

**THE COMMONWEALTH OF MASSACHUSETTS
GOVERNMENT LAND BANK
Devens Commerce Center
Devens, Massachusetts**

**UNDERGROUND STORAGE TANK
CLOSURE REPORT**

UST NO. 2636

SEPTEMBER 1996

**Prepared by:
S E A CONSULTANTS INC.
Science/Engineering/Architecture
Cambridge, Massachusetts
Rocky Hill, Connecticut
 Londonderry, New Hampshire
 Rochester, New York**

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	<u>INTRODUCTION</u>	1
2.0	<u>BACKGROUND</u>	1
3.0	<u>UST REMOVAL</u>	3
4.0	<u>FIELD OBSERVATIONS AND ASSESSMENT</u>	3
5.0	<u>FUTURE PLANS</u>	4

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
Figure 1	Location of UST and Sampling Locations	2

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
Table 1	Summary of Laboratory Analytical Results	5

LIST OF APPENDICES

APPENDIX A	-	Tank Manifests and Receipts
APPENDIX B	-	Laboratory Analytical Results
APPENDIX C	-	Compaction Tests
APPENDIX D	-	Bill of Lading

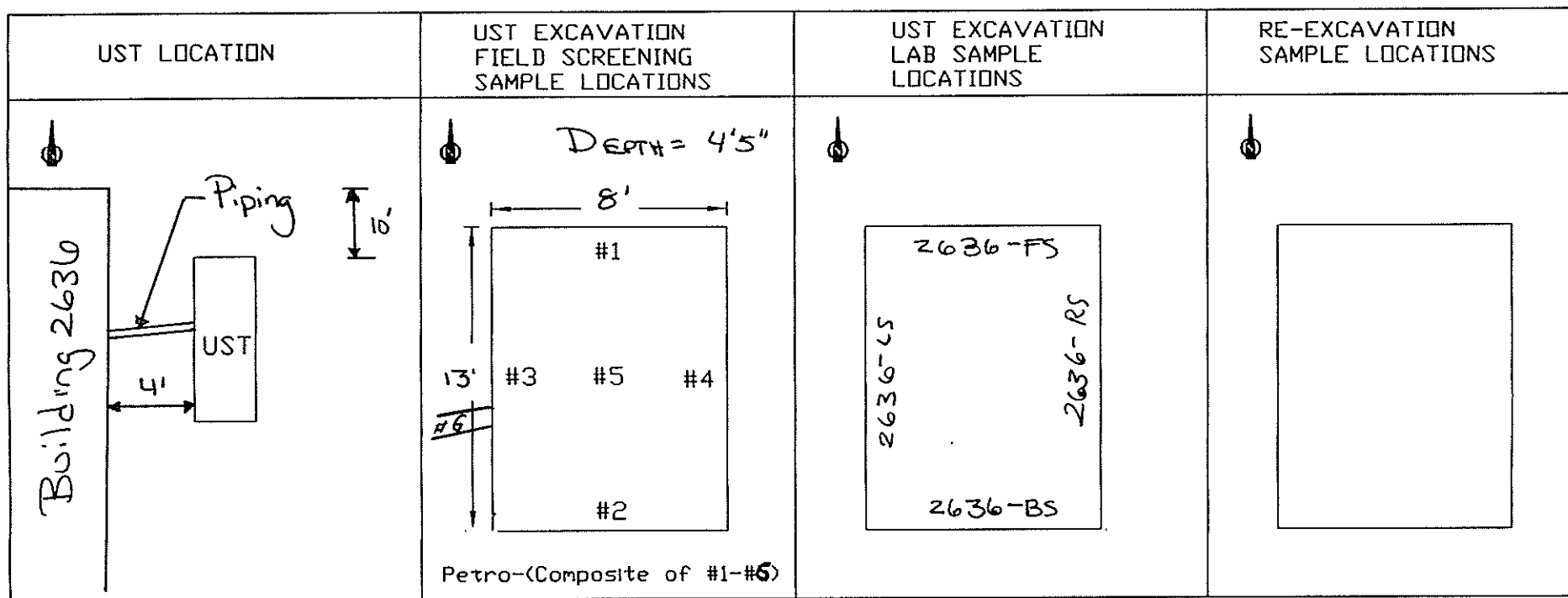
1.0 INTRODUCTION

This Underground Storage Tank (UST) Closure Report has been completed in accordance with the Commonwealth of Massachusetts Underground Storage Tank Closure Assessment Manual, dated April 9, 1996, and the Devens Commerce Center's (DCC) "*Underground Storage Tank Closure Protocol*" (Addendum to a DEP-approved Tier 1A permit), dated June 14, 1996. The 1,000-gallon UST was located at Building 2636, Jackson Road, Devens, Massachusetts (north/east [North American Datum, 1983] coordinates 3019485/621726). The former location of this UST is shown on Figure 1.

The 1,000-gallon steel UST, storing No. 2 heating oil, was removed on May 29, 1996. Headspace and Petroflag field screening on soil adjacent to the UST and associated piping indicated impacts to the soils from the UST/piping. Laboratory tests within the UST excavation confirmed contaminant levels below applicable regulatory levels outlined in the Massachusetts Contingency Plan (MCP) [310 CMR 40.0000]. Following review of the laboratory data, the excavated hole was backfilled.

2.0 BACKGROUND

The UST at Building 2636 was originally installed in 1966 by the U.S. Army to store No. 2 heating oil for Building 2636. Upon the closure of Fort Devens, the UST's ownership was transferred from the U.S. Army to the DCC. As part of the DCC's goal to develop Fort Devens, a number of USTs, including this UST at Building 2636, were removed. This steel UST had a diameter of four (4) feet and a length of eleven (11) feet. The associated piping was copper tubing.



FIELD SCREENING					FIELD SCREENING				
SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD	SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD
#1			4.5						
#2			15.0						
#3			8.6						
#4			2.5						
#5			35.0						
#6			1.2						
PETRO		1393							
PETRO 2		210							
2636-BS				133					
2636-RS				119					
2636-FS				108					
2636-LS				140					

Figure 1
UST and Sample Locations
Massachusetts Land Bank
Devens, Massachusetts

3.0 UST REMOVAL

On May 29, 1996, soil above the UST and its associated piping was removed with an excavator and hand shovel. The UST was then tilted by the excavator to allow any product to pool at the UST's bottom corner. A two-foot by two-foot access hole was then cut in the UST after it had been tested for combustible gases and oxygen. A laborer then made entry into the tank, however, there was no remaining product in the tank.

On May 29, 1996, the UST at Building 2636 was removed and transported off-site. Transfer documentation (Forms FP290R and 291) is in Appendix A. A total of seven (7) cubic yards of soil was excavated as part of the UST removal. Contaminant levels within the stockpile were later found to be below applicable regulatory thresholds.

4.0 FIELD OBSERVATIONS AND ASSESSMENT

Upon removal of the UST, three (3) 1mm diameter holes were observed on its bottom. The UST appeared quite rusted with some pitting. There was no visual or olfactory evidence of impacted soil within the excavation. Damp soil (indicating groundwater below) was observed at the base of the excavation.

Soil was then collected for Jar Headspace measurements using a Photoionization Detector (PID), and Total Petroleum Hydrocarbon (TPH) readings were measured using a Petroflag Hydrocarbon Analyzer. PID readings ranged from 1.2 to 35.0 ppmv. A composite sample collected from the sidewalls and base of the excavation measured 1,393 ppm of TPH using the Petroflag Hydrocarbon Analyzer. Based on this reading, an additional one (1) cubic yard was excavated from the base, however, groundwater immediately began infiltrating the excavation and soil removal was halted. TPH readings were then measured from soil samples collected from the sidewalls of the re-excavation using a Petroflag Hydrocarbon

Analyzer. The composite sample had a TPH concentration of **210** ppm. Samples were collected from the sidewall of the excavation and associated soil stockpile for laboratory analysis. Due to the six (6) inches of groundwater at the bottom of the excavation, soil samples were not collected from the base, and a sheen was observed within the groundwater at the base of the excavation. The samples collected from the sidewalls and stockpile were analyzed for TPH [Method 418.1]. All samples were below the applicable MCP "RCS-1 Reportable Concentrations". Results and sampling locations are shown in Table 1 and Figure 1, respectively. The laboratory analytical data package is contained in Appendix B. The stockpile was subsequently transported off-site under an LSP-approved Bill of Lading (Appendix D).

After receipt of the laboratory data, the excavation was lined with polyethylene sheets and off-site fill was backfilled into the excavation and compacted to bring the excavation back to grade. Compaction documentation is contained in Appendix C.

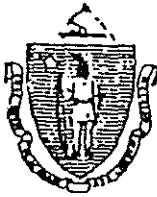
5.0 FUTURE PLANS

As per Section 7.0 of the *"Underground Storage Tank Closure Protocol"*, when groundwater was detected within the excavation, the DEP was notified within 24 hours and the site was transferred to the U.S. Army for further investigation of soil and groundwater contamination.

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL RESULTS

SAMPLE I.D. NUMBER	ANALYTE	LABORATORY RESULT (PPM)	RCS-1* (PPM)
2636-FS	TPH	108	500
2636-BS	TPH	133	500
2636-LS	TPH	140	500
2636-RS	TPH	119	500
2636-Stock	TPH	250	500

*Applicable Reportable Concentration (310 CMR 40.1600).
ND = Not Detected above laboratory detection limits.



The Commonwealth of Massachusetts

Grant

Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

1-273

1-25

8-1000

29 MAY 1996

C.02 S.40 M.G.L.

DIG SAFE NUMBER

961907225

Start Date MAY 96

#0055896
To
#0063596

To: HEAD OF FIRE DEPARTMENT
CHIEF PARENTEAU
City or Town

In accordance with the provisions of Chapter 148, G.L. as provided in
Section 38A Application is hereby made by

9 TOTAL 2687, 2688, 2637, 2979
143, 1437, 1468, 1602, 3596
(BLDG #'s)

VIM MORRIS
(Name of Person, Firm or Corporation)

248 RIVER ST. NORWELL, MA 02061
Address

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

DEVENS COMMERCE CENTER
Street address (city or town) CT. DEVENS, MA 01433

FDID# 17919 to approved Tank Yard# 008

State clearly type of
inert gas used in
steel storage tank

CO2
Type of Inert gas used

Name of Person, Firm, Corporation disposing tank J.G. GRANT, READING, MA.

Date issued - rejected 19
Date of expiration 19 paid/due

By: J.G. Grant
Signature of Applicant

REC'D TOTAL 225.00
Fee 25.00 PER (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

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

Name: Full name of person, firm or Corporation

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

State clearly type of
inert gas used in
steel storage tank

steel tank:

method

FDID# 17919

Fee paid \$

Name and address of contractor
disposing tank
Location to which tank will
be transported

This permit will expire 19

Approved tank yard#

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

CAPT. GRANT

APPENDIX A

TANK MANIFESTS AND RECEIPTS

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS JAMES G. GRANT
OF R. 28 WOLCOTT C.
APPROVED TANK YARD BEADVILLE MA 021

APPROVED TANK YARD NO. 5788

Tank Yard Ledger 502 CMR 3.03(4) Number: 9422371

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 SIM MORRIS - D + C

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# 17919 to transport this tank to this yard.

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

[Signature] [Signature] 5-29-96
SIGNATURE TITLE DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 17919 pursuant to 502 CMR 3:00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)



Tank Data

Gallons 1,000

Previous Contents #2FO

Diameter _____ Length _____

Date Received 5-29-96

Serial # (if available) _____

Tank I.D. # (Form FP-290) _____

Tank Removed From:

1 DEVEN'S COMMERCIAL CTS
(No. and Street)

FT DEVEN
(City or Town)

Fire Dept. Permit # 1/11

Owner/Operator to mail revised copy of Notification Form(FP-290, or Fp-290R) to: UST Compliance, Office of the State Fire Marshal, 1010 Commonwealth Avenue, Boston, Ma. 02215.

APPENDIX B

LABORATORY ANALYTICAL RESULTS

Received: 06/05/96

06/18/96 15:40:21

SAMPLE IDENTIFICATION

27	1669 BS
28	1671 STOCK
29	1671 BASE
30	1671 RS
31	1671 LS
32	1671 BS
33	1671 FS
34	242 STOCK
35	242 SIDE
36	242 BASE
37	24S STOCK
38	24S SIDE
39	24S BASE
40	2636 STOCK
41	2636 BS
42	2636 RS
43	2636 FS
44	2636 LS

Received: 06/05/96

Results by Sample

SAMPLE ID <u>24S BASE</u>	SAMPLE # <u>39</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>117</u>	
mg/Kg DL=40	

SAMPLE ID <u>2636 STOCK</u>	SAMPLE # <u>40</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>250</u>	
mg/Kg DL=40	

SAMPLE ID <u>2636 BS</u>	SAMPLE # <u>41</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>133</u>	
mg/Kg DL=40	

SAMPLE ID <u>2636 RS</u>	SAMPLE # <u>42</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>119</u>	
mg/Kg DL=40	

SAMPLE ID <u>2636 FS</u>	SAMPLE # <u>43</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>108</u>	
mg/Kg DL=40	

SAMPLE ID <u>2636 LS</u>	SAMPLE # <u>44</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/04/96</u> Category <u>SOIL</u>
TPH_IR <u>140</u>	
mg/Kg DL=40	

METHOD OF SHIPMENT

APPENDIX C

COMPACTION TESTS



Briggs Associates
400 Lillingham Street
Rockland, MA 02370
A Tundra Corporation Company

SOILS INSPECTION

PROJECT: *Fort Devens, Mass*PROJECT #: *60909*DATE: *June 21, 1996*INSPECTOR: *John Vey*

EMP.#: <i>236</i>	REPORT #:	CODE:	# of PAGES: <i>2</i>
ARR. TIME: <i>800</i>	JOB HOURS: <i>8</i>	T.T.:	MILEAGE:
TEMP.: <i>61 L</i>	WIND: <i>H 1</i>	HUMID.: <i>61 L</i>	SUNNY CLOUDY

Briggs Associates field engineer took in place density tests. In place density was determined in accordance with ASTM D-2922 and D-3017 for comparison to the laboratory determined maximum density at optimum moisture in accordance with ASTM D-1557, Method C.

LOCATION: *Fort Devens, Mass*
0.1 tank pits by old troop barracks.

REMARKS: *All tests taken were taken according to specs.*

FREQUENCY OF COMPACTION TESTS: *1 per lift*

Post-It™ brand fax transmittal memo 7671

of pages >

To: <i>WHILEY</i>	From: <i>TIM L</i>
Co.:	Co. <i>TUNDRA</i>
Dept.:	Phone #
Fax # <i>871-1629</i>	Fax #

TECHNICIAN:

APPROVED: *ROBERTA BONICA P.E.*



Briggs Associates
400 Hingham Street
Rockland, MA 02370
A Tundra Corporation Company

SOILS COMPACTION REPORT

PROJECT: Fort Devens
PROJECT #: 60404
DATE: 6-21-96.
INSPECTOR: John Hartzel

EMP#: 236	REPORT #:	CODE:	LAB #:
ARR. TIME: 800	JOB HOURS: 8	T.T.:	MLEAGE:
TEMP.: 45 L	WIND: H 1	HUMID.: 45 L	SUNNY CLOUDY

MAXIMUM DRY DENSITY: 118.3

OPTIMUM MOISTURE CONTENT: 9.5

METHOD OF TESTING (CHECK ONE): SAND CONE: ☐ NUCLEAR DENSOMETER: ☒

[illegible]

Tests not meeting requirements: none

Who notified: Bob (D+C const.)

Recommendations: none at present

REMARKS: Done at present

TECHNICIAN: 
APPROVED: ROBERT A. BONICA, P.E.



Tundra Corporation

D & C Construction / Ft. Devens
Briggs # 60904
Tested: 6-5-96

1. Sample No. *Keating Sand + Gravel Fitchburg.* Description Gravelly Sand with silt Source Site
M-956

2. Sieve Analysis (ASTM C 136, and ASTM C 117)

<u>Sieve Size</u>	<u>Results</u> (% Passing by WL.)	<u>Specs.</u>
4"	100	
3"	100	
2-1/2"	100	
2"	100	
1-1/2"	86	
1"	86	
3/4"	75	
1/2"	71	
3/8"	67	
#4	55	
#10	45	
#20	36	
#40	30	
#80	23	
#100	20	
#200	17.8	

3. No specifications provided.

4. Proctor Density (four point procedure - ASTM D 1557 Method C, and ASTM D 4718).

	<u>Results</u>
Maximum Dry Unit Weight (pcf)	130.8
Optimum Moisture Content (%)	8.3

400 Mingham Street, Rockland, Massachusetts 02370

Tel (617) 871-6040 • Fax (617) 871-7982

Offices located throughout the United States and Canada



Briggs Associates
A Tundra Corporation Company

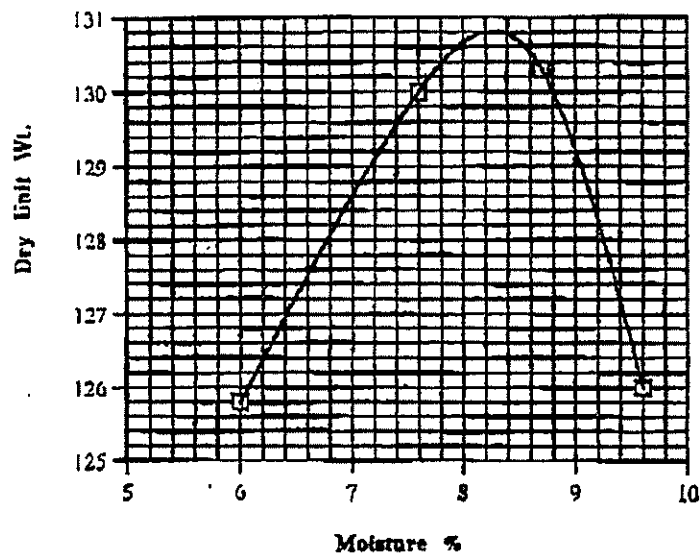
Project: D & C Construction / Ft. Devens

Sample no.

M-956

Date: 6/5/96

Proctor



Max. Dry Density
130.8 pcf

Optimum
Moisture
8.3 %



Briggs Associates
A Tundra Corporation Company

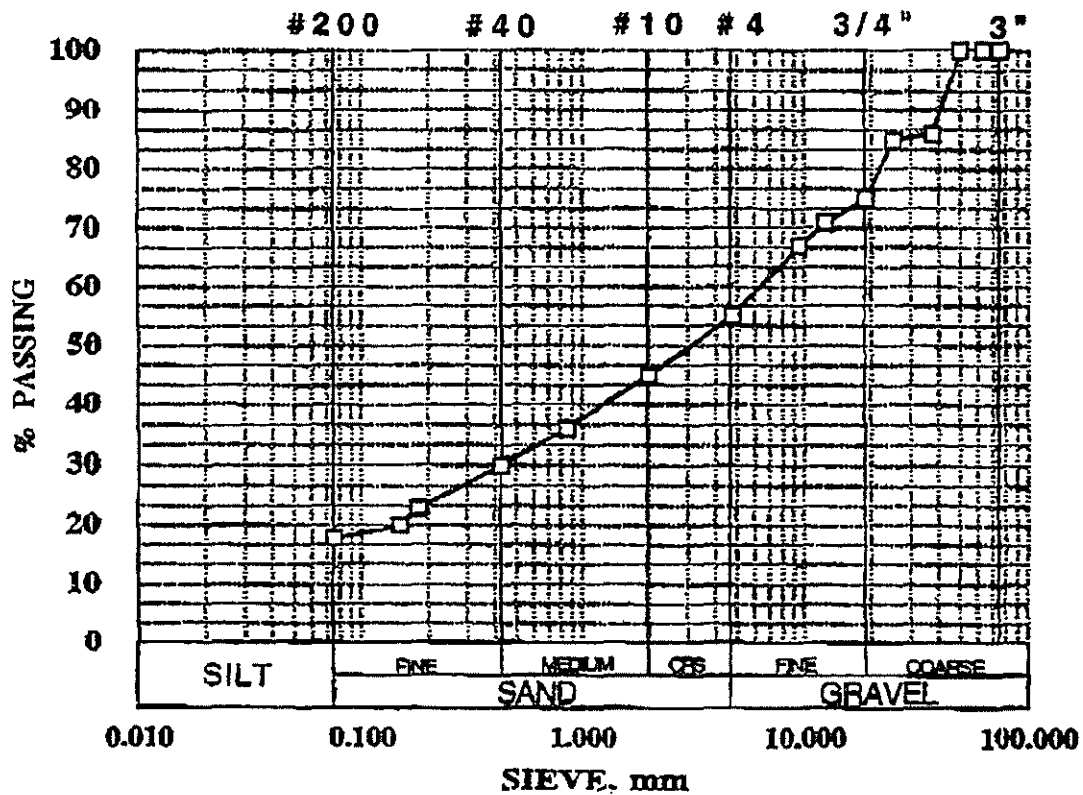
Project: D & C Construction / Ft. Devens

Sample No.

M-956

Date: 6/3/96

SIEVE





Tundra Corporation

D & C Construction / Ft. Devens
Briggs # 60904
Tested: 6-5-96

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source</u>
	M-957	Gravelly Sand	Site

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>	<u>Results</u> { % Passing by Wt. }	<u>Specs.</u>
4"	100	
3"	100	
2-1/2"	100	
2"	100	
1-1/2"	100	
1"	100	
3/4"	98	
1/2"	96	
3/8"	95	
#4	90	
#10	85	
#20	70	
#40	38	
#80	11	
#100	9	
#200	5.4	

3. No specifications provided.

4. Proctor Density {four point procedure - ASTM D 1557 Method C, and ASTM D 4718}.

	<u>Results</u>
Maximum Dry Unit Weight (pcf)	118.3
Optimum Moisture Content (%)	9.5

400 Flingham Street, Rockland, Massachusetts 02370

Tel (617) 871-6010 • Fax (617) 871-7982

Offices located throughout the United States and Canada



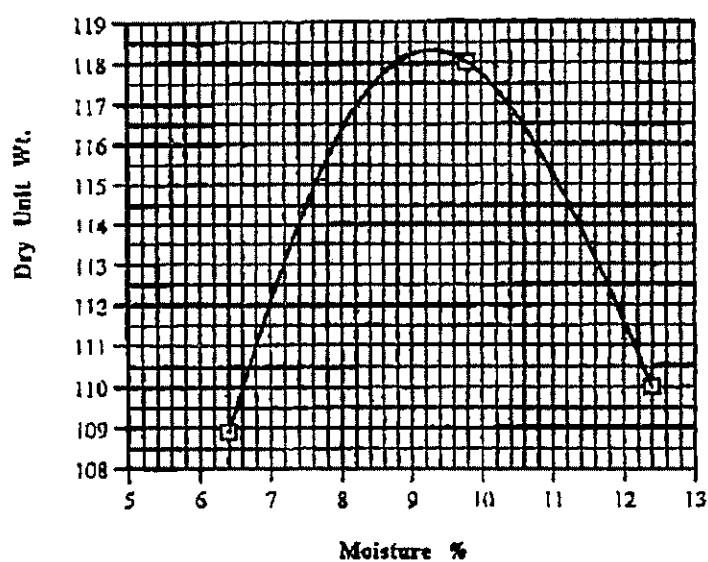
Briggs Associates
A Tundra Corporation Company

Project: D & C Construction / Ft. Devens

Sample no. M-957

Date: 6/5/96

Proctor



Max. Dry Density
118.3 pcf

**Optimum
Moisture**
9.5 %



Briggs Associates
A Tundra Corporation Company

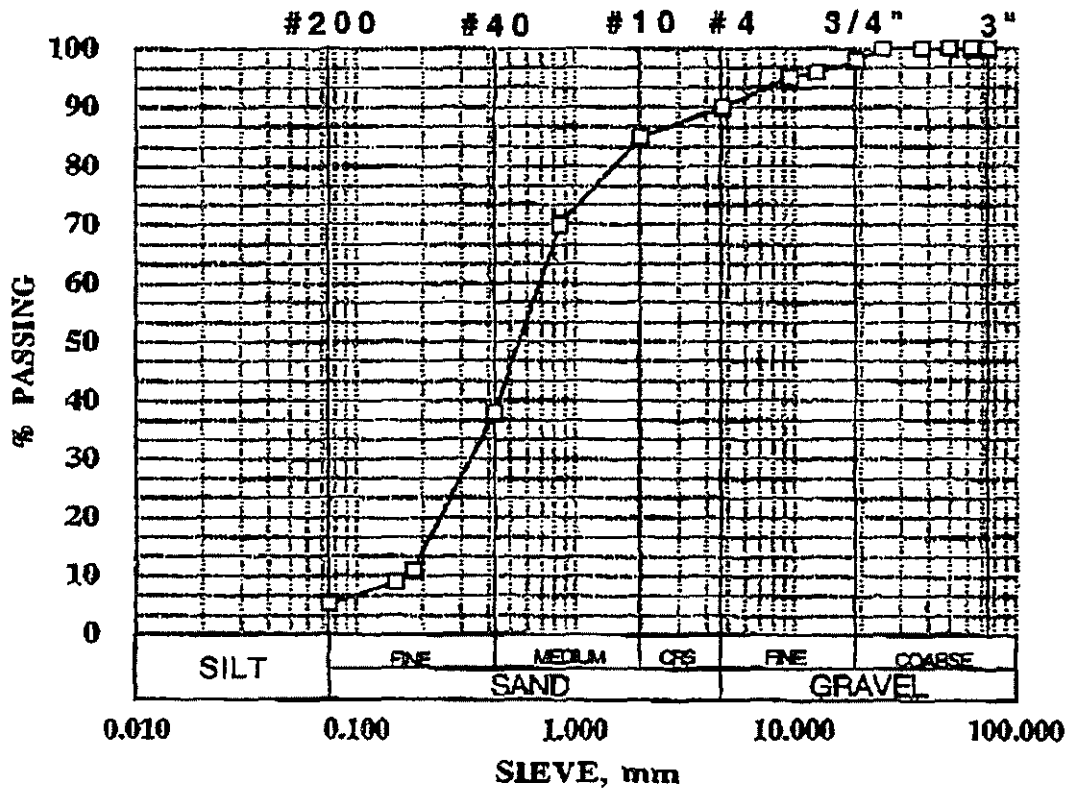
Project: D & C Construction / Ft. Devens

Sample No.

M-957

Date: 6/3/96

SIEVE



APPENDIX D

BILL OF LADING



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number*

2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

Release Name (optional):

Street: Location Aid: Bldgs. in 200, 1400, 1600
City/Town: Devens Zip Code: 01433 - 2600, 2700
Date/Period of Generation: 5 / 20 / 96 to 7 / 12 / 96 and 3500-blocks
Additional Release Tracking Numbers Associated with this Bill of Lading:

*Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

B. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Name of Organization: Devens Commerce Center
Name of Contact: Ronald J. Ostrowski Title: Env. Mgr.
Street: 43 Buena Vista St., P-12
City/Town: Devens State: MA Zip Code: 01433 -
Telephone: 508 - 772 - 6340 Ext. 303

C. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

check one/specify)

- ☐ RP Specify (circle one): Owner Operator Generator Transporter Other RP:
☒ PRP Specify (circle one): Owner Operator Generator Transporter Other PRP:
☐ Fiduciary/Secured Lender
☐ Agency/Public Utility on a Right of Way
☐ Other Person:

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER/COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: Carney Brothers Trucking
Contact Person: Jimmy Casey Title: General Manager
Street: 1958 Broadway
City/Town: Raynham State: MA Zip Code: 02767 -
Telephone: 508 - 824 - 4071 Ext.

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Laidlaw Waste Systems
Contact Person: Angelique Cosgrove Title: Sales Coord.
Street: 14 Belcher St.
City/Town: Plainville State: MA Zip Code: 02762 -
Telephone: 508 - 699 - 2267 Ext.

Type of Facility: (check one)
☐ Asphalt Batch/Cold Mix ☒ Landfill/Disposal ☐ Incinerator
☐ Asphalt Batch/Hot Mix ☒ Landfill/Daily Cover ☐ Temporary
☐ Thermal Processing ☐ Landfill/Structural Fill ☐ Storage

Other:

Division of Hazardous Waste/Class A Permit #: 15095 Division of Solid Waste Management Permit #: 15095 EPA Identification #: MAD108010729

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): ___ / ___ / ___ to ___ / ___ / ___

Reason for Temporary Storage (if applicable): N/A



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030)

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:

Street: N/A

City/Town: _____ State: _____ Zip Code: _____

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

☒ Contaminated Media (circle all that apply): Soil Groundwater Surface Water Other: _____

☐ Contaminated Debris (circle all that apply): Demolition/Construction Waste Vegetation/Organic Materials
Inorganic Absorbant Materials Other: _____

☐ Non-hazardous Uncontainerized Waste (circle all that apply): Non-aqueous Phase Liquid Other: _____

☐ Non-hazardous Containerized Waste (circle all that apply): Tank Bottoms/Sludges Containers Drums
Engineered Impoundments Other: _____

Type of Contamination (circle all that apply): Gasoline Diesel Fuel #2 Oil #4 Oil #6 Oil Waste Oil
Kerosene Jet Fuel Other: _____

Estimated Volume of Materials: Cubic Yards: 1000 Tons: _____ Other: _____

Contaminant Source (check one/specify): ☐ Transportation Accident ☒ Underground Storage Tank ☐ Other: _____

Response Action Associated with Bill of Lading (circle one): Immediate Response Action Release Abatement Measure
Utility-Related Abatement Measure Limited Removal Action (LRA) Comprehensive Response Action
Other (specify): _____

Remediation Waste Characterization Support Documentation attached:

☐ Site History Information ☐ Sampling and Analytical Methods and Procedures ☒ Laboratory Data ☐ Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: S E A Consultants, Inc.

LSP Name: William J. Mallio Title: Principal Scientist

Telephone: 617-498-4635 Ext. _____

I attest that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, and in my professional opinion and judgment based upon application of
(i) the standard of care in 309 CMR 4.02(1),
(ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
(iii) the provisions of 309 CMR 4.03(5).

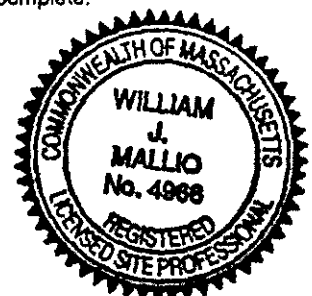
to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal. I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

Signature: William J. Mallio

Seal:

Date: 7/25/96

License Number: 4966





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

2	-	11210
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BILL OF LADING (pursuant to 310 CMR 40.0030)

4. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate, or incomplete information.

Signature: Ronald J. Ostrowski

Date: 7/25/96

Name of Person (print): Ronald J. Ostrowski

Enclosure to Bill of Lading (BWSC -12A)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Release Tracking No. 2-11210

Analyte	Range/Peak of Lab Results
TPH	2430 ppm
PCB's	Not Detected
Total Arsenic	12.1
Total Cadmium	0.55
Total Chromium	7.66
Total Lead	23.4
Total Mercury	0.066
Total PAH's	< 100 ppm
Listed/Characteristic Hazardous Waste (TCLP)	None
Total VOC's	< 10 ppm

Note: ppm = parts per million



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup Fort Dev. 120313

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 OF 3

Release Tracking Number:

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

108518

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 7:00

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 8:07

(circle one) am/pm

Truck/Tractor Registration: 32825

Trailer Registration (if any): 29641

Load Size (cu. yds./tons): 31.72

LOAD 2: Signature of Transporter Representative:

108514

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 8:00

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 8:02

(circle one) am/pm

Truck/Tractor Registration: 32820

Trailer Registration (if any): 27145

Load Size (cu. yds./tons): 31.69

LOAD 3: Signature of Transporter Representative:

108515

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 9:00

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 8:03

(circle one) am/pm

Truck/Tractor Registration: 36075

Trailer Registration (if any): 28615

Load Size (cu. yds./tons): 29.85

LOAD 4: Signature of Transporter Representative:

108512

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 6:49

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 7:54

(circle one) am/pm

Truck/Tractor Registration: E96-535 MA

Trailer Registration (if any): 27794 MA

Load Size (cu. yds./tons): 33.57

LOAD 5: Signature of Transporter Representative:

108521

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 7:10

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 8:15

(circle one) am/pm

Truck/Tractor Registration: 28658

Trailer Registration (if any): 29692

Load Size (cu. yds./tons): 34.58

LOAD 6: Signature of Transporter Representative:

108620

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 10:00

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 11:33

(circle one) am/pm

Truck/Tractor Registration: 32805

Trailer Registration (if any): 29641

Load Size (cu. yds./tons): 30.90

LOAD 7: Signature of Transporter Representative:

108625

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 8/14/96 Time of Shipment: 10:40

(circle one) am/pm

Date of Receipt: 8/14/96

Time of Receipt: 11:44

(circle one) am/pm

Truck/Tractor Registration: 328520

Trailer Registration (if any): 27145

Load Size (cu. yds./tons): 34.94

II. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons):

226.42

Total Carried Forward (cu. yds./tons):

0

Total Carried Forward and This Page (cu. yds./tons):

226.42



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-0125

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 2 OF 3

2 - 11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 12:24 (circle one) am/pm

Truck/Tractor Registration: 36075 Trailer Registration (if any): 29615

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 11:54 (circle one) am/pm

Load Size (cu. yds./tons): 28.87

LOAD 2: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 11:05 (circle one) am/pm

Truck/Tractor Registration: 29658 Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 12:16 (circle one) am/pm

Load Size (cu. yds./tons): 35.92

LOAD 3: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 11:21 (circle one) am/pm

Truck/Tractor Registration: 1896-535 MA Trailer Registration (if any): 27794 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 12:30 (circle one) am/pm

Load Size (cu. yds./tons): 36.97

LOAD 4: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 1:45 (circle one) am/pm

Truck/Tractor Registration: 32801 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 2:46 (circle one) am/pm

Load Size (cu. yds./tons): 34.71

LOAD 5: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 1:50 (circle one) am/pm

Truck/Tractor Registration: 29658 Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 2:54 (circle one) am/pm

Load Size (cu. yds./tons): 36.00

LOAD 6: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 1:55 (circle one) am/pm

Truck/Tractor Registration: 225570 Trailer Registration (if any): 27145

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 3:11 (circle one) am/pm

Load Size (cu. yds./tons): 27.31

LOAD 7: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 1:55 (circle one) am/pm

Truck/Tractor Registration: 36075 Trailer Registration (if any): 29615

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 3:32 (circle one) am/pm

Load Size (cu. yds./tons): 35.16

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 236.94

Total Carried Forward (cu. yds./tons): 226.42

Total Carried Forward and This Page (cu. yds./tons): 463.36



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 3 OF 3

Release Tracking Number:

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 2:59 (circle one) am/pm

Truck/Tractor Registration: LC96-535 MA Trailer Registration (if any): Q27794 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 4:03 (circle one) am/pm

Load Size (cu. yds./tons): 39.79

LOAD 2: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons):

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

39.79

463.36

503.15



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

Fort Dev. 120313

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 OF 1

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:10 (circle one) am/pm

Truck/Tractor Registration: 32985 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 8:17 (circle one) am/pm

Load Size (cu. yds./tons): 39.65

LOAD 2: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:30 (circle one) am/pm

Truck/Tractor Registration: 26642 Trailer Registration (if any): 29658

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 8:45 (circle one) am/pm

Load Size (cu. yds./tons): 35.75

LOAD 3: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: (circle one) am/pm

Truck/Tractor Registration: 32085 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 12:03 (circle one) am/pm

Load Size (cu. yds./tons): 39.48

LOAD 4: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: (circle one) am/pm

Load Size (cu. yds./tons):

II. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 114.82

Total Carried Forward (cu. yds./tons): 0

Total Carried Forward and This Page (cu. yds./tons): 114.82

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET 1 OF 1

2-11210

K. SUMMARY OF SHIPMENTS:

[illegible]



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET

2-11210

**L. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR
TEMPORARY STORAGE LOCATION:**

Receiving Facility/Temporary
Location Representative (print):

Ameliane Cosgrove

Title: Sale Coordinator

Signature:

[Signature]

Date: 8/15/96

**M. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON
CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate, or incomplete information.

Signature:

[Signature]

Date: 9/12/96

Name of Person (print):

JAMES E. ARMSTRONG

FOR RON OSTROWSKI