Ft Devens MA

Environmental
Consulting Services

ATEC®

BLDG 2447
1000 #2

Post-Removal Report
Underground Storage Tank Closure
1,000 Gallon No. 2 Fuel Oil
UST No. 0034
Building 2447
Fort Devens, Massachusetts

ATEC File: 37.07.91.07451
Contract No. DAK31-91-D-0015

Prepared for:

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

Attn: Mr. Robert J. Kruzewski,
Contracting Officer

February 13, 1992

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

February 13, 1992

Mr. Robert J. Kruzewski, Contracting Officer
United States Army
Directorate of Contracting
Building 227
Fort Devens, Massachusetts 01433-5340

RE: Post-Removal Report
Underground Storage Tank Closure
1,000 Gallon No. 2 Fuel Oil
Building 2447 - UST No. 0034
Fort Devens, Massachusetts
ATEC File: 37.07.91.07451

Mr. Kruzewski:

Attached is a report by ATEC Associates, Inc. (ATEC), detailing the results of the closure of one (1) 1,000 gallon, single wall, steel Underground Storage Tank (UST) referenced as UST No. 0034, located at property known as Building 2447, Fort Devens, Massachusetts. The purpose of the closure was to excavate the UST, to evaluate the potential for the presence of oil and hazardous material at the site.

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.

Mark E. Baldi
Environmental Scientist

James B. O'Brien
Group Manager

Marta J. Nover
Environmental Consulting
Division Manager

EXECUTIVE SUMMARY

On January 16, 1992, ATEC closed one (1) 1,000 gallon, single wall, steel Underground Storage Tank (UST) located at property known as Building 2447, 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.

ATEC's conclusions are as follows:

1. Upon excavation and removal, the tank was observed to be in good condition with no holes, perforations, or severe corrosion. However, the fill pipe connection at the tank was noted to be very loose.

2. Ground water was not encountered within the excavation.

3. Excavated soils required to free the tank were visibly contaminated. Soils excavated from above the tank were observed to be grossly contaminated and were segregated. Some staining of soils within the excavation was also observed.

4. Ten (10) soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR Analysis respectively. PID readings ranged from 0.4 ppm to 56 ppm. NDIR results ranged from 33.6 ppm to 2,834.0 ppm TPH.

5. Two (2) soil samples were obtained from the excavation for laboratory analysis for TPH utilizing USEPA Extraction Method 9071 and Analysis Method (draft) 9073. Analytical results for LSS-1 obtained from the north wall of the excavation revealed 875 ppm TPH. Analytical results for LSS-2 obtained from the bottom of the excavation revealed 846 ppm TPH.

6. One (1) composite, soil sample (LSS-3) was obtained from stockpiled soils for laboratory analysis. Analytical results for LSS-3 revealed 1,470 ppm TPH.

ATEC's recommendations are as follows:

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

2. Advance soil borings and install ground water monitoring wells to determine the vertical and horizontal extent of contamination. Continuous split spoon sampling and analysis will be conducted utilizing field analysis techniques, i.e. Photoionization Detector and Non-Dispersive Infrared Analysis, and laboratory analysis to document soil contamination levels as specified in the Hazardous Waste Containment Plan.

3. Additional excavated soils and stockpiled soils should be laboratory analyzed for Total Petroleum Hydrocarbons, Volatile Organic Compounds, PCBs, 13 TCLP Metals, flashpoint, sulfide reactivity, cyanide reactivity, and corrosivity for disposal classification.

4. Appropriately dispose of additional excavated soil and stockpiled soil off-site.

TABLE OF CONTENTS

TRANSMITTAL LETTER. i
EXECUTIVE SUMMARY. ii
1.0 INTRODUCTION 1
2.0 SUBSURFACE STORAGE TANK EXCAVATION AND REMOVAL.2
3.0 SAMPLING AND ANALYSIS PLAN 3
4.0 ANALYTICAL RESULTS 4
5.0 CONCLUSIONS AND RECOMMENDATIONS. 5
6.0 CERTIFICATIONS AND QUALIFICATIONS 6

APPENDICES

APPENDIX A: PHOTOGRAPHIC DOCUMENTATION
APPENDIX B: UST CLOSURE CHECKLIST
APPENDIX C: OCMA 220 DATA SHEETS
APPENDIX D: LABORATORY REPORTS
APPENDIX E: CHAIN OF CUSTODY FORMS
APPENDIX F: HAZARDOUS WASTE MANIFESTS
APPENDIX G: PERMITS/CERTIFICATES

POST-REMOVAL REPORT

United States Army Reserve Center
Building 2447
Fort Devens, Massachusetts
ATEC Project No. 37.07.91.07451

1.0 INTRODUCTION

This Post-Removal Report details the results of the closure of one (1) 1,000 gallon, single wall, steel, Underground Storage Tank (UST) referenced as UST No. 0034, located at property known as Building 2447, 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 16, 1992.

The basic Project Work Scope included:

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

2. Excavating, venting, cleaning, transporting, and disposing of one (1) 1,000 gallon UST by appropriately licensed contractors/facilities.

3. Disposal of UST slops at a licensed facility.

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

5. Laboratory Analysis of soil sampled from the UST excavation by a US EPA certified laboratory for Total Petroleum Hydrocarbons (USEPA Extraction Method 9071 and Analysis Method (draft) 9073).

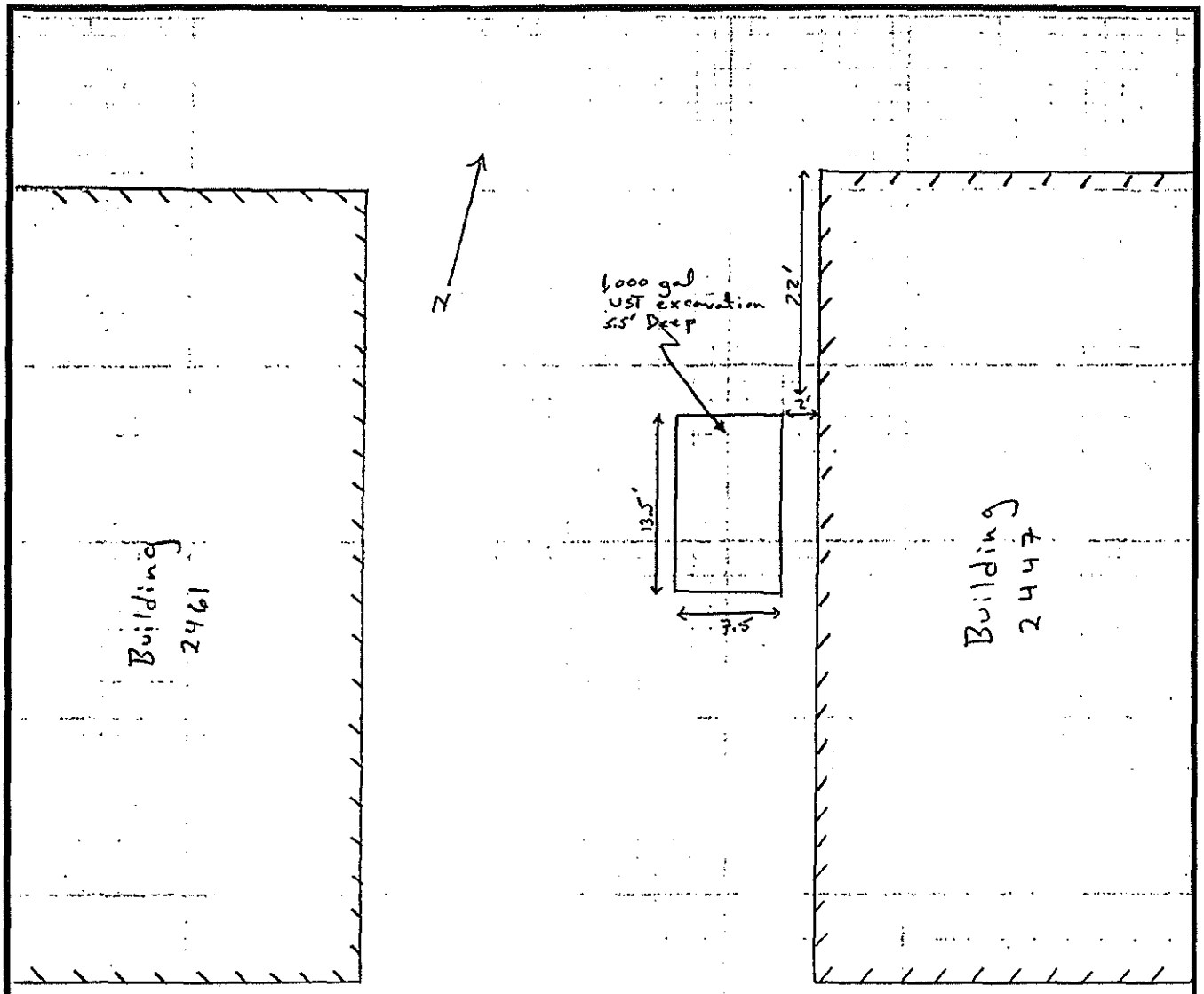
6. Preparation of a Post-Removal Report, to include assimilation of information gathered; major findings; and conclusions.

2.0 SUBSURFACE STORAGE TANK EXCAVATION AND REMOVAL

On January 16, 1992, one (1), 1,000 gallon, subsurface, No. 2 fuel oil, storage tank was excavated and removed from the site. The UST was located adjacent to the west side of the Building 2447. Site topography is level.

Soils in the excavation consisted primarily of medium brown, fine sand with fine to coarse gravel, cobbles, and boulders. The tank was covered by approximately 1.0 feet of soil. The bottom of the excavation was approximately 5.0 feet below grade. Ground water was not encountered. Excavated soils required to free the tank were visibly contaminated. Soils excavated from above the tank were observed to be grossly contaminated and were segregated. Some staining of soils within the excavation was also observed.

Associated piping was drained and tank connections were removed. UST No. 0034 was estimated to contain 35 gallons of No. 2 fuel oil and sludges. Approximately 20 gallons of fuel oil was removed on January 7, 1992, and transported to a licensed T.S.D.F. (Beede Waste Oil Corporation). Approximately 15 gallons of fuel oil and sludges were removed and drummed on January 15, 1992 for transportation at a later date. Tank openings were 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. However, the fill pipe connection at the tank was noted to be very loose. 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 slops.



UST LOCATION PLAN

1,000 gallon UST relative to:
Building 2447
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 1

ATEC

The scrap tank was removed from the site on January 16, 1992 and transported to the Contractor's yard, Lake George Street, Fort Devens for temporary storage. The tank was disposed at Tombarello & Sons, a licensed Massachusetts tank yard, on January 28, 1992. A copy of the disposal receipt is included in Appendix G.

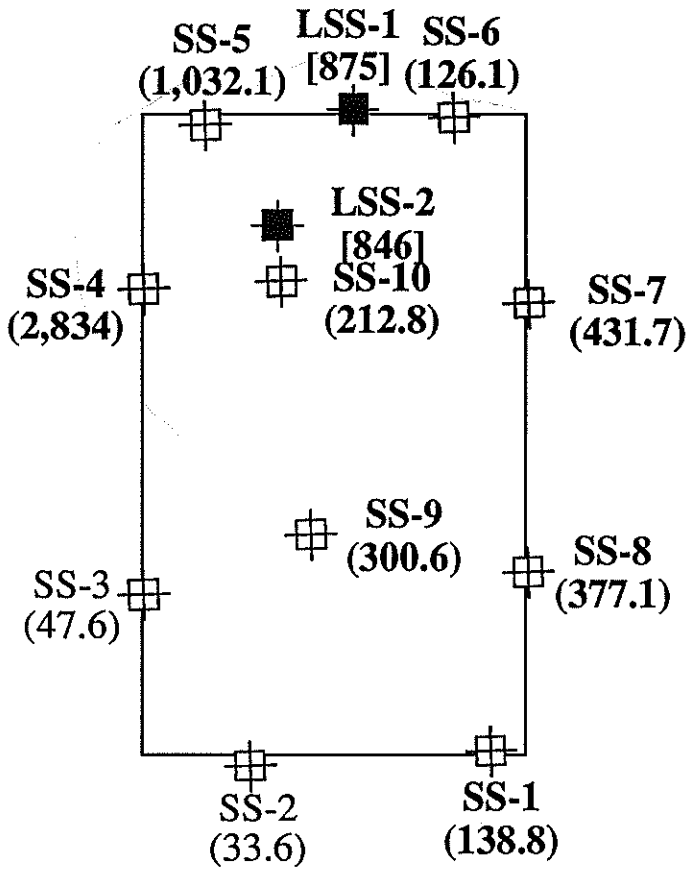
3.0 SAMPLING AND ANALYSIS PLAN

Ten (10) soil samples were obtained from the excavation for field screening with a Photoionizing Detector (PID) and field analyzed with a Non-Dispersive Infrared (NDIR) Analyzer. The PID field screening for Volatile Organic Compound (VOC) vapors 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 (8) of the samples (SS-1 to SS-8) were obtained from the excavation walls at a depth of approximately 2.5 - 3.5 feet below grade. Two (2) of the samples (SS-9 and SS-10) were obtained from the bottom of the excavation at a depth of approximately 5.0 feet below grade. Two (2) composite soil samples (Stock-1 and Stock-2) were obtained from stockpiled soils for PID and NDIR field screening. Soil sample Stock-2 was obtained from the segregated soils which were observed to grossly contaminated. Sampling locations for the excavation are depicted on the Sampling Schematic attached as Figure 2.

Two (2) soil samples (LSS-1 and LSS-2) were obtained from the excavation for laboratory analysis. Soil Sample LSS-1 was obtained from the north wall of the excavation. Soil sample LSS-2 was obtained from the bottom of the excavation. One (1) composite, soil sample (LSS-3) was obtained from stockpiled soils required to free the tank. These samples were analyzed for TPH utilizing USEPA Extraction Method 9071 and Analysis Method (draft) 9073. Sampling locations are depicted on the Sampling Schematic attached as Figure 2.

The appropriate chain of custody forms are included in Appendix E.



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

1,000 gallon UST excavation at:
Building 2447
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

NOT TO SCALE

FIGURE: 2

ATEC

4.0 ANALYTICAL RESULTS

The results from analysis with the Photoionization Detector (PID) and the Non-Dispersive Infrared (NDIR) Analyzer of the ten (10) soil samples obtained from the excavation, and the two (2) composite samples obtained from stockpiled soil are as follows:

TABLE 1 - PID AND NDIR RESULTS

Sample No.	PID (ppm)	NDIR(ppm)
SS-1	4.0	138.8
SS-2	3.6	33.6
SS-3	19.4	47.6
SS-4	0.4	2,834.0
SS-5	15.4	1,032.1
SS-6	56.0	126.1
SS-7	26.0	431.7
SS-8	44.0	377.1
SS-9	25.0	300.6
SS-10	34.0	212.8
Stock-1	56.0	1,110.0
Stock-2	31.0	2,249.2

N.D. = None Detected

Laboratory analytical results of the two (2) soil samples obtained from the excavation revealed 875 ppm TPH for LSS-1, and 846 ppm TPH for LSS-2. Laboratory analysis of the one (1) soil sample obtained from the stockpiled soils revealed 1,470 ppm TPH for LSS-3. See Appendix D.

5.0 CONCLUSIONS AND RECOMMENDATIONS

ATEC's conclusions are as follows:

1. Upon excavation and removal, the tank was observed to be in good condition with no holes, perforations, or severe corrosion. However, the fill pipe connection at the tank was noted to be very loose.

2. Ground water was not encountered within the excavation.

3. Excavated soils required to free the tank were visibly contaminated. Soils excavated from above the tank were observed to be grossly contaminated and were segregated. Some staining of soils within the excavation was also observed.

4. Ten (10) soil samples were obtained from the excavation for field screening and field analysis utilizing a PID and NDIR Analysis respectively. PID readings ranged from 0.4 ppm to 56 ppm. NDIR results ranged from 33.6 ppm to 2,834.0 ppm TPH.

5. Two (2) soil samples were obtained from the excavation for laboratory analysis for TPH utilizing USEPA Extraction Method 9071 and Analysis Method (draft) 9073. Analytical results for LSS-1 obtained from the north wall of the excavation revealed 875 ppm TPH. Analytical results for LSS-2 obtained from the bottom of the excavation revealed 846 ppm TPH.

6. One (1) composite, soil sample (LSS-3) was obtained from stockpiled soils for laboratory analysis. Analytical results for LSS-3 revealed 1,470 ppm TPH.

ATEC's recommendations are as follows:

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

2. Advance soil borings and install ground water monitoring wells to determine the vertical and horizontal extent of contamination. Continuous split spoon sampling and analysis will be conducted utilizing field analysis techniques, i.e. Photo-ionization Detector and Non-Dispersive Infrared Analysis, and laboratory analysis to document soil contamination levels as specified in the Hazardous Waste Containment Plan.

3. Additional excavated soils and stockpiled soils should be laboratory analyzed for Total Petroleum Hydrocarbons, Volatile Organic Compounds, PCBs, 13 TCLP Metals, flashpoint, sulfide reactivity, cyanide reactivity, and corrosivity for disposal classification.

4. Appropriately dispose of additional excavated and stockpiled soil off-site.

6.0 CERTIFICATIONS & QUALIFICATIONS

This report is addressed to Mr. Robert J. Kruzewski, Contracting Officer of Directorate of Contracting, United States Army, Fort Devens with respect to property known as Building 2447, Fort Devens, Massachusetts (the site).

ATEC certifies that to the best of their professional knowledge, information and belief:

The investigation of the site described in the report was performed by Mark E. Baldi, Quality Control Manager; and James B. O'Brien, Group Manager (site investigators) who are qualified to make the investigations and formulate the opinions herein set forth.

The site investigators are familiar with the current provisions of the State of Massachusetts General Law Chapter 148; 527 CMR 9.00; and 502 CMR 3.00.

The site investigators are knowledgeable regarding the types of industrial, manufacturing, commercial or other processes or operations which might reasonably be expected to generate, use, treat, store or dispose of oil or hazardous material.

The site investigators have reviewed the recent history of the site and have considered the potential for the generation, use, treatment, storage, or disposal of oil or hazardous material by (a) the uses presently associated with the site and (b) to the extent ascertainable by inquiry, as noted.

In January 1992, the site investigators studied the site and, except as herein qualified, the areas in the vicinity of the site to assess the possible presence of oil and hazardous material at the site.

The following qualifications apply to ATEC's opinion:

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

The work performed in conjunction with this assessment and the data developed are intended as a description of available information at the dates and locations given. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

APPENDIX A: PHOTOGRAPHIC DOCUMENTATION

Building 2447, Fort Devens, Massachusetts
ATEC File No. 37.07.91.07451

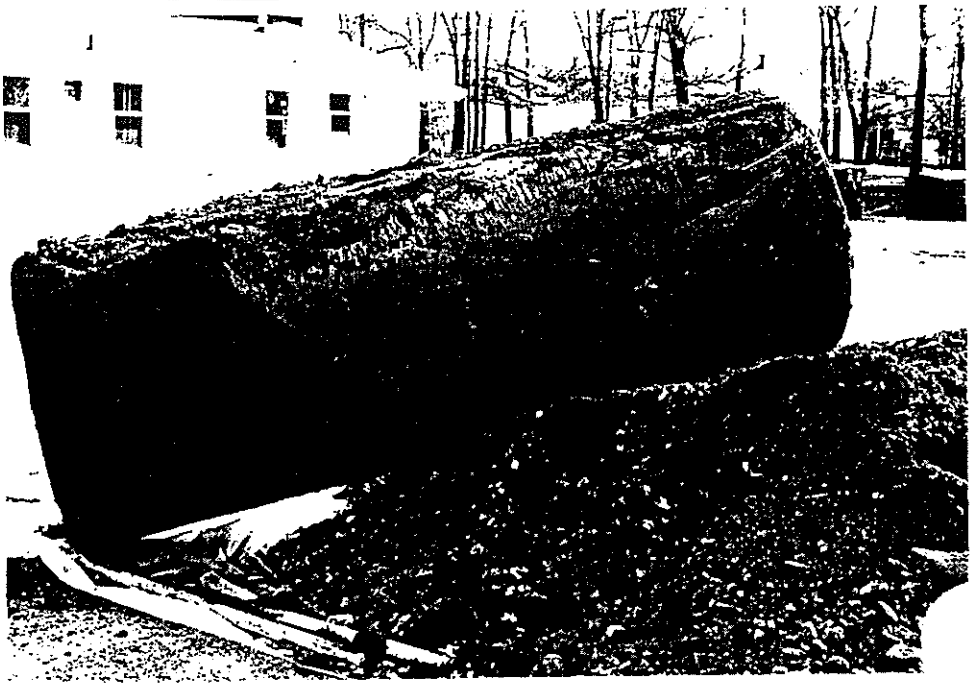
A-1: One (1) side of removed tank.

A-2: Opposite side of removed tank.

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

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

A-1



A-2

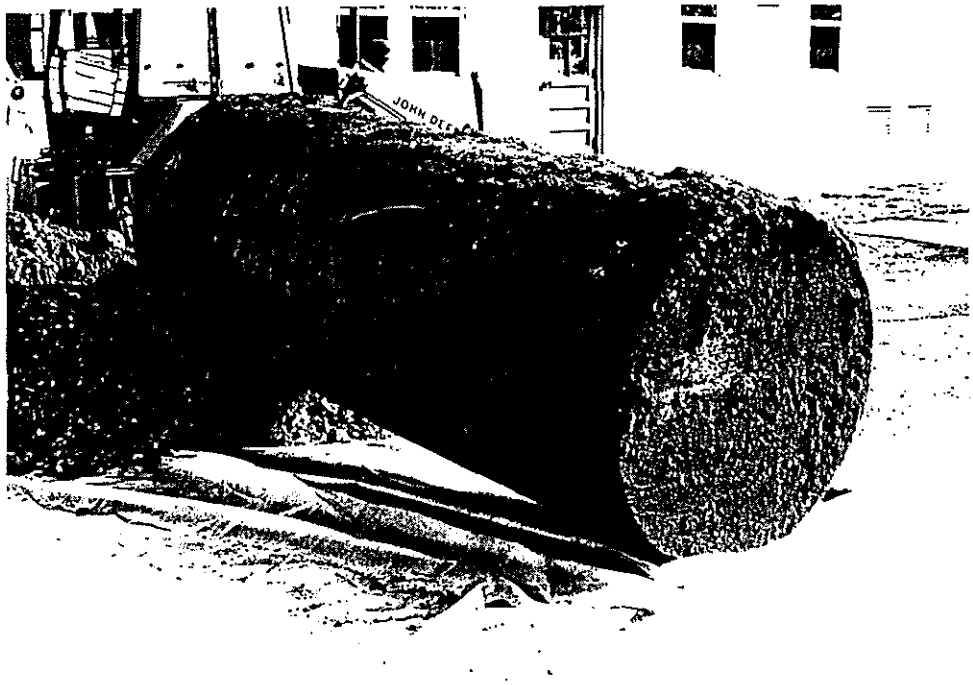


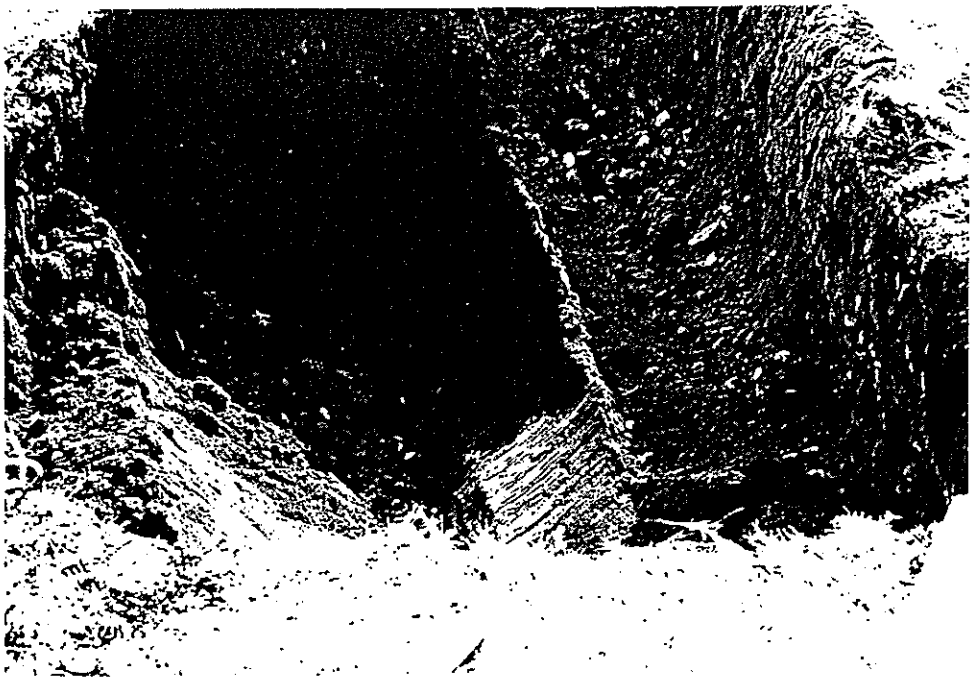
PHOTO DOCUMENTATION

1,000 gallon UST excavation at:
Building 2447
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ATEC

A-3



A-4

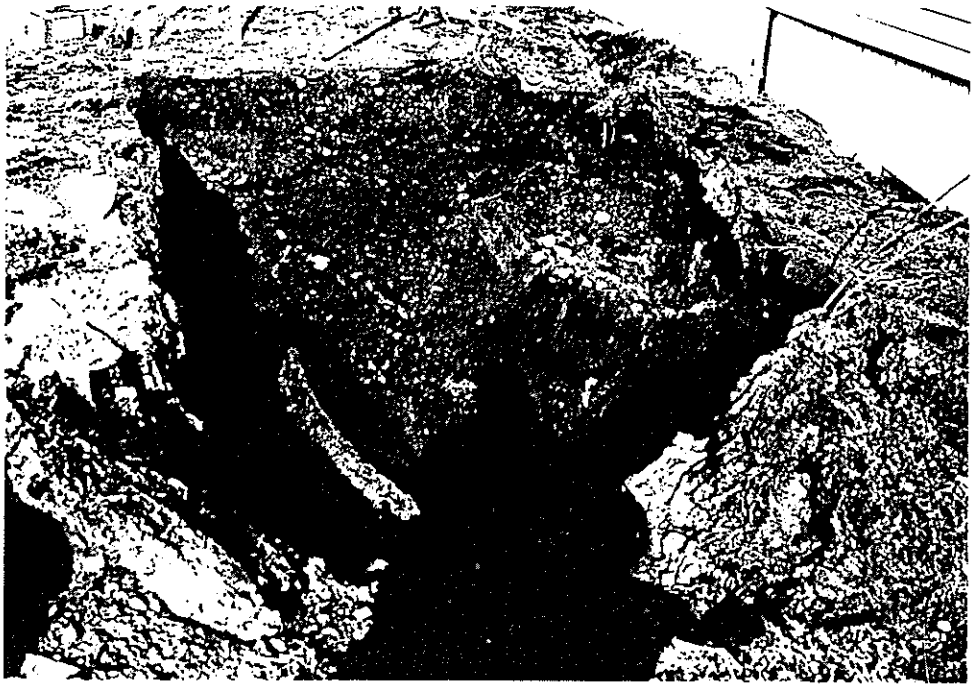


PHOTO DOCUMENTATION

1,000 gallon UST excavation at:
Building 2447
Fort Devens, Massachusetts

PROJECT: 37.07.91.07451

ĀTEC

APPENDIX B: UST CLOSURE CHECKLIST

UST-CLOSURE Q/C CHECK LIST	Tank 3	Bldg	2447	
1,000 gal No 2 fuel				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Calibrate PID & LEL/O2 meters	1/16/92	8:00		Site Topography: level
Drain & flush piping & pumps	1/16/92	8:00		
Excavate to top of tank	1/16/92	9:15		Depth to tank: 1.0'
Vent tank note LEL/O2 levels & times	1/16/92		LEL O2	
		T1: 1:00	0 20.7	
		T2: 1:15	0 20.7	
		T3: 1:30	0 20.7	
		T4:		
		T5:		
		T6:		
		T7:		
		T8:		
		T9:		
		T10:		
		T11:		
		T12:		
Pump & clean tank:	1/7/92		20 gal. liquid	Tank Dimensions: 4x10.5'
Note quantities liquid (gal) & sludge (lbs)	1/16/92	9:30	15 gal. sludge	tank in good condition, no holes, perf or rust. Fill pipe very loose
Remove all tank connections, and cap openings	1/16/92	8:45		
Excavate soils to free tank	1/16/92	9:05		
Segregate stained soils: Note PID readings	1/16/92	9:30	PID (ppm) NDIR (ppm)	
(if>10 ppm NDIR also)			56	stock-1
All soils visibly contam.			31	stock-2
Soils surround tank slight to				
mod. contam. Soils on top				
grossly contam => segreg (stock-2)				

T-CLOSURE Q/C CHECK LIST				
DEFINABLE FEATURE	DATE	TIME	MEASUREMENTS	NOTES
Remove tank, piping, pumps, and hardware.	1/16/92	9:30	Photographic Descriptions:	Soil Description: med. brown, fine
Photograph excavation; note descriptions.			Photo 1: tank	sand w/fine-coarse gravel,
Sketch Schematic			Photo 2: tank	cobbles, boulders
			Photo 3: excav N, face S	
			Photo 4: excav S, face N	
			Photo 5:	Depth to Groundwater/Conditions: N/A
			Photo 6:	
Place tank at safe distance from excavation	1/16/92	9:70		Depth of Excavation: 5.0'
Secure tanks transport off-site	1/16/92	17:45		
Obtain 10 soil samples from	1/16/92	9:45	PID (ppm) NDIR (ppm)	Sample locations: 2.5-3.5' deep
excavation walls/bottom: Note PID/NDIR			SS1: 4.0	S wall
readings and sample locations.			SS2: 36	S wall
			SS3: 19.4	W wall
			SS4: 0.4	W wall
			SS5: 15.4	N wall
			SS6: 56	N wall
			SS7: 76	E wall
			SS8: 44	E wall
			SS9: 26	bottom
			SS10: 34	bottom
Obtain 2 soil samples & 1 water samples	1/16/92	10:20		Sample Locations:
for laboratory analysis. Note sample locations.				LSS1: ≈ SS6
				LSS2: ≈ SS10
				LWS1:
				LSS3: composite stockpile

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,				
and disposal receipts.				

APPENDIX C - OCMA 220 DATA SHEETS

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 TANK #34

DATE: 01/17/92

OPERATOR: RICHARD 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:	4.2	0.0	-3.5	0.0	-0.3	0.0	27.9
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	79.7	75.3	17.5	1.0			9.0	8.7	8.8	1110.0
STOCK-2	79.0	73.3	17.5	1.0			23.2	23.1	--	2349.2
SS-1	81.0	74.6	17.5	1.0			1.3	1.6	1.6	138.8
SS-2	79.4	72.8	17.5	1.0			0.4	0.4	--	33.6
SS-3	81.0	74.0	17.5	1.0			0.5	0.6	--	47.6
SS-4	80.8	76.1	17.5	1.0			24.1	24.0	--	2334.0
SS-5	82.0	76.3	17.5	1.0			10.5	10.6	--	1032.1
SS-6	81.5	74.9	17.5	1.0			1.3	1.5	1.5	136.1
SS-7	82.7	75.5	17.5	1.0			5.2	5.6	5.6	431.7
SS-8	83.1	75.3	17.5	1.0			5.2	5.3	--	327.1
SS-9	77.6	72.8	17.5	1.0			2.5	2.6	--	300.6
SS-10	82.4	76.4	17.5	1.0			2.0	2.2	2.3	212.8

Engr

APPENDIX D - LABORATORY REPORTS

In Response To The Future

CERTIFICATE OF ANALYSIS

Date: 1/24/92 Job: 148
Account: 95659
Received: 1/17/92

TO: ATEC ENVIRONMENTAL CC.
62 Accord Park Drive
Norwell, MA 02061

Project: DEVENS-TANK 34

Attn: Mr. Mark Baldi

Sample Number	Method Number	Parameter	Result	Unit	Sample Description
2014801	EPA-160.3	Total Solids	92	%	LSS-1
	EPA-418.1	TPH/IR (Dry Wt.)	875	mg/kg	
2014802	EPA-160.3	Total Solids	88	%	LSS-2
	EPA-418.1	TPH/IR (Dry Wt.)	846	mg/kg	
2014803	EPA-160.3	Total Solids	87	%	LSS-3
	EPA-418.1	TPH/IR (Dry Wt.)	1470	mg/kg	

David Dickinson
Laboratory Manager

APPENDIX E - CHAIN OF CUSTODY FORMS

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	LAB PROJ. NO.
02.1151	Drums - Tank 34	
	CLIENT 19423	

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
LSS1	1/15/92			X		X						1				X						
LSS2	1/15			X		X						1				X						
LSS3	1/15		X	X		X						1				X						

LABORATORY ANALYSIS

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
	1/15/92				

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

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

PROJ. NO. | PROJECT NAME Dewens - Tank 34 | CLIENT | LAB PROJ. NO.

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
L551	1/16/92			X		X						1				X						SP1.+
L552	1/16/92			X		X						1				X						SP1.+
L553	1/16/92		X	X		X						1				X						SP1.+

Relinquished by: (Signature) | Date / Time 1/16/92 | 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 #:

LABORATORY ANALYSIS

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

APPENDIX F - HAZARDOUS WASTE MANIFESTS

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES. SEE REVERSE SIDE FOR DIRECTIONS

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. MA1721101621 — Manifest Document No. 5151401010211

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

3. Generator's Name and Mailing Address: HQS Fort Devens, AFZD-DEQ Box 10, Fort Devens, MA 01433

4. Generator's Phone (508) 796-3005 - 24hr (508) 796-2711

A. State Manifest Document Number: MA F353641

B. State Gen. ID: SAME

5. Transporter 1 Company Name: Beede Waste Oil Corp. — 6. US EPA ID Number: NHD018958140

C. State Trans. ID: NHA916171312

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

D. Transporter's Phone: 603 382-5761

E. State Trans. ID

9. Designated Facility Name and Site Address: Beede Waste Oil Corp., Kelley Road PO Box 127, Plaistow, NH 03865 — 10. US EPA ID Number: NHD018958140

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone: 603 382-5761

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE PETROLEUM OILS N.O.S. COMBUSTIBLE LIQUID NA1270	1	TT	01400	G	~~MA01~~ MA897
b.					
c.					
d.					

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

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

15. Special Handling Instructions and Additional Information

To be Recycled Exempt Recycle

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

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

Printed/Typed Name	Signature	Date (Month Day Year)
		01/17/92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Robert D. Murphy Jr.	Robert D. Murphy Jr.	01/17/92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

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

Printed/Typed Name	Signature	Date

MA F353641 COPY>1: FACILITY MAILS TO DESTINATION STATE

APPENDIX G - PERMITS/CERTIFICATIONS

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY — DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

DIG SAFE NUMBER
220220505
Start Date 1/31/92

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 ATEC Associates, 62 Alcord Park Dr., Norwell MA

Location to which tank will be transported

14901
Approved tank yard#

This permit will expire 31 Jan 1992

Thomas R. Powell Fire Chief
Signature of official granting permit (TITLE)
(Head of Fire Dept.)

RECEIPT FOR 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 1 1 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 ATEC Environmental Assoc. 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 Marcenta	CPA	1-29-92
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	48"	X	108"
Tank 2	-----	X	-----
Tank 3	-----	X	-----
Tank 4	-----	X	-----
Tank 5	-----	X	-----
	(feet)		(feet)

Tank Removed From

Ft. Devens Bldg. # 2447 ~~Bldg. #~~ 34

(no. street)

Ayer

(city or town)

Fire Department Permit # None-listed (if applicable)