

Appendix D
LRA Documentation

Memorandum

ERM-New England, Inc.

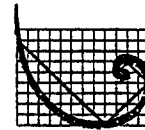
205 Portland Street
Boston, MA 02114
(617) 742-8228
(617) 720-5742 (FAX)

To: File

From: John D'Agostino, Duane Wanty; for John McTigue

Date: 7 May 1996

Subject: Raytheon Wayland, LRA Activities



ERM

1.0 Introduction

1.1 Background

Raytheon Electronic Systems (RES) contracted ERM-New England, Inc. (ERM) to conduct a Phase I Investigation of RES's Wayland, Massachusetts' Boston Post Road facility. The results of field sampling and analysis of soils conducted during the Phase I investigation revealed concentrations of organic and inorganic contaminants in soils within three drywells and one sump above Reportable Concentrations (RCs) pursuant to 310 CMR 40.1600 of the Massachusetts Contingency Plan (MCP). In order to abate these conditions, Raytheon elected to conduct four Limited Removal Actions (LRAs) pursuant to 310 CMR 40.0318, including excavation, removal and disposal of contaminated materials.

1.2 Purpose & Scope

The purpose of this memorandum is to summarize and document the completion of the four LRAs and the current site status. The LRAs were conducted to remove contaminated soils and associated materials containing Oil and/or Hazardous Materials (OHM) in excess of RCs. ERM provided technical assistance including oversight, sampling and analysis of soils, and Licensed Site Professional (LSP) services. RES contracted Laidlaw Environmental Services (LES) to perform excavation, removal, transportation and disposal services. Because ERM was not involved in all aspects of the LRAs, this summary is limited to ERM personnel's personal observations and compilation of information collected from third party sources (i.e., RES and LES personnel).

2.0 Methodology

The parties involved in the four LRAs varied as follows:

- LES was the contractor for the removal and disposal of soils from dry well DW-06 and RES conducted the construction oversight. ERM later assisted in the testing of soils removed as part of this LRA.

- LES was the contractor for the removal and disposal of soils from dry wells DW-01 and DW-05 and the Boiler Room sump. ERM conducted the construction oversight.
- RES Personnel capped pipes leading to former drywells.

Field screening methods were used as noted below in Section 3.0. In addition, field samples were analyzed at the laboratory using a combination (as detailed in Section 3.0) of the following methods:

- Volatile Organic Compounds (VOCs) by EPA Method 8260
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270
- Poly-Chlorinated Biphenyls (PCBs) by EPA Method 8080
- Organochlorine Pesticides by EPA Method 8080
- Total Petroleum Hydrocarbons (TPH) by EPA Method 8100
- RCRA 8 Total Metals
- TCLP Metals (only where specified below)

3.0 Results and Discussion

3.1 DW-06 (a.k.a. MH-13)

On 30 June 1995, RES became aware of concentrations in soils collected from dry well DW-06 (Sample MH-13) that exceeded RCs for PCBs (12 mg/kg), chromium (7,850 mg/kg), barium (5,310 mg/kg) and lead (666 mg/kg). VOCs and TPH did not exceed RCs. Follow-up investigation activities included a second round of sampling (LES), installation and sampling of a downgradient monitoring well (ERM), and advancement and sampling of a soil boring located adjacent to the dry well (ERM). ERM determined that concentrations did not exceed RCs in the monitoring well (MW-4) or soil boring (SB-5). Analytical results for soil analyses are contained in Table 1.

On 31 October 1995, LES excavated the dry well and surrounding soil. A total of approximately 80 cubic yards of soil were stockpiled onsite in a weather-protected manner. This pile was segregated into two piles: contaminated dry well soils and excess soil. ERM completed testing of the excess soil stockpile and confirmed that no RCs were exceeded. Disposal characterization results are summarized in Table 2. Excavation closure sampling results are contained in Table 1.

On 18 December 1995, RES arranged for the transport of the clean excess soils to AMREC in Charlton via Charlton Welding. Approximately 60 cubic yards of clean soil were shipped. Approximately 20 cubic yards of contaminated soils and debris were shipped by Dart Trucking to CWM Chemical Services in Model City, New York on 18 January 1996.

3.2 DW-01

Soils collected from dry well DW-01 (Sample SB-1) by ERM on 13 October 1995 exceeded RCs for four SVOCs as follows:

- benzo (b) fluoranthene at 2,900 µg/kg
- benzo (a) anthracene at 3,200 µg/kg
- chrysene at 3,100 µg/kg
- benzo (a) pyrene at 2,900 µg/kg

No VOCs, PCBs, or metals exceeded RCs. All analytical results are contained in Table 1.

On 19 December 1995, ERM supervised the backhoe removal of the drywell structure and associated contaminated soils. The excavation was completed to a target depth of 10 feet and measured approximately nine feet by nine feet (36 square feet). Approximately 30 cubic yards (measured in-ground) of soil and debris was removed from the DW-01 excavation. The contaminated soils and drywell structure (bricks and cement blocks) were placed on polyethylene sheeting in two piles adjacent to the drywell excavation.

ERM screened a soil sample taken from the bottom of the excavation for TPH screening using a Hanby TPH test kit. The screening result showed that the soil sample did not contain TPH. Confirmatory samples were taken from the sidewalls and bottom of the excavation by LES employees and sent to Alpha Analytical Laboratories for analysis of SVOCs, PCBs, and Pesticides. All concentrations were non-detectable in these confirmatory samples. When complete, LES secured the excavation with a snowfence that surrounded both stockpiled soils and the excavation. Closure sampling results are contained in Table 1.

On 19 December 1995, ERM collected samples from the two stockpiles for analysis of SVOCs, PCBs, Pesticides, and TCLP Metals. Disposal characterization results are summarized in Table 2. There were no detections of any constituents. On 18 January 1996, RES arranged for the transport of the contaminated soils to American Reclamation Corporation

(AMREC) in Charlton, Massachusetts. Dart Trucking handled the transportation. Bills of Lading are attached.

3.3 DW-05

Soils collected by ERM from dry well DW-05 on 13 and 20 October 1995 exceeded RCs for PCBs (up to 240 mg/kg), benzo(b,k) flouranthene (1,500 µg/kg), cadmium (200 mg/kg), chromium (2,300 mg/kg), lead (690 mg/kg) and silver (170 mg/kg). VOCs, SVOCs and pesticides were all below RCs. All analytical results are contained in Table 1.

LES personnel entered the dry well on 15 and 18 December 1995 using confined space entry safety equipment and removed contaminated soils from the bottom of the dry well using a five-gallon bucket. Approximately one cubic yard of material was removed from the dry well structure in this manner. Soils were placed in a Wrangler box and later transferred to six 55-gallon drums for proper offsite disposal.

A backhoe was then used to remove the dry well structure and associated contaminated soils. The contaminated soils and drywell structure (bricks and concrete blocks) were placed into two 20-cubic yard rolloff containers. The rolloff containers were covered with plastic sheeting attached to each container to protect against weather conditions. The excavation measured six feet by eight feet by nine feet deep, and approximately 16 to 17 cubic yards (measured in-ground) were removed in this manner.

ERM screened soil from the excavation for PCBs using DTECH test kits to determine the limits of excavation. A sample taken from nine feet below ground surface in the center of the excavation contained 0.5 to 1.0 parts per million (ppm) of PCBs. The screening results were determined by John Drobinski of ERM and Grace Hwang of Raytheon to be low enough to terminate the excavation activities. Confirmatory samples were then taken from all sidewalls and the bottom of the excavation by LES employees and sent to Alpha Analytical Laboratories for analysis of PCBs. All concentrations were non-detectable in these confirmatory samples. ERM used PCBs as an indicator of contamination in this dry well because codisposal of PCBs and metals is likely. ERM therefore assumes that the metals were removed to below RCs along with the PCBs. When completed, LES secured the excavation with snow fence that surrounded the entire excavation and one rolloff container. Closure sampling results are contained in Table 1.

On 18 December 1995, LES collected samples from the two rolloffs for analysis of VOCs, SVOCs, PCBs, Pesticides, and Total RCRA 8 Metals.

The only concentration that exceeded RCs was for PCBs (2,500 µg/kg) in one of the rollofs. There were no detections of VOCs, SVOCs, or pesticides in either rolloff. Disposal characterization results are summarized in Table 2. On 16 January 1996, RES arranged for the transport of the contaminated soils to Model City, New York via Dart Trucking. The non-contaminated soil was sent to AMREC via Charlton Welding. The six drums of PCB contaminated soil collected on 15 December 1995 were sent to Laidlaw Environmental in Reidsville, North Carolina via JB Hunt Special Commodities on 23 January 1996. Manifests and Bills of Lading are attached.

3.4 *Boiler Room Sump*

Soils collected by LES from the Boiler Room sump on 20 October 1995 were analyzed for TPH, RCRA 8 TCLP, and PCBs. Only PCBs were detected at 2,300 µg/kg. However, the laboratory believed they swapped samples with a different sample, therefore, resampling was necessary. Soils collected by LES from the Boiler Room sump on 16 November 1995 exceeded RCs for PCBs (3.2 mg/kg). All analytical results are contained in Table 1.

On 18 December 1995, LES employees removed approximately one 55-gallon drum of soil from the sump using a shovel and a five-gallon bucket. The excavation was completed to a target depth of four feet below ground surface. ERM screened a soil sample taken from the center of the completed excavation for PCBs using a DTECH test kit. The screening results showed that the sample contained less than 0.5 ppm of PCBs, and the excavation was terminated. A confirmatory sample was taken from the base of the sump and sent to Alpha Analytical Laboratories for analysis of PCBs. No PCBs were detected in the confirmatory sample. Closure sampling results are contained in Table 1.

On 23 January 1996, RES arranged for the transport of the contaminated soils to Laidlaw Environmental Services in Reidsville, North Carolina. JB Hunt Special Commodities handled the transportation. Manifests are attached as Appendix D.

4.0 **Summary, Conclusions and Recommendations**

4.1 *Summary and Conclusions*

- PCBs, chromium, barium, lead, oil and grease were detected in dry well DW-06 above RCs. Following the LRA, which occurred within 120 days of knowledge of a release, all concentrations were below RCs.

- Four SVOCs were detected in dry well DW-01 above RCs. Following the LRA, which occurred within 120 days of knowledge of a release, all concentrations were below RCs.
- PCBs, benzo (b,k) flouranthene, cadmium, chromium, silver and lead were detected in dry well DW-05 above RCs. Following the LRA, which occurred within 120 days of knowledge of a release, all concentrations were below RCs.
- PCBs were detected in the Boiler Room sump above RCs. Following the LRA, which occurred within 120 days of knowledge of a release, all concentrations were below RCs.

4.2 *Recommendations*

- ERM recommends that no further action be taken at former dry well DW-06.
- ERM recommends that no further action be taken at former dry well DW-01.
- ERM recommends that no further action be taken at former dry well DW-05.
- ERM recommends that no further action be taken at the Boiler Room sump.

Table 1
Sheet 1 of 2
Summary of Soil Conditions Prior to and After LRAs *
Raytheon, Wayland, Massachusetts

Sample ID, Date Sampled, Reference location Before LRA or After LRA	Reportable Concentration (S-1)	SB-1	47139-1 (Bottom)	47139-02 (Front)	47139-03 (Right)	47139-04 (Back)	47139-05 (Left)	MH-13	MH-13	45375-01	45375-2	45375-3	45375-4	45375-5
		13-Oct-95	14-Dec-95	19-Dec-95	19-Dec-95	19-Dec-95	19-Dec-95	14-Jan-95	10-Jul-95	30-Oct-96	20-Oct-96	30-Oct-96	30-Oct-96	30-Oct-96
		DW-01	DW-01 Excavation	DW-01 Excavation	DW-01 Excavation	DW-01 Excavation	DW-01 Excavation	DW-06	DW-06	DW-06	DW-06	DW-06	DW-06	DW-06
		Before	After	After	After	After	After	Before	IEA	After	After	After	After	After
Organic														
Volatile Organic Compounds (VOCs) (µg/kg)														
<i>EPA Method 8260</i>														
Ethylbenzene	80,000	-	NA	NA	NA	NA	NA	-	-	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	100,000	-						-	-					
Xylenes	500,000	-						-	-					
Methylene chloride	100	108						138	188					
Tetrachloroethene	500	-						-	-					
Trichlorobenzene-1,2,4	100,000	-						-	-					
n-Butylbenzene	NSL	-						-	-					
sec-Butylbenzene	NSL	-						-	-					
Isopropylbenzene	1,000,000	-						-	-					
p-Isopropyltoluene	NSL	-						-	-					
Naphthalene	4,000	-						-	-					
1,3,5-Trimethylbenzene	10,000	-						-	-					
1,2,4-Trimethylbenzene	1,000,000	-						-	-					
Semi-Volatile Organic Compounds (SVOCs) (µg/kg)														
<i>EPA Method 8270</i>														
Trichlorobenzene-1,2,4	100,000	-	ND	ND	ND	ND	ND	-	-	ND	NA	NA	NA	NA
Naphthalene	4,000	-						-	-					
Benzo (b) fluoranthene	700	2,900						-	-					
Pyrene	500,000	5,100						-	-					
Tetrachlorobenzene	1,000,000	-						-	-					
Pentachlorobenzene	50,000	-						-	-					
Benzo (a) anthracene	700	3,200						-	-					
Chrysene	7,000	3,100						-	-					
Fluoranthene	600,000	4,300						-	-					
Benzo (a) pyrene	700	2,900						-	-					
bis-2-ethylhexyl phthalate	100,000	-						1,400	-					
Polychlorinated Biphenyls (PCBs) (µg/kg)														
<i>EPA Method 8080</i>														
Arochlor 1254	2,000	-						-	6,700					
Arochlor 1260	2,000	12,000						2,000	-					
Organochlorine Pesticides (µg/kg)														
<i>EPA Method 8080</i>														
	-	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (TPH) (mg/kg)														
<i>EPA Method 8100</i>														
Unknown Hydrocarbon	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil #6	500	-						300	-					
Oil and Grease (mg/kg)														
	NA	NA	NA	NA	NA	NA	NA	NA	1,379	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (TPH) (mg/kg)														
<i>EPA Method 418.1</i>														
	500	-						300	NA	NA	NA	NA	NA	NA
Inorganic														
Total Metals (mg/kg)														
Arsenic	30	5.96	NA	NA	NA	NA	NA	12	11.1	3.81	4.32	4.57	3.82	4.62
Barium	1,000	62.00						3,310	2,210	23	17	33	19	28
Cadmium	30	2.20						67.5	35.3	-	-	-	-	-
Chromium	1,000	19.60						7,850	25,200	73.5	8.3	16.7	32.8	17.0
Lead	300	4.40						549	644	4.05	5.88	4.98	8.77	8.61
Mercury	20	-						0.81	1.81	-	-	-	-	-
Selenium	400	-						-	-	-	-	-	-	-
Silver	100	-						45.1	31.7	-	-	-	-	-

Notes:
 - Analytical result was below the method detection limit
 ND=No compounds or elements detected above method detection limits
 NA = Not Analyzed
 µg/kg=microgram per kilogram (approximately equal to part per billion (ppb))
 mg/kg=milligram per kilogram (approximately equal to part per million (ppm))
 *Tabulated results include only those compounds which were detected above method detection limits.
 NSL = No Standard Listed
 Shading indicates that the value exceeds the Reportable Concentration

Table 1
Sheet 2 of 2
Summary of Soil Conditions Prior to and After LRAs *
Raytheon, Wayland, Massachusetts

Sample ID, Date Sampled, Reference location Before LRA or After LRA	Reportable Concentration	SB-8 S1 20-Oct-95 Inside DW-5 Before	SB-8 S2 13-Oct-95 Inside DW-5 Before	SB-8 S3 13-Oct-95 Inside DW-5 Before	SB-8 S4 13-Oct-95 Inside DW-5 Before	47131-01 (Bottom) 18-Dec-95 DW-5 Excavation After	47131-02 (Front) 18-Dec-95 DW-5 Excavation After	47131-03 (Right) 18-Dec-95 DW-5 Excavation After	47131-04 (Back) 18-Dec-95 DW-5 Excavation After	47131-05 (Left) 18-Dec-95 DW-5 Excavation After	213-1 16-Nov-95 Boiler Rm Original Before	47131-06 18-Dec-95 Boiler Rm Sump After
Organic												
<i>Volatile Organic Compounds (VOCs) (µg/kg)</i>												
EPA Method 8260												
Ethylbenzene	80,000	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	100,000	-										
Xylenes	500,000	-										
Methylene chloride	100	-										
Tetrachloroethene	500	90										
Trichlorobenzene-1,2,4	100,000	110										
n-Butylbenzene	NSL	-										
sec-Butylbenzene	NSL	-										
Isopropylbenzene	1,000,000	-										
p-Isopropyltoluene	NSL	-										
Naphthalene	4,000	-										
1,3,5-Trimethylbenzene	10,000	-										
1,2,4-Trimethylbenzene	1,000,000	-										
<i>Semi-Volatile Organic Compounds (SVOCs) (µg/kg)</i>												
EPA Method 8270												
Trichlorobenzene-1,2,4	100,000	5,700	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Naphthalene	4,000	640										
Benzo (b,k) flouranthene	700	1,500										
Pyrene	500,000	1,200										
Tetrachlorobenzene	1,000,000	13,000										
Pentachlorobenzene	50,000	17,000										
Benzo (a) anthracene	700	-										
Chrysene	7,000	-										
Flouranthene	600,000	-										
Benzo (a) pyrene	700	-										
<i>Polychlorinated Biphenyls (PCBs) (µg/kg)</i>												
EPA Method 8080												
Arochlor 1260	2,000	240,000	1,000	630							3,200	
<i>Organochlorine Pesticides (µg/kg)</i>												
EPA Method 8080												
	-	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Total Petroleum Hydrocarbons (TPH) (mg/kg)</i>												
EPA Method 8100												
Unknown Hydrocarbon	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil #6	500											
Inorganic												
<i>Total Metals (mg/kg)</i>												
Arsenic	30	29	5.2	4.4	4.8	NA	NA	NA	NA	NA	NA	NA
Barium	1,000	120	9.5	15	12							
Cadmium	30	200	5.2	-	2.2							
Chromium	1,000	2,300	220	110	110							
Lead	300	690	57	12	6.5							
Mercury	20	1	-	-	-							
Selenium	400	-	-	-	-							
Silver	100	170	3.0	0.83	-							

Notes:

- = Analytical result was below the method detection limit

ND = No compounds or elements detected above method detection limits

NA = Not Analyzed

µg/kg = microgram per kilogram (approximately equal to part per billion (ppb))

mg/kg = milligram per kilogram (approximately equal to part per million (ppm))

* Tabulated results include only those compounds which were detected above method detection limits.

NSL = No Standard Listed

Shaded cells indicate that the value exceeds the Reportable Concentration

Table 2
Sheet 1 of 1
Summary of Disposal Characterization*
Raytheon, Wayland, Massachusetts

Sample I.D. Date Sampled Reference Location Comments	C-1 17-Nov-95 DW-06 Excavation	D-1 17-Nov-95 DW-06 Excavation	47133-06 19-Dec-98 DW-05 Stockpile	47133-07 19-Dec-95 DW-05 Stockpile	47139-6 19-Dec-95 DW-01 Stockpile	47139-7 19-Dec-95 DW-01 Stockpile
Organic						
<i>Volatile Organic Compounds (VOCs) (µg/l)</i>			ND	ND	NA	NA
EPA Method 8260						
Dichloroethene-cis-1,2						
Tetrachloroethene						
Trichloroethene						
Trichloroethane-1,1,1						
Dichloroethene-1,1						
<i>Semi-Volatile Organic Compounds (SVOCs)(µg/l)</i>			ND	ND	ND	ND
EPA Method 8270						
<i>Polychlorinated Biphenyls (PCBs)(µg/kg)</i>	ND	ND				
EPA Method 8080						
Arochlor 1260			2,500	460	ND	ND
<i>Organochlorine Pesticides (µg/l)</i>			ND	ND	ND	ND
EPA Method 8080						
<i>Total Hydrocarbon (mg/kg)</i>	930	130				
EPA Method 418.1						
Inorganic					ND	ND
<i>Total Metals (mg/kg)</i>						
Arsenic	2.9	3.3	6.9	6.0		
Barium	20	19	24	44		
Cadmium	-	-	23	10		
Chromium	37	37	260	160		
Lead	4.8	5.2	260	22.0		
Mercury	-	-				
Selenium	-	-				
Silver	-	-	1.1	0.43		

Notes:

- = Analytical result was below the method detection limit

ND = No compounds or elements detected above method detection limits

µg/kg = microgram per kilogram (approximately equal to part per billion (ppb))

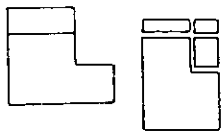
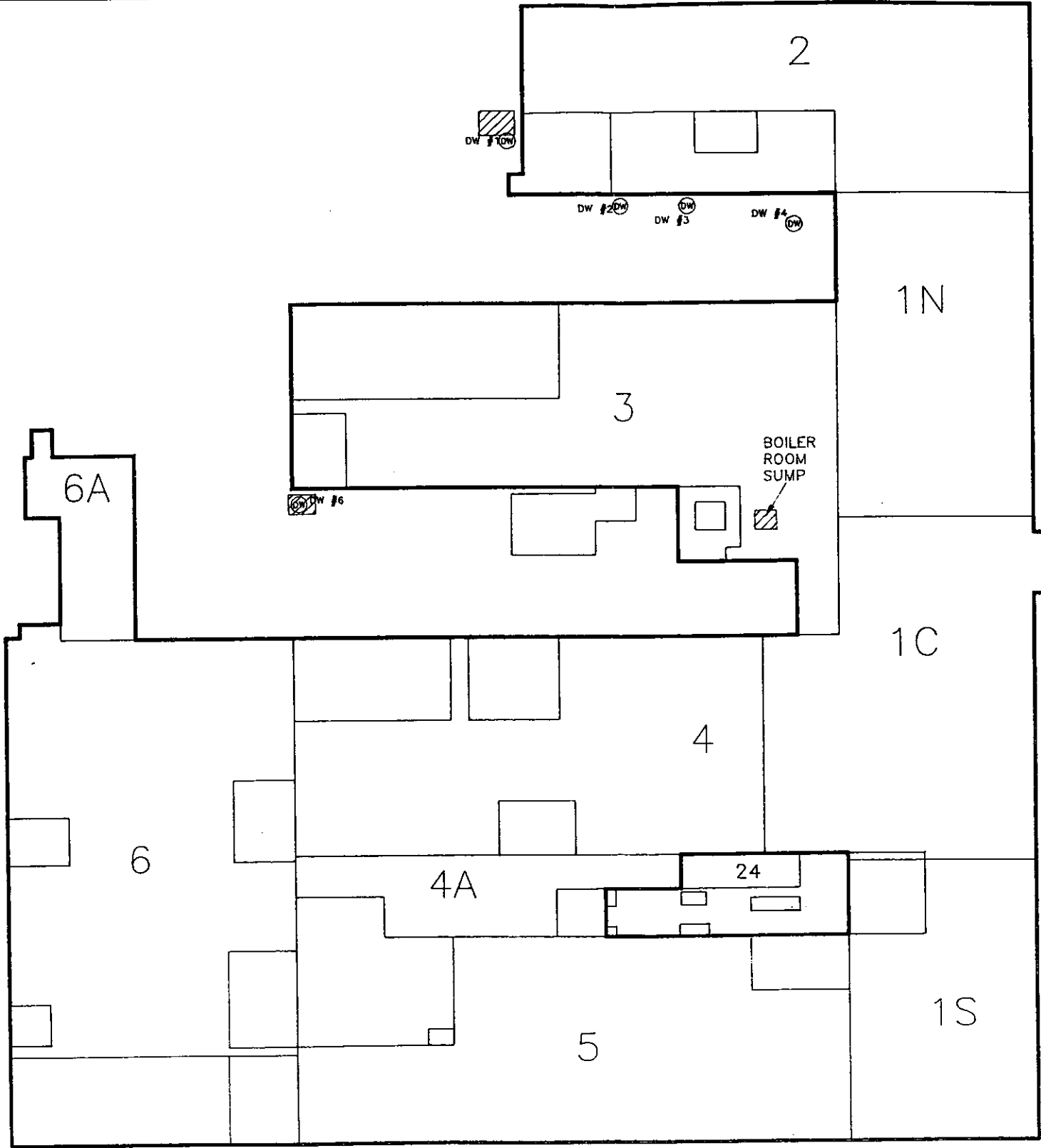
mg/l = milligram per liter (approximately equal to part per million (ppm))

*Tabulated results include only those compounds which were detected above method detection limits.


Refer to laboratory reports for a complete list of compounds analyzed and method or sample specific quantitation limits.


Shading indicates that the value exceeds the Reportable Concentration.

All soil samples were analyzed by Alpha Analytical Labs.



LEGEND

 LRA AREAS

 DRY WELL

ERM-New England, Inc.		
205 PORTLAND STREET - BOSTON, MA 02114 (617) 742-8228		
CLIENT NAME: RAYTHEON	DRAWN BY: KCW	DATE: 2/6/96
FILE NAME: 1434006	SCALE: NONE	PROJ: 143_40
RAYTHEON COMPANY 430 BOSTON POST ROAD - WAYLAND, MA		
LRA AREAS		FIGURE NO. 1
PROJECT MGR: JWM	TQM REV: CAF	

Limited Removal Action

DW-01



Release Tracking Number:

-

BILL OF LADING (pursuant to 310 CMR 40.0030)

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

Temporary Storage Address: N/A
Street: _____
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: Concrete blocks from dry well removal

Non-hazardous Uncontainerized Waste (circle all that apply): Non-aqueous Phase Liquid Other: 30 yd³ dump trailer

Non-hazardous Containerized Waste (circle all that apply): Tank Bottoms/Sludges Containers X 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: 20 Tons: _____ Other: _____

Contaminant Source (check one/specify): Transportation Accident Underground Storage Tank Other: Inactive Dry Well

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

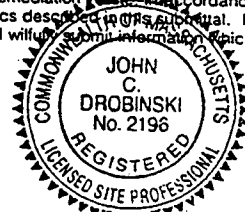
If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: ERM-New England, Inc.
LSP Name: John Drobinski Title: Principal-in-Charge
Telephone: 617-742-8228 Ext. 152

I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the Remediation Waste in accordance with 310 CMR 40.0030, and that the facility or location can accept remediation wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete.

Signature: _____ Seal: _____
Date: 1/16/96
License Number: 2196



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: George Chretien Date: 1/16/96
Name of Person (print): George Chretien



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

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

Release Tracking Number:

[] - []

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: _____

Date of Shipment: 1/18/96 Time of Shipment: _____ (circle one) am/pm

Truck/Tractor Registration: 21346 MA Trailer Registration (if any): 39128 MA

Receiving Facility/Temporary Storage Representative: _____

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

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

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): _____

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

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



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

Release/Tracking Number:

- NA

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

Receiving Facility/Temporary Location Representative (print): W. McCarbridge Title: manager
Signature: [Signature] Date: 1/18/92

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 willfully submitting false, inaccurate, or incomplete information.

Signature: _____ Date: 1/18/92
Name of Person (print): _____

FEB-05-1996 15:05 FROM

100 West Main Street
Northborough, MA 01532
Tel: (508) 393-6333
Fax (508) 393-4511



**AMERICAN
RECLAMATION
CORPORATION**

TO
P.O. Box 653
130 Sturbridge Road
Charlton, MA 01508
Tel. (508) 248-3777
Fax (508) 248-7701

15084402051 P.02

35536

DATE _____

CUSTOMER LAIDLAW

10:12 01/18/96

115020 LB G

GENERATOR RAYHEON DUAL

CITY WAMPIANO STATE MA

TRUCK NO. CW2

NET WEIGHT - TONS 41.59

REMARKS 1 LOAD OF OILY SOIL

10:24 01/18/96

115020 LB (K) G
31840 LB T
83180 LB N

DRIVER ON OFF [Signature]

WEIGHER D.P.



INFORMATION FORM FOR RELEASE SITES

GENERATOR INFORMATION:

Generator Name: Raytheon Electronic Systems
 Generator Address: 430 Boston Post Road
Wayland MA 01778
 Release Location: same as above
 Contact Person: Grace Hwang
 Telephone: 508 440 2729 Fax: 508 440 2051

RELEASE INFORMATION:

Site History/Use: This site was a research and development center. Pilot, small scaled production of electronic related devices were tested.
 Description of Release: Historical only. Constituents of petroleum were detected in a soil boring inside the dry well.
 Petroleum Released: Refer to attached soil boring results.
 Amount of Soil: ± 30 yards
 Description of Soil: Fine to medium sand AND < 10% concrete blocks

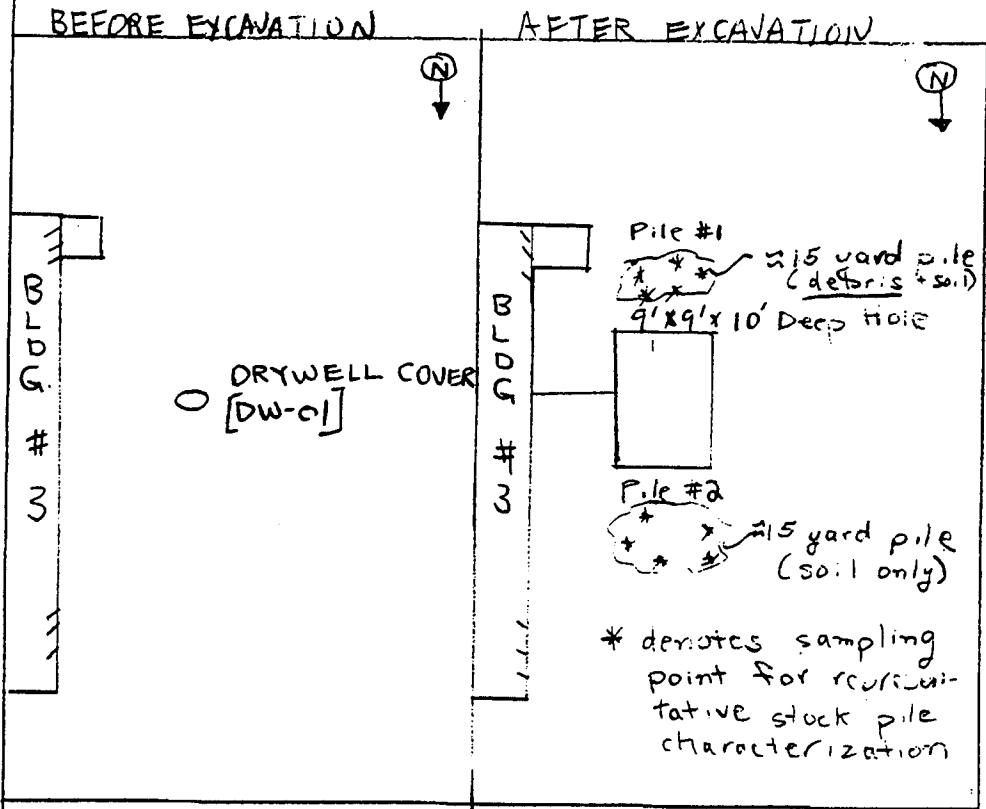
→ Note Client ID # SB-1 on IEA Lab Report RIITC-005.

BILLING INFORMATION: (for submission of documentation and invoice(s))

Company: Laidlaw Environmental
 Address: 221 Sutton Street
N Andover MA 01845
 Contact Person: Dave Daniels
 Telephone: 508 683 1002 Fax: 508 682 3871

SITE DIAGRAM AND SAMPLING INFORMATION:

In the space below, please provide an approximate representation of the site and/or the stockpile(s) of soil designated for recycling. Indicate the sampling delineations and methodologies used. Attach additional information if necessary. ~~SEE~~ attached sample results
 NOT TO SCALE



CERTIFICATION STATEMENT:

I certify that the information provided on this sheet and applicable attachments has been carefully reviewed and is representative of the site, and I have applied due diligence in the characterization of the site.

Signed: Grace Hwang Date: 12/27/95
 Name: Grace M Hwang Title: Technical Specialist
 Company: Raytheon Electronic Systems
 Telephone: 508 440 2729 Fax: 508 440 2051

SB-1 = DW

11/07/95 17:32

504 667 7871

IEA-MASS

ERM N.E.

003/021



SOIL BORING RESULTS BEFORE EXCAVATION

IEA LABORATORY RESULTS

Report Date: 11/07/95
 Client: Raytheon - EBSD
 Project: WAY ESA

Received Date: 10/24/95
 IEA Job Number: R117C-005

IEA Sample #	Client ID	Parameter	Results	Units	PQL	Date Analyzed
TOTAL METALS						
1	SB-1	Arsenic	5.96	mg/kg (dry)	0.50	11/01/95
1	SB-1	Barium	62	mg/kg (dry)	10	10/31/95
1	SB-1	Cadmium	2.2	mg/kg (dry)	2.0	10/31/95
1	SB-1	Chromium	13.6	mg/kg (dry)	3.0	10/31/95
1	SB-1	Lead	4.40	mg/kg (dry)	0.50	11/01/95
1	SB-1	Mercury	BQL	mg/kg (dry)	0.10	10/31/95
1	SB-1	Selenium	BQL	mg/kg (dry)	0.50	11/01/95
1	SB-1	Silver	BQL	mg/kg (dry)	2.0	10/31/95
TOTAL METALS						
2	SB-4	Arsenic	3.56	mg/kg (dry)	0.50	11/01/95
2	SB-4	Barium	21	mg/kg (dry)	10	10/31/95
2	SB-4	Cadmium	BQL	mg/kg (dry)	1.0	10/31/95
2	SB-4	Chromium	13.4	mg/kg (dry)	3.0	10/31/95
2	SB-4	Lead	7.73	mg/kg (dry)	0.50	11/01/95
2	SB-4	Mercury	BQL	mg/kg (dry)	0.10	10/31/95
2	SB-4	Selenium	BQL	mg/kg (dry)	0.50	11/01/95
2	SB-4	Silver	BQL	mg/kg (dry)	2.0	10/31/95
TOTAL METALS						
3	SB-9	Arsenic	4.73	mg/kg (dry)	0.50	11/01/95
3	SB-9	Barium	22	mg/kg (dry)	10	10/31/95
3	SB-9	Cadmium	BQL	mg/kg (dry)	1.0	10/31/95
3	SB-9	Chromium	9.6	mg/kg (dry)	3.0	10/31/95
3	SB-9	Lead	4.39	mg/kg (dry)	0.50	11/01/95
3	SB-9	Mercury	BQL	mg/kg (dry)	0.10	10/31/95
3	SB-9	Selenium	0.84	mg/kg (dry)	0.50	11/01/95
3	SB-9	Silver	BQL	mg/kg (dry)	2.0	10/31/95

COMMENTS:

PQL = Practical Quantitation Limit
 BQL = Below Quantitation Limit

Result3.wk1 Rev. 041393

ATTORNEY CLIENT
 COMMUNICATION AND
 WORK PRODUCT: ALL
 PRIVILEGES CLAIMED

10/07/95 17:22

506 667 7871

IEA-MASS

ERM N.E.

1004/021



IEA
An Aquarion Company

SOIL BORING RESULTS BEFORE EXCAVATION.

Analysis Report: EPA Method 8080A
Aroclors

Handwritten note:
Diluted

Client: Raytheon - RESD
 Project: WAY ESA
 Report Date: 11/06/95
 Collected: 10/13/95
 Received: 10/24/95
 Extracted: 10/27/95
 Analyzed: 10/30/95
 By: GAM

IEA ID: R117C-005-01
 Sample: SB-1
 Type: Soil
 Container: Glass

Dilution Factor: 2.4

Number	Compound	PQL ug/kg (dry)	Result ug/kg (dry)
1	Aroclor 1016		
2	Aroclor 1221	340	BQL
3	Aroclor 1232	240	BQL
4	Aroclor 1242	240	BQL
5	Aroclor 1248	240	BQL
6	Aroclor 1254	240	BQL
7	Aroclor 1260	240	BQL

Surrogate Standard Recovery:

Tetrachloro-meta-xylene 95 %

**ATTORNEY CLIENT
COMMUNICATION AND
WORK PRODUCT, ALL
PRIVILEGES CLAIMED**

Comments:

BQL - Below Quantitation Limit.
 PQL - Practical Quantitation Limit.
 Quantitation limit elevated due to extract dilution prior to analysis.
 Extract diluted due to the presence of non-target compounds.

Doc# GCF20300.MA

11/07/95 17:23 506 667 7871

IEA-MASS

ERM N.E.



SOIL BORING RESULTS BEFORE EXCAVATION

ATTORNEY CLIENT AND COMMUNICATION AND WORK PRODUCT, ALL PRIVILEGES CLAIMED

Analysis Report: EPA Method 8260A (PAGE 2 OF 2 PAGES)

Client: Raytheon - RESD
Project: WAY ESA

IEA ID: R117C-005-01
Sample: SB-1

Other TCL Compounds

Number	Compound	PQL ug/kg (dry)	Result ug/kg (dry)
32	Acetone		
33	2-Butanone	120	
34	n-Butylbenzene	120	BQL
35	s-Butylbenzene	6	BQL
36	t-Butylbenzene	6	BQL
37	Carbon disulfide	6	BQL
38	2-Chlorotoluene	6	BQL
39	4-Chlorotoluene	6	BQL
40	1,2-Dibromoethane	6	BQL
41	2-Hexanone	6	BQL
42	Hexachlorobutadiene	24	BQL
43	Isopropylbenzene	6	BQL
44	p-Isopropyltoluene	6	BQL
45	4-Methyl-2-pentanone	6	BQL
46	Methyl-t-butyl ether	24	BQL
47	Naphthalene	6	BQL
48	n-Propylbenzene	60	BQL
49	Styrene	6	BQL
50	1,1,1,2-Tetrachloroethane	6	BQL
51	1,2,3-Trichlorobenzene	6	BQL
52	1,2,4-Trichlorobenzene	6	BQL
53	1,2,4-Trimethylbenzene	6	BQL
54	1,3,5-Trimethylbenzene	6	BQL
55	Vinyl acetate	6	BQL
56	Xylenes (Total)	24	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d2	85 %
Toluene-d8	104 %
Bromofluorobenzene	100 %

COMMENTS:

- BQL = Below Quantitation Limit.
- PQL = Practical Quantitation Limit.
- B = Compound in blank.

Doc# MSF11901.MA

/07/95 17:23

508 867 7871

IEA-MASS

ERM N.E.

007/021



SOIL BORING RESULTS BEFORE EXCAVATION

ATTORNEY CLIENT COMMUNICATION AND WORK PRODUCT. ALL PRIVILEGES CLAIMED

Analysis Report: EPA Method 8260A (PAGE 1 OF 2 PAGES)

Client: Raytheon - RESD
 Project: WAY ESJ
 Report Date: 11/07/95
 Collected: 10/13/95
 Received: 10/24/95
 Analyzed: 10/27/95
 By: GMT

IEA ID: R117C-005-01
 Sample: SB-1
 Type: Soil
 Container: Glass
 Dilution Factor: 1.2

Priority Pollutant Compounds

Number	Compound	PQL ug/kg (dry)	Result ug/kg (dry)
1	Benzene	6	BQL
2	Bromodichloromethane	6	BQL
3	Bromoform	6	BQL
4	Bromomethane	12	BQL
5	Carbon tetrachloride	6	BQL
6	Chlorobenzene	6	BQL
7	Chloroethane	12	BQL
8	2-Chloroethylvinyl ether	6	BQL
9	Chloroform	6	BQL
10	Chloromethane	12	BQL
11	Dibromochloroethane	6	BQL
12	1,2-Dichlorobenzene	6	BQL
13	1,3-Dichlorobenzene	6	BQL
14	1,4-Dichlorobenzene	6	BQL
15	1,1-Dichloroethane	6	BQL
16	1,2-Dichloroethane	6	BQL
17	1,1-Dichloroethene	6	BQL
18	1,2-Dichloroethenes (Total)	6	BQL
19	1,2-Dichloropropane	6	BQL
20	cis-1,3-Dichloropropene	6	BQL
21	trans-1,3-Dichloropropene	6	BQL
22	Ethylbenzene	6	BQL
23	Methylene chloride	6	10B
24	1,1,2,2-Tetrachloroethane	6	BQL
25	Tetrachloroethene	6	BQL
26	Toluene	6	BQL
27	1,1,1-Trichloroethane	6	BQL
28	1,1,2-Trichloroethane	6	BQL
29	Trichloroethane	6	BQL
30	Trichlorofluoromethane	6	BQL
31	Vinyl chloride	12	BQL

Doc# MSF11901.MA

DW-01

ALPHA ANALYTICAL LABORATORIES

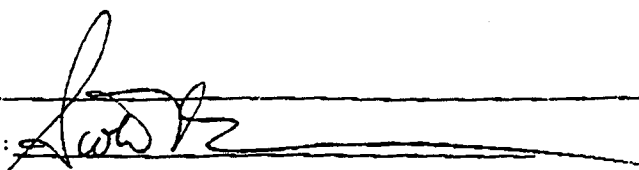
Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: Laidlaw Environmental Services	Laboratory Job Number: L9509693
Address: 221 Sutton Street	Invoice Number: 79983
North Andover, MA 01845	Date Received: 19-DEC-95
Attn: Dave Danis	Date Reported: 26-DEC-95
Project Number:	Delivery Method: Alpha
Site: Raytheon	

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9509693-01	47133-06	Wayland, MA
L9509693-02	47133-07	Wayland, MA
L9509693-03	47139-6 PILE #1 ✓	Wayland, MA
L9509693-04	47139-7 PILE #2 ✓	Wayland, MA

Authorized by: 

Scott McLean - Laboratory Director

10-26-95 TUE 05:37 PM

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9509693-03
47139-6 PILE #1
Sample Matrix: SOIL

Date Collected: 19-DEC-95
Date Received : 19-DEC-95
Date Reported : 26-DEC-95

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1 Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES		ID
						PREP	ANALYSIS	
Solids, Total	89.	%	0.10	3	2540B		26-Dec	ST
pH	7.4	SU		1	9040		19-Dec	ST
Hydrocarbons, Total	930	mg/l	0.50	1	418.1	26-Dec	26-Dec	ST
Flash Point	>200	F	60	1	1010		21-Dec	ST
Cyanide, Reactive	ND	mg/kg	0.25	1	7.3		21-Dec	
Sulfide, Reactive	ND	mg/kg	0.20	1	7.3		21-Dec	ST
TCLP Extraction								
Arsenic, TCLP	ND	mg/l	1.0	1	6010	26-Dec	26-Dec	GF
Barium, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Cadmium, TCLP	ND	mg/l	0.10	1	6010	26-Dec	26-Dec	GF
Chromium, TCLP	ND	mg/l	0.20	1	6010	26-Dec	26-Dec	GF
Lead, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Mercury, TCLP	ND	mg/l	0.005	1	7470/7471	22-Dec	22-Dec	DM
Selenium, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Silver, TCLP	ND	mg/l	0.10	1	6010	26-Dec	26-Dec	GF

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-03
 47139-6 PILE #1

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES	II
						PREP ANALYSIS	
Semi-volatile Organics by GC/MS							
				1	8270	21-Dec 23-Dec	
Acenaphthene	ND	ug/kg	270				
Benzidine	ND	ug/kg	2300				
1,2,4-Trichlorobenzene	ND	ug/kg	350				
Hexachlorobenzene	ND	ug/kg	270				
Bis(2-chloroethyl) ether	ND	ug/kg	290				
2-Chloronaphthalene	ND	ug/kg	290				
1,2-Dichlorobenzene	ND	ug/kg	270				
1,3-Dichlorobenzene	ND	ug/kg	310				
1,4-Dichlorobenzene	ND	ug/kg	230				
3,3'-Dichlorobenzidine	ND	ug/kg	610				
2,4-Dinitrotoluene	ND	ug/kg	350				
2,6-Dinitrotoluene	ND	ug/kg	270				
Azobenzene	ND	ug/kg	270				
Fluoranthene	ND	ug/kg	270				
4-Chlorophenyl phenyl ether	ND	ug/kg	270				
4-Bromophenyl phenyl ether	ND	ug/kg	290				
4-Bromophenyl phenyl ether	ND	ug/kg	270				
Bis(2-chloroisopropyl) ether	ND	ug/kg	190				
Bis(2-chloroethoxy) methane	ND	ug/kg	210				
Hexachlorobutadiene	ND	ug/kg	770				
Hexachlorocyclopentadiene	ND	ug/kg	730				
Hexachloroethane	ND	ug/kg	480				
Isophorone	ND	ug/kg	230				
Naphthalene	ND	ug/kg	210				
Nitrobenzene	ND	ug/kg	180				
Nitrosodiphenylamine (NDPA) /DPA	ND	ug/kg	230				
n-Nitrosodi-n-propylamine	ND	ug/kg	250				
Bis(2-ethylhexyl) phthalate	ND	ug/kg	880				
Butyl benzyl phthalate	ND	ug/kg	190				
Di-n-butylphthalate	ND	ug/kg	690				
Di-n-octylphthalate	ND	ug/kg	230				
Diethyl phthalate	ND	ug/kg	480				
Dimethyl phthalate	ND	ug/kg	480				
Benzo(a)anthracene	ND	ug/kg	310				
Benzo(a)pyrene	ND	ug/kg	360				
Benzo(b)fluoranthene	ND	ug/kg	350				
Benzo(k)fluoranthene	ND	ug/kg	350				
Chrysene	ND	ug/kg	310				
Acenaphthylene	ND	ug/kg	250				
Anthracene	ND	ug/kg	230				
Benzo(ghi)perylene	ND	ug/kg	480				
Fluorene	ND	ug/kg	270				
Phenanthrene	ND	ug/kg	250				
Dibenzo(a,h)anthracene	ND	ug/kg	460				
Indeno(1,2,3-cd)pyrene	ND	ug/kg	460				
Pyrene	ND	ug/kg	270				
Aniline	ND	ug/kg	960				
4-Chloroaniline	ND	ug/kg	380				
1-Methylnaphthalene	ND	ug/kg	670				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-03
47139-6 PILE #1

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES
						PREP ANALYSIS
Semi-volatile Organics by GC/MS continued						
2-Nitroaniline	ND	ug/kg	310	1	8270	21-Dec 23-Dec 10
3-Nitroaniline	ND	ug/kg	580			
4-Nitroaniline	ND	ug/kg	560			
Dibenzofuran	ND	ug/kg	190			
a, a-Dimethylphenethylamine	ND	ug/kg	4400			
Hexachloropropene	ND	ug/kg	1900			
Nitrosodi-n-butylamine	ND	ug/kg	460			
2-Methylnaphthalene	ND	ug/kg	170			
Tetrachlorobenzene	ND	ug/kg	1200			
Pentachlorobenzene	ND	ug/kg	1200			
a-Naphthalamine	ND	ug/kg	1900			
b-Naphthalamine	ND	ug/kg	880			
Acetophenetidide	ND	ug/kg	960			
Dimethoate	ND	ug/kg	1900			
4-Aminobiphenyl	ND	ug/kg	1000			
Pentachloronitrobenzene	ND	ug/kg	380			
Isodrin	ND	ug/kg	360			
p-Dimethylaminoazobenzene	ND	ug/kg	690			
Chlorobenzilate	ND	ug/kg	1500			
Diis (2-ethylhexyl) adipate	ND	ug/kg	310			
Methylcholanthrene	ND	ug/kg	1900			
n-ethylmethanesulfonate	ND	ug/kg	1400			
Acetophenone	ND	ug/kg	460			
Nitrosodipiperidine	ND	ug/kg	1900			
7,12-Dimethylbenz (a) anthracene	ND	ug/kg	2300			
n-Nitrosodimethylamine	ND	ug/kg	3800			
2,4,6-Trichlorophenol	ND	ug/kg	190			
p-Chloro-m-cresol	ND	ug/kg	290			
2-Chlorophenol	ND	ug/kg	310			
2,4-Dichlorophenol	ND	ug/kg	960			
2,4-Dimethylphenol	ND	ug/kg	230			
2-Nitrophenol	ND	ug/kg	310			
4-Nitrophenol	ND	ug/kg	1200			
2,4-Dinitrophenol	ND	ug/kg	1400			
4,6-Dinitro-o-cresol	ND	ug/kg	1700			
Pentachlorophenol	ND	ug/kg	670			
Phenol	ND	ug/kg	810			
Cresol, Total	ND	ug/kg	690			
2,4,5-Trichlorophenol	ND	ug/kg	270			
2,6-Dichlorophenol	ND	ug/kg	460			
Benzoic Acid	ND	ug/kg	3800			
Benzyl Alcohol	ND	ug/kg	560			
SURROGATE RECOVERY						
2-Fluorophenol	45.0	%				
Phenol-d6	50.0	%				
Nitrobenzene-d5	90.0	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-03
47139-6 PILE #1

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP ANALYSIS
Semi-volatile Organics by GC/MS continued						
2-Fluorobiphenyl	93.0	%		1	8270	21-Dec 23-Dec 1
2,4,6-Tribromophenol	87.0	%				
4-Terphenyl-d14	100.	%				
Polychlorinated Biphenyls						
Arochlor 1221	ND	ug/kg	250	1	8080	21-Dec 22-Dec D.
Arochlor 1232	ND	ug/kg	250			
Arochlor 1242/PCB 1016	ND	ug/kg	250			
Arochlor 1248	ND	ug/kg	250			
Arochlor 1254	ND	ug/kg	250			
Arochlor 1260	ND	ug/kg	250			
Arochlor 1262	ND	ug/kg	250			
Arochlor 1268	ND	ug/kg	250			
SURROGATE RECOVERY						
2,4,5,6-Tetrachloro-m-xylene	70.0	%				
Decachlorobiphenyl	81.0	%				
rganochlorine Pesticides						
Delta-BHC	ND	ug/kg	50.	1	8080	21-Dec 22-Dec DB
Lindane	ND	ug/kg	50.			
Alpha-BHC	ND	ug/kg	50.			
Beta-BHC	ND	ug/kg	50.			
Heptachlor	ND	ug/kg	50.			
Aldrin	ND	ug/kg	50.			
Heptachlor epoxide	ND	ug/kg	50.			
Endrin	ND	ug/kg	50.			
Endrin aldehyde	ND	ug/kg	50.			
Endrin ketone	ND	ug/kg	50.			
Dieldrin	ND	ug/kg	50.			
4,4'-DDE	ND	ug/kg	50.			
4,4'-DDD	ND	ug/kg	50.			
4,4'-DDT	ND	ug/kg	50.			
Endosulfan I	ND	ug/kg	50.			
Endosulfan II	ND	ug/kg	50.			
Endosulfan sulfate	ND	ug/kg	50.			
Methoxychlor	ND	ug/kg	50.			
Toxaphene	ND	ug/kg	100			
Chlordane	ND	ug/kg	50.			
SURROGATE RECOVERY						
2,4,5,6-Tetrachloro-m-xylene	70.0	%				
Decachlorobiphenyl	81.0	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9509693-04
 47139-7 PILE #2
 Sample Matrix: SOIL

Date Collected: 19-DEC-95
 Date Received : 19-DEC-95
 Date Reported : 26-DEC-95

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1 Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES		II
						PREP	ANALYSIS	
Solids, Total	91.	%	0.10	3	2540B		26-Dec	ST
pH	7.4	SU		1	9040		19-Dec	ST
Hydrocarbons, Total	130	mg/l	0.50	1	418.1	26-Dec	26-Dec	ST
Flash Point	>200	F	60	1	1010		21-Dec	ST
Cyanide, Reactive	ND	mg/kg	0.25	1	7.3		21-Dec	ST
Sulfide, Reactive	ND	mg/kg	0.20	1	7.3		21-Dec	ST
TCLP Extraction				1	1311		22-Dec	
Arsenic, TCLP	ND	mg/l	1.0	1	6010	26-Dec	26-Dec	GF
Barium, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Cadmium, TCLP	ND	mg/l	0.10	1	6010	26-Dec	26-Dec	GF
Chromium, TCLP	ND	mg/l	0.20	1	6010	26-Dec	26-Dec	GF
Lead, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Mercury, TCLP	ND	mg/l	0.005	1	7470/7471	22-Dec	22-Dec	DM
Selenium, TCLP	ND	mg/l	0.50	1	6010	26-Dec	26-Dec	GF
Silver, TCLP	ND	mg/l	0.10	1	6010	26-Dec	26-Dec	GF

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-04
47139-7 PILE #2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATES PREP ANALYSIS
Semi-volatile Organics by GC/MS					
				1 8270	21-Dec 22-Dec 1
Acenaphthene	ND	ug/kg	270		
Benzidine	ND	ug/kg	2300		
1,2,4-Trichlorobenzene	ND	ug/kg	340		
Hexachlorobenzene	ND	ug/kg	270		
Bis(2-chloroethyl) ether	ND	ug/kg	290		
2-Chloronaphthalene	ND	ug/kg	290		
1,2-Dichlorobenzene	ND	ug/kg	270		
1,3-Dichlorobenzene	ND	ug/kg	310		
1,4-Dichlorobenzene	ND	ug/kg	230		
3,3'-Dichlorobenzidine	ND	ug/kg	610		
2,4-Dinitrotoluene	ND	ug/kg	340		
2,6-Dinitrotoluene	ND	ug/kg	270		
Azobenzene	ND	ug/kg	270		
Fluoranthene	ND	ug/kg	270		
4-Chlorophenyl phenyl ether	ND	ug/kg	270		
4-Bromophenyl phenyl ether	ND	ug/kg	290		
Bis(2-chloroisopropyl) ether	ND	ug/kg	270		
Bis(2-chloroethoxy)methane	ND	ug/kg	190		
Hexachlorobutadiene	ND	ug/kg	210		
Hexachlorocyclopentadiene	ND	ug/kg	760		
Hexachloroethane	ND	ug/kg	730		
Isophorone	ND	ug/kg	480		
Naphthalene	ND	ug/kg	230		
Nitrobenzene	ND	ug/kg	210		
Nitrosodiphenylamine (NDPA) /DPA	ND	ug/kg	180		
n-Nitrosodi-n-propylamine	ND	ug/kg	230		
Bis(2-ethylhexyl) phthalate	ND	ug/kg	250		
Butyl benzyl phthalate	ND	ug/kg	880		
Di-n-butylphthalate	ND	ug/kg	190		
Di-n-octylphthalate	ND	ug/kg	860		
Diethyl phthalate	ND	ug/kg	230		
Dimethyl phthalate	ND	ug/kg	480		
Benzo(a)anthracene	ND	ug/kg	480		
Benzo(a)pyrene	ND	ug/kg	310		
Benzo(b)fluoranthene	ND	ug/kg	360		
Benzo(k)fluoranthene	ND	ug/kg	340		
Chrysene	ND	ug/kg	340		
Acenaphthylene	ND	ug/kg	310		
Anthracene	ND	ug/kg	250		
Benzo(ghi)perylene	ND	ug/kg	230		
Fluorene	ND	ug/kg	480		
Phenanthrene	ND	ug/kg	270		
Dibenzo(a,h)anthracene	ND	ug/kg	250		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	460		
Pyrene	ND	ug/kg	460		
Aniline	ND	ug/kg	270		
4-Chloroaniline	ND	ug/kg	960		
1-Methylnaphthalene	ND	ug/kg	380		
		ug/kg	670		

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-04
47139-7 PILE #2

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP ANALYSIS	I
Semi-volatile Organics by GC/MS continued							1
					8270	21-Dec 22-Dec	I
2-Nitroaniline	ND	ug/kg	310				
3-Nitroaniline	ND	ug/kg	570				
4-Nitroaniline	ND	ug/kg	550				
Dibenzofuran	ND	ug/kg	190				
a, a-Dimethylphenethylamine	ND	ug/kg	4400				
Hexachloropropene	ND	ug/kg	1900				
Nitrosodi-n-butylamine	ND	ug/kg	460				
2-Methylnaphthalene	ND	ug/kg	170				
Tetrachlorobenzene	ND	ug/kg	1200				
Pentachlorobenzene	ND	ug/kg	1200				
a-Naphthalamine	ND	ug/kg	1900				
b-Naphthalamine	ND	ug/kg	880				
Acetophenetidide	ND	ug/kg	960				
Dimethoate	ND	ug/kg	1900				
4-Aminobiphenyl	ND	ug/kg	990				
Pentachloronitrobenzene	ND	ug/kg	380				
Isodrin	ND	ug/kg	360				
p-Dimethylaminoazobenzene	ND	ug/kg	690				
Chlorobenzilate	ND	ug/kg	1500				
Bis(2-ethylhexyl) adipate	ND	ug/kg	310				
3-Methylcholanthrene	ND	ug/kg	1900				
Ethylmethanesulfonate	ND	ug/kg	1400				
Acetophenone	ND	ug/kg	460				
Nitrosodipiperidine	ND	ug/kg	1900				
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	2300				
n-Nitrosodimethylamine	ND	ug/kg	3800				
2,4,6-Trichlorophenol	ND	ug/kg	190				
p-Chloro-m-cresol	ND	ug/kg	290				
2-Chlorophenol	ND	ug/kg	310				
2,4-Dichlorophenol	ND	ug/kg	960				
2,4-Dimethylphenol	ND	ug/kg	230				
2-Nitrophenol	ND	ug/kg	310				
4-Nitrophenol	ND	ug/kg	1100				
2,4-Dinitrophenol	ND	ug/kg	1400				
4,6-Dinitro-o-cresol	ND	ug/kg	1700				
Pentachlorophenol	ND	ug/kg	670				
Phenol	ND	ug/kg	800				
Cresol, Total	ND	ug/kg	690				
2,4,5-Trichlorophenol	ND	ug/kg	270				
2,6-Dichlorophenol	ND	ug/kg	460				
Benzoic Acid	ND	ug/kg	3800				
Benzyl Alcohol	ND	ug/kg	550				

SURROGATE RECOVERY

2-Fluorophenol	66.0	%
Phenol-d6	79.0	%
Nitrobenzene-d5	114.	%

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-04
 47139-7 PILE #2

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP ANALYSIS
-----------	--------	-------	-----	-----	--------	------------------------

Semi-volatile Organics by GC/MS continued 1 8270 21-Dec 22-Dec

2-Fluorobiphenyl	93.0	%				
2,4,6-Tribromophenol	128.	%				
4-Terphenyl-d14	116.	%				

Polychlorinated Biphenyls 1 8080 21-Dec 26-Dec

Arochlor 1221	ND	ug/kg	250			
Arochlor 1232	ND	ug/kg	250			
Arochlor 1242/PCB 1016	ND	ug/kg	250			
Arochlor 1248	ND	ug/kg	250			
Arochlor 1254	ND	ug/kg	250			
Arochlor 1260	ND	ug/kg	250			
Arochlor 1262	ND	ug/kg	250			
Arochlor 1268	ND	ug/kg	250			

SURROGATE RECOVERY

2,4,5,6-Tetrachloro-m-xylene	80.0	%				
Decachlorobiphenyl	92.0	%				

Chlorine Pesticides 1 8080 21-Dec 26-Dec

Delta-BHC	ND	ug/kg	50.			
Lindane	ND	ug/kg	50.			
Alpha-BHC	ND	ug/kg	50.			
Beta-BHC	ND	ug/kg	50.			
Heptachlor	ND	ug/kg	50.			
Aldrin	ND	ug/kg	50.			
Heptachlor epoxide	ND	ug/kg	50.			
Endrin	ND	ug/kg	50.			
Endrin aldehyde	ND	ug/kg	50.			
Endrin ketone	ND	ug/kg	50.			
Dieldrin	ND	ug/kg	50.			
4,4'-DDE	ND	ug/kg	50.			
4,4'-DDD	ND	ug/kg	50.			
4,4'-DDT	ND	ug/kg	50.			
Endosulfan I	ND	ug/kg	50.			
Endosulfan II	ND	ug/kg	50.			
Endosulfan sulfate	ND	ug/kg	50.			
Methoxychlor	ND	ug/kg	50.			
Toxaphene	ND	ug/kg	100			
Chlordane	ND	ug/kg	50.			

SURROGATE RECOVERY

2,4,5,6-Tetrachloro-m-xylene	80.0	%				
Decachlorobiphenyl	92.0	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L9509693

Parameter	Value 1	Value 2	RPD	Units
pH	DUPLICATE for sample(s) 03-04			
	7.4	7.3	1	SU
Total Metals	DUPLICATE for sample(s) 01-02			
Mercury, Total	ND	ND	NC	mg/kg
TCLP Extraction	DUPLICATE for sample(s) 03-04			
Mercury, TCLP	ND	ND	NC	mg/l
TCLP Extraction	DUPLICATE for sample(s) 03-04			
Arsenic, TCLP	ND	ND	NC	mg/l
Barium, TCLP	ND	ND	NC	mg/l
Cadmium, TCLP	ND	ND	NC	mg/l
Chromium, TCLP	ND	ND	NC	mg/l
Lead, TCLP	ND	ND	NC	mg/l
Selenium, TCLP	ND	ND	NC	mg/l
Silver, TCLP	ND	ND	NC	mg/l

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

laboratory Job Number: L9509693

Parameter	MS %	MSD %	RPD
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 01-02			
1,1-Dichloroethene	104	102	2
Trichloroethene	101	104	3
Benzene	96	102	6
Toluene	99	103	4
Chlorobenzene	99	105	6
Semi-volatile Organic by GC/MS MS/MSD for sample(s) 01-04			
p-Chloro-m-cresol	30	40	29
2-Chlorophenol	62	45	32
Phenol	75	51	38
Acenaphthene	79	79	0
1,2,4-Trichlorobenzene	116	68	27
1,4-Dichlorobenzene	102	74	32
2,4-Dinitrotoluene	45	56	22
N-Nitrosodipropylamine	89	78	13
Pyrene	94	87	8
SURROGATE RECOVERY			
2-Fluorophenol	77	45	52
Phenol-d6	64	40	46
Chlorobenzene-d5	82	63	26
4-Fluorobiphenyl	72	75	4
2,4,6-Tribromophenol	102	71	36
4-Terphenyl-d14	80	66	19
Pesticide Spike Recovery MS/MSD for sample(s) 01-04			
Lindane	138	161	15
Heptachlor	74	100	30
Aldrin	83	103	22
Endrin	103	119	14
Dieldrin	92	101	9
4,4'-DDT	91	133	38
SURROGATE RECOVERY			
2,4,5,6-Tetrachloro-m-xylene	84	118	34
Decachlorobiphenyl	90	104	14

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L9509693

Parameter	% Recovery
Total Metals	SPIKE for sample(s) 01-02
Arsenic, Total	100
Barium, Total	88
Cadmium, Total	100
Lead, Total	89
Silver, Total	80
Total Metals	SPIKE for sample(s) 01-02
Mercury, Total	113
TCLP Extraction	SPIKE for sample(s) 03-04
Mercury, TCLP	123
TCLP Extraction	SPIKE for sample(s) 03-04
Arsenic, TCLP	103
Barium, TCLP	100
Cadmium, TCLP	103
Chromium, TCLP	103
Lead, TCLP	104
Selenium, TCLP	101
Silver, TCLP	90

ALPHA ANALYTICAL LABS
ADDENDUM I

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.
3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

GLOSSARY OF TERMS AND SYMBOLS

REP Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

Initials of the analyst.

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. 659
Sheet 1 of 1

Company Name: Laidlaw
Ralph Laidlaw

Project Number:
P.O. Number: 19987

Project Name/Location:
Dry Well Excavation

Date Received in Lab:
12/19

Date Due: RUSH 12/26

Company Address:

Phone Number:
FAX No.:

Project Manager:
Dave Danis

Alpha Job Number: (Lab use only)
9509693

ALPHA Lab # (Lab Use Only)	Sample I.D.	Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other	Containers (number/type)	Matrix / Source	Method Preserve. (number of containers)						Solubles - F.I.	Sampling		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 SO = Sludge B = Bottom Sediment X1 = Other _____ X2 = Other _____	Analysis Requested
					Unpres.	Ice	Nitric	Sulfuric	HCl	Other		Date	Time		
9693.1	47133-06		1P	S	1							12/19	14:10	ABN, TRCRAB, R260, TPH1R	(TS)
2	↓ -02		↓	↓	↓							↓	↓	↓	↓
3	47139-6		↓	↓	↓							↓	↓	TCRP-RCRAB, ABN, TPH-1R, PH, Flash, Acet	
4	↓ -7		↓	↓	↓							↓	↓	↓	↓

Sampler's Signature: _____
Affiliation: _____ Date: _____ Time: _____

ADDITIONAL COMMENTS:
Bill Laidlaw

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	<u>[Signature]</u>		12/19	16:30
2				
3				
4				

11/13/06 10:45 AM



IEA
An Aquarion Company

149 Rangeway Road
N. Billerica, Massachusetts 01862
508 / 667-1400
Fax 508 / 667-7871

CHAIN OF CUSTODY RECORD

REGULATORY CLASSIFICATION - PLEASE SPECIFY

NPDES DRINKING WATER RCRA MCP OTHER

REQUIRED

TURN AROUND

15 BUSINESS DAY
 10 BUSINESS DAY
 RUSH
 OTHER **5 DAY**

COMPANY	CONTACT PERSON	PROJECT ID	PHONE #	FAX #
Landlaw	XXXXXXXXXX Date Daniel	47139 AMP 47133	708 612 100 2	708 612 100 2

ADDRESS			MATRIX	CONTAINER TYPE	# OF CONTAINERS	PRESERVATIVES	REQUESTED PARAMETERS							(COMMENTS)
CITY	STATE	ZIP					TU/PCB/SL/AL	VOCS	TPH	PH	PI	IR	by	
221 South Street														
N. Andover														
MA 01145														
DATE	TIME	SAMPLE I.D.												
12/19	14:45	47133-06	S	P	1	None	X	X	X	X	Y			Stock Pile DU-05
		47133-07	S	P	1		X	X	X	X				Stock Pile DU-05
		47139-6 Pile #1	S	P	1		X	X		X	X	Y		Stock Pile DU-01
		47139-27 Pile #2	S	P	1		X	X		X	X	X		Stock Pile DU-01

SAMPLED BY: Kendall (SIGNATURE)

RELINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED BY (SIGNATURE) DATE/TIME

[Signature] 12/19/95 2:20 [Signature] 12/19 3:30

RELINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED FOR LAB BY (SIGNATURE) DATE/TIME

[Signature] 12/19/95 2:20 [Signature] 12/19 3:30

IEA USE ONLY

FIELD REMARKS

For All...
 All...
 All...

Limited Removal Action

DW-05 & Sump 2.13



Release Tracking Number*

-

BILL OF LADING (pursuant to 310 CMR 40.0030)

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

Release Name (optional): 05-05-DR-03
 Street: 430 Boston Post Road Location Aid: _____
 City/Town: Wayland Zip Code: 01778 - _____
 Date/Period of Generation: 12/15/95 to 12/18/95
 Additional Release Tracking Numbers Associated with this Bill of Lading: None

***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: Raytheon Electronic Systems
 Name of Contact: Grace Hwang Title: Technical Specialist
 Street: 528 Boston Post Road
 City/Town: Sudbury State: MA Zip Code: 01776 - _____
 Telephone: 508-440-2729 Ext. _____

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: Charlton Welding
 Contact Person: Larry McKessick Title: President
 Street: 11 Griffin Street
 City/Town: Charlton State: MA Zip Code: 01508 - _____
 Telephone: 508-248-7037 Ext. _____

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: AMREC
 Contact Person: Bill McCambridge Title: Operations Manager
 Street: 130 Route 20
 City/Town: Charlton State: MA Zip Code: 01508 - _____
 Telephone: 508-248-3777 Ext. _____

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

Division of Hazardous Waste/Class A Permit #: 0144-91 Division of Solid Waste Management Permit #: N/A EPA Identification #: MAD 982-201-055

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

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



Release Tracking Number

[] - []

BILL OF LADING (pursuant to 310 CMR 40.0030)

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

Temporary Storage Address: N/A
Street: _____
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: Paint

Estimated Volume of Materials: Cubic Yards: 19 * Tons: _____ Other: _____

Contaminant Source (check one/specify): Transportation Accident Underground Storage Tank Other: Inactive Dry Well

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:

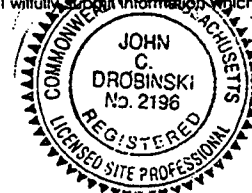
Name of Organization: ERM-New England, Inc.
LSP Name: John Drobinski Title: Principal-in-Charge
Telephone: 617-742-8228 Ext. 152

I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my Opinion that the testing and assessment actions undertaken were adequate to characterize the Remediation Waste in accordance with 310 CMR 40.0030, and that the facility or location can accept remediation wastes with the characteristics described in this submittal. I am aware that there are significant penalties including, but not limited to, possible fines and imprisonment may result if I wilfully submit information which I know to be false, inaccurate, or materially incomplete.

Signature: _____ Seal: _____

Date: 1/16/96
License Number: 2196

* 9 yards came from LRA DW-05
10 yards came from LRA DW-01



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: George Chretien Date: 1/16/96
Name of Person (print): George Chretien



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

Release Tracking Number

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: *Martin Hine*

Date of Shipment: 01/18/96 Time of Shipment: 12:02 (circle one) am/pm

Truck/Tractor Registration: 22230 MA Trailer Registration (if any): T921RB 0A

Receiving Facility/Temporary Storage Representative: _____

Date of Receipt: / / Time of Receipt: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

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: : :

Load Size (cu. yds./tons): _____ (circle one) am/pm

J. LOG SHEET VOLUME INFORMATION:

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

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

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



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

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

Release/Tracking Number:

- N/A

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

Receiving Facility/Temporary Location Representative (print): W. McLambidge Title: Manager
Signature: W. McLambidge Date: 1/18/96

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 willfully submitting false, inaccurate, or incomplete information.

Signature: _____ Date: 1/1
Name of Person (print): _____

FEB-01-1996 14:05 FROM

100 West Main Street
Northborough, MA 01532
Tel. (508) 393-8333
Fax (508) 393-4511



**AMERICAN
RECLAMATION
CORPORATION**

TO

P.O. Box 653
130 Sturbridge Road
Charlton, MA 01508
Tel. (508) 248-3777
Fax (508) 248-7701

15084402051 P.02

35500

DATE _____

CUSTOMER LAIDLAW

GENERATOR RAYHEON DWOS

CITY WAYLAND STATE MA

TRUCK NO. Dart 185

NET WEIGHT - TONS 9.78

REMARKS LOAD of oily soil

13:56 01/18/96

66460 LB G

14:22 01/18/96

66460 LB (K) G

46900 LB T

19560 LB N

D96-01-10

DRIVER ON OFF M. M. H. H.

WEIGHER D.P.



INFORMATION FORM FOR RELEASE SITES

GENERATOR INFORMATION:

Generator Name: Raytheon Electronic Systems
Generator Address: 430 Boston Post Road
Wayland MA 01778
Release Location: same as above
Contact Person: Grace Huang
Telephone: 508 440 2729 Fax: 508 440 2051

RELEASE INFORMATION:

Site History/Use: This site was a research and development center pilot, small scaled production of electronic related devices were tested.
Description of Release: None This soil surrounds an out-of-service dry well. The contaminated waste was removed prior to excavation.
Petroleum Released: Not Applicable
Amount of Soil: 2.9 yards.
Description of Soil: Fine to medium sand

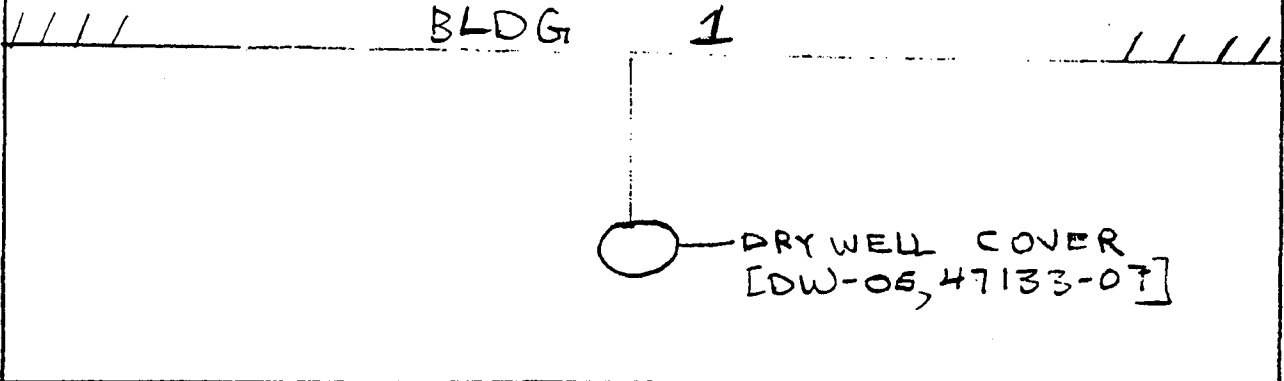
BILLING INFORMATION: (for submission of documentation and invoice(s))

Company: Laidlaw Environmental
Address: 221 Sutton Street
North Andover MA 01845
Contact Person: Dave Daniels
Telephone: 508 683 1002 Fax: 508 682 3871

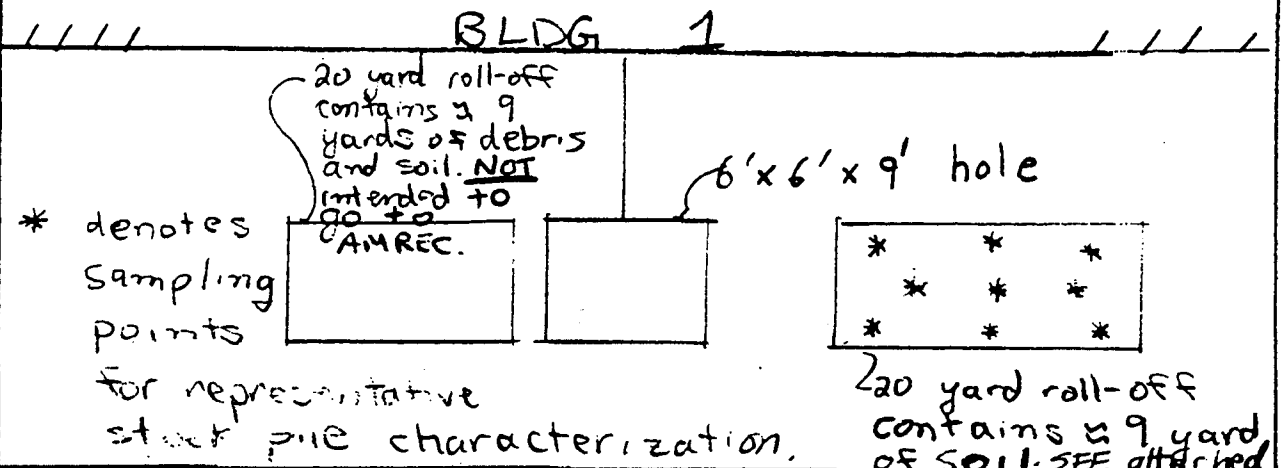
SITE DIAGRAM AND SAMPLING INFORMATION:

In the space below, please provide an approximate representation of the site and/or the stockpile(s) of soil designated for recycling. Indicate the sampling delineations and methodologies used. Attach additional information if necessary. SEE attached sample list.

Not to Scale BEFORE EXCAVATION



Note to Scale AFTER EXCAVATION



CERTIFICATION STATEMENT:

I certify that the information provided on this sheet and applicable attachments has been carefully reviewed and is representative of the site, and I have applied due diligence in the characterization of the site.

Signed: Grace Huang Date: 12/27/95
Name: Grace Huang Title: Technical Specialist
Company: Raytheon Electronic Systems
Telephone: 508 440 2129 Fax: 508 440 2051

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PR-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: Laidlaw Environmental Services

Address: 221 Sutton Street

North Andover, MA 01845

Attn: Dave Danis

Project Number:

Site: Raytheon

Laboratory Job Number: L9509693


Invoice Number: 79983

Date Received: 19-DEC-95

Date Reported: 26-DEC-95

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9509693-01	47133-06	Wayland, MA
L9509693-02	47133-07 ✓	Wayland, MA
L9509693-03	47139-6 PILE #1	Wayland, MA
L9509693-04	47139-7 PILE #2	Wayland, MA

Authorized by: 
Scott McLean - Laboratory Director

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9509693-02

Sample Matrix: 47133-07
 SOIL

Condition of Sample: Satisfactory

Number & Type of Containers: 1 Plastic

Date Collected: 19-DEC-95

Date Received : 19-DEC-95

Date Reported : 26-DEC-95

Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES	
						PREP	ANALYSIS
Solids, Total	94.	%	0.10	3	2540B		26-D
Hydrocarbons, Total	ND	mg/l	0.50	1	418.1		26-Dec 26-D
Total Metals				1	3005/3050		
Arsenic, Total	6.0	mg/kg	0.20	1	6010	19-Dec	22-De
Barium, Total	44.	mg/kg	2.0	1	6010	19-Dec	22-De
Cadmium, Total	10.	mg/kg	0.40	1	6010	19-Dec	22-De
Chromium, Total	160	mg/kg	0.80	1	6010	19-Dec	22-De
Lead, Total	22.	mg/kg	2.0	1	6010	19-Dec	De
Mercury, Total	ND	mg/kg	0.25	1	7470/7471	19-Dec	De
Selenium, Total	ND	mg/kg	0.40	1	6010	21-Dec	21-Dec
Silver, Total	0.43	mg/kg	0.40	1	6010	19-Dec	22-Dec
						19-Dec	22-Dec

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-02
 47133-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS						
				1	8260	22-Dec-22-Dec D
Methylene chloride	ND	ug/kg	25.			
1,1-Dichloroethane	ND	ug/kg	7.5			
Chloroform	ND	ug/kg	7.5			
Carbon tetrachloride	ND	ug/kg	5.0			
1,2-Dichloropropane	ND	ug/kg	18.			
Dibromochloromethane	ND	ug/kg	5.0			
1,1,2-Trichloroethane	ND	ug/kg	7.5			
2-Chloroethylvinyl ether	ND	ug/kg	50.			
Tetrachloroethene	ND	ug/kg	7.5			
Chlorobenzene	ND	ug/kg	18.			
Trichlorofluoromethane	ND	ug/kg	25.			
1,2-Dichloroethane	ND	ug/kg	7.5			
1,1,1-Trichloroethane	ND	ug/kg	5.0			
Bromodichloromethane	ND	ug/kg	5.0			
trans-1,3-Dichloropropene	ND	ug/kg	7.5			
cis-1,3-Dichloropropene	ND	ug/kg	5.0			
Bromoform	ND	ug/kg	5.0			
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0			
Benzene	ND	ug/kg	5.0			
Toluene	ND	ug/kg	7.5			
Ethylbenzene	ND	ug/kg	5.0			
Chloromethane	ND	ug/kg	50.			
Bromomethane	ND	ug/kg	10.			
Vinyl chloride	ND	ug/kg	18.			
Chloroethane	ND	ug/kg	10.			
1,1-Dichloroethene	ND	ug/kg	7.5			
trans-1,2-Dichloroethene	ND	ug/kg	7.5			
Trichloroethene	ND	ug/kg	5.0			
1,2-Dichlorobenzene	ND	ug/kg	50.			
1,3-Dichlorobenzene	ND	ug/kg	50.			
1,4-Dichlorobenzene	ND	ug/kg	50.			
Methyl tert butyl ether	ND	ug/kg	50.			
Xylenes	ND	ug/kg	5.0			
cis-1,2-Dichloroethene	ND	ug/kg	5.0			
Dibromomethane	ND	ug/kg	50.			
1,4-Dichlorobutane	ND	ug/kg	50.			
Iodomethane	ND	ug/kg	50.			
1,2,3-Trichloropropane	ND	ug/kg	50.			
Styrene	ND	ug/kg	5.0			
Dichlorodifluoromethane	ND	ug/kg	50.			
Acetone	ND	ug/kg	50.			
Carbon Disulfide	ND	ug/kg	50.			
2-Butanone	ND	ug/kg	23.			
Vinyl Acetate	ND	ug/kg	50.			
4-Methyl-2-pentanone	ND	ug/kg	50.			
2-Hexanone	ND	ug/kg	50.			
Ethyl methacrylate	ND	ug/kg	50.			
Protein	ND	ug/kg	130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-02
 47133-07

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATES PREP ANAL
Volatile Organics by GC/MS continued					
Acrylonitrile	ND	ug/kg	50.	8260	22-Dec 22
Bromochloromethane	ND	ug/kg	25.		
2,2-Dichloropropane	ND	ug/kg	25.		
1,2-Dibromoethane	ND	ug/kg	25.		
1,3-Dichloropropane	ND	ug/kg	25.		
1,1,1,2-Tetrachloroethane	ND	ug/kg	25.		
Bromobenzene	ND	ug/kg	25.		
n-Butylbenzene	ND	ug/kg	25.		
sec-Butylbenzene	ND	ug/kg	25.		
tert-Butylbenzene	ND	ug/kg	25.		
o-Chlorotoluene	ND	ug/kg	25.		
p-Chlorotoluene	ND	ug/kg	25.		
1,2-Dibromo-3-chloropropane	ND	ug/kg	25.		
Hexachlorobutadiene	ND	ug/kg	25.		
Isopropylbenzene	ND	ug/kg	25.		
p-Isopropyltoluene	ND	ug/kg	25.		
Naphthalene	ND	ug/kg	25.		
n-Propylbenzene	ND	ug/kg	25.		
1,2,3-Trichlorobenzene	ND	ug/kg	25.		
2,4-Trichlorobenzene	ND	ug/kg	25.		
3,5-Trimethylbenzene	ND	ug/kg	25.		
1,2,4-Trimethylbenzene	ND	ug/kg	25.		
trans-1,4-Dichloro-2-butene	ND	ug/kg	25.		
Ethyl ether	ND	ug/kg	130		
SURROGATE RECOVERY					
Toluene-d8	103.	%			
4-Bromofluorobenzene	106.	%			
Dibromofluoromethane	108.	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-02
 47133-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE: PREP A1
Semi-volatile Organics by GC/MS						
Acenaphthene	ND	ug/kg	280	1	8270	21-Dec
Benzidine	ND	ug/kg	2400			
1,2,4-Trichlorobenzene	ND	ug/kg	360			
Hexachlorobenzene	ND	ug/kg	280			
Bis(2-chloroethyl) ether	ND	ug/kg	300			
2-Chloronaphthalene	ND	ug/kg	300			
1,2-Dichlorobenzene	ND	ug/kg	280			
1,3-Dichlorobenzene	ND	ug/kg	320			
1,4-Dichlorobenzene	ND	ug/kg	240			
3,3'-Dichlorobenzidine	ND	ug/kg	640			
2,4-Dinitrotoluene	ND	ug/kg	360			
2,6-Dinitrotoluene	ND	ug/kg	280			
Azobenzene	ND	ug/kg	280			
Fluoranthene	ND	ug/kg	280			
4-Chlorophenyl phenyl ether	ND	ug/kg	280			
4-Bromophenyl phenyl ether	ND	ug/kg	280			
Bis(2-chloroisopropyl) ether	ND	ug/kg	200			
Bis(2-chloroethoxy) methane	ND	ug/kg	220			
Hexachlorobutadiene	ND	ug/kg	800			
Hexachlorocyclopentadiene	ND	ug/kg	760			
Hexachloroethane	ND	ug/kg	500			
Isophorone	ND	ug/kg	240			
Naphthalene	ND	ug/kg	220			
Nitrobenzene	ND	ug/kg	190			
NitrosoDiphenylAmine (NDPA) /DPA	ND	ug/kg	240			
n-Nitrosodi-n-propylamine	ND	ug/kg	260			
Bis(2-ethylhexyl) phthalate	ND	ug/kg	920			
Butyl benzyl phthalate	ND	ug/kg	200			
Di-n-butylphthalate	ND	ug/kg	740			
Di-n-octylphthalate	ND	ug/kg	240			
Diethyl phthalate	ND	ug/kg	500			
Dimethyl phthalate	ND	ug/kg	500			
Benzo (a) anthracene	ND	ug/kg	320			
Benzo (a) pyrene	ND	ug/kg	380			
Benzo (b) fluoranthene	ND	ug/kg	360			
Benzo (k) fluoranthene	ND	ug/kg	360			
Chrysene	ND	ug/kg	320			
Acenaphthylene	ND	ug/kg	260			
Anthracene	ND	ug/kg	240			
Benzo (ghi) perylene	ND	ug/kg	500			
Fluorene	ND	ug/kg	280			
Phenanthrene	ND	ug/kg	260			
Dibenzo (a, h) anthracene	ND	ug/kg	480			
Indeno (1, 2, 3-cd) pyrene	ND	ug/kg	480			
Pyrene	ND	ug/kg	280			
Aniline	ND	ug/kg	1000			
4-Chloroaniline	ND	ug/kg	400			
1-Methylnaphthalene	ND	ug/kg	700			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-02
47133-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP A
Semi-volatile Organics by GC/MS continued						
				1	8270	21-Dec
2-Nitroaniline	ND	ug/kg	320			
3-Nitroaniline	ND	ug/kg	600			
4-Nitroaniline	ND	ug/kg	580			
Dibenzofuran	ND	ug/kg	200			
a, a-Dimethylphenethylamine	ND	ug/kg	4600			
Hexachloropropene	ND	ug/kg	2000			
Nitrosodi-n-butylamine	ND	ug/kg	480			
2-Methylnaphthalene	ND	ug/kg	180			
Tetrachlorobenzene	ND	ug/kg	1200			
Pentachlorobenzene	ND	ug/kg	1300			
a-Naphthalamine	ND	ug/kg	2000			
b-Naphthalamine	ND	ug/kg	920			
Acetophenetidide	ND	ug/kg	1000			
Dimethoate	ND	ug/kg	2000			
4-Aminobiphenyl	ND	ug/kg	1000			
Pentachloronitrobenzene	ND	ug/kg	400			
Isodrin	ND	ug/kg	380			
p-Dimethylaminoazobenzene	ND	ug/kg	720			
Chlorobenzilate	ND	ug/kg	1600			
Bis(2-ethylhexyl) adipate	ND	ug/kg	320			
3-Methylcholanthrene	ND	ug/kg	2000			
Ethylmethanesulfonate	ND	ug/kg	1500			
Acetophenone	ND	ug/kg	480			
Nitrosodipiperidine	ND	ug/kg	2000			
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	2400			
n-Nitrosodimethylamine	ND	ug/kg	4000			
2,4,6-Trichlorophenol	ND	ug/kg	200			
p-Chloro-m-cresol	ND	ug/kg	300			
2-Chlorophenol	ND	ug/kg	320			
2,4-Dichlorophenol	ND	ug/kg	1000			
2,4-Dimethylphenol	ND	ug/kg	240			
2-Nitrophenol	ND	ug/kg	320			
4-Nitrophenol	ND	ug/kg	1200			
2,4-Dinitrophenol	ND	ug/kg	1500			
4,6-Dinitro-o-cresol	ND	ug/kg	1700			
Pentachlorophenol	ND	ug/kg	700			
Phenol	ND	ug/kg	840			
Cresol, Total	ND	ug/kg	720			
2,4,5-Trichlorophenol	ND	ug/kg	280			
2,6-Dichlorophenol	ND	ug/kg	480			
Benzoic Acid	ND	ug/kg	4000			
Benzyl Alcohol	ND	ug/kg	580			
SURROGATE RECOVERY						
2-Fluorophenol	35.0	%				
Phenol-d6	41.0	%				
Nitrobenzene-d5	88.0	%				

ments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9509693-02
47133-07

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP ANAL
Semi-volatile Organics by GC/MS continued						
2-Fluorobiphenyl	82.0	%		1	8270	21-Dec-22
2,4,6-Tribromophenol	117.	%				
4-Terphenyl-d14	118.	%				
Polychlorinated Biphenyls						
Arochlor 1221	ND	ug/kg	250	1	8080	21-Dec-22
Arochlor 1232	ND	ug/kg	250			
Arochlor 1242/PCB 1016	ND	ug/kg	250			
Arochlor 1248	ND	ug/kg	250			
Arochlor 1254	ND	ug/kg	250			
Arochlor 1260	460	ug/kg	250			
Arochlor 1262	ND	ug/kg	250			
Arochlor 1268	ND	ug/kg	250			
SURROGATE RECOVERY						
2,4,5,6-Tetrachloro-m-xylene	79.0	%				
Decachlorobiphenyl	92.0	%				
Organochlorine Pesticides						
Delta-BHC	ND	ug/kg	50.	1	8080	21-Dec-22
Lindane	ND	ug/kg	50.			
Alpha-BHC	ND	ug/kg	50.			
Beta-BHC	ND	ug/kg	50.			
Heptachlor	ND	ug/kg	50.			
Aldrin	ND	ug/kg	50.			
Heptachlor epoxide	ND	ug/kg	50.			
Endrin	ND	ug/kg	50.			
Endrin aldehyde	ND	ug/kg	50.			
Endrin ketone	ND	ug/kg	50.			
Dieldrin	ND	ug/kg	50.			
4,4'-DDE	ND	ug/kg	50.			
4,4'-DDD	ND	ug/kg	50.			
4,4'-DDT	ND	ug/kg	50.			
Endosulfan I	ND	ug/kg	50.			
Endosulfan II	ND	ug/kg	50.			
Endosulfan sulfate	ND	ug/kg	50.			
Methoxychlor	ND	ug/kg	50.			
Toxaphene	ND	ug/kg	50.			
Chlordane	ND	ug/kg	100			
SURROGATE RECOVERY						
2,4,5,6-Tetrachloro-m-xylene	79.0	%				
Decachlorobiphenyl	92.0	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

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. 56659

Company Name: Laidlaw
Raytheon Wayne

Project Number:
P.O. Number: 19987

Project Name/Location:
Dry Well Excavation

Date Received in Lab: 12/19
Date Due: RUSH 12/26

Company Address:

Phone Number:
FAX No.:

Project Manager:
Dave Danis

Alpha Job Number: (Lib use only)
9509693

ALPHA Lab # (Lab Use Only)	Sample I.D.	Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other	Containers (number/type)	Matrix / Source	Method Preserve. (number of containers)						Solubles - F.F.	Sampling		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 _____	Analysis Requested
					Unpres.	Ice	Nitric	Sulfuric	HCl	Other		Date	Time		
9693.1	47133-06		1P	S	1							12/19	14:10	ABN, TRCRA8, 8260, TPHIR (TS)	
2	↓ - 07		↓	↓	↓							↓	↓	↓	↓
3	47139-6		↓	↓	↓							↓	↓	TCLP-RCRA8, ABN, TPH-IR, PH, Flash, React	
4	↓ - 7		↓	↓	↓							↓	↓	↓	↓

Sampler's Signature: _____

ADDITIONAL COMMENTS:
BILL LAIDLAW

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	<u>[Signature]</u>		12/19	14:30
2				
3				
4				

11/24/00 10:43 AM

IEA
An Aquatun Company
149 Rangeway Road
N. Billerica, Massachusetts 01802
508 / 667-1400
Fax 508 / 667-7871

CHAIN OF CUSTODY RECORD

REGULATORY CLASSIFICATION - PLEASE SPECIFY

NPDES DRINKING WATER RCRA MCP OTHER

REQUIRED

COMPANY: Lardlaw CONTACT PERSON: [REDACTED] PROJECT # 47139 AND 47133 PHONE # 508 667 1002 FAX # 508 667 1002

ADDRESS: 321 South Street

TURN AROUND

15 BUSINESS DAY
 10 BUSINESS DAY
 RUSH
 OTHER 5 DAY

DATE	TIME	CITY	STATE	ZIP	MATRIX	CONTAINER TYPE	# OF CONTAINERS	PRESERVATIVES	REQUESTED PARAMETERS						(COMMENTS)
									TCS/PCB/SLAG/AL	VOCs	TAH	PH	PL	IR	
12/19/14	1:44	N. Andover	MA	01845	S	P	1	None	X	X	X	X	Y		Stock Pile Du
					S	P	1		X	X	Y	X	Y		Stock Pile Du
					S	P	1	X	X			X	X	Y	Stock Pile Du
					S	P	1	X	X			X	X	X	Stock Pile Du

SAMPLED BY: [Signature] Kendall
(PRINT NAME)

RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED BY (SIGNATURE)	DATE / TIME
<u>[Signature]</u>	12/19/14 2:20	<u>[Signature]</u>	12/19 2:30
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED FOR LAB BY	DATE / TIME
<u>[Signature]</u>	12/19 2:30	<u>[Signature]</u>	12/19 2:50

IEA USE ONLY

FIELD REMARKS

10x All

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION
HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

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

Please print or type. Do not Staple.

In case of emergency or spill immediately call the National Response Center (800 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. MA099062555400005		Manifest Document No. 1	2. Page 1 of 1	Information in the shaded area is not required by Federal law	
3. Generator's Name and Mailing Address Raytheon Electronic Systems Attn: Grace Hwang M/S 4-2-263 528 Boston Post Road Sudbury MA 01775		4. Generator's Phone (508) 440-2729		5. State Manifest Document No. NY B729372-5		6. Generator's EPA ID MA099062555400005	
5. Transporter 1 (Company Name) Dart Trucking Co. Inc.		6. US EPA ID Number 08D009865825		7. State Transporter ID 08D009865825		8. Transporter's Phone (508) 440-2729	
7. Transporter 2 (Company Name)		8. US EPA ID Number		9. State Transporter ID		10. Transporter's Phone	
9. Designated Facility Name and Site Address CMI Chemical Services 150 Balliner Road Model City, NY 14107		10. US EPA ID Number NYD049836679		11. State Facility ID NYD049836679		12. Facility's Phone	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers	13. Total Quantity	14. Unit	15. Waste No.
a. HAZARDOUS WASTE SOLID, N.O.S. (Cadmium, perchlorate) D006 (PGII) (HA02, PCB1)				No. 1	Type CM	12500K	K
Additional Descriptions for Materials listed Above				Handling Codes for Wastes Listed Above			
ER01, ER02, ER05				L			
15. Special Handling Instructions and Additional Information O.B.S. 12/18/95 ER05 31 YR-275234				81443604			
Emergency Contact: Lafleur, David Danix 508-683-1002 ext. 5364							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.							
If I am a large quantity generator, I certify that I have 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 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Grace H. Hwang		Signature <i>Grace H. Hwang</i>		Mo. 01		Day Year 18 96	
17. Transporter 1 (Acknowledgement of Receipt of Materials)		Printed/Typed Name Debra Belmont		Signature <i>Debra Belmont</i>		Mo. Day Year 01 11 89 6	
18. Transporter 2 (Acknowledgement or Receipt of Materials)		Printed/Typed Name		Signature		Mo. Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name Edward Carter		Signature <i>Edward Carter</i>		Mo. Day Year 01 11 96			

Name: Roytman Co. 430 Boston Post Rd
Wayland, Ms.

Manifest Doc. No.: 0000211

File Number: 5W9113

State Manifest No.: NY 8730

Is this waste a non-wastewater or a wastewater? (See 40 CFR 268.2) Check ONE: Non-Wastewater Wastewater
 Is this waste subject to any California List restrictions enter the letter from below (either A, B1, or B2) next to each restriction that is applicable:
 HOCs. PCBs. Acid. Metals. Cyanides. 93725

Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subdivision, or check NONE if the waste code has no subdivision. Also check which treatment standards apply. Spent solvent and California List treatment standards are listed on the back of this form. If F039, multi-source leachate applies, those standards must be attached by the generator.

REF	4. US EPA HAZARDOUS WASTE CODE(S)	5. SUBDIVISION		6. APPLICABLE TREATMENT STANDARDS			7. HOW MUST THE WASTE BE MANAGED? ENTER THE LETTER FROM BELOW
		ENTER THE SUBDIVISION DESCRIPTION IF NOT APPLICABLE SIMPLY CHECK NONE		6.a - PERFORMANCE-BASED: CHECK AS APPLICABLE		6.b - SPECIFIED TECHNOLOGY: IF APPLICABLE ENTER THE 40 CFR 268.42-TABLE 1 TREATMENT CODE(S)	
		DESCRIPTION	NONE	268.41(a)	268.43(a)	268.42(a)	
1	PCB1		<input checked="" type="checkbox"/>				E
2	MA02		<input checked="" type="checkbox"/>				E
3	D006		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	A
4							
5							
6							
7							
8							
9							
10							

To list additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided (CWM-2001-B) and check here:

MUST THE WASTE BE MANAGED? In column 7 above, enter the letter (A, B1, B2, B3, C, or D) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, or D, you are making the appropriate certification as provided below.

- A. RESTRICTED WASTE REQUIRES TREATMENT**
 This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).
- B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS**
 "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."
- B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)**
 "I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- B.3 GOOD FAITH ANALYTICAL CERTIFICATION - FOR INCINERATED ORGANICS**
 "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264 Subpart O or Part 265 Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- C. RESTRICTED WASTE SUBJECT TO A VARIANCE**
 This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 7 above.
- D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT**
 "I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth on 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment."

N. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
 This waste is newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.
Grace Williams Technical Specialist 11/19/91

PCB SHIPMENT WORKSHEET

DW05
 Generator Name: Raytheon Co. EPA ID# MAD9906855
 Address: 430 Boston Post Rd P.O.# _____
Wayland, MA 01778 Manifest# NYS 7365876
 Contact: Grace Harvey 93-7
 Phone: 508-440-2729 725

PCB INFORMATION				
Drum #	Weight (kg)	Out of Service Date	Contents	Disposal Method
BW9113MDC		12/18/95	ABS oil	landfill

ADDITIONAL INFORMATION FOR CAPACITORS/TRANSFORMERS				
Drum #	Unit Dimension	Leaking? Yes/No	Manufacturers Serial#	Pallet or Drum?

* 20 yard rolloff

Determination of Underlying Constituents

Generator Name: Raytheon Co. Location: 430 Boston Post Rd
Weymouth, MA
 Waste Name: PCB Soil / Sludge [DW-05] Waste Codes: PCB1 MA02
 EPA ID #: MAD 990 685 554 Profile #: _____

In accordance with final Land Disposal Restriction regulations published on May 18, 1993 and September 19, 1994, hazardous wastes which exhibit the characteristics of: D001 (ignitability, except for D001, High TOC Ignitable Subcategory, TOC > 10%); D002 (corrosivity); and D012 through D043 (toxicity characteristic for pesticides and organics) must be treated to remove the characteristic and for all "underlying constituents" which are reasonably expected to be present in the waste at levels above those listed in 40 CFR Part 268.48, Table UTS - Universal Treatment Standards, at the point of generation of the waste. Generators of these wastes are now responsible for monitoring and identifying, through analysis or documentable knowledge, all underlying constituents reasonably expected to be present in the waste above the UTS level. Wastes exhibiting the characteristics of D004 through D011 (toxicity characteristic for metals) are not affected by this rule.

In order to comply with the requirements of these rules, Laidlaw Environmental Services is requesting all generators whose wastes exhibit one or more of the affected characteristics to review the Universal Treatment Standards table on the back of this form and check the statement which is appropriate for the waste material.



I certify that this waste does not contain any of the "underlying constituents" indicated in 40 CFR Part 268.48, Table UTS. This certification is supported by:



Analytical Data (Please provide);



Generator Knowledge.



I certify that this waste meets the Universal Treatment Standards for all "underlying constituents" reasonably expected to be present in this waste. (Please provide analytical data supporting this certification).



I notify that this waste does not meet the Universal Treatment Standards for the following "underlying constituents" and must be treated before this waste can be land disposed. (Please list all applicable legend numbers from the table provided on the back of this form).

X

Print Name: Grace Hwang
 Title: Technical Specialist

Signature: Grace Hwang
 Date: 1/16/96

Generator Name: Rainwater Co. Location: 150 Boston Boston Wayland, MA Waste Name: PCB Soil Sludge
 Profile #: _____ EPA ID#: MA090685314 Laidlaw Category: _____

CHARACTERISTICS OF HAZARDOUS WASTE: Indicate if this waste contains any of the following characteristics based on criteria mandated by 40 CFR 261.21, 261.22, 261.23 and 261.24.

Characteristic	Regulatory Threshold Level	(Check One)		Scientific Data	Generator Knowledge	Actual Value	Constituent	Regulatory Threshold Level	(Check One)		Scientific Data	Generator Knowledge	Actual Value
		Yes	No						Yes	No			
D001 (Ignitability)	<140°F	—	<input checked="" type="checkbox"/>	—	—	—	D023 o-Cresol	200.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D002 (Corrosivity)	≤2 or ≥12.5	—	<input checked="" type="checkbox"/>	—	—	—	D024 m-Cresol	200.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D003 (Reactivity)		—	<input checked="" type="checkbox"/>	—	—	—	D025 p-Cresol	200.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D004 (Arsenic)	5.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D026 Cresol	200.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D005 (Barium)	100.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D027 1,4-Dichlorobenzene	7.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D006 (Cadmium)	1.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D028 1,2-Dichloroethane	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D007 (Chromium)	5.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D029 1,1-Dichloroethane	0.7 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D008 (Lead)	5.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D030 2,4-Dinitrotoluene	0.13 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D009 (Mercury)	0.20 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D031 Heptachlor (and its epoxide)	0.008 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D010 (Selenium)	1.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D032 Hexachlorobenzene	0.13 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D011 (Silver)	5.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D033 Hexachlorobutadiene	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D012 (Ethics)	0.02 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D034 Hexachlorocyclopentadiene	3.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D013 (Lindane)	0.4 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D035 Methyl ethyl ketone	200.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D014 (Methoxychlor)	10.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D036 Nitrobenzene	2.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D015 (Toluene)	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D037 Pentachlorophenol	100.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D016 2,4-D	10.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D038 Pyridine	5.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D017 2,4,5-TP (Silver)	1.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D039 Tetrachloroethylene	0.7 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D018 Benzene	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D040 Trichloroethylene	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D019 Carbon Tetrachloride	0.5 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D041 2,4,5-Trichlorophenol	400.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D020 Chlorane	0.03 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D042 2,4,6-Trichlorophenol	2.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D021 Chlorobenzene	100.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—	D043 Vinyl Chloride	0.2 ppm	—	<input checked="" type="checkbox"/>	—	—	—
D022 Chloroform	6.0 ppm	—	<input checked="" type="checkbox"/>	—	—	—							

* As defined by the TCLP (Method 1311)

** If waste exhibits characteristics of Ignitability or Corrosivity the ICR Rule Certification on the back must be completed.

____ I certify that this waste is considered non-hazardous under 40 CFR 261. (Please initial if applicable)

Indicate the expected concentrations of the following parameters for this waste stream:

Thallium (ppm) _____ Ammonia (ppm) _____ TOC (ppm) _____ VOC (ppm) _____ COD (ppm) _____
 TPH (ppm) _____ TCLP-TPH (ppm) _____ BOD (ppm) _____ Oil (%) _____ Ash (%) _____ Chloride (ppm) _____

Does this waste contain any of the following: Pesticides, Herbicides, or Dioxins? Please initial one: Yes _____ No _____

If YES, indicate compounds and concentrations: _____

"LISTED" Hazardous Wastes: Indicate if this waste also contains any listed hazardous wastes coded in 40 CFR 261.31, 261.32, and 261.33 by including the appropriate EPA hazardous waste code(s).

Please initial each statement if your waste does not carry any listed hazardous wastes coded in 40 CFR 261.31, 261.32 and/or 261.33.

I certify that this waste does not contain any listed hazardous waste(s) coded in 40 CFR 261.31, 261.32 and/or 261.33.

____ I certify that the treatment of this waste will not produce any listed hazardous waste(s) coded in 40 CFR 261.31 and/or 261.32 (i.e. F006 sludges from the treatment of electroplating wastewaters. F019 sludges from aluminum chemical conversion coating wastewaters).

SORBENT NOTIFICATION: Please initial the appropriate line.

I have not added sorbents (i.e. material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb, absorb, or both) to the waste streams indicated above.

____ I have added sorbents (i.e. material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb, absorb, or both) to the waste streams indicated above. I certify that any sorbent agents added to this waste are considered nonbiodegradable as indicated in 40 CFR Section 264.314/265.314.

REPRESENTATIVE SAMPLE CERTIFICATION: Please initial below.

____ I certify that the sample presented is representative of the waste and has been collected in accordance with "Test Methods for the Evaluation of Solid Wastes. Physical/Chemical Methods" SW246, USEPA. Office of Solid Waste, Washington, D.C. 20460.

GENERATOR CERTIFICATION:

I hereby certify that all information submitted on this form and all attached documents are true and accurate. In the event that this form is not fully completed, I authorize Laidlaw Environmental Services (TS) Inc. to conduct necessary testing at my expense to properly complete the form, and to modify my profile based upon the analytical data on the representative sample sent upon my notification.

Print Name: Grace Huang Signature: Grace Huang Title: Technical Specialist Date: 1/16/96

THIS CERTIFICATION/RECERTIFICATION IS REQUIRED FOR EACH PROFILE TO LAIDLAW ENVIRONMENTAL SERVICES (TS), INC.
 ORIGINAL SIGNATURE REQUIRED



Waste Management, Inc.

CWM Chemical Services, Inc. Phone 716/754-8231
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107

Federal EPA ID: NYD049836679

RAYTHEON ELECTRONIC SYSTEMS ATTN: GRACE HWANG M/S 4-2-263
ATTN: MANIFEST SECTION
MAD990685554
528 BOSTON POST RD
SUDBURY MA 01776

CERTIFICATE OF DISPOSAL

CWM Chemical Services, Inc. has received waste material from RAYTHEON ELECTRONIC SYSTEMS ATTN: GRACE HWANG M/S 4-2-263 on 01/19/96 as described on Hazardous Waste Manifest number NYB7393725 Sequence number 01. CWM Chemical Services, Inc., hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: BW9113
CWM Tracking ID: 8144260401
CWM Unit #: 1*0
Disposal Date: 01/23/96

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Kathleen D. Morrison

KATHLEEN D. MORRISON
RECORDS DEPT. SUPERVISOR
Certificate # 54464
01/29/96

P.E. BURKE MOVING & STORAGE CORP.

AGENT FOR UNITED VAN LINES

124 PROSPECT ST. • WALTHAM, MA 02154 • Ph. (617) 894-1900

08063

DATE _____

CUSTOMER'S NAME _____

B/L NO. _____

ORIGIN _____

DESTINATION _____

CARRIER _____

DATE
1-17-96

TIME
4:34AM

20520

lb GROSS

lb TARE - DRIVER

ON _____

OFF _____

lb NET

Roll of

bw-05

some

DW06

(4.4yds)

DRIVER _____

WEIGHER _____

TRUCK NO. _____

TRAILER NO. _____

FEE _____

203701

R026

(5)

WEIGHED ON A FAIRBANKS SCALE

Michael Canard