

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

**UNDERGROUND STORAGE TANK
CLOSURE REPORT**

UST NO. 3548

SEPTEMBER 1996

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

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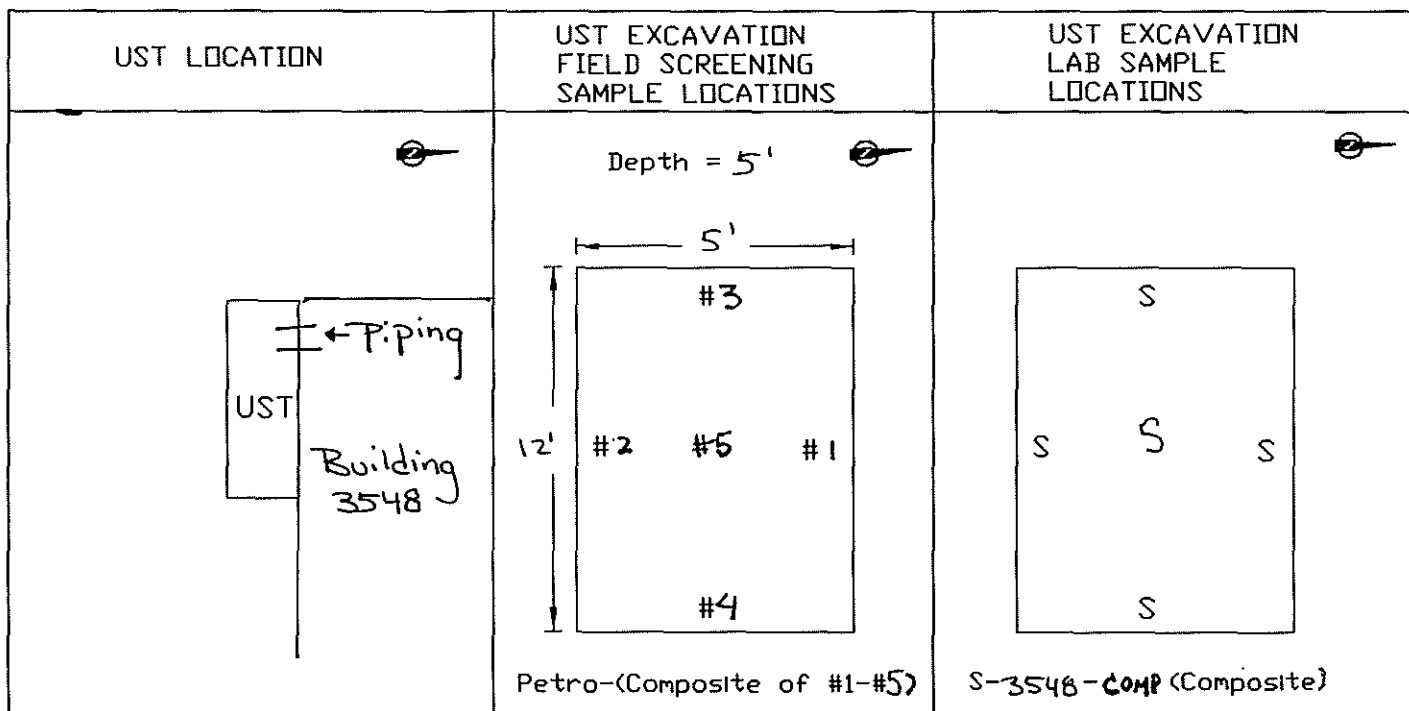
1.0 INTRODUCTION

This Underground Storage Tank (UST) Closure Report has been completed in accordance with the Commonwealth of Massachusetts Underground Storage Tank Closure Assessment Manual, dated April 9, 1996, and the Devens Commerce Center's (DCC) "*Underground Storage Tank Closure Protocol*" (Addendum to a DEP-approved Tier 1A permit), dated June 14, 1996. The 1,000-gallon UST was located at Building 3548, Patch Road, Devens, Massachusetts (north/east [North American Datum, 1983] coordinates 3021198/626818). The former location of this UST is shown on Figure 1.

The 1,000-gallon steel UST, storing No. 2 heating oil, was removed on May 23, 1996. Headspace and Petroflag field screening on soil adjacent to the UST and associated piping indicated minimal impact to the soils from the UST/piping. Laboratory tests within the UST excavation confirmed contaminant levels below applicable regulatory levels outlined in the Massachusetts Contingency Plan (MCP) [310 CMR 40.0000]. Following review of the laboratory data, the excavated hole was backfilled.

2.0 BACKGROUND

The UST at Building 3548 was originally installed in 1966 by the U.S. Army to store No. 2 heating oil for Building 3548. 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 3548, were removed. This steel UST had a diameter of four (4) feet and a length of eleven (11) feet. The associated piping was copper tubing.



FIELD SCREENING				
SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD
#1	2.5'		6.2	
#2	2.5'		8.1	
#3	2.5'		10.6	
#4	2.5'		8.0	
#5	5'		2.5	
3548-COMP				224
Petro		315		

Figure 1
UST and Sample Locations

Massachusetts Land Bank
Devens, Massachusetts

3.0 UST REMOVAL

During the weeks of May 13 and 20, 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 were removed with an excavator and 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 then cut in the UST after it had been tested for combustible gases and oxygen. A laborer then 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 in Appendix A. On May 23, 1996, the UST was removed and transported off-site. Transfer documentation (Forms FP290R and 291) is in Appendix B. A total of five (5) cubic yards of soil were excavated as part of the UST removal. Contaminant levels within the stockpile were later found to be below applicable regulatory thresholds.

4.0 FIELD OBSERVATIONS AND ASSESSMENT

Upon removal of the UST, it was observed to be intact with very little rust. There was no visual or olfactory evidence of impacted soil within the excavation and groundwater was not observed.

Soil was then collected for Jar Headspace measurements using a Photoionization Detector (PID), and Total Petroleum Hydrocarbons (TPH) readings were measured using a Petroflag Hydrocarbon Analyzer. PID readings ranged from 2.5 to 10.0 ppmv. A composite sample collected from the sidewalls and base of the excavation measured 315 ppm of TPH using the Petroflag Hydrocarbon Analyzer. Results and sampling locations are shown in Figure 1. Due to the low levels of these field readings, no further excavation was conducted and

samples were collected from the excavation and associated soil stockpile for laboratory analysis. A composite sample of the sidewalls and base of the excavation was analyzed for TPH [Method 418.1], and the associated stockpile was analyzed for TPH [Method 418.1], Polynuclear Aromatic Hydrocarbons (PAHs) [Method 8270], and Volatile Organic Compounds (VOCs) [Method 8260]. All samples were below the applicable MCP "RCS-1 Reportable Concentrations". Results and sampling locations are shown in Table 1 and Figure 1, respectively. The laboratory analytical data package is contained in Appendix C.

After receipt of the laboratory data, the stockpiled soil was manifested off-site under an LSP-approved Bill of Lading (Appendix E). Although the stockpile was below 500 ppm TPH (MCP S-1/GW-1 Standards), the DCC manifested it off-site because it was over 250 ppm TPH (threshold mandated by the DCC's UST Closure Protocol (6/14/96)). Off-site fill was then backfilled into the excavation and compacted to bring the excavation back to grade. Compaction documentation is contained in Appendix D.

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL RESULTS

SAMPLE I.D. NUMBER	ANALYTE	LABORATORY RESULT (PPM)	RCS-1* (PPM)
3548-Comp	TPH	224	500
3548-Stock	TPH	266	500
3548-Stock 3548-Comp	Fluorene	ND ND	400
3548-Stock 3548-Comp	Phenanthrene	ND ND	100
3548-Stock 3548-Comp	Anthracene	ND ND	1,000
3548-Stock 3548-Comp	Fluoranthene	ND ND	600
3548-Stock 3548-Comp	Pyrene	ND ND	500
3548-Stock 3548-Comp	Benzo(a)anthracene	ND ND	0.7
3548-Stock 3548-Comp	Chrysene	ND ND	7
3548-Stock 3548-Comp	Benzo(b)fluoranthene	ND ND	0.7
3548-Stock 3548-Comp	Benzo(a)pyrene	ND ND	0.7
3548-Stock 3548-Comp	Indeno(1,2,3-cd)pyrene	ND ND	0.7
3548-Stock 3548-Comp	Toluene	ND ND	90
3548-Stock 3548-Comp	Ethyl Benzene	ND ND	80
3548-Stock 3548-Comp	Xylenes	ND ND	500

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

APPENDIX A

UNIFORM HAZARDOUS WASTE MANIFESTS



DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

→ Carter Fahy

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

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator US EPA ID No. NOT APPLICABLE 48176		Manifest Document No. 48176		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.			
3. Generator's Name and Mailing Address DEVENS COMMERCE CENTER 43 BUENA VISTA ST. P-12 FORT DEVENS, MA 01433				A. State Manifest Document Number MA 48176							
4. Generator's Phone 508 772-6340				B. State Gen. ID 43 BUENA VISTA ST. FORT DEVENS, MA							
5. Transporter 1 Company Name ENVIRONMENTAL PRODUCTS & SERVICES, INC.				C. State Trans. ID MA 25684							
6. US EPA ID Number NYD98076119				D. Transporter's Phone 315-471-0503							
7. Transporter 2 Company Name				E. State Trans. ID							
8. US EPA ID Number				F. Transporter's Phone							
9. Designated Facility Name and Site Address OLSON'S GREENHOUSES 590 SOUTH ST. E. RAYNHAM, MA 02767				G. State Facility's ID Not Required							
10. US EPA ID Number MA D059733				H. Facility's Phone 508-880-6002							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers		13. Total Quantity		14. Unit		Waste No.	
a. FUEL OIL MIXTURE, COMBUSTIBLE LIQUID, NA1993, PGIII				No. Type		Quantity		Wt/Vol		Waste No.	
b.				0 0 1 T		127010		G		MA96	
c.											
d.											
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)				K. Handling Codes for Wastes Listed Above							
a. #2 FUEL OIL, WATER				a. 2							
b.				b.							
c.				c.							
d.				d.							
15. Special Handling Instructions and Additional Information Job #: E0641 PO #: Emergency #: (315) 471-0503 FRG 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 RJ Ostrowski				Date Month Day Year 05/16/96			
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature Phil Plick				Date Month Day Year 05/16/96			
Printed/Typed Name Phil Plick Jr				Signature Phil Plick Jr				Date Month Day Year 05/16/96			
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature				Date			
Printed/Typed Name				Signature				Date			
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 S. Carmelko				Signature Anthony S. Carmelko				Date Month Day Year 05/16/96			

Approved OMB No. 2050-0039. Expires 9-30-96

Form 8700-22 (Rev. 9-94) Previous editions are obsolete.

COPY>3:

FACILITY MAILS TO GENERATOR

MA 48176

COPY>3:

FACILITY MAILS TO GENERATOR



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

Print or type. (Form designed for use on elite (12-pin) dot matrix printer)

UNIFORM HAZARDOUS WASTE MANIFEST		Manifest Document No. MA 8178		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address DEVENS COMMERCE CENTER 43 BUENA VISTA ST. P-12 FORT DEVENS, MA 01433				A. State Manifest Document Number MA 8178			
4. Generator's Phone () 508 772-6340				B. State Gen. ID 43 BUENA VISTA ST. P FORT DEVENS, MA			
5. Transporter 1 Company Name ENVIRONMENTAL PRODUCTS & SERVICES, INC		6. US EPA ID Number NYD980761191		C. State Trans. ID 25684AA			
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone () 315 471-0503			
9. Designated Facility Name and Site Address OLSON'S GREENHOUSES 590 SOUTH ST. E. RAYNHAM, MA 02767		10. US EPA ID Number MA D05973370		E. State Trans. ID			
				F. Transporter's Phone ()			
				G. State Facility ID Not Required			
				H. Facility's Phone 508 880-6002			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers		13. Total Quantity	
				No. Type		Unit Wt/Vol	
a. FUEL OIL MIXTURE, COMBUSTIBLE LIQUID, NA1993, PGLII				0 0 1 T T		12900 G	
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)				K. Handling Codes for Wastes Listed Above			
a. #2 FUEL WATER				b. D			
c.				c.			
d.				d.			
15. Special Handling Instructions and Additional Information Job #: E0641 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.							
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature RJTO		Date Month Day Year 01/17/91	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature Phil Pike Jr		Date Month Day Year 01/17/91	
19. Discrepancy Indication Space				Signature		Date Month Day Year	
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.				Signature Cheryl S. Cavanaugh		Date Month Day Year 01/17/91	



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

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

UNIFORM HAZARDOUS WASTE MANIFEST		Manifest No. MA 005973337		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address DEVENS COMMERCE CENTER 43 BUENA VISTA ST. P-12 FORT DEVENS, MA 01433				A. State Manifest Document Number MA 005973337			
4. Generator's Phone (508 772-6340)				B. State Gen. ID # 43 BUENA VISTA ST. P-12 FORT DEVENS, MA			
5. Transporter 1 Company Name ENVIRONMENTAL PRODUCTS & SERVICES, INC.				C. State Trans. ID # 26133/MA			
6. US EPA ID Number NYD98076119				D. Transporter's Phone (315 471-0503)			
7. Transporter 2 Company Name				E. State Trans. ID			
9. Designated Facility Name and Site Address OLSON'S GREENHOUSES 590 SOUTH ST. E. RAYNHAM, MA 02767				F. Transporter's Phone ()			
10. US EPA ID Number MA 005973337				G. State Facility's ID # Not Required			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers		13. Total Quantity	14. Unit Wt/Vol
a. FUEL OIL MIXTURE, COMBUSTIBLE LIQUID, NA1993, PGIII				No. Type		1600	5/123
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)				K. Handling Codes for Wastes Listed Above			
a. #2 FUEL OIL WATER				a. B18.9			
b.				b.			
15. Special Handling Instructions and Additional Information EO649 Job #: 10641 PO #: Emergency #:(315)471-0503 ERG A. 27				Binned for Emergency			
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 JAMES E. ARMSTRONG				Signature <i>[Signature]</i>		Date 05/23/96	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <i>[Signature]</i>		Date 05/23/96	
Printed/Typed Name PHILIP PIKE JR.				Signature <i>[Signature]</i>		Date 05/23/96	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
Printed/Typed Name				Signature		Date	
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 JEFFREY E. KARKIV				Signature <i>[Signature]</i>		Date 05/23/96	

APPENDIX B

TANK MANIFESTS AND RECEIPTS



The Commonwealth of Massachusetts

Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

May 20 1996
10:41

To: HEAD OF FIRE DEPARTMENT
CHIEF PASQUALE
City or Town

C.62 S.40 M.G.L.

DIG SAFE NUMBER
961907225
Start Date May 10 96

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)

T-3548

Address

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

DEVED COMMERCE CENTER
Street address (city or town)

FDID# 17919 to approved Tank Yard# 008

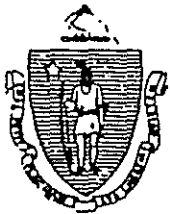
State clearly type of
Inert gas used in
steel storage tank

CO2
Type of Inert gas used

Name of Person, Firm, Corporation disposing tank J.C. Goss Readville MA.

Date issued - rejected 5/20 1996
Date of expiration, 19 paid/due
Fee (MGL C-148, S-10A)

By: J.C. Goss
Signature of Applicant



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

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

Name:

Full name of person, firm or Corporation
To transport underground steel storage tank(s)
to Approved tank yard#

State clearly type of
Inert gas used in
steel storage tank

steel tank:

method

FDID# 17919

Fee paid \$

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

This permit will expire 1996

Approved tank yard#
008
Signature of official granting permit (TITLE)

C.62 S.40 M.G.L.

DIG SAFE NUMBER
961907225
Start Date May 10 96

Tank Data

Gallons 1,000

Previous Contents #2FO

Diameter _____ Length _____

Date Received 5-23-96

Serial # (if available) _____

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

Tank Removed From:

Commence Ctn
(No. and Street)

FT DEVERIS
(City or Town)

Fire Dept. Permit # N/A

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

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS JAMES G. GRANT CO., INC.
OF R. 28 WOLCOTT ST.
APPROVED TANK YARD READVILLE, MA 02137
APPROVED TANK YARD NO. #002



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

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 NONNIS and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FDID# 17919 to transport this tank to this yard.

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

[Signature] [Signature] 5-23-96
SIGNATURE TITLE DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 17919 pursuant to 502 CMR 3.00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)

APPENDIX C

LABORATORY ANALYTICAL RESULTS

Page 1

TOXIKON CORP.

REPORT

Work Order # 96-05-384

Received: 05/21/96

05/29/96 15:22:12

REPORT HYDROSCIENCE
TO 415 VFW DRIVE
ROCKLAND, MA 02370
617-871-0232 FAX:1029
ATTEN WHITEY MORRIS

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (617)275-3330

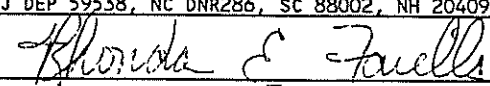
CERTIFIED BY 

CONTACT JOHN M

CLIENT HYDROSCIENCE SAMPLES 2
COMPANY HYDROSCIENCE
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 FT.DEVENS
TAKEN 5/20/96
TRANS _____
TYPE SOIL
P.O. # _____
INVOICE under separate cover

VERIFIED BY: 

SAMPLE IDENTIFICATION

01 3548-STOCK
02 3548-COMP

TEST CODES and NAMES used on this workorder

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

Page 2

TOXIKON CORP.

REPORT

Work Order # 96-05-384

Received: 05/21/96

Results by Sample

SAMPLE ID <u>3548-STOCK</u>	SAMPLE # <u>01</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>05/20/96 15:00:00</u> Category <u>SOIL</u>	
TPH IR <u>266</u>	
mg/Kg DL=40.0	

Received: 05/21/96

Results by Sample

SAMPLE ID 3548-STOCKFRACTION 01ATEST CODE 8260NAME PURGEABLE ORGANICS VOADate & Time Collected 05/20/96 15:00:00Category 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	Bromochloromethane	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-Dichloropropane	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 05/28/96

ANALYST CMD

INSTRUMENT _____ G

DIL. FACTOR 1

UNITS ug/Kg

COMMENTS _____

ND = Not detected at detection limit

Received: 05/21/96

Results by Sample

SAMPLE ID 3548-STOCKFRACTION 01ATEST CODE 827PAHNAME 8270 PAH ONLYDate & Time Collected 05/20/96 15:00:00Category SOIL

BASE NEUTRAL EXTRACTABLES

	RESULT	LIMIT
Naphthalene	ND	350
Acenaphthylene	ND	350
Acenaphthene	ND	350
Fluorene	ND	350
Phenanthrene	ND	350
Anthracene	ND	350
Fluoranthene	ND	350
Pyrene	ND	350
Benzo (a) anthracene	ND	350
Chrysene	ND	350
Benzo(b)fluoranthene	ND	350
Benzo(k)fluoranthene	ND	350
Benzo(a)pyrene	ND	350
Indeno(1,2,3-cd)pyrene	ND	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	ND	350
2-Methylnaphthalene	ND	350

Notes and Definitions for this Report:

UNITS: ug/KgEXTRACTED: 05/24/96DATE RUN: 05/28/96ANALYST: PACINSTRUMENT: FDIL. FACTOR: 1

ND = not detected at detection limit

Received: 05/21/96

Results by Sample

SAMPLE ID <u>3548-COMP</u>	SAMPLE # <u>02</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>05/20/96 14:30:00</u> Category <u>SOIL</u>	
TPH_IR <u>224</u>	
mg/Kg DL=40.0	

Received: 05/21/96

Results by Sample

SAMPLE ID 3548-COMPFRACTION Q2ATEST CODE 8260NAME PURGEABLE ORGANICS VOADate & Time Collected 05/20/96 14:30:00Category 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	Bromochloromethane	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-Dichloropropane	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 05/28/96

ANALYST CMD

INSTRUMENT _____ G

DIL. FACTOR 1

UNITS ug/Kg

COMMENTS _____

ND = Not detected at detection limit

Received: 05/21/96

Results by Sample

SAMPLE ID 3548-COMPFRACTION Q2ATEST CODE 827PAHNAME 8270 PAH ONLYDate & Time Collected 05/20/96 14:30:00Category SOIL

BASE NEUTRAL EXTRACTABLES

	RESULT	LIMIT
Naphthalene	ND	350
Acenaphthylene	ND	350
Acenaphthene	ND	350
Fluorene	ND	350
Phenanthrene	ND	350
Anthracene	ND	350
Fluoranthene	ND	350
Pyrene	ND	350
Benzo (a) anthracene	ND	350
Chrysene	ND	350
Benzo(b)fluoranthene	ND	350
Benzo(k)fluoranthene	ND	350
Benzo(a)pyrene	ND	350
Indeno(1,2,3-cd)pyrene	ND	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	ND	350
2-Methylnaphthalene	ND	350

Notes and Definitions for this Report:

UNITS: ug/KgEXTRACTED: 05/24/96DATE RUN: 05/28/96ANALYST: PACINSTRUMENT: FDIL. FACTOR: 1

ND = not detected at detection limit

Received: 05/21/96

Test Methodology

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
ORGANICS; CAPILLARY COLUMN 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.

CHAIN OF CUSTODY RECORD

5.29.5

PROJECT ID/LOCATION: F-7, D. 1000

7. OTHER (SPECIFY

FOIA
TAM (418.1)
VOC (8060)
FAH (60.70)

SAMPLED BY: <i>C.C.F.</i>	DATE: <i>5 - 20 - 96</i>	QUOTATION #:	
	TIME: <i>1 - - -</i>		
RELINQUISHED BY: <i>W. H. H. H.</i>	DATE: <i>5 - 21 - 96</i>	RECEIVED BY: <i>Mr. Sandbeck</i>	DATE: <i>5 - 21 - 96</i>
	TIME: <i>12:15 -</i>		TIME: <i>10:45 -</i>
RELINQUISHED BY: <i>Mr. J. J. J.</i>	DATE: <i>- - - 96</i>	RECEIVED FOR LAB BY: <i>[Signature]</i>	DATE: <i>5 - 21 - 96</i>
	TIME: <i>- - -</i>		TIME: <i>1:14 PM</i>
METHOD OF SHIPMENT		COOLER TEMPERATURE	

☒ RUSH *5* BUSINESS DAY TURN AR
☐ 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

APPENDIX D

COMPACTION TESTS



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

SOILS COMPACTION REPORT

PROJECT: Fort Devens, Ayer
PROJECT #: 60409
DATE: June 19, 1996
INSPECTOR: John Vogel

EMP.#: 226	REPORT #:	CODE:	LAB #:
ARR. TIME: 800	JOB HOURS:	T.T.:	MILEAGE:
TEMP: 71 L	WIND: H 0	HUMID.: H 0 L	SUNNY / CLOUDY

MAXIMUM DRY DENSITY: 130.8 // 115.3

OPTIMUM MOISTURE CONTENT: 8.3 // 9.5

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 %
1	Building 3541	11 ft	2 ft	95.2% 124.5 pcf	95%	4.1	8.3
2			grade	95.7 125.2 pcf		4.3	8.3
3			grade	96.5 114.1		6.6	9.5
4	3548		3 ft	95.4 124.9		5.5	8.3
5			1 ft	96.3 125.9		6.1	8.3
6			grade	96.8 114.5		4.6	9.5
7	3546		3 ft	95.9 113.4		5.9	9.5
8			1 ft	96.8 114.5		6.2	9.5
9			grade	97.9 115.8		4.8	9.5
10	1431		4 ft	96.3 113.9		6.5	9.5
11			2 ft	96.7 114.4		7.1	9.5
12			grade	95.8 113.3		6.3	9.5
13	1671		2 ft	97.1 114.8		6.0	9.5
14			grade	96.0 113.5		5.6	9.5
15	1661		2 ft	95.4 112.8		5.3	9.5
16			grade	96.6 114.3		5.8	9.5
17	202		2 ft	96.4 114.0		6.4	9.5
18			grade	95.9 113.4		5.9	9.5
19	1676		2 ft	95.8 113.3		5.8	8.3
20			grade	96.2 113.8		6.1	9.5

Tests not meeting requirements: none

Who notified: Bob (Dir Const.)

Recommendations: none at this time

REMARKS: None at this time

TECHNICIAN:
APPROVED:



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)

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

3. No specifications provided.

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

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

400 Hingham Street, Rockland, Massachusetts 02370

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

Offices located throughout the United States and Canada



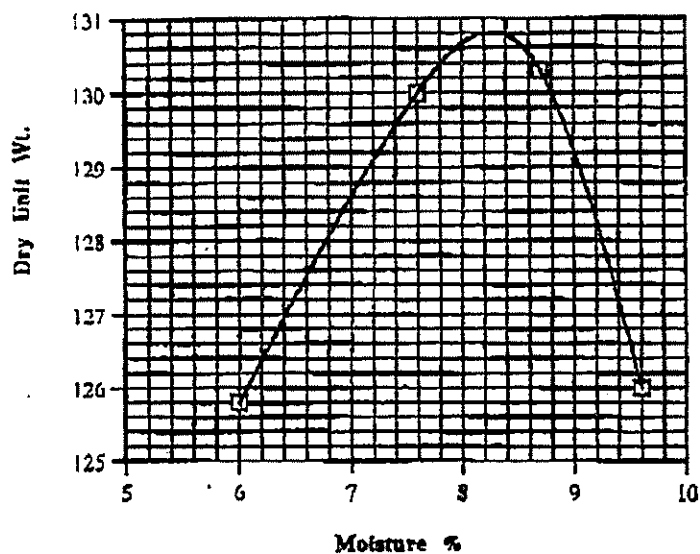
Briggs Associates
A Tundra Corporation Company

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

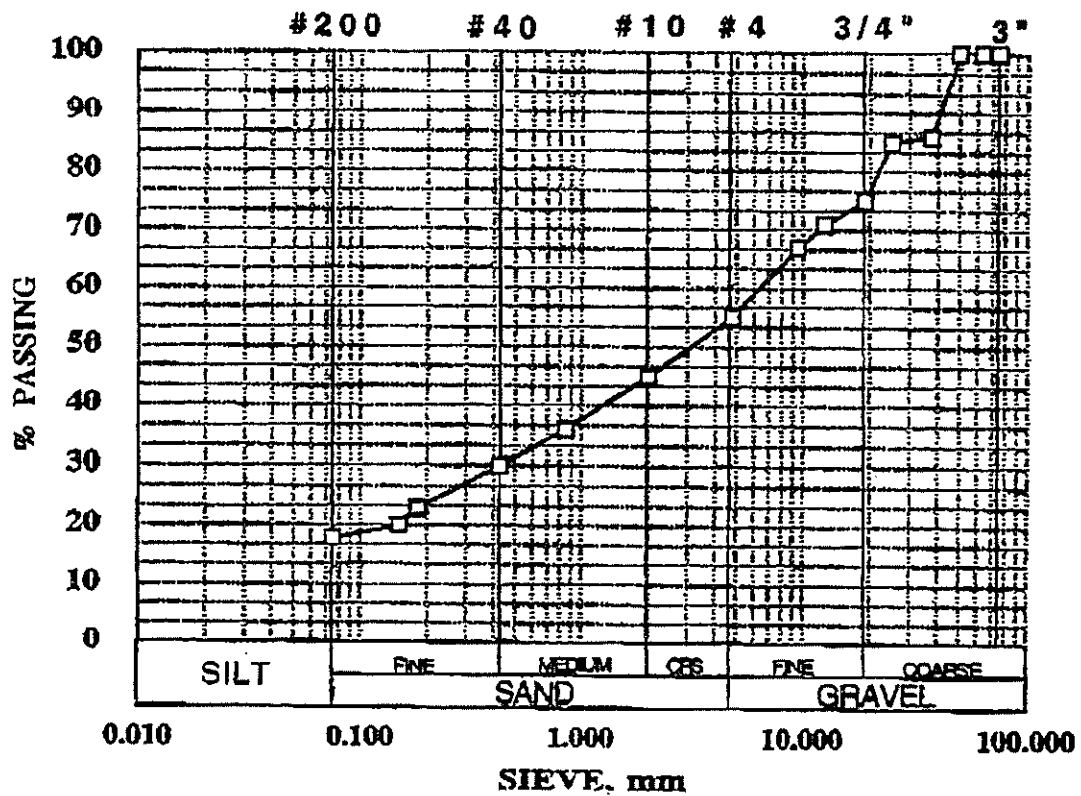
Project: D & C Construction / Ft. Devens

Sample No.

M-956

Date: 6/3/96

SIEVE





Tundra Corporation

D & C Construction / Ft. Devens

Briggs # 60904

Tested: 6-5-96

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

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

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

3. No specifications provided.

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

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

400 Flingham Street, Rockland, Massachusetts 02370

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

Offices located throughout the United States and Canada



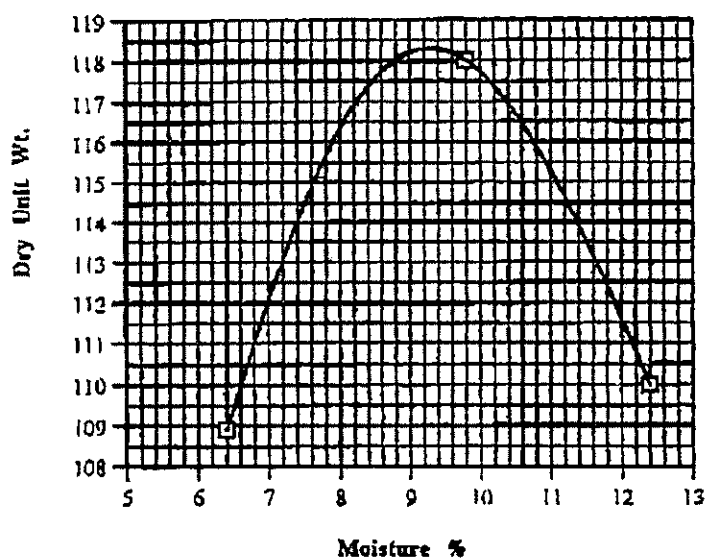
Briggs Associates
A Tundra Corporation Company

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

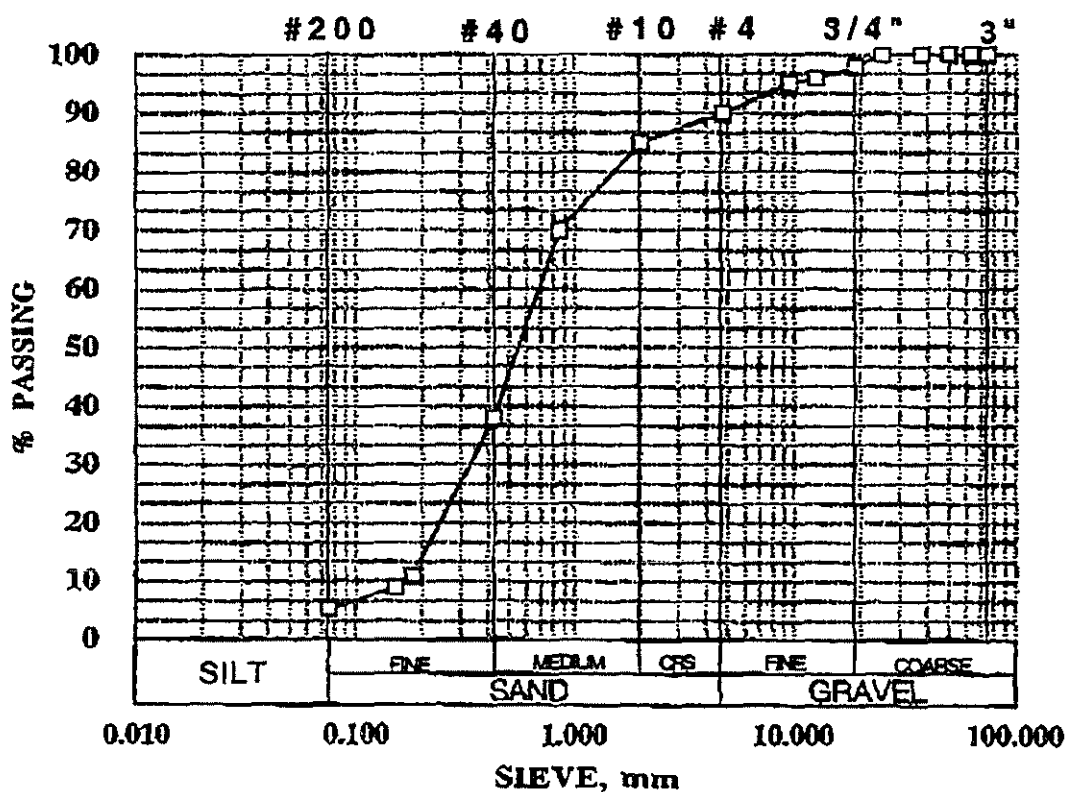
Project: D & C Construction / Ft. Devens

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)

1. 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.

3. 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

2. 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.

4. 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. _____

5. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

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

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

Other: _____

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

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

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



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030)

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

Temporary Storage Address:

Street: N/A

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

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

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

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

Inorganic Absorbant Materials Other: _____

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

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

Engineered Impoundments Other: _____

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

Kerosene Jet Fuel Other: _____

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

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

Response Action Associated with Bill of Lading (circle one): Immediate Response Action Release Abatement Measure

Utility-Related Abatement Measure Limited Removal Action (LRA) Comprehensive Response Action

Other (specify): _____

Remediation Waste Characterization Support Documentation attached:

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

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

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: S E A Consultants, Inc.

LSP Name: William J. Mallio Title: Principal Scientist

Telephone: 617-498-4635 Ext. _____

I attest that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, and in my professional opinion and judgment based upon application of

- (i) the standard of care in 309 CMR 4.02(1),
- (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
- (iii) the provisions of 309 CMR 4.03(5).

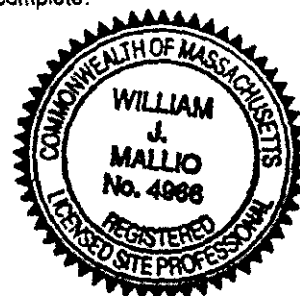
to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility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

Signature: William J. Mallio

Seal:

Date: 7/25/96

License Number: 4966





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

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

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
Bureau of Waste Site Cleanup Fort Dev. 120313

BWSC-012B

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

Release Tracking Number:

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: 108518

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

Truck/Tractor Registration: 328895 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 8:07

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

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

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

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: 28658 Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 8:15

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: 32805 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 11:33

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

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

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
Bureau of Waste Site Cleanup

BWSC-0128

Release Tracking Number:

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

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [Signature] 108639

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

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

Receiving Facility/Temporary Storage Representative: [Signature]

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

Load Size (cu. yds./tons): 28.57

LOAD 2: Signature of Transporter Representative: [Signature] 108647

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

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

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

LOAD 3: Signature of Transporter Representative: [Signature] 108657

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

Truck/Tractor Registration: 1796-535 MA Trailer Registration (if any): 27794 MA

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

LOAD 4: Signature of Transporter Representative: [Signature] 108719

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

Truck/Tractor Registration: 32805 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

LOAD 5: Signature of Transporter Representative: [Signature] 108723

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

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

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

LOAD 6: Signature of Transporter Representative: [Signature] 108726

Date of Shipment: 8/14/96 Time of Shipment: 1:58 (circle one) am/pm

Truck/Tractor Registration: 28570 Trailer Registration (if any): 27145

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

LOAD 7: Signature of Transporter Representative: [Signature] 108731

Date of Shipment: 8/14/96 Time of Shipment: 2:00 (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative: [Signature]

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

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

II. LOG SHEET VOLUME INFORMATION:

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

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

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



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

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

Release Tracking Number:

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

8/14/96

2:59

(circle one) am/pm

Truck/Tractor Registration:

1696-535 MA

Trailer Registration (if any):

027794 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

8/14/96

4:03

(circle one) am/pm

Load Size (cu. yds./tons):

39.79

LOAD 2: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment:

Time of Shipment:

/ /

:

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt:

/ /

:

(circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

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

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
Bureau of Waste Site Cleanup

BWSC-012B

Port Dev. 120313

Release Tracking Number:

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

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:18 (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): 29.65

LOAD 2: Signature of Transporter Representative:

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

Truck/Tractor Registration: 26642 Trailer Registration (if any): 29638

Receiving Facility/Temporary Storage Representative:

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

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

LOAD 3: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:30 (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):

LOG SHEET VOLUME INFORMATION:

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

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

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

Release Tracking Number:

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

2-11210

K. SUMMARY OF SHIPMENTS:

[illegible]



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

2-11210

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

Receiving Facility/Temporary
Location Representative (print): Amelique Cosgrove

Title: Sale Coordinator

Signature: [Signature]

Date: 8/15/96

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

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

Signature: [Signature]

Date: 9/12/96

Name of Person (print): JAMES E. ARMSTRONG

FOR RON OSTROWSKI