Massachusetts Department of Environmental Protection **BWSC-103**
Bureau of Waste Site Cleanup

Release Tracking Number
2 - 11210
If assigned by DEP

RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

A. RELEASE OR THREAT OF RELEASE LOCATION:

Street: Jackson Road Location Aid: Building 2729

City/Town: Devens ZIP Code: 01433

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

[X] Submit a **Release Notification** (complete all sections of this form).

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

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

Date and time you obtained knowledge of the Release or TOR. Date: 6/11/96 Time: _____ Specify: [ ] AM [ ] PM

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

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

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

Provide date and time of Oral Notification. Date: _____ Time: _____ Specify: [ ] AM [ ] PM

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

2 HOUR REPORTING CONDITIONS

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

72 HOUR REPORTING CONDITIONS

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

120 DAY REPORTING CONDITIONS

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

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

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

O or HM Released	O (check one)	HM (check one)	CAS # (if known)	Amount or Concentration	Units	Reportable Concentrations Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
Benzo(a)pyrene	[ ]	[X]		>0.7	mg/kg	RCS-2
Benzo(a)fluoranthene	[ ]	[X]		>0.7	mg/kg	RCS-2
Benzo(a)anthracene	[ ]	[X]		>0.7	mg/kg	RCS-2

D. ADDITIONAL INVOLVED PARTIES:

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

[ ] Check here if attaching Licensed Site Professional (LSP) name and address (optional).

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

2729

Massachusetts Department of Environmental Protection **BWSC-103**
Bureau of Waste Site Cleanup

Release Tracking Number
2 - 11210
If assigned by DEP

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

E. PERSON REQUIRED TO NOTIFY:

Name of Organization: Devens Commerce Center / Massachusetts Government Land Bank

Name of Contact: Mr. Ron J. Ostrowski Title: Environmental Manager

Street: 43 Buena Vista Street, P-12

City/Town: Devens State: MA ZIP Code: 01433

Telephone: (508) 772-6340 Ext.: 303 FAX: (optional) (508) 772-7577

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

[X] RP or PRP Specify: ( ) Owner ( ) Operator (X) Generator ( ) Transporter Other RP or PRP: _____

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

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

[ ] Any Person Otherwise Required to Notify Specify Relationship: _____

G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

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

By: RJ Ostrowski Title: ENV SVS
(signature)

For: RJ Ostrowski Date: 10/15/96
(print name of person or entity recorded in Section E)

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

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

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

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number: 2 - 11210

A. SITE OR DOWNGRADIENT PROPERTY LOCATION:

Site Name: (optional) _____

Street: Jackson Road Location Aid: Building 2729

City/Town: Devens ZIP Code: 01433

[X] Check here if this Site location is Tier Classified. If a Tier I Permit has been issued, state the Permit Number: ACO-CEL-96-3001

Related Release Tracking Numbers that this Form Addresses: #84890

If submitting an RAO Statement, you must document the location of the Site or the location and boundaries of the Disposal Site subject to this Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site. If submitting a Downgradient Property Status Submittal, you must provide a site plan of the property subject to the submittal and, to the extent defined, the Disposal Site.

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

[X] Submit a **Response Action Outcome (RAO) Statement** (complete Sections A, B, C, D, E, F, H, I, J and L).

[ ] Check here if this is a revised RAO Statement. Date of Prior Submittal: _____

[ ] Check here if any Response Actions remain to be taken to address conditions associated with any of the Releases whose Release Tracking Numbers are listed above. This RAO Statement will record only an RAO-Partial Statement for those Release Tracking Numbers.

Specify Affected Release Tracking Numbers: _____

[ ] Submit an optional **Phase I Completion Statement supporting an RAO Statement or Downgradient Property Status Submittal** (complete Sections A, B, H, I, J, and L).

[ ] Submit a **Downgradient Property Status Submittal** (complete Sections A, B, G, H, I, J and K).

[ ] Check here if this is a revised Downgradient Property Status Submittal. Date of Prior Submittal: _____

[ ] Submit a **Termination of a Downgradient Property Status Submittal** (complete Sections A, B, I, J and L).

[ ] Submit a **Periodic Review Opinion evaluating the status of a Temporary Solution** (complete Sections A, B, H, I, J and L).

Specify one: [ ] For a Class C RAO [ ] For a Waiver Completion Statement indicating a Temporary Solution

Provide Submittal Date of RAO Statement or Waiver Completion Statement: _____

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

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

[ ] Assessment and/or Monitoring Only

[X] Removal of Contaminated Soils

[ ] Re-use, Recycling or Treatment

( ) On Site (X) Off Site Est. Vol.: 60 cubic yards

Describe: _____

[ ] Landfill ( ) Cover ( ) Disposal Est. Vol.: _____ cubic yards

[X] Removal of Drums, Tanks or Containers

Describe: 2,000 gallon UST

[ ] Removal of Other Contaminated Media

Specify Type and Volume: _____

[ ] Other Response Actions

Describe: _____

[ ] Deployment of Absorbant or Contaminent Materials

[ ] Temporary Covers or Caps

[ ] Bioremediation

[ ] Soil Vapor Extraction

[ ] Structure Venting System

[ ] Product or NAPL Recovery

[ ] Groundwater Treatment Systems

[ ] Air Sparging

[ ] Temporary Water Supplies

[ ] Temporary Evacuation or Relocation of Residents

[ ] Fencing and Sign Posting

SECTION C IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number: 2729 — 2 - 11210

C. DESCRIPTION OF RESPONSE ACTIONS: (continued)

☐ Check here if any Response Action(s) that serve as the basis for this RAO Statement involve the use of Innovative Technologies. (DEP is interested in using this information to create an Innovative Technologies Clearinghouse.)

Describe Technologies: _____

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

Name of Facility: Laidlaw Waste Systems, Inc. (LWS) Plainville Landfill

Town and State: Plainville, MA

Quantity of Remediation Waste Transported to Date: 60 cubic yards

E. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the Site or Disposal Site. Select **ONLY** one Class:

☐ **Class A-1 RAO**: Specify one of the following:

○ Contamination has been reduced to background levels. ○ A Threat of Release has been eliminated.

☒ **Class A-2 RAO**: You **MUST** provide justification that reducing contamination to background levels is infeasible.

☐ **Class A-3 RAO**: You **MUST** provide both an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to background levels is infeasible.

If applicable, provide the earlier of the AUL expiration date or date the design life of the remedy will end: _____

☐ **Class B-1 RAO**: Specify one of the following:

○ Contamination is consistent with background levels ○ Contamination is **NOT** consistent with background levels.

☐ **Class B-2 RAO**: You **MUST** provide an implemented AUL.

If applicable, provide the AUL expiration date : _____

☐ **Class C RAO**: ☐ Check here if you will conduct post-RAO Operation, Maintenance and Monitoring at the Site.

Specify One: ○ Passive Operation and Maintenance ○ Monitoring Only

○ Active Operation and Maintenance (defined at 310 CMR 40.0006)

F. RESPONSE ACTION OUTCOME INFORMATION:

☐ If an RAO Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment.

☐ Check here if submitting one or more AULs. You must attach an AUL Transmittal Form (BWSC-113) and a copy of each Implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for all Class A-3 RAOs and Class B-2 RAOs)

○ Notice of Activity and Use Limitation ○ Grant of Environmental Restriction Number of AULs attached: _____

Specify the Risk Characterization Method(s) used to achieve the RAO described above and all Soil and Groundwater Categories applicable to the Site.

More than one Soil Category and more than one Groundwater Category may apply at a Site.
Be sure to check off all APPLICABLE categories, even if more stringent soil and groundwater standards were met.

Risk Characterization Method(s) Used:	☒ Method 1	☐ Method 2	☐ Method 3
Soil Category(ies) Applicable:	☒ S-1	☐ S-2	☐ S-3
Groundwater Category(ies) Applicable:	☐ GW-1	☐ GW-2	☒ GW-3

> **When submitting any Class A-1 RAO or a Class B-1 RAO where contamination is consistent with background levels, do NOT specify a Risk Characterization Method.**

> **When submitting any Class A-2 RAO or a Class B-1 RAO where contamination is NOT consistent with background levels, you cannot use an AUL to maintain a level of no significant risk. Therefore, you must meet S-1 Soil Standards, if using Risk Characterization Method 1.**

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

2729
Release Tracking Number
2 - 11210

G. DOWNGRADIENT PROPERTY STATUS SUBMITTAL:

☐ If a Downgradient Property Status Submittal Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment.

☐ Check here if a Release(s) of Oil or Hazardous Material(s), other than that which is the subject of this submittal, has occurred at this property.

Release Tracking Number(s): _____

◯ Check here if the Releases identified above require further Response Actions pursuant to 310 CMR 40.0000.

Required documentation for a Downgradient Property Status Submittal includes, but is not limited to, copies of notices provided to owners and operators of both upgradient and downgradient abutting properties and of any known or suspected source properties.

H. LSP OPINION:

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

> *if Section B indicates that a **Downgradient Property Status Submittal** is being provided*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in 310 CMR 40.0183(2)(b), and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that either an **RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion** is being provided*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

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

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

LSP Name: William J. Mallio LSP #: 4966 Stamp:

Telephone: (617) 498-4635 Ext.:

FAX: (optional) (617) 498-4623

Signature: William J. Mallio

Date: 6/11/96

COMMONWEALTH OF MASSACHUSETTS
WILLIAM J. MALLIO
No. 4966
REGISTERED LICENSED SITE PROFESSIONAL

I. PERSON MAKING SUBMITTAL:

Name of Organization: Devens Commerce Center/Massachusetts Land Bank

Name of Contact: Ronald J. Ostrowski Title: Environmental Manager

Street: 43 Buena Vista St., P-12

City/Town: Devens State: MA ZIP Code: 01433

Telephone: (508) 772-6340 Ext.: 303 FAX: (optional) (508) 772-7577

J. RELATIONSHIP TO SITE OF PERSON MAKING SUBMITTAL: (check one)

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

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

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

☐ Any Other Person Submitting This Form Specify Relationship: _____

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

2729
Release Tracking Number
2 - 11210

K. CERTIFICATION OF PERSON SUBMITTING DOWNGRADIENT PROPERTY STATUS SUBMITTAL:

I, _____ , attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form; (ii) that, based on my inquiry of the/those individual(s) immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge, information and belief, true, accurate and complete; (iii) that, to the best of my knowledge, information and belief, I/the person(s) or entity(ies) on whose behalf this submittal is made satisfy(ies) the criteria in 310 CMR 40.0183(2); (iv) that I/the person(s) or entity(ies) on whose behalf this submittal is made have provided notice in accordance with 310 CMR 40.0183(5); and (v) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is/are aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: _____ Title: _____
(signature)

For: _____ Date: _____
(print name of person or entity recorded in Section I)

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

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

L. CERTIFICATION OF PERSON MAKING SUBMITTAL:

If you are completing only a Downgradient Property Status Submittal, you do not need to complete this section of the form.

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

By: RJOstrowski Title: ENV SVS
(signature)

For: RONALD J OSTROWSKI Date: 10/15/96
(print name of person or entity recorded in Section I)

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

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

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

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

Closure Report

RELEASE TRACKING NO. 2-11210

UST NO. 2729

OCTOBER 1996

Attachment to:

RESPONSE ACTION OUTCOME (RAO) STATEMENT
(BWSC-104)

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

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1.0 INTRODUCTION

This Release Action Outcome (RAO) Statement has been completed in accordance with 310 CMR 40.1000. The response action was conducted as a result of a historical release adjacent to a 2,000-gallon steel underground storage tank (UST) located at Building No. 2729, Jackson Road, Devens, Massachusetts (north/east [North American Datum, 1983] coordinates N622286/E3020960).

The UST closure was conducted 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 Department of Environmental Protection (DEP) approved Tier 1A permit), dated June 14, 1996.

The 2,000-gallon steel UST, storing No. 2 heating oil, was removed on May 29, 1996. Impacted soil above RCS-2 Reportable Concentrations was identified during tank closure through laboratory analysis of soil samples. Per 310 CMR 40.0361(1)(b), the RCS-2 reporting category applies to this site because it is outside the geographic boundaries of an area categorized as RCS-1. The release at the site is, therefore, subject to the DEP's 120-day notification requirements, as per 310 CMR 40.0300.

Because the DCC was conducting a large number of these UST removals, the DEP had issued the DCC a Presumptive Letter of Approval on March 19, 1996 to conduct an Immediate Response Action (IRA) at the UST excavation if impacted soil was detected above Reportable Concentrations outlined in the Massachusetts Contingency Plan (MCP) [310 CMR 40.1600].

As part of the IRA, approximately eighty-one (81) cubic yards of impacted soil have been removed and disposed of by the DCC. Following laboratory tests which confirmed that criteria were met for closure of the excavation, the excavation was backfilled and compacted with off-site fill.

2.0 BACKGROUND

The UST at Building 2729 was originally installed in 1965 by the U.S. Army to store No. 2 fuel oil for heating Building 2729. 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 2729, were removed. This steel UST had a diameter of five (5) feet and four (4) inches, and a length of twelve (12) feet and three (3) inches. The associated piping was copper tubing.

3.0 UST REMOVAL

On May 29, 1996, D&C Construction Co., Inc. of Rockland, Massachusetts, as part of its UST removal contract with the DCC, removed product from the UST with a vacuum truck. Later, soil above the UST and its associated piping was removed with an excavator and by hand shovel. The UST was then tilted by the excavator to allow the remaining product to pool at the UST's bottom corner. A two-foot by two-foot access hole was cut in the UST after it had been tested for combustible gases and oxygen. A laborer made entry into the tank, and using squeegee wipers, rags and a vacuum hose, cleaned out the remaining product from the tank. All product was transported off-site as hazardous waste. The manifests are included as Appendix A. On May 29, 1996, the UST was removed and transported off-site. Copies of transfer documentation (Forms FP290R and 291) are included as Appendix B. A total of sixty (60) cubic yards of soil was excavated in the process of removing the UST. Contaminant levels within the stockpile were later found to be above applicable MCP thresholds.

4.0 FIELD OBSERVATIONS, EXCAVATION, AND ASSESSMENT

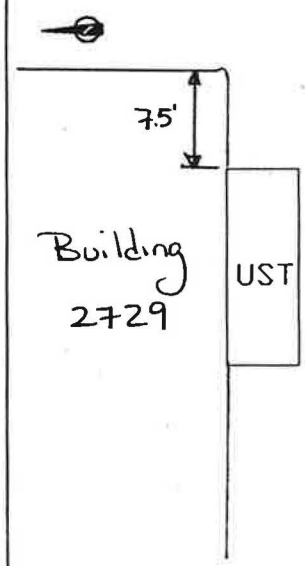
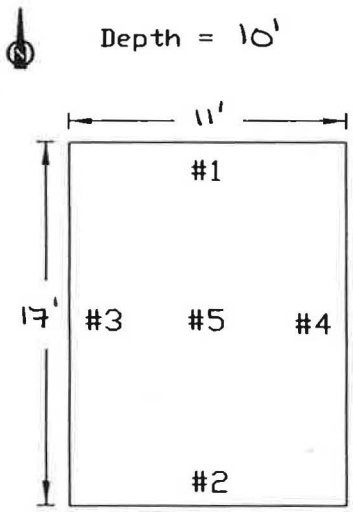
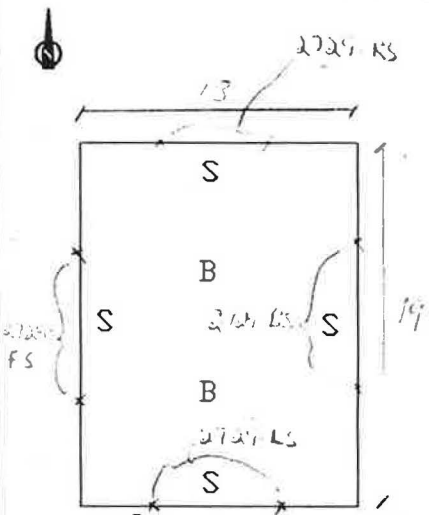
Upon removal of the UST, it was observed to be intact with no sign that the integrity of the tank skin had been compromised. There was some visual evidence of impacted soil next to the UST, which may have been due to the asphalt coating of the UST. Groundwater was not observed in the excavation during tank removal.

Soil samples were screened by the Jar Headspace method using a Photoionization Detector (PID). PID readings ranged from **0.1** to **2.4** parts per million by volume (ppmv) as benzene. A composite sample collected from the sidewalls and base of the excavation was screened using the Petroflag Hydrocarbon Analyzer system. The sample measured **235** ppm of Total Petroleum Hydrocarbons (TPH). Results and sampling locations are shown in Figure 1.

Due to the low levels of these field screening values, no further excavation was conducted and closure samples were collected from the excavation. A sample was also collected from the soil stockpile for characterization and disposal. The following laboratory analyses were conducted:

Location Description	Laboratory Analyses Method
Base of the Excavation	TPH (EPA Method 418.1)
Sidewalls of the Excavation and Stockpile	TPH (EPA Method 418.1) Polynuclear Aromatic Hydrocarbons (EPA Method 8270) Volatile Organic Compounds (EPA Method 8260)

Laboratory results indicated PAH levels within the stockpile and sidewalls were above RCS-2 Reportable Concentrations (benzo(a)anthracene > 0.7 ppm; benzo(b)fluoranthene > 1.0 ppm; benzo(a)pyrene > 0.7 ppm), but within the acceptable range for recycling. Samples collected from the base of the excavation were reanalyzed for PAHs, and were below RCS-2 Reportable Concentrations. As a result of the elevated PAH levels on the sidewalls, an additional twenty-one (21) cubic yards were excavated from the sidewalls. Closure samples

UST LOCATION	UST EXCAVATION FIELD SCREENING SAMPLE LOCATIONS	UST EXCAVATION LAB SAMPLE LOCATIONS
	 Petro-(Composite of #1-#5)	 B- 2729-Base (Composite) S- 2729-Side (Composite)

FIELD SCREENING				
SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD
#1			2.4	
#2			1.8	
#3			0.1	
#4			1.4	
#5			0.8	
PETRO		235		
2729-BASE				352
2729-SIDE				292

Figure 1
UST and Sample Locations

Massachusetts Land Bank
Devens, Massachusetts

SEA Consultants, Inc.
Scientists/Engineers/Architects

G:\WET\DEVENS\DEMO\USTCLEAN.DWG

were collected from each sidewall of the excavation. Laboratory results indicated PAH levels of the sidewalls were below Reportable Concentrations. Results and sampling locations are shown in Table 1 and Figure 1, respectively. The laboratory analytical data package is contained in Appendix C.

After receipt of the laboratory data, the stockpiled soil was transported off-site under an LSP-approved Bill of Lading (Appendix E). Off-site clean fill was later backfilled into the excavation and compacted in accordance with the contract documents to bring the excavation back to grade. Compaction documentation is contained in Appendix D.

5.0 METHOD 1 RISK CHARACTERIZATION

Analytical results from the environmental sampling were compared to MCP "Reportable Concentrations" and "Applicable Cleanup Standards" to assess site constraints. The soil and groundwater cleanup standards for the subject site were selected as per 310 CMR 40.0970 for both current and foreseeable site uses. A Method 1 Risk Characterization was conducted in order to select the applicable cleanup standards for soil and groundwater on-site. The basis for the selected cleanup standards for current and foreseeable uses is presented below.

Current Use:

The site was formerly the U.S. Army's Fort Devens. Currently, the tank location is part of the DCC's Innovation and Technology Use Development. The site is unpaved and there are no residences on the site.

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL RESULTS

SAMPLE I.D. NUMBER	ANALYTE	LABORATORY RESULT (PPM)	S-1/GW-1/GW-2/GW-3* (PPM)
2729-Base	TPH	352	500
2729-Side	TPH	292	500
2729-Stock	TPH	149	500
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Fluorene	ND ND/ND ND/ND/ND/ND	400
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Phenanthrene	0.818 4.87/0.685 ND/ND/ND/ND	100
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Anthracene	ND ND/ND ND/ND/ND/ND	1,000
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Fluoranthene	1.18 10.9/1.15 ND/.28/ND/ND	600
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Pyrene	1.63 3.47/1.01 ND/ND/ND/ND	500
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Benzo(a)anthracene	**0.803** **2.36**/0.602 ND/ND/ND/ND	0.7
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Chrysene	0.663 2.53/0.457 ND/ND/ND/ND	7
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Benzo(b)fluoranthene	0.527 **2.07**/0.445 ND/ND/ND/ND	0.7
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Benzo(k)fluoranthene	1.5 ND/0.445 ND/ND/ND/ND	7

TABLE 1 (CONTINUED)
SUMMARY OF LABORATORY ANALYTICAL RESULTS

SAMPLE I.D. NUMBER	ANALYTE	LABORATORY RESULT (PPM)	S-1/GW-1/GW-2/GW-3* (PPM)
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Benzo(a)pyrene	0.668 **2.39**/0.44 ND/ND/ND/ND	0.7
2729-Stock 2729-Side/Base 2729-FS/BS/RS/LS**	Indeno(1,2,3-cd)pyrene	ND ND/0.552 ND/ND/ND/ND	0.7
2729-Stock 2729-Side	Toluene	ND ND	500
2729-Stock 2729-Side	Ethyl Benzene	ND ND	90
2729-Stock 2729-Side	Xylenes	ND ND	500

*Soil/Groundwater Category S-1/GW-1/GW-2/GW-3 [310 CMR 40.0975(6)(a)].
** Final sidewall closure samples
ND = Not detected above laboratory detection limits.

Applicable Groundwater Standards:

The applicable "Groundwater Category" for the subject site, as defined under the MCP (310 CMR 40.0932), was identified based on the following considerations:

1. **Groundwater Category "GW-1" Standards:** GW-1 groundwater standards are applicable to groundwater that is or could be used as drinking water (e.g., within "Zone II" aquifer protection area, interim wellhead protection areas, "Potentially Productive" aquifers, and Zone A/Class A surface water bodies). Currently, the site is not within a Zone II delineated area, and, therefore, this GW-1 groundwater category does not apply. The Zone II delineation at Devens is based on a 3-layer model drafted by ETA, Inc. on August 15, 1995. The DEP is currently using this delineation on an interim basis (phone conversation Ron Ostrowski (DCC)/Lynne Welsh (DEP), July 24, 1996).

2. **Groundwater Category "GW-2" Standards:** GW-2 groundwater standards are applicable to groundwater located within thirty (30) feet of an existing occupied structure when depth to groundwater is fifteen (15) feet or less. GW-2 standards account for potential exposure to vapors resulting from compounds in groundwater. The average depth to groundwater in the area is less than fifteen (15) feet, and, therefore, this classification does not apply.

3. **Groundwater Category "GW-3" Standards:** Due to ecological exposure considerations, all groundwater in Massachusetts is classified as Category GW-3 (per 310 CMR 40.0932 [3]), including groundwater classified as Groundwater Category GW-1 or GW-2. This means that for those compounds for which GW-3 standards are more stringent than GW-1 or GW-2 standards, the GW-3 standards apply.

Applicable Soil Standards:

Soil Standards are determined based on potential exposure scenarios. Pertinent aspects of the exposure scenario developed for the site, using current site conditions, are summarized as follows:

- Potential receptors include adult contract workers engaged in demolition or construction activities;
- Potential frequency of use is "high" (since the site contractors are walking over the site daily);
- Potential intensity of use is "high" (since there is routine disturbance of surface and subsurface soils); and
- The soil is considered "accessible" (impacted soil is present less than three (3) feet below grade and the area is unpaved).

Based on the potential exposure scenario, and the provisions outlined under 310 CMR 40.0933, Soil Category "S-1", standards have been identified as applicable for characterization of risk of soil exposure on the site.

In addition to considerations of direct exposure to soil, indirect exposures could result from leaching of contaminants from soil into groundwater. As such, cleanup standards are also based in part on the category of groundwater, as defined under 310 CMR 40.0932, at or near potentially accessible soil.

Therefore, based upon the potential exposure scenario and the above groundwater classification, Soil Category S-1/GW-2/GW-3 has been identified as applicable for the site's current uses.

Future or Foreseeable Use:

The foreseeable future use for the site is to be as part of the DCC's Rail, Industrial, and Trade-related development.

Applicable Groundwater Standards:

As the groundwater category and elevation are not expected to change (assuming a building within fifteen (15) feet of the site), GW-2/GW-3 standards will still apply to the site.

Applicable Soil Standards:

Soil Standards applicable for risk characterization using Method 1 (per 310 CMR 40.0970) are determined based on potential exposure scenarios. Pertinent aspects of the exposure scenario developed for the site, assuming future site conditions, are summarized as follows:

- Receptors include employees and possibly children;
- Potential frequency of use is "high" for adults (since it is a workplace and large numbers of adults may be present at any given time, regardless of any one person's frequency of use) and "low" for children (infrequent visitors);
- Potential intensity of use is "high" (since activity will likely result in the inhalation of soil-derived dust); and

- The contaminated soil is "accessible" (less than three (3) feet below grade on an unpaved area).

Based on the potential exposure scenario, and the provisions outlined under 310 CMR 40.0933, soil standards have been identified as applicable for characterization of risk of soil on-site. Soil Category "S-1" would apply to the site.

Therefore, based upon the potential exposure scenario and the above groundwater classification, Soil Category S-1/GW-2/GW-3 has been identified as applicable for the site's foreseeable future uses.

In order to make future use of the site unrestricted, and due to the possibility that in future years the site may be classified as being within a Zone II aquifer, the DCC preferred the remediation of impacted soil to continue until soil contaminant levels were below more restrictive soil-groundwater limits (S-1/GW-1/GW-2/GW-3). Therefore, soil/groundwater category S-1/GW-1/GW-2/GW-3 has been selected as a goal by the owners as a standard that will allow unrestricted use in the future.

Impacted soil was excavated until the post-excavation samples taken were below the soil/groundwater concentrations applicable to category S-1/GW-1/GW-3.

Discussion of Results:

As presented in Table 1, final soil samples collected from the excavation sidewalls and base have TPH and PAH concentrations below the S-1/GW-1/GW-2/GW-3 Method 1 Risk standard. Therefore, the soil within the tank grave does not present a "significant risk" to human health or the environment.

6.0 FEASIBILITY OF RESTORATION TO BACKGROUND

As per 310 CMR 40.0860, the feasibility of implementing a Permanent Solution of reducing the level of oil and hazardous material (OHM) to background is required for a Class A-2 RAO, which is applicable to the subject site.

A Technological Feasibility Assessment (310 CMR 40.0860 [5]) and Benefit-Cost Analysis (310 CMR 40.0860 [6]) have been conducted for the subject site, as follows.

Technological Feasibility (310 CMR 40.0860 [5])

a.) The excavation of impacted soil is technologically feasible using an excavator.

b.) This remedial action alternative (excavation) has been sufficiently proven reliable at other sites.

c.) The remedial action alternative (excavation) can comply with applicable regulations and requirements.

Benefit-Cost Analysis (310 CMR 40.0860 [6])

a.) The cost of conducting additional excavation of impacted soil is disproportionate to the incremental benefits achieved through additional reduction of potential risk.

b.) The implementation of additional excavation does not appear to present risk of harm to health, safety, and public welfare or the environment. Note that there may be a safety hazard associated with open excavation.

c.) No wetlands are located within the impacted area.

c-1.) Other feasible Temporary or Permanent Solutions exist.

c-2.) PAHs are not likely to bioaccumulate or migrate (based on its elevation above groundwater).

c-3.) Excavation of impacted soil would not result in permanent or irreparable damage to resources.

Therefore, the incremental costs of conducting the remedial action alternative (increased excavation) is substantial and disproportionate to the incremental benefits of risk reduction, environmental restoration, and monetary and non-pecuniary values.

7.0 FINDINGS AND CONCLUSIONS

Based upon subsurface investigations indicating the presence of impacted soil, D&C excavated approximately eighty-one (81) cubic yards of the impacted soil.

Closure samples were collected from the sidewalls and base of the initial excavation, as determined by visual observation, jar headspace readings, and the Petroflag Hydrocarbon Analyzer system. Benzo(a)anthracene, Benzo(a)pyrene, and Benzo(b)fluoranthene were detected at concentrations above RCS-2 concentrations within the excavation. Soil was excavated until closure samples collected from the tank grave indicated clean closure. The associated stockpile was transported off-site under an LSP-approved Bill of Lading. Laboratory analysis of closure samples confirmed that the sidewalls and base of the excavation were below S-1/GW-1/GW-2/GW-3 soil cleanup standards. Therefore, the soil within the tank grave does not present a significant risk to human health or the environment.

As per 310 CMR 40.0860, S E A evaluated the feasibility of achieving or approaching background levels of OHM at the subject site. It is technologically feasible to excavate impacted soil at the subject site, however, the costs of conducting the remedial action outweigh the incremental benefits. Therefore, "No Further Action" is necessary at the subject site.

Based on these findings, it is concluded that a Class A-2 RAO is applicable to this site, as (1) a Permanent Solution has been achieved; (2) the level of oil and hazardous material in the environment has not been reduced to background; and (3) one or more AULs are not required to maintain a level of No Significant Risk.

APPENDIX A

UNIFORM HAZARDOUS WASTE MANIFESTS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
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. MPSO 8772634 Manifest Document No. 48181
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
DEVENS COMMERCE CENTER
43 BUENA VISTA ST. P-12
FORT DEVENS, MA 01433

4. Generator's Phone (508 772-6340)

A. State Manifest Document Number: MA J148181
B. State Gen. ID: SAME

5. Transporter 1 Company Name: ENVIRONMENTAL PRODUCTS&SERVICES, INC
6. US EPA ID Number: MAD980761119
C. State Trans. ID: 13870ACT

7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone (315 471-0503)
E. State Trans. ID

9. Designated Facility Name and Site Address
OLSENS GREENHOUSES
590 SOUTH STREET EAST
RAYNHAM, MA 02767
10. US EPA ID Number: MAD059733787
F. Transporter's Phone ( )
G. State Facility's ID: Not Required
H. Facility's Phone (508 822-1151)

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. FUEL OIL MIXTURE, COMBUSTIBLE LIQUID, NA1993, PGIII	001	T	2600	G	MA98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. #2 OIL, WATER
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. D 87
b.
c.
d.

15. Special Handling Instructions and Additional Information
BURNED FOR ENERGY
Job #: E0653 PO #:
Emergency #:(315)471-0503 ERG A. 27

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: RONALD J. OSTROWSKI
Signature: R J Ostrowski
Date: Month 05 Day 29 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Phil Pike Jr
Signature:
Date: Month 05 Day 29 Year 96

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: Anthony J Caruso
Signature:
Date: Month 05 Day 29 Year 96

Form Approved OMB No. 2050-0039. Expires 9-30-96
EPA Form 8700-22 (Rev. 9-94) Previous editions are obsolete.

COPY>3: FACILITY MAILS TO GENERATOR

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

MA J148181 COPY>3: FACILITY MAILS TO GENERATOR

APPENDIX B

TANK MANIFESTS AND RECEIPTS

Grant

The Commonwealth of Massachusetts

Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

1-27 5
1-2 5
8-10:00
1-3

29 MAY 1996
(Date)

#0055896 TO #0063596

To: HEAD OF FIRE DEPARTMENT
CHIEF PARENTEAU
City or Town

C.82 S.40 M.G.L.
DIG SAFE NUMBER
961907225
Start Date MAY 96
10

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

9 TOTAL 2687, 2688, 2637, 2979, 1431, 1437, 1468, 1602, 3596 (BLDG #'s)

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) FT. DEVENS, MA 01433

FDID# 17919 to approved Tank Yard# 008

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

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

Date issued - rejected _____ 19 By: G. Mann
Date of expiration _____ 19 paid/due Signature of Applicant
Fee 25.00 PER (MGL C-148, S-10A)

REC'D TOTAL $225.00

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

_____ 19

C.82 S.40 M.G.L.
DIG SAFE NUMBER
Start Date

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

Name and address of contractor disposing tank _____

Fee paid $_____

Location to which tank will be transported

Approved tank yard# _____

This permit will expire _____ 19

CAPT. GROUP 3
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: JAMES G. GRANT C
R. 28 WOLCOTT ST.
READVILLE, MA 021

APPROVED TANK YARD NO. [illegible] ___ ___ ___

Tank Yard Ledger 502 CMR 3.03(4) Number: 9 6 2 2 3 7 1

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 Jim Morris – D+ E 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 _____ TITLE _____ DATE SIGNED 5-29-96

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)

FORM F.P. 291 (rev. 11/95) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

APPENDIX C

LABORATORY ANALYTICAL RESULTS

Received: 05/30/96 06/10/96 12:39:20

REPORT TO
D & C CONSTRUCTION CO.
415 VFW DRIVE
ROCKLAND, MA. 02370
617-871-8200 FAX: 871-8871
ATTEN WHITEY MORRIS

PREPARED BY
TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY
CONTACT JOHNM

CLIENT D C CONSTRUC SAMPLES 35
COMPANY D & C CONSTRUCTION CO.
FACILITY 415 VFW DRIVE
ROCKLAND, MA. 02370

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST.,NUTRIENTS. DEMAND. O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID DEVENS
TAKEN 5/29/96 AND 5/30/96
TRANS
TYPE SOIL
P.O. #
INVOICE under separate cover

VERIFIED BY:
CERT # M-MA064

SAMPLE IDENTIFICATION

01 1603-BASE
02 1603-SIDE
03 1604-STOCK
04 1604-SIDE
05 1604-BASE
06 1607-STOCK
07 1607-BASE
08 1607-SIDE
09 1608-STOCK
10 1608-BASE
11 1608-SIDE
12 1609-STOCK
13 1609-BASE
14 1609-SIDE
15 1610-STOCK
16 1610-BASE
17 1610-SIDE
18 1611-STOCK
19 1611-BASE
20 1611-SIDE
21 1652-STOCK
22 1652-BASE
23 1652-SIDE
24 1653-STOCK
25 1653-BASE
26 1653-SIDE

TEST CODES and NAMES used on this workorder

8260 PURGEABLE ORGANICS VOA
827PAH 8270 PAH ONLY
TPH IR TPH BY IR

D & C CONSTRUCTION CO. INC.
JUL 16 1996
RECEIVED

	SAMPLE IDENTIFICATION
27	1676-STOCK
28	1676-BASE
29	1676-SIDE
30	3596-STOCK
31	3596-BASE
32	3596-SIDE
33	1468-BASE
34	1468-SIDE
35	2729-BASE

SAMPLE ID 3596-BASE SAMPLE # 31 FRACTIONS: A
Date & Time Collected 05/30/96 13:17:00 Category SOIL

TPH_IR 64.2
mg/kg DL=40.0

SAMPLE ID 3596-SIDE SAMPLE # 32 FRACTIONS: A
Date & Time Collected 05/30/96 13:17:00 Category SOIL

TPH_IR 176
mg/kg DL=40.0

SAMPLE ID 1468-BASE SAMPLE # 33 FRACTIONS: A
Date & Time Collected 05/30/96 13:25:00 Category SOIL

TPH_IR 181
mg/kg DL=40.0

SAMPLE ID 1468-SIDE SAMPLE # 34 FRACTIONS: A
Date & Time Collected 05/30/96 13:25:00 Category SOIL

TPH_IR 461
mg/kg DL=40.0

SAMPLE ID 2729-BASE SAMPLE # 35 FRACTIONS: A
Date & Time Collected 05/30/96 13:00:00 Category SOIL

TPH_IR 352
mg/kg DL=40.0

TEST CODE 8260 NAME PURGEABLE ORGANICS VOA

EPA METHOD: 8260: Gas Chromatography/Mass Spectrometry for Volatile Organics.

Reference: Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE 827PAH NAME 8270 PAH ONLY

EPA METHOD: 8270 GAS CHROMATOGRAPHY / MASS SPECTROMETRY FOR SEMIVOLATILE
ORGAINCS; CAPILLARY COLUM TECHNIQUE. BASE NEUTRAL ONLY.

REFERENCE: TEST METHODS FOR EVALUATING SOLID WASTES: PHYSICAL/CHEMICAL METHODS.
EPA SW-846 (THIRD EDITION) 1986. OFFICE OF SOLID WASTE, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE TPH IR NAME TPH BY IR

EPA METHOD: 418.1 for water sample.

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL, Cincinnati, OH.

EPA METHOD: 9071/9073

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

TOXIKON
5 Wiggins Ave., Bedford, MA 01730
Telephone: (617) 275-3330
Fax: (617) 271-1136

CHAIN OF CUSTODY RECORD

7/3

WORK ORDER #: 96-05-570
DUE DATE : 6-6-96

OMPANY: D+C
DDRESS: 415 VFW Dr
Rockland MA 02370
HONE #: (617) 871-0332 FAX #: (617) 871-1029
O. #:
ROJECT MANAGER: Whitney
ROJECT ID/LOCATION: DEVENS

SAMPLE TYPE	CONTAINER TYPE
1. WASTEWATER	P - PLASTIC
2. SOIL	G - GLASS
3. SLUDGE	V - VOA
4. OIL	
5. DRINKING WATER	
6. WATER (GW/MW/SW)	
7. OTHER (SPECIFY	

ANALYSES

KON	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVE	TPH (418.1)	VOC's (8260)	SVOC's (8270)										SPECIAL INSTRUCTIONS/ COMMENTS
7	1676-stock	Soil	250	Glass	2	5/29/96	1537	—	X	X	X										
8	1676-base	↓	↓	↓	↓	↓	↓														
9	1676-side	↓	↓	↓	↓	↓	↓														
0	3596-stock	soil	250/2oz	↓	2	5/30/96	1317														
1	3596-base						↓														
2	3596-side						↓														
3	1468-base						1325														
4	1468-side						↓														
	~~1468-stock~~						↓														
	~~2688-base~~						1045														
	~~2688-side~~																				
	~~2688-stock~~						↓														
5	2729-base	↓	↓	↓	↓	↓	1300	↓	↓	↓	↓										

PLED BY: CCF	DATE: 5-29-96	QUOTATION #:		
	TIME: - -			
QUISHED BY: [signature]	DATE: 5-30-96	RECEIVED BY: [signature]	DATE: 5-30-96	
	TIME: 17-10 -		TIME: 17-10 -	
NQUISHED BY:	DATE: - -	RECEIVED FOR LAB BY:	DATE: - -	
	TIME: - -		TIME: - -	
HOD OF SHIPMENT		COOLER TEMPERATURE		

☑ RUSH ..5.. BUSINESS DAY TURN AROUND
☐ ROUTINE
Sample disposal information
Are there any other known or suspected contaminants in these samples other than those listed above?
Yes ____ No ____ If Yes, 1st Known ______

Page 1 TOXIKON CORP. REPORT Work Order # 96-05-571

Received: 05/30/96 06/10/96 12:41:30

REPORT TO: D & C CONSTRUCTION CO.
415 VFW DRIVE
ROCKLAND, MA. 02370
617-871-8200 FAX: 871-8871
ATTEN WHITEY MORRIS

PREPARED BY: TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNM

CLIENT D C CONSTRUC SAMPLES 24
COMPANY D & C CONSTRUCTION CO.
FACILITY 415 VFW DRIVE
ROCKLAND, MA. 02370

WORK ID DEVENS
TAKEN 5/29/96 AND 5/30/96
TRANS
TYPE SOIL
P.O. #
INVOICE under separate cover

MA CERT # M-MA064: TRACE METALS, SULFATE, CYANIDE, RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST., NUTRIENTS. DEMAND. O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

VERIFIED BY:
CERT # M-MA064

SAMPLE IDENTIFICATION

01 208-STOCK
02 208-BASE
03 208-SIDE
04 209-STOCK
05 209-BASE
06 209-SIDE
07 1601-STOCK
08 1601-BASE
09 1601-SIDE
10 1602-STOCK
11 1602-BASE
12 1602-SIDE
13 1603-STOCK
14 2729-SIDE
15 2729-STOCK
16 1657-BASE
17 1657-SIDE
18 1657-STOCK
19 2687-SIDE
20 2687-STOCK
21 2687-BASE
22 2688-SIDE
23 2688-STOCK
24 2688-BASE

TEST CODES and NAMES used on this workorder

8260 PURGEABLE ORGANICS VOA
827PAH 8270 PAH ONLY
TPH IR TPH BY IR

SAMPLE ID 2729-SIDE SAMPLE # 14 FRACTIONS: A
Date & Time Collected 05/30/96 13:00:00 Category SOIL

TPH_IR 292
mg/Kg DL=40

SAMPLE ID 2729-STOCK SAMPLE # 15 FRACTIONS: A
Date & Time Collected 05/30/96 13:00:00 Category SOIL

TPH_IR 149
mg/Kg DL=40

SAMPLE ID 2729-SIDE FRACTION 14A TEST CODE 827PAH NAME 8270 PAH ONLY
Date & Time Collected 05/30/96 13:00:00 Category SOIL

BASE NEUTRAL EXTRACTABLES

	RESULT	LIMIT
Naphthalene	ND	1800
Acenaphthylene	ND	1800
Acenaphthene	ND	1800
Fluorene	ND	1800
Phenanthrene	4870	1800
Anthracene	ND	1800
Fluoranthene	10900	1800
Pyrene	3470	1800
Benzo (a) anthracene	2360	1800
Chrysene	2530	1800
Benzo(b)fluoranthene	2070	1800
Benzo(k)fluoranthene	ND	1800
Benzo(a)pyrene	2390	1800
Indeno(1,2,3-cd)pyrene	ND	1800
Dibenz(a,h)anthracene	ND	1800
Benzo(g,h,i)perylene	ND	1800
2-Methylnaphthalene	ND	1800

Notes and Definitions for this Report:

UNITS: ug/Kg
EXTRACTED: 07/10/96
DATE RUN: 07/11/96
ANALYST: PAC
INSTRUMENT: F
DIL. FACTOR: 5
ND = not detected at detection limit

Received: 05/30/96 Results by Sample

SAMPLE ID 2729-STOCK FRACTION 15A TEST CODE 8260 NAME PURGEABLE ORGANICS VOA
Date & Time Collected 05/30/96 13:00:00 Category SOIL

EPA 8260 PURGEABLE ORGANICS

	RESULT	LIMIT		RESULT	LIMIT
Chloromethane	ND	10	o-Xylene	ND	5.0
Bromomethane	ND	10	m-Xylene	ND	5.0
Vinyl Chloride	ND	2.0	p-Xylene	ND	5.0
Chloroethane	ND	10	1,2-Dichlorobenzene	ND	5.0
Methylene Chloride	ND	10	1,3-Dichlorobenzene	ND	5.0
1,1-Dichloroethene	ND	5.0	1,4-Dichlorobenzene	ND	5.0
Trichlorofluoromethane	ND	10	Naphthalene	ND	10
1,1-Dichloroethane	ND	5.0	n-Propylbenzene	ND	10
Trans-1,2-Dichloroethene	ND	5.0	Bromobenzene	ND	5.0
Chloroform	ND	5.0	Bromchloromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	n-Butylbenzene	ND	10
1,1,1-Trichloroethane	ND	5.0	sec-Butylbenzene	ND	10
Carbon Tetrachloride	ND	5.0	tert-Butylbenzene	ND	10
Bromodichloromethane	ND	5.0	2-Chlorotoluene	ND	5.0
1,2-Dichloropropane	ND	5.0	4-Chlorotoluene	ND	5.0
Trichloroethene	ND	5.0	1,2-Dibromo-3-chloropropane	ND	5.0
Dibromochloromethane	ND	5.0	1,2-Dibromomethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0	Dibromomethane	ND	5.0
Benzene	ND	5.0	Dichlorodifluoromethane	ND	10
1,1-Dichloropropene	ND	5.0	cis-1,2-Dichloroethene	ND	5.0
2-2-Dichlorpropane	ND	5.0	1,3-Dichloropropane	ND	5.0
Bromoform	ND	5.0	1,1,1,2-Tetrachloroethane	ND	5.0
Hexachlorobutadiene	ND	10	1,2,3-Trichlorobenzene	ND	5.0
Isopropylbenzene	ND	10	1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0	1,2,4-Trichlorobenzene	ND	5.0
Methyl tertiary butyl ether	ND	5.0	1,2,3-Trichloropropane	ND	5.0
Toluene	ND	5.0	1,2,4-Trimethylbenzene	ND	10
Chlorobenzene	ND	5.0	1,3,5-Trimethylbenzene	ND	10
Ethyl Benzene	ND	5.0			
p-Isopropyltoluene	ND	10			

Notes and definitions for this report:

DATE RUN 06/08/96
ANALYST CMD
INSTRUMENT G
DIL. FACTOR 1
UNITS ug/Kg
COMMENTS

ND = Not detected at detection limit

SAMPLE ID 2729-STOCK FRACTION 15A TEST CODE 827PAH NAME 8270 PAH ONLY
Date & Time Collected 05/30/96 13:00:00 Category SOIL

BASE NEUTRAL EXTRACTABLES

	RESULT	LIMIT
Naphthalene	ND	370
Acenaphthylene	ND	370
Acenaphthene	ND	370
Fluorene	ND	370
Phenanthrene	818	370
Anthracene	ND	370
Fluoranthene	1180	370
Pyrene	1630	370
Benzo (a) anthracene	803	370
Chrysene	663	370
Benzo(b)fluoranthene	527	370
Benzo(k)fluoranthene	1500	370
Benzo(a)pyrene	668	370
Indeno(1,2,3-cd)pyrene	ND	370
Dibenz(a,h)anthracene	ND	370
Benzo(g,h,i)perylene	ND	370
2-Methylnaphthalene	ND	370

Notes and Definitions for this Report:

UNITS: ug/Kg
EXTRACTED: 06/06/96
DATE RUN: 06/06/96
ANALYST: PAC
INSTRUMENT: F
DIL. FACTOR: 1
ND = not detected at detection limit

TEST CODE 8260 NAME PURGEABLE ORGANICS VOA

EPA METHOD: 8260: Gas Chromatography/Mass Spectrometry for Volatile Organics.

Reference: Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE 827PAH NAME 8270 PAH ONLY

EPA METHOD: 8270 GAS CHROMATOGRAPHY / MASS SPECTROMETRY FOR SEMIVOLATILE ORGAINCS; CAPILLARY COLUN TECHNIQUE. BASE NEUTRAL ONLY.

REFERENCE: TEST METHODS FOR EVALUATING SOLID WASTES: PHYSICAL/CHENICAL METHODS.
EPA SW-846 (THIRD EDITION) 1986. OFFICE OF SOLID WASTE, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE TPH_IR NAME TPH BY IR

EPA METHOD: 418.1 for water sample.

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL, Cincinnati, OH.

EPA METHOD: 9071/9073

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

TOXIKON
15 Wiggins Ave., Bedford, MA 01730
Telephone: (617) 275-3330
Fax: (617) 271-1136

CHAIN OF CUSTODY RECORD

2/2

WORK ORDER #: 10-01-571

DUE DATE : 6-6-96

COMPANY: D+C
ADDRESS: 415 VFW Dr
Rockland MA 02370
PHONE #: (617) 871-0332 FAX #: (617) 871-1623
P.O. #:
PROJECT MANAGER: White
PROJECT ID/LOCATION: DEVENS

SAMPLE TYPE	CONTAINER TYPE
1. WASTEWATER	P - PLASTIC
2. SOIL	G - GLASS
3. SLUDGE	V - VOA
4. OIL	
5. DRINKING WATER	
6. WATER (GW/MW/SW)	
7. OTHER (SPECIFY	

TOXIKON #	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVE	ANALYSES: TPH (418.1)	SVOCs (8270)	VOCs (8260)	SPECIAL INSTRUCTIONS/ COMMENTS
14	2729-side	Soil	250/202	G	2	5/30/96	1300	—	X	X	X	
15	2729-stock											
16	1657-base						1100					
17	1657-side											
18	1657-stock											
19	2687-side						1100					
20	2687-stock											
21	2687-base											
22	2688-side						1045					
23	2688-stock											
24	2688-base											

SAMPLED BY: CCE
DATE: 5 - 30 - 96
TIME: —

RELINQUISHED BY:
DATE: 5 - 30 - 96
TIME: 17 - 10

RELINQUISHED BY:
DATE: -
TIME: -

METHOD OF SHIPMENT

QUOTATION #:

RECEIVED BY:
DATE: 5 - 30 - 96
TIME: 17 - 10

RECEIVED FOR LAB BY:
DATE: -
TIME: -

COOLER TEMPERATURE

☑ RUSH 5... BUSINESS DAY TURN AROUND
☐ ROUTINE

Sample disposal information
Are there any other known or suspected contaminants in these samples other than those listed above?
Yes ____ No ____ If-Yes, 1st Known ____

FROM : TOXIKON
PHONE NO. : 6172757478
Jun. 10 1996 02:42PM P51

GeoLabs, Inc.
Environmental Laboratories
Phone: (617) 878-1346 Fax: (617) 871-7069

FINAL REPORT

PREPARED FOR:	Hydro-Science Associates 415 VFW Drive P.O. Box 552 Rockland, MA 02370 Att: Whitey Morris
PROJECT ID:	Devens
GEOLABS CLIENT #:	1317-95
SAMPLE NUMBER:	45706-45710
DATE PREPARED:	August 27, 1996
PREPARED BY:	Suzanne Pidgeon
APPROVED BY:	Jim Chen Laboratory Director

Location: 400 Hingham Street
Rockland, MA 02370

Mailing Address: PO Box 254
Accord, MA 02018

GEOLABS, INC.
P.O. BOX 254
ACCORD, MA 02018
(617) 878-1346

CLIENT NAME:	HYDRO-SCIENCE	PROJECT ID:	FORT DEVENS
SAMPLE TYPE:	SOIL	REPORT DATE:	08/27/96
COLLECTION DATE:	08/23/96	ANALYZED BY:	NER 08/26/96
REC'D BY LAB:	08/23/96	EXTRACTION DATE:	08/26/96
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A

POLYNUCLEAR AROMATIC HYDROCARBONS
EPA METHOD 8270

SAMPLE NUMBER:	45706	45707	DETECTION LIMIT (µg/kg)
SAMPLE LOCATION:	2729-BS	2729-FS	
PARAMETER	RESULTS (µg/kg)		
Acenaphthene	ND	ND	270
Acenaphthylene	ND	ND	230
Anthracene	ND	ND	270
Benzo(a)Anthracene	ND	ND	300
Benzo(b)Fluoranthene	ND	ND	230
Benzo(k)Fluoranthene	ND	ND	300
Benzo(g,h,i)Perylene	ND	ND	130
Benzo(a)Pyrene	ND	ND	200
Chrysene	ND	ND	270
Dibenzo(a,h)Anthracene	ND	ND	130
Fluoranthene	280	ND	170
Fluorene	ND	ND	200
Indeno(1,2,3-CD)Pyrene	ND	ND	170
2-Methylnaphthalene	ND	ND	170
Naphthalene	ND	ND	230
Phenanthrene	ND	ND	230
Pyrene	ND	ND	230

ND = NOT DETECTED

Method Reference:

Polynuclear Aromatic Hydrocarbons 8270 [1]

1) US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846.

GEOLABS, INC.
P.O. BOX 254
ACCORD, MA 02018
(617) 878-1346

CLIENT NAME:	HYDRO-SCIENCE	PROJECT ID:	FORT DEVENS
SAMPLE TYPE:	SOIL	REPORT DATE:	08/27/96
COLLECTION DATE:	08/23/96	ANALYZED BY:	NER 08/26/96
REC'D BY LAB:	08/23/96	EXTRACTION DATE:	08/26/96
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A

POLYNUCLEAR AROMATIC HYDROCARBONS
EPA METHOD 8270

SAMPLE NUMBER:	45708	45709	DETECTION LIMIT
SAMPLE LOCATION:	2729-RS	2729-LS	(µg/kg)
PARAMETER	RESULTS (µg/kg)		
Acenaphthene	ND	ND	270
Acenaphthylene	ND	ND	230
Anthracene	ND	ND	270
Benzo(a)Anthracene	ND	ND	300
Benzo(b)Fluoranthene	ND	ND	230
Benzo(k)Fluoranthene	ND	ND	300
Benzo(g,h,i)Perylene	ND	ND	130
Benzo(a)Pyrene	ND	ND	200
Chrysene	ND	ND	270
Dibenzo(a,h)Anthracene	ND	ND	130
Fluoranthene	ND	ND	170
Fluorene	ND	ND	200
Indeno(1,2,3-CD)Pyrene	ND	ND	170
2-Methylnaphthalene	ND	ND	170
Naphthalene	ND	ND	230
Phenanthrene	ND	ND	230
Pyrene	ND	ND	230

ND = NOT DETECTED

Method Reference:

Polynuclear Aromatic Hydrocarbons 8270 (1)

1) US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846.

GEOLABS, INC.
P.O. BOX 254
ACCORD, MA 02018
(617) 878-1346

POLYNUCLEAR AROMATIC HYDROCARBONS
EPA METHOD 8270

CLIENT NAME:	HYDRO-SCIENCE	PROJECT ID:	DEVENS
SAMPLE TYPE:	SOIL	REPORT DATE:	08/15/96
COLLECTION DATE:	08/09/96	ANALYZED BY:	NER 08/14/96
REC'D BY LAB:	08/13/96	EXTRACTION DATE:	08/14/96
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A

SAMPLE NUMBER:	45316
SAMPLE LOCATION:	2729-BASE

PARAMETER	RESULT (µg/kg)	DETECTION LIMIT (µg/kg)
Acenaphthene	ND	270
Acenaphthylene	ND	230
Anthracene	ND	270
Benzo(a)Anthracene	602	300
Benzo(b)Fluoranthene	445	230
Benzo(k)Fluoranthene	434	300
Benzo(g,h,i)Perylene	545	130
Benzo(a)Pyrene	440	200
Chrysene	457	270
Dibenzo(a,h)Anthracene	322	130
Fluoranthene	1150	170
Fluorene	ND	200
Indeno(1,2,3-CD)Pyrene	552	170
2-Methylnaphthalene	ND	170
Naphthalene	ND	230
Phenanthrene	685	230
Pyrene	1010	230

ND = NOT DETECTED

Method Reference:

Polynuclear Aromatic Hydrocarbons 8270 (1)

1) US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846.

GEOLABS, INC.
P.O. BOX 254
ACCORD, MA 02018

LIMITATIONS & EXCLUSIONS

All the professional opinions presented in this report are based solely on the scope of work conducted and sources referred to in our report. The data presented by GeoLabs in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report represents the conditions, locations and materials that were observed at the time the work was conducted. No inferences regarding other conditions, locations or materials, at a later or earlier time may be made based on the contents of the report. No other warranty, express or implied is made.

This report was prepared for the sole use of our client. Portions of the report may not be used independent of the entire report.

All analyses were performed within required holding times, in accordance with EPA protocols and using accepted QA/QC procedures. The information contained in this report is, to the best of my knowledge, accurate and complete.

ALPHA
Analytical Laboratories, Inc.

Eight Walkup Drive
Westborough, MA 01581-1019
508-898-9220 FAX 508-898-9193

CHAIN OF CUSTODY RECORD and ANALYSIS REQUEST RECORD

No. 8
Sheet 1 of 1

Company Name: D+C (Hydro-Science)
Project Number:
P.O. Number:
Project Name/Location: DEVENS
Date Received in Lab:
Date Due:
Company Address:
Phone Number:
FAX No.:
Project Manager: WHITEY MORRIS
Alpha Job Number: (Lab use only)

Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other

MATRIX / SOURCE CODES: MW = Monitoring Well; RO = Runoff; O = Outfall; W = Well; LF = Landfill; L = Lake/Pond/Ocean; I = Influent; E = Effluent; DW = Drinking Water; R = River Stream; S = Soil; SG = Sludge; B = Bottom Sediment; X1 = Other; X2 = Other

ALPHA Lab # (Lab Use Only)	Sample I.D.	Containers (number/type)	Matrix/Source	Method Preserve. (number of containers): Unpres.	Ice	Nitric	Sulfuric	HCl	Other	Solubles - F.F.	Sampling Date	Sampling Time	Analysis Requested
45706	2729-BS	1/G 4oz	S								8/23	1110	PAH (8270)
45707	2729-FS	1	S								1	1	1
45708	2729-RS	1	S								1	1	1
45709	2729-LS	1	S								1	↓	↓
45710	1437-FS3	↓	S								↓	1030	TPH (418.1)

Sampler's Signature: [signature] Affiliation: SEA Date: 8/23/96 Time:

ADDITIONAL COMMENTS:

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	[signature]	[signature]		
2				
3		[signature]		
4			8/23/96	1525

Form No. QOP/06-03

APPENDIX D

COMPACTION TESTS

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

SOILS INSPECTION

PROJECT: Fort Devens, Ayer
PROJECT #: 60404
DATE: 8-25-96
INSPECTOR: John Doyel

EMP.#: 236	REPORT #:	CODE:	# of PAGES:
ARR. TIME: 800	JOB HOURS:	T.T.:	MILEAGE:
TEMP.: H 65 L	WIND: H Ø	HUMID.: H 65 L	~~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: Buildings 1411, 1437 and 1655 and 2729

REMARKS: All tests taken to ASTM Specs

FREQUENCY OF COMPACTION TESTS: 1 every 2 lifts

TECHNICIAN:
APPROVED: ROBERTA. BONICA, P.E.

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

SOILS COMPACTION REPORT

PROJECT: Fort Devens, Ayer
PROJECT #: 60964
DATE: 9-25-96
INSPECTOR: John Vogel

EMP.#: 236	REPORT #:	CODE:	LAB #:
ARR. TIME: 800	JOB HOURS:	T.T.:	MILEAGE:
TEMP.: (H) L	WIND: H (L)	HUMID.: (H) L	(SUNNY) CLOUDY

MAXIMUN DRY DENSITY: 130.8 // 118.3
OPTIMUM MOISTURE CONTENT: 8.3 // 7.5
METHOD OF TESTING (CHECK ONE): SAND CONE: ☐ NUCLEAR DENSOMETER: ☑

Test No:	Location	Estimated Area Tested	Elevation Depth	Test Results % compaction	Min.% Comp. Req.	Moist. Content %	Optimum Moisture %
	Building 1411	11 ft	6ft	95.0%	95.0	10.4	8.3
			4ft	95.4		9.0	8.5
			2ft	96.1		8.8	
			grade	96.7		8.4	
	1655		6	96.2		9.1	
			4	95.7		8.7	
			2	98.5		8.0	
			grade	96.2		9.1	
	2728		6	96.2		9.1	
			4	95.8		7.1	
			2	96.3		8.2	
			grade	96.8		8.0	
	1437		6	95.4		9.0	
			4	95.1		7.8	
			2	96.2		7.5	
			grade	95.1		9.0	

Tests not meeting requirements: none
Who notified: Bob (Dick Grant)
Recommendations: none at present
REMARKS: None at present

TECHNICIAN:
APPROVED: ROBERTA BONICA, P.E.

Tundra Corporation

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

1. Sample No. M-956 (Keating Sand + Gravel Fitchburg.) | Description: Gravelly Sand with silt | Source: Site

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

Sieve Size	Results (% Passing by Wt.)	Specs.
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).

	Results
Maximum Dry Unit Weight (pcf)	130.8
Optimum Moisture Content (%)	8.3

400 Hingham Street, Rockland, Massachusetts 02370
Tel (617) 871-6040 • Fax (617) 871-7982
Offices located throughout the United States and Canada

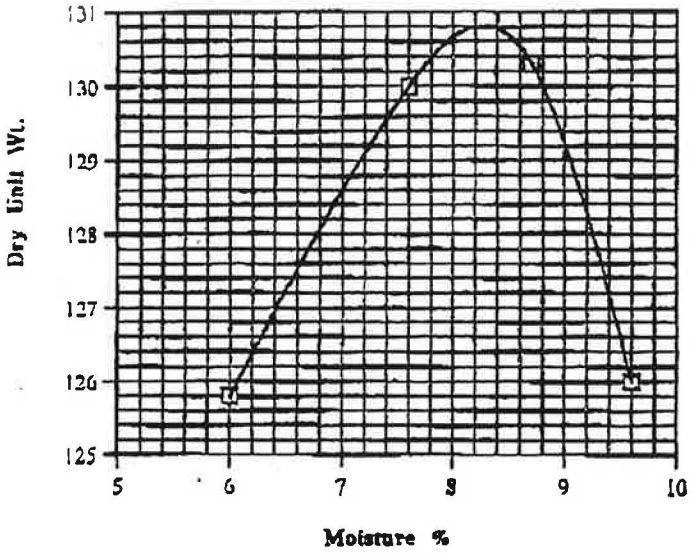
Briggs Associates

A Tundra Corporation Company

Project: D & C Construction / Ft. Devens

Sample no. M-956 **Date:** 6/5/96

Proctor



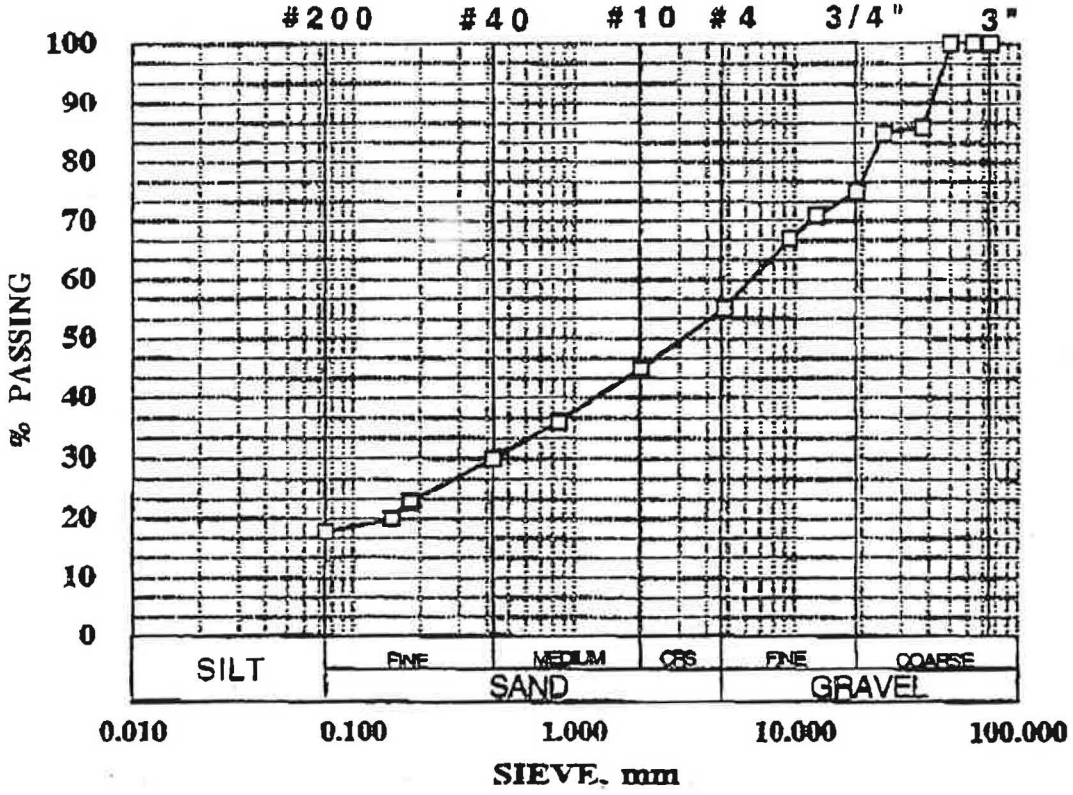
Max. Dry Density
130.8 pcf

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.

Sample No.	Description	Source
M-957	Gravelly Sand	Site

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

Sieve Size	Results {% Passing by Wt.}	Specs.
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}.

	Results
Maximum Dry Unit Weight (pcf)	118.3
Optimum Moisture Content (%)	9.5

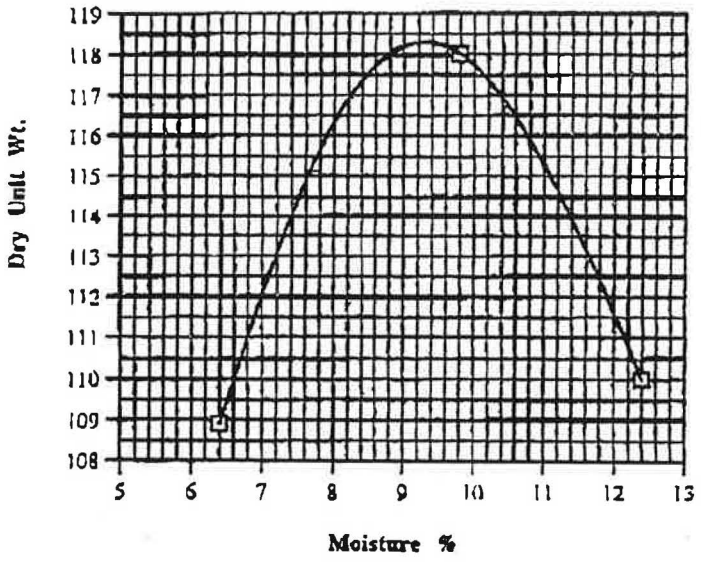
400 Hingham Street, Rockland, Massachusetts 02370
Tel (617) 871-6040 • Fax (617) 871-7982
Offices located throughout the United States and Canada

Briggs Associates

A Tundra Corporation Company

Project:	D & C Construction / Ft. Devens		
Sample no.	M-957	**Date:**	6/5/96

Proctor



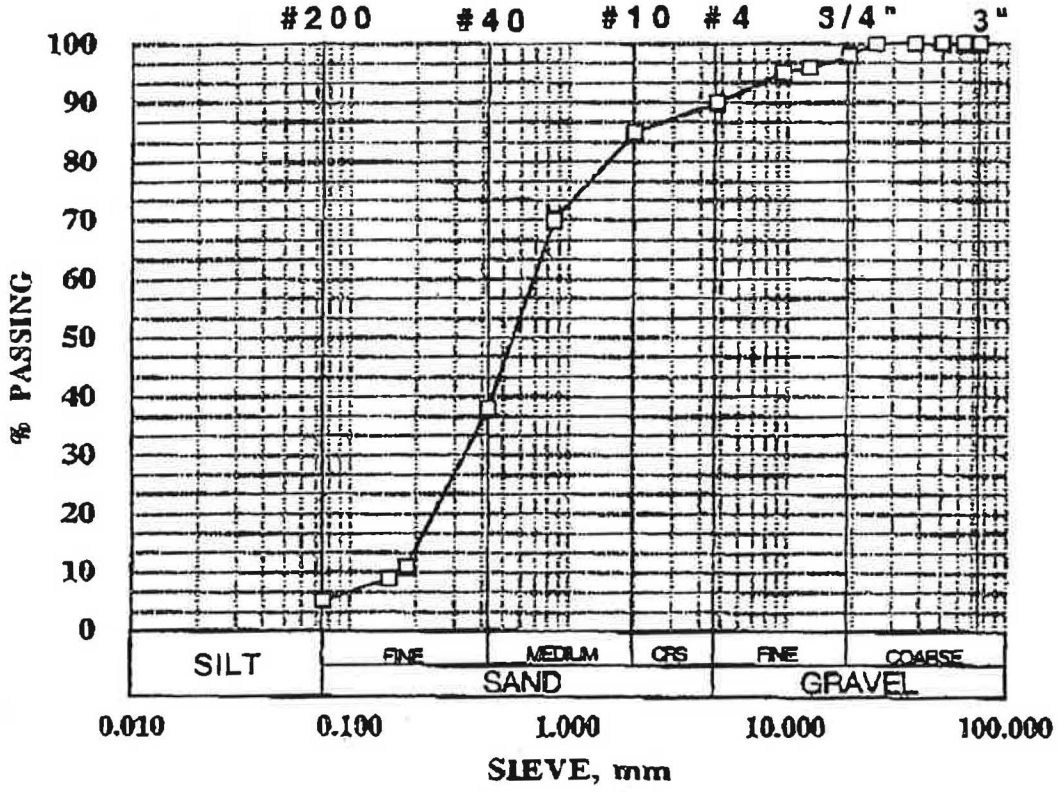
Max. Dry Density
118.3 pcf

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 E

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
- ☐ Asphalt Batch/Hot Mix
- ☐ Thermal Processing
- ☒ Landfill/Disposal
- ☒ Landfill/Daily Cover
- ☐ Landfill/Structural Fill
- ☐ Incinerator
- ☐ Temporary
- ☐ 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

COMMONWEALTH OF MASSACHUSETTS
WILLIAM J. MALLIO
No. 4966
REGISTERED LICENSED SITE PROFESSIONAL

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)

H. 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 **BWSC-012B**

Bureau of Waste Site Cleanup Fort Dev. 120313

Release Tracking Number: 2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030) DTC

LOG SHEET 1 **OF** 3

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 108518

Date of Shipment: 8/14/96 Time of Shipment: 7:00 (circle one) am/pm

Truck/Tractor Registration: 32595 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 8:07 (circle one) am/pm

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

LOAD 2: Signature of Transporter Representative: 108514

Date of Shipment: 8/14/96 Time of Shipment: 8:00 (circle one) am/pm

Truck/Tractor Registration: 528520 Trailer Registration (if any): 27145

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 8:02 (circle one) am/pm

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

LOAD 3: Signature of Transporter Representative: 108515

Date of Shipment: 8/14/96 Time of Shipment: 9:00 (circle one) am/pm

Truck/Tractor Registration: 36075 Trailer Registration (if any): 28615

Receiving Facility/Temporary Storage Representative:

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

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

LOAD 4: Signature of Transporter Representative: 108512

Date of Shipment: 8/14/96 Time of Shipment: 6:49 (circle one) am/pm

Truck/Tractor Registration: CE96-535 MA Trailer Registration (if any): 27794 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 7:54 (circle one) am/pm

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

LOAD 5: Signature of Transporter Representative: 108521

Date of Shipment: 8/14/96 Time of Shipment: 7:10 (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: 8:15 (circle one) am/pm

Load Size (cu. yds./tons): 34.55

LOAD 6: Signature of Transporter Representative: 108620

Date of Shipment: 8/14/96 Time of Shipment: 10:00 (circle one) am/pm

Truck/Tractor Registration: 32803 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 11:33 (circle one) am/pm

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

LOAD 7: Signature of Transporter Representative: 108625

Date of Shipment: 8/14/96 Time of Shipment: 10:40 (circle one) am/pm

Truck/Tractor Registration: 528520 Trailer Registration (if any): 27145

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 11:44 (circle one) am/pm

Load Size (cu. yds./tons): 34.74

J. 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 **BWSC-012B**
Bureau of Waste Site Cleanup

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

Release Tracking Number: 2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 108639
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 12:24 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 11:54 (circle one) am/pm
Truck/Tractor Registration: 36075 Trailer Registration (if any): X 29615
Load Size (cu. yds./tons): 28.17

LOAD 2: Signature of Transporter Representative: 108647
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 11:05 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 12:16 (circle one) am/pm
Truck/Tractor Registration: 29658 Trailer Registration (if any): X 29642
Load Size (cu. yds./tons): 35.92

LOAD 3: Signature of Transporter Representative: 108657
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 11:21 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 12:30 (circle one) am/pm
Truck/Tractor Registration: 1T496 535 MA Trailer Registration (if any): X 27794 MA
Load Size (cu. yds./tons): 36.92

LOAD 4: Signature of Transporter Representative: 108719
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 1:45 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 2:46 (circle one) am/pm
Truck/Tractor Registration: 32805 Trailer Registration (if any): 29641
Load Size (cu. yds./tons): 36.72

LOAD 5: Signature of Transporter Representative: 108723
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 1:50 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 2:54 (circle one) am/pm
Truck/Tractor Registration: 29655 Trailer Registration (if any): X 29642
Load Size (cu. yds./tons): 36.00

LOAD 6: Signature of Transporter Representative: 108726
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: 1:58 (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 3:11 (circle one) am/pm
Truck/Tractor Registration: 285790 Trailer Registration (if any): X 27145
Load Size (cu. yds./tons): 27.37

LOAD 7: Signature of Transporter Representative: 108731
Receiving Facility/Temporary Storage Representative:
Date of Shipment: 8/14/96 Time of Shipment: ___:___ (circle one) am/pm
Date of Receipt: 8/14/96 Time of Receipt: 3:32 (circle one) am/pm
Truck/Tractor Registration: 36075 Trailer Registration (if any): X 29615
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 **BWSC-0128**

Bureau of Waste Site Cleanup

Release Tracking Number: 2 - 11210

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

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 105736

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

Truck/Tractor Registration: 6E96535 MA Trailer Registration (if any): Q97794 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):

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 39.79

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

Total Carried Forward and This Page (cu.yds./tons): 503.15

Massachusetts Department of Environmental Protection **BWSC-012B**

Bureau of Waste Site Cleanup Fort Dev. 120313

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 **OF** 1 D+C

Release Tracking Number: 2 - 11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 108794

Date of Shipment: 8/15/96 Time of Shipment: 7:18 (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): 39.69

LOAD 2: Signature of Transporter Representative: 108784

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: 108898

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):

J. 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

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

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

Release Tracking Number: 2-11210

K. SUMMARY OF SHIPMENTS:

DATE OF SHIPMENT:	DATE OF RECEIPT:	NUMBER OF LOADS SHIPPED:	DAILY VOLUME SHIPPED (CU. YDS./TONS):
8-14-96	8-14-96	15	503.15
8-15-96	8-15-96	3	114.82

SUMMARY SHEET TOTAL SHIPPED:	18	617.97
BILL OF LADING TOTALSHIPPED (only if different):		

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

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

Receiving Facility/Temporary Location Representative (print): Angelique Cosgrove Title: Sale Coordinator

Signature: Angelique Cosgrove 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: Date: 9/12/96

Name of Person (print): JAMES E ATHANSTONE

FOR RON OSTROWSKI

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: Buildings 1437 and 2729

City/Town: Devens Zip Code: 01433 - _____

Date/Period of Generation: 8 / 23 / 96 to 8 / 23 / 96

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: Sale's Coord./

Street: 14 Belcher St.

City/Town: Plainville State: MA Zip Code: 02762 - _____

Telephone: 508 - 699-[illegible]2267 Ext. _____

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

Division of Hazardous Waste/Class A Permit #: _____

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): _____

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: 50 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 4.02(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: 09/17/96

License Number: 4966

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

2 - 11219

H. 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 willfully submitting false, inaccurate, or incomplete information.

Signature: R J Ostrowski Date: 9/17/96

Name of Person (print): Ronald J. Ostrowski

Enclosure to Bill of Lading (BWSC -12A)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Release Tracking No. 2-11210
Re-Excavation of 2729 and 1437

Analyte	Range/Peak of Lab Results
TPH	106 ppm
Total PCB's	0.0149 ppm
Total Arsenic	11.8 ppm
Total Barium	12.9 ppm
Total Cadmium	1.19
Total Chromium	7.64 ppm
Total Lead	14.6 ppm
Total Mercury	0.02 ppm
Total PAH's	13.93 ppm
Total VOC's	< 1 ppm

Note: ppm = parts per million

Massachusetts Department of Environmental Protection **BWSC-012B**

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030) 9994

LOG SHEET 1 **OF** 1

Release Tracking Number: 2-11210n

Fort Devens Commerce Center

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 115951

Date of Shipment: 9/12/91 Time of Shipment: 12:00 (circle one) am/pm

Truck/Tractor Registration: 291 SV Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 9/18/91 Time of Receipt: 1:14 (circle one) am/pm

Load Size (cu. yds./tons): 37.50

LOAD 2: Signature of Transporter Representative: 115332

Date of Shipment: 9/18/91 Time of Shipment: 12:10 (circle one) am/pm

Truck/Tractor Registration: E85-736 Trailer Registration (if any): 39477

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 9/18/91 Time of Receipt: 1:25 (circle one) am/pm

Load Size (cu. yds./tons): 33.49

LOAD 3: Signature of Transporter Representative: 11553

Date of Shipment: 9/18/91 Time of Shipment: 12:30 (circle one) am/pm

Truck/Tractor Registration: 32907 Trailer Registration (if any): 9231

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 9/18/96 Time of Receipt: 12:30 (circle one) am/pm

Load Size (cu. yds./tons): 34.88

LOAD 4: Signature of Transporter Representative:

Date of Shipment: 9/18/96 Time of Shipment: : (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 9/18/96 Time of Receipt: 3:00 (circle one) am/pm

Load Size (cu. yds./tons): 25.84

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):

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 132.16

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

Total Carried Forward and This Page(cu.yds./tons): 132.16

Massachusetts Department of Environmental Protection **BWSC-012C**

Bureau of Waste Site Cleanup

Release Tracking Number: [ ] - [ ]

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

K. SUMMARY OF SHIPMENTS:

DATE OF SHIPMENT:	DATE OF RECEIPT:	NUMBER OF LOADS SHIPPED:	DAILY VOLUME SHIPPED (CU. YDS./TONS):
9-8-96	9-18-96	4	132.16

SUMMARY SHEET TOTAL SHIPPED:	4	132.16
BILL OF LADING TOTALSHIPPED (only if different):		

Massachusetts Department of Environmental Protection **BWSC-012C**
Bureau of Waste Site Cleanup

Release Tracking Number: ☐ - ☐

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

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

Receiving Facility/Temporary Location Representative (print): Angeline Cosatovo Title: Sales Coordinator

Signature: [signature] Date: 9/18/96

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: R.J Ostrowski Date: 10/9/96

Name of Person (print): RONALD J. OSTROWSKI