

David Dickinson
Laboratory Director

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In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: U.S. Army-Ft. Devens
Client Sample ID: Stock-19
ESS Sample ID: 921516-01

Date Sampled: 6/8/92
Date TCLP Performed: 6/18/92
Date Leachate Extracted: 6/19/92
Date Extract Analyzed: 6/22/92

	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	0.02
Chromium	ND	0.05	ND	0.05
Lead	0.1	0.1	0.2	0.2
Mercury	ND	0.002	ND	0.003
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.05
Copper	0.04	0.02	0.04	0.02
Nickel	ND	0.04	ND	0.05
Zinc	0.26	0.02	0.31	0.03
Beryllium	ND	0.01	ND	0.02
Thallium	ND	0.05	ND	0.06

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

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 26 June 92
David Dickinson
Laboratory Director

007

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

2.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil samples which were laboratory analyzed. If date received is not on chain-of-custody date received and analyzed is in lab report and /or quality control section.

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
37.07.451	FT. DEVENS - REMEDIATION CLIENT UST # 19, BLDG. 631	

SAMPLERS: *(Signature)* Craig D. Trombly

SAMPLING METHOD

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	13 TCLP	SAMPLE LOCATION / REMARKS
LRS-1	8-25-92					X				X		3		X		X				X		UST #19 BLDG. 631
LRS-2	"					X				X		1				X						"
LRS-3	"					X				X		1				X						"
LRS-4	"					X				X		1				X						"
LRS-5	"					X				X		3		X		X				X		"
LRS-6	"					X				X		1				X						"

LABORATORY ANALYSIS

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)*
Craig D. Trombly	8-25-92				

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

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
97.451	Devens - Tank 19 CLIENT PO 19468	

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
LSS1	1/30/92			X		X						1				X						
LSS2	1/30/92			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 Zaldi	2/3/92				
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Project Manager / Phone #:	
		2/4			

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
07.451	Devens Tank 19	
	CLIENT	

SAMPLERS: *(Signature)* M. A. E. Gold

SAMPLING METHOD: grab

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
LSS1	1/30/92			X		X						1				X						Tank
LSS2	1/30/92			X		X						1				X						Tank

LABORATORY ANALYSIS

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

PROJ. NO.	PROJECT NAME / CLIENT	LAB PROJ. NO.
37.07.451	U.S. Army - Ft. Devens	

SAMPLERS: *(Signature)* Charles Langenhagen

SAMPLING METHOD: Grab

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER	VOLATILE ORGANICS - 8240	~~BTEX~~ 5-VOA-8270	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	~~TOTAL METALS~~ 13 TCLP	IGNITABILITY	pH	Cyanide/Sulfide react	SAMPLE LOCATION / REMARKS
STOCK-19	6/8/92	10:30A	X	X		X				X		3		X	X	X	X		X	X	X	X	Bld 0631
STOCK-22		10:45A	X	X		X				X		3		X	X		X		X	X	X	X	Bldg. 1427
STOCK-23		11:00A	X	X		X				X		3		X	X		X		X	X	X	X	Bldg. 1429
STOCK-24		11:15A	X	X		X				X		3		X	X		X		X	X	X	X	Bldg. 1435
STOCK-25		11:30A	X	X		X				X		3		X	X		X		X	X	X	X	Bldg 1605
STOCK-26		11:45A	X	X		X				X		3		X	X		X		X	X	X	X	Bldg. 1666

LABORATORY ANALYSIS

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)*
Charles Langenhagen	6/9	6/10			
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:	
0450					

2.10 HAZARDOUS WASTE MANIFESTS

UST No. 0019 was estimated to contain 200 gallons of No. 2 fuel oil and residual tank materials. The fuel oil was removed and the residuals were drummed on January 30, 1992 for transportation at a later date.

A copy of the appropriate hazardous waste manifest was not available for UST No. 0019.

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

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

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator US EPA ID No. / Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
	MA7210025154 FD1639		

3. Generator's Name and Mailing Address
Dept. of The ARMY
Headquarters Ft. Devens Box 19.
AFZD-DEQEM Attn: Mark Boser
Fort Devens, MA 01433
Generator's Phone (508-796-3002

A. State Manifest Document Number: MA F353777
B. State Gen. ID: N/A

4. Transporter 1 Company Name: eede Waste Oil Corp.
5. US EPA ID Number: NHD018958140
C. State Trans. ID: N/A

6. Transporter 2 Company Name:
7. US EPA ID Number:
D. Transporter's Phone: 603 382-5761
E. State Trans. ID: N/A

8. Designated Facility Name and Site Address: eede Waste Oil Corp.
elley Rd., P.O. Box 127
laistow, NH 03865
10. US EPA ID Number: NHD018958140
F. Transporter's Phone: N/A
G. State Facility's ID: Not Required
H. Facility's Phone: 603 382-5761

9. 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.
Waste Petroleum Oils N.O.S. Combustable liquid NA 1270	007	DM	00385	G	MA01

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

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

15. Special Handling Instructions and Additional Information
4-Bldg 631 1-Bldg 2447 1-2686 - 1-3573
To Be Recycled #2 Fuel With SI=Sludge
For Recycling only Land Disposal Prohibited.
UST 19

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	Signature	Date (Month Day Year)
Stephen R Hopkins		02 27 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
rian Ginivan	Brian Ginivan	02 27 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)

Form OMB No. 2050-0039 Expires 9-30-91
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

MA F353777 COPY>1: FACILITY MAILS TO DESTINATION STATE

2.11 WEIGHT RECEIPTS AND BILLS OF LADING

The following bills of lading document the disposal of contaminated soil associated with UST No. 0019.

JUN 26 92 15:16 DEQE CENTRAL REGION

BILL OF LADING
POLICY # WSC- 400-89

BILL OF LADING #: 16 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
US Army
AFZD-EM - Box 19
Fort Devens
CONTACT/TEL #: (508) 796-3002

SITE OF GENERATION: TANK
STREET Building 631 Quebec St.
TOWN Fort Devens
STATE MA 01433
TRANSPORTATION ACCIDENT? ___Y X N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 112.5 wt (tons) 75 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ___ # absorbent booms ___ wt / vol (cu yds) speedy dri ___ other (specify) ___

TYPE OF CONTAMINATION:
___ gasoline X #2 oil ___ #4 oil ___ #6 oil ___ other (specify) ___
ANALYSES ATTACHED?
Volatiles: X Y ___N TPH: X Y ___N

TRANSPORTER NAME/ADDRESS:
Trimount Bituminous Products
70 Blanchard Road
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: X Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: Mark Ber DATE: 6-29-92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION & DEQE SIGNATURE (originating region): D. Lynne Chapleau DATE: 7/16/92
(if applicable) DEQE SIGNATURE (destination region): ___ DATE: ___

TRUCK/TRACTOR REGISTRATION ___
TRAILER REGISTRATION ___
LEFT SITE AT ___ DATE ___
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: ___

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	17.5	___
REMAINING TO BE SHIPPED	___	___

Ticket # R2497

TRANSPORTER'S SIGNATURE Jerry Fox DATE 7-31-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE ___ DATE 7/31/92 ARR TIME 2150

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-400-89

BILL OF LADING #: 115 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
US Army
AFZD-EM - Box 19
Fort Devens
CONTACT/TEL #: (508) 796-3002

SITE OF GENERATION:
STREET Building 631 Quebec St.
TOWN Fort Devens
STATE MA 01433
TRANSPORTATION ACCIDENT? ___Y X N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 112.5 wt (tons) 75 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads _____ # absorbent booms _____
wt (tons) / vol (cu yds) spoody dri _____ other (specify) _____

TYPE OF CONTAMINATION:
___ gasoline X #2 oil ___ #4 oil ___ #6 oil ___ other (specify) _____
ANALYSES ATTACHED?
Volatiles: X Y ___N TPH: X Y ___N

TRANSPORTER NAME/ADDRESS:
Trimount Bituminous Products
70 Blanchard Road
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: X Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: _____ DATE: 6-29-92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEQE AUTHORIZATION)

AUTHORIZATION: DEQE SIGNATURE (originating region): D. Lynne Chapin DATE: 7/16/92
(if applicable) DEQE SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION AK 167 MA
TRAILER REGISTRATION 98232 MA
LEFT SITE AT 205 DATE 8-20-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	—	—
SHIPPED TO DATE	—	—
THIS LOAD (estimated)	35.31	—
REMAINING TO BE SHIPPED	—	—

Ticket # 74034

TRANSPORTER'S SIGNATURE _____ DATE 8/20/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/20/92 ARR TIME 3:05

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.

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HI 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

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

Cash ☐ C.O.D. ☐ Charge ☒
CHECKED BY _____

TICKET #R 72497
CARRIER

stomer # ATE001
TEC ASSOC.
2 ACCORD PARK DRIVE
ORWELL, MA 02061
17-878-6200

Job # BLDGFD
US ARMY
BLDG 631
FORT DEVENS, MA 01433
PO# 37.04.72053

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
2:54:25	29900	35120	65020	17.56

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

Load#	Job Total	Time & Date	Fob/Del
12	249.93	2:54:26 pm Jul 31, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
NVERS 750-4200

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

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

Cash ☐ C.O.D. ☐ Charge ☒
CHECKED BY _____

CARRIER

TICKET #R 74034

stomer # ATE001
TEC ASSOC.
2 ACCORD PARK DRIVE
ORWELL, MA 02061
17-878-6200

Job # BLDGFD
US ARMY
BLDG 631
FORT DEVENS, MA 01433
PO# 37.04.72123

MIX # #76 MIX NAME OIL SOIL TRUCK# 9

Time	Tare	Net	Gross	Total
3:05:34	31000	70620	101620	35.31

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

Load#	Job Total	Time & Date	Fob/Del
5	169.46	3:05:35 pm Aug 20, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

L OF LADING #: 116 DATE: DEP CASE #:

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #:

SITE OF GENERATION: 1.5K #2 F.O.
STREET BUILDING 631 UST #19
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y X N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 56.25 wt (tons) 37.5 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____
vol (cu yds) speedy dri ____ other (specify) ____

TYPE OF CONTAMINATION:
__ gasoline X #2 oil __ #4 oil __ #6 oil __ other (specify) ____
ANALYSES ATTACHED?
Volatiles: X Y __N TPH: X 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:
TRIMOUT BITUMINOUS PRODUCTS
651 LAKE ST.
SHREWSBURY MA
TYPE OF FACILITY: X Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: DATE: 7/20/92
ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION
AUTHORIZATION: DEP SIGNATURE (originating region): DATE: 23 July 92
(if applicable) DEP SIGNATURE (destination region): DATE:

TRUCK/TRACTOR REGISTRATION
TRAILER REGISTRATION
LEFT SITE AT DATE
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE:

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	21.92	___
REMAINING TO BE SHIPPED	___	___

Ticket # R 74081

TRANSPORTER'S SIGNATURE DATE 8-21-92
RECEIVING FACILITY REPRESENTATIVES SIGNATURE DATE 8/21/92 ARR TIME 9:58

EIVED
2 1 1992
DEP
Bl - 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

SIFICATION 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.

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY HI 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

TIME
FMN _____
ARRIVED JOB _____
LEFT JOB _____

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

TICKET #R 74081

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 631
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 37.04.72183

Time	Tare	Net	Gross	Total
9:56:05	31400	42840	74240	21.42

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

Load#	Job Total	Time & Date	Fob/Del
1	21.42	9:58:05 am Aug 21, 1992	F

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

RECEIVED BY _____ 116

2.12 PERMITS AND CERTIFICATIONS

The following permit was obtained from the Fort Devens Fire Department 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 (Date) 1992

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

DIG SAFE NUMBER
92 19 4901
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
(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

631 Buena St Fort Devens
Street address (city or town)

FDID# 17919 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: Mark E Gallo
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

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

5/8 1992

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

DIG SAFE NUMBER
92 19 4901
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 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: Dry Ice
method

FDID# 17919

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 of official granting permit (TITLE)
(Head of Fire Dept.)

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

6.83 B.46 M.G.L.
DIG SAFE NUMBER
920411497
STATE DATE

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 N/A

Fee paid $ _____

Name and address of contractor disposing tank Same as Above *

Location to which tank will be transported

B106631

TANK # 19

1500

J-1

14901
Approved tank yard#

This permit will expire 2-15 1992

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 0 2 0 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 Assoc., Inc. 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 Mavento	CPW	2-19-92
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 OFFIC

DIMENSIONS

	Width (feet)		Length (feet)	
Tank 1	64"	X	10'	(1,500 gal.)
Tank 2	-----	X	-----	
Tank 3	-----	X	-----	
Tank 4	-----	X	-----	
Tank 5	-----	X	-----	

Tank Removed From

FT. DEVENS - BLDG. 631 - tank #19
(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.

UST-CLOSURE Q/C CHECK LIST	Tank 19 Bldg 631 Fort Devens			
1,500 gal No. 2 Fuel				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Calibrate PID & LEL/O2 meters	1/30/92	8:00		Site Topography: rel. level, gentle upgrad slope to N
Drain & flush piping & pumps	1/30/92	9:30		
Excavate to top of tank	1/30/92	9:00		Depth to tank: 1.5
Vent tank note LEL/O2 levels & times	1/30/92		LEL O2	
		T1: 12:15	0 20.9	
		T2: 12:30	0 20.9	
		T3: 12:45	0 20.9	
		T4: 1:00	0 20.9	
		T5: 1:15	0 20.9	
		T6:		
		T7:		
		T8:		
		T9:		
		T10:		
		T11:		
		T12:		
Pump & clean tank:			___ gal. liquid	Tank Dimensions: 5'4" x 9'7"
Note quantities liquid (gal) & sludge (lbs)	1/30/92	1:15	200 lbs. sludge + H,O	surficial rust, no holes or perf. 2 plugged bungs → on bottom, 1 on end.
Remove all tank connections, and cap openings	1/30/92	1:30		
Excavate soils to free tank	1/30/92	7:45		
Segregate stained soils: Note PID readings	1/30/92	7:45	PID (ppm) NDIR (ppm)	
(if >10 ppm NDIR also)			2.1	stock-1
none visibly contaminated			1.9	stock-2
from excav soil req to leave				
room ↓				

ST-CLOSURE O/C CHECK LIST				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Remove tank, piping, pumps, and hardware.	1/30/92	2:45	Photographic Descriptions:	Soil Description: med. brown fine
Photograph excavation; note descriptions.			Photo 1: Tank	sand silt w/ fine to
Sketch Schematic			Photo 2: Tank	coarse gravel cobbles boulders
			Photo 3: excav	
			Photo 4: excav	
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	1/30/92	3:00		Depth of Excavation: 6.5'
				some slight contam of soils
Secure tanks transport off-site	1/30/92	3:30		at SE corner
Obtain 10 soil samples from	1/30/92	3:15	PID (ppm) NDIR (ppm)	Sample locations: 3.5 - 5.0'
excavation walls/bottom. Note PID/NDIR			SS1: 2.8	E wall
readings and sample locations.			SS2: 0.4	E wall
			SS3: 0.4	S wall
			SS4: 0.2	S wall
			SS5: 0.1	W wall
			SS6: 0.2	W wall
			SS7: 0.4	N wall
			SS8: 2.6	N wall
			SS9: 1.4	bottom
			SS10: 0.2	bottom
Obtain 2 soil samples & 1 water samples	1/30/92	3:15		Sample Locations:
for laboratory analysis. Note sample locations.				LSS1: ≈ 551
				LSS2: ≈ 559
				LWS1:

CLOSURE O/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				
Remove rubbish/debris				
Transport hazardous material off-site:				Amount Classification
Note amount/classification				
Make copies of manifests, permits,				
nd disposal receipts.				

2.14 INSTALLATIONS

The installation of a replacement UST No. 19 was not performed.

3.0 UST No. 0020

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. 0020, located at property known as Building 1404, 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 May 8, 12, and 13, 1992.

The basic Project Work Scope included:

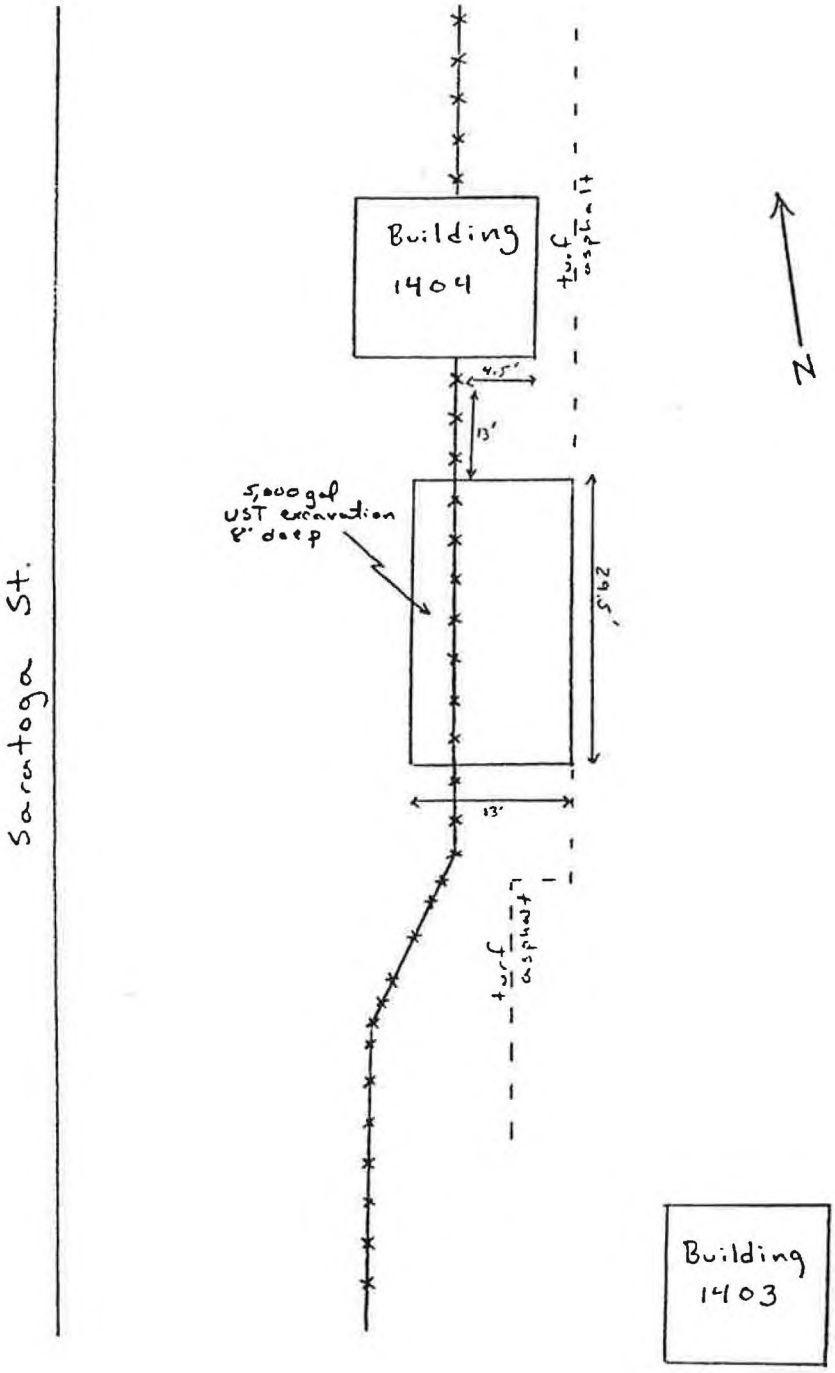
- Procurement/administration of all federal, state and local permits, manifests, regulations, etc., associated with UST system closure.
- Excavating, venting, cleaning, transporting, and disposing of one 5,000-gallon UST by appropriately licensed contractors/facilities.
- Disposal of residual UST materials at a licensed facility.
- Field screening and analysis of soil in the excavations by 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.

3.1.2 Subsurface Storage Tank Excavation and Removal

On May 8, 12, and 13, 1992, one 5,000-gallon, underground, diesel fuel, storage tank was excavated and removed from the site. The UST was located approximately 14 feet to the south of Building 1404. Site topography is level and surface cover at the site consisted of soil and asphalt.

The tank was covered by approximately 1 foot of soil. Excavated soil required to free the tank was observed to be visibly contaminated at the south end of the tank, in the vicinity of the fill pipe. This soil (<1 cubic yard) was segregated. Soil in the excavation from grade level to a depth of approximately 3 feet consisted primarily of medium brown, fine to medium sand, with some fine to coarse gravel and cobble fill; from a depth of 2 to 4 feet soil consisted of black, fine to coarse sand, cinder, and slag. From a depth of 3 to 4 feet, the soil consisted primarily of medium brown, fine to medium sand with little medium to coarse gravel, and from a depth of 4 to 5 feet soil consists primarily of light brown, medium to coarse sand and little medium to coarse gravel; from a depth of 5 to 8 feet soil consists primarily of light brown, fine sand with trace coarse gravel. The bottom of the excavation was approximately 8 feet below grade. Soil within the excavation was observed to be slightly stained at the south end, in the vicinity of the fill pipe, and at the center of the excavation. Groundwater was not encountered within the excavation. The removal and excavation was inspected by Mr. David Salvadore of the Commonwealth of Massachusetts Department of Environmental Protection (DEP).

Associated piping was drained, and tank connections were removed. Inspection revealed piping to be intact and in good condition. UST No. 0020 was estimated to contain 1,255 gallons of diesel fuel and residual tank materials. Approximately 1,230 gallons of diesel fuel were removed on May 4, 1992, and transported to a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Hitchcock Gas Engine Company, Bridgeport, Connecticut).



UST LOCATION PLAN

5,000 gallon UST relative to:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 3.1

ATEC

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. Following venting of the tank, an access way was cut in the end of the tank to allow entry for cleaning. It was then entered and vacuumed/wiped clean of any residual materials. Approximately 25 gallons of diesel fuel and residual materials were removed and drummed on May 13, 1992 for transportation at a later date. Drummed material was transported to CYN Environmental Services of Stoughton, Massachusetts on June 5, 1992. Appropriate hazardous waste manifests are included in Section 3.10.

The scrap tank was disposed of at Tombarello & Sons in Lawrence, Massachusetts, a licensed Massachusetts tank yard. A copy of the disposal receipt is included in Section 3.11, Permits and Certifications.

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.

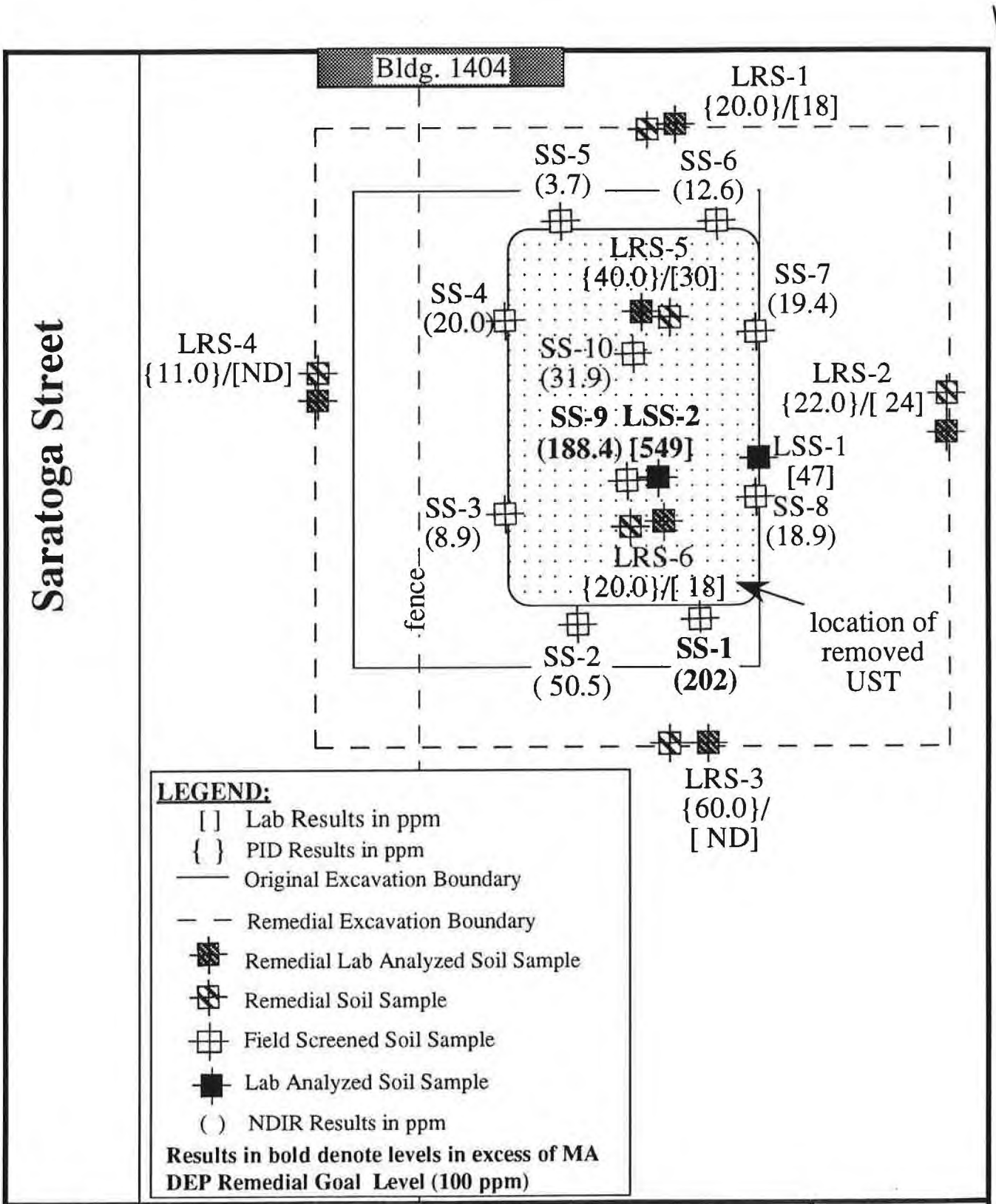
Eight of the samples (SS-1 to SS-8) were obtained from the excavation walls at a depth of approximately 4 to 5 feet below grade. Two of the samples (SS-9 and SS-10) were obtained from the bottom of the excavation at a depth of approximately 8 feet below grade. Two composite soil samples (Stock-1 and Stock-2) were obtained from stockpiled soils. Stock-2 was obtained from the visibly contaminated stockpiled soil which was segregated. Sampling locations for the excavation are depicted on the Sampling Schematic, as Figure 3.2.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for 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. These samples were analyzed for TPH utilizing USEPA Method 418.1. Sampling locations are depicted on the Sampling Schematic, as Figure 3.2.

The appropriate chain of custody forms are included in Section 3.9.

3.1.4 Analytical Results

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



SAMPLING SCHEMATIC

5,000 gallon UST excavation at:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.07.91.0451

NOT TO SCALE

FIGURE: 3.2

ATEC

TABLE 3.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	NDIR (ppm TPH)
SS-1	0.6	202.0
SS-2	0.4	50.5
SS-3	1.0	8.9
SS-4	0.2	20.0
SS-5	0.0	3.7
SS-6	0.1	12.6
SS-7	0.2	19.4
SS-8	2.2	18.9
SS-9	76.0	188.4
SS-10	0.2	31.9
Stock-1	0.1	53.1
Stock-2	29.0	26.5

Laboratory analytical results of the two soil samples obtained from the excavation revealed TPH concentrations of 47 ppm for LSS-1, and 549 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. Associated piping was observed to be in good condition.

Groundwater was not encountered within the excavation.

Excavated soil required to free the tank was visibly contaminated in the vicinity of the fill pipe. This soil (<1 cubic yard) was segregated. Soil within the excavation was visibly contaminated particularly at the south end of the excavation in the vicinity of the fill pipe.

Ten soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR analysis respectively. PID readings ranged from 0.0 to 76 ppm. NDIR results revealed TPH levels ranging from 3.7 to 202 ppm.

Two composite soil samples (Stock-1 and Stock-2) were obtained from excavated, stockpiled soils required to free the tank for PID and NDIR screening. Stock-2 was obtained from the visibly contaminated stockpiled soil which was segregated. PID results revealed 0.1 ppm for Stock-1, and 29 ppm for Stock-2. NDIR results revealed TPH levels of 53.1 ppm for Stock-1, and 26.5 ppm for Stock-2.

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 southeast wall of the excavation revealed a TPH concentration of 47 ppm. Analytical results for LSS-2 obtained from the bottom of the excavation revealed a TPH concentration of 549 ppm.

ATEC's recommendations are as follows:

Conduct remedial excavation until laboratory analysis reveal background TPH levels of <100 ppm. 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.

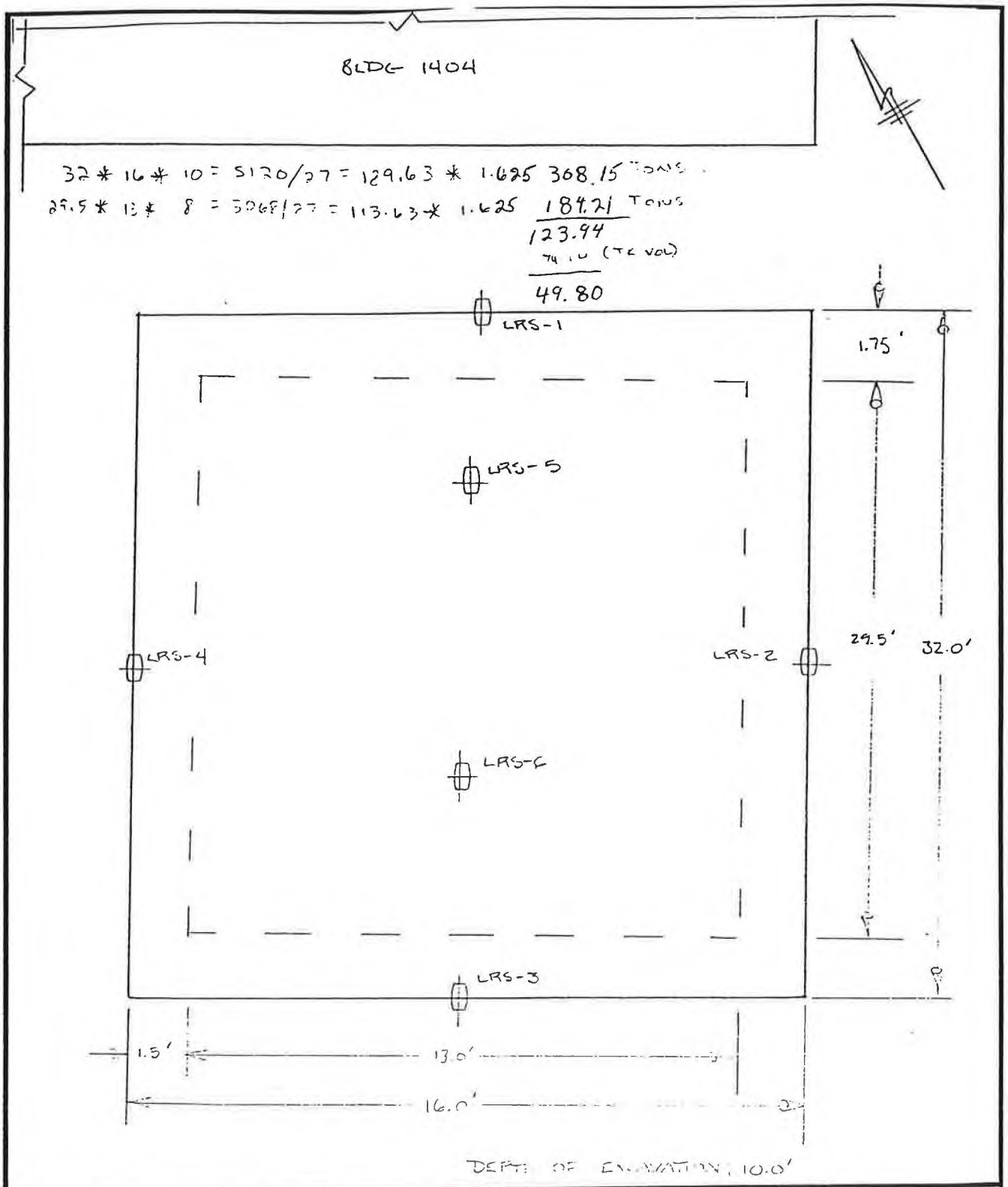
Stockpiled soils should be laboratory analyzed for TPH, Volatile Organic Compounds (VOCs), Polychlorinated Biphenyls (PCBs), 13 Metals by Toxicity Leachate Characteristics Procedure (TCLP), Flashpoint, Corrosivity, sulfide reactivity, and cyanide reactivity for disposal classification.

3.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

3.2.1 Site Remediation

Following initial PID screening, additional excavation to remove contaminated soil to reach background TOV levels by PID (<1 ppm) was conducted per order the Contracting Officer's Representative and David Salvadore of the Massachusetts Department of Environmental Protection (DEP). Approximately 162 tons of contaminated soil were removed from excavation floor and all sidewalls during remedial excavation on August 19, 1992.

Six soil samples (LRS-1 to LRS-6) were obtained from the post-remedial excavation for PID field screening. LRS-1 to LRS-4 were obtained from the sidewalls of the excavation. LRS-5 and LRS-6 were obtained from the bottom of the excavation Final PID results ranged from 11.0 to 60.0 ppm (See Table 3.2.1).



REMEDIAL EXCAVATION PLAN

5,000 gallon UST relative to:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 3.3

ATEC©

TABLE 3.2.1 - PID SCREENING RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	LOCATION
RSS-1	20.0	north sidewall (5' depth)
RSS-2	22.0	east sidewall (5' depth)
RSS-3	60.0	south sidewall (5' depth)
RSS-4	11.0	west sidewall (5' depth)
RSS-5	40.0	bottom (10.' depth)
RSS-6	20.0	bottom (10' depth)

RSS = Remediation Soil Sample

Four soil samples (LRS-1, LRS-2, LRS-4, and LRS-6) were obtained for laboratory analysis for TPH.

Two soil samples (LRS-3 and LRS-5) were obtained for laboratory analysis for TPH (USEPA Method 418.1), VOCs (USEPA Method 8240), 13 TCLP Metals (USEPA Method 1311), and PCBs (USEPA Method 8080) (see Table 3.2.2, and Section 3.8, Laboratory Analytical Results).

TABLE 3.2.2 - LABORATORY ANALYSIS

SAMPLE NUMBER	TPH (ppm)	VOCs (ppm)	13 TCLP METALS	LOCATION
LRS-1	18.0	N.A.	N.A.	north sidewall (5' depth)
LRS-2	24.0	N.A.	N.A.	east sidewall (5' depth)
LRS-3	N.D.	N.D.	N.D.	south sidewall (5' depth)
LRS-4	N.D.	N.A.	N.A.	west sidewall (5' depth)
LRS-5	30.0	N.D.	0.17 zinc	bottom (10' depth)
LRS-6	18.0	N.A.	N.D.	bottom (10' depth)

LRS = Laboratory Remediation Sample
N.D. = Not Detected Above the Method Reporting Limit
N.A. =Not Applicable

3.2.2 Soil Stratigraphy

The soil stratigraphy of the excavation varied with the depth of the excavation. The stratigraphy for approximately the first 2.5 feet, consisted of a mixture of top soil and gravel. The remaining 7.5 feet of the excavation consisted of sand. (See Figure 3.4, Soil Stratigraphy).

3.2.3 Contaminated Soil Disposal

Contaminated soil removed from the excavation for UST No. 0020 was transported to Trimount Bituminous Products Company, Shrewsbury, Massachusetts. The weight of contaminated soil was determined at the time of disposal. Based on weight disposal receipts, 162.04 tons of contaminated soil disposed on October 16, 1992. See Section 3.11, Weight Disposal Receipts for copies of the appropriate weight slips.

3.3 HYDROGEOLOGICAL SERVICES

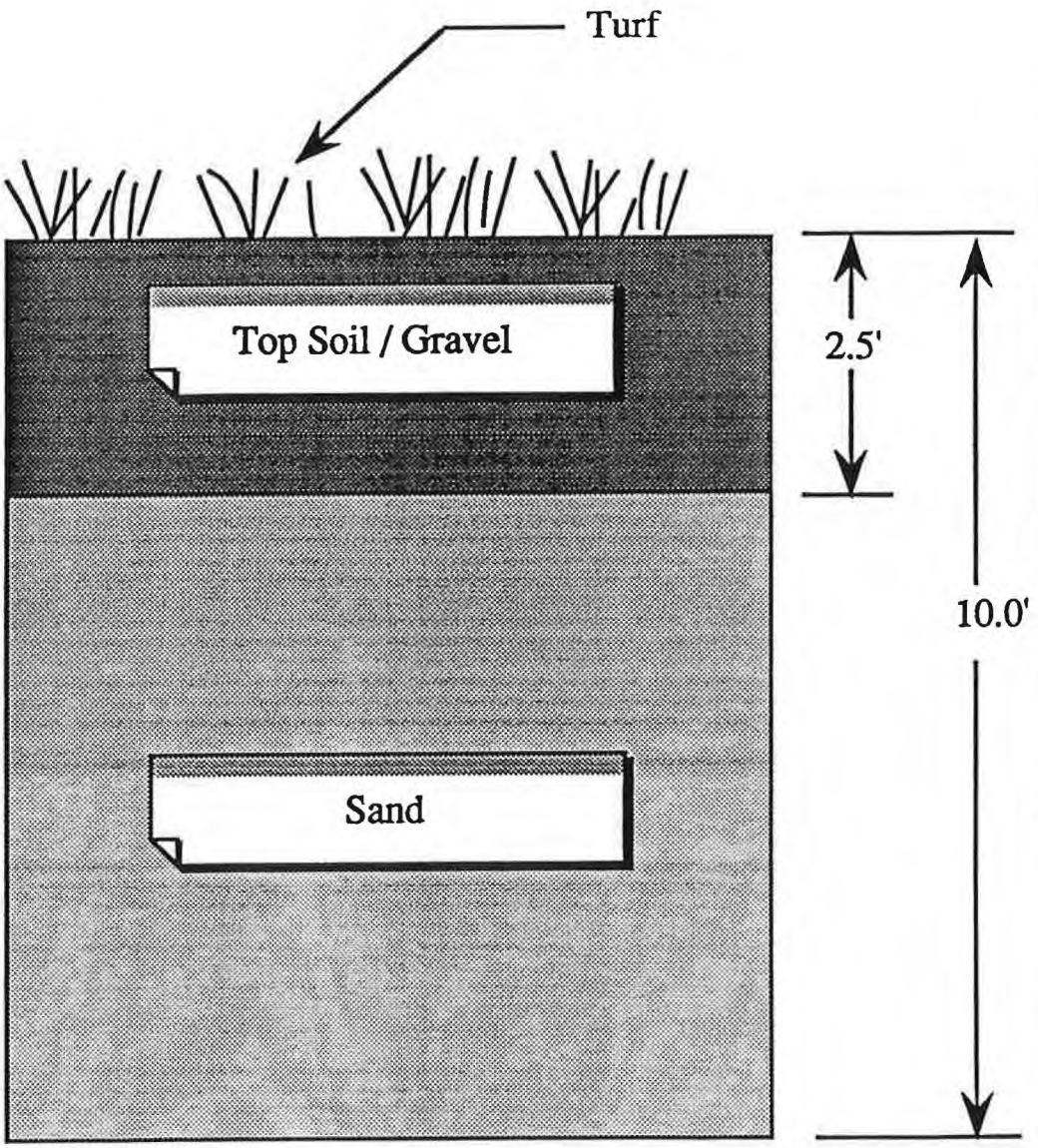
Hydrogeological services were not performed relative to UST No. 0020.

3.4 BACKFILL

The excavation was lined with polyethylene plastic sheeting and backfilled with 200 tons of uncontaminated fill material on August 19, 1992. Backfilling was conducted with the approval of the Contracting Officer's Representative.

3.5 SURFACE RESTORATION

Following backfill of the excavation, approximately 512 square feet of loam was distributed over the excavated area and seed with grass.



SOIL STRATIGRAPHY

5,000 gallon UST excavation at:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

UST - 20

FIGURE: 3.4

ĀTEC

3.6 PHOTOGRAPHIC DOCUMENTATION

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

A-1: One side of removed tank.

A-2: Opposite side of removed tank.

A-3: Excavation as viewed from south, facing north.

A-4: Excavation as viewed from north, facing south.

A-5: View of remediated excavation.

A-6: Opposite view of remediated excavation.

A-1



A-2

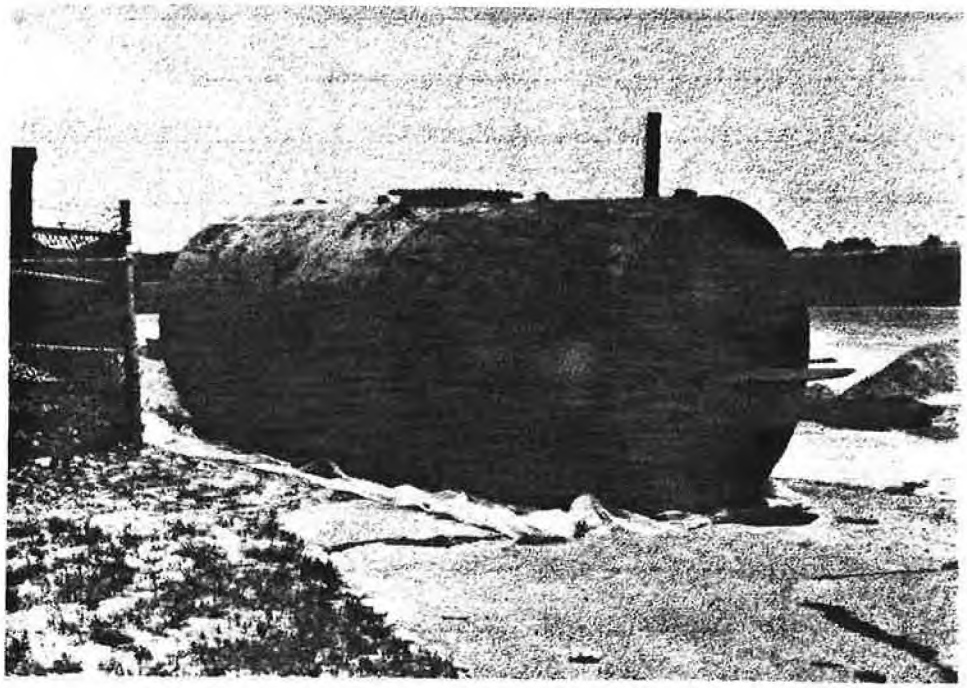


PHOTO DOCUMENTATION 5,000 gallon UST removal at: Building 1404 Fort Devens, Massachusetts	PROJECT: 37.07.91.07451	ATEC

A-3



A-4

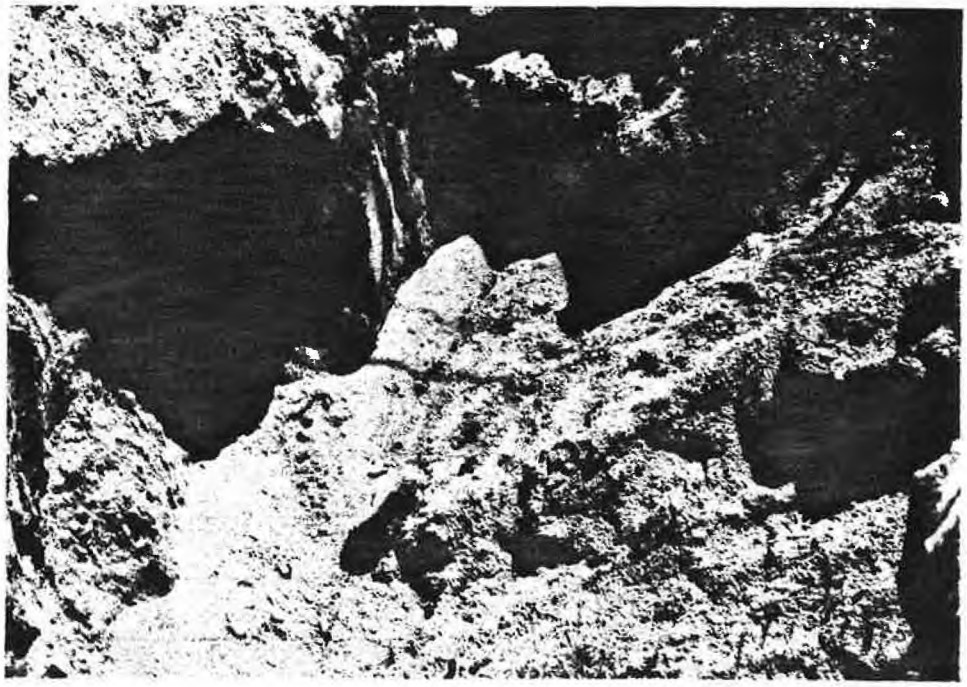


PHOTO DOCUMENTATION

5,000 gallon UST removal at:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ATEC

A-5



A-6

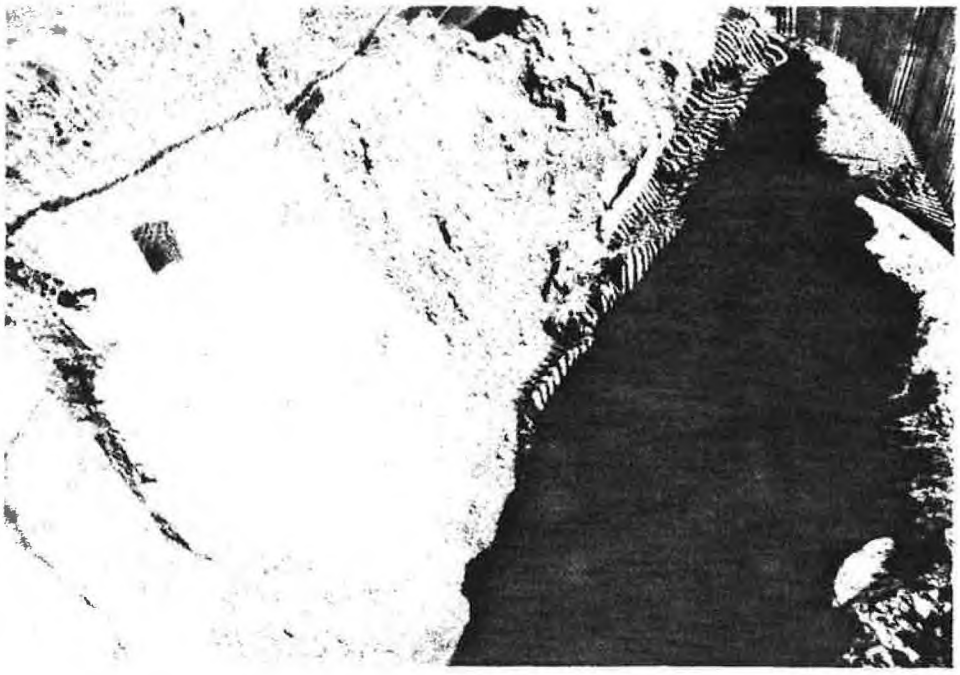


PHOTO DOCUMENTATION

5,000 gallon UST excavation at:
Building 1404
Fort Devens, Massachusetts

PROJECT: 37.04.91.0451

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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 0020

DATE: May 13, 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:	0.5	0.0	-0.2	0.0	0.1	0.0	28.4
SPAN:	34.6	40.0	38.0	40.0	39.9	40.0	
ZERO:	5.6	0.0	-3.0	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	2nd	3rd	CONCENTRATION mg/l
STOCK-1	83.5	75.4	17.5	3.0	–	–	2.0	2.1	–	53.1
STOCK-2	84.5	75.2	17.5	3.0	–	–	1.0	1.2	–	26.5
SS-1	81.6	74.8	17.5	3.0	—	—	6.9	6.7	–	202.0
SS-2	81.7	75.2	17.5	3.0	—	—	1.5	1.6	–	50.5
SS-3	82.1	75.2	17.5	3.0	–	–	0.4	0.3	–	8.9
SS-4	83.2	75.0	17.5	3.0	–	–	1.1	0.8	–	20.0
SS-5	80.9	75.4	17.5	3.0	—	—	0.3	0.1	–	3.7
SS-6	81.9	75.4	17.5	3.0	—	—	0.4	0.4	–	12.6
SS-7	82.8	75.4	17.5	3.0	–	–	0.8	0.7	–	19.4
SS-8	81.2	74.7	17.5	3.0	—	—	0.5	0.6	–	18.9
SS-9	82.4	75.0	17.5	3.0	–	–	6.7	6.8	–	188.4
SS-10	82.7	75.0	17.5	3.0	–	–	1.0	1.2	–	31.9

3.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports are associated with the removal, remedial excavation and stockpiled soil. These reports were organized and provided by Environmental Science Services Inc. Results are included for:

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

- Stock-20: Soil samples obtained from stockpiled soil for disposal classification. Laboratory analyzed for PCBs.

- LRS-1 to LRS-6: Soil samples obtained from the remedial excavation. Laboratory analyzed for TPH.

- LRS-3 and LRS-5: Soil samples additionally analyzed for VOCs, PCBs, and 13 TCLP Metals.

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 20, Bldg 1404 **ESS Project ID: 921273**

Date Samples Received: 5/15/92 **Date Reported: 5/27/92**

Client ID	Lab ID	Results	Units	MRL	% Solids
LSS-1	921273-01	47	mg/Kg	11	94%
LSS-2	921273-02	549	mg/Kg	11	95%

MRL = Method Reporting Limit

Note: Results reported on a dry weight basis.

Approved by: _____ Date: 27MAY92
David Dickinson
Laboratory Director

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



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 **ESS Project ID:** 922208

Client Sample ID: LRS-1 **ESS Sample ID:** 922208-01

Date Sample Received: 8/24/92 **Date Reported:** 9/10/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	18	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=95%

Approved by: _____ Date: 10 Sept 92

David Dickinson
Laboratory Director



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 **ESS Project ID:** 922208

Client Sample ID: LRS-2 **ESS Sample ID:** 922208-02

Date Sample Received: 8/24/92 **Date Reported:** 9/10/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	24	mg/Kg	10	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=97%

Approved by: _____ Date: 10 Sept 92

David Dickinson
Laboratory Director



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: Ust #20 Bldg 1404 **ESS Project ID:** 922208

Client Sample ID: LRS-3 **ESS Sample ID:** 922208-03

Date Sample Received: 8/24/92 **Date Reported:** 9/10/92

Parameter	Results	Units	MRL	Method
Percent Solids	94	% w/w	1	160.3
Polychlorinated Biphenyls	ND	mg/Kg	Attached	8080
Total Petroleum Hydrocarbons-IR	ND	mg/Kg	11	418.1
Volatile Organics	ND	ug/Kg	Attached	8260
Toxicity Characteristic Leaching Procedure				1311
Metals	ND	mg/L	Attached	6010

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 10 Sep 92

David Dickinson
Laboratory Director

0000

In Response To The Future

ERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST #20 UST 1404 — ESS Project ID: 922208

Client Sample ID: LRS-3 — ESS Sample ID: 922208-03

Date Sample Received: 8/24/92 — Date Reported: 9/10/92

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	99%	50 - 150%

Approved by: _____ Date: 10 Sept 92
David Dickinson
Laboratory Director

0004

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 — ESS Project ID: 922208

Client Sample ID: LRS-3 — ESS Sample ID: 922208-03

Date Sample Received: 8/24/92 — Date Reported: 9/10/92

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: 10 Sept 92

David Dickinson
Laboratory Director

0005

In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: UST #20 Bldg 1404
Client Sample ID: LRS-3
ESS Sample ID: 922208-03

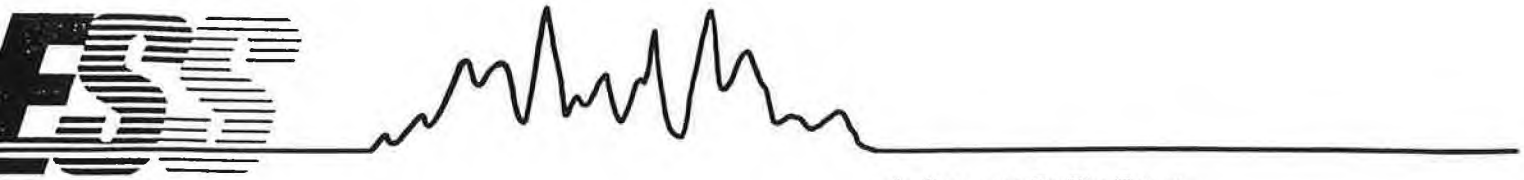
Date Sampled: 8/21/92
Date TCLP Performed: 8/30/92
Date Leachate Extracted: 8/31/92
Date Extract Analyzed: 9/1/92

	Actual		Adjusted*	
Target Analyte	Sample Result (mg/L)	Method Reporting Limit	Sample Result (mg/L)	Method Reporting Limit
Antimony	ND	0.1	ND	0.2
Arsenic	ND	0.2	ND	0.3
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.06
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.05
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.06
Zinc	ND	0.02	ND	0.03
Beryllium	ND	0.02	ND	0.04
Thallium	ND	0.2	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: _____ Date: 10 Sept 92
David Dickinson
Laboratory Director



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 — **ESS Project ID:** 922208

Client Sample ID: LRS-4 — **ESS Sample ID:** 922208-04

Date Sample Received: 8/24/92 — **Date Reported:** 9/10/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	ND	mg/Kg	10	418.1

ND = Not Detected above Method Reporting Limit (MRL)

Results reported on a dry weight basis, % solids=96%

Approved by: _____ Date: 10 Sept 92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: Ust #20 Bldg 1404 — ESS Project ID: 922208

Client Sample ID: LRS-5 — ESS Sample ID: 922208-05

Date Sample Received: 8/24/92 — Date Reported: 9/10/92

Parameter	Results	Units	MRL	Method
Percent Solids	93	% w/w	1	160.3
Polychlorinated Biphenyls	ND	mg/Kg	Attached	8080
Total Petroleum Hydrocarbons-IR	30	mg/Kg	11	418.1
Volatile Organics	ND	ug/Kg	Attached	8260
Toxicity Characteristic Leaching Procedure				1311
Metals				
Zinc	0.17	mg/L	Attached	6010

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 10 Sept 92

David Dickinson
Laboratory Director

0033



In Response To The Future

ERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: UST #20 UST 1404 | **ESS Project ID: 922208**

Client Sample ID: LRS-5 | **ESS Sample ID: 922208-05**

Date Sample Received: 8/24/92 | **Date Reported: 9/10/92**

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	115%	50 - 150%

Approved by: _____ Date: 10 Sept 92
David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 — ESS Project ID: 922208

Client Sample ID: LRS-5 — ESS Sample ID: 922208-05

Date Sample Received: 8/24/92 — Date Reported: 9/10/92

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: 10 Sept 92

David Dickinson
Laboratory Director

0010

In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: UST #20 Bldg 1404
Client Sample ID: LRS-5
ESS Sample ID: 922208-05

Date Sampled: 8/21/92
Date TCLP Performed: 8/30/92
Date Leachate Extracted: 8/31/92
Date Extract Analyzed: 9/1/92

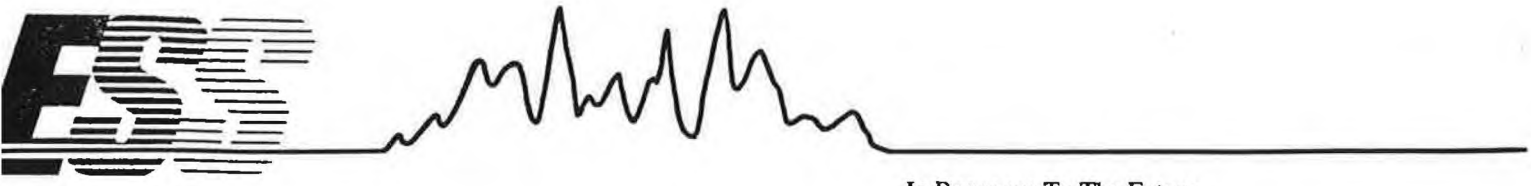
	Actual		Adjusted*	
Target Analyte	Sample Result (mg/L)	Method Reporting Limit	Sample Result (mg/L)	Method Reporting Limit
Antimony	ND	0.1	ND	0.2
Arsenic	ND	0.2	ND	0.3
Cadmium	ND	0.02	ND	0.03
Chromium	ND	0.05	ND	0.06
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.3
Silver	ND	0.05	ND	0.05
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.06
Zinc	0.16	0.02	0.17	0.03
Beryllium	ND	0.02	ND	0.04
Thallium	ND	0.2	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: _____ Date: 10 Sept 92
David Dickinson
Laboratory Director

0011



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 **ESS Project ID:** 922208

Client Sample ID: LRS-6 **ESS Sample ID:** 922208-06

Date Sample Received: 8/24/92 **Date Reported:** 9/10/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	18	mg/Kg	10	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=96%

Approved by: _____ Date: 10 Sept 92

David Dickinson
Laboratory Director

0012

QUALITY CONTROL SECTION

In Response To The Future

ERTIFICATE OF ANALYSIS

VOA SOIL SURROGATE RECOVERY

Client: ATEC Environmental Consultants
Client Project ID: UST #20 Bldg 1404

Date Sample Analyzed: 9/4/92
ESS Project ID: 922208

SAMPLE ID	1,2 DICHLOROETHANE-D4 (70-121%)*	TOLUENE-D8 (81-117%)*	BFB (74-121%)*
VS0904B1	98%	88%	94%
922208-03	72	92	94
922208-05	75	90	90

* Acceptance criteria

Approved by: _____ Date: 10 Sept 92
David Dickinson
Laboratory Director

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST #20 Bldg 1404 — ESS Project ID: 922208

Client Sample ID: Method Blank — ESS Sample ID: VS0904B1

Date Sample Received: N/A — Date Reported: 9/10/92

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: _____ Date: 10 Sept '92
David Dickinson
Laboratory Director

0015

In Response To The Future

ERTIFICATE OF ANALYSIS

MATRIX SPIKE ANALYSIS SUMMARY

TCLP METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants Matrix: Solid

TCLP Batch ID: 220803 Concentration in: mg/L

Target Analyte	Result	Spike Added	Spiked Result	Percent Recovery
Antimony	ND	*	-	62%
Arsenic	ND	2.00	1.82	91
Cadmium	ND	0.5	0.38	76
Chromium	ND	1.0	0.92	92
Lead	ND	1.0	0.76	76
Mercury	ND	0.02	0.020	100
Selenium	ND	2.00	2.00	100
Silver	ND	1.0	1.30	130
Copper	ND	1.0	0.97	97
Nickel	ND	1.0	0.75	75
Zinc	ND	1.0	0.93	93
Beryllium	ND	*	-	62
Thallium	ND	*	-	62

This matrix spike analysis summary applies to the following samples: 922208-03, -05

ND = Not Detected above Method Reporting Limit (MRL)

* Matrix Spike recovery based on the lowest spike recovery of the spiked compounds.

Approved by: _____ Date: 10/sept/92

David Dickinson
Laboratory Director

In Response To The Future

ERTIFICATE OF ANALYSIS

POLYCHLORINATED BIPHENYLS
Method 8080

Client: ATEC Environmental Consultants

Client Project ID: Ft. Devens/UST 20 | **ESS Project ID: 922161**

Client Sample ID: Stock-20.2 | **ESS Sample ID: 922161-01**

Date Sample Received: 8/19/92 | **Date Reported: 9/3/92**

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	92%	50 - 150%

Approved by: Kelly Jarvis for: David Dickinson
Laboratory Director

Date: September 3, 1992

3.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil samples which were laboratory analyzed. If date received is not on chain-of-custody date received and analyzed is in lab report and /or quality control section.

CHAIN OF CUSTODY RECORD

PROJ. NO. 07.451

PROJECT NAME UST 20 - Bldg 1404

CLIENT Ft. Devens due 5/22/92

LAB PROJ. NO.

SAMPLERS: *(Signature)*

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 (TPH)	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY		SAMPLE LOCATION / REMARKS
LSS-1	5/19/92			X		X				X		1				X						
LSS-2	5/19/92			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)*
	5/14/92				
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:	

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
[illegible]	[illegible] Bldg 1104	
	CLIENT [illegible]	

SAMPLERS: *(Signature)*

SAMPLING METHOD: [illegible]

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		1				X						SP1-7

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)*
[illegible]	5/10/91 1305	[illegible]			
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:	

PROJ. NO. 07.451

PROJECT NAME UST 20 - Bldg 1404

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-20	8/14		X	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 Zaldi	8/14 3:30				

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

CHAIN OF CUSTODY RECORD

37.07.-72523

PROJ. NO. 37.07.457

PROJECT NAME FT. DEVENS - REMEDIATION

CLIENT UST #20 - BLDG. 1404

LAB PROJ. NO.

SAMPLERS: *(Signature)* Craig D. Trombly

SAMPLING METHOD

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	E.P. TOXIC METALS (13 TCLP METALS)	IGNITABILITY		SAMPLE LOCATION / REMARKS
LRS-1	8-21-92					X				X		1				X					UST #20 BLDG. 1404
LRS-2	"					X				X		1				X					"
LRS-3	"					X				X		3		X		X	X		X		"
LRS-4	"					X				X		1				X					"
LRS-5	"					X				X		3		X		X	X		X		"
LRS-6	"					X				X		1				X					"

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Craig D. Trombly	8-21-92	Ron Smith			
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 MANIFESTS

UST No. 0020 was estimated to contain 1,255 gallons of diesel fuel and residual tank materials. Approximately 1,230 gallons of diesel fuel were removed on May 4, 1992, and transported to a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Hitchcock Gas Engine Company, Bridgeport, Connecticut). Approximately 25 gallons of residuals were drummed for transportation at a later date. Drummed material was transported to CYN Environmental Services, Stoughton, Massachusetts, on June 5, 1992.

The following Hazardous Waste Manifests were generated from residual tank materials.

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

Use 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.: MA 7210025154 — Manifest Document No.: FD 7703

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, Mass 01433-5190

A. State Manifest Document Number: CT F 0122460

B. G.S.I. (Gen. Site Address): Bldg # 219-1404-3713-2613

4. Generator's Phone (508) 796 3002 24 Hr X2220

5. Transporter 1 Company Name: HITCHCOCK GAS ENGINE CO.
6. US EPA ID Number: CTD. 002593887

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

C. S.T.I. (Trans. Lic. Plate #) CT99362
D. Tran. Phone 401-539-0080
E. S.T.I. (Trans. Lic. Plate #)
F. Tran. Phone ( )

9. Designated Facility Name and Site Address
HITCHCOCK GAS ENGINE CO.
50 CROSS STREET
BRIDGEPORT, CT 06610

10. US EPA ID Number: CTD. 002593887

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. WASTE OIL, COMBUSTIBLE LIQUID n.o.s.,NA 1270	001	TT	0.1.500	G	EPA STATE CRO-2
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above	
a. WASTE PETROLEUM OIL	c. non-RCRA-hazardous	a.	c.
b. CT REGULATED WASTE	d.	b.	d.

15. Special Handling Instructions and Additional Information

24 HOUR EMERGENCY CONTACT # (508) 796-2220 DAKF 90 (ATEC) UST Removal
ERG# 27 -ATTACHED (FOR RECYCLE)

Point of Departure: Ft, Devens, Mass

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 Bosca	Mark	05	04	92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DENNIS J. WHITE	Dennis J White	05	04	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

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

COPY 1: FACILITY MAILS TO DESTINATION STATE

CT F 0122460

ATEC Environmental Consultants
Division of ATEC Associates, Inc.
62 Accord Park Drive
Norwell, Massachusetts 02061
(617)878-6200 FAX (617)871-6781

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

July 14, 1992

Ms. Beth Castriotta, Contract Specialist
U.S. Army
Directorate of Contracting
Building 227
Fort Devens, MA 01433-5340

RE: Disposal of Drums
Containing Waste Sludges
Removed from Underground Storage Tanks
Fort Devens, Massachusetts
ATEC File No. 37.04.91.00451

Ms. Castriotta:

Attached please find copies of the hazardous waste manifests generated for the transport and disposal of the following non-pumpable tank contents:

Building No.	UST No.	No. of 55-gallon drums	Product	Date of disposal
605	0016	1	Diesel Fuel	06/05/92
606	0017	3	Diesel Fuel	06/05/92
605	0089	2	Diesel Fuel	06/05/92
1404	0020	1	Diesel Fuel	06/05/92
3713	0044	1	Diesel Fuel	06/05/92
219	0083	1	Diesel Fuel	06/05/92
605	0084	1	Diesel Fuel	06/05/92

Building No.	UST No.	No. of 55-gallon drums	Product	Date of disposal
204	0013	3	Waste Oil	07/06/92
219	0014	1	Waste Oil	06/05/92
242	0015	2	Waste Oil	07/06/92
612	0051	4	Waste Oil	07/06/92
619	0052	3	Waste Oil	07/06/92
1401	0053	1	Waste Oil	06/05/92
2008	0054	2	Waste Oil	07/06/92
2446	0055	1	Waste Oil	06/05/92
3587	0056	1	Waste Oil	06/05/92
3713	0058	1	Waste Oil	06/05/92
3774	0060	1	Waste Oil	06/05/92
3818	0061	1	Waste Oil	06/05/92

The attached hazardous waste manifest, dated June 5, was intended for the disposal of thirty-four (34), 55-gallon drums. Due to the waste classification, the intended Treatment Storage Disposal Facility (T.S.D.F) was unable to accept fourteen (14) drums containing waste oil and three drums containing oily wipes. Note Box 19 (Discrepancy Indication Space) of the corrected manifest. All waste diesel fuel drums and ten (10) waste oil drums were accepted as noted in the above table.

Returned drums containing waste oil and oily wipes were transported and disposed of July 6, 1992 (see Attachments). Six drums containing oil and freon contaminated soil were also disposed. This soil is a waste product associated with the NDIR analysis of soil samples obtained from the excavation under Section 3.0, Paragraph 4.6.1.5 of the contract (DAKF31-91-D-0015).

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

Sincerely,

ATEC Associates, Inc.

Maark E. Baldi
Project Manager

4043R

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. / Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
	MA 7 2 1 1 0 0 2 5 1 1 5 4 FD12KD		

3. Generator's Name and Mailing Address: U.S. Army Ft. Devens 508-796-3002
AFKA-FE, 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: RI D 0 9 8 2 1 1 9 2 6 2 7
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: MA D 0 8 2 3 0 3 7 7 7

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	3	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. — c. — d.

K. Handling Codes for Wastes Listed Above
a. S102 — b. T — c. S10 — d.

15. Special Handling Instructions and Additional Information: In Case Of Emergency 24 Hour Contact Chemtrec 1-800-424-9300 OR Lincoln Environmental 1-800-659-3359 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 Bosco — 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 05 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 COLONIAL 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. Stern — 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

3.11 WEIGHT RECEIPTS AND BILLS OF LADING

The following bills of lading document the disposal of contaminated soil associated with UST No. 0019.

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 78347

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
ACCORD PARK DRIVE BLDG 1404
RWELL, MA 02061 FORT DEVENS, MA 01433
7-878-6200 PO# 72069

Time	Tare	Net	Gross	Total
0:00:08	27000	67120	94120	33.56

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

Load#	Job Total	Time & Date	Fob/Del
1	33.56	10:00:09 am Oct 16, 1992	F

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

RECEIVED BY 182

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 78351

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
ACCORD PARK DRIVE BLDG 1404
RWELL, MA 02061 FORT DEVENS, MA 01433
7-878-6200 PO# 72069

Time	Tare	Net	Gross	Total
0:10:33	27000	64060	91060	32.03

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

Load#	Job Total	Time & Date	Fob/Del
2	65.59	10:10:33 am Oct 16, 1992	F

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

RECEIVED BY 182

BILL OF LADING
POLICY # WSC-89-001

OF LADING #: 1 DATE: DEP CASE #:

NERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
NTACT/TEL #: (508) 796 3809

SITE OF GENERATION: TANK # 20
STREET BUILDING 1404 5K DIESEL
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

TERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
NTAMINATED SOIL: 125 wt (tons) 80 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ____ # absorbent booms ____
vol (cu yds) speedy dri ____ other (specify) ____

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

ANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
70 BLANCHARD RD
BURLINGTON MA 01803
ONTACT/TEL #: DAVID PETER (617) 221 8400

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

NERATOR'S SIGNATURE: DATE: 8/3/92
BOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)
THORIZATION: DEP SIGNATURE (originating region): DATE: 8/3/92
(if applicable) DEP SIGNATURE (destination region): DATE:

UCK/TRACTOR REGISTRATION 39066 MA
AILER REGISTRATION E95673 MA
FT SITE AT 1135 DATE 10-16-92
NERATOR OR RECEIVING FACILITY REPRESENTATIVE'S
GNATURE:

QUANTITY SHIPPED: wt (tons) vol (cu yds)
TOTAL PROJECTED ____ ____
SHIPPED TO DATE ____ ____
THIS LOAD (estimated) 34.24 ____
REMAINING TO BE SHIPPED ____ ____
Ticket # R 78394

ANSPORTER'S SIGNATURE DATE 10-16-92
CEIVING FACILITY REPRESENTATIVE'S SIGNATURE DATE 10/16/92 ARR TIME 12:51

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

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

BILL OF LADING
POLICY # WSC-89-001

OF LADING #: 184 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: TANK #20
STREET BUILDING 1404 5K DIESEL
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: 125 wt (tons) 80 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
71 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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): _____ DATE: 8/3/92

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

TRUCK/TRACTOR REGISTRATION 913380 MA
TRAILER REGISTRATION 39415 MA
LEFT SITE AT 11:30 DATE 10-16-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S
SIGNATURE: Brian Leman

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	____	____
SHIPPED TO DATE	____	____
THIS LOAD (estimated)	32.2 C	____
REMAINING TO BE SHIPPED	____	____

Ticket # R78384

TRANSPORTER'S SIGNATURE _____ DATE 10-16-92

RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 10/16/92 ARR TIME 12:30

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

SIFICATION 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.

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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 _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB ~~CHECK #~~ CARRIER

TICKET #R 78386

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1404
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 72069

Time	Tare	Net	Gross	Total
12:30:35	27000	64520	91520	32.26

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

Load#	Job Total	Time & Date	Fob/Del
3	97.85	12:30:36 pm Oct 16, 1992	F

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

RECEIVED BY [signature] 184

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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 _____ Cash ☐ C.O.D. ☐ Charge ☑
ARRIVED JOB _____ CHECKED BY _____
LEFT JOB ~~CHECK #~~ CARRIER

TICKET #R 78394

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1404
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 72069

Time	Tare	Net	Gross	Total
12:51:59	27000	68480	95480	34.24

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

Load#	Job Total	Time & Date	Fob/Del
4	132.09	12:51:59 pm Oct 16, 1992	F

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

RECEIVED BY [signature]

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 78432
7206

toker # ATE001
EC ASSOC.
ACCORD PARK DRIVE
RWELL, MA 02061
7-878-6200

Job # BLDGFD
US ARMY
BLDG 1404
FORT DEVENS, MA 01433
PO# 72069

MIX # 476 MIX NAME OIL SOIL TRUCK# 9

50

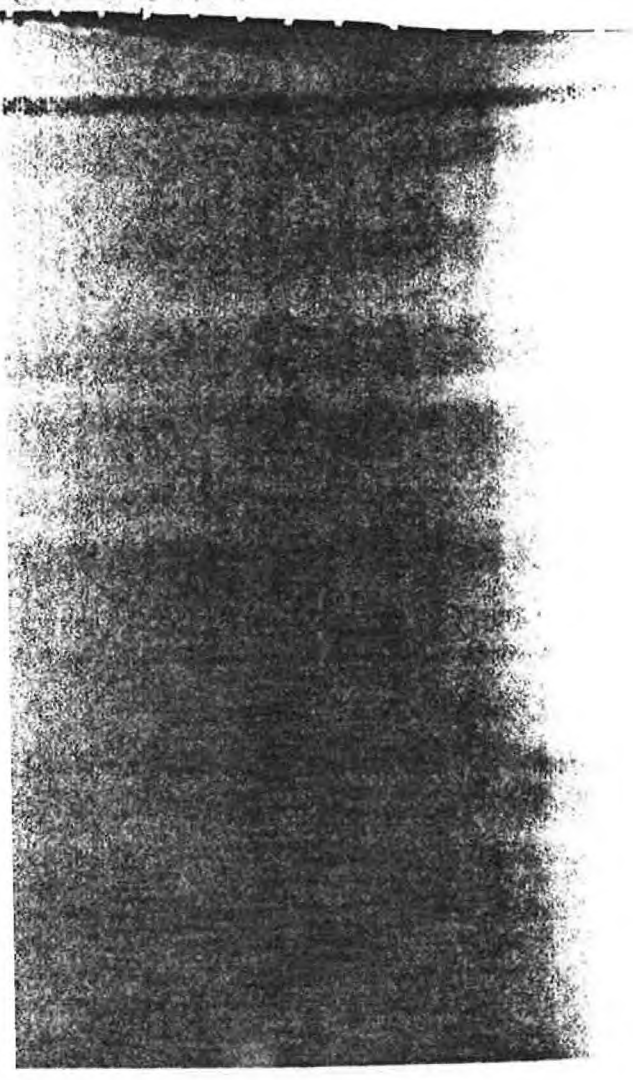
Time	Tare	Net	Gross	Total
3:01:38	27000	59900	86900	29.95

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

Load#	Job Total	Time & Date	Fob/Del
5	162.04	3:01:36 pm Oct 16, 1997	F

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

RECEIVED BY 186



3.12 PERMITS AND CERTIFICATIONS

The following permit was obtained from the Fort Devens Fire Department for the proper closure of a UST. Following the permit 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 (Date) 1992

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

DIG SAFE NUMBER
92194391
Start Date 5/18/92

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 1404 Saratoga St. Fort Devens
Street address (City or town)

FDID# 12914 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: Mark E Gallo
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 1992

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

C.82 S.40 M.G.L.
DIG SAFE NUMBER
92194391
Start Date 5/18/92

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# 12914

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

John D Boyle Fire Chief
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
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 1 0 6

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 AEC 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 Navarro	CPW	6-04-92
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	96"	X 132" (5,000 gal)
Tank 2	-----	X -----
Tank 3	-----	X -----
Tank 4	-----	X -----
Tank 5	-----	X -----

Tank Removed From
Ft. Devens - Bldg. 1404 - tank # 20
(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 Q/C CHECK LIST	UST 20 - 5,000 gal Diesel		Bldg 1404		
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS		NOTES
Calibrate PID & LEL/O2 meters	5/12/92				Site Topography: level
Drain & flush piping & pumps	5/8/92	1:00			
Excavate to top of tank	5/8/92	1:35			Depth to tank: 1'
					soil/turf cover
nt tank note LEL/O2 levels & times	5/13/92		LEL	O2	
		T1: 1:00	04	21	
		T2: 1:15	03	21	
		T3: 1:30	01	21	
		T4: 1:45	01	21	
		T5: 2:00	01	21	
		T6:			
		T7:			
		T8:			
		T9:			
		T10:			
		T11:			
		T12:			
Pump & clean tank:	5/4/92	10:00	1230 gal liquid		Tank Dimensions: 17'9" x 7'D
Note quantities liquid (gal) & sludge (lbs)	5/13/92	1:06	25 ~~lbs~~ sludge		Tank good cond., no holes part or corrosion. Asphalt coating intact. Piping good
Remove all tank connections, and cap openings	5/12/92	8:30			
Excavate soils to free tank	5/12/92	10:00			Removal inspect by D Salvatore, MH DED
Segregate stained soils: Note PID readings	5/12/92	10:00	PID (ppm)	NDIR (ppm)	
(if >10 ppm NDIR also) → ~~sand~~ vis contam			0.1		Stock-1
soil around fill (sand) is segregated →			79		Stock-2 (segregated contam soil)
slight contam					

...T-CLOSURE O/C CHECK LIST				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Remove tank, piping, pumps, and hardware.	5/13/97	2:05	Photographic Descriptions:	Soil Description: 0-2" asphalt 2"-2.5'
Photograph excavation; note descriptions.			Photo 1: Tank 4	med brown f-m sand, some f-c gravel,
Sketch Schematic			Photo 2: Tank 4	cobbles (1-11"); 2.5'-3.5' black f-c sand clay &
			Photo 3: excav N, face S	cinder, 3.5'-11.0' med brown f-m sand little
			Photo 4: excav S, face N	m-c gravel 4-5' m-c sand little m-c gravel
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	5-8' light brown f-m sand trace coarse
				gravel
...ace tank at safe distance from excavation	5/13/97	7:10		Depth of Excavation: 8.0'
				some slight staining S end bottom
Secure tanks transport off-site	5/14/97	9:00	to Contractor Yard	mid bottom
Obtain 10 soil samples from	5/13/97	2:15	PID (ppm) NDIR (ppm)	Sample locations: 4-5' deep. See schematic
excavation walls/bottom. Note PID/NDIR			SS1: 0.6	S wall
readings and sample locations.			SS2: 0.4	S wall
			SS3: 1.0	W wall
			SS4: 0.2	W wall (slight stain)
			SS5: 0.0	N wall
			SS6: 0.1	N wall
			SS7: 0.2	E wall
			SS8: 7.2	E wall (slight stain)
			SS9: 76	bottom (slight stain
			SS10: 0.2	bottom
Obtain 2 soil samples & 1 water samples	5/13/97	2:30		Sample Locations:
for laboratory analysis. Note sample locations.				LSS1: ≃ 558
				LSS2: ≃ 559
				LWS1:

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
				____ tons of backfill
Backfill excavation (if clean):	N/A	—		Backfill description:
Note amount & type of backfill	N/A	—		
Close open excavation (if applicable)	N/A	—		
~~store surface and~~ rope off	5-13-92	—		
Remove rubbish/debris	5-13-92	3:30		
Transport hazardous material off-site:	—			Amount Classification
Note amount/classification	—			
Make copies of manifests, permits,	5-28-92	8:00		
and disposal receipts.	5-28-92	8:00		

3.14 INSTALLATIONS

The installation of a replacement UST No. 0020 was not performed.

4.0 UST No. 0021

4.1 POST REMOVAL REPORT

4.1.1 Introduction

This Post-Removal Report details the results of the closure of one 4,000-gallon, single wall, steel, underground storage tank (UST) referenced as UST No. 0021, located at property known as Building 1419, Fort Devens, Massachusetts. 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 January 30 and April 22, 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 4,000-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.

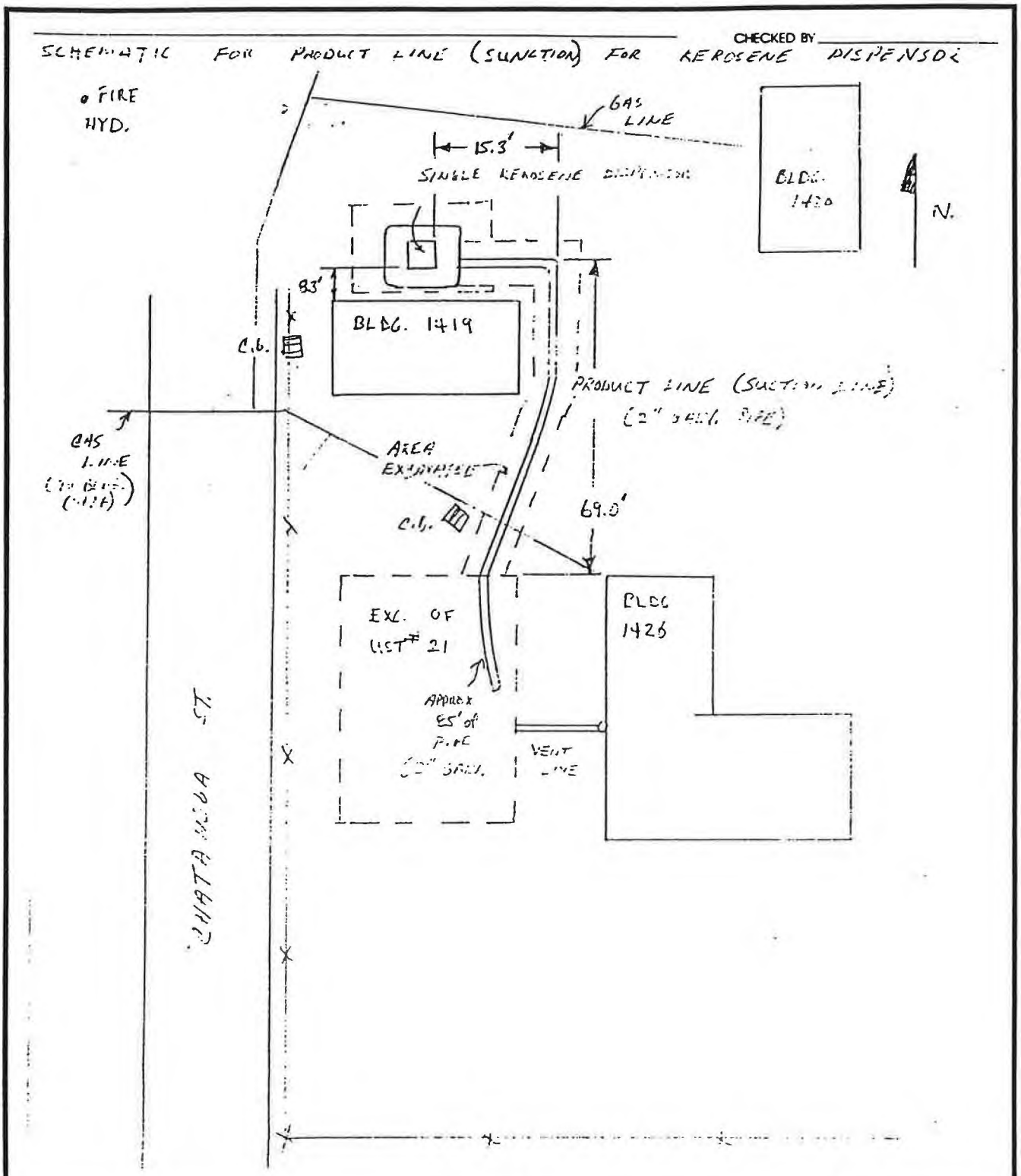
4.1.2 Subsurface Storage Tank Excavation and Removal

On April 22, 1992, one 4,000-gallon, subsurface, kerosene storage tank was excavated and removed from the site. The UST was located adjacent to the south of Building 1419, and adjacent to the west of Building 1426. Site topography is relatively level with a slight downgradient slope to the east. Surface cover at the site consists of soil and asphalt.

The tank was covered by approximately 3 feet of soil. Staining of surface soil and the excavated soil required to free the tank was observed. From grade level to a depth of approximately 4 feet, soil was observed to consist primarily of light brown, fine to coarse sand, with broken layers of black topsoil and black sand. From a depth of approximately 4 feet to the bottom of the excavation soil consists primarily of light brown, fine and coarse sand. The bottom of the excavation was approximately 9 feet below grade. Soil within the excavation was observed to be visibly stained. Groundwater was not encountered within the excavation. The removal and excavation was inspected by Mr. David Salvadore of the Commonwealth of Massachusetts Department of Environmental Protection (DEP).

Associated piping was drained, and tank connections were removed. Approximately 85 feet of product line piping and the associated dispenser pump were removed. Inspection revealed a piping union, located approximately 19 feet north of the removed UST, to be leaking. The soil located beneath the removed dispenser pump was also noted to be visibly stained. UST No. 0021 was estimated to contain approximately 30 gallons of kerosene.

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. 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



UST LOCATION PLAN

4,000 gallon UST relative to:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 4.1

ATEC©

vacuumed/wiped clean of any residual materials. Approximately 30 gallons of kerosene and residual tank materials were removed and drummed. Drummed waste was disposed on May 4, 1992 at a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Hitchcock Gas Engine Company, Bridgeport, Connecticut). The appropriate hazardous waste manifest is included in Section 4.10.

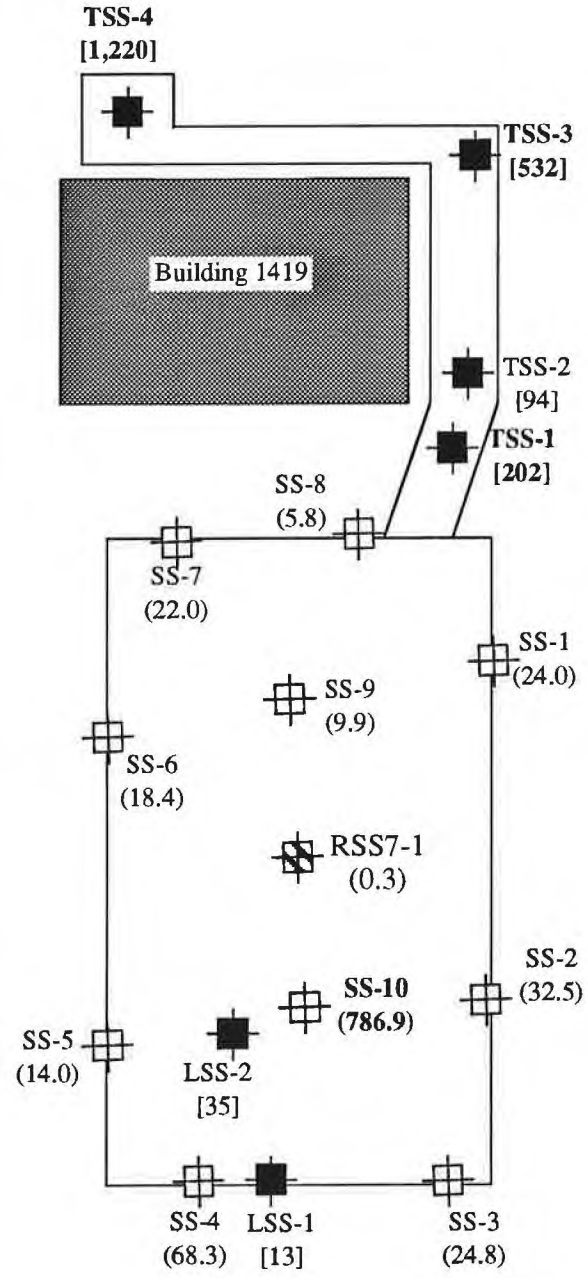
The scrap tank was transported to the Contractor's yard, Lake George Street, Fort Devens. The tank was disposed at Tombarello & Sons, a licensed Massachusetts tank yard, located in Lawrence, Massachusetts. A copy of the disposal receipt can be found in Section 4.11, Permits and Certifications.

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

Eight of the samples (SS-1 to SS-8) were obtained from the excavation walls at a depth of approximately 2 to 3 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 6 feet below grade. Sampling locations for the excavation are depicted on the Sampling Schematic, as Figure 4.2.

Two composite soil samples (Stock-1 and Stock-2) were obtained from separate stockpiles of soil required to free the tank. Stockpile #1 is located adjacent to the north of the excavation. Stockpile #2 is located adjacent to the south of the excavation.



LEGEND:

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

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

SAMPLING SCHEMATIC

4,000 gallon UST excavation at:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.07.91.0451

NOT TO SCALE

FIGURE: 4.2

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Four soil samples (TSS-1 to TSS-4) were obtained from the bottom of the excavated piping trench for PID screening and laboratory analysis. TSS-1 was obtained from the piping trench in the vicinity of the leaking piping union. Three soil samples (Stock-3, Stock-4, and Stock-5) were obtained for PID screening from separate stockpiles of soil removed from the piping trench excavation.

Two soil samples (LSS-1 and LSS-2) were obtained from the excavation for laboratory analysis. Soil sample LSS-1 was obtained from the south wall of the excavation. Soil sample LSS-2 was obtained from the bottom of the excavation. These samples were analyzed for TPH utilizing USEPA Method 418.1. Sampling locations are depicted on the Sampling Schematic attached as Figure 4.2.

The appropriate chain of custody forms are included in Section 4.9.

4.1.4 Analytical Results

The results from analysis with the PID and the NDIR analyzer of the ten soil samples obtained from the excavation, four soil samples obtained from the pipe trench, and the five soil samples obtained from stockpiled soil are as follows:

TABLE 4.1 - PID AND NDIR RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	NDIR (ppm TPH)
SS-1	28.0	24.0
SS-2	3.8	32.5
SS-3	0.2	24.8
SS-4	30.0	68.3
SS-5	0.2	14.0
SS-6	0.2	18.4
SS-7	0.0	22.0
SS-8	1.0	5.8
SS-9	2.0	9.9
SS-10	42.0	786.9
Stock-1	25.0	129.3
Stock-2	30.0	156.2
Stock-3	0.0	N.A.
Stock-4	0.0	N.A.
Stock-5	0.0	N.A.
TSS-1	0.0	N.A.
TSS-2	0.5	N.A.
TSS-3	0.2	N.A.
TSS-4	180.0	N.A.

N.A. - Not Applicable

Laboratory analytical results of the two soil samples obtained from the excavation revealed a TPH concentration of 13 ppm for LSS-1, and 35 ppm for LSS-2. Laboratory analytical results of the four soil samples obtained from the pipe trench revealed a TPH concentration of 202 ppm for TSS-1, 94 ppm for TSS-2, 532 ppm for TSS-3, and 1,220 ppm for TSS-4. 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.

All associated piping and pump dispenser hardware was excavated and removed. Inspection revealed a piping union, located approximately 19 feet north of the removed UST, to be leaking. The soil located beneath the removed dispenser pump was also noted to be visibly stained.

Groundwater was not encountered within the excavation.

Excavated soil required to free the tank and within the excavation was 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 ranged from 0.0. to 42 ppm. NDIR results revealed TPH levels ranging from 5.8 to 786.9 ppm.

Two composite soil samples (Stock-1 and Stock-2) were obtained from excavated, stockpiled soils required to free the tank for PID and NDIR screening. PID results were 25 ppm and 30 ppm, respectively. NDIR results were 129.3 ppm TPH for Stock-1, and 156.2 ppm TPH for Stock-2. Three soil samples (Stock-3, Stock-4, and Stock-5) were obtained from stockpiled soil excavated from the piping trench for PID screening. PID readings for TOVs were 0.0 for these three samples.

Four soil samples (TSS-1 to TSS-4) were obtained from the excavated piping trench for PID screening and laboratory analysis for TPH. PID results ranged from 0.0 to 180 ppm.

Analytical results for TSS-1 revealed TPH concentrations of 202 ppm, 94 ppm for TSS-2, 532 ppm for TSS-3, and 1,220 ppm for TSS-4.

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 south wall of the excavation revealed a TPH concentration of 13 ppm. Analytical results for LSS-2 obtained from the bottom of the excavation revealed TPH concentrations of 35 ppm.

ATEC's recommendations are as follows:

Conduct remedial excavation of the piping trench until laboratory analysis reveal background TPH levels are <100 ppm. 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.

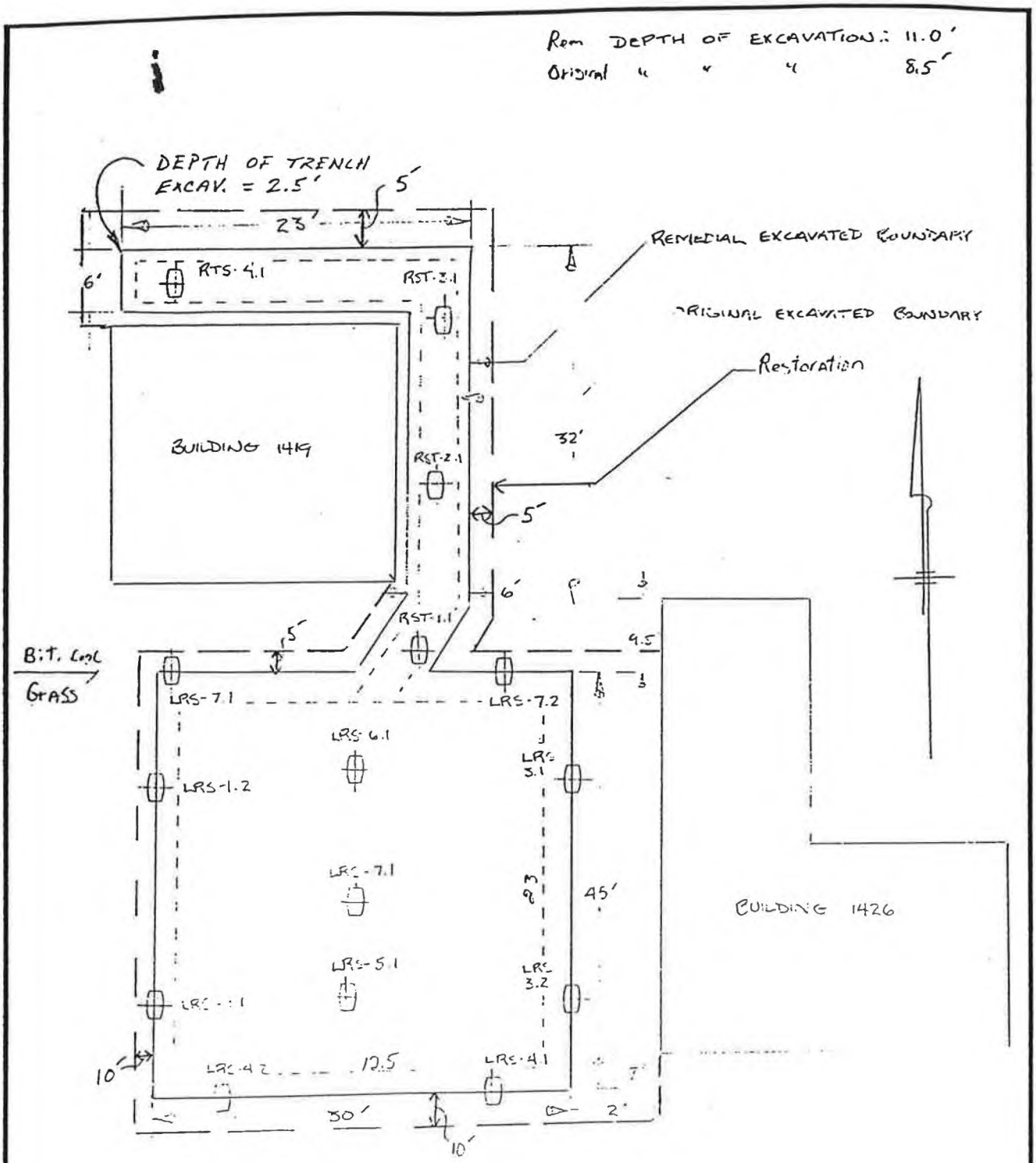
Stockpiled soils should be laboratory analyzed for TPH, Volatile Organic Compounds (VOCs), Polychlorinated Biphenyls, (PCBs), 13 Metals by Toxicity Leachate Characteristics Procedure (TCLP), Flashpoint, Corrosivity, sulfide reactivity, and cyanide reactivity for disposal classification.

4.2 SITE REMEDIATION AND CONTAMINATED SOIL DISPOSAL

4.2.1 Site Remediation

Following initial PID screening, additional excavation to remove contaminated soil and reach background levels by PID (<1 ppm) was conducted per order the Contracting Officer's Representative and David Salvadore of the Massachusetts Department of Environmental Protection (DEP). Approximately 400 tons of contaminated soil were removed from excavation floor and all sidewalls during remedial excavation on August 11, 1992.

Eleven soil samples (LRS-1.1 to LRS-7.1) were obtained from the post-remedial excavation for PID field screening. LRS-1.1 to LRS-4.2 were obtained from the side walls at a depth of approximately 5 feet below grade. LRS-5.1, LRS-6.1, and LRS-7.1 were obtained from the bottom of the excavation at a depth of approximately 11 feet below grade. Final PID results ranged from 0.0 to 1.0 ppm (See Table 4.2).



REMEDIAL EXCAVATION PLAN

4,000 gallon UST relative to:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 4.3

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TABLE 4.1 - PID SCREENING RESULTS

SAMPLE NUMBER	PID (ppm TOVs)	LOCATION
LRS-1.1	0.0	east sidewall (7-8' depth)
LRS-1.2	0.0	east sidewall (7-8' depth)
LRS-2.1	0.2	south sidewall (7-8' depth)
LRS-2.2	0.1	south sidewall (7-8' depth)
LRS-3.1	0.0	west sidewall (7-8' depth)
LRS-3.2	0.0	west sidewall (7-8' depth)
LRS-4.1	0.0	north sidewall (7-8' depth)
LRS-4.2	0.0	north sidewall (7-8' depth)
LRS-5.1	1.0	bottom (11' depth)
LRS-6.1	0.3	bottom (11' depth)
LRS-7.1	0.3	bottom (11' depth)
RTS-1.1	3.4	pipe trench (2' depth)
RTS-2.1	0.2	pipe trench (2' depth)
RTS-3.1	0.2	pipe trench (2' depth)
RTS-4.1	0.2	pipe trench (2' depth)
RTS-1.2	0.4	pipe trench (3' depth)

LRS = Remediation Soil Sample

Fifteen soil samples were obtained from the excavation and piping trench for laboratory analysis for TPH (USEPA Method 418.1). Two of the soil samples (LRS-2.1 and LRS 5.1) were additionally analyzed for 13 TCLP Metals (USEPA Method 1311), and VOCs (USEPA Method 8260).

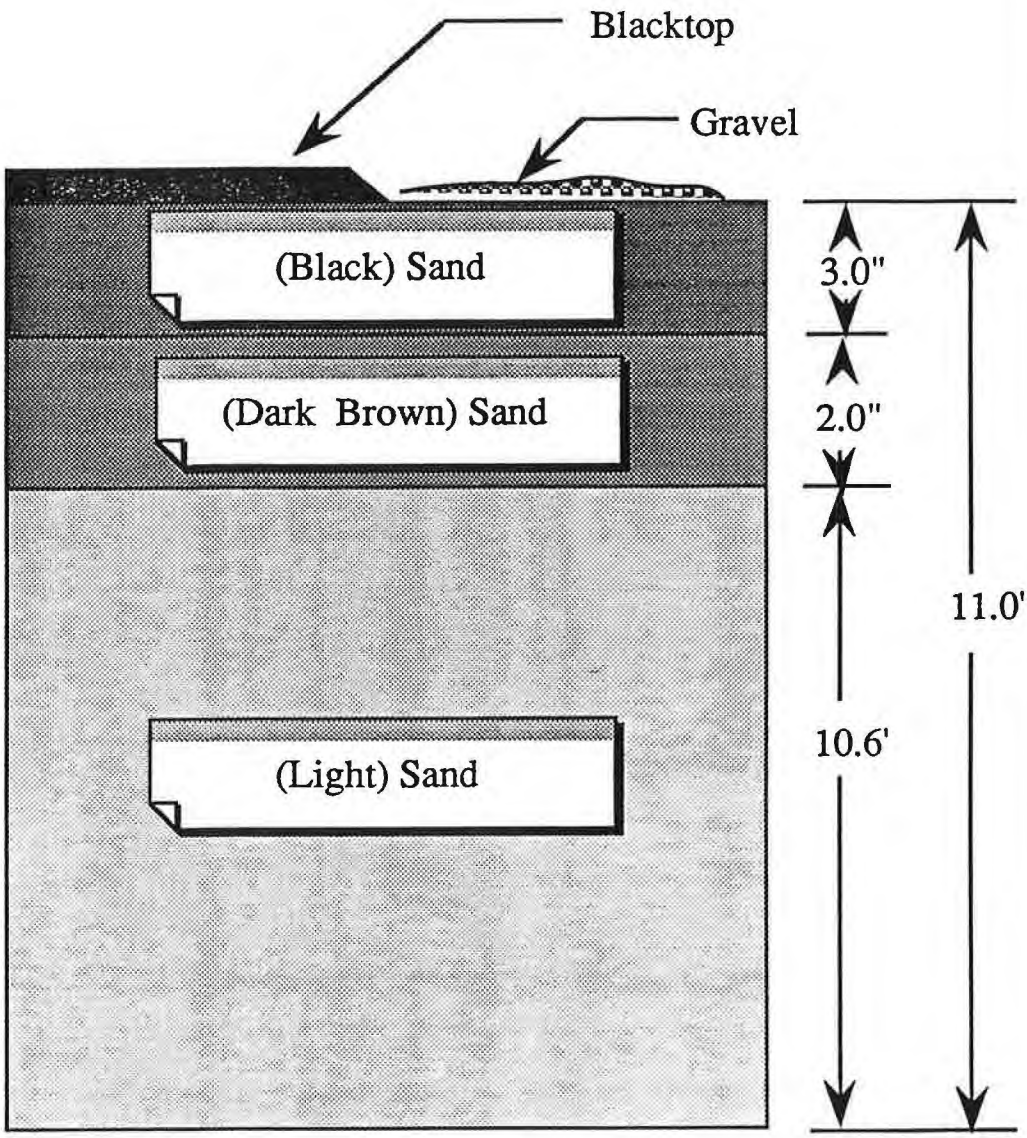
TABLE 4.2 - LABORATORY ANALYSIS

SAMPLE NUMBER	TPH (ppm)	VOCs (ppm)	13 METALS TCLP	LOCATION
LRS-1.1	38.0	N.A.	N.A.	east sidewall (7-8' depth)
LRS-1.2	19.0	N.A.	N.A.	east sidewall (7-8' depth)
LRS-2.1	N.D.	13.0 benzene	N.A.	south sidewall (7-8' depth)
LRS-2.2	N.D.	N.A.	0.44 zinc	south sidewall (7-8' depth)
LRS-3.1	N.D.	N.A.	N.A.	west sidewall (7-8' depth)
LRS-3.2	N.D.	N.A.	N.A.	west sidewall (7-8' depth)
LRS-4.1	N.D.	N.A.	N.A.	north sidewall (7-8' depth)
LRS-4.2	N.D.	N.A.	N.A.	north sidewall (7-8' depth)
LRS-5.1	N.D.	6.0 methylene chloride	N.D.	bottom (11' depth)
LRS-6.1	N.D.	N.A.	N.A.	bottom (11' depth)
LRS-7.1	N.D.	N.A.	N.A.	bottom (11' depth)
RTS-1.2	N.D.	N.A.	N.A.	pipe trench (2' depth)
RTS-2.1	36.0	N.A.	N.A.	pipe trench (2' depth)
RTS-3.1	81.0	N.A.	N.A.	pipe trench (2' depth)
RTS-4.1	N.D.	N.A.	N.A.	pipe trench (3' depth)

N.D. = Not Detected above the Method Reporting Limit (MRL)
N.A. = Not Applicable
LRS = Laboratory Remediation Sample
RTS = Remediation Trench Sample

4.2.2 Soil Stratigraphy

The soil stratigraphy of the excavation varied with the depth of the excavation. There was a layer of asphalt covering a layer of gravel before reaching the soil. The soil for the initial 3 feet consisted primarily of black sand. The following 2 feet consisted of dark brown sand. The remaining 6 feet of the excavation primarily consisted of light sand. (See Figure 4.4, Soil Stratigraphy).



SOIL STRATIGRAPHY

4,000 gallon UST excavation at:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

UST - 21

FIGURE: 4.4

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4.2.3 Contaminated Soil Disposal

Contaminated soil was transported to Trimount Bituminous Products Company, Shrewsbury, Massachusetts. The weight of contaminated soil was determined at the time of disposal. According to weight receipts, 400.1 tons kerosene contaminated soil was disposed August 11 and 12, 1992.

4.3 HYDROGEOLOGICAL SERVICES

Hydrogeological services, to include to installation of monitoring wells, was not performed relative to UST 0021.

4.4 BACKFILL

The excavation was backfilled with approximately 743 tons of uncontaminated fill material on August 12, 1993, as estimated through field drawings. Backfilling was conducted with the approval of the Contracting Officer's Representative.

4.5 SURFACE RESTORATION

Following backfill of the excavation, the excavation site was restored with 1,350 square feet of asphalt.

4.6 PHOTOGRAPHIC DOCUMENTATION

The following photographs are of the removal and remediation of USTs No. 0021:

A-1: One side of removed tank.

A-2: Opposite side of removed tank.

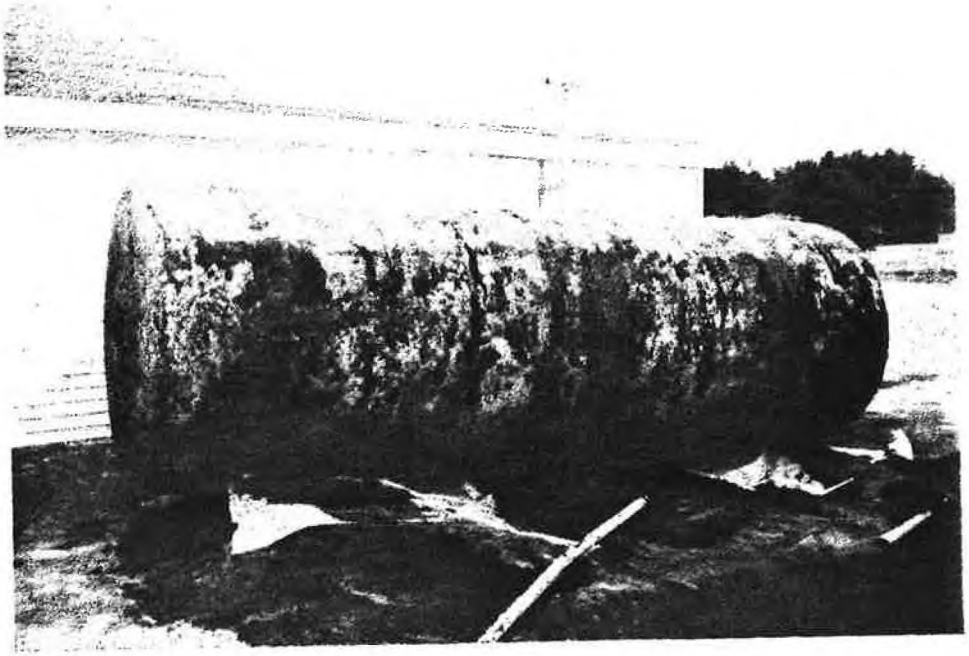
A-3: Excavation as viewed from south, facing north.

A-4: Trench excavation as viewed from north, facing south.

A-5: View of the remediated excavation, end to end.

A-6: Opposite view of the remediated excavation.

A-1



A-2

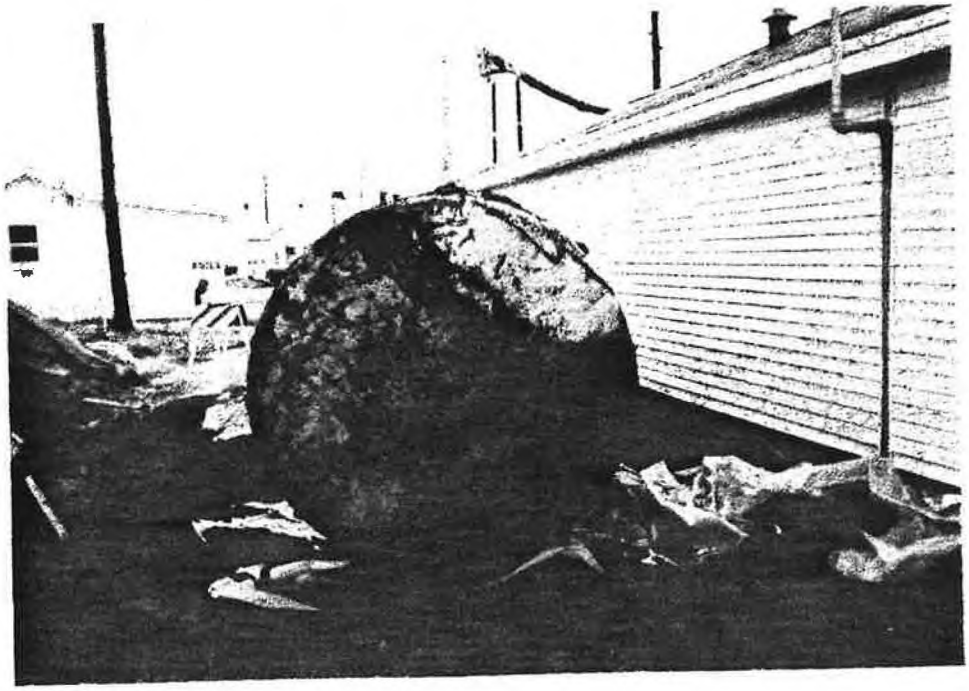


PHOTO DOCUMENTATION	PROJECT: 37.07.91.07451	ĀTEC
4,000 gallon UST excavation at: Building 1419 Fort Devens, Massachusetts		

A-3



A-4



PHOTO DOCUMENTATION

4,000 gallon UST excavation at:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ĀTEC

A-5



A-6

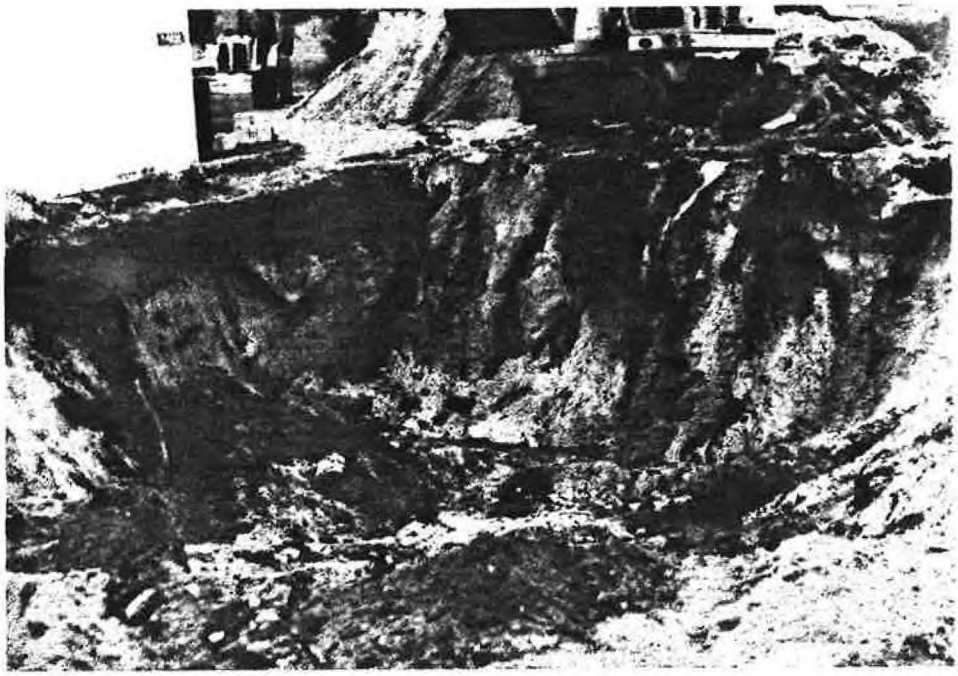


PHOTO DOCUMENTATION

4,000 gallon UST excavation at:
Building 1419
Fort Devens, Massachusetts

PROJECT: 37.04.91.0451

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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 0021

DATE: Apr 22, 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:	5.0	0.0	-2.6	0.0	-1.6	0.0	26.6
SPAN:	37.3	40.0	41.4	40.0	39.8	40.0	
ZERO:	4.7	0.0	-3.7	0.0	0.0	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	82.2	75.7	17.5	3.0	—	—	3.8	4.1	–	129.3
STOCK-2	82.1	75.8	17.5	3.0	—	—	4.6	4.8	–	156.2
SS-1	83.3	75.9	17.5	3.0	—	—	1.7	1.7	–	24.0
SS-2	82.0	75.7	17.5	3.0	—	—	0.8	1.0	–	32.5
SS-3	82.4	75.8	17.5	3.0	—	—	0.9	0.8	–	24.8
SS-4	82.2	75.3	17.5	3.0	–	–	2.2	2.3	–	68.3
SS-5	82.6	75.3	17.5	3.0	—	—	0.5	0.5	–	14.0
SS-6	83.6	75.8	17.5	3.0	—	—	0.5	0.7	–	18.4
SS-7	80.9	75.3	17.5	3.0	—	—	0.4	0.6	–	22.0
SS-8	82.9	75.8	17.5	3.0	—	—	0.3	0.2	–	5.8
SS-9	81.9	75.7	17.5	3.0	—	—	0.3	0.3	–	9.9
SS-10	81.8	75.6	17.5	3.0	–	–	23.2	24.3	23.8	786.9
–	–	–	—	—	—	—	—	—	–	—
—	—	—	—	—	—	—	—	—	–	—

4.8 LABORATORY ANALYTICAL RESULTS

The following laboratory analytical reports are associated with the removal, remedial excavation and stockpiled soil. These reports were organized and provided by Environmental Science Services, Inc (ESS).

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

- TSS-1 to TSS-4: Soil samples obtained from the bottom of the piping trench. Laboratory analyzed for TPH.

- LRS-1.1, LRS-1.2, LRS-2.1, LRS-2.2, LRS-3.1, LRS-3.2, LRS-4.1, LRS-4.2, LRS-5.1, LRS-6.1, LRS-7.1: Soil samples obtained from the remedial excavation. Laboratory analyzed for TPH.

- LRS-2.1 and LRS-5.1: Soil samples additionally analyzed for VOCs and 13 TCLP Metals.

- RTS-1.2, RTS-2.1, RTS-3.1, RTS-4.1: Soil samples obtained from the remedial excavation of the piping trench. Laboratory analyzed for TPH.

In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 21, Bldg 1419 **ESS Project ID:** 921048

Client Sample ID: LSS #1 **ESS Sample ID:** 921048-01

Date Sample Received: 4/24/92 **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	13	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=93%

Approved by: David Dickinson
Laboratory Director

Date: 30 Apr 92

ivironmental 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 21, Bldg 1419 — **ESS Project ID:** 921048

Client Sample ID: LSS #2 — **ESS Sample ID:** 921048-02

Date Sample Received: 4/24/92 — **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	35	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=88%

Approved by: _____ Date: 30 Apr 92

David Dickinson
Laboratory Director

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 21, Bldg 1419 **ESS Project ID:** 921049

Client Sample ID: TSS #1 **ESS Sample ID:** 921049-01

Date Sample Received: 4/24/92 **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	202	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=92%

Approved by: David Dickinson
Laboratory Director

Date: 30 Apr 92

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

In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 21, Bldg 1419 — **ESS Project ID:** 921049

Client Sample ID: TSS #2 — **ESS Sample ID:** 921049-02

Date Sample Received: 4/24/92 — **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	94	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: 30 Apr 92

nvironmental 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 21, Bldg 1419 — **ESS Project ID:** 921049

Client Sample ID: TSS #3 — **ESS Sample ID:** 921049-03

Date Sample Received: 4/24/92 — **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	532	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=95%

Approved by: David Dickinson
Laboratory Director

Date: 30 Apr 92

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



In Response To The Future

ERTIFICATE OF ANALYSIS

Client: ATEC Environmental Consultants

Client Project ID: UST 21, Bldg 1419 — **ESS Project ID:** 921049

Client Sample ID: TSS #4 — **ESS Sample ID:** 921049-04

Date Sample Received: 4/24/92 — **Date Reported:** 4/30/92

Parameter	Results	Units	MRL	Method
Total Petroleum Hydrocarbon-IR	1,220	mg/Kg	11	418.1

MRL = Method Reporting Limit

Results reported on a dry weight basis, % solids=91%

Approved by: _____ Date: 30 Apr 92

David Dickinson
Laboratory Director

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 21-Bldg 1419 ESS Project ID: 922105

Date Samples Received: 8/13/92 Date Reported: 8/27/92

Client ID	Lab ID	Results	Units	MRL	% Solids
LRS 1.1	922105-01	38	mg/Kg	11	93%
LRS 1.2	922105-02	19	mg/Kg	11	94
LRS 2.1	922105-03	ND	mg/Kg	11	89
LRS 2.2	922105-04	16	mg/Kg	10	96
LRS 3.1	922105-05	ND	mg/Kg	10	96
LRS 3.2	922105-06	ND	mg/Kg	10	96
LRS 4.1	922105-07	ND	mg/Kg	10	97
LRS 4.2	922105-08	ND	mg/Kg	11	94
LRS 5.1	922105-09	ND	mg/Kg	10	96
LRS 6.1	922105-10	ND	mg/Kg	11	95
LRS 7.1	922105-11	ND	mg/Kg	11	95
RTS 1.2	922105-12	ND	mg/Kg	11	95
RTS 2.1	922105-13	36	mg/Kg	11	95
RTS 3.1	922105-14	81	mg/Kg	11	91
RTS 4.1	922105-15	ND	mg/Kg	10	96

ND = Not Detected above Method Reporting Limit (MRL)

Note: Results reported on a dry weight basis.

Approved by: Kelly Vario for: Date: August 27, 1992
David Dickinson
Laboratory Director

001

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST 21-Bldg 1419 — ESS Project ID: 922105

Client Sample ID: LRS 2.1 — ESS Sample ID: 922105-03

Date Sample Received: 8/13/92 — Date Reported: 8/27/92

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	**13**	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)	**30**	10

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: Kelly Vann for: — Date: August 27, 1992

David Dickinson
Laboratory Director

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 21-Bldg 1419
Client Sample ID: LRS 2.1
ESS Sample ID: 922105-03

Date Sampled: 8/11/92
Date TCLP Performed: 8/18/92
Date Leachate Extracted: 8/20/92
Date Extract Analyzed: 8/21/92

	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	0.4
Cadmium	ND	0.02	ND	0.04
Chromium	ND	0.05	ND	0.08
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.5
Silver	ND	0.05	ND	0.09
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.05
Zinc	0.44	0.02	0.52	0.04
Beryllium	ND	0.02	ND	0.04
Thallium	ND	0.1	ND	0.2

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

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: Kelly Vano for
David Dickinson
Laboratory Director

Date: August 27, 1992

In Response To The Future

ERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST 21-Bldg 1419 ESS Project ID: 922105

Client Sample ID: LRS 5.1 ESS Sample ID: 922105-09

Date Sample Received: 8/13/92 Date Reported: 8/27/92

Parameter	Result (ug/Kg)	MRL
Methylene Chloride	6	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: Kelly Varn for: David Dickinson
Laboratory Director

Date: August 27, 1992

In Response To The Future

ERTIFICATE OF ANALYSIS

TOXICITY CHARACTERISTICS LEACHING PROCEDURE (TCLP)

METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants
Client Project ID: UST 21-Bldg 1419
Client Sample ID: LRS 5.1
ESS Sample ID: 922105-09

Date Sampled: 8/11/92
Date TCLP Performed: 8/18/92
Date Leachate Extracted: 8/20/92
Date Extract Analyzed: 8/21/92

	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	0.4
Cadmium	ND	0.02	ND	0.04
Chromium	ND	0.05	ND	0.08
Lead	ND	0.1	ND	0.2
Mercury	ND	0.005	ND	0.005
Selenium	ND	0.3	ND	0.5
Silver	ND	0.05	ND	0.09
Copper	ND	0.02	ND	0.03
Nickel	ND	0.04	ND	0.05
Zinc	ND	0.02	ND	0.04
Beryllium	ND	0.02	ND	0.04
Thallium	ND	0.1	ND	0.2

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

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: Kelly Vano for: David Dickinson, Laboratory Director

Date: August 27, 1992

QUALITY CONTROL SECTION

In Response To The Future

CERTIFICATE OF ANALYSIS

TCL VOLATILE ORGANICS
Method 8260

Client: ATEC Environmental Consultants

Client Project ID: UST 21-Bldg 1419 | **ESS Project ID:** 922105

Client Sample ID: Method Blank | **ESS Sample ID:** VS0820B1

Date Sample Received: N/A | **Date Reported:** 8/27/92

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: Kelly Vano for: David Dickinson, Laboratory Director Date: August 27, 1992

OCT

In Response To The Future

CERTIFICATE OF ANALYSIS

VOA SOIL SURROGATE RECOVERY

Client: ATEC Environmental Consultants

Client Project ID: UST 21-Bldg 1419

Date Sample Analyzed: 8/20/92

ESS Project ID: 922105

SAMPLE ID	1,2 DICHLOROETHANE-D4 (70-121%)*	TOLUENE-D8 (81-117%)*	BFB (74-121%)*
VS0820B1	105%	100%	98%
922105-03	84	88	97
922105-09	88	89	102

* Acceptance criteria

Approved by: Kelly Vano for David Dickinson
Laboratory Director

Date: August 27, 1992

In Response To The Future

CERTIFICATE OF ANALYSIS

MATRIX SPIKE ANALYSIS SUMMARY

TCLP METALS

EPA METHOD 1311

Client: ATEC Environmental Consultants Matrix: Soil

TCLP Batch ID: 209501 Concentration in: mg/L

Target Analyte	Result	Spike Added	Spiked Result	Percent Recovery
Antimony	ND	*	ND	52%
Arsenic	ND	2.00	1.23	62
Cadmium	ND	0.5	0.26	52
Chromium	ND	1.0	0.62	62
Lead	ND	1.0	0.80	80
Mercury	ND	0.02	0.020	100
Selenium	ND	2.00	1.25	63
Silver	ND	1.0	0.52	52
Copper	ND	1.0	0.79	79
Nickel	ND	1.0	0.86	86
Zinc	0.39	1.0	1.23	84
Beryllium	ND	*	ND	52
Thallium	ND	*	ND	52

This matrix spike analysis summary applies to the following samples: 922105-03, -09

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: Kelly Vario for
David Dickinson
Laboratory Director

Date: August 27, 1992

4.9 CHAIN OF CUSTODY FORMS

The following chain of custody forms were produced for the soil samples which were laboratory analyzed. If date received is not on chain-of-custody date received and date analyzed is in lab report and /or quality control section.

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
37.07.451	FT. DEVONS BLDG. 1419 UST # 21	
	CLIENT	

SAMPLERS: *(Signature)* CRAIG D. TROMBLY

SAMPLING METHOD: GRAB

SAMPLE I.D. NO.	DATE	TIME	COMPOSITE	GRAB	WATER	SOIL		FILTERED	ACIDIFIED	ICED		NUMBER OF CONTAINERS	LAB I.D. NUMBER
TSS #1	4-23-92			✓		✓				✓		1	
TSS #2	4-23-92			✓		✓				✓		1	
TSS #3	4-23-92			✓		✓				✓		1	
TSS #4	4-23-92			✓		✓				✓		1	

LABORATORY ANALYSIS

VOLATILE ORGANICS	BTX & E	TOTAL HYDROCARBONS	PCB'S	E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
		✓							
		✓							
		✓							
		✓							

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)*
Craig D. Trombly	4-23-92 1:40				
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:	
		4/24			

CHAIN OF CUSTODY RECORD

PROJ. NO. 07.451

PROJECT NAME UST 21 - Bldg 1419

CLIENT Ft Devens

LAB PROJ. NO.

SAMPLERS: (Signature) Mark E Zaldokas

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
RTS-1.2	8/12	3:00		X		X				X		1				X						
RTS-2.1	8/12	3:00		X		X				X		1				X						
RTS-3.1	8/12	3:00		X		X				X		1				X						
RTS-4.1	8/12	3:00		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 Zaldokas	8/12 3:30	Darek C Sowa			

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

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
07.451	UST 21 - Bldg 1419 CLIENT Ft Devens	

SAMPLERS: *(Signature)*

SAMPLING METHOD: grab

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
RTS-1.1A	5/12	3:00		X		X				X		1				X						
RTS-2.1A	5/12	3:00		X		X				X		1				X						
RTS-3.1A	5/12	3:00		X		X				X		1				X						
RTS-4.1A	5/12	3:00		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)*
	5/12 3:30				

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

CHAIN OF CUSTODY RECORD

PROJ. NO. 07.451 | PROJECT NAME UST 21 - Bldg 1419 | 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 13 TCLP E.P. TOXIC METALS	TOTAL METALS (8)	IGNITABILITY			SAMPLE LOCATION / REMARKS
LRS-1.1	9/11	2:00		X		X				X		1				X						
LRS-1.2				X		X				X		1				X						
LRS-2.1				X		X				X		3		X		X		X				
LRS-2.2				X		X				X		1				X						
LRS-3.1				X		X				X		1				X						
LRS-3.2				X		X				X		1				X						
LRS-4.1				X		X				X		1				X						
LRS-4.2				X		X				X		1				X						
LRS-5.1				X		X				X		3		X		X		X				
LRS-6.1				X		X				X		1				X						
LRS-7.1	↓	↓		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 Zaldi	8/12				

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

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
37.07.451	FT. DEVONS BLDG. 1419	
	CLIENT UST# 21	

SAMPLERS: *(Signature)* CRAIG D. TROMBLY Craig D. Trombly

SAMPLING METHOD: GRAB

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	4-22-92			✓		✓				✓		1				✓						S. WALL OF EXC.
LSS#2	4-22-92			✓		✓				✓		1				✓						S. SIDE UNDER TANK

LABORATORY ANALYSIS

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Craig D. Trombly	4-22-92 11:30				
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Project Manager / Phone #:	
		4/24			

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

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
37.07.451	FT. DEVONS BLDG 1419 UST # 21	
	CLIENT	

SAMPLERS: *(Signature)* CRAIG D. TROMBLY

SAMPLING METHOD: GRAB

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	4-22-92			✓		✓				✓		1				✓						S. WALL OF EXC.	SPLIT
LSS#2	4-22-92			✓		✓				✓		1				✓						S. SIDE UNDER TANK	SPLIT

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Craig D. Trombly	4-23-92 0850 ~~4-22-92 11:30~~				
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 MANIFESTS

Approximately 30 gallons of kerosene were removed and residual tank materials were drummed. Drummed waste was disposed on May 4, 1992 at a licensed Treatment Storage Disposal Facility (T.S.D.F.) (Hitchcock Gas Engine Company, Bridgeport, Connecticut).

The following Hazardous Waste Manifest was generated from residual tank materials during the vacuum process and cleaning process.

MAY-7-92 THU 7:50 P.02

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.: MA 7210025154 | Manifest Document No.: FD 703

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, Mass 01433-5190

A. State Manifest Document Number: CT F 0122460

4. Generator's Phone (508) 796-3002 24 Hr X2220

B. G.B.I. (Gen. Site Address): Bldg# 219-1404-3713-2613

5. Transporter 1 Company Name: HITCHCOCK GAS ENGINE CO.
6. US EPA ID Number: CTD. 002593887

C. S.T.I. (Trans. Lic. Plate #): CT99362

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

D. Tran. Phone: 401-539-0080

9. Designated Facility Name and Site Address
HITCHCOCK GAS ENGINE CO.
50 CROSS STREET
BRIDGEPORT, CT 06610
10. US EPA ID Number: CTD. 002593887

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. WASTE OIL, COMBUSTIBLE LIQUID n.o.s.,NA 1270	001	TT.	1.500	G	EPA STATE CRO-2
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. WASTE PETROLEUM OIL	c. non-RCRA-hazardous	a.		c.	
b. CT REGULATED WASTE	d.	b.		d.	

15. Special Handling Instructions and Additional Information
24 HOUR EMERGENCY CONTACT # (508) 796-2220 DAKF 90 (ATEC) UST Removal
ERG# 27 -ATTACHED (FOR RECYCLE)

Point of Departure: Ft. Devens, Mass

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 Bosca	Mark	05	04	92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DENNIS J. WHITE	Dennis J White	05	04	92

18. Transporter 2 Acknowledgement of Receipt of Materials

	Signature	Month	Day	Year

manifest for
55 gal drums

hazardous materials covered by this manifest except as noted in Item 19.

	Signature	Month	Day	Year

rm 8/30/94. Previous edition is obsolete.

UST #21

I: FACILITY MAILS TO DESTINATION STATE

GENERATOR — TRANSPORTER — FACILITY

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802. FOR SPILLS WITHIN CONNECTICUT, CONTACT CT DEP - OIL AND CHEMICAL SPILL RESPONSE AT (203) 566-3338.

COPY 1: FACILITY MAILS TO DESTINATION STATE

CT F 0122460

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

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

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
	MA 7 2 1 1 0 0 2 5 1 5 4	FD174V7		

Generator's Name and Mailing Address
U.S. Army Ft. Devens 508-796-3002
~~T-2 EH~~, Box 19, Ft. Devens, Ma. 01433-5190
Generator's Phone (508- 796-3002

A. State Manifest Document Number: MA G113102
B. State Gen. ID: Bldg. 2613

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

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

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

9. 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.
RQ, Waste Oil, n.o.s., Combustible Liquid, NA1270	34	DM	13600	P	STATE MA 01

Additional Descriptions for Materials Listed Above (include physical state and hazard code.)		K. Handling Codes for Wastes Listed Above	
a. Waste Oil - Water	c.	a.	c.
	d.	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	Signature	Date (Month Day Year)
Mark Boser		06 05 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
RANDALL GRIFFIN		06 05 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 G113102 COPY 1: FACILITY MAILS TO DESTINATION STATE

4.11 WEIGHT RECEIPTS AND BILLS OF LADING

The following bills of lading document the disposal of contaminated soil associated with UST No. 0019.

BILL OF LADING
POLICY # WSC-89-001

L OF LADING #: 66 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ 100 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) KEROSENE
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: _____ 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 732531 MA
TRAILER REGISTRATION 43125 MA
LEFT SITE AT 11:40 DATE 8-11-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	____	____
SHIPPED TO DATE	____	____
THIS LOAD (estimated)	23.18	____
REMAINING TO BE SHIPPED	____	____

Tickets # 733.84

TRANSPORTER'S SIGNATURE _____ DATE 8-11-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/11/92 ARR TIME 12:46

EIVED
0 6 1992
DEP
al - 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

SIFICATION 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.

BILL OF LADING
POLICY # WSC-89-001

OF LADING #: 67 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ 100 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) KEROSENE
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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Lynne Clappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION B76278
TRAILER REGISTRATION 32400
LEFT SITE AT 11:35 DATE 8-11-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S
SIGNATURE: _____

QUANTITY SHIPPED:

	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	31.86	___
REMAINING TO BE SHIPPED	___	___

Ticket # 73386

TRANSPORTER'S SIGNATURE _____ DATE 8/11/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/11/92 ARR TIME 12:50

RECEIVED
AUG 6 1992
DEP
Final - 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.

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73384

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1419
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
12:46:23	39600	47960	87560	23.98

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

Load#	Job Total	Time & Date	Fob/Del
8	227.48	12:46:24 pm Aug 11, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73386

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1419
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
12:50:00	39600	63720	103320	31.86

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

Load#	Job Total	Time & Date	Fob/Del
9	259.34	12:50:00 pm Aug 11, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 70 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) ___ vol (cu yds) 100
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) KEROSENE
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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP. SIGNATURE (originating region): D. Lynne Clappell DATE: 8/6/92
(if applicable) DEP. SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 876-278
TRAILER REGISTRATION 3400
LEFT SITE AT _____ DATE _____
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	28.97	___
REMAINING TO BE SHIPPED	___	___

Ticket R73420

TRANSPORTER'S SIGNATURE _____ DATE 8/11/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/11/92 ARR TIME 3:53

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

L OF LADING #: 71 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) ___ vol (cu yds) 100
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) KEROSENE
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. Eugene Cluppell DATE: 8/6/92

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

TRUCK/TRACTOR REGISTRATION 732-534
TRAILER REGISTRATION 43125
LEFT SITE AT 3:00 DATE 8-11-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE: [signature]

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	24.38	___
REMAINING TO BE SHIPPED	___	___

Ticket R73422

TRANSPORTER'S SIGNATURE [signature] DATE 8-11-92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 8/11/92 ARR TIME 4:07

EIVED
0 6 1992
DEP
al - 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

SIFICATION 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
NALTIES.

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73420

tomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
EC ASSOC. US ARMY
ACCORD PARK DRIVE BLDG 1419
RWELL, MA 02061 FORT DEVENS, MA 01433
7-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
3:53:46	39600	57840	97440	28.92

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

Load#	Job Total	Time & Date	Fob/Del
12	343.12	3:53:47 pm Aug 11, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
DANVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73422

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
62 ACCORD PARK DRIVE BLDG 1419
NORWELL, MA 02061 FORT DEVENS, MA 01433
617-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
4:07:41	39600	48760	88360	24.38

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

Load#	Job Total	Time & Date	Fob/Del
13	367.50	4:07:41 pm Aug 11, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

L OF LADING #: 75 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ 100 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) KEROSENE
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 8100

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): [signature] DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): __ DATE: __

TRUCK/TRACTOR REGISTRATION 915435 MA
TRAILER REGISTRATION 42697 MA
LEFT SITE AT 8:14 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: [signature]

QUANTITY SHIPPED: wt (tons) vol (cu yds)
TOTAL PROJECTED __ __
SHIPPED TO DATE __ __
THIS LOAD (estimated) 25.89 __
REMAINING TO BE SHIPPED __ __
Ticket # R73469

TRANSPORTER'S SIGNATURE [signature] DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 8/12/92 ARR TIME 9:13

EIVED
0 6 1992
DEP
al - 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

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.

BILL OF LADING
POLICY # WSC-89-001

L OF LADING #: 76 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ 100 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) KEROSENE
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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Eugene Clappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 7335 34 MA
TRAILER REGISTRATION 43125 MA
LEFT SITE AT 930 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	25.21	___
REMAINING TO BE SHIPPED	___	___

Ticket # R73417

TRANSPORTER'S SIGNATURE CRA Cutler DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 9:49

CEIVED
0 6 1992
DEP
ral - 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

LSIFICATION 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.

MAIN OFFICE:
DANVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73477

ustomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
62 ACCORD PARK DRIVE BLDG
NORWELL, MA 02061 FORT DEVENS, MA 01433
617-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
9:49:32	39600	50420	90020	25.21

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

Load#	Job Total	Time & Date	Fob/Del
5	135.36	9:49:32 am Aug 12, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
DANVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY [illegible] 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

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

TICKET #R 73469

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
62 ACCORD PARK DRIVE BLDG 1419
NORWELL, MA 02061 FORT DEVENS, MA 01433
617-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
9:23:43	39600	51780	91380	25.89

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

Load#	Job Total	Time & Date	Fob/Del
4	110.15	9:23:43 am Aug 12, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

OF LADING #: 73 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) ___ 100 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) KEROSENE
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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Tyler Chappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 376 277 MA
TRAILER REGISTRATION 32-394 MA
LEFT SITE AT 800 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S
SIGNATURE: _____

QUANTITY SHIPPED:

	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	29.76	___
REMAINING TO BE SHIPPED	___	___

Ticket # 73463

TRANSPORTER'S SIGNATURE _____ DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12 ARR TIME 9:06

RECEIVED
AUG 6 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

OF LADING #: 74 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ 100 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) KEROSENE
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: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): D. Tyler Clappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION B76278
TRAILER REGISTRATION 32400
LEFT SITE AT 810 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE'S
SIGNATURE: Bruce Adams

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	25.91	___
REMAINING TO BE SHIPPED	___	___

Ticket # 23466

TRANSPORTER'S SIGNATURE _____ DATE _____
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 9:16

RECEIVED
AUG 6 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.

MAIN OFFICE:
NVERS 750-4200

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

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

TICKET #R 73463

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC.
2 ACCORD PARK DRIVE
ORWELL, MA 02061
17-878-6200

US ARMY
BLDG 1419
FORT DEVENS, MA 01433
PO# 37.04.72053

Time	Tare	Net	Gross	Total
9:06:41	39600	59520	99120	29.76

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

Load#	Job Total	Time & Date	Fob/Del
2	58.35	9:06:41 am Aug 12, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
NVERS 750-4200

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

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

TICKET #R 73466

tomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
EC ASSOC.
ACCORD PARK DRIVE
RWELL, MA 02061
7-878-6200

US ARMY
BLDG 1419
FORT DEVENS, MA 01433
PO# 37.04.72053

Time	Tare	Net	Gross	Total
9:16:56	39600	51820	91420	25.91

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

Load#	Job Total	Time & Date	Fob/Del
3	84.26	9:16:56 am Aug 12, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 78 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 1419 4K TANK # 21 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) 100 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) KEROSENE
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) 221-9440

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SOUTH SUDBURY, MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): _____ DATE: 8/6/92
(If applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 37677
TRAILER REGISTRATION 32394
LEFT SITE AT 11:25 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE
SIGNATURE _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	27.58	___
REMAINING TO BE SHIPPED	___	___

Ticket R 73529

TRANSPORTER'S SIGNATURE _____ DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 12:33

CEIVED
0 6 1992
DEP
tral - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC/SUPERFUND RESPONSE BRANCH
[illegible] STREET, 5th FLOOR
[illegible], MA 02108
AND
THE APPROPRIATE REGIONAL OFFICE

LSIFICATION OR MISREPRESENTATION OF THE INFORMATION ON THIS BILL OF LADING IS A VIOLATION OF G.L. C. 21C AND 310 CMR 30.000 AND IS SUBJECT TO APPROPRIATE STATUTORY OR REGULATORY NALTIES.

BILL OF LADING
POLICY # WSC-89-001

LL OF LADING #: 77 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) 100 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) KEROSENE
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): [signature] Chappell DATE: 8/6/92
(If applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 162-377 MA
TRAILER REGISTRATION 38806 MA
LEFT SITE AT 750 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVES
SIGNATURE: [signature]

QUANTITY SHIPPED:

	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	28.59	___
REMAINING TO BE SHIPPED	___	___

Ticket # R73460

TRANSPORTER'S SIGNATURE [signature] DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE [signature] DATE 8/12/92 ARR TIME 8:56

CEIVED
6 0 6 1992
DEP
tral - 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

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 ENALTIES.

MAIN OFFICE:
ANVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY H[illegible] 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

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

TICKET #R 73527

ustomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC. US ARMY
62 ACCORD PARK DRIVE BLDG 1419
NORWELL, MA 02061 FORT DEVENS, MA 01433
617-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
12:33:36	39600	55160	94760	27.58

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

Load#	Job Total	Time & Date	Fob/Del
7	192.07	12:33:37 pm Aug 12, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
NVERS 750-4200

TRIMOUNT BITUMINOUS PRODUCTS CO.
5 CHERRY H[illegible] 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

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

TICKET #R 73460

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1419
ORWELL, MA 02061 FORT DEVENS, MA 01433
7-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
8:56:02	39600	57180	96780	28.59

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

Load#	Job Total	Time & Date	Fob/Del
1	28.59	8:56:02 am Aug 12, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

LL OF LADING #: 79 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01433
CONTACT/TEL #: (508) 796-3800

SITE OF GENERATION: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) ___ vol.(cu yds) 150
CONTAMINATED DEBRIS: # absorbent pads ___ # absorbent booms ___ vol (cu yds) speedy dri ___ other (specify) ___

TYPE OF CONTAMINATION:
___ gasoline ___ #2 oil ___ #4 oil ___ #6 oil ___ other
ANALYSES ATTACHED?
Volatiles: ✓Y __N TPH: ✓Y __N

TRANSPORTER NAME/ADDRESS:
TRIMOUNT BITUMINOUS
70 BLANCHARD RD
BURLINGTON MA
CONTACT/TEL #: DAVID PETER

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
NEW BRAINTREE, MA
TYPE OF FACILITY: ✓ Recycling ___ Landfill ___ Incinerator

GENERATOR'S SIGNATURE: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region): P. Cappell DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 876278
TRAILER REGISTRATION 32400
LEFT SITE AT 11:40 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE SIGNATURE: Brian Lemon

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	26.88	___
REMAINING TO BE SHIPPED	___	___

Ticket 73530

TRANSPORTER'S SIGNATURE _____ DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 12:47

CEIVED
G 0 6 1992
DEP
tral - Req.

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEP REGIONAL OFFICE
DEP CENTRAL OFFICE

LSIFICATION OR MISREPRESENTATION OF ANY 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 ENALTIES.

BILL OF LADING
PERMIT # WE C-92-091

OF LADING #: 80 DEP CASE #:

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

SITE OF GENERATION: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN: FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: ___ wt (tons) 150 vol (cu yds)
CONTAMINATED DEBRIS: # absorbent pads ___ # absorbent booms ___
vol (cu yds) specify dri ___ other (specify) ___

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil __ other
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) 938-7010

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

GENERATOR'S SIGNATURE: DATE: 8/3/92
ABOVE ITEMS MUST BE COMPLETED PRIOR TO LEAVING
AUTHORIZATION: DEP SIGNATURE (originating region): DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region): DATE:

TRUCK/TRACTOR REGISTRATION 915435 MA
TRAILER REGISTRATION 42697 MA
LEFT SITE AT 1150 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE SIGNATURE:

TRANSPORTER'S SIGNATURE
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE

QUANTITY SHIPPED:

	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	26.10	___
REMAINING TO BE SHIPPED	___	___

Ticket # C7353.J
DATE 8/12/92
DATE 8/12/92 ARR TIME 12:47

EIVED
6 1992
EP
l - Req.

GENERATOR IS RESPONSIBLE FOR SUBMITTING SIGNED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SOLID WASTE DISPOSAL
1 WINTER STREET, 5TH FLOOR
BOSTON, MA 02108
AND
THE APPROPRIATE REGIONAL OFFICE

SIFICATION 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.

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:
NVERS 750-4200

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

TICKET #R 73530

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1419
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
12:45:00	39600	53760	93360	26.88

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

Load#	Job Total	Time & Date	Fob/Del
8	218.95	12:45:00 pm Aug 12, 1992	F

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

RECEIVED BY _____

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:
NVERS 750-4200

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

TICKET #R 73531

stomer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
TEC ASSOC. US ARMY
2 ACCORD PARK DRIVE BLDG 1419
ORWELL, MA 02061 FORT DEVENS, MA 01433
17-878-6200 PO# 37.04.72053

Time	Tare	Net	Gross	Total
12:47:59	39600	52200	91800	26.10

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

Load#	Job Total	Time & Date	Fob/Del
9	245.05	12:47:59 pm Aug 12, 1992	F

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

RECEIVED BY _____

BILL OF LADING
POLICY # WSC-89-001

BILL OF LADING #: 61 DATE: _____ DEP CASE #: _____

GENERATOR NAME/ADDRESS:
U.S. ARMY
AFZD-FM, BOX 19
FORT DEVENS, MA 01432
CONTACT/TEL #: (508) 796-3809

SITE OF GENERATION: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) __ vol (cu yds) 100
CONTAMINATED DEBRIS: # absorbent pads __ # absorbent booms __
vol (cu yds) specify dri _____ other (specify) _____

TYPE OF CONTAMINATION:
__ gasoline __ #2 oil __ #4 oil __ #6 oil __ other (specify) _____
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) 272-9400

DESTINATION FACILITY NAME/ADDRESS:
TRIMOUNT BITUMINOUS PRODUCTS
651 LAKE ST.
SOUTH NEWBURY MA
TYPE OF FACILITY: ✓ Recycling __ Landfill __ Incinerator

GENERATOR'S SIGNATURE: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP SIGNATURE (originating region) _____ DATE: 8/6/92
(if applicable) DEP SIGNATURE (destination region) _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 732534
TRAILER REGISTRATION 43125
LEFT SITE AT 12:05 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	___	___
SHIPPED TO DATE	___	___
THIS LOAD (estimated)	29.26	___
REMAINING TO BE SHIPPED	___	___

Ticket # R73546

TRANSPORTER'S SIGNATURE _____ DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 1:16

GENERATOR IS RESPONSIBLE FOR RETURNING COMPLETED FORM WITHIN 5 DAYS TO:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC - SOLID WASTE RESPONSE BRANCH
1 WINTER STREET, 5TH FLOOR
BOSTON, MA 02108
AND
THE APPROPRIATE REGIONAL OFFICE

RECEIVED
AUG 06 1992
DEP
Central - Req.

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-92-091

L OF LADING #: 87 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: 4K TANK # 21
STREET BUILDING 1419 Kerosene
TOWN FORT DEVENS
STATE MA 01433
TRANSPORTATION ACCIDENT? __Y ✓N

MATERIAL DESCRIPTION (TOTAL PROJECTED QUANTITY):
CONTAMINATED SOIL: __ wt (tons) 100 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) ____
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) 221-5400

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

GENERATOR'S SIGNATURE: _____ DATE: 8/3/92
(ABOVE ITEMS MUST BE COMPLETED PRIOR TO DEP AUTHORIZATION)

AUTHORIZATION: DEP. SIGNATURE (originating region): _____ DATE: 8/6/92
(if applicable) DEP. SIGNATURE (destination region): _____ DATE: _____

TRUCK/TRACTOR REGISTRATION 162377 MA
TRAILER REGISTRATION 38806 MA
LEFT SITE AT 310 DATE 8-12-92
GENERATOR OR RECEIVING FACILITY REPRESENTATIVE SIGNATURE: _____

QUANTITY SHIPPED:	wt (tons)	vol (cu yds)
TOTAL PROJECTED	____	____
SHIPPED TO DATE	____	____
THIS LOAD (estimated)	31.09	____
REMAINING TO BE SHIPPED	____	____

Ticket R 73574

TRANSPORTER'S SIGNATURE _____ DATE 8/12/92
RECEIVING FACILITY REPRESENTATIVE'S SIGNATURE _____ DATE 8/12/92 ARR TIME 4:04

CEIVED
0 6 1992
DEP
ral - 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

LSIFICATION OR MISREPRESENTATION OF ANY OTHER 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.

MAIN OFFICE:
DANVERS 750-4200

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

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

TICKET #R 73574

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200
US ARMY
BLDG 1419
FORT DEVENS, MA 01433
PO# 37.04.72053

Time	Tare	Net	Gross	Total
4:04:54	39600	62180	101780	31.09

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

Load#	Job Total	Time & Date	Fob/Del
11	305.40	4:04:54 pm Aug 12, 1992	F

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

RECEIVED BY _____

MAIN OFFICE:
DANVERS 750-4200

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

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

TICKET #R 73540

Customer # ATE001 Job # BLDGFD MIX # #76 MIX NAME OIL SOIL TRUCK# 9
ATEC ASSOC.
62 ACCORD PARK DRIVE
NORWELL, MA 02061
617-878-6200
US ARMY
BLDG 1419
FORT DEVENS, MA 01433
PO# 37.04.72053

Time	Tare	Net	Gross	Total
1:16:54	39600	58520	98120	29.26

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

Load#	Job Total	Time & Date	Fob/Del
10	274.31	1:16:54 pm Aug 12, 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 from the Fort Devens Fire Department 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 S.40 M.G.L.
DIG SAFE NUMBER
221602232
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

Fee paid $ N/A

Name and address of contractor disposing tank SAME AS ABOVE

Location to which tank will be transported

14901
Approved tank yard#

This permit will expire 5-13 19 92
Extended to 5/31/92

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

John O Dowd

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD [illegible] MANCHELLO & SONS [illegible] WASHINGTON ST. [illegible], MASS. 01841

APPROVED TANK YARD NO. 1 4 9 0 1 — 9 2 0 1 0 2 2

Tank Yard Ledger 502 CMR 3.03(4) Number:

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:

Jami Mavanto	CPW	5-28-92
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	64"	X	23'11"	(4,000 gal.)
Tank 2	-----	X	-----	
Tank 3	-----	X	-----	
Tank 4	-----	X	-----	
Tank 5	-----	X	-----	
	(feet)		(feet)	

Tank Removed From

Ft. Devens - Bldg. #1419 - tank # 21
(no. street)

Ayer
(city or town)

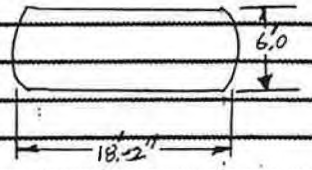
Fire Department Permit # None-Listed
(if applicable)

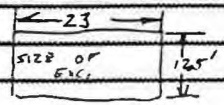
4.13 UST CLOSURE CHECKLIST

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

UST CLOSURE O/C CHECK LIST

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS		NOTES
Calibrate PID & LEL/O2 meters	4-22-92	8:15			Site Topography: slopes slightly towards the EAST (BLDG 1419)
Drain & flush piping & pumps	1-30-92				
Excavate to top of tank	1-30-92				Depth to tank: 2.5 ft.
Vent tank note LEL/O2 levels & times	4-22-92		LEL	O2	
		T1: 10:00	0	20.0	
		T2: 10:20	0	20.4	
		T3:			
		T4:			
		T5:			
		T6:			
		T7:			
		T8:			
		T9:			PRODUCT LINE- 2" GALVINIZED PIPE
		T10:			VENT LINE - 2.5" GALVINIZED PIPE
		T11:			
		T12:			
Pump & clean tank:	4-22-92	9:45	30 gal. liquid		Tank Dimensions/Conditions:
Note quantities liquid (gal) & sludge (lbs)			___ lbs. sludge		
Remove all tank connections, and cap openings	1-30-92				
Excavate soils to free tank	4-21-92	2:30			
Segregate stained soils: Note PID readings	1-30/4-22-92		PID (ppm)	NDIR (ppm)	1- slight amount of corrosion
(if >10 ppm NDIR also)	4-21-92				2- no asphalt coating
	1-30-92	1:30	25.0		stockpile #1
	4-22-92	9:30	30.0		stockpile #2



UST CLOSURE O/C CHECK LIST				
DEFINABLE FEATURE	**DATE**	**TIME**	**MEASUREMENTS**	**NOTES**
Remove tank, piping, pumps, and hardware.			Photographic Descriptions:	Soil Description: Fine and course sand.
Photograph excavation; note descriptions.	4-22-92	8:30	Photo 1: EMPTY EXC.	note: spotty layers of black
Sketch Schematic	4-22-92	8:30	Photo 2: TANK OUT OF EXC.	sand around perimeter of exc.
	4-22-92	9:15	Photo 3: STOCKPILE # 1	SAND - VERY DAMP & OILY
	4-22-92	9:15	Photo 4: STOCKPILE # 2	
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	4-22-92	9.15		Depth of Excavation/Conditions: 8.5'
				
Secure tanks transport off-site				
Obtain 10 soil samples from			PID (ppm) NDIR (ppm)	Sample locations:
excavation walls/bottom: Note PID/NDIR	4-22-92	8:50	SS1: 28.	E. WALL (3.5 FT. DEEP)
readings and sample locations.	"	8:50	SS2: 3.8	" "
	"	8:53	SS3: 0.2	S. WALL "
	"	8:55	SS4: 30.	" "
	"	9:00	SS5: 0.2	W. WALL "
	"	9:00	SS6: 0.2	" "
	"	9:10	SS7: 0.0	N. WALL "
	"	9:10	SS8: 1.0	" "
	"	9:15	SS9: 2.0	S SIDE, UNDER TANK (SS#4)
	"	9:15	SS10: 42.0	N SIDE, UNDER TANK (SS#10)
	"	9:25	Stockpile#1 25.0	
	"	9:25	stockpile#2 30.0	
Obtain 2 soil samples & 1 water samples	N/A			Sample Locations:
for laboratory analysis. Note sample locations.	4-22-92	9:35		LSS1: S. WALL (3.5 DEEP)
	"	9:35		LSS2: S. SIDE, UNDER TANK
				LWS1: N/A

DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
				____ tons of backfill
Backfill excavation (if clean): Not completed as of				Backfill description:
Note amount & type of backfill 5/11/92				
Close open excavation (if applicable) Not completed as of				
5/11/92				
Restore surface and rope off	4/22/92	3:00		
Remove rubbish/debris	4/22/92	3:30		
Transport hazardous material off-site:	5/4/92	10:00		Amount Classification
Note amount/classification				30 yd waste petro oil
Make copies of manifests, permits,				
and disposal receipts.				

4.14 INSTALLATION

The installation of a replacement UST No.0021 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
8665 Bash Street
Indianapolis, IN 46256-1202
(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)