Environmental
Resources
Management

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14 May 2008
Reference: 0061882.05

Ms. Kim Tisa
PCB Coordinator
United States Environmental Protection Agency
1 Congress St, Suite 1100-CPT
Boston, MA 02114-2023

Re: Toxic Substances Control Act Risk-Based Polychlorinated Biphenyls Remediation Final Report

Dear Ms. Tisa:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is submitting to the United States Environmental Protection Agency (USEPA) Region I, Polychlorinated Biphenyl (PCB) Coordinator this Final Report regarding the wetland remediation and restoration on the Former Raytheon Facility located at 430 Boston Post Road, Wayland, MA (Site) and adjacent property (Figure 1). This report is provided in accordance with Special Condition 16 of the Approval for Risked-Based Remediation dated 2 October 2003 under 40 Code of Federal Regulations 761.61(c). Relevant components of Special Condition 16 are listed in italics with the required information presented directly below.

The Toxic Substance Control Act (TSCA; 40 CFR 750 and 761) Approval for Risk-Based PCB Remediation was issued by the USEPA in response to an Application for Risk-Based Disposal Approval submitted on 23 December 2002 (revision and additional information submitted on 3 April 2003, 8 May 2003, and 28 August 2003). The information summarized below has also been presented in great detail in the Phase IV Remedy Implementation Plan Completion Report (Phase IV CR), dated 24 November 2004, submitted in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) to the Massachusetts Department of Environmental Protection (DEP). For your reference, an electronic copy of the Phase IV CR has been provided as Appendix A.

This Final Report is being submitted without the inclusion of one of the required Deed Notices for the two subject properties covered by the permit. The Deed Notice for the Former Raytheon Property will be

submitted to the USEPA after Raytheon and the current property owner revise the existing Deed Notice is response to proposed redevelopment activities on the property. Submission of the Final Report without this Deed Notice was requested by Kim Tisa in an email sent to Raytheon and ERM on 21 April 2008.

NARRATIVE OF REMEDIAL ACTIVITIES

The primary source of impact to the wetland soil/sediment at the above-referenced Site is believed to be historic releases of oil and/or hazardous material (OHM) to the stormwater conveyance system, discharging at the stormwater outfall OF-1 (Figure 2). The primary contaminants of concern (COCs) identified in source structures (e.g. dry wells and manholes) connected to the stormwater conveyance system included polynuclear aromatic hydrocarbons (PAHs), PCBs, and heavy metals (chromium, copper, silver, arsenic, and lead). These COCs were identified under the Phase II Comprehensive Site Assessment, dated 21 November 2001, and the remedial activities were described in the Phase III Remedial Action Plan, dated 21 November 2001, and subsequent Phase IV Remedy Implementation Plan (RIP), dated 27 December 2002. The Site was Tier classified in May 1997 as a Tier IB "Disposal Site" and issued DEP Permit No. 133939.

Wetland soil/sediment remediation activities were conducted between October 2003 and October 2004 and included the following:

- Excavation of impacted wetland soil/sediment;
- Sediment verification sampling of the remediation area;
- Backfilling area with clean soil and restoration planting/monitoring of the wetland area;
- Management and disposal of water, excavated soil/sediment, and remedial waste; and
- Demobilization of equipment and restoration of project work areas.

ESTIMATE OF THE TOTAL SIZE OF THE REMEDIATED AREAS

Wetland excavation activities were completed from 14 October 2003 through 30 January 2004. According to the final excavation area survey, the square footage of each excavated area was as follows:

- Area A = 3,151.5 square feet (ft^2);
- Area B = 9,623.9 ft^2; and
- Area C = 76,052.6 ft^2.

The total area excavated was 88,828 ft^2, or 2.04 acres, and the volume totaled approximately 8,076 cubic yards (approximately 9,500 tons of sediment). Figure 2 shows the final delineation of the wetland excavation area. More details of the excavation of the wetland area are described in Section 2.4 of the Phase IV CR (Appendix A).

CHARACTERIZATION AND CONFIRMATION SAMPLING ANALYTICAL RESULTS

Verification Sampling

Wetland verification sampling focused on satisfying TSCA clean-up requirements in accordance with 40 CFR 761, Subpart O for PCBs and MCP risk management criteria for PAHs and metals. The Risk-Based Plan to meet TSCA requirements was approved on 2 October 2003. Target clean-up goals presented in the following table represent the arithmetic average residual concentration of each compound allowed in the remediation area following excavation.

Compound	Cleanup Goal Arithmetic Average Concentration (mg/kg)
Total PCBs	2.0
Total PAHs	9.0
Arsenic	11
Chromium (trivalent)	332
Copper	372
Lead	210
Silver	13

Two types of verification samples were collected:

- Grid samples - five-point composite samples taken within 20-foot by 20-foot grid cells from the pattern surveyed onto the remediation areas (Figure 2); and
- Perimeter samples - grab samples collected along the sidewall boundaries of the three excavation areas (Figure 2).

The analytical results for the wetland soil/sediment samples are compared to the applicable cleanup goals as stated in the USEPA approved Risk-Based Remediation Plan and are presented in Tables 1a through 1f. If composite verification samples indicated that clean-up goals were not achieved, an additional 6 inches was removed and the cell re-sampled. If perimeter verification samples indicated that clean-up goals were not achieved, the cell to the outside of the sample location was excavated and both the newly excavated grid cell and the perimeter location were re-sampled. As grid cells were re-sampled, the sampling round number of the sample identification was changed (i.e., -01 to -02 to -03). Sample results for the verification samples, which were in compliance with the clean-up goals, are presented in Tables 1a through 1f. Table 2 details which contaminants were in exceedance and which cells were re-sampled.

Sampling collection procedures were performed in accordance with the Raytheon Wetlands Remediation QA/QC Plan as provided to the USEPA in the Application for Risk-Based Disposal Approval.

Laboratory Quality Control/Quality Assurance

Each laboratory report contains the laboratory's quality control/quality assurance checks. A Tier II data validation review was performed by ERM and is included as Appendix B. Laboratory analytical results for the verification sampling and the accompanying chains of custody are included in Appendix C of the Phase IV CR (Appendix A).

Waste Characterization Sampling

Excavated wetland soil/sediment was segregated into stockpiles according to moisture content and contaminant class (i.e. wetland soil/sediment containing greater than 50 parts per million [ppm] PCBs were stockpiled separately from wetland soil/sediment containing less than 50 ppm PCBs). For every 200 cubic yards (yd^3) of wetland soil/sediment excavated from the wetland and transported to the stockpile area, a waste characterization sample was collected. Laboratory analytical results summarizing the waste characterization sampling are presented in Table 3. The laboratory analytical reports are included in Appendix E of the Phase IV CR (Appendix A).

Manifests, Bills of Lading, Certificates of Disposal

Off-site transportation of wetland soil/sediment occurred from 27 October 2003 to 16 January 2004 and 7 June 2004 to 16 July 2004. Wetland excavation activities were completed in January 2004. However, freezing temperatures prohibited the completion of sediment transport at that time. Sediment and excavated ice were temporarily stored in the staging area until June 2004 when warmer temperatures allowed for proper preparation, loading and transportation off Site.

Wetland soil/sediment was transported via truck and rail by Clean Harbors Inc. to Clean Harbors Lone Mountain Storage Facility in Waynoka, Oklahoma. Wetland soil/sediment containing greater than 50 ppm PCBs was transported to the Subtitle C landfill cell. Wetland soil/sediment containing less than 50 ppm PCBs was classified as non-hazardous waste and sent to the Subtitle D landfill cell. Copies of the manifests were sent to the DEP and the Oklahoma Department of Environmental Quality in accordance with 40 CFR 26.2 and 310 CMR 30.000. Manifests are presented in Appendix F of the Phase IV CR (Appendix A).

During Site demobilization activities, materials used in the project work areas were transported off Site for recycling or disposal. Access road soil/gravel scrapings were transported from the Site to Waste Management of New Hampshire Inc., Rochester, New Hampshire. Shipments occurred between 8 July 2004 and 12 July 2004 totaling approximately 665 tons of material for disposal. Approximately 35 tons of non-hazardous soil was transported from the Site to Environmental Soil Management, Inc., Loudon, New Hampshire on 27 October 2004. Asphalt and gravel used in project areas was shipped for recycling to American Reclamation Corporation in Charlton, Massachusetts from 6 July 2004 to 12 July 2004. Approximately 712 tons of asphalt and 300 tons of gravel were shipped for recycling. The Bill of Lading forms, Straight Bill of Lading forms, and associated laboratory characterization reports required by the DEP are included in Appendix C.

Excavation equipment was also sampled for PCBs and metals as part of decontamination procedures prior to permanent removal from the wetland. Results indicated non-detect levels of PCBs and trace concentrations of metals, confirming that equipment could be transported off Site. Laboratory results of equipment samples are included in Appendix G of the Phase IV CR (Appendix A).

Wetland Restoration Activities

Pre-excavation ground elevations were surveyed and marked on stakes placed in the remediation area, indicating the maximum extent of proposed fill needed. On 2 February 2004, engineered soil was brought in to fill and grade the remediation area. The soil was a sandy loam and compost mixture with approximately 12 percent organic matter. It was treated with steam to kill invasive species and weed seeds, and inoculated with mycorrhizae fungi to enhance the re-vegetation effort. The soil specifications used as well as the verification analyses and certification letter are included as Appendix D. Approximately 11,300 yd^3 of clean fill were used in the excavated areas and grading was completed on 18 February 2004.

Wetland restoration planting was completed on 20 February 2004 using the planting specifications submitted through the permit applications. A total of 71,255 seedlings were hand planted and a seed mixture was broadcast over the remediation area to fill in gaps between plants and promote plant diversity. Minor substitutions were made based on species availability and were made using comparable species.

As described in the Risk-Based Remediation Plan wetlands monitoring has been ongoing and will continue for 5 years after the completion of the remediation project. Additional plantings and invasive species control have been, and will continue to be, planned as needed. To date, 4 years of wetland monitoring have been performed and plantings continue to cover the entire remedial area. Annual Wetland Monitoring Reports were provided to regulatory agencies following the 2004, 2005 (Woodlot, 2004 and 2005), 2006, and 2007 (ERM, 2006 and 2007) monitoring events.

A more detailed description of the restoration, planting, and wetland monitoring is included in the Phase IV CR (Appendix A).

Use Conditions and Deed Notice

In accordance to Condition 13 of the Approval for Risked-Based Remediation dated 2 October 2003 under 40 CFR 761.61(c), a Deed Notice has been issued for the Former Hamlen Property and is included in Appendix E. As stated above, the Deed Notice for the Former Raytheon Property has not been finalized and will be submitted upon completion.

If you have any questions or comments, please contact the undersigned at (617) 646-7800.

Sincerely,

John C. Drobinski, P.G., LSP
Principal-in-Charge

Jeremy J. Picard, P.G.
Project Manager

Enclosures:

Figure 1	Site Locus
Figure 2	Wetland Remedial Area
Table 1a to 1f	Summary of Wetland Soil/Sediment Analytical Results
Table 2	Summary of Resampled Wetland Grid Cells
Table 3	Summary of Waste Characterization Analytical Results
Appendix A	Phase IV Completion Report (CD)
Appendix B	Data Validation Report
Appendix C	Bill of Lading Forms and Associated Laboratory Reports
Appendix D	Soil Specifications and Certification
Appendix E	Deed Notice

cc: Louis Burkhardt, Raytheon
Benson Gould, CMG
Brian Monahan, Town of Wayland Conservation Commission
Public Repositories (2)
Paula Phillips, Congress Group

Tables

Table 1a
Summary of Wetland Soil/Sediment Analytical Results - Area A Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-C113-01	BC-C114-01	BC-C117-01	BC-C118-01	BC-C121-01	BC-C122-01	Average
Date Sampled		29-Jan-04	29-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	
Total Metals (mg/kg)								
Arsenic	11	**2.3**	**2.3**	**2.1**	**2.6**	**2.2**	**1.9**	2.2
Chromium	332	**7.6**	**7.5**	**6.0**	**7.4**	**6.7**	**7.3**	7.1
Copper	372	**9.7**	**13**	**9.9**	**10**	**10**	**11**	11
Lead	210	**2.9**	**2.7**	**2.8**	**3.0**	**2.5**	**2.5**	2.7
Silver	13	0.17	0.17	0.16	0.16	0.17	0.17	0.16
SVOCs/PAHs (µg/kg)								
1-Methyl phenanthrene		65	65	60	65	65	65	64
1-Methylnaphthalene		65	65	60	65	65	65	64
2-Methylnaphthalene		65	65	60	65	65	65	64
Acenaphthene		65	65	60	65	65	65	64
Acenaphthylene		65	65	60	65	65	65	64
Anthracene		65	65	60	65	65	65	64
Benz(a)anthracene		65	65	60	65	65	65	64
Benzo(a)pyrene		65	65	60	65	65	65	64
Benzo(b)fluoranthene		65	65	60	65	65	65	64
Benzo(ghi)perylene		65	65	60	65	65	65	64
Benzo(k)fluoranthene		65	65	60	65	65	65	64
Biphenyl		65	65	60	65	65	65	64
Chrysene		65	65	60	65	65	65	64
Dibenzo(a,h)anthracene		65	65	60	65	65	65	64
Fluoranthene		65	65	60	65	65	65	64
Fluorene		65	65	60	65	65	65	64
Indeno(1,2,3-cd)pyrene		65	65	60	65	65	65	64
Naphthalene		65	65	60	65	65	65	64
Perylene		65	65	**180**	**200**	**160**	**260**	155
Phenanthrene		65	65	60	65	65	65	64
Pyrene		65	65	60	65	65	65	64
Total SVOC/PAHs	*9,000*	*1,365*	*1,365*	*1,380*	*1,500*	*1,460*	*1,560*	*1,438*
PCBs (µg/kg)								
Aroclor® 1016 and 1242 - combination		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1221		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1232		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1248		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1254		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1260		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1262		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Aroclor® 1268		41.7	41.7	39.1	40.3	41.7	41.7	41.0
Total PCBs	*2,000*	*333.2*	*333.2*	*312.4*	*322.4*	*333.2*	*333.2*	*327.9*

Notes:
Detected values are displayed in bold.
Non-detects are shown as half the method detection limit.

Table 1b
Summary of Wetland Soil/Sediment Analytical Results - Area A Perimeters
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-P121-01	BC-P118-01	BC-P113-01	Average
Date Sampled		28-Jan-04	28-Jan-04	29-Jan-04	
Total Metals (mg/kg)					
Arsenic	11	**3.7**	**1.7**	**4.0**	3.1
Chromium	332	**11**	**6.2**	**23**	13
Copper	372	**17**	**7.4**	**34**	19
Lead	210	**6.2**	**2.1**	**13**	7.1
Silver	13	0.19	0.17	**0.99**	0.45
SVOCs/PAHs (µg/kg)					
1-Methyl phenanthrene		75	65	70	70
1-Methylnaphthalene		75	65	70	70
2-Methylnaphthalene		75	65	70	70
Acenaphthene		75	65	70	70
Acenaphthylene		75	65	70	70
Anthracene		75	65	70	70
Benz(a)anthracene		75	65	70	70
Benzo(a)pyrene		75	65	70	70
Benzo(b)fluoranthene		75	65	70	70
Benzo(ghi)perylene		75	65	70	70
Benzo(k)fluoranthene		75	65	70	70
Biphenyl		75	65	70	70
Chrysene		75	65	70	70
Dibenzo(a,h)anthracene		75	65	70	70
Fluoranthene		75	65	70	70
Fluorene		75	65	70	70
Indeno(1,2,3-cd)pyrene		75	65	70	70
Naphthalene		75	65	70	70
Perylene		75	65	70	70
Phenanthrene		75	65	70	70
Pyrene		**190**	65	70	108
Total SVOC/PAHs	*9,000*	*1,690*	*1,365*	*1,470*	*1,508*
PCBs (µg/kg)					
Aroclor® 1016 and 1242 - combination		48.1	41.7	44.7	44.8
Aroclor® 1221		48.1	41.7	44.7	44.8
Aroclor® 1232		48.1	41.7	44.7	44.8
Aroclor® 1248		48.1	41.7	44.7	44.8
Aroclor® 1254		48.1	41.7	44.7	44.8
Aroclor® 1260		48.1	41.7	44.7	44.8
Aroclor® 1262		48.1	41.7	44.7	44.8
Aroclor® 1268		48.1	41.7	44.7	44.8
Total PCBs	*2,000*	*384.8*	*333.2*	*357.2*	*358.4*

Notes:
Detected values are displayed in bold.
Non-detects are shown as half the method detection limit.

Table 1c
Summary of Wetland Soil/Sediment Analytical Results - Area B Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-Up Goals	BC-C092-01	BC-C093-01	BC-C094-01	BC-C096-01	BC-C097-01	BC-C098-01	BC-C100-01	BC-C101-01	BC-C102-01	BD-C085-01	BD-C086-01	BD-C087-01	BD-C089-01
Date Sampled		22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03
Total Metals (mg/kg)														
Arsenic	11	**5.1**	**3.0**	**5.1**	**4.6**	**2.4**	**5.8**	**9.9**	**3.9**	**7.8**	**2.2**	**2.4**	**3.2**	**2.6**
Chromium	332	**120**	**6.7**	**54**	**120**	**6.9**	**62**	**710**	**87**	**360**	**8.5**	**9.5**	**8.7**	**17**
Copper	372	**170**	**8.9**	**110**	**170**	**5.7**	**120**	**730**	**98**	**330**	**9.2**	**10**	**13**	**18**
Lead	210	**45**	**2.3**	**77**	**49**	**2.1**	**90**	**150**	**53**	**150**	**2.4**	**2.7**	**3.6**	**4.2**
Silver	13	**7.6**	0.15	**3.7**	**5.4**	0.16	**4.2**	**26**	**3.9**	**33**	0.16	0.16	0.2	**0.54**
SVOCs/PAHs (µg/kg)														
1-Methyl phenanthrene		70	60	70	70	65	70	90	70	75	65	60	60	60
1-Methylnaphthalene		70	60	70	70	65	70	90	70	75	65	60	60	60
2-Methylnaphthalene		70	60	70	70	65	70	90	70	75	65	60	60	60
Acenaphthene		70	60	70	70	65	70	90	70	75	65	60	60	60
Acenaphthylene		70	60	70	70	65	70	90	70	75	65	60	60	60
Anthracene		70	60	70	70	65	70	90	70	75	65	60	60	60
Benz[a]anthracene		70	60	70	70	65	**180**	90	70	75	65	60	60	60
Benzo[a]pyrene		70	60	70	70	65	**200**	**180**	70	75	65	60	60	60
Benzo[b]fluoranthene		70	60	70	70	65	**340**	**300**	70	**220**	65	60	60	60
Benzo[ghi]perylene		70	60	70	70	65	70	90	70	75	65	60	60	60
Benzo[k]fluoranthene		70	60	70	70	65	**340**	**280**	70	**190**	65	60	60	60
Biphenyl		70	60	70	70	65	70	90	70	75	65	60	60	60
Chrysene		70	60	70	70	65	**350**	**350**	70	**220**	65	60	60	60
Dibenzo[a,h]anthracene		70	60	70	70	65	70	90	70	75	65	60	60	60
Fluoranthene		70	60	70	70	65	**430**	**370**	70	**260**	65	60	60	60
Fluorene		70	60	70	70	65	70	90	70	75	65	60	60	60
Indeno[1,2,3-cd]pyrene		70	60	70	70	65	70	90	70	75	65	60	60	60
Naphthalene		70	60	70	70	65	70	90	70	75	65	60	60	60
Perylene		70	60	70	70	65	70	90	70	75	65	60	60	60
Phenanthrene		70	60	70	70	65	**190**	90	70	75	65	60	60	60
Pyrene		70	60	70	70	65	**460**	**420**	70	**300**	65	60	60	60
Total PAHs	*9,000*	*1,470*	*1,260*	*1,470*	*1,470*	*1,365*	*3,400*	*3,250*	*1,470*	*2,390*	*1,365*	*1,260*	*1,260*	*1,260*
PCBs (µg/kg)														
Aroclor® 1016 and 1242 - combination		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Aroclor® 1221		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Aroclor® 1232		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Aroclor® 1248		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Aroclor® 1254		**425**	36.8	**129**	**251**	40.3	**195**	**585**	**129**	**950**	40.3	39.1	37.9	37.9
Aroclor® 1260		**102**	36.8	43.1	**126**	40.3	44.7	**583**	**124**	**293**	40.3	39.1	37.9	37.9
Aroclor® 1262		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Aroclor® 1268		44.7	36.8	43.1	44.7	40.3	44.7	57.0	43.1	48.1	40.3	39.1	37.9	37.9
Total PCBs	*2,000*	*794.9*	*294.0*	*430.7*	*644.9*	*322.4*	*507.6*	*1,510*	*511.6*	*1,532*	*322.4*	*312.4*	*303.2*	*303.2*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1c
Summary of Wetland Soil/Sediment Analytical Results - Area B Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-Up Goals	BD-C090-01	BD-C091-01	BD-C093-01	BD-C094-01	BD-C095-01	BD-C097-01	BD-C098-01	BD-C099-01	BD-C101-01	BD-C102-01	BD-C103-01	BD-C105-01	BD-C106-01
Date Sampled		22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	21-Oct-03	22-Oct-03	22-Oct-03	21-Oct-03	21-Oct-03	22-Oct-03	21-Oct-03	21-Oct-03
Total Metals (mg/kg)														
Arsenic	11	**2.4**	**2.7**	**2.5**	**2.9**	**2.7**	**4.9**	**3.1**	**3.7**	**6.0**	**4.3**	**5.4**	**7.6**	**6.4**
Chromium	332	**7.8**	**8.4**	**7.3**	**6.9**	**7.2**	**12**	**8.5**	**8.5**	**20**	**7.7**	**9.1**	**10**	**7.2**
Copper	372	**8.8**	**7.7**	**7.1**	**6.4**	**6.8**	**14**	**6.4**	**8.7**	**24**	**6.9**	**7.0**	**4.5**	**3.3**
Lead	210	**2.8**	**3.0**	**2.2**	**2.4**	**2.3**	**4.5**	**2.9**	**3.4**	**5.3**	**3.3**	**3.6**	**3.6**	**2.9**
Silver	13	0.15	0.15	0.15	0.15	0.16	0.14	0.15	0.16	**0.39**	0.14	0.16	0.13	0.13
SVOCs/PAHs (µg/kg)														
1-Methyl phenanthrene		60	60	60	60	60	55	60	60	55	55	60	50	50
1-Methylnaphthalene		60	60	60	60	60	55	60	60	55	55	60	50	50
2-Methylnaphthalene		60	60	60	60	60	55	60	60	55	55	60	50	50
Acenaphthene		60	60	60	60	60	55	60	60	55	55	60	50	50
Acenaphthylene		60	60	60	60	60	55	60	60	55	55	60	50	50
Anthracene		60	60	60	60	60	55	60	60	55	55	60	50	50
Benz[a]anthracene		60	60	60	60	60	55	60	60	55	55	60	50	50
Benzo[a]pyrene		60	60	60	60	60	55	60	60	55	55	60	50	50
Benzo[b]fluoranthene		60	60	60	60	60	55	60	60	55	55	60	50	50
Benzo[ghi]perylene		60	60	60	60	60	55	60	60	55	55	60	50	50
Benzo[k]fluoranthene		60	60	60	60	60	55	60	60	55	55	60	50	50
Biphenyl		60	60	60	60	60	55	60	60	55	55	60	50	50
Chrysene		60	60	60	60	60	55	60	60	55	55	60	50	50
Dibenzo[a,h]anthracene		60	60	60	60	60	55	60	60	55	55	60	50	50
Fluoranthene		60	60	60	60	60	55	60	60	55	55	60	50	50
Fluorene		60	60	60	60	60	55	60	60	55	55	60	50	50
Indeno[1,2,3-cd]pyrene		60	60	60	60	60	55	60	60	55	55	60	50	50
Naphthalene		60	60	60	60	60	55	60	60	55	55	60	50	50
Perylene		60	60	60	60	60	**150**	60	60	**130**	55	60	**150**	50
Phenanthrene		60	60	60	60	60	55	60	60	55	55	60	50	50
Pyrene		60	60	60	60	60	55	60	60	55	55	60	50	50
Total PAHs	*9,000*	*1,260*	*1,260*	*1,260*	*1,260*	*1,260*	*1,250*	*1,260*	*1,260*	*1,230*	*1,155*	*1,260*	*1,150*	*1,050*
PCBs (µg/kg)														
Aroclor® 1016 and 1242 - combination		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1221		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1232		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1248		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1254		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1260		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1262		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Aroclor® 1268		36.8	37.9	36.8	37.9	39.1	35.7	36.8	39.1	34.7	35.7	39.1	32.9	32.9
Total PCBs	*2,000*	*294.0*	*303.2*	*294.0*	*303.2*	*312.4*	*285.6*	*294.0*	*312.4*	*277.6*	*285.6*	*312.4*	*263.2*	*263.2*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1c
Summary of Wetland Soil/Sediment Analytical Results - Area B Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-Up Goals	BD-C107-01	BD-C109-01	BD-C110-01	BD-C111-01	BD-C113-01	BD-C114-01	BD-C115-01	Average
Date Sampled		21-Oct-03	21-Oct-03	21-Oct-03	21-Oct-03	21-Oct-03	21-Oct-03	21-Oct-03	
Total Metals (mg/kg)									
Arsenic	11	**4.4**	**19**	**7.0**	**6.0**	**8.7**	**16**	**8.3**	5.5
Chromium	332	**8.8**	**160**	**8.8**	**21**	**130**	**340**	**30**	72
Copper	372	**4.1**	**190**	**2.3**	**33**	**130**	**150**	**31**	74
Lead	210	**2.6**	**100**	**3.0**	**27**	**110**	**80**	**66**	32
Silver	13	0.13	**6.0**	0.12	**0.28**	**2.5**	**3.2**	**0.4**	3.0
SVOCs/PAHs (µg/kg)									
1-Methyl phenanthrene		50	75	49	55	65	65	60	62
1-Methylnaphthalene		50	75	49	55	65	65	60	62
2-Methylnaphthalene		50	75	49	55	65	65	60	62
Acenaphthene		50	75	49	55	65	65	60	62
Acenaphthylene		50	75	49	55	65	65	60	62
Anthracene		50	75	49	55	65	65	60	62
Benz[a]anthracene		50	75	49	55	65	65	60	65
Benzo[a]pyrene		50	75	49	55	65	65	60	69
Benzo[b]fluoranthene		50	**190**	49	55	**210**	**260**	60	95
Benzo[ghi]perylene		50	75	49	55	65	65	60	62
Benzo[k]fluoranthene		50	**170**	49	55	**190**	**190**	60	90
Biphenyl		50	75	49	55	65	65	60	62
Chrysene		50	**190**	49	55	**190**	**220**	60	95
Dibenzo[a,h]anthracene		50	75	49	55	65	65	60	62
Fluoranthene		50	**250**	49	55	**240**	**240**	60	103
Fluorene		50	75	49	55	65	65	60	62
Indeno[1,2,3-cd]pyrene		50	75	49	55	65	65	60	62
Naphthalene		50	75	49	55	65	65	60	62
Perylene		**110**	75	**100**	55	65	65	60	74
Phenanthrene		50	75	49	55	65	65	60	66
Pyrene		50	**270**	49	55	**250**	**260**	60	108
Total PAHs	*9,000*	*1,110*	*2,270*	*1,080*	*1,155*	*2,120*	*2,210*	*1,260*	*1,509*
PCBs (µg/kg)									
Aroclor® 1016 and 1242 - combination		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Aroclor® 1221		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Aroclor® 1232		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Aroclor® 1248		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Aroclor® 1254		32.9	**172**	30.5	35.7	**231**	**556**	37.9	135
Aroclor® 1260		32.9	46.3	30.5	35.7	**108**	**347**	37.9	80.6
Aroclor® 1262		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Aroclor® 1268		32.9	46.3	30.5	35.7	40.3	41.7	37.9	39.3
Total PCBs	*2,000*	*263.2*	*496.1*	*244.0*	*285.6*	*580.8*	*1,152.9*	*303.2*	*452*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1d
Summary of Wetland Soil/Sediment Analytical Results - Area B Perimeters
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-Up Goals	BC-P092-01	BC-P094-01	BC-P100-01	BC-P102-01	BD-P087-01	BD-P089-01	BD-P095-01	BD-P097-01	BD-P103-01	BD-P105-01	BD-P111-01	BD-P114-01	Average
Date Sampled		21-Oct-03	21-Oct-03	21-Oct-03	21-Oct-03	22-Oct-03	22-Oct-03	22-Oct-03	20-Oct-03	22-Oct-03	20-Oct-03	17-Oct-03	17-Oct-03	
Total Metals (mg/kg)														
Arsenic	11	**5.7**	**5.1**	**4.4**	**5.4**	**3.4**	**6.5**	**7.1**	**6.2**	**6.6**	**12**	**6.5**	**65**	11
Chromium	332	**210**	**16**	**32**	**10**	**12**	**15**	**64**	**16**	**12**	**15**	**21**	**9.1**	21
Copper	372	**390**	**38**	**42**	**10**	**18**	**27**	**67**	**25**	**14**	**12**	**31**	**4.0**	25
Lead	210	**70**	**28**	**18**	**6.7**	**5.8**	**11**	**36**	**7.5**	**12**	**8.8**	**54**	**6.8**	18
Silver	13	**7**	**0.79**	**0.88**	0.15	0.16	**0.34**	**2.4**	0.17	0.15	0.15	0.16	0.13	0.5
PAHs (µg/kg)														
1-Methyl phenanthrene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
1-Methylnaphthalene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
2-Methylnaphthalene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Acenaphthene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Acenaphthylene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Anthracene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Benz[a]anthracene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Benzo[a]pyrene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Benzo[b]fluoranthene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Benzo[ghi]perylene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Benzo[k]fluoranthene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Biphenyl		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Chrysene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Dibenzo[a,h]anthracene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Fluoranthene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Fluorene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Indeno[1,2,3-cd]pyrene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Naphthalene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Perylene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Phenanthrene		75	70	70	60	60	60	75	70	60	60	65	50	62.5
Pyrene		**160**	70	70	60	60	60	75	**140**	60	60	65	50	71.3
Total PAHs	*9,000*	*1,660*	*1,470*	*1,470*	*1,260*	*1,260*	*1,260*	*1,575*	*1,540*	*1,260*	*1,260*	*1,365*	*1,050*	*1,321.3*
PCBs (µg/kg)														
Aroclor® 1016 and 1242 - combination		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1221		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1232		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1248		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1254		**171**	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1260		**276**	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1262		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Aroclor® 1268		46.3	43.1	43.1	37.9	39.1	37.9	46.3	43.1	37.9	37.9	40.3	32.9	39.4
Total PCBs	*2,000*	*724.8*	*344.8*	*344.8*	*303.2*	*312.4*	*303.2*	*370.4*	*344.8*	*303.2*	*303.2*	*322.4*	*263.2*	*315.4*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AC-C001-01	AC-C002-01	AC-C003-01	AC-C004-01	AC-C005-01	AC-C006-01	AC-C008-01	AC-C009-01	AC-C010-01	AC-C011-01	AC-C012-01	AC-C015-01	AC-C016-01	AC-C017-01
Date Sampled		28-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	28-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	28-Jan-04	30-Jan-04	30-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**7.8**	**7.5**	**9.2**	**8.3**	**11**	**4.2**	**6.4**	**6.2**	**11**	**22**	**10**	**1.9**	**5.4**	**9.7**
Chromium	332	**7.2**	**8.2**	**11**	**9.1**	**6.9**	**4.4**	**31**	**44**	**27**	**67**	**17**	**2.7**	**10**	**20**
Copper	372	**11**	**11**	**13**	**12**	**13**	**6.9**	**31**	**81**	**39**	**70**	**21**	**2**	**7.7**	**21**
Lead	210	**2.8**	**3.7**	**4.8**	**10**	**13**	**3.8**	**6.7**	**8**	**16**	**18**	**9.9**	**1.2**	**4**	**8**
Silver	13	0.14	0.13	0.15	0.08	0.07	0.06	**1.4**	**4.6**	**1.2**	**2.7**	**0.36**	0.06	**0.23**	**0.75**
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
1-Methylnaphthalene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
2-Methylnaphthalene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Acenaphthene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Acenaphthylene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Anthracene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Benz[a]anthracene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Benzo[a]pyrene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Benzo[b]fluoranthene		55	50	60	34	27	25	60	60	**200**	50	**78**	25	34	41
Benzo[ghi]perylene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Benzo[k]fluoranthene		55	50	60	34	27	25	60	60	**160**	50	**59**	25	34	41
Biphenyl		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Chrysene		55	50	60	34	27	25	60	60	**150**	50	**62**	25	34	41
Dibenzo[a,h]anthracene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Fluoranthene		55	50	60	34	27	25	**140**	60	**210**	50	**100**	25	34	41
Fluorene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Indeno[1,2,3-cd]pyrene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Naphthalene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Perylene		55	50	**180**	34	27	25	60	60	60	50	28	25	**130**	**250**
Phenanthrene		55	50	60	34	27	25	60	60	60	50	28	25	34	41
Pyrene		55	50	60	34	27	25	**150**	**120**	**210**	50	**97**	25	34	41
Total SVOC/PAHs	*9,000*	*1,155*	*1,050*	*1,380*	*703.5*	*556.5*	*514.5*	*1,430*	*1,320*	*1,890*	*1,050*	*844*	*514.5*	*800*	*1,070*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1221		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1232		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1248		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1254		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1260		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	**92.2**	**95**	**59.4**	15.45	20.85	**233**
Aroclor® 1262		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Aroclor® 1268		33.8	32.9	151.5	20.85	66	15.25	36.75	37.9	36.75	32.05	17.6	15.45	20.85	102
Total PCBs	*2,000*	*270.4*	*263.2*	*1212*	*166.8*	*528*	*122*	*294*	*303.2*	*349.45*	*319.35*	*182.6*	*123.6*	*166.8*	*947*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AC-C018-01	AC-C019-01	AC-C022-01	AC-C023-01	AC-C024-01	AC-C025-01	AC-C026-01	AC-C029-01	AC-C030-01	AC-C031-01	AC-C032-01	AC-C036-01	AC-C043-01	AD-C001-01
Date Sampled		30-Jan-04	30-Jan-04	28-Jan-04	28-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	28-Jan-04	30-Jan-04	30-Jan-04	30-Jan-04	28-Jan-04	23-Jan-04	05-Dec-03
Total Metals (mg/kg)															
Arsenic	11	**19**	**12**	**5.8**	**3.8**	**9.3**	**31**	**7**	**5**	**7.2**	**13**	**9.5**	**16**	**20**	**17**
Chromium	332	**95**	**28**	**4.6**	**5.2**	**16**	**53**	**11**	**3.5**	**6.6**	**17**	**9.8**	**24**	**11**	**300**
Copper	372	**90**	**39**	**2.1**	**1.5**	**14**	**64**	**22**	**1.7**	**2.9**	**14**	**6.4**	**24**	**16**	**800**
Lead	210	**19**	**16**	**1.5**	**2.5**	**6.1**	**18**	**9.4**	**1.5**	**3.1**	**4.4**	**3.1**	**5.1**	**3.6**	**250**
Silver	13	**3.8**	**2**	0.07	0.07	**0.45**	**2.1**	**0.21**	0.06	0.07	**0.49**	**0.19**	**1**	0.16	**22**
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
1-Methylnaphthalene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
2-Methylnaphthalene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Acenaphthene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Acenaphthylene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Anthracene		29	28	27	28	29	35	28	25	26	27	28	41	60	**250**
Benz[a]anthracene		29	**69**	27	28	29	35	28	25	26	27	28	41	60	**900**
Benzo[a]pyrene		29	**64**	27	28	29	35	28	25	26	27	28	41	60	**1,400**
Benzo[b]fluoranthene		**78**	**120**	27	28	29	35	28	25	26	27	28	41	60	**2,000**
Benzo[ghi]perylene		29	28	27	28	29	35	28	25	26	27	28	41	60	**1,400**
Benzo[k]fluoranthene		**59**	**90**	27	28	29	35	28	25	26	27	28	41	60	**1,600**
Biphenyl		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Chrysene		**58**	**96**	27	28	29	35	28	25	26	27	28	41	60	**1,800**
Dibenzo[a,h]anthracene		29	28	27	28	29	35	28	25	26	27	28	41	60	**300**
Fluoranthene		**94**	**160**	27	28	29	**88**	28	25	26	27	28	41	60	**2,900**
Fluorene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Indeno[1,2,3-cd]pyrene		29	28	27	28	29	35	28	25	26	27	28	41	60	**1,300**
Naphthalene		29	28	27	28	29	35	28	25	26	27	28	41	60	55
Perylene		29	28	27	**190**	**150**	35	28	25	26	27	28	41	**290**	**330**
Phenanthrene		29	28	27	28	29	35	28	25	26	27	28	41	60	**1,100**
Pyrene		**83**	**150**	27	28	29	**81**	28	25	26	27	28	41	60	**2,500**
Total SVOC/PAHs	*9,000*	*828*	*1141*	*556.5*	*750*	*730*	*834*	*588*	*514.5*	*546*	*556.5*	*588*	*861*	*1,490*	*18,220*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Aroclor® 1221		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Aroclor® 1232		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Aroclor® 1248		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Aroclor® 1254		**61.3**	**106**	16.45	17.6	18.1	**56.1**	69.5	15.25	16.25	16.65	17.35	25.5	39.05	**121**
Aroclor® 1260		**183**	**112**	16.45	17.6	**39.9**	**102**	69.5	15.25	16.25	**49.2**	**37.2**	25.5	39.05	**558**
Aroclor® 1262		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Aroclor® 1268		17.85	17.6	16.45	17.6	18.1	21.9	69.5	15.25	16.25	16.65	17.35	25.5	39.05	35.7
Total PCBs	*2,000*	*351.4*	*323.6*	*131.6*	*140.8*	*166.6*	*289.5*	*556*	*122*	*130*	*165.75*	*158.65*	*204*	*312.4*	*893.2*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AD-C002-01	AD-C003-01	AD-C004-01	AD-C005-01	AD-C006-02	AD-C008-01	AD-C009-01	AD-C010-01	AD-C011-01	AD-C012-01	AD-C013-01	AD-C015-01	AD-C016-01	AD-C017-01
Date Sampled		05-Dec-03	05-Dec-03	05-Dec-03	05-Dec-03	26-Jan-04	05-Dec-03	04-Dec-03	04-Dec-03	04-Dec-03	04-Dec-03	04-Dec-03	03-Dec-03	03-Dec-03	03-Dec-03
Total Metals (mg/kg)															
Arsenic	11	**4**	**7.8**	**10**	**2.8**	**2.4**	**6**	**6**	**5**	**16**	**7.9**	**6.8**	**8**	**3.8**	**12**
Chromium	332	**8.2**	**6**	**17**	**9.3**	**7.2**	**5.3**	**7.5**	**7.1**	**12**	**9.7**	**10**	**23**	**20**	**24**
Copper	372	**9.6**	**8.9**	**20**	**8.9**	**7.6**	**1.9**	**4.8**	**5.2**	**9.7**	**11**	**13**	**34**	**24**	**25**
Lead	210	**3.4**	**2.8**	**7.8**	**3.1**	**3.3**	**2.1**	**3.5**	**2.7**	**4.6**	**5.2**	**8.4**	**9.1**	**11**	**9.1**
Silver	13	0.14	0.14	0.08	0.06	0.06	0.07	0.11	0.09	0.12	0.07	0.06	**0.75**	**0.82**	**1.1**
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		55	55	33	25	25	29	46	37	48	27	**100**	55	37	46
1-Methylnaphthalene		55	55	33	25	25	29	46	37	48	27	25	55	37	46
2-Methylnaphthalene		55	55	33	25	25	29	46	37	48	27	25	55	37	46
Acenaphthene		55	55	33	25	25	29	46	37	48	27	25	55	37	46
Acenaphthylene		55	55	33	25	25	29	46	37	48	27	**720**	55	37	46
Anthracene		55	55	33	25	25	29	46	37	48	27	**490**	55	37	46
Benz[a]anthracene		55	55	33	25	25	29	46	37	48	27	**1,700**	55	**280**	46
Benzo[a]pyrene		55	55	33	25	25	29	46	37	48	27	**1,300**	55	**290**	**95**
Benzo[b]fluoranthene		55	55	33	25	25	29	46	37	48	27	**1,600**	55	**340**	**120**
Benzo[ghi]perylene		55	55	33	25	25	29	46	37	48	27	**650**	55	**270**	**110**
Benzo[k]fluoranthene		55	55	33	25	25	29	46	37	48	27	**1,600**	55	**370**	**130**
Biphenyl		55	55	33	25	25	29	46	37	48	27	25	55	37	46
Chrysene		55	55	33	25	25	29	46	37	48	27	**1,700**	**130**	**420**	**130**
Dibenzo[a,h]anthracene		55	55	33	25	25	29	46	37	48	27	**320**	55	37	46
Fluoranthene		55	55	33	25	25	29	46	37	48	27	**3,200**	**220**	**790**	**210**
Fluorene		55	55	33	25	25	29	46	37	48	27	25	55	37	46
Indeno[1,2,3-cd]pyrene		55	55	33	25	25	29	46	37	48	27	**750**	55	**240**	**91**
Naphthalene		55	55	33	25	25	29	46	37	48	27	25	55	37	46
Perylene		55	55	33	25	25	29	46	**100**	48	27	**320**	55	**190**	**96**
Phenanthrene		55	55	33	25	25	29	46	37	48	27	**270**	55	**350**	46
Pyrene		55	55	33	25	25	29	46	37	48	27	**3,000**	**200**	**680**	**190**
Total SVOC/PAHs	*9,000*	*1,155*	*1,155*	*693*	*514.5*	*514.5*	*609*	*955.5*	*830*	*997.5*	*556.5*	*17,867*	*1,540*	*4,590*	*1,718*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1221		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1232		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1248		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1254		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1260		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	**577**	**481**	**115**
Aroclor® 1262		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Aroclor® 1268		35.7	35.7	20.5	15.45	15.45	18.1	28.4	22.7	29.75	16.45	15.45	35.7	23.15	28.4
Total PCBs	*2,000*	*285.6*	*285.6*	*164*	*123.6*	*123.6*	*144.8*	*227.2*	*181.6*	*238*	*131.6*	*123.6*	*826.9*	*643.05*	*313.8*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AD-C018-01	AD-C019-01	AD-C020-01	AD-C022-01	AD-C023-01	AD-C024-01	AD-C025-01	AD-C026-02	AD-C027-02	AD-C029-01	AD-C030-01	AD-C031-01	AD-C032-01	AD-C033-03
Date Sampled		03-Dec-03	12-Nov-03	12-Nov-03	18-Nov-03	14-Nov-03	14-Nov-03	14-Nov-03	04-Dec-03	04-Dec-03	18-Nov-03	14-Nov-03	14-Nov-03	14-Nov-03	26-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**9.2**	**6.6**	**5.1**	**7.6**	**11**	**4.8**	**6.6**	**18**	**5.2**	**7.7**	**16**	**5**	**11**	**9.2**
Chromium	332	**7.1**	**70**	**10**	**9.2**	**30**	**9.4**	**14**	**22**	**11**	**19**	**14**	**44**	**13**	**7.6**
Copper	372	**6.8**	**74**	**15**	**34**	**23**	**12**	**20**	**38**	**7**	**16**	**5.5**	**30**	**18**	**1.3**
Lead	210	**2.7**	**24**	**6.4**	**3.8**	**5.8**	**16**	**7.1**	**26**	**4.5**	**5**	**5.5**	**26**	**7.6**	**2.6**
Silver	13	0.14	**5.5**	0.12	**0.3**	**0.28**	0.09	**0.51**	**0.36**	0.08	**0.28**	0.18	**0.5**	0.15	0.06
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		55	35	**70**	34	55	46	46	49	31	34	36	**70**	30	25
1-Methylnaphthalene		55	35	23	34	55	46	46	49	31	34	36	29	30	25
2-Methylnaphthalene		55	35	23	34	55	46	46	49	31	34	36	29	30	25
Acenaphthene		55	35	23	34	55	46	46	49	31	34	36	**66**	30	25
Acenaphthylene		55	35	**200**	34	55	46	46	49	**64**	34	36	29	30	25
Anthracene		55	**70**	**180**	34	55	**160**	**180**	49	**85**	34	36	**220**	30	25
Benz[a]anthracene		55	**260**	**790**	34	55	**460**	**300**	49	**78**	34	36	**570**	30	25
Benzo[a]pyrene		55	**280**	**510**	34	55	**530**	**260**	49	31	34	36	**450**	30	25
Benzo[b]fluoranthene		55	**390**	**740**	34	55	**620**	**270**	**110**	**88**	34	36	**360**	30	25
Benzo[ghi]perylene		55	**260**	**310**	34	55	**390**	**140**	49	31	34	36	**300**	30	25
Benzo[k]fluoranthene		55	**320**	**620**	34	55	**500**	**290**	49	**80**	34	36	**450**	30	25
Biphenyl		55	35	23	34	55	46	46	49	31	34	36	29	30	25
Chrysene		55	**400**	**860**	34	55	**640**	**390**	**100**	**85**	34	36	**610**	**64**	25
Dibenzo[a,h]anthracene		55	**77**	**140**	34	55	**94**	46	49	31	34	36	**100**	30	25
Fluoranthene		55	**680**	**1,700**	34	55	**1,200**	**780**	**180**	**120**	34	36	**1,300**	**220**	25
Fluorene		55	35	23	34	55	**100**	**190**	**99**	**88**	34	36	**71**	30	25
Indeno[1,2,3-cd]pyrene		55	**220**	**340**	34	55	**350**	**130**	49	31	34	36	**260**	30	25
Naphthalene		55	35	23	34	55	46	46	49	31	34	36	29	30	25
Perylene		55	**69**	**120**	34	55	**160**	46	49	31	34	36	**120**	30	25
Phenanthrene		55	**230**	**140**	34	55	**570**	**200**	49	**100**	34	36	**520**	30	25
Pyrene		55	**590**	**1,200**	34	55	**1,000**	**700**	**160**	**120**	34	36	**1,200**	**210**	25
Total SVOC/PAHs	*9,000*	*1,155*	*4,122*	*8,058*	*714*	*1,155*	*7,093*	*4,240*	*1,433*	*1,249*	*703.5*	*745.5*	*6,812*	*1,034*	*514.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1221		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1232		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1248		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1254		34.7	21.55	14.55	21.2	35.7	28.4	**81.7**	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1260		34.7	**444**	**47.9**	21.2	35.7	**406**	**174**	**153**	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1262		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Aroclor® 1268		34.7	21.55	14.55	21.2	35.7	28.4	28.4	30.5	19.25	20.85	22.3	18.1	18.65	15.25
Total PCBs	*2,000*	*277.6*	*594.85*	*149.75*	*169.6*	*285.6*	*604.8*	*426.1*	*366.5*	*154*	*166.8*	*178.4*	*144.8*	*149.2*	*122*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AD-C034-02	AD-C036-01	AD-C037-01	AD-C038-01	AD-C039-01	AD-C040-01	AD-C041-01	AD-C043-01	AD-C044-01	AD-C045-01	AD-C046-01	AD-C047-01	AD-C048-02	AD-C050-01
Date Sampled		04-Dec-03	18-Nov-03	14-Nov-03	14-Nov-03	14-Nov-03	14-Nov-03	12-Nov-03	19-Nov-03	19-Nov-03	14-Nov-03	14-Nov-03	14-Nov-03	03-Dec-03	19-Nov-03
Total Metals (mg/kg)															
Arsenic	11	**5.3**	**15**	**5.8**	**7.1**	**3.8**	**9.9**	**7.5**	**25**	**15**	**12**	**6.5**	**8.1**	**5.9**	**12**
Chromium	332	**14**	**42**	**13**	**380**	**19**	**30**	**8.6**	**27**	**18**	**15**	**21**	**16**	**9**	**7**
Copper	372	**12**	**34**	**8**	**540**	**130**	**26**	**14**	**550**	**13**	**42**	**17**	**23**	**16**	**1.9**
Lead	210	**5.3**	**8.2**	**3.9**	**110**	**5**	**14**	**7.4**	**18**	**6.4**	**13**	**7.4**	**6.1**	**7.5**	**4.1**
Silver	13	0.06	**0.82**	0.09	**9.5**	**0.74**	**0.36**	0.12	**0.43**	**0.23**	**0.4**	**0.38**	**0.45**	**0.14**	0.07
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		24	60	44	28	24	27	23	60	37	28	27	24	**86**	26
1-Methylnaphthalene		24	60	44	28	24	27	23	60	37	28	27	24	25	26
2-Methylnaphthalene		24	60	44	28	24	27	23	60	37	28	27	24	25	26
Acenaphthene		24	60	44	28	24	27	23	60	37	**59**	27	24	25	26
Acenaphthylene		**110**	60	44	28	24	27	23	60	37	28	27	24	**540**	26
Anthracene		**120**	60	44	**180**	**76**	27	23	60	37	**160**	27	24	**370**	26
Benz[a]anthracene		**340**	60	44	**440**	**170**	27	**98**	60	37	**280**	27	24	**1,500**	26
Benzo[a]pyrene		**220**	60	44	**400**	**140**	27	82	60	37	**240**	27	24	**1,200**	26
Benzo[b]fluoranthene		**290**	60	44	**420**	**130**	27	**110**	60	37	**240**	27	24	**1,600**	26
Benzo[ghi]perylene		**94**	60	44	**190**	**85**	27	**57**	60	37	**150**	27	24	**760**	26
Benzo[k]fluoranthene		**310**	60	44	**390**	**120**	27	**130**	60	37	**250**	27	24	**1,400**	26
Biphenyl		24	60	44	28	24	27	23	60	37	28	27	24	25	26
Chrysene		**360**	60	44	**490**	**170**	**70**	**140**	60	37	**360**	27	24	**1,600**	26
Dibenzo[a,h]anthracene		24	60	44	**62**	24	27	23	60	37	28	27	24	**320**	26
Fluoranthene		**700**	60	44	**1,000**	**430**	**100**	**220**	60	37	**800**	27	**82**	**3,000**	26
Fluorene		24	60	44	**75**	24	27	23	60	37	**75**	27	24	25	26
Indeno[1,2,3-cd]pyrene		**110**	60	44	**180**	**76**	27	**61**	60	37	**140**	27	24	**830**	26
Naphthalene		24	60	44	28	24	27	23	60	37	28	27	24	25	26
Perylene		**65**	60	44	**98**	24	27	23	60	37	28	27	24	**300**	26
Phenanthrene		**78**	60	44	**310**	**210**	27	23	60	37	**210**	27	24	**260**	26
Pyrene		**640**	60	44	**1,000**	**370**	**97**	**200**	60	37	**710**	27	**70**	**2,900**	26
Total SVOC/PAHs	*9,000*	*3,629*	*1,260*	*913.5*	*5,428*	*2,217*	*744*	*1,374*	*1,260*	*766.5*	*3,894*	*556.5*	*608*	*16,813*	*535.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1221		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1232		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1248		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1254		14.9	37.9	27.15	**94.3**	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1260		**70.5**	37.9	27.15	17.1	15.05	**210**	14.55	37.9	22.7	**72.2**	16.45	**46.7**	15.45	15.8
Aroclor® 1262		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Aroclor® 1268		14.9	37.9	27.15	17.1	15.05	16.45	14.55	37.9	22.7	17.1	16.45	15.05	15.45	15.8
Total PCBs	*2,000*	*174.8*	*303.2*	*217.2*	*214*	*120.4*	*325.15*	*116.4*	*303.2*	*181.6*	*191.9*	*131.6*	*152.05*	*123.6*	*126.4*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AD-C051-01	AD-C052-01	AD-C053-02	AD-C054-02	AD-C055-02	AD-C057-01	AD-C058-01	AD-C059-02	AD-C060-02	AD-C061-01	AD-C064-01	AD-C065-02	AD-C071-02	AD-C072-02
Date Sampled		19-Nov-03	14-Nov-03	03-Dec-03	03-Dec-03	26-Jan-04	19-Nov-03	19-Nov-03	26-Jan-04	26-Jan-04	03-Dec-03	19-Nov-03	27-Jan-04	27-Jan-04	27-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**11**	**41**	**18**	**20**	**9.8**	**5.8**	**6.9**	**8.2**	**10**	**16**	**8.1**	**5.6**	**9.4**	**7.1**
Chromium	332	**7.1**	**750**	**7.3**	**8.3**	**9.5**	**12**	**10**	**10**	**8.8**	**54**	**13**	**20**	**12**	**11**
Copper	372	**2**	**850**	**1**	**7.1**	**9**	**4.4**	**5.2**	**2.2**	**2.3**	**56**	**12**	**9**	**1.8**	**3.6**
Lead	210	**2.5**	**110**	**3.1**	**8.5**	**6**	**3.3**	**3.2**	**2.9**	**3.1**	**23**	**3.2**	**5.4**	**3.3**	**3.6**
Silver	13	0.06	**7**	0.06	0.08	0.06	0.07	0.07	0.06	0.07	**3.1**	0.07	0.07	0.07	0.07
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
1-Methylnaphthalene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
2-Methylnaphthalene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Acenaphthene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Acenaphthylene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Anthracene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Benz[a]anthracene		25	47	25	30	25	26	26	25	26	**180**	27	27	27	26
Benzo[a]pyrene		25	47	25	30	25	26	26	25	26	**230**	27	27	27	26
Benzo[b]fluoranthene		25	**100**	25	30	25	26	26	25	26	**240**	27	27	27	26
Benzo[ghi]perylene		25	47	25	30	25	26	26	25	26	**290**	27	27	27	26
Benzo[k]fluoranthene		25	**120**	25	30	25	26	26	25	26	**260**	27	27	27	26
Biphenyl		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Chrysene		25	**130**	25	30	25	26	26	25	26	**290**	27	27	27	26
Dibenzo[a,h]anthracene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Fluoranthene		25	**190**	25	30	25	26	26	25	26	**390**	27	27	27	26
Fluorene		25	**140**	25	30	25	26	26	25	26	60	27	27	27	26
Indeno[1,2,3-cd]pyrene		25	47	25	30	25	26	26	25	26	**210**	27	27	27	26
Naphthalene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Perylene		25	47	25	30	25	26	26	25	26	60	27	27	27	26
Phenanthrene		25	47	25	30	25	26	26	25	26	**150**	27	27	27	26
Pyrene		25	**160**	25	30	25	26	26	25	26	**350**	27	27	27	26
Total SVOC/PAHs	*9,000*	*514.5*	*1,538*	*514.5*	*619.5*	*525*	*535.5*	*535.5*	*525*	*535.5*	*3,250*	*567*	*556.5*	*556.5*	*535.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1221		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1232		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1248		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1254		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1260		15.45	**174**	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Aroclor® 1262		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	**57.6**	16.9	16.45	16.45	16
Aroclor® 1268		15.45	29.05	15.45	18.4	15.6	16	16	15.6	15.8	19.55	16.9	16.45	16.45	16
Total PCBs	*2,000*	*123.6*	*377.35*	*123.6*	*147.2*	*124.8*	*128*	*128*	*124.8*	*126.4*	*194.45*	*135.2*	*131.6*	*131.6*	*128*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-C001-01	BC-C002-01	BC-C003-01	BC-C004-01	BC-C005-01	BC-C006-01	BC-C008-01	BC-C009-01	BC-C010-01	BC-C011-01	BC-C012-01	BC-C015-01	BC-C016-01	BC-C017-01
Date Sampled		28-Jan-04	05-Dec-03	05-Dec-03	05-Dec-03	05-Dec-03	29-Jan-04	28-Jan-04	05-Dec-03	05-Dec-03	05-Dec-03	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**4.8**	**7.6**	**15**	**9.4**	**2.9**	**4**	**3.5**	**7.1**	**4.2**	**4.7**	**5**	**4**	**4.8**	**4.4**
Chromium	332	**11**	**6.9**	**280**	**20**	**11**	**27**	**5.1**	**16**	**13**	**34**	**53**	**5.3**	**16**	**13**
Copper	372	**7.9**	**4.2**	**260**	**17**	**9.7**	**25**	**5.3**	**15**	**14**	**29**	**63**	**4.1**	**19**	**16**
Lead	210	**4**	**2.1**	**39**	**4.2**	**2.7**	**4.6**	**2**	**4.4**	**3.6**	**7.1**	**17**	**1.8**	**2.9**	**3.4**
Silver	13	**0.16**	0.08	**7.7**	**0.47**	0.15	**2.4**	0.1	**0.3**	0.14	**0.77**	**1.9**	0.08	0.15	0.16
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
1-Methylnaphthalene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
2-Methylnaphthalene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Acenaphthene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Acenaphthylene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Anthracene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Benz[a]anthracene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Benzo[a]pyrene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Benzo[b]fluoranthene		32	32	**150**	49	60	65	40	55	55	60	70	34	60	65
Benzo[ghi]perylene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Benzo[k]fluoranthene		32	32	**120**	49	60	65	40	55	55	60	70	34	60	65
Biphenyl		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Chrysene		32	32	**140**	**100**	60	65	40	55	55	60	70	34	60	65
Dibenzo[a,h]anthracene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Fluoranthene		32	32	**210**	**150**	60	65	40	55	55	60	70	34	60	65
Fluorene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Indeno[1,2,3-cd]pyrene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Naphthalene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Perylene		**430**	32	**130**	**140**	60	**290**	40	55	55	60	70	34	**140**	65
Phenanthrene		32	32	55	49	60	65	40	55	55	60	70	34	60	65
Pyrene		32	32	**190**	**150**	60	65	40	55	55	60	70	34	60	65
Total SVOC/PAHs	*9,000*	*1,060*	*672*	*1,765*	*1,373*	*1,260*	*1,590*	*840*	*1,155*	*1,155*	*1,260*	*1,470*	*703.5*	*1,340*	*1,365*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1221		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1232		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1248		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1254		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1260		19.85	20.15	**287**	30.5	36.75	41.65	25	33.8	**176**	36.75	44.65	20.85	37.9	40.3
Aroclor® 1262		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Aroclor® 1268		19.85	20.15	34.7	30.5	36.75	41.65	25	33.8	35.7	36.75	44.65	20.85	37.9	40.3
Total PCBs	*2,000*	*158.8*	*161.2*	*529.9*	*244*	*294*	*333.2*	*200*	*270.4*	*425.9*	*294*	*357.2*	*166.8*	*303.2*	*322.4*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-C018-01	BC-C022-01	BC-C023-01	BC-C024-01	BC-C029-01	BC-C030-01	BC-C031-01	BC-C036-01	BC-C037-01	BC-C038-01	BC-C043-01	BC-C044-01	BC-C045-01	BC-C050-01
Date Sampled		28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	28-Jan-04	23-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**5**	**9.7**	**7.6**	**6.9**	**7.4**	**8.4**	**5.8**	**6.3**	**9.5**	**5.3**	**5.5**	**5.3**	**8.3**	**5.3**
Chromium	332	**29**	**8.1**	**8.7**	**12**	**5**	**9.5**	**91**	**5.8**	**7.5**	**22**	**8**	**9.5**	**12**	**6.2**
Copper	372	**32**	**8**	**14**	**20**	**4.3**	**13**	**85**	**7.3**	**10**	**26**	**11**	**15**	**19**	**10**
Lead	210	**6.2**	**2.9**	**2.4**	**3.2**	**1.5**	**2.6**	**18**	**1.9**	**2.2**	**5.4**	**2.1**	**2.6**	**3.4**	**2.3**
Silver	13	**0.77**	0.12	0.17	0.19	0.08	0.15	**3.4**	0.11	0.15	**0.84**	0.16	0.17	0.16	0.16
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
1-Methylnaphthalene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
2-Methylnaphthalene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Acenaphthene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Acenaphthylene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Anthracene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Benz[a]anthracene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Benzo[a]pyrene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Benzo[b]fluoranthene		70	48	70	75	33	60	**230**	45	60	75	60	65	65	65
Benzo[ghi]perylene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Benzo[k]fluoranthene		70	48	70	75	33	60	**190**	45	60	75	60	65	65	65
Biphenyl		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Chrysene		70	48	70	75	33	60	**160**	45	60	75	60	65	65	65
Dibenzo[a,h]anthracene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Fluoranthene		70	**150**	70	75	33	60	**260**	45	60	75	60	65	65	65
Fluorene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Indeno[1,2,3-cd]pyrene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Naphthalene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Perylene		70	48	70	75	33	60	70	45	**140**	**180**	**230**	**170**	**200**	**210**
Phenanthrene		70	48	70	75	33	60	70	45	60	75	60	65	65	65
Pyrene		70	**160**	70	75	33	60	**230**	45	60	75	60	65	65	65
Total SVOC/PAHs	*9,000*	*1,470*	*1,213*	*1,470*	*1,575*	*693*	*1,260*	*2,190*	*934.5*	*1,340*	*1,680*	*1,430*	*1,470*	*1,500*	*1,510*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1221		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1232		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1248		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1254		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1260		44.65	29.75	43.1	48.1	20.5	36.75	**143**	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1262		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Aroclor® 1268		44.65	29.75	43.1	48.1	20.5	36.75	44.65	27.8	36.75	48.1	39.05	41.65	40.3	40.3
Total PCBs	*2,000*	*357.2*	*238*	*344.8*	*384.8*	*164*	*294*	*455.55*	*222.4*	*294*	*384.8*	*312.4*	*333.2*	*322.4*	*322.4*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-C051-01	BC-C052-01	BC-C057-01	BC-C058-01	BC-C059-01	BC-C064-01	BC-C065-01	BC-C066-01	BC-C071-01	BC-C072-01	BC-C073-01	BC-C079-01	BD-C001-01	BD-C002-01
Date Sampled		23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	23-Jan-04	28-Jan-04	23-Jan-04	05-Dec-03	04-Dec-03
Total Metals (mg/kg)															
Arsenic	11	**6.3**	**4.7**	**6.3**	**3**	**4**	**6.4**	**5.9**	**5.4**	**13**	**4.8**	**9.3**	**7.5**	**3**	**4.4**
Chromium	332	**29**	**91**	**6**	**4.6**	**6.1**	**8.2**	**7.3**	**19**	**9.9**	**10**	**6.4**	**7.2**	**17**	**5.9**
Copper	372	**33**	**88**	**13**	**8.8**	**12**	**16**	**15**	**23**	**18**	**16**	**12**	**11**	**40**	**4.2**
Lead	210	**5.8**	**17**	**2.2**	**1.9**	**2.3**	**3.1**	**3.1**	**5.4**	**11**	**4**	**2.1**	**3.2**	**3.7**	**2**
Silver	13	**1.1**	**4.7**	0.16	0.16	0.17	0.17	0.17	**0.76**	0.19	0.19	0.19	0.18	**0.53**	0.06
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
1-Methylnaphthalene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
2-Methylnaphthalene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Acenaphthene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Acenaphthylene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Anthracene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Benz[a]anthracene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Benzo[a]pyrene		65	**150**	65	60	65	70	65	65	75	75	75	70	33	25
Benzo[b]fluoranthene		65	**370**	65	60	65	70	65	65	75	75	75	70	33	25
Benzo[ghi]perylene		65	**140**	65	60	65	70	65	65	75	75	75	70	33	25
Benzo[k]fluoranthene		65	**260**	65	60	65	70	65	65	75	75	75	70	33	25
Biphenyl		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Chrysene		65	**240**	65	60	65	70	65	65	75	75	75	70	33	25
Dibenzo[a,h]anthracene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Fluoranthene		65	**300**	65	60	65	70	65	65	75	75	75	**140**	33	25
Fluorene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Indeno[1,2,3-cd]pyrene		65	**140**	65	60	65	70	65	65	75	75	75	70	33	25
Naphthalene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Perylene		65	**190**	**270**	**190**	**230**	**150**	**160**	**140**	75	**170**	**270**	70	33	25
Phenanthrene		65	70	65	60	65	70	65	65	75	75	75	70	33	25
Pyrene		65	**310**	**140**	60	65	70	65	65	75	75	75	**220**	33	25
Total SVOC/PAHs	*9,000*	*1,365*	*2,940*	*1,645*	*1,390*	*1,530*	*1,550*	*1,460*	*1,440*	*1,575*	*1,670*	*1,770*	*1,690*	*693*	*514.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1221		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1232		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1248		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1254		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1260		40.3	**125**	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1262		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Aroclor® 1268		40.3	43.1	40.3	39.05	41.65	43.1	41.65	41.65	46.3	48.1	46.3	44.65	20.5	15.45
Total PCBs	*2,000*	*322.4*	*426.7*	*322.4*	*312.4*	*333.2*	*344.8*	*333.2*	*333.2*	*370.4*	*384.8*	*370.4*	*357.2*	*164*	*123.6*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BD-C003-01	BD-C004-01	BD-C005-01	BD-C006-01	BD-C008-01	BD-C009-01	BD-C010-01	BD-C011-01	BD-C012-01	BD-C013-01	BD-C015-01	BD-C016-01	BD-C017-01	BD-C018-01
Date Sampled		04-Dec-03	05-Dec-03	05-Dec-03	05-Dec-03	05-Dec-03	19-Nov-03	19-Nov-03	04-Dec-03	04-Dec-03	04-Dec-03	18-Nov-03	18-Nov-03	18-Nov-03	18-Nov-03
Total Metals (mg/kg)															
Arsenic	11	**8**	**8.3**	**5.8**	**6**	**9.8**	**40**	**9.8**	**5**	**7.1**	**6.7**	**11**	**19**	**30**	**12**
Chromium	332	**7.5**	**7.2**	**14**	**48**	**51**	**20**	**5.8**	**17**	**15**	**400**	**7.3**	**7.6**	**8.6**	**6.7**
Copper	372	**2.7**	**3**	**14**	**40**	**51**	**10**	**3.4**	**13**	**13**	**240**	**130**	**4.2**	**8**	**2.6**
Lead	210	**2.5**	**2.2**	**3.6**	**7.4**	**7.8**	**6**	**2.4**	**3.3**	**3.4**	**46**	**2.6**	**2.5**	**2.5**	**2.5**
Silver	13	0.08	0.13	0.14	**1**	**1.8**	0.15	0.08	**0.33**	0.12	**8.1**	**0.27**	0.06	0.07	0.09
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
1-Methylnaphthalene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
2-Methylnaphthalene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Acenaphthene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Acenaphthylene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Anthracene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Benz[a]anthracene		31	50	55	55	**68**	60	30	35	47	45	27	25	27	34
Benzo[a]pyrene		31	50	55	55	**81**	60	30	35	47	**96**	27	25	27	34
Benzo[b]fluoranthene		31	50	55	55	**110**	60	30	35	47	**210**	27	25	27	34
Benzo[ghi]perylene		31	50	55	55	34	60	30	35	47	**100**	27	25	27	34
Benzo[k]fluoranthene		31	50	55	55	**94**	60	30	35	47	**160**	27	25	27	34
Biphenyl		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Chrysene		31	50	55	55	**110**	60	30	35	47	**180**	27	25	27	34
Dibenzo[a,h]anthracene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Fluoranthene		31	50	55	55	**200**	60	30	35	47	**180**	27	25	27	34
Fluorene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Indeno[1,2,3-cd]pyrene		31	50	55	55	34	60	30	35	47	**100**	27	25	27	34
Naphthalene		31	50	55	55	34	60	30	35	47	45	27	25	27	34
Perylene		31	**140**	55	**140**	34	60	30	**87**	**160**	45	27	25	27	34
Phenanthrene		31	50	55	55	**86**	60	30	35	47	45	27	25	27	34
Pyrene		31	50	55	55	**170**	60	30	35	47	**170**	27	25	27	34
Total SVOC/PAHs	*9,000*	*651*	*1,140*	*1,155*	*1,240*	*1,355*	*1,260*	*619.5*	*777*	*1,090*	*1,775*	*556.5*	*514.5*	*567*	*703.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Aroclor® 1221		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Aroclor® 1232		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Aroclor® 1248		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Aroclor® 1254		19.55	32.9	35.7	35.7	20.85	37.9	18.4	**383**	29.05	**462**	16.45	15.45	16.9	20.85
Aroclor® 1260		19.55	32.9	35.7	**79.4**	**137**	37.9	18.4	**720**	29.05	**951**	16.45	15.45	16.9	20.85
Aroclor® 1262		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Aroclor® 1268		19.55	32.9	35.7	35.7	20.85	37.9	18.4	21.55	29.05	27.8	16.45	15.45	16.9	20.85
Total PCBs	*2,000*	*156.4*	*263.2*	*285.6*	*329.3*	*282.95*	*303.2*	*147.2*	*1,232*	*232.4*	*1,580*	*131.6*	*123.6*	*135.2*	*166.8*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BD-C019-01	BD-C020-01	BD-C022-01	BD-C023-01	BD-C024-01	BD-C025-01	BD-C026-01	BD-C027-02	BD-C029-01	BD-C030-01	BD-C031-01	BD-C032-01	BD-C033-01	BD-C034-02
Date Sampled		04-Dec-03	04-Dec-03	18-Nov-03	17-Nov-03	17-Nov-03	17-Nov-03	04-Dec-03	27-Jan-04	18-Nov-03	17-Nov-03	17-Nov-03	17-Nov-03	04-Dec-03	27-Jan-04
Total Metals (mg/kg)															
Arsenic	11	**12**	**16**	**6.2**	**3**	**10**	**22**	**7.6**	**7.2**	**5.6**	**3.1**	**4.6**	**12**	**17**	**8.5**
Chromium	332	**15**	**630**	**7**	**6.2**	**8.1**	**9.4**	**6.2**	**5.4**	**10**	**4.4**	**5.9**	**12**	**9.6**	**5.6**
Copper	372	**12**	**520**	**27**	**9.7**	**7.9**	**16**	**4.2**	**3.1**	**230**	**6.8**	**3.7**	**17**	**5.3**	**3.2**
Lead	210	**3.8**	**100**	**2.8**	**1.6**	**2.7**	**2.8**	**2.2**	**2.3**	**4.2**	**1.9**	**2.7**	**4**	**2.3**	**1.7**
Silver	13	0.13	**26**	**0.3**	0.14	0.12	**0.48**	0.08	0.09	**1.1**	0.13	0.13	**0.28**	0.07	0.07
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
1-Methylnaphthalene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
2-Methylnaphthalene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Acenaphthene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Acenaphthylene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Anthracene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Benz[a]anthracene		50	**290**	25	28	25	26	33	36	31	26	26	26	26	26
Benzo[a]pyrene		50	**440**	25	28	25	26	33	36	31	26	26	26	26	26
Benzo[b]fluoranthene		50	**900**	25	28	25	26	33	36	31	26	26	26	26	26
Benzo[ghi]perylene		50	**420**	25	28	25	26	33	36	31	26	26	26	26	26
Benzo[k]fluoranthene		50	**640**	25	28	25	26	33	36	31	26	26	26	26	26
Biphenyl		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Chrysene		50	**730**	25	28	25	26	33	36	31	26	26	26	26	26
Dibenzo[a,h]anthracene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Fluoranthene		50	**800**	25	28	25	26	33	36	31	26	26	26	26	26
Fluorene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Indeno[1,2,3-cd]pyrene		50	**430**	25	28	25	26	33	36	31	26	26	26	26	26
Naphthalene		50	70	25	28	25	26	33	36	31	26	26	26	26	26
Perylene		**170**	**170**	25	28	25	26	33	36	31	26	26	26	26	26
Phenanthrene		50	**280**	25	28	25	26	33	36	31	26	26	26	26	26
Pyrene		50	**720**	25	28	25	26	33	36	31	26	26	26	26	26
Total SVOC/PAHs	*9,000*	*1,170*	*6,520*	*525*	*577.5*	*514.5*	*546*	*693*	*745.5*	*651*	*535.5*	*546*	*546*	*546*	*535.5*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1221		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1232		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1248		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1254		31.25	**407**	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1260		31.25	**548**	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1262		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Aroclor® 1268		31.25	44.65	15.6	17.1	15.25	16.25	20.5	22.3	19.55	16	16.25	16.25	16.25	16
Total PCBs	*2,000*	*250*	*1,223*	*124.8*	*136.8*	*122*	*130*	*164*	*178.4*	*156.4*	*128*	*130*	*130*	*130*	*128*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BD-C036-01	BD-C037-01	BD-C038-01	BD-C039-01	BD-C040-01	BD-C041-01	BD-C043-01	BD-C044-01	BD-C045-01	BD-C046-01	BD-C047-01	BD-C048-01	BD-C050-01	BD-C051-01
Date Sampled		18-Nov-03	17-Nov-03	17-Nov-03	17-Nov-03	04-Dec-03	04-Dec-03	19-Nov-03	19-Nov-03	02-Dec-03	03-Dec-03	03-Dec-03	03-Dec-03	19-Nov-03	02-Dec-03
Total Metals (mg/kg)															
Arsenic	11	**13**	**8.5**	**6.5**	**7.3**	**4.2**	**8.9**	**22**	**6.5**	**5.5**	**1.6**	**1.1**	**8.3**	**10**	**6.2**
Chromium	332	**31**	**14**	**9.9**	**12**	**3.1**	**130**	**94**	**9.2**	**14**	**18**	**14**	**150**	**5.8**	**7.1**
Copper	372	**46**	**21**	**6**	**5.2**	**1.6**	**210**	**89**	**3**	**10**	**13**	**17**	**250**	**19**	**36**
Lead	210	**5.9**	**9.9**	**3.3**	**4.3**	**2.2**	**27**	**18**	**3.1**	**3.8**	**2.8**	**3.4**	**37**	**3.6**	**2.5**
Silver	13	**0.55**	**0.18**	0.14	0.14	0.06	**4.2**	**2**	0.07	**0.28**	**0.44**	**0.35**	**4**	0.06	0.06
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
1-Methylnaphthalene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
2-Methylnaphthalene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Acenaphthene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Acenaphthylene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Anthracene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Benz[a]anthracene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Benzo[a]pyrene		60	47	28	28	25	32	50	26	27	27	29	**74**	25	25
Benzo[b]fluoranthene		60	47	28	28	25	32	50	26	27	27	29	**180**	25	25
Benzo[ghi]perylene		60	47	28	28	25	32	50	26	27	27	29	**79**	25	25
Benzo[k]fluoranthene		60	47	28	28	25	32	50	26	27	27	29	**140**	25	25
Biphenyl		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Chrysene		60	47	28	28	25	32	50	26	27	27	29	**130**	25	25
Dibenzo[a,h]anthracene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Fluoranthene		60	47	28	28	25	32	50	26	27	27	29	**130**	25	25
Fluorene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Indeno[1,2,3-cd]pyrene		60	47	28	28	25	32	50	26	27	27	29	**75**	25	25
Naphthalene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Perylene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Phenanthrene		60	47	28	28	25	32	50	26	27	27	29	37	25	25
Pyrene		60	47	28	28	25	32	50	26	27	27	29	**120**	25	25
Total SVOC/PAHs	*9,000*	*1260*	*976.5*	*588*	*577.5*	*514.5*	*672*	*1,050*	*535.5*	*556.5*	*556.5*	*598.5*	*1,403*	*514.5*	*525*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1221		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1232		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1248		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1254		37.9	29.05	17.35	17.1	15.25	**116**	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1260		**193**	29.05	17.35	17.1	15.25	**279**	31.25	16	16.45	16.65	17.85	93.7	15.45	15.6
Aroclor® 1262		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Aroclor® 1268		37.9	29.05	17.35	17.1	15.25	20.15	31.25	16	16.45	16.65	17.85	22.7	15.45	15.6
Total PCBs	*2,000*	*458.3*	*232.4*	*138.8*	*136.8*	*122*	*515.9*	*250*	*128*	*131.6*	*133.2*	*142.8*	*252.6*	*123.6*	*124.8*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1e
Summary of Wetland Soil/Sediment Analytical Results - Area C Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BD-C052-01	BD-C053-01	BD-C054-01	BD-C055-01	BD-C057-01	BD-C058-01	BD-C059-01	BD-C064-01	BD-C065-01	BD-C066-01	BD-C071-02	BD-C072-02	BD-C073-02	Average
Date Sampled		02-Dec-03	03-Dec-03	03-Dec-03	03-Dec-03	02-Dec-03	02-Dec-03	03-Dec-03	02-Dec-03	02-Dec-03	03-Dec-03	27-Jan-04	27-Jan-04	27-Jan-04	
Total Metals (mg/kg)															
Arsenic	11	**5.2**	**2.8**	**3.2**	**9.1**	**17**	**5.4**	**3.6**	**7.7**	**1.3**	**1.5**	**6.4**	**4.1**	**4.2**	8.8
Chromium	332	**20**	**140**	**780**	**1,600**	**14**	**14**	**960**	**21**	**20**	**540**	**12**	**7.6**	**10**	54.3
Copper	372	**9.8**	**110**	**500**	**800**	**4.4**	**4.7**	**690**	**22**	**14**	**470**	**2**	**1.1**	**1.6**	56.0
Lead	210	**4.2**	**17**	**85**	**230**	**4.4**	**3.6**	**100**	**4.8**	**3.6**	**50**	**3.8**	**3.8**	**2.8**	11.9
Silver	13	**0.29**	**5.3**	**12**	**17**	0.07	0.07	**31**	**0.51**	**0.44**	**10**	0.07	0.06	0.065	1.3
SVOC/PAHs (µg/kg)															
1-Methyl phenanthrene		30	35	70	180	28	28	65	28	27	31	27	25	27	42.9
1-Methylnaphthalene		30	35	70	180	28	28	65	28	27	31	27	25	27	41.6
2-Methylnaphthalene		30	35	70	180	28	28	65	28	27	31	27	25	27	41.6
Acenaphthene		30	35	70	180	28	28	65	28	27	31	27	25	27	42.0
Acenaphthylene		30	35	70	180	28	28	65	28	27	31	27	25	27	50.0
Anthracene		30	35	70	**370**	28	28	65	28	27	31	27	25	27	54.4
Benz[a]anthracene		30	35	70	**1,000**	28	28	**190**	28	27	31	27	25	27	91.6
Benzo[a]pyrene		30	35	**220**	**1,600**	28	28	**290**	28	27	**80**	27	25	27	94.4
Benzo[b]fluoranthene		30	35	**610**	**3,600**	28	28	**640**	28	27	**220**	27	25	27	129.6
Benzo[ghi]perylene		30	35	**300**	**1,700**	28	28	**310**	28	27	**130**	27	25	27	83.2
Benzo[k]fluoranthene		30	35	**360**	**2,400**	28	28	**500**	28	27	**140**	27	25	27	112.4
Biphenyl		30	35	70	180	28	28	65	28	27	31	27	25	27	41.6
Chrysene		30	35	**560**	**2,600**	28	28	**510**	28	27	**150**	27	25	27	125.7
Dibenzo[a,h]anthracene		30	35	70	430	28	28	65	28	27	31	27	25	27	49.4
Fluoranthene		30	35	**340**	**2,400**	28	28	**420**	28	27	**120**	27	25	27	180.1
Fluorene		30	35	70	180	28	28	65	28	27	31	27	25	27	44.6
Indeno[1,2,3-cd]pyrene		30	35	**300**	**1,700**	28	28	**320**	28	27	**120**	27	25	27	82.3
Naphthalene		30	35	70	180	28	28	65	28	27	31	27	25	27	41.6
Perylene		30	35	70	180	28	28	65	28	27	31	27	25	27	73.9
Phenanthrene		30	35	70	**690**	28	28	**170**	28	27	31	27	25	27	69.6
Pyrene		30	35	**320**	**2,200**	28	28	**410**	28	27	**120**	27	25	27	167.1
Total SVOC/PAHs	*9,000*	*619.5*	*735*	*3,920*	*22,310*	*588*	*588*	*4,475*	*588*	*567*	*1,483*	*567*	*514.5*	*567*	*1,660*
PCBs (µg/kg)															
Aroclor® 1016 and 1242 - combination		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.1
Aroclor® 1221		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.1
Aroclor® 1232		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.1
Aroclor® 1248		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.1
Aroclor® 1254		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	36.2
Aroclor® 1260		**91**	**66.5**	**2,030**	**1,350**	17.35	17.35	**465**	17.35	**43.3**	**199**	16.9	15.45	16.9	89.6
Aroclor® 1262		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.3
Aroclor® 1268		18.4	21.9	22.3	57	17.35	17.35	20.85	17.35	16.9	19.25	16.9	15.45	16.9	27.1
Total PCBs	*2,000*	*219.8*	*219.8*	*2,186*	*1749*	*138.8*	*138.8*	*610.95*	*138.8*	*161.6*	*333.75*	*135.2*	*123.6*	*135.2*	*288.8*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1f
Summary of Wetland Soil/Sediment Analytical Resul - Area C Perimeters
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AC-P043-03	AC-P036-03	AC-P031-03	AC-P026-01	AC-P012-01	BC-P006-01	BC-P012-01	BC-P018-01	BC-P031-01	BC-P045-01	BC-P059-01	BC-P073-01	BC-P079-01
Date Sampled		12-Feb-04	12-Feb-04	12-Feb-04	30-Jan-04	30-Jan-04	24-Oct-03	24-Oct-03	24-Oct-03	24-Oct-03	24-Oct-03	22-Jan-04	22-Jan-04	22-Jan-04
Total Metals (mg/kg)														
Arsenic	11	**46**	**31**	**17**	**7.8**	**6.7**	**4.0**	**4.5**	**5.0**	**4.0**	**18**	**6.5**	**8.4**	**16**
Chromium	332	**250**	**7.7**	**11**	**54**	**11**	**9.1**	**14**	**34**	**12**	**46**	**27**	**14**	**120**
Copper	372	**290**	**6.4**	**13**	**73**	**18**	**11**	**26**	**160**	**46**	**73**	**110**	**20**	**130**
Lead	210	**81**	**3.9**	**3.5**	**15**	**7.5**	**3.9**	**11**	**51**	**5.7**	**14**	**7.8**	**4.7**	**27**
Silver	13	**18**	0.15	**0.44**	**1.1**	0.07	0.15	0.17	**1.5**	0.17	**2.0**	**1.5**	**0.51**	**7.1**
SVOC/PAHs (µg/kg)														
1-Methyl phenanthrene		65	60	55	33	**55**	60	65	65	65	75	75	70	70
1-Methylnaphthalene		65	60	55	33	27	60	65	65	65	75	75	70	70
2-Methylnaphthalene		65	60	55	33	27	60	65	65	65	75	75	70	70
Acenaphthene		65	60	55	33	27	60	65	65	65	75	75	70	70
Acenaphthylene		65	60	55	33	27	60	65	65	65	75	75	70	70
Anthracene		65	60	55	33	27	60	65	65	65	75	75	70	70
Benz[a]anthracene		65	60	55	**160**	27	60	65	65	65	75	75	70	70
Benzo[a]pyrene		65	60	55	**170**	27	60	65	65	65	75	75	**200**	70
Benzo[b]fluoranthene		**140**	60	55	**370**	27	60	65	65	65	**170**	75	**420**	70
Benzo[ghi]perylene		65	60	55	33	27	60	65	65	65	75	75	**170**	70
Benzo[k]fluoranthene		65	60	55	**200**	27	60	65	65	65	**150**	75	**290**	70
Biphenyl		65	60	55	33	27	60	65	65	65	75	75	70	70
Chrysene		65	60	55	**210**	27	60	65	65	65	**170**	75	**300**	70
Dibenzo[a,h]anthracene		65	60	55	33	27	60	65	65	65	75	75	70	70
Fluoranthene		**170**	60	55	**410**	**57**	60	65	65	65	**230**	75	**380**	70
Fluorene		65	60	55	33	27	60	65	65	65	75	75	70	70
Indeno[1,2,3-cd]pyrene		65	60	55	33	27	60	65	65	65	75	75	**180**	70
Naphthalene		65	60	55	33	27	60	65	65	65	75	75	70	70
Perylene		65	60	55	33	27	60	65	65	65	75	75	**220**	70
Phenanthrene		65	60	55	**150**	27	60	65	65	65	75	75	70	70
Pyrene		**160**	60	55	**350**	**57**	60	65	65	65	**250**	**180**	**370**	70
Total SVOC/PAHs	*9,000*	*1,640*	*1,260*	*1,155*	*2,449*	*646*	*1,260*	*1,365*	*1,365*	*1,365*	*2,170*	*1,680*	*3,370*	*1,470*
PCBs (µg/kg)														
Aroclor® 1016 and 1242 - combination		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Aroclor® 1221		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Aroclor® 1232		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Aroclor® 1248		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Aroclor® 1254		40.3	37.9	35.7	**79.3**	66	37.9	41.65	41.65	41.65	46.3	46.3	**97.8**	44.65
Aroclor® 1260		40.3	37.9	35.7	**228**	66	37.9	41.65	**154**	41.65	46.3	46.3	**132**	44.65
Aroclor® 1262		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Aroclor® 1268		40.3	37.9	35.7	20.5	66	37.9	41.65	41.65	41.65	46.3	46.3	43.1	44.65
Total PCBs	*2,000*	*322.4*	*303.2*	*285.6*	*430.3*	*528*	*303.2*	*333.2*	*445.55*	*333.2*	*370.4*	*370.4*	*488.4*	*357.2*

Notes:
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Detected values are displayed in bold.

Table 1f
Summary of Wetland Soil/Sediment Analytical Resul - Area C Perimeters
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	BC-P071-01	BC-P057-01	BD-P072-02	BD-P066-01	BD-P053-01	BD-P055-01	BD-P041-01	BD-P034-02	BD-P020-01	BD-P013-01	AD-P006-02	AD-P020-01	AD-P034-02
Date Sampled		22-Jan-04	22-Jan-04	27-Jan-04	19-Nov-03	02-Dec-03	24-Oct-03	24-Oct-03	27-Jan-04	24-Oct-03	24-Oct-03	26-Jan-04	12-Nov-03	04-Dec-03
Total Metals (mg/kg)														
Arsenic	11	**43**	**38**	**8.2**	**5.2**	**4.5**	**4.4**	**7.0**	**37**	**9.3**	**11**	**6**	**5.1**	**6.4**
Chromium	332	**430**	**220**	**49**	**69**	**27**	**27**	**13**	**20**	**16**	**20**	**6.6**	**12**	**8.1**
Copper	372	**540**	**420**	**44**	**1,800**	**200**	**120**	**50**	**33**	**42**	**57**	**10**	**12**	**16**
Lead	210	**140**	**120**	**25**	**64**	**13**	**36**	**7.2**	**9.1**	**13**	**13**	**5.9**	**5.8**	**5.6**
Silver	13	**34**	**11**	**0.9**	**1.9**	**0.79**	**0.81**	**0.77**	**1.1**	**0.74**	0.16	0.06	0.12	0.05
SVOC/PAHs (µg/kg)														
1-Methyl phenanthrene		95	85	65	65	60	45	41	60	60	65	25	23	21
1-Methylnaphthalene		95	85	65	65	60	45	41	60	60	65	25	23	21
2-Methylnaphthalene		95	85	65	65	60	45	41	60	60	65	25	23	21
Acenaphthene		95	85	65	65	60	45	41	60	60	65	25	23	21
Acenaphthylene		95	85	65	65	60	45	41	60	60	65	25	23	21
Anthracene		95	85	65	65	60	45	41	60	60	65	25	23	21
Benz[a]anthracene		**280**	**210**	65	65	60	45	41	60	60	65	25	**49**	21
Benzo[a]pyrene		**450**	**290**	65	65	60	45	41	60	60	65	25	23	21
Benzo[b]fluoranthene		**980**	**580**	**150**	65	60	45	41	60	60	65	25	**47**	21
Benzo[ghi]perylene		**430**	**270**	65	65	60	45	41	60	60	65	25	23	21
Benzo[k]fluoranthene		**640**	**390**	**130**	65	60	45	41	60	60	65	25	**57**	21
Biphenyl		95	85	65	65	60	45	41	60	60	65	25	23	21
Chrysene		**710**	**470**	**130**	65	60	45	41	60	60	65	25	**50**	21
Dibenzo[a,h]anthracene		95	85	65	65	60	45	41	60	60	65	25	23	21
Fluoranthene		**840**	**590**	**180**	65	60	45	41	**120**	60	65	25	**72**	21
Fluorene		95	85	65	65	60	45	41	60	60	65	25	23	21
Indeno[1,2,3-cd]pyrene		**440**	**280**	65	65	60	45	41	60	60	65	25	23	21
Naphthalene		95	85	65	65	60	45	41	60	60	65	25	23	21
Perylene		95	85	65	65	60	45	41	60	60	65	25	23	21
Phenanthrene		**270**	**240**	65	65	60	45	41	60	60	65	25	23	21
Pyrene		**770**	**540**	**180**	65	60	45	41	60	60	65	**67**	**70**	21
Total SVOC/PAHs	*9,000*	*6,855*	*4,795*	*1,810*	*1,365*	*1,260*	*934.5*	*861*	*1,320*	*1,260*	*1,365*	*567*	*690*	*441*
PCBs (µg/kg)														
Aroclor® 1016 and 1242 - combination		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1221		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1232		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1248		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1254		**373**	**190**	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1260		**401**	**241**	**87.8**	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1262		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Aroclor® 1268		59.5	52	40.3	41.65	37.9	27.8	25.5	36.75	39.05	40.3	15.6	14.35	13.3
Total PCBs	*2,000*	*1,131*	*743*	*369.9*	*333.2*	*303.2*	*222.4*	*204*	*294*	*312.4*	*322.4*	*124.8*	*114.8*	*106.4*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 1f
Summary of Wetland Soil/Sediment Analytical Resul - Area C Perimeters
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Clean-up Goals	AD-P048-02	AD-P058-01	AD-P060-01	AD-P065-02	AD-P071-02	Average
Date Sampled		03-Dec-03	19-Nov-03	03-Dec-03	27-Jan-04	27-Jan-04	
Total Metals (mg/kg)							
Arsenic	11	**7.6**	**14**	**20**	**7.6**	**9.0**	13.5
Chromium	332	**11**	**12**	**200**	**10**	**6.5**	57
Copper	372	**15**	**55**	**190**	**3.6**	**1.6**	148
Lead	210	**10**	**4.6**	**86**	**3.2**	**3.4**	26
Silver	13	0.06	**0.41**	**5.4**	0.06	0.07	2.9
SVOC/PAHs (µg/kg)							
1-Methyl phenanthrene		25	27	49	25	26	54
1-Methylnaphthalene		25	27	49	25	26	53
2-Methylnaphthalene		25	27	49	25	26	53
Acenaphthene		25	27	49	25	26	53
Acenaphthylene		25	27	49	25	26	53
Anthracene		75	27	**210**	25	26	60
Benz[a]anthracene		**180**	27	**160**	25	26	77
Benzo[a]pyrene		**140**	27	**170**	25	26	87
Benzo[b]fluoranthene		**170**	27	**260**	25	26	140
Benzo[ghi]perylene		**100**	27	**210**	25	26	81
Benzo[k]fluoranthene		**160**	27	**250**	25	26	109
Biphenyl		25	27	49	25	26	53
Chrysene		**230**	27	**290**	25	26	119
Dibenzo[a,h]anthracene		25	27	49	25	26	53
Fluoranthene		**400**	27	**800**	52	26	169
Fluorene		25	27	49	25	26	53
Indeno[1,2,3-cd]pyrene		**95**	27	**170**	25	26	80
Naphthalene		25	27	49	25	26	53
Perylene		**62**	27	49	25	26	59
Phenanthrene		**160**	27	**140**	25	26	75
Pyrene		**350**	27	**810**	25	26	164
Total SVOC/PAHs	*9,000*	*2,347*	*556.5*	*3,960*	*552*	*546*	*1,699*
PCBs (µg/kg)							
Aroclor® 1016 and 1242 - combination		15.6	16.65	30.5	15.6	16.25	35
Aroclor® 1221		15.6	16.65	30.5	15.6	16.25	35
Aroclor® 1232		15.6	16.65	30.5	15.6	16.25	35
Aroclor® 1248		15.6	16.65	30.5	15.6	16.25	35
Aroclor® 1254		15.6	16.65	30.5	15.6	16.25	53
Aroclor® 1260		15.6	16.65	**191**	15.6	16.25	72
Aroclor® 1262		15.6	16.65	30.5	15.6	16.25	35
Aroclor® 1268		15.6	16.65	30.5	15.6	16.25	35
Total PCBs	*2,000*	*124.8*	*133.2*	*404.5*	*124.8*	*130*	*335*

Notes:
Non-detects are shown as half the method detection limit.
Detected values are displayed in bold.

Table 2
Summary of Resampled Wetland Grid Cells
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	Sample Date	Parameters in Exceedance	Resample I.D.	Resampled Date	Parameters in Exceedance	Resample I.D.	Resampled Date
AC-P031 -01	30-Jan-04	As	AC-P031 -02	05-Feb-04	As	AC-P031 -03	12-Feb-04
AC-P036 -01	29-Jan-04	As	AC-P036 -02	05-Feb-04	As	AC-P036 -03	12-Feb-04
AC-P043 -01	28-Jan-04	As, Cr, Cu, Ag, PAHs	AC-P043 -02	05-Feb-04	As	AC-P043 -03	12-Feb-04
AD-C006 -01	05-Dec-03	PAHs	AD-C006 -02	26-Jan-04	-	-	-
AD-P006 -01	04-Dec-03	PAHs	AD-P006 -02	26-Jan-04	-	-	-
AD-C026 -01	12-Nov-03	PAHs, PCBs	AD-C026 -02	04-Dec-03	-	-	-
AD-C027 -01	12-Nov-03	PAHs	AD-C027 -02	04-Dec-03	-	-	-
AD-C033 -01	12-Nov-03	PAHs	AD-C033 -02	04-Dec-03	PAHs	AD-C033 -03	26-Jan-04
AD-C034 -01	12-Nov-03	Ag, PAHs, PCBs	AD-C034 -02	04-Dec-03	-	-	-
AD-P034 -01	12-Nov-03	PAHs	AD-P034 -02	04-Dec-03	-	-	-
AD-C048 -01	14-Nov-03	As, PAHs	AD-C048 -02	03-Dec-03	-	-	-
AD-P048 -01	12-Nov-03	PAHs	AD-P048 -02	03-Dec-03	-	-	-
AD-C053 -01	14-Nov-03	As, Cr, Cu, Ag, PAHs, PCBs	AD-C053 -02	03-Dec-03	-	-	-
AD-C054 -01	14-Nov-03	Cr, Cu, Ag, PCBs	AD-C054 -02	03-Dec-03	-	-	-
AD-C055 -01	03-Dec-03	PAHs, PCBs	AD-C055 -02	26-Jan-04	-	-	-
AD-C059 -01	19-Nov-03	As, Cr, Cu, Pb, Ag, PAHs, PCBs	AD-C059 -02	26-Jan-04	-	-	-
AD-C060 -01	03-Dec-03	As, Cr, Cu, Pb, Ag, PAHs, PCBs	AD-C060 -02	26-Jan-04	-	-	-
AD-C065 -01	19-Nov-03	As, Cr, Cu, Pb, Ag, PAHs, PCBs	AD-C065 -02	26-Jan-04	-	-	-
AD-P065 -01	19-Nov-03	As	AD-P065 -02	26-Jan-04	-	-	-
AD-C071 -01	19-Nov-03	NONE[1]	AD-C071 -02	26-Jan-04	-	-	-
AD-P071 -01	19-Nov-03	NONE[1]	AD-P071 -02	26-Jan-04	-	-	-
AD-C072 -01	19-Nov-03	As, Cr, Cu, Ag, PAHs, PCBs	AD-C072 -02	26-Jan-04	-	-	-
BD-C027 -01	04-Dec-03	As, Cu	BD-C027 -02	26-Jan-04	-	-	-
BD-C034 -01	04-Dec-03	As, Cr, Cu, Ag, PCBs	BD-C034 -02	26-Jan-04	-	-	-
BD-P034 -01	24-Oct-03	As	BD-P034 -02	26-Jan-04	-	-	-
BD-C071 -01	02-Dec-03	Cr, Cu, Ag, PAHs, PCBs	BD-C071 -02	26-Jan-04	-	-	-
BD-C072 -01	02-Dec-03	Cr, Cu, Ag, PCBs	BD-C072 -02	26-Jan-04	-	-	-
BD-P072 -01	19-Nov-03	Cu	BD-P072 -02	26-Jan-04	-	-	-
BD-C073 -01	02-Dec-03	As, Cr, Cu, Pb, Ag, PAHs, PCBs	BD-C073 -02	26-Jan-04	-	-	-

Notes:
[1] AD-C071 was resampled due to proximity to AD-C072, AD-C065 and BD-C071.

Table 3
Summary of Waste Characterization Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	SP-1017-1	SP-1021-1	SP-1023-1	SP-1023-2	SP-1024-1	SP-1024-2	SP-1110-1	SP-1113-1	SP-1114-1	SP-1114-2	SP-1115-1	SP-1115-2	SP-1117-1
Date Sampled	17-Oct-03	21-Oct-03	23-Oct-03	23-Oct-03	24-Oct-03	24-Oct-03	10-Nov-03	13-Nov-03	14-Nov-03	14-Nov-03	15-Nov-03	15-Nov-03	17-Nov-03
pH (standard units)	5.4	5.4	5.5	5.7	5.4	5.8	6.7	6.1	6.4	6.6	5.9	6.0	5.9
Reactivity (mg/kg)													
Cyanide, Reactive	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide, Reactive	-	-	-	-	-	-	-	-	-	-	-	-	-
Flash Point (degrees Fahrenheit)	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150
Paint Filter Liquid	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Total Petroleum Hydrocarbons (mg/kg)													
Unknown Hydrocarbon	-	500	390	450	350	550	7,300	2,800	2,300	1,600	990	1,200	650
Polychlorinated Buphenyls (µg/kg)													
Aroclor® 1254	89.7	361	101	110	158	113	-	-	-	-	563	426	258
Aroclor® 1260	-	188	119	111	261	326	4,640	6,510	6,620	7,320	2,410	1,880	1,060
TCLP Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Semi-Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Metals (mg/L)													
Barium	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Pesticides (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Polychlorinated Buphenyls (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Herbicides (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
- = Not Detected

Table 3
Summary of Waste Characterization Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	SP-1117-2	SP-1119-1	SP-1208-1	SP-1210-1	SP-1210-2	SP-1212-1	SP-1216-1	SP-1217-1	SP-1219-1	SP-1223-1	SP-1229-1	SP-1230-1	SP-1231-1
Date Sampled	17-Nov-03	19-Nov-03	08-Dec-03	10-Dec-03	10-Dec-03	12-Dec-03	16-Dec-03	17-Dec-03	19-Dec-03	23-Dec-03	29-Dec-03	30-Dec-03	31-Dec-03
pH (standard units)	5.8	6.4	12.8	12	12	13	12	12	12.2	12.2	12.0	12.0	12.0
Reactivity (mg/kg)													
Cyanide, Reactive	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide, Reactive	-	-	-	-	-	-	-	-	-	-	-	-	-
Flash Point (degrees Fahrenheit)	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150
Paint Filter Liquid	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Total Petroleum Hydrocarbons (mg/kg)													
Unknown Hydrocarbon	540	1,100	1,000	1,600	650	750	540	1,300	2,500	1,100	650	460	2,100
Polychlorinated Buphenyls (µg/kg)													
Aroclor® 1254	400	-	680	-	-	-	-	-	-	-	-	-	-
Aroclor® 1260	1,500	9,690	2,130	3,130	1,730	2,130	1,700	342	3,840	8,040	1,140	1,650	4,590
TCLP Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Semi-Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Metals (mg/L)													
Barium	-	-	-	-	-	-	1.0	0.60	0.85	0.98	0.52	0.62	0.76
Chromium	-	-	-	0.24	0.20	0.21	0.20	-	-	-	-	-	-
TCLP Pesticides (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Polychlorinated Buphenyls (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCLP Herbicides (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-

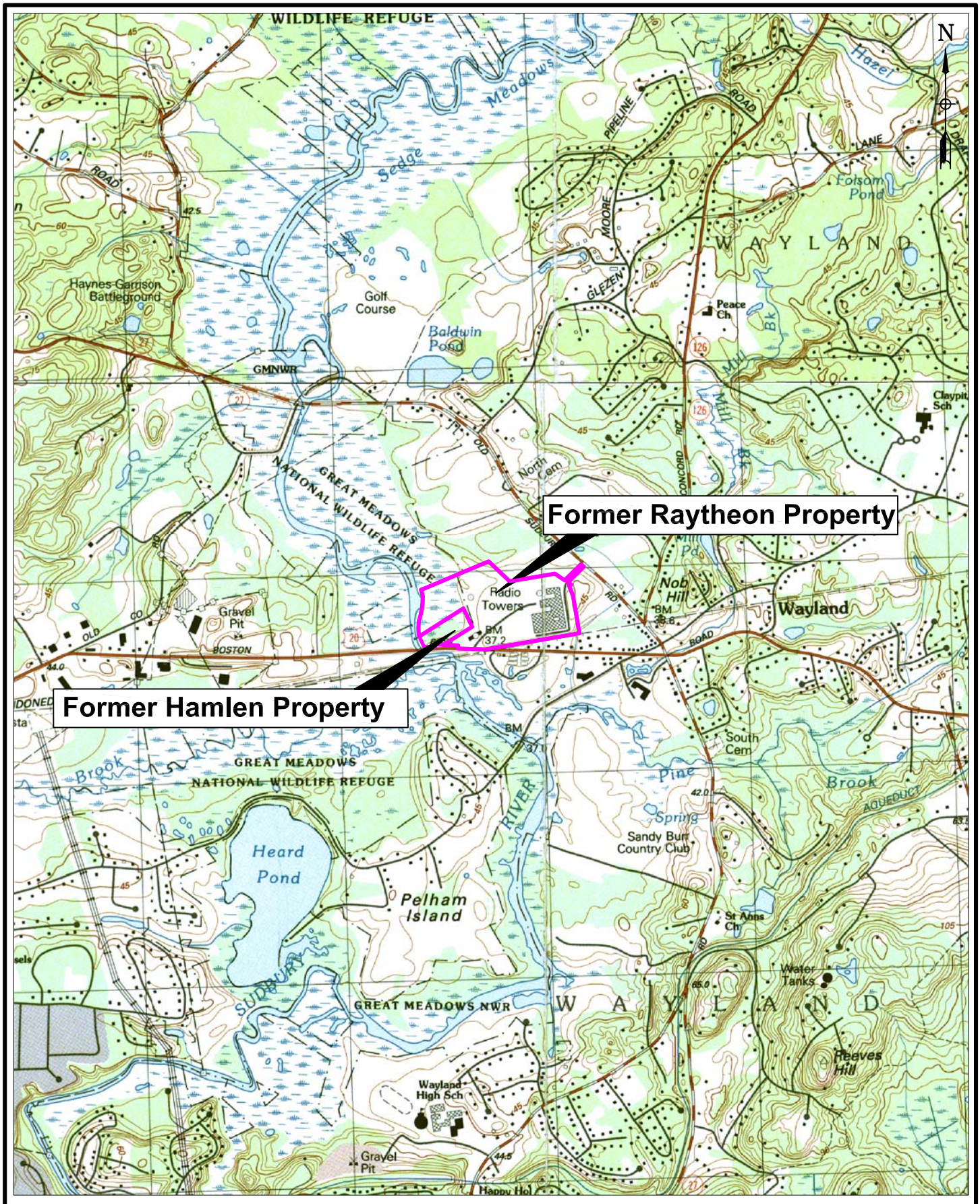
Notes:
- = Not Detected

Table 3
Summary of Waste Characterization Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Sample I.D.	**SP-1-1**	**SP-1-2**	**SP-1-3**	**SP-1-4**	**SP-1-5**	**SP-1-6**	**SP-2-1**	**SP-2-2**	**SP-2-3**	**SP-2-4**
Date Sampled	14-Jun-04	14-Jun-04	14-Jun-04	14-Jun-04	14-Jun-04	14-Jun-04	14-Jun-04	23-Jun-04	23-Jun-04	23-Jun-04
pH (standard units)	11.7	11.9	11.9	11.9	11.8	12.4	12.5	12.5	12.4	12.7
Reactivity (mg/kg)										
Cyanide, Reactive	-	-	-	-	-	-	-	-	-	-
Sulfide, Reactive	-	-	-	-	-	-	-	-	-	-
Flash Point (degrees Fahrenheit)	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150	> 150
Paint Filter Liquid	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Total Petroleum Hydrocarbons (mg/kg)										
Unknown Hydrocarbon	250	330	500	380	320	440	310	260	640	610
Polychlorinated Buphenyls (µg/kg)										
Aroclor® 1254	-	-	-	-	-	-	-	-	-	-
Aroclor® 1260	-	-	-	-	-	-	-	-	-	-
TCLP Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-
TCLP Semi-Volatile Organic Compounds (µg/L)	-	-	-	-	-	-	-	-	-	-
TCLP Metals (mg/L)										
Barium	-	-	-	-	-	-	-	-	-	0.50
Chromium	-	-	-	-	-	-	-	-	-	-
TCLP Pesticides (µg/L)	-	-	-	-	-	-	-	-	-	-
TCLP Polychlorinated Buphenyls (µg/L)	-	-	-	-	-	-	-	-	-	-
TCLP Herbicides (mg/L)	-	-	-	-	-	-	-	-	-	-

Notes:
- = Not Detected

Figures



Scale 1:25,000

0.5 km 0 500 m

0.5 mi 0 1,000 ft

Legend

Subject Property Line

Figure 1 - Site Locus Map
Former Raytheon Facility - Wayland, MA

ERM

R:\Raytheon\Wayland - 1922\Report-TSCA Closure\CAD\Figure 1 Site Locus Map.dwg (04/18/2008 - 2:48pm Boston)

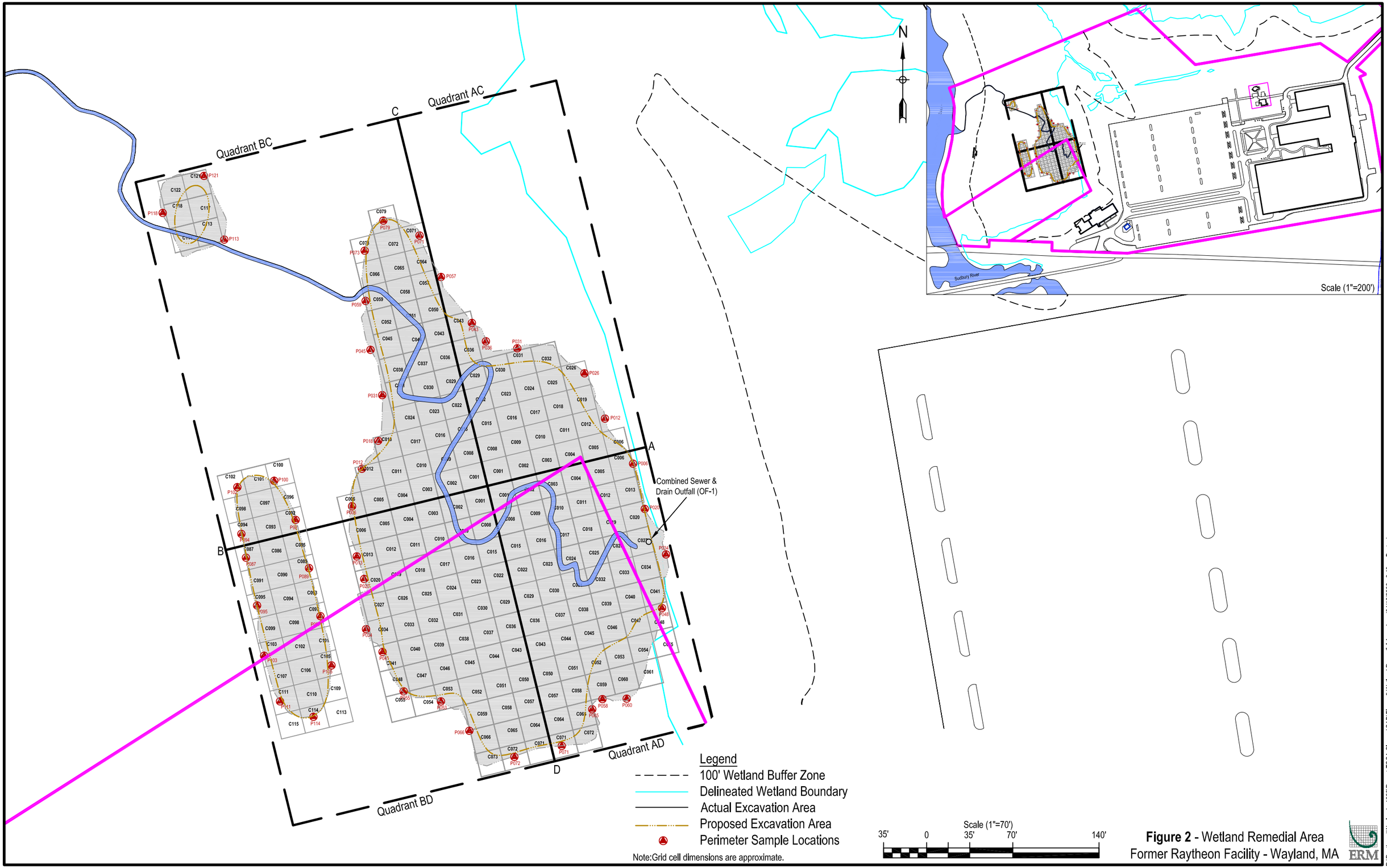


Figure 2 - Wetland Remedial Area
Former Raytheon Facility - Wayland, MA

ERM

R:\Raytheon\Wayland - 1922\Report-TSCA Closure\CAD\Figure 2 Wetland Remedial Area.dwg (04/18/2008 - 3:40pm Boston)

Appendix A
Phase IV Completion Report

Available On-Line at:
www.ermne.com
username: raytheon
password: wayland

Appendix B
Data Validation Report:
Raytheon Wetlands Remedial Action

DATA VALIDATION REPORT
RAYTHEON WETLANDS REMEDIAL ACTION

SEDIMENT SAMPLE ANALYSES
ALPHA ANALYTICAL LABORATORIES JOB NUMBERS
L0310, L0311, L0312, L0313, L0315, L0400, L0410

This validation report consists of the below referenced sample data packages for sediment samples collected as part of the Raytheon Wetlands Remedial Action at the Former Raytheon Facility located in Wayland, Massachusetts. This report also summarizes the validation of sample data packages generated by Alpha Laboratories, Westborough, Massachusetts. Due to inclement weather, the sample collection schedule was delayed with sampling extending from October 17, 2003 through January 30, 2004. Consequently, sample collection did not comform with the proposed schedule. Sample data packages consisted of the following:

L0310

L0310590	L0310660	L0310843
L0310591	L0310661	L0310847
L0310592	L0310662	L0310849
L0310601	L0310686	L0310854
L0310605	L0310722	
L0310630	L0310773	

L0311

L0311462	L0311633	L0311748
L0311466	L0311664	L0311749
L0311513	L0311685	L0311776
L0311565	L0311691	L0311825
L0311595	L0311727	L0311849
L0311596	L0311728	L0311851
L0311598	L0311729	L0311860
L0311632	L0311746	

L0312

L0312002	L0312376	L0312421
L0312208	L0312398	L0312455
L0312248	L0312419	L0312506
L0312250	L0312456	L0312520
L0312272	L0312301	L0312669

L0400

L0400524	L0400678	L0400704
L0400578	L0400679	L0400774
L0400618	L0400680	L0400955
L0400655	L0400685	

L0401

L0401261

Some of the above listed data packages included the analysis of water samples that were collected as part of the verification study, but were not specifically referenced in the Raytheon Wetlands Remedial QA/QC Plan. These include data reported in packages L0310591, L0310854, L0311513, L0311565, L0311598, L0311729, L03122002, L0312208, L0312421, and L0312455.

The data packages included three equipment rinsate blank samples EB-1 (L0311596-01), EB-2 and EB-3 (L0312250-01 and L0312250-02) and thirty blind field duplicate samples (designated as DUP-1 through DUP-30). Matrix spike/matrix spike duplicate (MS/MSD) samples were included within each data package.

All samples submitted to the laboratory were received in the condition consistent with that described on each respective chain-of-custody document that accompanied each data package. Consequently, appropriate preservation and shipping methods were considered acceptable for all samples.

Deliverables

The above listed data packages contained sufficient deliverables to perform a Tier II review consistent with a United States Environmental Protection Agency (USEPA) Region I requirements for organics and inorganic parameters. The data were validated according to the protocols and quality control (QC) requirements of the analytical methods and the New England Data Validation Functional Guidelines for Evaluating Environmental Analysis (December, 1996).

Primary analysis as required by the Raytheon Wetlands Remedial QA/QC Plan included the following:

- Polynuclear Aromatic Hydrocarbons (PAHs) - USEPA SW-846 Method 8270C-SIM

- Polychlorinated Biphenyls (PCBs)- USEPA SW-846 Method 8082

- Total Metals - Arsenic (As), Chromium (Cr), Copper (Cu), Lead (Pb) and Silver (Ag) - USEPA SW-846 Method 6010B

Additional analyses were performed during the course of the remedial action that were not included in the Raytheon Wetlands Remedial QA/QC Plan. While these data were reviewed; the quality of the data were not specifically included within this validation summary. These analyses included the following:

Toxicity Characteristic Leaching Procedure (TCLP) - USEPA SW-846 Extraction Method 1311, analyzed for the following analytical groups:

- Volatile Organic Compounds (VOCs) - USEPA SW-846 Method 8260B,

- Semivolatile Organic Compounds (SVOCs) - USEPA SW-846 Method 8270c,

- Polynuclear Aromatic Hydrocarbons (PAHs) USEPA SW-846 Method 8270C-SIM,

- Polychlorinated Biphenyls (PCBs) USEPA SW-846 Method 8082,

- Pesticides - USEPA SW-846 Method 8081,

- Herbicides USEPA SW-846 Method 8051A (M), and

- Metals USEPA SW-846 Method 6010B

Total Solids - USEPA Method 2540G
Flash Point - USEPA Method 1010
pH - USEPA Method 9045c
Paint filter test - USEPA Method 9095A
Reactive Cyanide and Sulfide - USEPA Method 7.3
Total Petroleum Hydrocarbons (TPH) - USEPA Method 8100M

This validation report pertains to the samples summarized according to sample summary packages. The following items/criteria were provided by the laboratory and reviewed for this report:

PAHs and PCB Analysis

- Case narrative and deliverable compliance

- Holding times and sample preservation (including pH and temperature)
- Surrogate recoveries, summary and data
- Laboratory control samples (LCS)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- Blank Spike Sample (BSS) , recoveries, summary, data
- Method bland summary and data
- Field Blank results

Metals Analysis

- Case narrative and deliverable requirements
- Holding times and sample preservation
- Detection Limits
- Lab Blank results
- Field Blank results
- Matrix Spike analysis
- Matrix Spike Duplicate analysis
- Laboratory control samples (LCS)

The items listed above were technically in compliance with USEPA protocols with the exceptions discussed in the following text. The data have been validated according to the procedures outlined above and qualified accordingly.

Sample Quality Control

Equipment rinsate blanks were analyzed for PAHs, PCBs, and total metals. No analytes were detected in these samples. Therefore, equipment decontamination procedures were considered to be adequate. An sufficient number of field duplicate samples (30) were collected during the field sampling program. Analysis of these samples were indicates that sampling precision was adequate.

Miscellaneous Exceptions

- Some of the data packages submitted early in the project to the laboratory were replaced by data packages to include the analysis of total arsenic. These data packages included L0310590, L0310630, L0310660, and L0310722.

- Consistent with the QA/QC plan, samples were analyzed only for compounds specified on the chain of custody (i.e., certain metals and PAHs were analyzed and reported).

- Extraction method 3545 was used as the extraction method for the analysis of EPH PCB ad PAH-SIM. For some samples, extraction method 3540c was used during the analysis of PCBs (BD-C095-01, BC-C092-01, and BC-P012-01).

Summary of Data Usability Issues

The data verification reports indicate which laboratory results are considered non-complaint when compared to the requirements set forth in the relevant documents. However, the majority of these non-compliant results represents minor quality control problems and do not affect data usability. In most cases these problems are typical analytical difficulties or were the result of sample matrix problems. The validation process considers all cases where quality control problems that were or were not identified that impact data quality as well as usability. These are discussed in the following sections.

Qualified Data Considered Usable

Polynuclear Aromatic Hydrocarbons

- Typically an MS/MSD is collected and sent to the laboratory per twenty field samples collected. In some cases no MS/MSD was submitted to the laboratory with a particular group of samples. In these instance, the laboratory provided batch QC data to fulfill requirements. The batch QC has no bearing on the sample data and is not used for sample validation purposes. If the batch QC is present the blank sample is utilized to determine the quality of the data.

- If the MS/MSD was analyzed on a sample collected at the site, qualification of the sample data was not performed based on MS/MSD results alone. Many factors can cause percent recoveries (%R) to fall outside of QC criteria. For samples considered in this report, the main factor contributing to inadequate recoveries was due to the sample matrix or matrix interference, followed by the presence of an elevated concentration of particular spiking compounds in the unspiked sample. Positive results for compounds with deficient %R are considered estimated and flagged "J" in the unspiked portion of the sample result only while non-detect results will be flagged "UJ" in the unspiked portion of the sample only. The laboratory reports non-detects as "ND", therefore non-detects are flagged "ND J".

- Blank spike percent recoveries (%R) were outside QC criteria applicable to some samples. Results are possibly biased high for a %R above QC criteria and possible biased low for a %R below C criteria. For a %R below QC criteria positive results are considered estimated and flagged "J" while non-detects are flagged with a "UJ". For a %R greater than QC criteria, positive results are considered estimated and flagged "J" while non-detects are acceptable and not qualified. The laboratory reports non-detects as "ND", therefore non-detects are flagged "ND J"

- Dilutions have been performed on various samples either based on the sample matrix or due to the concentration of target compounds exceeding the calibration range of the instrument with the initial analysis. In these cases, the laboratory reported only the final result for each compound. Samples that required dilution included AD-C034-01, AD-C026-01, AD-C048-01, AD-C053-01, AD-P053-01, AD-C059-01, AD-C072-01, BD-C054-01, BD-C055-01, BD-C059-01, AD-C060-01, AD-C061-01, AD-C055-01, AD-C065-01AD-C033-02, AD-P006-01, SP-1119-01 (and associated MS/MSD), and AD-C059-01. It should be noted that dilutions caused the reporting limit of non-detections to be elevated. No qualification of the sample data is required.

- Samples which exhibit one or more internal standard (IS) are responses outside of the established "upper " and "lower" QC limits require qualification. Limits are established by taking twice and half of the CCC area response for each IS. Samples are either reanalyzed or no action is required when an MS/MSD exhibits similar poor responses. All target compounds quantitated against the appropriate IS are flagged as estimated "J", while non-detects are flagged "UJ". The laboratory reports non-detects as "ND", therefore non-detects are flagged "ND J"

Polychlorinated Biphenyls

- Typically an MS/MSD is collected and sent to the laboratory per twenty field samples collected. In some cases no MS/MSD was submitted to the laboratory with a particular group of samples. In these instance, the laboratory provided batch QC data to fulfill requirements. The batch QC has no bearing on the sample data and is not used for sample validation purposes. If the batch QC is present the blank sample is utilized to determine the quality of the data.

- If the MS/MSD was analyzed on a sample collected at the site, qualification of the sample data was not performed based on MS/MSD results alone. Many factors can cause percent recoveries (%R) to fall outside of QC criteria. For samples considered in this report, the main factor contributing to inadequate recoveries was due to the sample matrix or matrix interference, followed by the presence of an elevated concentration of particular spiking compounds in the unspiked sample. Positive results for compounds with deficient %R are considered estimated and flagged "J" in the unspiked portion of the sample result only while non-detect results will be flagged "UJ" in the unspiked portion of the sample only. The laboratory reports non-detects as "ND", therefore non-detects are flagged "ND J".

- Dilutions have been performed on various samples either based on the sample matrix or due to the presence of a concentration of target compounds exceeding the calibration range of the instrument with the initial analysis. In these cases, the laboratory reported only the final result for each compound. Samples that required dilution included: AD-C034-01, AD-C026-01, SIDEWALL SLUDGE, SP-1110-1 (and associated MS/MSD), SP-1113-1, AD-P053-01, AD-C048-01, AD-C054-01 (and associated MS/MSD), AD-C053-01, SP-1210-2, SP-1114-01, SP-1114-2, SP-1115-1, SP-1115-2, SP-1119-1 (and associated MS/MSD), AD-C065-01, AD-C072-01, AD-C959-01, DUP-11, BD-C073-01, BD-C071-01, BD-C072-01, DUP-3, BD-053-01, BD-C054-01, BD-C059-01, BD-C034-01, AD-P008-01, AD-C060-01, AD-C055-01, SP-1208-01, SP-1210-01, SP-1208-01, AD-C065-01, AD-C072-01, AD-C059-01, AD-C033-02, SP-1212-01 and SP-1210-2. It should be noted that dilutions caused the reporting limit of non-detections to be elevated.

- Some samples and associated method blanks required additional clean up by Method 3660A due to the presence of elemental sulfur in the sample matrix. Samples requiring additional cleanup included BD-C113-01, BD-C115-01, SP-1021-1, BD-C105-01, BD-C101-01, BC-P102-01, BC-P094-01, BC-P092-01, BC-P100-01, BD-C102-01, BD-C097-01, BD-C106-01, BD-C107-01, DUP-1, DUP-2, BD-C111-01, AC-P036-01, BC-P113-01, BC-C114-01, BC-C113-01, AD-C006-02, AD-C065-02, AD-P065-02, BD-C073-02, DUP-23, and BD-C034-02. For these samples, data from the second analysis was reported. No action required.

- The results for Aroclor 1260 for samples AC-C010-01, AC-C012-01, AC-C018-01, AC-C024-01, AC-P026-01, AC-C025-01, BC-P057-01, BC-P071-01, and BC-P073-01 were based on fewer than three peaks

as required by the method. The samples were quantified with two peaks due to multiple aroclors in samples. The use of less than three peaks was done to prevent excess quantification of concentration. As required by the method, the samples were re-extracted and analyzed; however, the same results as that of the original analysis was reported.

- Sample AD-P060-01 was inadvertently spiked with a higher concentration of internal standard than required. The concentration was corrected within the sample calculations. Standard recovery was within the acceptable limits.

Total Metals

- When the spike sample percent recovery (%R) for an analyte falls outside the QC limit of 75-125% results are possibly biased high for a %R above QC criteria and possibly biased low for a %R below QC criteria. For a %R between 30-74%, results greater than the instrument detection limit (IDL) are considered estimated and flagged "J" while non-detects are flagged "UJ". The laboratory reports non-detects as "ND", therefore non-detects are flagged "ND J".

- Dilutions have been performed on various samples wither based on the sample matrix or due to the presence of concentration of target compounds exceeding the calibration range of the instrument with the initial analysis. The laboratory has reported only the final result for each metal. No qualification of the sample data is required. Samples that required dilution included the following: AD-C065-01, AD-C072-01, AD-C065-01, AD-C059-01, AD-C072-01, AD-C065-01, AD-C072-01, AD-C065-01, and AD-C072-01. It should be noted that dilutions will cause the reporting limit of non-detections to be elevated.

- Due to a preparation error no additional Ag spike was added to the laboratory control sample (LCS) for samples included in data package L0310722. Nevertheless the recovery of Ag in the LCS was within acceptable limits.

Appendix C
Bills of Lading and Associated Laboratory Reports

Bill of Lading Forms – Access Road Soil/Gravel Mixture

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number*
3 - 13302

BILL OF LADING (pursuant to 310 CMR 40.0030)

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

Release Name (optional): Former Raythean Facility
Street: 430 Boston Post Road Location Aid:
City/Town: Wayland ZIP Code: 01778
Date/Period of Generation: 6/2004 to: 7/2004
Additional Release Tracking Numbers Associated with this Bill of Lading:

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

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

Name of Organization: Raytheon Company
Name of Contact: Ed Madera Title: Sr Environmental Engineer
Street: 528 Boston Post Road
City/Town: Sudbury State: MA ZIP Code: 01776
Telephone: Ext.:

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

☐ RP or PRP Specify: ☐ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: Former Operator
☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
☐ 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 OR COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name:
Contact Person: Title:
Street:
City/Town: State: ZIP Code:
Telephone: Ext.:

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Waste Management of New Hampshire Inc
Contact Person: Title:
Street: 90 Rochester Neck Rd
City/Town: Rochester State: NH ZIP Code: 03839-4802
Telephone: Ext.:

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

EPA Identification #:

Division of Hazardous Waste/Class A Permit #: Division of Solid Waste Management Permit #:

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

Reason for Temporary Storage:

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number*: 3 - 13308

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

Temporary Storage Address:

Street: _____

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

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

☑ Contaminated Media (check all that apply): ◉ Soil ○ Groundwater ○ Surface Water ○ Other: _____

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

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

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

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

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

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

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

Remediation Waste Charcterization 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 thedate and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: Environmental Resources Management

LSP Name: John Drobinski Title: Principal-in-Charge

Telephone: 617 646-7800 Ext.: _____

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of

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

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

LSP Signature: _____ Seal:

Date: 6/25/04

License Number: 2196

COMMONWEALTH OF MASSACHUSETTS
JOHN C. DROBINSKI No. 2196 REGISTERED
LICENSED SITE PROFESSIONAL

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number*

3 - 13302

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: Edwin P. Madera Date: 7/2/04

Name of Person (print): Edwin P. Madera

Mobile # 56845 Incc # 103

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 7/8/04

Time of Shipment: 0915 ☒ AM ☐ PM

Truck/Tractor Registration: 58578 MA

Trailer Registration (if any): —

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 7/8/04 Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons): 20.00

Load 2:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded 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-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET ______ OF ______

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: [signature]
Date of Shipment: 7/8/04
Time of Shipment: 10:10 ☒ AM ☐ PM
Truck/Tractor Registration: Pope NH
Trailer Registration (if any): 0055737
Receiving Facility/Temporary Storage Representative: [signature]
Date of Receipt: 7-8-04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 30.84

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

WM PROFILE 56845

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

T84

Release Tracking Number: 3 - 13302

SUMMARY SHEET 1 OF 1

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative:
Date of Shipment: 7/8/04
Time of Shipment: 10:30 ☒ AM ☐ PM
Truck/Tractor Registration: AR3338 NH
Trailer Registration (if any): T29530NH
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 7/8/04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 32.47

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

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Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 6 OF 1

Release Tracking Number: 3-13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: Michael Bodoni
Date of Shipment: 7/8/04
Time of Shipment: 10:50 ☒ AM ☐ PM
Truck/Tractor Registration: AR3902
Trailer Registration (if any): 0655138
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 7-8-04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 34.48

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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Northern Essex LTD T-16

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number 3 - 13302

SUMMARY SHEET 1 **OF** 1

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 7/8/04 Time of Shipment: 11:00 ☒ AM ☐ PM

Truck/Tractor Registration: MA 33276 Trailer Registration (if any): MA 66858

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 7/8/04 Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons): 33.91

Load 2:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

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

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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

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

WM PROFILE #56845 1 of 1

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 7/8/04

Time of Shipment: 12:50 ☐ AM ☒ PM

Truck/Tractor Registration: 915984 MC

Trailer Registration (if any): 05 - 56946 MC

Receiving Facility/Temporary Storage Representative: R. Bodai

Date of Receipt: 7/8/04

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons): 32.78

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

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

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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

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

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T337

WM Profile # 56845

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

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: Joel Hoyle
Date of Shipment: 7/9/04
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: P8P4CNH
Trailer Registration (if any): 0655137mc
Receiving Facility/Temporary Storage Representative: J. Bacon
Date of Receipt: 7/9/04
Time of Receipt: 9:13 ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 2:
Signature of Transporter Representative: Joel Hoyle
Date of Shipment: 7-9-04
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: P8P4CNH
Trailer Registration (if any): 0655137mc
Receiving Facility/Temporary Storage Representative: J. Bacon
Date of Receipt: 7/9/04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 34.94

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

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WM Profile # 56845

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: [signature]
Date of Shipment: 7/9/04
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: [illegible] NH
Trailer Registration (if any): 065513 [illegible]
Receiving Facility/Temporary Storage Representative: [signature]
Date of Receipt: 7/9/04
Time of Receipt: 9:13 ☐ AM ☐ PM
Load Size (cu. yds./tons): 33.00

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

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Pro# 56843 Northern Essex T-16

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: E. Cote
Date of Shipment: 7/9/04
Time of Shipment: 7:15 ☒ AM ☐ PM
Truck/Tractor Registration: MA 33276
Trailer Registration (if any): MA 66878
Receiving Facility/Temporary Storage Representative: P. Bain
Date of Receipt: 7-9-04
Time of Receipt: 9:15 ☒ AM ☐ PM
Load Size (cu. yds./tons):

Load 2:
Signature of Transporter Representative: E. Cote
Date of Shipment: 7/9/04
Time of Shipment: 12:00 ☐ AM ☒ PM
Truck/Tractor Registration: MA 33276
Trailer Registration (if any): MA 66828
Receiving Facility/Temporary Storage Representative: P. Bain
Date of Receipt: 7-9-04
Time of Receipt: 2:23 ☐ AM ☐ PM
Load Size (cu. yds./tons): 37.21

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

Revised 10/3/94

Pro#56075 Northern Essex T-16

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 7/9/04

Time of Shipment: 7:15 ☒ AM ☐ PM

Truck/Tractor Registration: MA 33276

Trailer Registration (if any): MA 66858

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 7-9-04

Time of Receipt: 9:15 ☒ AM ☐ PM

Load Size (cu. yds./tons): 34.10

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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

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

Revised 10/3/94

PROFILE # 56845 1 of 1

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: Jeffrey Jones
Date of Shipment: 7/9/04
Time of Shipment: 7:25 ☒ AM ☐ PM
Truck/Tractor Registration: AR3338 NH
Trailer Registration (if any): T29530 NH
Receiving Facility/Temporary Storage Representative: P. Bain
Date of Receipt: 7-9-04
Time of Receipt: 9:29 ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 2:
Signature of Transporter Representative: Jeffrey Jones
Date of Shipment: 7/9/04
Time of Shipment: 12:30 ☐ AM ☒ PM
Truck/Tractor Registration: AR3338 NH
Trailer Registration (if any): T29530
Receiving Facility/Temporary Storage Representative: P. Bain
Date of Receipt: 7-9-04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 32.04

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

Profile # 56845 1 of 1

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

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Date of Shipment: 7/9/04
Time of Shipment: 7:25 ☒ AM ☐ PM
Truck/Tractor Registration: AR3338 NH
Trailer Registration (if any): T29530 NH
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 7-9-04
Time of Receipt: 9:29 ☐ AM ☐ PM
Load Size (cu. yds./tons): 33.25

Load 2:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
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Revised 10/3/94

Profile# 56845 TKEE #933

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number: 3-13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 7/9/04

Time of Shipment: 740 ☒ AM ☐ PM

Truck/Tractor Registration: 58578 MA

Trailer Registration (if any): —

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 7/9/4

Time of Receipt: 9:30 ☒ AM ☐ PM

Load Size (cu. yds./tons): 27.86

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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Revised 10/3/94

W 1 # 56845

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

I. LOAD INFORMATION:

Load	Transporter	Receiving Facility
Load 1:	Signature of Transporter Representative: Michael Rodonis Date of Shipment: 7/9/04 Time of Shipment: 7:40 ☒ AM ☐ PM Truck/Tractor Registration: AR3907 NH Trailer Registration (if any): 0655138.me	Receiving Facility/Temporary Storage Representative: R. Bair Date of Receipt: 7-9-04 Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons): 35.30
Load 2:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 3:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 4:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 5:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 6:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons)
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Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative:
Date of Shipment: 7/9/04
Time of Shipment: 740 ☒ AM ☐ PM
Truck/Tractor Registration: 58578 MA
Trailer Registration (if any): —
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 7/9/4
Time of Receipt: 9:30 ☒ AM ☐ PM
Load Size (cu. yds./tons):

Load 2:
Signature of Transporter Representative:
Date of Shipment: 7/9/04
Time of Shipment: 1230 ☐ AM ☒ PM
Truck/Tractor Registration: 58578 MA
Trailer Registration (if any): —
Receiving Facility/Temporary Storage Representative: A Baer 2:38
Date of Receipt: 7/9/04
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 24.86

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

Revised 10/3/94

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

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: Michael Rodonis
Date of Shipment: 7/9/04 Time of Shipment: 7:40 ☒ AM ☐ PM
Truck/Tractor Registration: AR3907 NH Trailer Registration (if any): 0655138 ME
Receiving Facility/Temporary Storage Representative: R Baur
Date of Receipt: 7-9-04 Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 2:
Signature of Transporter Representative: Michael Rodonis
Date of Shipment: 7/9/04 Time of Shipment: 12:45 ☐ AM ☒ PM
Truck/Tractor Registration: AR3907 Trailer Registration (if any): 0655138
Receiving Facility/Temporary Storage Representative: R Baur
Date of Receipt: 7-9-04 Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 37.02

Load 3:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons)
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

Revised 10/3/94

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons):
07/08/2004	07/08/2004	6	184.48
07/09/2004	07/09/2004	10	329.58
07/12/2004	07/12/2004	2	66.26
Summary Sheet Total Shipped:		18	580.32 tons
Bill of Lading Total Shipped (only if different):			

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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
3 - 13302

ONLY COMPLETE ONE COPY OF THIS PAGE AND ATTACH TO THE FINAL COPY OF THE SUMMARY SHEET.

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

Receiving Facility/Temporary Storage Representative (print): Ellen Bellio

Title: Technical Manager

Signature: Ellen Bellio

Date: February 2, 2005

M. ACKNOWLEDGMENT 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 in 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: _____

Name of Person (print): _____

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Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET _____ **OF** _____

EB

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Ernest Powell

Date of Shipment: 7/12/04

Time of Shipment: 7:30 ☒ AM ☐ PM

Truck/Tractor Registration: 68192 MA

Trailer Registration (if any): 07600 24 HE

Receiving Facility/Temporary Storage Representative: R Brodeur

Date of Receipt: 7/12/04

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons): 31.05

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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

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

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Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET _____ OF _____

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Ed Lott

Receiving Facility/Temporary Storage Representative: K. Bates

Date of Shipment: 7-12-04

Time of Shipment: 7:30 ☒ AM ☐ PM

Date of Receipt: 7/12/04

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration: M933276

Trailer Registration (if any): MA 88878

Load Size (cu. yds./tons): 35 21

Load 2:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

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

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

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Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET _____ OF _____

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Michael Rodons

Receiving Facility/Temporary Storage Representative: R. Rodia

Date of Shipment: 7/12/04

Time of Shipment: 7:39 ☒ AM ☐ PM

Date of Receipt: 7/12/04

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration: AR3907

Trailer Registration (if any): 056613

Load Size (cu. yds./tons): 36.93

Load 2:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

DEP

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET ______ **OF** ______

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load	Transporter	Receiving Facility
Load 1:	Signature of Transporter Representative: [signature] Date of Shipment: 7/12/04 Time of Shipment: 840 ☒ AM ☐ PM Truck/Tractor Registration: 58578 mn Trailer Registration (if any): —	Receiving Facility/Temporary Storage Representative: R. Badea Date of Receipt: 7/12/04 Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons): 29.92
Load 2:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 3:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 4:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 5:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):
Load 6:	Signature of Transporter Representative: Date of Shipment: Time of Shipment: ☐ AM ☐ PM Truck/Tractor Registration: Trailer Registration (if any):	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: ☐ AM ☐ PM Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

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

VNO # 56076 1 of 4

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

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 13302

SUMMARY SHEET _____ **OF** _____

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative:
Date of Shipment: 7/12/04
Time of Shipment: 1:30 ☐ AM ☒ PM
Truck/Tractor Registration: 915984 mc
Trailer Registration (if any): 05 56946 mc
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 7-12-04 Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons): 16.99

Load 2:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment: Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded 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

DEP

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons):
7/8/04	7/8/04	6	184.48
7/9/04	7/9/04	10	329.58
7/12/04	7/12/04	5	150.10
Summary Sheet Total Shipped:		21	664.16
Bill of Lading Total Shipped (only if different):			

56846

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons):
7-12-2004	7-12-2004	3	83.84 Tons
Summary Sheet Total Shipped:		3	83.84 Tons
Bill of Lading Total Shipped (only if different):			

56846

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
3 - 13302

ONLY COMPLETE ONE COPY OF THIS PAGE AND ATTACH TO THE FINAL COPY OF THE SUMMARY SHEET.

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

Receiving Facility/Temporary Storage Representative (print): Ellen Bellio

Title: Technical Manager

Signature: Ellen Bellio

Date: January 31, 2005

M. ACKNOWLEDGMENT 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 in 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: _____

Name of Person (print): _____

Bill of Lading Forms – Non-Hazardous Soil

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

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 13302

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

Release Name (optional): Former Raytheon Facility
Street: 430 Boston Post Road Location Aid:
City/Town: Wayland ZIP Code: 01778
Date/Period of Generation: 6/2004 to: 7/2004
Additional Release Tracking Numbers Associated with this Bill of Lading:
** Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.*

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

Name of Organization: Raytheon
Name of Contact: Ed Madera Title: Sr. Environmental Engineer
Street: 528 Boston Post Rd
City/Town: Sudbury State: MA ZIP Code: 01776
Telephone: Ext.:

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

☐ RP or PRP Specify: ☐ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: Former Operator
☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
☐ 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 OR COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name:
Contact Person: Title:
Street:
City/Town: State: ZIP Code:
Telephone: Ext.:

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Environmental Soil Management Inc
Contact Person: Title:
Street: 67 International Dr
City/Town: Loudon State: NH ZIP Code: 03307
Telephone: 603 783-0228 Ext.:

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

Division of Hazardous Waste/Class A Permit #: Division of Solid Waste Management Permit #:
Actual/Anticipated Period of Temporary Storage (specify dates if applicable): to:
Reason for Temporary Storage:

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

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: ☐ - ☐

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

Temporary Storage Address:

Street: _____

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

F. DESCRIPTION OF REMEDIATION WASTE:
(check all that apply)

☑ Contaminated Media (check all that apply): ◉ Soil ○ Groundwater ○ Surface Water ○ Other: _____

☐ Contaminated Debris (check all that apply): ○ Vegetation or Organic Debris ○ Demolition/Construction Waste ○ Inorganic Absorbent Materials ○ Other: _____

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

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

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

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

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

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

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 its date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: Environmental Resources Management

LSP Name: John Drobinski Title: Principal-in-Charge

Telephone: 617 646-7800 Ext.: _____

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of

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

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

LSP Signature: _____ Seal:

Date: 10/25/04

License Number: 2196

COMMONWEALTH OF MASSACHUSETTS — JOHN C. DROBINSKI No. 2196 — REGISTERED LICENSED SITE PROFESSIONAL

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 13302

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: Edwin P. Madera Date: 7/2/04

Name of Person (print): Edwin P. Madera

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET ________ **OF** ________

Release Tracking Number: 3 - 13302

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: Brian [signature]
Date of Shipment: 10-27-04
Time of Shipment: 11:00 ☑ AM ☐ PM
Truck/Tractor Registration: 59851 MA
Trailer Registration (if any): 0520784 ME
Receiving Facility/Temporary Storage Representative: [signature]
Date of Receipt: 10/27/04
Time of Receipt: 1:03 ☐ AM ☑ PM
Load Size (cu. yds./tons): 34.97 Tn

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons): 34.97 Tn
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

Revised 10/3/94

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 **OF** 1

Release Tracking Number 3 - 13302

K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons):
10/27/04	10/27/04	1	34.97 tons
Summary Sheet Total Shipped:			
Bill of Lading Total Shipped (only if different):			

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
3 - 13302

ONLY COMPLETE ONE COPY OF THIS PAGE AND ATTACH TO THE FINAL COPY OF THE SUMMARY SHEET.

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

Receiving Facility/Temporary Storage Representative (print): ESMI / Marc Aubrey Title: General Manager

Signature: Marc Aubrey Date: 11/9/04

M. ACKNOWLEDGMENT 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 in 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: _____

Name of Person (print): _____

Straight Bill of Lading Forms – Asphalt & Gravel

EN678512

DOCUMENT NO. 67035

WORK ORDER NO. 71206

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sims Transportation
EPA ID #
VEHICLE ID # 63192 MA
TRANS. 1 PHONE 401-552-2639

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
AMREC	Raytheon Company
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26	tons
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul Parker	Paul Parker	7/12/04
TRANSPORTER 1	Everett Russell	Everett Russell	7/12/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN 678518

DOCUMENT NO. 67012

WORK ORDER NO. 706012

STRAIGHT BILL OF LADING

Plate # POPEYE N.H.

TRANSPORTER 1 Sam's Transportation
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6688

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
Amec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS	ADDRESS
130 Sturbridge Rd	528 Boston Post RD
CITY / STATE / ZIP	CITY / STATE / ZIP
Charlton MA. 01507	Sudbury MA. 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN) Harbors	[signature]	7/6/04
TRANSPORTER 1	Popeyes Express	[signature]	7-6-04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN67 8510

DOCUMENT NO. 67034

WORK ORDER NO. 71205

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sams Transportation VEHICLE ID # 33179 NY
EPA ID # TRANS. 1 PHONE 222-552-6629

TRANSPORTER 2 VEHICLE ID #
EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY			SHIPPER		
AMREC			Raytheon Company		
FACILITY EPA ID #			SHIPPER EPA ID #		
ADDRESS 130 Sturbridge Rd			ADDRESS 528 Boston Post Rd		
CITY Charlton	STATE MA	ZIP 01507	CITY Sudbury	STATE MA	ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26	tons
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul Pukk	[signature]	7/12/04
TRANSPORTER 1	Fred Standart	[signature]	7/12/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67033

WORK ORDER NO. 71204

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sams Transportation
EPA ID #
VEHICLE ID # MA 33276
TRANS. 1 PHONE 888-552-6689

TRANSPORTER 2
EPA ID #
VEHICLE ID # MA 33276
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
ANREC	Raytheon Company
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 528 Boston Post Road
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26	tons
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul Rhc	[signature]	7/12/04
TRANSPORTER 1	SAMS TRANS	Edward [signature]	7/12/04
TRANSPORTER 2	Edward [signature]	Northern Essex HG	7/12/04
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EV678518

DOCUMENT NO. 67032

WORK ORDER NO. 71203

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS TRANSPORTATION VEHICLE ID # 915984 ME
EPA ID # TRANS. 1 PHONE 208-352-6619

TRANSPORTER 2 VEHICLE ID #
EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
AMREC	Raytheon Company
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 520 Boston ~~Road~~ Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26	to 15
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul RKK	Paul Ruan	7/12/04
TRANSPORTER 1	Tom Hanlon		7/12/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN678518

DOCUMENT NO. 67031

WORK ORDER NO. 7120Z

STRAIGHT BILL OF LADING

TRANSPORTER 1 SANDS Transportation
EPA ID #
VEHICLE ID # 33179 MM.
TRANS. 1 PHONE 508-352-6687

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY		SHIPPER	
AMREC		Raytheon Company	
FACILITY EPA ID #		SHIPPER EPA ID #	
ADDRESS 130 Sturbridge Rd		ADDRESS 528 Boston Post Rd	
CITY Charlton	STATE MA ZIP 01507	CITY Sud Bury	STATE MA ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	21	tons
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul Puck	Paul Puck	7/12/04
TRANSPORTER 1	~~Sam's~~ Fred Gmide	Fred Gmide	7/13/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67030

WORK ORDER NO. 71201

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS Transportation
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6687

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
AMREC	Raytheon Company
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Starbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY STATE ZIP

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26	tons
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Paul Rikk Clean Harbors	[signature]	7/12/04
TRANSPORTER 1	[signature]	Everett Russell	7/12/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

ENG78517

DOCUMENT NO. 67029

WORK ORDER NO. 70804

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS TRANSPORTATION
EPA ID #
VEHICLE ID # AR3338NH
TRANS. 1 PHONE 877-352-6677

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
AMREC	RAYTHEON COMPANY
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 STURBRIDGE RD	ADDRESS 528 BOSTON POST RD
CITY CHARLTON STATE MA ZIP 01507	CITY SUDBURY STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1-30CY	DT		A. ASPHALT OR GRAVEL	2lb	TONS
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	JOHN EARLY - CLEAN HARBORS		7/3/07
TRANSPORTER 1	SAMS / J&J TRAN		7/8/07
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN6785178

DOCUMENT NO. 67028

WORK ORDER NO. 70803

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS TRANSPORTATION
EPA ID # _____
VEHICLE ID # 1149 33276
TRANS. 1 PHONE ~~877~~ 352-6639

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
AMREC	RAYTHEON COMPANY
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS STURBRIDGE RD 130 ~~CHARLTON~~	ADDRESS 528 BOSTON POST RD
CITY CHARLTON STATE MA ZIP 01507	CITY SUDBURY STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1-30 CY	DT		A. ASPHALT OR GRAVEL	26	TON
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	JOHN ERWIN - CLEAN HARBORS		7/8/04
TRANSPORTER 1	SAMTRANS	Edward Catt	7/8/04
TRANSPORTER 2	Northern Essex T16	Edward Catt	7/8/04
RECEIVED BY			

CHI 190

EN 678518

DOCUMENT NO. 67027

WORK ORDER NO. 70802

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS TRANSPORTATION
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6688

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
AMREC	RAYTHEON COMPANY
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 STURBRIDGE RD	ADDRESS 528 BOSTON POST RD
CITY CHARLTON STATE MA ZIP 01507	CITY SUDBURY STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1-30CY	DT		A. ASPHALT OR GRAVEL	26-	TONS
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	JOHN IRWIN-CLEAN HARBORS		7/8/04
TRANSPORTER 1	SAMS trans	Michael Rodomo	7/8/04
TRANSPORTER 2	M R + 69	Michael Rodomo	7/8/04
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN6785 18

DOCUMENT NO. 67026

WORK ORDER NO. 70801

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAMS TRANSPORTATION
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
AMREC	RAYTHEON COMPANY
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 STURBRIDGE RD	ADDRESS 528 BOSTON POST RD
CITY CHARLTON STATE MA ZIP 01507	CITY SUDBURY STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1-30CY	DT		A. ASPHALT OR GRAVEL	26 TONS	TONS
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	JOHN ERWIN - CLEAN HARBORS		7/8/04
TRANSPORTER 1	PRINT Paper Express	SIGN	DATE 7-8-04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN678518

DOCUMENT NO. 67016

WORK ORDER NO. 70701

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transportation
EPA ID #
VEHICLE ID # ME0655137
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amrec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Clam Harbor - Howard Allen		7/7/04
TRANSPORTER 1	Pope's Express		7-7-04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EM 678518

DOCUMENT NO. 67018

WORK ORDER NO. 70703

STRAIGHT BILL OF LADING

38578 MA

TRANSPORTER 1 Semi Transportation
EPA ID #
VEHICLE ID # Yard Walks #C
TRANS. 1 PHONE ~~508~~ - 352-6689

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY		SHIPPER	
FACILITY EPA ID #		SHIPPER EPA ID #	
ADDRESS	130 Sturbridge Rd	ADDRESS	528 Boston Post Rd
CITY	Charlton	CITY	Sudbury
STATE	MA	STATE	MA
ZIP	01507	ZIP	01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	24 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Allen - Clean Harbors		7/7/04
TRANSPORTER 1	Daniel Ricker		7/7/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EM 678518

DOCUMENT NO. 67019

WORK ORDER NO. 72704

STRAIGHT BILL OF LADING

TRANSPORTER 1 Semi Transportation
EPA ID # _____
VEHICLE ID # NH TZ 9530
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY			SHIPPER	
Amrec			Raytheon	
FACILITY EPA ID #			SHIPPER EPA ID #	
ADDRESS 130 Stanbridge Rd			ADDRESS 528 Boston Post Rd	
CITY Chelsea	STATE MA	ZIP 01507	CITY Sudbury	STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Allen - Cla Harbor		1/7/04
TRANSPORTER 1	SAM / J & J TRANS.		5/7/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67020

WORK ORDER NO. 70705

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transporting
EPA ID # _____
VEHICLE ID # MA668878
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY				SHIPPER			
Amrec				Raytheon			
FACILITY EPA ID #				SHIPPER EPA ID #			
ADDRESS 130 Stuarbridge Rd				ADDRESS 528 Boston Post Rd			
CITY Charlton	STATE MA	ZIP 01507		CITY Sudbury	STATE MA	ZIP 01776	

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. ~~Asphalt~~ Gravel	26 Ton	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Clean Harbors Howard Allen		7/7/04
TRANSPORTER 1	PRINT SAM TRANS	SIGN	DATE 7/7/04
TRANSPORTER 2	PRINT NORTHERN ESSEX	SIGN	DATE 7/7/04
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EM678518

DOCUMENT NO. 67021

WORK ORDER NO. 70706

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transportation
EPA ID # _____
VEHICLE ID # MA585578
TRANS. 1 PHONE 888-392-6687

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
Amrec	Ray Bean
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Gravel	24 Ton	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Allen - Clean Harbors		7/7/04
TRANSPORTER 1	Daniel E Richter		7/7/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67022

WORK ORDER NO. 70707

STRAIGHT BILL OF LADING

TRANSPORTER 1 Semi Transportation
EPA ID #
VEHICLE ID # NHTZ9530
TRANS. 1 PHONE 888-352-6687

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amrec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Gravel	26 ton	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Allen - Clean Harbors		7/7/04
TRANSPORTER 1	SAM / J & J TRAN		7/7/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN6785 18

DOCUMENT NO. 67023

WORK ORDER NO. 70708

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transportation
EPA ID # _____
VEHICLE ID # MA66878
TRANS. 1 PHONE 888-352-6859

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	Amrec	SHIPPER	Ray Rea
FACILITY EPA ID #		SHIPPER EPA ID #	
ADDRESS	130 Sturbridge Rd	ADDRESS	528 Boston Post Rd
CITY	Charlton	STATE / ZIP	MA 01507
CITY	Sudbury	STATE / ZIP	MA 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Gravel		
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Alla - Clean Harbors		7/7/04
TRANSPORTER 1	SAMS TRANS	Edward Catt	7/7/04
TRANSPORTER 2	Northern Essex	Edward Catt	7/7/04
RECEIVED BY			

CHI 190

EM678518

DOCUMENT NO. 67024 WORK ORDER NO. 70709

STRAIGHT BILL OF LADING

TRANSPORTER 1 Semi Transportation VEHICLE ID # MA58578
EPA ID # TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 VEHICLE ID #
EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY	Amrec	SHIPPER	Raytheon
FACILITY EPA ID #		SHIPPER EPA ID #	
ADDRESS	130 Sturbridge Rd	ADDRESS	528 Boston Post Rd
CITY	Charlton	STATE / ZIP	MA 01507
CITY	Sudbury	STATE / ZIP	MA 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Gravel	24 Ton	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Howard Allen Clean Harbors		7/7/04
TRANSPORTER 1	Daniel E Ricker		7/7/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

CN678518

DOCUMENT NO. 67001

WORK ORDER NO. 70601

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transportation
EPA ID #
VEHICLE ID # MA, Cable # 52802
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amerec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Shirbridge Rd	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. ~~Asph.~~	26 tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER X	EA Russell #4	X Bob Cooke	7-6-04
TRANSPORTER 1 X	SAM'S	X	DATE
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EA 678518

DOCUMENT NO. 67002

WORK ORDER NO. 70602

STRAIGHT BILL OF LADING

Date POPEYE

TRANSPORTER 1 SAM'S Transportation
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
Amrec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER X	Sams Trans	X	
TRANSPORTER 1 X	Joe Hyl	X	7-6-04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

DOCUMENT NO. 67003

EA678518

WORK ORDER NO. 70603

STRAIGHT BILL OF LADING

TRANSPORTER 1 Sam's Transportation
EPA ID #

Plate 58578
VEHICLE ID #
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2
EPA ID #

VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amree	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 stuckbridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 TONS	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Clean Harbors		2/6/07
TRANSPORTER 1	Daniel E Ricker		2/6/07
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EW 678518

DOCUMENT NO. 67004

WORK ORDER NO. 70604

STRAIGHT BILL OF LADING

Plate # 33276

TRANSPORTER 1 Sam's Transportation VEHICLE ID #

EPA ID # TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 VEHICLE ID #

EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amerc	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Sams Trans	Edward Catt	7/6/04
TRANSPORTER 1	Northern Essex T-16 LTD	Edward Catt	7/6/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EN 678518

DOCUMENT NO. 67005

WORK ORDER NO. 20605

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAM's TRANSPORTION VEHICLE ID # AR 3338 O.H.

EPA ID # TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 VEHICLE ID #

EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
AMEC	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Stuebridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA. ZIP 01507	CITY Sudbury STATE MA. ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Clean Harbors		
TRANSPORTER 1	SAMS/J&J TRANS	Jeffrey J Joyce	7/6/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EA 678518

DOCUMENT NO. 67006

WORK ORDER NO. 70606

STRAIGHT BILL OF LADING

TRANSPORTER 1	Sam's Transportation	VEHICLE ID #	Plate 52802 MA.
EPA ID #		TRANS. 1 PHONE	888-352-6689
TRANSPORTER 2		VEHICLE ID #	
EPA ID #		TRANS. 2 PHONE	

DESIGNATED FACILITY			SHIPPER		
Amrec			Raytheon		
FACILITY EPA ID #			SHIPPER EPA ID #		
ADDRESS			ADDRESS		
130 ~~Sturb~~ Sturbridge RD			528 Boston Post RD		
CITY	STATE	ZIP	CITY	STATE	ZIP
Charlton	MA	01507	Sudbury	MA	01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Clean Harbors	[signature]	7/6/04
TRANSPORTER 1	EA Russell #4		
TRANSPORTER 2	SAMS		
RECEIVED BY	[signature]		

CHI 190

EA 678518

DOCUMENT NO. 67007

WORK ORDER NO. 70607

STRAIGHT BILL OF LADING

TRANSPORTER 1 SAM's Transportation — VEHICLE ID # Plate POPEYE MA.
EPA ID # — TRANS. 1 PHONE 888-352-6685

TRANSPORTER 2 — VEHICLE ID #
EPA ID # — TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 TONS	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN Harbors	[signature]	7/6/04
TRANSPORTER 1	Power Express	[signature]	7-6-04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EA 678518

DOCUMENT NO. 67008

WORK ORDER NO. 7060 8

STRAIGHT BILL OF LADING

TRANSPORTER 1 - SAM'S TRANSPORTATION
VEHICLE ID # Plate 58578 MA,
EPA ID #
TRANS. 1 PHONE 888-352-6685

TRANSPORTER 2
VEHICLE ID #
EPA ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
AMREC	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge RD	ADDRESS 528 Boston Post Rd
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA. ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN HARBORS		7/6/04
TRANSPORTER 1	Daniel E Ridler		7/6/04
TRANSPORTER 2			
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67009

WORK ORDER NO. 70609

STRAIGHT BILL OF LADING

PLATE # 3388 NH,

TRANSPORTER 1 SAM'S TRANSPORTATION
EPA ID #
VEHICLE ID #
TRANS. 1 PHONE 888-352-6685

TRANSPORTER 2
EPA ID #
VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Amrec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Sturbridge RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA ZIP 01507	CITY Sudbury STATE MA ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 TONS	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN HARBORS	[signature]	7/6/04
TRANSPORTER 1	SAM / J & J TRANS.	[signature]	7/6/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 190

EA 678518

DOCUMENT NO. 67010

WORK ORDER NO. 20610

STRAIGHT BILL OF LADING

PLATE # 33276 MA ~~33328 MA~~

TRANSPORTER 1 SAM's TRANSPORTATION
EPA ID # _____
VEHICLE ID # _____
TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 _____
EPA ID # _____
VEHICLE ID # _____
TRANS. 2 PHONE _____

DESIGNATED FACILITY	SHIPPER
Amrec	Raytheon
FACILITY EPA ID #	SHIPPER EPA ID #
ADDRESS 130 Shrewsbury RD	ADDRESS 528 Boston Post RD
CITY Charlton STATE MA. ZIP 01507	CITY Sudbury STATE MA. ZIP 01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 TONS	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN HARBORS	[signature]	7/6/04
TRANSPORTER 1	SAMS TRAIUS	Edward [illegible]	7 6 04
TRANSPORTER 2	Northern Essex T/C	Edward [illegible]	7 6 04
RECEIVED BY			

CHI 190

EN678518

DOCUMENT NO. 67011

WORK ORDER NO. 70611

STRAIGHT BILL OF LADING

PLATE# 52802 MA

TRANSPORTER 1 SAM'S TRANSPORTATION VEHICLE ID #
EPA ID # TRANS. 1 PHONE 888-352-6689

TRANSPORTER 2 VEHICLE ID #
EPA ID # TRANS. 2 PHONE

DESIGNATED FACILITY			SHIPPER		
Amcec			Raytheon		
FACILITY EPA ID #			SHIPPER EPA ID #		
ADDRESS			ADDRESS		
130 Sturbridge RD			528 Boston Post RD		
CITY	STATE	ZIP	CITY	STATE	ZIP
Charlton	MA.	01507	Sudbury	MA.	01776

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1	DT		A. Asphalt	26 Tons	
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	CLEAN HARBORS	[signature]	7/6/04
TRANSPORTER 1	EA Russell #4		
TRANSPORTER 2	SAM'S		
RECEIVED BY	Bob Cushen		

CHI 190

Waste Characterization Laboratory Reports

Access Road Soil/Gravel Mixture and Asphalt Laboratory Reports

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0406888

Date Received: 23-JUN-2004

Date Reported: 29-JUN-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Ellen M. Collins
This document electronically signed

Laboratory Job Number: L0406888
Date Reported: 29-JUN-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0406888-01	ROAD-1	WAYLAND, MA
L0406888-02	ROAD-2	WAYLAND, MA
L0406888-03	ROAD-3	WAYLAND, MA
L0406888-04	ROAD-4	WAYLAND, MA
L0406888-05	ASPHALT-1	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0406888

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PCBs by Method 8082 and SVOCs by Method 8270C on samples -01 through -04.

Extraction method 3540C was used as the extraction method for the analysis of PCBs by Method 8082 and SVOCs by Method 8270C on sample -05.

Semi-Volatile Organics

L0406888-03 has elevated limits of detection due to the 2x dilution required by the matrix of the sample.

L0406888-05 has elevated limits of detection due to the 30x dilution required by the matrix of the sample.

In reference to question E, the LCS associated with -01 through -04 has a low recovery for Aniline.

In reference to question E, the LCS associated with -05 has low recoveries for Aniline and 4-Chloroaniline.

PCBs

L0406888-05 has elevated limits of detection due to the 200x analytical dilutions required by the matrix of the sample.

In reference to question E, the Surrogate % Recoveries on L0406888-05 were not recovered due to the dilutions required to quantitate the sample.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406888-01
ROAD-1
Sample Matrix: SOIL

Date Collected: 23-JUN-2004 10:10
Date Received : 23-JUN-2004
Date Reported : 29-JUN-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	98.	%	0.10	30	2540G		0624 13:00	JH
Total Metals				1	3051			
Arsenic, Total	7.0	mg/kg	0.40	54	6010B	0624 12:00	0625 16:14	MG
Barium, Total	24.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:14	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 16:14	MG
Chromium, Total	16.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:14	MG
Lead, Total	8.0	mg/kg	2.0	54	6010B	0624 12:00	0625 16:14	MG
Mercury, Total	ND	mg/kg	0.08	54	7471A	0624 16:40	0625 10:32	DM
Selenium, Total	ND	mg/kg	0.80	54	6010B	0624 12:00	0625 16:14	MG
Silver, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 16:14	MG
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0625 17:03	HL
Acenaphthene	ND	ug/kg	340					
1,2,4-Trichlorobenzene	ND	ug/kg	340					
Hexachlorobenzene	ND	ug/kg	340					
Bis(2-chloroethyl)ether	ND	ug/kg	340					
2-Chloronaphthalene	ND	ug/kg	340					
1,2-Dichlorobenzene	ND	ug/kg	340					
1,3-Dichlorobenzene	ND	ug/kg	340					
1,4-Dichlorobenzene	ND	ug/kg	340					
3,3'-Dichlorobenzidine	ND	ug/kg	680					
2,4-Dinitrotoluene	ND	ug/kg	340					
2,6-Dinitrotoluene	ND	ug/kg	340					
Azobenzene	ND	ug/kg	340					
Fluoranthene	1400	ug/kg	340					
4-Bromophenyl phenyl ether	ND	ug/kg	340					
Bis(2-chloroisopropyl)ether	ND	ug/kg	340					
Bis(2-chloroethoxy)methane	ND	ug/kg	340					
Hexachlorobutadiene	ND	ug/kg	680					
Hexachloroethane	ND	ug/kg	340					
Isophorone	ND	ug/kg	340					
Naphthalene	ND	ug/kg	340					
Nitrobenzene	ND	ug/kg	340					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	680					
Butyl benzyl phthalate	520	ug/kg	340					
Di-n-butylphthalate	ND	ug/kg	340					
Di-n-octylphthalate	ND	ug/kg	340					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-01
ROAD-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 17:03	HL
Diethyl phthalate	ND	ug/kg	340				
Dimethyl phthalate	ND	ug/kg	340				
Benzo(a)anthracene	560	ug/kg	340				
Benzo(a)pyrene	720	ug/kg	340				
Benzo(b)fluoranthene	830	ug/kg	340				
Benzo(k)fluoranthene	700	ug/kg	340				
Chrysene	820	ug/kg	340				
Acenaphthylene	ND	ug/kg	340				
Anthracene	ND	ug/kg	340				
Benzo(ghi)perylene	720	ug/kg	340				
Fluorene	ND	ug/kg	340				
Phenanthrene	410	ug/kg	340				
Dibenzo(a,h)anthracene	ND	ug/kg	340				
Indeno(1,2,3-cd)Pyrene	620	ug/kg	340				
Pyrene	1200	ug/kg	340				
Aniline	ND	ug/kg	680				
4-Chloroaniline	ND	ug/kg	340				
Dibenzofuran	ND	ug/kg	340				
2-Methylnaphthalene	ND	ug/kg	340				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	340				
2-Chlorophenol	ND	ug/kg	410				
2,4-Dichlorophenol	ND	ug/kg	680				
2,4-Dimethylphenol	ND	ug/kg	340				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	680				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	480				
2-Methylphenol	ND	ug/kg	410				
3-Methylphenol/4-Methylphenol	ND	ug/kg	410				
2,4,5-Trichlorophenol	ND	ug/kg	340				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	49.0	%	30-130				
Phenol-d6	60.0	%	30-130				
Nitrobenzene-d5	55.0	%	30-130				
2-Fluorobiphenyl	67.0	%	30-130				
2,4,6-Tribromophenol	93.0	%	30-130				
4-Terphenyl-d14	84.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 21:51	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	72.0	%	30-150				
Decachlorobiphenyl	44.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 21:51	AK
Aroclor 1221	ND	ug/kg	34.0				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-01
ROAD-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0624 11:30	0625 21:51	AK
Aroclor 1232	ND	ug/kg	34.0				
Aroclor 1242/1016	ND	ug/kg	34.0				
Aroclor 1248	ND	ug/kg	34.0				
Aroclor 1254	ND	ug/kg	34.0				
Aroclor 1260	ND	ug/kg	34.0				
Aroclor 1262	ND	ug/kg	34.0				
Aroclor 1268	ND	ug/kg	34.0				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	74.0	%	30-150				
Decachlorobiphenyl	41.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406888-02 **Date Collected:** 23-JUN-2004 10:20
ROAD-2 **Date Received :** 23-JUN-2004
Sample Matrix: SOIL **Date Reported :** 29-JUN-2004

Condition of Sample: Satisfactory **Field Prep:** None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	98.	%	0.10	30	2540G		0624 13:00	JH
Total Metals				1	3051			
Arsenic, Total	29.	mg/kg	0.41	54	6010B	0624 12:00	0625 16:19	MG
Barium, Total	42.	mg/kg	0.41	54	6010B	0624 12:00	0625 16:19	MG
Cadmium, Total	ND	mg/kg	0.41	54	6010B	0624 12:00	0625 16:19	MG
Chromium, Total	25.	mg/kg	0.41	54	6010B	0624 12:00	0625 16:19	MG
Lead, Total	8.9	mg/kg	2.0	54	6010B	0624 12:00	0625 16:19	MG
Mercury, Total	ND	mg/kg	0.07	54	7471A	0624 16:40	0625 10:34	DM
Selenium, Total	ND	mg/kg	0.82	54	6010B	0624 12:00	0625 16:19	MG
Silver, Total	ND	mg/kg	0.41	54	6010B	0624 12:00	0625 16:19	MG
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0625 17:29	HL
Acenaphthene	ND	ug/kg	340					
1,2,4-Trichlorobenzene	ND	ug/kg	340					
Hexachlorobenzene	ND	ug/kg	340					
Bis(2-chloroethyl)ether	ND	ug/kg	340					
2-Chloronaphthalene	ND	ug/kg	340					
1,2-Dichlorobenzene	ND	ug/kg	340					
1,3-Dichlorobenzene	ND	ug/kg	340					
1,4-Dichlorobenzene	ND	ug/kg	340					
3,3'-Dichlorobenzidine	ND	ug/kg	680					
2,4-Dinitrotoluene	ND	ug/kg	340					
2,6-Dinitrotoluene	ND	ug/kg	340					
Azobenzene	ND	ug/kg	340					
Fluoranthene	4600	ug/kg	340					
4-Bromophenyl phenyl ether	ND	ug/kg	340					
Bis(2-chloroisopropyl)ether	ND	ug/kg	340					
Bis(2-chloroethoxy)methane	ND	ug/kg	340					
Hexachlorobutadiene	ND	ug/kg	680					
Hexachloroethane	ND	ug/kg	340					
Isophorone	ND	ug/kg	340					
Naphthalene	ND	ug/kg	340					
Nitrobenzene	ND	ug/kg	340					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	680					
Butyl benzyl phthalate	ND	ug/kg	340					
Di-n-butylphthalate	ND	ug/kg	340					
Di-n-octylphthalate	ND	ug/kg	340					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-02
ROAD-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 17:29	HL
Diethyl phthalate	ND	ug/kg	340				
Dimethyl phthalate	ND	ug/kg	340				
Benzo(a)anthracene	1300	ug/kg	340				
Benzo(a)pyrene	1900	ug/kg	340				
Benzo(b)fluoranthene	2500	ug/kg	340				
Benzo(k)fluoranthene	1900	ug/kg	340				
Chrysene	2400	ug/kg	340				
Acenaphthylene	ND	ug/kg	340				
Anthracene	ND	ug/kg	340				
Benzo(ghi)perylene	1900	ug/kg	340				
Fluorene	ND	ug/kg	340				
Phenanthrene	1800	ug/kg	340				
Dibenzo(a,h)anthracene	400	ug/kg	340				
Indeno(1,2,3-cd)Pyrene	1700	ug/kg	340				
Pyrene	3700	ug/kg	340				
Aniline	ND	ug/kg	680				
4-Chloroaniline	ND	ug/kg	340				
Dibenzofuran	ND	ug/kg	340				
2-Methylnaphthalene	ND	ug/kg	340				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	340				
2-Chlorophenol	ND	ug/kg	410				
2,4-Dichlorophenol	ND	ug/kg	680				
2,4-Dimethylphenol	ND	ug/kg	340				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	680				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	480				
2-Methylphenol	ND	ug/kg	410				
3-Methylphenol/4-Methylphenol	ND	ug/kg	410				
2,4,5-Trichlorophenol	ND	ug/kg	340				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	49.0	%	30-130				
Phenol-d6	60.0	%	30-130				
Nitrobenzene-d5	55.0	%	30-130				
2-Fluorobiphenyl	70.0	%	30-130				
2,4,6-Tribromophenol	106.	%	30-130				
4-Terphenyl-d14	92.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 22:20	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	62.0	%	30-150				
Decachlorobiphenyl	41.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 22:20	AK
Aroclor 1221	ND	ug/kg	34.0				

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

Laboratory Sample Number: L0406888-02
ROAD-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0624 11:30	0625 22:20	AK
Aroclor 1232	ND	ug/kg	34.0				
Aroclor 1242/1016	ND	ug/kg	34.0				
Aroclor 1248	ND	ug/kg	34.0				
Aroclor 1254	ND	ug/kg	34.0				
Aroclor 1260	ND	ug/kg	34.0				
Aroclor 1262	ND	ug/kg	34.0				
Aroclor 1268	ND	ug/kg	34.0				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	67.0	%	30-150				
Decachlorobiphenyl	41.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406888-03 ROAD-3
Sample Matrix: SOIL

Date Collected: 23-JUN-2004 10:30
Date Received : 23-JUN-2004
Date Reported : 29-JUN-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	99.	%	0.10	30	2540G		0624 13:00	JH
Total Metals				1	3051			
Arsenic, Total	4.0	mg/kg	0.40	54	6010B	0624 12:00	0625 16:23	MG
Barium, Total	25.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:23	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 16:23	MG
Chromium, Total	21.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:23	MG
Lead, Total	18.	mg/kg	2.0	54	6010B	0624 12:00	0625 16:23	MG
Mercury, Total	ND	mg/kg	0.08	54	7471A	0624 16:40	0625 10:35	DM
Selenium, Total	ND	mg/kg	0.80	54	6010B	0624 12:00	0625 16:23	MG
Silver, Total	0.43	mg/kg	0.40	54	6010B	0624 12:00	0625 16:23	MG
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0625 17:54	HL
Acenaphthene	ND	ug/kg	670					
1,2,4-Trichlorobenzene	ND	ug/kg	670					
Hexachlorobenzene	ND	ug/kg	670					
Bis(2-chloroethyl)ether	ND	ug/kg	670					
2-Chloronaphthalene	ND	ug/kg	670					
1,2-Dichlorobenzene	ND	ug/kg	670					
1,3-Dichlorobenzene	ND	ug/kg	670					
1,4-Dichlorobenzene	ND	ug/kg	670					
3,3'-Dichlorobenzidine	ND	ug/kg	1300					
2,4-Dinitrotoluene	ND	ug/kg	670					
2,6-Dinitrotoluene	ND	ug/kg	670					
Azobenzene	ND	ug/kg	670					
Fluoranthene	4600	ug/kg	670					
4-Bromophenyl phenyl ether	ND	ug/kg	670					
Bis(2-chloroisopropyl)ether	ND	ug/kg	670					
Bis(2-chloroethoxy)methane	ND	ug/kg	670					
Hexachlorobutadiene	ND	ug/kg	1300					
Hexachloroethane	ND	ug/kg	670					
Isophorone	ND	ug/kg	670					
Naphthalene	ND	ug/kg	670					
Nitrobenzene	ND	ug/kg	670					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	1300					
Butyl benzyl phthalate	ND	ug/kg	670					
Di-n-butylphthalate	ND	ug/kg	670					
Di-n-octylphthalate	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: L0406888-03
ROAD-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 17:54	HL
Diethyl phthalate	ND	ug/kg	670				
Dimethyl phthalate	ND	ug/kg	670				
Benzo(a)anthracene	1200	ug/kg	670				
Benzo(a)pyrene	1700	ug/kg	670				
Benzo(b)fluoranthene	2300	ug/kg	670				
Benzo(k)fluoranthene	1800	ug/kg	670				
Chrysene	2200	ug/kg	670				
Acenaphthylene	ND	ug/kg	670				
Anthracene	ND	ug/kg	670				
Benzo(ghi)perylene	1600	ug/kg	670				
Fluorene	ND	ug/kg	670				
Phenanthrene	2100	ug/kg	670				
Dibenzo(a,h)anthracene	ND	ug/kg	670				
Indeno(1,2,3-cd)Pyrene	1400	ug/kg	670				
Pyrene	3700	ug/kg	670				
Aniline	ND	ug/kg	1300				
4-Chloroaniline	ND	ug/kg	670				
Dibenzofuran	ND	ug/kg	670				
2-Methylnaphthalene	ND	ug/kg	670				
Acetophenone	ND	ug/kg	2700				
2,4,6-Trichlorophenol	ND	ug/kg	670				
2-Chlorophenol	ND	ug/kg	810				
2,4-Dichlorophenol	ND	ug/kg	1300				
2,4-Dimethylphenol	ND	ug/kg	670				
2-Nitrophenol	ND	ug/kg	2700				
4-Nitrophenol	ND	ug/kg	1300				
2,4-Dinitrophenol	ND	ug/kg	2700				
Pentachlorophenol	ND	ug/kg	2700				
Phenol	ND	ug/kg	940				
2-Methylphenol	ND	ug/kg	810				
3-Methylphenol/4-Methylphenol	ND	ug/kg	810				
2,4,5-Trichlorophenol	ND	ug/kg	670				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	42.0	%	30-130				
Phenol-d6	55.0	%	30-130				
Nitrobenzene-d5	46.0	%	30-130				
2-Fluorobiphenyl	65.0	%	30-130				
2,4,6-Tribromophenol	101.	%	30-130				
4-Terphenyl-d14	90.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 23:17	AK
Aroclor 1260	46.6	ug/kg	33.7				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	64.0	%	30-150				
Decachlorobiphenyl	39.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 23:17	AK

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-03
ROAD-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0624 11:30	0625 23:17	AK
Aroclor 1221	ND	ug/kg	33.7				
Aroclor 1232	ND	ug/kg	33.7				
Aroclor 1242/1016	ND	ug/kg	33.7				
Aroclor 1248	ND	ug/kg	33.7				
Aroclor 1254	ND	ug/kg	33.7				
Aroclor 1262	ND	ug/kg	33.7				
Aroclor 1268	ND	ug/kg	33.7				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	69.0	%	30-150				
Decachlorobiphenyl	35.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406888-04 **Date Collected:** 23-JUN-2004 10:40
ROAD-4 **Date Received :** 23-JUN-2004
Sample Matrix: SOIL **Date Reported :** 29-JUN-2004

Condition of Sample: Satisfactory **Field Prep:** None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	98.	%	0.10	30	2540G		0624 13:00	JH
Total Metals				1	3051			
Arsenic, Total	30.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:40	MG
Barium, Total	37.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:40	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 16:40	MG
Chromium, Total	22.	mg/kg	0.40	54	6010B	0624 12:00	0625 16:40	MG
Lead, Total	8.9	mg/kg	2.0	54	6010B	0624 12:00	0625 16:40	MG
Mercury, Total	ND	mg/kg	0.07	54	7471A	0624 16:40	0625 10:37	DM
Selenium, Total	ND	mg/kg	0.81	54	6010B	0624 12:00	0625 16:40	MG
Silver, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 16:40	MG
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0625 18:20	HL
Acenaphthene	ND	ug/kg	340					
1,2,4-Trichlorobenzene	ND	ug/kg	340					
Hexachlorobenzene	ND	ug/kg	340					
Bis(2-chloroethyl)ether	ND	ug/kg	340					
2-Chloronaphthalene	ND	ug/kg	340					
1,2-Dichlorobenzene	ND	ug/kg	340					
1,3-Dichlorobenzene	ND	ug/kg	340					
1,4-Dichlorobenzene	ND	ug/kg	340					
3,3'-Dichlorobenzidine	ND	ug/kg	680					
2,4-Dinitrotoluene	ND	ug/kg	340					
2,6-Dinitrotoluene	ND	ug/kg	340					
Azobenzene	ND	ug/kg	340					
Fluoranthene	3100	ug/kg	340					
4-Bromophenyl phenyl ether	ND	ug/kg	340					
Bis(2-chloroisopropyl)ether	ND	ug/kg	340					
Bis(2-chloroethoxy)methane	ND	ug/kg	340					
Hexachlorobutadiene	ND	ug/kg	680					
Hexachloroethane	ND	ug/kg	340					
Isophorone	ND	ug/kg	340					
Naphthalene	ND	ug/kg	340					
Nitrobenzene	ND	ug/kg	340					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	680					
Butyl benzyl phthalate	ND	ug/kg	340					
Di-n-butylphthalate	ND	ug/kg	340					
Di-n-octylphthalate	ND	ug/kg	340					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-04
ROAD-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 18:20	HL
Diethyl phthalate	ND	ug/kg	340				
Dimethyl phthalate	ND	ug/kg	340				
Benzo(a)anthracene	990	ug/kg	340				
Benzo(a)pyrene	1300	ug/kg	340				
Benzo(b)fluoranthene	1800	ug/kg	340				
Benzo(k)fluoranthene	1100	ug/kg	340				
Chrysene	1600	ug/kg	340				
Acenaphthylene	ND	ug/kg	340				
Anthracene	ND	ug/kg	340				
Benzo(ghi)perylene	1200	ug/kg	340				
Fluorene	ND	ug/kg	340				
Phenanthrene	1200	ug/kg	340				
Dibenzo(a,h)anthracene	ND	ug/kg	340				
Indeno(1,2,3-cd)Pyrene	1100	ug/kg	340				
Pyrene	2500	ug/kg	340				
Aniline	ND	ug/kg	680				
4-Chloroaniline	ND	ug/kg	340				
Dibenzofuran	ND	ug/kg	340				
2-Methylnaphthalene	ND	ug/kg	340				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	340				
2-Chlorophenol	ND	ug/kg	410				
2,4-Dichlorophenol	ND	ug/kg	680				
2,4-Dimethylphenol	ND	ug/kg	340				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	680				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	480				
2-Methylphenol	ND	ug/kg	410				
3-Methylphenol/4-Methylphenol	ND	ug/kg	410				
2,4,5-Trichlorophenol	ND	ug/kg	340				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	37.0	%	30-130				
Phenol-d6	42.0	%	30-130				
Nitrobenzene-d5	39.0	%	30-130				
2-Fluorobiphenyl	51.0	%	30-130				
2,4,6-Tribromophenol	102.	%	30-130				
4-Terphenyl-d14	88.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 23:45	AK
Aroclor 1260	35.8	ug/kg	34.0				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	66.0	%	30-150				
Decachlorobiphenyl	44.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 23:45	AK

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-04
ROAD-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0624 11:30	0625 23:45	AK
Aroclor 1221	ND	ug/kg	34.0				
Aroclor 1232	ND	ug/kg	34.0				
Aroclor 1242/1016	ND	ug/kg	34.0				
Aroclor 1248	ND	ug/kg	34.0				
Aroclor 1254	ND	ug/kg	34.0				
Aroclor 1262	ND	ug/kg	34.0				
Aroclor 1268	ND	ug/kg	34.0				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	69.0	%	30-150				
Decachlorobiphenyl	40.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406888-05 ASPHALT-1
Sample Matrix: SOLID

Date Collected: 23-JUN-2004 11:00
Date Received : 23-JUN-2004
Date Reported : 29-JUN-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	100	%	0.10	30	2540G		0624 13:00	JH
Total Metals				1	3051			
Arsenic, Total	1.6	mg/kg	1.0	54	6010B	0624 14:40	0625 11:23	MG
Barium, Total	5.5	mg/kg	1.0	54	6010B	0624 14:40	0625 11:23	MG
Cadmium, Total	ND	mg/kg	1.0	54	6010B	0624 14:40	0625 11:23	MG
Chromium, Total	5.1	mg/kg	1.0	54	6010B	0624 14:40	0625 11:23	MG
Lead, Total	ND	mg/kg	5.0	54	6010B	0624 14:40	0625 11:23	MG
Mercury, Total	ND	mg/kg	0.08	54	7471A	0624 16:40	0625 10:46	DM
Selenium, Total	ND	mg/kg	2.0	54	6010B	0624 14:40	0625 11:23	MG
Silver, Total	ND	mg/kg	1.0	54	6010B	0624 14:40	0625 11:23	MG
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0626 18:01	HL
Acenaphthene	ND	ug/kg	10000					
1,2,4-Trichlorobenzene	ND	ug/kg	10000					
Hexachlorobenzene	ND	ug/kg	10000					
Bis(2-chloroethyl)ether	ND	ug/kg	10000					
2-Chloronaphthalene	ND	ug/kg	10000					
1,2-Dichlorobenzene	ND	ug/kg	10000					
1,3-Dichlorobenzene	ND	ug/kg	10000					
1,4-Dichlorobenzene	ND	ug/kg	10000					
3,3'-Dichlorobenzidine	ND	ug/kg	20000					
2,4-Dinitrotoluene	ND	ug/kg	10000					
2,6-Dinitrotoluene	ND	ug/kg	10000					
Azobenzene	ND	ug/kg	10000					
Fluoranthene	ND	ug/kg	10000					
4-Bromophenyl phenyl ether	ND	ug/kg	10000					
Bis(2-chloroisopropyl)ether	ND	ug/kg	10000					
Bis(2-chloroethoxy)methane	ND	ug/kg	10000					
Hexachlorobutadiene	ND	ug/kg	20000					
Hexachloroethane	ND	ug/kg	10000					
Isophorone	ND	ug/kg	10000					
Naphthalene	ND	ug/kg	10000					
Nitrobenzene	ND	ug/kg	10000					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	20000					
Butyl benzyl phthalate	ND	ug/kg	10000					
Di-n-butylphthalate	ND	ug/kg	10000					
Di-n-octylphthalate	ND	ug/kg	10000					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-05
ASPHALT-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0626 18:01	HL
Diethyl phthalate	ND	ug/kg	10000				
Dimethyl phthalate	ND	ug/kg	10000				
Benzo(a)anthracene	ND	ug/kg	10000				
Benzo(a)pyrene	ND	ug/kg	10000				
Benzo(b)fluoranthene	ND	ug/kg	10000				
Benzo(k)fluoranthene	ND	ug/kg	10000				
Chrysene	ND	ug/kg	10000				
Acenaphthylene	ND	ug/kg	10000				
Anthracene	ND	ug/kg	10000				
Benzo(ghi)perylene	ND	ug/kg	10000				
Fluorene	ND	ug/kg	10000				
Phenanthrene	ND	ug/kg	10000				
Dibenzo(a,h)anthracene	ND	ug/kg	10000				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	10000				
Pyrene	ND	ug/kg	10000				
Aniline	ND	ug/kg	20000				
4-Chloroaniline	ND	ug/kg	10000				
Dibenzofuran	ND	ug/kg	10000				
2-Methylnaphthalene	ND	ug/kg	10000				
Acetophenone	ND	ug/kg	40000				
2,4,6-Trichlorophenol	ND	ug/kg	10000				
2-Chlorophenol	ND	ug/kg	12000				
2,4-Dichlorophenol	ND	ug/kg	20000				
2,4-Dimethylphenol	ND	ug/kg	10000				
2-Nitrophenol	ND	ug/kg	40000				
4-Nitrophenol	ND	ug/kg	20000				
2,4-Dinitrophenol	ND	ug/kg	40000				
Pentachlorophenol	ND	ug/kg	40000				
Phenol	ND	ug/kg	14000				
2-Methylphenol	ND	ug/kg	12000				
3-Methylphenol/4-Methylphenol	ND	ug/kg	12000				
2,4,5-Trichlorophenol	ND	ug/kg	10000				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	104.	%	30-130				
Phenol-d6	113.	%	30-130				
Nitrobenzene-d5	113.	%	30-130				
2-Fluorobiphenyl	106.	%	30-130				
2,4,6-Tribromophenol	92.0	%	30-130				
4-Terphenyl-d14	101.	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 10:45	0628 19:59	JB
Aroclor 1221	ND	ug/kg	5000				
Aroclor 1232	ND	ug/kg	5000				
Aroclor 1242/1016	ND	ug/kg	5000				
Aroclor 1248	ND	ug/kg	5000				
Aroclor 1254	ND	ug/kg	5000				
Aroclor 1260	ND	ug/kg	5000				
Aroclor 1262	ND	ug/kg	5000				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406888-05
ASPHALT-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0624 10:45	0628 19:59	JB
Aroclor 1268	ND	ug/kg	5000				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	ND	%	30-150				
Decachlorobiphenyl	ND	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 10:45	0628 19:59	JB
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	ND	%	30-150				
Decachlorobiphenyl	ND	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0406888

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01-04 (L0406840-01, WG174167)					
Solids, Total	72.	71.	%	1	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406888

Parameter	% Recovery	QC Criteria
Total Metals LCS for sample(s) 01-04 (WG174227)		
Arsenic, Total	98	75-125
Barium, Total	89	75-125
Cadmium, Total	95	75-125
Chromium, Total	85	75-125
Lead, Total	100	75-125
Selenium, Total	100	75-125
Silver, Total	93	75-125
Total Metals LCS for sample(s) 05 (WG174229)		
Arsenic, Total	103	75-125
Barium, Total	94	75-125
Cadmium, Total	108	75-125
Chromium, Total	90	75-125
Lead, Total	103	75-125
Selenium, Total	104	75-125
Silver, Total	84	75-125
Total Metals LCS for sample(s) 01-04 (WG174214)		
Mercury, Total	101	75-125
Total Metals LCS for sample(s) 05 (WG174249)		
Mercury, Total	101	75-125
Semivolatile Organics by MCP 8270C LCS for sample(s) 01-04 (WG174181)		
Acenaphthene	62	40-140
1,2,4-Trichlorobenzene	54	40-140
Hexachlorobenzene	88	40-140
Bis(2-chloroethyl)ether	53	40-140
2-Chloronaphthalene	60	40-140
1,2-Dichlorobenzene	52	40-140
1,3-Dichlorobenzene	52	40-140
1,4-Dichlorobenzene	52	40-140
3,3'-Dichlorobenzidine	73	40-140
2,4-Dinitrotoluene	92	40-140
2,6-Dinitrotoluene	100	40-140
Azobenzene	80	40-140
Fluoranthene	98	40-140
4-Bromophenyl phenyl ether	87	40-140
Bis(2-chloroisopropyl)ether	50	40-140
Bis(2-chloroethoxy)methane	56	40-140
Hexachlorobutadiene	52	40-140
Hexachloroethane	51	40-140
Isophorone	58	40-140
Naphthalene	54	40-140
Nitrobenzene	57	40-140
Bis(2-Ethylhexyl)phthalate	97	40-140
Butyl benzyl phthalate	99	40-140
Di-n-butylphthalate	100	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406888

Continued

Parameter	% Recovery	QC Criteria
Semivolatile Organics by MCP 8270C LCS for sample(s) 01-04 (WG174181)		
Di-n-octylphthalate	100	40-140
Diethyl phthalate	84	40-140
Dimethyl phthalate	83	40-140
Benzo(a)anthracene	94	40-140
Benzo(a)pyrene	86	40-140
Benzo(b)fluoranthene	93	40-140
Benzo(k)fluoranthene	81	40-140
Chrysene	88	40-140
Acenaphthylene	68	40-140
Anthracene	87	40-140
Benzo(ghi)perylene	88	40-140
Fluorene	74	40-140
Phenanthrene	86	40-140
Dibenzo(a,h)anthracene	91	40-140
Indeno(1,2,3-cd)Pyrene	90	40-140
Pyrene	98	40-140
Aniline	33	40-140
4-Chloroaniline	51	40-140
Dibenzofuran	68	40-140
2-Methylnaphthalene	57	40-140
Acetophenone	58	40-140
2,4,6-Trichlorophenol	72	30-130
2-Chlorophenol	56	30-130
2,4-Dichlorophenol	59	30-130
2,4-Dimethylphenol	50	30-130
2-Nitrophenol	61	30-130
4-Nitrophenol	91	30-130
2,4-Dinitrophenol	83	30-130
Pentachlorophenol	65	30-130
Phenol	59	30-130
2-Methylphenol	56	30-130
3-Methylphenol/4-Methylphenol	56	30-130
2,4,5-Trichlorophenol	82	30-130
Surrogate(s)		
2-Fluorophenol	54	30-130
Phenol-d6	58	30-130
Nitrobenzene-d5	59	30-130
2-Fluorobiphenyl	64	30-130
2,4,6-Tribromophenol	98	30-130
4-Terphenyl-d14	94	30-130
Semivolatile Organics by MCP 8270C LCS for sample(s) 05 (WG174245)		
Acenaphthene	67	40-140
1,2,4-Trichlorobenzene	60	40-140
Hexachlorobenzene	91	40-140
Bis(2-chloroethyl)ether	67	40-140
2-Chloronaphthalene	64	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406888

Continued

Parameter	% Recovery	QC Criteria
Semivolatile Organics by MCP 8270C LCS for sample(s) 05 (WG174245)		
1,2-Dichlorobenzene	60	40-140
1,3-Dichlorobenzene	57	40-140
1,4-Dichlorobenzene	58	40-140
3,3'-Dichlorobenzidine	48	40-140
2,4-Dinitrotoluene	110	40-140
2,6-Dinitrotoluene	95	40-140
Azobenzene	85	40-140
Fluoranthene	100	40-140
4-Bromophenyl phenyl ether	87	40-140
Bis(2-chloroisopropyl)ether	63	40-140
Bis(2-chloroethoxy)methane	65	40-140
Hexachlorobutadiene	58	40-140
Hexachloroethane	57	40-140
Isophorone	67	40-140
Naphthalene	62	40-140
Nitrobenzene	67	40-140
Bis(2-Ethylhexyl)phthalate	110	40-140
Butyl benzyl phthalate	110	40-140
Di-n-butylphthalate	110	40-140
Di-n-octylphthalate	110	40-140
Diethyl phthalate	96	40-140
Dimethyl phthalate	87	40-140
Benzo(a)anthracene	99	40-140
Benzo(a)pyrene	89	40-140
Benzo(b)fluoranthene	94	40-140
Benzo(k)fluoranthene	98	40-140
Chrysene	96	40-140
Acenaphthylene	68	40-140
Anthracene	91	40-140
Benzo(ghi)perylene	94	40-140
Fluorene	81	40-140
Phenanthrene	94	40-140
Dibenzo(a,h)anthracene	97	40-140
Indeno(1,2,3-cd)Pyrene	95	40-140
Pyrene	100	40-140
Aniline	17	40-140
4-Chloroaniline	34	40-140
Dibenzofuran	73	40-140
2-Methylnaphthalene	61	40-140
Acetophenone	66	40-140
2,4,6-Trichlorophenol	73	30-130
2-Chlorophenol	63	30-130
2,4-Dichlorophenol	66	30-130
2,4-Dimethylphenol	51	30-130
2-Nitrophenol	63	30-130
4-Nitrophenol	120	30-130
2,4-Dinitrophenol	89	30-130
Pentachlorophenol	85	30-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406888

Continued

Parameter	% Recovery	QC Criteria
Semivolatile Organics by MCP 8270C LCS for sample(s) 05 (WG174245)		
Phenol	69	30-130
2-Methylphenol	67	30-130
3-Methylphenol/4-Methylphenol	62	30-130
2,4,5-Trichlorophenol	86	30-130
Surrogate(s)		
2-Fluorophenol	62	30-130
Phenol-d6	63	30-130
Nitrobenzene-d5	64	30-130
2-Fluorobiphenyl	63	30-130
2,4,6-Tribromophenol	97	30-130
4-Terphenyl-d14	96	30-130
Polychlorinated Biphenyls by MCP 8082 LCS for sample(s) 01-04 (WG174182)		
Aroclor 1242/1016	75	40-140
Aroclor 1260	87	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	71	30-150
2,4,5,6-Tetrachloro-m-xylene	77	30-150
Decachlorobiphenyl	58	30-150
Decachlorobiphenyl	57	30-150
Polychlorinated Biphenyls by MCP 8082 LCS for sample(s) 05 (WG174246)		
Aroclor 1242/1016	76	40-140
Aroclor 1260	88	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	71	30-150
2,4,5,6-Tetrachloro-m-xylene	71	30-150
Decachlorobiphenyl	62	30-150
Decachlorobiphenyl	54	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406888

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174227-1)								
Total Metals				1	3051			
Arsenic, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 14:51	MG
Barium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 14:51	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 14:51	MG
Chromium, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 14:51	MG
Lead, Total	ND	mg/kg	2.0	54	6010B	0624 12:00	0625 14:51	MG
Selenium, Total	ND	mg/kg	0.80	54	6010B	0624 12:00	0625 14:51	MG
Silver, Total	ND	mg/kg	0.40	54	6010B	0624 12:00	0625 14:51	MG
Blank Analysis for sample(s) 05 (WG174229-1)								
Total Metals				1	3051			
Arsenic, Total	ND	mg/kg	0.40	54	6010B	0624 14:40	0625 11:11	MG
Barium, Total	ND	mg/kg	0.40	54	6010B	0624 14:40	0625 11:11	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0624 14:40	0625 11:11	MG
Chromium, Total	ND	mg/kg	0.40	54	6010B	0624 14:40	0625 11:11	MG
Lead, Total	ND	mg/kg	2.0	54	6010B	0624 14:40	0625 11:11	MG
Selenium, Total	ND	mg/kg	0.80	54	6010B	0624 14:40	0625 11:11	MG
Silver, Total	ND	mg/kg	0.40	54	6010B	0624 14:40	0625 11:11	MG
Blank Analysis for sample(s) 01-04 (WG174214-1)								
Total Metals								
Mercury, Total	ND	mg/kg	0.08	54	7471A	0624 16:40	0625 10:01	DM
Blank Analysis for sample(s) 05 (WG174249-1)								
Total Metals								
Mercury, Total	ND	mg/kg	0.08	54	7471A	0624 16:40	0625 10:39	DM
Blank Analysis for sample(s) 01-04 (WG174181-1)								
Semivolatile Organics by MCP 8270C				54	8270C	0624 12:00	0625 13:13	HL
Acenaphthene	ND	ug/kg	330					
1,2,4-Trichlorobenzene	ND	ug/kg	330					
Hexachlorobenzene	ND	ug/kg	330					
Bis(2-chloroethyl)ether	ND	ug/kg	330					
2-Chloronaphthalene	ND	ug/kg	330					
1,2-Dichlorobenzene	ND	ug/kg	330					
1,3-Dichlorobenzene	ND	ug/kg	330					
1,4-Dichlorobenzene	ND	ug/kg	330					
3,3'-Dichlorobenzidine	ND	ug/kg	670					
2,4-Dinitrotoluene	ND	ug/kg	330					
2,6-Dinitrotoluene	ND	ug/kg	330					
Azobenzene	ND	ug/kg	330					
Fluoranthene	ND	ug/kg	330					
4-Bromophenyl phenyl ether	ND	ug/kg	330					
Bis(2-chloroisopropyl)ether	ND	ug/kg	330					

Laboratory Job Number: L0406888

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174181-1)							
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 13:13	HL
Bis(2-chloroethoxy)methane	ND	ug/kg	330				
Hexachlorobutadiene	ND	ug/kg	670				
Hexachloroethane	ND	ug/kg	330				
Isophorone	ND	ug/kg	330				
Naphthalene	ND	ug/kg	330				
Nitrobenzene	ND	ug/kg	330				
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	670				
Butyl benzyl phthalate	ND	ug/kg	330				
Di-n-butylphthalate	ND	ug/kg	330				
Di-n-octylphthalate	ND	ug/kg	330				
Diethyl phthalate	ND	ug/kg	330				
Dimethyl phthalate	ND	ug/kg	330				
Benzo(a)anthracene	ND	ug/kg	330				
Benzo(a)pyrene	ND	ug/kg	330				
Benzo(b)fluoranthene	ND	ug/kg	330				
Benzo(k)fluoranthene	ND	ug/kg	330				
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
Aniline	ND	ug/kg	670				
4-Chloroaniline	ND	ug/kg	330				
Dibenzofuran	ND	ug/kg	330				
2-Methylnaphthalene	ND	ug/kg	330				
Acetophenone	ND	ug/kg	1300				
2,4,6-Trichlorophenol	ND	ug/kg	330				
2-Chlorophenol	ND	ug/kg	400				
2,4-Dichlorophenol	ND	ug/kg	670				
2,4-Dimethylphenol	ND	ug/kg	330				
2-Nitrophenol	ND	ug/kg	1300				
4-Nitrophenol	ND	ug/kg	670				
2,4-Dinitrophenol	ND	ug/kg	1300				
Pentachlorophenol	ND	ug/kg	1300				
Phenol	ND	ug/kg	470				
2-Methylphenol	ND	ug/kg	400				
3-Methylphenol/4-Methylphenol	ND	ug/kg	400				
2,4,5-Trichlorophenol	ND	ug/kg	330				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	52.0	%	30-130				
Phenol-d6	55.0	%	30-130				
Nitrobenzene-d5	56.0	%	30-130				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406888

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174181-1)							
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0625 13:13	HL
2-Fluorobiphenyl	57.0	%	30-130				
2,4,6-Tribromophenol	72.0	%	30-130				
4-Terphenyl-d14	93.0	%	30-130				
Blank Analysis for sample(s) 05 (WG174245-1)							
Semivolatile Organics by MCP 8270C				54 8270C	0624 12:00	0626 16:43	HL
Acenaphthene	ND	ug/kg	330				
1,2,4-Trichlorobenzene	ND	ug/kg	330				
Hexachlorobenzene	ND	ug/kg	330				
Bis(2-chloroethyl)ether	ND	ug/kg	330				
2-Chloronaphthalene	ND	ug/kg	330				
1,2-Dichlorobenzene	ND	ug/kg	330				
1,3-Dichlorobenzene	ND	ug/kg	330				
1,4-Dichlorobenzene	ND	ug/kg	330				
3,3'-Dichlorobenzidine	ND	ug/kg	670				
2,4-Dinitrotoluene	ND	ug/kg	330				
2,6-Dinitrotoluene	ND	ug/kg	330				
Azobenzene	ND	ug/kg	330				
Fluoranthene	ND	ug/kg	330				
4-Bromophenyl phenyl ether	ND	ug/kg	330				
Bis(2-chloroisopropyl)ether	ND	ug/kg	330				
Bis(2-chloroethoxy)methane	ND	ug/kg	330				
Hexachlorobutadiene	ND	ug/kg	670				
Hexachloroethane	ND	ug/kg	330				
Isophorone	ND	ug/kg	330				
Naphthalene	ND	ug/kg	330				
Nitrobenzene	ND	ug/kg	330				
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	670				
Butyl benzyl phthalate	ND	ug/kg	330				
Di-n-butylphthalate	ND	ug/kg	330				
Di-n-octylphthalate	ND	ug/kg	330				
Diethyl phthalate	ND	ug/kg	330				
Dimethyl phthalate	ND	ug/kg	330				
Benzo(a)anthracene	ND	ug/kg	330				
Benzo(a)pyrene	ND	ug/kg	330				
Benzo(b)fluoranthene	ND	ug/kg	330				
Benzo(k)fluoranthene	ND	ug/kg	330				
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
Aniline	ND	ug/kg	670				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406888

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 05 (WG174245-1)							
Semivolatile Organics by MCP 8270C continued				54 8270C	0624 12:00	0626 16:43	HL
4-Chloroaniline	ND	ug/kg	330				
Dibenzofuran	ND	ug/kg	330				
2-Methylnaphthalene	ND	ug/kg	330				
Acetophenone	ND	ug/kg	1300				
2,4,6-Trichlorophenol	ND	ug/kg	330				
2-Chlorophenol	ND	ug/kg	400				
2,4-Dichlorophenol	ND	ug/kg	670				
2,4-Dimethylphenol	ND	ug/kg	330				
2-Nitrophenol	ND	ug/kg	1300				
4-Nitrophenol	ND	ug/kg	670				
2,4-Dinitrophenol	ND	ug/kg	1300				
Pentachlorophenol	ND	ug/kg	1300				
Phenol	ND	ug/kg	470				
2-Methylphenol	ND	ug/kg	400				
3-Methylphenol/4-Methylphenol	ND	ug/kg	400				
2,4,5-Trichlorophenol	ND	ug/kg	330				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	53.0	%	30-130				
Phenol-d6	55.0	%	30-130				
Nitrobenzene-d5	55.0	%	30-130				
2-Fluorobiphenyl	51.0	%	30-130				
2,4,6-Tribromophenol	70.0	%	30-130				
4-Terphenyl-d14	84.0	%	30-130				
Blank Analysis for sample(s) 01-04 (WG174182-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 19:29	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	70.0	%	30-150				
Decachlorobiphenyl	56.0	%	30-150				
Blank Analysis for sample(s) 01-04 (WG174182-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 11:30	0625 19:29	AK
Aroclor 1221	ND	ug/kg	33.3				
Aroclor 1232	ND	ug/kg	33.3				
Aroclor 1242/1016	ND	ug/kg	33.3				
Aroclor 1248	ND	ug/kg	33.3				
Aroclor 1254	ND	ug/kg	33.3				
Aroclor 1260	ND	ug/kg	33.3				
Aroclor 1262	ND	ug/kg	33.3				
Aroclor 1268	ND	ug/kg	33.3				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	72.0	%	30-150				
Decachlorobiphenyl	54.0	%	30-150				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406888

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 05 (WG174246-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 10:45	0628 17:36	JB
Aroclor 1221	ND	ug/kg	25.0				
Aroclor 1232	ND	ug/kg	25.0				
Aroclor 1242/1016	ND	ug/kg	25.0				
Aroclor 1248	ND	ug/kg	25.0				
Aroclor 1254	ND	ug/kg	25.0				
Aroclor 1260	ND	ug/kg	25.0				
Aroclor 1262	ND	ug/kg	25.0				
Aroclor 1268	ND	ug/kg	25.0				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	72.0	%	30-150				
Decachlorobiphenyl	59.0	%	30-150				
Blank Analysis for sample(s) 05 (WG174246-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0624 10:45	0628 17:36	JB
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	71.0	%	30-150				
Decachlorobiphenyl	53.0	%	30-150				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0406888

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0406888-01A	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-01B	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-01C	Plastic 2oz unpreserved for TS	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-02A	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-02B	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	MCP-8082, MCP-8270
L0406888-02C	Plastic 2oz unpreserved for TS	A	N/A	5.6C	Y	Absent	TS
L0406888-03A	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-03B	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	MCP-8082, MCP-8270
L0406888-03C	Plastic 2oz unpreserved for TS	A	N/A	5.6C	Y	Absent	TS
L0406888-04A	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-04B	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	MCP-8082, MCP-8270
L0406888-04C	Plastic 2oz unpreserved for TS	A	N/A	5.6C	Y	Absent	TS
L0406888-05A	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-05B	Amber 250ml unpreserved	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406888-05C	Plastic 2oz unpreserved for TS	A	N/A	5.6C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI

Container Comments

Container ID	Comments

Gravel Laboratory Reports

ALPHA ANALYTICAL LABORATORIES

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(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0406986

Date Received: 25-JUN-2004

Date Reported: 02-JUL-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: James Todaro
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0406986

MCP Related Narratives

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PCB by method 8082 and SVOCs by method 8270C.

SemiVolatile Organics

In reference to question E,

The LCS % recovery for Aniline is below the acceptance criteria for the method. The LCS has a total of 1 exceedence. (1 of 57 =2%). The MCP method allows for up to 20% of compounds to be outside the criteria.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406986-02
GRAVEL-1
Sample Matrix: SOIL

Date Collected: 25-JUN-2004 13:00
Date Received : 25-JUN-2004
Date Reported : 02-JUL-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	95.	%	0.10	30	2540G		0629 10:13	ST
Total Metals				1	3051			
Arsenic, Total	0.98	mg/kg	0.41	54	6010B	0628 11:20	0629 11:11	MG
Barium, Total	35.	mg/kg	0.41	54	6010B	0628 11:20	0629 11:11	MG
Cadmium, Total	ND	mg/kg	0.41	54	6010B	0628 11:20	0629 11:11	MG
Chromium, Total	18.	mg/kg	0.41	54	6010B	0628 11:20	0629 11:11	MG
Lead, Total	2.2	mg/kg	2.0	54	6010B	0628 11:20	0629 11:11	MG
Mercury, Total	ND	mg/kg	0.08	54	7471A	0628 17:30	0629 17:17	DM
Selenium, Total	ND	mg/kg	0.82	54	6010B	0628 11:20	0629 11:11	MG
Silver, Total	ND	mg/kg	0.41	54	6010B	0628 11:20	0629 11:11	MG
Semivolatile Organics by MCP 8270C				54	8270C	0626 11:50	0628 13:44	HL
Acenaphthene	ND	ug/kg	350					
1,2,4-Trichlorobenzene	ND	ug/kg	350					
Hexachlorobenzene	ND	ug/kg	350					
Bis(2-chloroethyl)ether	ND	ug/kg	350					
2-Chloronaphthalene	ND	ug/kg	350					
1,2-Dichlorobenzene	ND	ug/kg	350					
1,3-Dichlorobenzene	ND	ug/kg	350					
1,4-Dichlorobenzene	ND	ug/kg	350					
3,3'-Dichlorobenzidine	ND	ug/kg	700					
2,4-Dinitrotoluene	ND	ug/kg	350					
2,6-Dinitrotoluene	ND	ug/kg	350					
Azobenzene	ND	ug/kg	350					
Fluoranthene	ND	ug/kg	350					
4-Bromophenyl phenyl ether	ND	ug/kg	350					
Bis(2-chloroisopropyl)ether	ND	ug/kg	350					
Bis(2-chloroethoxy)methane	ND	ug/kg	350					
Hexachlorobutadiene	ND	ug/kg	700					
Hexachloroethane	ND	ug/kg	350					
Isophorone	ND	ug/kg	350					
Naphthalene	ND	ug/kg	350					
Nitrobenzene	ND	ug/kg	350					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	700					
Butyl benzyl phthalate	ND	ug/kg	350					
Di-n-butylphthalate	ND	ug/kg	350					
Di-n-octylphthalate	ND	ug/kg	350					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-02
GRAVEL-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0626 11:50	0628 13:44	HL
Diethyl phthalate	ND	ug/kg	350				
Dimethyl phthalate	ND	ug/kg	350				
Benzo(a)anthracene	ND	ug/kg	350				
Benzo(a)pyrene	ND	ug/kg	350				
Benzo(b)fluoranthene	ND	ug/kg	350				
Benzo(k)fluoranthene	ND	ug/kg	350				
Chrysene	ND	ug/kg	350				
Acenaphthylene	ND	ug/kg	350				
Anthracene	ND	ug/kg	350				
Benzo(ghi)perylene	ND	ug/kg	350				
Fluorene	ND	ug/kg	350				
Phenanthrene	ND	ug/kg	350				
Dibenzo(a,h)anthracene	ND	ug/kg	350				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	350				
Pyrene	ND	ug/kg	350				
Aniline	ND	ug/kg	700				
4-Chloroaniline	ND	ug/kg	350				
Dibenzofuran	ND	ug/kg	350				
2-Methylnaphthalene	ND	ug/kg	350				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	350				
2-Chlorophenol	ND	ug/kg	420				
2,4-Dichlorophenol	ND	ug/kg	700				
2,4-Dimethylphenol	ND	ug/kg	350				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	700				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	490				
2-Methylphenol	ND	ug/kg	420				
3-Methylphenol/4-Methylphenol	ND	ug/kg	420				
2,4,5-Trichlorophenol	ND	ug/kg	350				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	49.0	%	30-130				
Phenol-d6	53.0	%	30-130				
Nitrobenzene-d5	50.0	%	30-130				
2-Fluorobiphenyl	61.0	%	30-130				
2,4,6-Tribromophenol	81.0	%	30-130				
4-Terphenyl-d14	87.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 14:49	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	67.0	%	30-150				
Decachlorobiphenyl	33.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 14:49	AK
Aroclor 1221	ND	ug/kg	35.1				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-02
GRAVEL-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0626 11:20	0701 14:49	AK
Aroclor 1232	ND	ug/kg	35.1				
Aroclor 1242/1016	ND	ug/kg	35.1				
Aroclor 1248	ND	ug/kg	35.1				
Aroclor 1254	ND	ug/kg	35.1				
Aroclor 1260	ND	ug/kg	35.1				
Aroclor 1262	ND	ug/kg	35.1				
Aroclor 1268	ND	ug/kg	35.1				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	75.0	%	30-150				
Decachlorobiphenyl	39.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406986-03
GRAVEL-2
Sample Matrix: SOIL

Date Collected: 25-JUN-2004 13:15
Date Received : 25-JUN-2004
Date Reported : 02-JUL-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	96.	%	0.10	30	2540G		0629 10:13	ST
Total Metals				1	3051			
Arsenic, Total	0.65	mg/kg	0.41	54	6010B	0628 11:20	0629 11:25	MG
Barium, Total	34.	mg/kg	0.41	54	6010B	0628 11:20	0629 11:25	MG
Cadmium, Total	ND	mg/kg	0.41	54	6010B	0628 11:20	0629 11:25	MG
Chromium, Total	18.	mg/kg	0.41	54	6010B	0628 11:20	0629 11:25	MG
Lead, Total	ND	mg/kg	2.0	54	6010B	0628 11:20	0629 11:25	MG
Mercury, Total	ND	mg/kg	0.09	54	7471A	0628 17:30	0629 17:19	DM
Selenium, Total	ND	mg/kg	0.82	54	6010B	0628 11:20	0629 11:25	MG
Silver, Total	ND	mg/kg	0.41	54	6010B	0628 11:20	0629 11:25	MG
Semivolatile Organics by MCP 8270C				54	8270C	0626 11:50	0628 14:36	HL
Acenaphthene	ND	ug/kg	350					
1,2,4-Trichlorobenzene	ND	ug/kg	350					
Hexachlorobenzene	ND	ug/kg	350					
Bis(2-chloroethyl)ether	ND	ug/kg	350					
2-Chloronaphthalene	ND	ug/kg	350					
1,2-Dichlorobenzene	ND	ug/kg	350					
1,3-Dichlorobenzene	ND	ug/kg	350					
1,4-Dichlorobenzene	ND	ug/kg	350					
3,3'-Dichlorobenzidine	ND	ug/kg	690					
2,4-Dinitrotoluene	ND	ug/kg	350					
2,6-Dinitrotoluene	ND	ug/kg	350					
Azobenzene	ND	ug/kg	350					
Fluoranthene	ND	ug/kg	350					
4-Bromophenyl phenyl ether	ND	ug/kg	350					
Bis(2-chloroisopropyl)ether	ND	ug/kg	350					
Bis(2-chloroethoxy)methane	ND	ug/kg	350					
Hexachlorobutadiene	ND	ug/kg	690					
Hexachloroethane	ND	ug/kg	350					
Isophorone	ND	ug/kg	350					
Naphthalene	ND	ug/kg	350					
Nitrobenzene	ND	ug/kg	350					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	690					
Butyl benzyl phthalate	ND	ug/kg	350					
Di-n-butylphthalate	ND	ug/kg	350					
Di-n-octylphthalate	ND	ug/kg	350					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-03
GRAVEL-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0626 11:50	0628 14:36	HL
Diethyl phthalate	ND	ug/kg	350				
Dimethyl phthalate	ND	ug/kg	350				
Benzo(a)anthracene	ND	ug/kg	350				
Benzo(a)pyrene	ND	ug/kg	350				
Benzo(b)fluoranthene	ND	ug/kg	350				
Benzo(k)fluoranthene	ND	ug/kg	350				
Chrysene	ND	ug/kg	350				
Acenaphthylene	ND	ug/kg	350				
Anthracene	ND	ug/kg	350				
Benzo(ghi)perylene	ND	ug/kg	350				
Fluorene	ND	ug/kg	350				
Phenanthrene	ND	ug/kg	350				
Dibenzo(a,h)anthracene	ND	ug/kg	350				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	350				
Pyrene	ND	ug/kg	350				
Aniline	ND	ug/kg	690				
4-Chloroaniline	ND	ug/kg	350				
Dibenzofuran	ND	ug/kg	350				
2-Methylnaphthalene	ND	ug/kg	350				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	350				
2-Chlorophenol	ND	ug/kg	420				
2,4-Dichlorophenol	ND	ug/kg	690				
2,4-Dimethylphenol	ND	ug/kg	350				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	690				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	490				
2-Methylphenol	ND	ug/kg	420				
3-Methylphenol/4-Methylphenol	ND	ug/kg	420				
2,4,5-Trichlorophenol	ND	ug/kg	350				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	60.0	%	30-130				
Phenol-d6	66.0	%	30-130				
Nitrobenzene-d5	62.0	%	30-130				
2-Fluorobiphenyl	70.0	%	30-130				
2,4,6-Tribromophenol	84.0	%	30-130				
4-Terphenyl-d14	89.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0702 12:03	AK
Aroclor 1221	ND	ug/kg	34.7				
Aroclor 1232	ND	ug/kg	34.7				
Aroclor 1242/1016	ND	ug/kg	34.7				
Aroclor 1248	ND	ug/kg	34.7				
Aroclor 1254	ND	ug/kg	34.7				
Aroclor 1260	ND	ug/kg	34.7				
Aroclor 1262	ND	ug/kg	34.7				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-03
GRAVEL-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0626 11:20	0702 12:03	AK
Aroclor 1268	ND	ug/kg	34.7				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	79.0	%	30-150				
Decachlorobiphenyl	35.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0702 12:03	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	74.0	%	30-150				
Decachlorobiphenyl	32.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0406986-04
GRAVEL-3
Sample Matrix: SOIL

Date Collected: 25-JUN-2004 13:00
Date Received : 25-JUN-2004
Date Reported : 02-JUL-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	95.	%	0.10	30	2540G		0629 10:13	ST
Total Metals				1	3051			
Arsenic, Total	0.89	mg/kg	0.42	54	6010B	0628 11:20	0629 11:29	MG
Barium, Total	38.	mg/kg	0.42	54	6010B	0628 11:20	0629 11:29	MG
Cadmium, Total	ND	mg/kg	0.42	54	6010B	0628 11:20	0629 11:29	MG
Chromium, Total	22.	mg/kg	0.42	54	6010B	0628 11:20	0629 11:29	MG
Lead, Total	ND	mg/kg	2.1	54	6010B	0628 11:20	0629 11:29	MG
Mercury, Total	ND	mg/kg	0.08	54	7471A	0628 17:30	0629 17:20	DM
Selenium, Total	ND	mg/kg	0.84	54	6010B	0628 11:20	0629 11:29	MG
Silver, Total	ND	mg/kg	0.42	54	6010B	0628 11:20	0629 11:29	MG
Semivolatile Organics by MCP 8270C				54	8270C	0626 11:50	0628 14:10	HL
Acenaphthene	ND	ug/kg	350					
1,2,4-Trichlorobenzene	ND	ug/kg	350					
Hexachlorobenzene	ND	ug/kg	350					
Bis(2-chloroethyl)ether	ND	ug/kg	350					
2-Chloronaphthalene	ND	ug/kg	350					
1,2-Dichlorobenzene	ND	ug/kg	350					
1,3-Dichlorobenzene	ND	ug/kg	350					
1,4-Dichlorobenzene	ND	ug/kg	350					
3,3'-Dichlorobenzidine	ND	ug/kg	700					
2,4-Dinitrotoluene	ND	ug/kg	350					
2,6-Dinitrotoluene	ND	ug/kg	350					
Azobenzene	ND	ug/kg	350					
Fluoranthene	ND	ug/kg	350					
4-Bromophenyl phenyl ether	ND	ug/kg	350					
Bis(2-chloroisopropyl)ether	ND	ug/kg	350					
Bis(2-chloroethoxy)methane	ND	ug/kg	350					
Hexachlorobutadiene	ND	ug/kg	700					
Hexachloroethane	ND	ug/kg	350					
Isophorone	ND	ug/kg	350					
Naphthalene	ND	ug/kg	350					
Nitrobenzene	ND	ug/kg	350					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	700					
Butyl benzyl phthalate	ND	ug/kg	350					
Di-n-butylphthalate	ND	ug/kg	350					
Di-n-octylphthalate	ND	ug/kg	350					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-04
GRAVEL-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Semivolatile Organics by MCP 8270C continued				54 8270C	0626 11:50	0628 14:10	HL
Diethyl phthalate	ND	ug/kg	350				
Dimethyl phthalate	ND	ug/kg	350				
Benzo(a)anthracene	ND	ug/kg	350				
Benzo(a)pyrene	ND	ug/kg	350				
Benzo(b)fluoranthene	ND	ug/kg	350				
Benzo(k)fluoranthene	ND	ug/kg	350				
Chrysene	ND	ug/kg	350				
Acenaphthylene	ND	ug/kg	350				
Anthracene	ND	ug/kg	350				
Benzo(ghi)perylene	ND	ug/kg	350				
Fluorene	ND	ug/kg	350				
Phenanthrene	ND	ug/kg	350				
Dibenzo(a,h)anthracene	ND	ug/kg	350				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	350				
Pyrene	ND	ug/kg	350				
Aniline	ND	ug/kg	700				
4-Chloroaniline	ND	ug/kg	350				
Dibenzofuran	ND	ug/kg	350				
2-Methylnaphthalene	ND	ug/kg	350				
Acetophenone	ND	ug/kg	1400				
2,4,6-Trichlorophenol	ND	ug/kg	350				
2-Chlorophenol	ND	ug/kg	420				
2,4-Dichlorophenol	ND	ug/kg	700				
2,4-Dimethylphenol	ND	ug/kg	350				
2-Nitrophenol	ND	ug/kg	1400				
4-Nitrophenol	ND	ug/kg	700				
2,4-Dinitrophenol	ND	ug/kg	1400				
Pentachlorophenol	ND	ug/kg	1400				
Phenol	ND	ug/kg	490				
2-Methylphenol	ND	ug/kg	420				
3-Methylphenol/4-Methylphenol	ND	ug/kg	420				
2,4,5-Trichlorophenol	ND	ug/kg	350				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	42.0	%	30-130				
Phenol-d6	45.0	%	30-130				
Nitrobenzene-d5	44.0	%	30-130				
2-Fluorobiphenyl	43.0	%	30-130				
2,4,6-Tribromophenol	71.0	%	30-130				
4-Terphenyl-d14	74.0	%	30-130				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 15:46	AK
Aroclor 1221	ND	ug/kg	35.1				
Aroclor 1232	ND	ug/kg	35.1				
Aroclor 1242/1016	ND	ug/kg	35.1				
Aroclor 1248	ND	ug/kg	35.1				
Aroclor 1254	ND	ug/kg	35.1				
Aroclor 1260	ND	ug/kg	35.1				
Aroclor 1262	ND	ug/kg	35.1				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0406986-04
GRAVEL-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0626 11:20	0701 15:46	AK
Aroclor 1268	ND	ug/kg	35.1				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	75.0	%	30-150				
Decachlorobiphenyl	36.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 15:46	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	70.0	%	30-150				
Decachlorobiphenyl	31.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0406986

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01-04 (L0407050-03, WG174490)					
Solids, Total	90.	91.	%	1	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406986

Parameter	% Recovery	QC Criteria
Total Metals LCS for sample(s) 01-04 (WG174439)		
Arsenic, Total	108	75-125
Barium, Total	99	75-125
Cadmium, Total	103	75-125
Chromium, Total	94	75-125
Lead, Total	108	75-125
Selenium, Total	108	75-125
Silver, Total	100	75-125
Total Metals LCS for sample(s) 01-04 (WG174433)		
Mercury, Total	88	75-125
Semivolatile Organics by MCP 8270C LCS for sample(s) 01-04 (WG174354)		
Acenaphthene	68	40-140
1,2,4-Trichlorobenzene	53	40-140
Hexachlorobenzene	83	40-140
Bis(2-chloroethyl)ether	60	40-140
2-Chloronaphthalene	61	40-140
1,2-Dichlorobenzene	55	40-140
1,3-Dichlorobenzene	53	40-140
1,4-Dichlorobenzene	53	40-140
3,3'-Dichlorobenzidine	61	40-140
2,4-Dinitrotoluene	94	40-140
2,6-Dinitrotoluene	91	40-140
Azobenzene	83	40-140
Fluoranthene	91	40-140
4-Bromophenyl phenyl ether	81	40-140
Bis(2-chloroisopropyl)ether	59	40-140
Bis(2-chloroethoxy)methane	59	40-140
Hexachlorobutadiene	52	40-140
Hexachloroethane	52	40-140
Isophorone	63	40-140
Naphthalene	56	40-140
Nitrobenzene	60	40-140
Bis(2-Ethylhexyl)phthalate	96	40-140
Butyl benzyl phthalate	95	40-140
Di-n-butylphthalate	93	40-140
Di-n-octylphthalate	100	40-140
Diethyl phthalate	91	40-140
Dimethyl phthalate	85	40-140
Benzo(a)anthracene	93	40-140
Benzo(a)pyrene	86	40-140
Benzo(b)fluoranthene	88	40-140
Benzo(k)fluoranthene	88	40-140
Chrysene	89	40-140
Acenaphthylene	68	40-140
Anthracene	87	40-140
Benzo(ghi)perylene	89	40-140
Fluorene	78	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0406986

Continued

Parameter	% Recovery	QC Criteria
Semivolatile Organics by MCP 8270C LCS for sample(s) 01-04 (WG174354)		
Phenanthrene	87	40-140
Dibenzo(a,h)anthracene	90	40-140
Indeno(1,2,3-cd)Pyrene	90	40-140
Pyrene	91	40-140
Aniline	31	40-140
4-Chloroaniline	42	40-140
Dibenzofuran	73	40-140
2-Methylnaphthalene	56	40-140
Acetophenone	61	40-140
2,4,6-Trichlorophenol	71	30-130
2-Chlorophenol	57	30-130
2,4-Dichlorophenol	60	30-130
2,4-Dimethylphenol	40	30-130
2-Nitrophenol	59	30-130
4-Nitrophenol	100	30-130
2,4-Dinitrophenol	83	30-130
Pentachlorophenol	73	30-130
Phenol	65	30-130
2-Methylphenol	58	30-130
3-Methylphenol/4-Methylphenol	58	30-130
2,4,5-Trichlorophenol	79	30-130
Surrogate(s)		
2-Fluorophenol	57	30-130
Phenol-d6	59	30-130
Nitrobenzene-d5	59	30-130
2-Fluorobiphenyl	61	30-130
2,4,6-Tribromophenol	90	30-130
4-Terphenyl-d14	86	30-130
Polychlorinated Biphenyls by MCP 8082 LCS for sample(s) 01-04 (WG174356)		
Aroclor 1242/1016	69	40-140
Aroclor 1260	85	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	71	30-150
2,4,5,6-Tetrachloro-m-xylene	71	30-150
Decachlorobiphenyl	58	30-150
Decachlorobiphenyl	56	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406986

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174439-1)								
Total Metals				1	3051			
Arsenic, Total	ND	mg/kg	0.40	54	6010B	0628 11:20	0629 10:15	MG
Barium, Total	ND	mg/kg	0.40	54	6010B	0628 11:20	0629 10:15	MG
Cadmium, Total	ND	mg/kg	0.40	54	6010B	0628 11:20	0629 10:15	MG
Chromium, Total	ND	mg/kg	0.40	54	6010B	0628 11:20	0629 10:15	MG
Lead, Total	ND	mg/kg	2.0	54	6010B	0628 11:20	0629 10:15	MG
Selenium, Total	ND	mg/kg	0.80	54	6010B	0628 11:20	0629 10:15	MG
Silver, Total	ND	mg/kg	0.40	54	6010B	0628 11:20	0629 10:15	MG
Blank Analysis for sample(s) 01-04 (WG174433-1)								
Total Metals								
Mercury, Total	ND	mg/kg	0.08	54	7471A	0628 17:30	0629 17:11	DM
Blank Analysis for sample(s) 01-04 (WG174354-1)								
Semivolatile Organics by MCP 8270C				54	8270C	0626 11:50	0628 12:22	HL
Acenaphthene	ND	ug/kg	330					
1,2,4-Trichlorobenzene	ND	ug/kg	330					
Hexachlorobenzene	ND	ug/kg	330					
Bis(2-chloroethyl)ether	ND	ug/kg	330					
2-Chloronaphthalene	ND	ug/kg	330					
1,2-Dichlorobenzene	ND	ug/kg	330					
1,3-Dichlorobenzene	ND	ug/kg	330					
1,4-Dichlorobenzene	ND	ug/kg	330					
3,3'-Dichlorobenzidine	ND	ug/kg	670					
2,4-Dinitrotoluene	ND	ug/kg	330					
2,6-Dinitrotoluene	ND	ug/kg	330					
Azobenzene	ND	ug/kg	330					
Fluoranthene	ND	ug/kg	330					
4-Bromophenyl phenyl ether	ND	ug/kg	330					
Bis(2-chloroisopropyl)ether	ND	ug/kg	330					
Bis(2-chloroethoxy)methane	ND	ug/kg	330					
Hexachlorobutadiene	ND	ug/kg	670					
Hexachloroethane	ND	ug/kg	330					
Isophorone	ND	ug/kg	330					
Naphthalene	ND	ug/kg	330					
Nitrobenzene	ND	ug/kg	330					
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	670					
Butyl benzyl phthalate	ND	ug/kg	330					
Di-n-butylphthalate	ND	ug/kg	330					
Di-n-octylphthalate	ND	ug/kg	330					
Diethyl phthalate	ND	ug/kg	330					
Dimethyl phthalate	ND	ug/kg	330					
Benzo(a)anthracene	ND	ug/kg	330					
Benzo(a)pyrene	ND	ug/kg	330					
Benzo(b)fluoranthene	ND	ug/kg	330					
Benzo(k)fluoranthene	ND	ug/kg	330					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406986

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174354-1)							
Semivolatile Organics by MCP 8270C continued				54 8270C	0626 11:50	0628 12:22	HL
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
Aniline	ND	ug/kg	670				
4-Chloroaniline	ND	ug/kg	330				
Dibenzofuran	ND	ug/kg	330				
2-Methylnaphthalene	ND	ug/kg	330				
Acetophenone	ND	ug/kg	1300				
2,4,6-Trichlorophenol	ND	ug/kg	330				
2-Chlorophenol	ND	ug/kg	400				
2,4-Dichlorophenol	ND	ug/kg	670				
2,4-Dimethylphenol	ND	ug/kg	330				
2-Nitrophenol	ND	ug/kg	1300				
4-Nitrophenol	ND	ug/kg	670				
2,4-Dinitrophenol	ND	ug/kg	1300				
Pentachlorophenol	ND	ug/kg	1300				
Phenol	ND	ug/kg	470				
2-Methylphenol	ND	ug/kg	400				
3-Methylphenol/4-Methylphenol	ND	ug/kg	400				
2,4,5-Trichlorophenol	ND	ug/kg	330				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	54.0	%	30-130				
Phenol-d6	57.0	%	30-130				
Nitrobenzene-d5	57.0	%	30-130				
2-Fluorobiphenyl	53.0	%	30-130				
2,4,6-Tribromophenol	51.0	%	30-130				
4-Terphenyl-d14	87.0	%	30-130				
Blank Analysis for sample(s) 01-04 (WG174356-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 11:31	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	79.0	%	30-150				
Decachlorobiphenyl	63.0	%	30-150				
Blank Analysis for sample(s) 01-04 (WG174356-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0626 11:20	0701 11:31	AK
Aroclor 1221	ND	ug/kg	33.3				
Aroclor 1232	ND	ug/kg	33.3				
Aroclor 1242/1016	ND	ug/kg	33.3				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0406986

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG174356-1)							
Polychlorinated Biphenyls by MCP 8082 continued				54 8082	0626 11:20	0701 11:31	AK
Aroclor 1248	ND	ug/kg	33.3				
Aroclor 1254	ND	ug/kg	33.3				
Aroclor 1260	ND	ug/kg	33.3				
Aroclor 1262	ND	ug/kg	33.3				
Aroclor 1268	ND	ug/kg	33.3				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	67.0	%	30-150				
Decachlorobiphenyl	52.0	%	30-150				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0406986

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0406986-01A	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	MCP-8082, MCP-8270
L0406986-01B	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406986-01C	Plastic 2oz unpreserved for TS	A	N/A	2.4 C	Y	Absent	TS
L0406986-02A	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	MCP-8082, MCP-8270
L0406986-02B	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406986-02C	Plastic 2oz unpreserved for TS	A	N/A	2.4 C	Y	Absent	TS
L0406986-03A	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	MCP-8082, MCP-8270
L0406986-03B	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406986-03C	Plastic 2oz unpreserved for TS	A	N/A	2.4 C	Y	Absent	TS
L0406986-04A	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	MCP-8082, MCP-8270
L0406986-04B	Amber 250ml unpreserved	A	N/A	2.4 C	Y	Absent	AG-TI, AS-TI, BA-TI, CD-TI, CR-TI, HG-T, PB-TI, PREPT, SE-TI
L0406986-04C	Plastic 2oz unpreserved for TS	A	N/A	2.4 C	Y	Absent	TS

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 6/25

ALPHA Job #: L0406986

ALPHA ANALYTICAL
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: ERM
Address: 399 Boylston St
Boston, MA
Phone:
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland, MA
Project #: 0010686
Project Manager: Catherine Regan
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH *(only confirmed if pre-approved!)*
Date Due: 7/2 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program *Criteria*

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☑ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☑ No Are Drinking Water Samples Submitted?
☑ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCB	RCRA 8 Metals	SVOC	Total Solids	Sample Specific Comments	TOTAL # BOTTLES
6986.1	SUMP BOTTOM	6-25-04	0715	S	BT	X	X	X	X		3
2	Gravel-1	6-25-04	1300	S	BT	X	X	X	X		3
3	Gravel-2	6-25-04	1315	S	BT	X	X	X	X		3
4	Gravel-3	6-25-04	1330	S	BT	X	X	X	X		3

	PCB	RCRA 8 Metals	SVOC	Total Solids
Container Type	A	A	A	P
Preservative	A	A	A	A

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]		[signature]	6/25/04 1440
[signature]	6/25/04 1645	[signature]	6/25 1645

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Non-Hazardous Soil Laboratory Reports

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0407464

Date Received: 09-JUL-2004

Date Reported: 15-JUL-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	YES

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0407464

Report Submission

This report replaces the report issued on 07/13/04 to include Aroclor 1260 on sample -03.

All MCP required questions were answered with affirmative responses, therefore, there are no relevant data issues to discuss.

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PCB by Method 8082.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0407464-02
SPA-2
Sample Matrix: SOIL

Date Collected: 09-JUL-2004 14:10
Date Received : 09-JUL-2004
Date Reported : 15-JUL-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	91.	%	0.10	30 2540G		0709 18:15	DP
Polychlorinated Biphenyls by MCP 8082				54 8082	0710 09:15	0712 11:23	AK
Aroclor 1221	ND	ug/kg	36.6				
Aroclor 1232	ND	ug/kg	36.6				
Aroclor 1242/1016	ND	ug/kg	36.6				
Aroclor 1248	ND	ug/kg	36.6				
Aroclor 1254	ND	ug/kg	36.6				
Aroclor 1262	ND	ug/kg	36.6				
Aroclor 1268	ND	ug/kg	36.6				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	80.0	%	30-150				
Decachlorobiphenyl	67.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0710 09:15	0712 11:23	AK
Aroclor 1260	61.8	ug/kg	36.6				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	76.0	%	30-150				
Decachlorobiphenyl	74.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0407464

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01-06 (L0407464-01, WG175351)					
Solids, Total	91.	91.	%	0	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407464

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Polychlorinated Biphenyls by MCP 8082 for sample(s) 01-06 (WG175446-2, WG175446)					
Aroclor 1242/1016	91	96	5		40-140
Aroclor 1260	107	106	1		40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	90	90	0		30-150
2,4,5,6-Tetrachloro-m-xylene	90	83	8		30-150
Decachlorobiphenyl	102	102	0		30-150
Decachlorobiphenyl	102	104	2		30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407464

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-06 (WG175446-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0710 09:15	0712 09:30	AK
Aroclor 1221	ND	ug/kg	33.3				
Aroclor 1232	ND	ug/kg	33.3				
Aroclor 1242/1016	ND	ug/kg	33.3				
Aroclor 1248	ND	ug/kg	33.3				
Aroclor 1254	ND	ug/kg	33.3				
Aroclor 1260	ND	ug/kg	33.3				
Aroclor 1262	ND	ug/kg	33.3				
Aroclor 1268	ND	ug/kg	33.3				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	89.0	%	30-150				
Decachlorobiphenyl	102.	%	30-150				
Blank Analysis for sample(s) 01-06 (WG175446-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0710 09:15	0712 09:30	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	81.0	%	30-150				
Decachlorobiphenyl	104.	%	30-150				

REFERENCES

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0407464

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0407464-01A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-01B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-01C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS
L0407464-02A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-02B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-02C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS
L0407464-03A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-03B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-03C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS
L0407464-04A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-04B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-04C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS
L0407464-05A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-05B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-05C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS
L0407464-06A	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	MCP-8082
L0407464-06B	Plastic 2oz unpreserved for TS	A	NA	1.1 C	Y	Absent	TS
L0407464-06C	Amber 250ml unpreserved	A	NA	1.1 C	Y	Absent	TS

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7/9/04

ALPHA Job #: L0407464

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

Client Information

Client: ERM

Address: 399 Boylston St
Boston, MA

Phone:

Fax:

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 00106860

Project Manager: C. Regan

ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved!)

Date Due: 7-13-04 Time: 48hr

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are Drinking Water Samples Submitted?

☐ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

* Rush PCB samples

HOLD PAH + Metals

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCBs	PAHs	Metals	RCRA 8 Metals	Sample Specific Comments	TOTAL # BOTTLES
07464.1	SPA-1	7-9-04	1400	S	BT	X	X	X	X		3
2	SPA-2	7-9-04	1410	S	BT	X	X	X	X		3
3	SPA-3	7-9-04	1420	S	BT	X	X	X	X		3
4	SPA-4	7-9-04	1430	S	BT	X	X	X	X		3
5	SPA-5	7-9-04	1440	S	BT	X	X	X	X		3
6	SPA-6	7-9-04	1450	S	BT	X	X	X	X		3

Container Type	A	A	A	P
Preservative	A	A	A	A

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
	7-9-04 1500		7/9/04 15:45
	7/9/04 1725		7/9/04 1725

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0407514

Date Received: 12-JUL-2004

Date Reported: 14-JUL-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	YES

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: James Todaro
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0407514

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PCB by Method 8082.

PCB

In reference to question E, the results on -04 and 05 for Aroclor 1260 were based on fewer than three peaks required by the method. The 1260 was quantitated with two peaks. This is due to multiple Aroclors present in the sample. The use of less than five peaks was done to prevent excess quantitation of concentration.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0407514-05
GRA-5
Sample Matrix: SOIL

Date Collected: 12-JUL-2004 13:30
Date Received : 12-JUL-2004
Date Reported : 14-JUL-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	95.	%	0.10	30 2540G		0712 23:27	DP
Polychlorinated Biphenyls by MCP 8082				54 8082	0712 20:30	0713 20:19	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	66.0	%	30-150				
Decachlorobiphenyl	66.0	%	30-150				
Polychlorinated Biphenyls by MCP 8082				54 8082	0712 20:30	0713 20:19	AK
Aroclor 1221	ND	ug/kg	35.1				
Aroclor 1232	ND	ug/kg	35.1				
Aroclor 1242/1016	ND	ug/kg	35.1				
Aroclor 1248	ND	ug/kg	35.1				
Aroclor 1254	184.	ug/kg	35.1				
Aroclor 1260	112.	ug/kg	35.1				
Aroclor 1262	ND	ug/kg	35.1				
Aroclor 1268	ND	ug/kg	35.1				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	67.0	%	30-150				
Decachlorobiphenyl	55.0	%	30-150				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0407514

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01-08 (L0407514-01, WG175490)					
Solids, Total	95.	95.	%	0	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407514

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Polychlorinated Biphenyls by MCP 8082 for sample(s) 01-08 (WG175480-2, WG175480)					
Aroclor 1242/1016	64	79	21		40-140
Aroclor 1260	81	93	14		40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	61	71	15		30-150
2,4,5,6-Tetrachloro-m-xylene	61	76	22		30-150
Decachlorobiphenyl	81	92	13		30-150
Decachlorobiphenyl	81	91	12		30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407514

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-08 (WG175480-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0712 20:30	0713 16:04	AK
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	62.0	%	30-150				
Decachlorobiphenyl	80.0	%	30-150				
Blank Analysis for sample(s) 01-08 (WG175480-1)							
Polychlorinated Biphenyls by MCP 8082				54 8082	0712 20:30	0713 16:04	AK
Aroclor 1221	ND	ug/kg	33.3				
Aroclor 1232	ND	ug/kg	33.3				
Aroclor 1242/1016	ND	ug/kg	33.3				
Aroclor 1248	ND	ug/kg	33.3				
Aroclor 1254	ND	ug/kg	33.3				
Aroclor 1260	ND	ug/kg	33.3				
Aroclor 1262	ND	ug/kg	33.3				
Aroclor 1268	ND	ug/kg	33.3				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	63.0	%	30-150				
Decachlorobiphenyl	76.0	%	30-150				

REFERENCES

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0407514

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0407514-01A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-01B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-01C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-02A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-02B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-02C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-03A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-03B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-03C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-04A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-04B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-04C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-05A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-05B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-05C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-06A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-06B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-06C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-07A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-07B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-07C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS
L0407514-08A	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-08B	Amber 250ml unpreserved	A	N/A	0.7C	Y	Absent	MCP-8082
L0407514-08C	Plastic 2oz unpreserved for TS	A	N/A	0.7C	Y	Absent	TS

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7-12-04

ALPHA Job #: L0407514

ALPHA
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: 399 Boylston St
Address: Boston, MA
Phone:
Fax:
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland, MA
Project #: 00106880
Project Manager: C. Rogan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved!)
Date Due: 7-14-04 Time: 48hr

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☑ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☑ No Are Drinking Water Samples Submitted?
☑ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:
* RUSH PCB Samples
HOLD PAH + Metals

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCBs	PAHs	Total Metals	Total Solids	Sample Specific Comments	TOTAL # BOTTLES
7514 .1	GRA 1	7-12-04	1100	S	BT	X	X	X	X		
.2	GRA-2	7-12-04	1110	S	BT	X	X	X	X		
.3	GRA-3	7-12-04	1120	S	BT	X	X	X	X		
.4	GRA-4	7-12-04	1130	S	BT	X	X	X	X		
.5	GRA-5	7-12-04	1330	S	BT	X	X	X	X		
.6	GRA-6	7-12-04	1340	S	BT	X	X	X	X		
.7	GRA-7	7-12-04	1350	S	BT	X	X	X	X		
.8	GRA-8	7-12-04	1400	S	BT	X	X	X	X		
					Container Type	A	A	A	P		
					Preservative	A	A	A	A		

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7/12/04 ??	[signature]	7/12/04 1530
[signature]	7-12-04 1625	[signature]	7-12-04 1625

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORMNO 31-01

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0407873

Date Received: 20-JUL-2004

Date Reported: 08-OCT-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: James Todaro
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0407873

Report Submission

This report replaces the report issued July 26, 2004. At the client's request, the report has been amended to include the results for Total Silver on all samples.

MCP Related Narratives

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PAH by Method 8270c.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0407873-02
SPA-2
Sample Matrix: SOIL

Date Collected: 09-JUL-2004 14:10
Date Received : 20-JUL-2004
Date Reported : 08-OCT-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	91.	%	0.10	30 2540G		0709 18:15	DP
Total Metals by MCP 6000/7000 series				60 6010B			
Arsenic, Total	6.2	mg/kg	0.43	60 6010B	0721 15:00	0722 14:10	RW
Chromium, Total	14.	mg/kg	0.43	60 6010B	0721 15:00	0722 14:10	RW
Copper, Total	17.	mg/kg	0.43	60 6010B	0721 15:00	0722 14:10	RW
Lead, Total	18.	mg/kg	2.2	60 6010B	0721 15:00	0722 14:10	RW
Silver, Total	ND	mg/kg	0.43	60 6010B	0721 15:00	0722 14:10	RW
Polynuclear Aromatic Hydrocarbons by MCP 8270C				54 8270C	0721 12:00	0722 15:10	HL
Acenaphthene	ND	ug/kg	370				
2-Chloronaphthalene	ND	ug/kg	370				
Fluoranthene	1300	ug/kg	370				
Naphthalene	ND	ug/kg	370				
Benzo(a)anthracene	530	ug/kg	370				
Benzo(a)pyrene	670	ug/kg	370				
Benzo(b)fluoranthene	770	ug/kg	370				
Benzo(k)fluoranthene	710	ug/kg	370				
Chrysene	760	ug/kg	370				
Acenaphthylene	ND	ug/kg	370				
Anthracene	ND	ug/kg	370				
Benzo(ghi)perylene	620	ug/kg	370				
Fluorene	ND	ug/kg	370				
Phenanthrene	420	ug/kg	370				
Dibenzo(a,h)anthracene	ND	ug/kg	370				
Indeno(1,2,3-cd)Pyrene	560	ug/kg	370				
Pyrene	1100	ug/kg	370				
2-Methylnaphthalene	ND	ug/kg	370				
Surrogate(s)	Recovery		QC Criteria				
Nitrobenzene-d5	71.0	%	30-130				
2-Fluorobiphenyl	83.0	%	30-130				
4-Terphenyl-d14	83.0	%	30-130				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0407873-07
GRA-5
Sample Matrix: SOIL

Date Collected: 12-JUL-2004 13:30
Date Received : 20-JUL-2004
Date Reported : 08-OCT-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	95.	%	0.10	30 2540G		0712 23:27	SD
Total Metals by MCP 6000/7000 series				60 6010B			
Arsenic, Total	7.4	mg/kg	0.42	60 6010B	0721 15:00	0722 14:35	RW
Chromium, Total	15.	mg/kg	0.42	60 6010B	0721 15:00	0722 14:35	RW
Copper, Total	29.	mg/kg	0.42	60 6010B	0721 15:00	0722 14:35	RW
Lead, Total	24.	mg/kg	2.1	60 6010B	0721 15:00	0722 14:35	RW
Silver, Total	ND	mg/kg	0.42	60 6010B	0721 15:00	0722 14:35	RW
Polynuclear Aromatic Hydrocarbons by MCP 8270C				54 8270C	0721 12:00	0722 17:20	HL
Acenaphthene	ND	ug/kg	350				
2-Chloronaphthalene	ND	ug/kg	350				
Fluoranthene	3200	ug/kg	350				
Naphthalene	ND	ug/kg	350				
Benzo(a)anthracene	1100	ug/kg	350				
Benzo(a)pyrene	1500	ug/kg	350				
Benzo(b)fluoranthene	2200	ug/kg	350				
Benzo(k)fluoranthene	1300	ug/kg	350				
Chrysene	1800	ug/kg	350				
Acenaphthylene	ND	ug/kg	350				
Anthracene	ND	ug/kg	350				
Benzo(ghi)perylene	1500	ug/kg	350				
Fluorene	ND	ug/kg	350				
Phenanthrene	1300	ug/kg	350				
Dibenzo(a,h)anthracene	ND	ug/kg	350				
Indeno(1,2,3-cd)Pyrene	1300	ug/kg	350				
Pyrene	2600	ug/kg	350				
2-Methylnaphthalene	ND	ug/kg	350				
Surrogate(s)	Recovery		QC Criteria				
Nitrobenzene-d5	73.0	%	30-130				
2-Fluorobiphenyl	86.0	%	30-130				
4-Terphenyl-d14	87.0	%	30-130				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0407873

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 06-10 (L0407174-30, WG176298)					
Solids, Total	95.	95.	%	0	
Solids, Total for sample(s) 11-16 (L0407174-32, WG176300)					
Solids, Total	97.	97.	%	0	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407873

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Total Metals by MCP 6000/7000 series for sample(s) 01-16 (WG176334-2, WG176334)					
Arsenic, Total	103	101	2	30	75-125
Chromium, Total	94	93	1	30	75-125
Copper, Total	90	89	1	30	75-125
Lead, Total	104	104	0	30	75-125
Silver, Total	92	92	0	30	75-125
Polynuclear Aromatic Hydrocarbons by MCP 8270C for sample(s) 01-16 (WG176312-2, WG176312)					
Acenaphthene	66	68	3		40-140
2-Chloronaphthalene	60	62	3		40-140
Fluoranthene	98	98	0		40-140
Naphthalene	48	58	19		40-140
Benzo(a)anthracene	99	102	3		40-140
Benzo(a)pyrene	94	97	3		40-140
Benzo(b)fluoranthene	99	102	3		40-140
Benzo(k)fluoranthene	88	89	1		40-140
Chrysene	92	95	3		40-140
Acenaphthylene	69	70	1		40-140
Anthracene	91	95	4		40-140
Benzo(ghi)perylene	89	93	4		40-140
Fluorene	80	79	1		40-140
Phenanthrene	88	92	4		40-140
Dibenzo(a,h)anthracene	93	97	4		40-140
Indeno(1,2,3-cd)Pyrene	95	100	5		40-140
Pyrene	95	96	1		40-140
2-Methylnaphthalene	55	61	10		40-140
Surrogate(s)					
Nitrobenzene-d5	49	57	15		30-130
2-Fluorobiphenyl	60	65	8		30-130
4-Terphenyl-d14	91	89	2		30-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407873

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-16 (WG176334-1)							
Total Metals by MCP 6000/7000 series				60 6010B			
Arsenic, Total	ND	mg/kg	0.40	60 6010B	0721 15:00	0722 13:45	RW
Chromium, Total	ND	mg/kg	0.40	60 6010B	0721 15:00	0722 13:45	RW
Copper, Total	ND	mg/kg	0.40	60 6010B	0721 15:00	0722 13:45	RW
Lead, Total	ND	mg/kg	2.0	60 6010B	0721 15:00	0722 13:45	RW
Silver, Total	ND	mg/kg	0.40	60 6010B	0721 15:00	0722 13:45	RW
Blank Analysis for sample(s) 01-16 (WG176312-1)							
Polynuclear Aromatic Hydrocarbons by MCP 8270C				54 8270C	0721 12:00	0722 12:55	HL
Acenaphthene	ND	ug/kg	330				
2-Chloronaphthalene	ND	ug/kg	330				
Fluoranthene	ND	ug/kg	330				
Naphthalene	ND	ug/kg	330				
Benzo(a)anthracene	ND	ug/kg	330				
Benzo(a)pyrene	ND	ug/kg	330				
Benzo(b)fluoranthene	ND	ug/kg	330				
Benzo(k)fluoranthene	ND	ug/kg	330				
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
2-Methylnaphthalene	ND	ug/kg	330				
Surrogate(s)	Recovery		QC Criteria				
Nitrobenzene-d5	48.0	%	30-130				
2-Fluorobiphenyl	49.0	%	30-130				
4-Terphenyl-d14	90.0	%	30-130				

REFERENCES

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

60. Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

ug/cart Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0407873

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0407873-01A	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-PAH
L0407873-01B	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-02A	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-PAH
L0407873-02B	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-03A	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-PAH
L0407873-03B	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-04A	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-PAH
L0407873-04B	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-05A	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-PAH
L0407873-05B	Amber 250ml unpreserved	A	NA	1.1C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-06A	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-PAH
L0407873-06B	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-07A	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-PAH
L0407873-07B	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-08A	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-PAH
L0407873-08B	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-09A	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-PAH
L0407873-09B	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-10A	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-PAH
L0407873-10B	Amber 250ml unpreserved	B	NA	0.7C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0407873

Continued

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
							6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-11A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-11B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-12A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-12B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-13A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-13B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-14A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-14B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-15A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-15B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT
L0407873-16A	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-PAH
L0407873-16B	Amber 250ml unpreserved	C	NA	3C	Y	Absent	MCP-AG-6010T, MCP-AS-6010T, MCP-CR-6010T, MCP-CU-6010T, MCP-PB-6010T, PREPT

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE _____ OF _____

ALPHA Laboratories
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab: 7-20-04

ALPHA Job #: L0407873

Client Information

Client: ERM
Address: 399 Boylston St
Boston MA
Phone:
Fax
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland, MA
Project #: 0010686
Project Manager: C. Regan
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 7-27-04 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are Drinking Water Samples Submitted?
☐ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

RECG OF L0407464-1, 2, 4, 5, 6
L0407514-4→8
L0407562-1, 3, 9, 10, 18, 20

ANALYSIS: PAH; As, Cu, Cr, Pb - Total

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PAH	As, Cu, Cr, Pb - Total	Sample Specific Comments	TOTAL # BOTTLES
7873.1	SPA-1	7/9/04	1400	Soil		✓	✓		2
.2	SPA-2	7/9/04	1410	Soil		✓	✓		2
.3	SPA-4	7/9/04	1430	Soil		✓	✓		2
.4	SPA-5	7/9/04	1440	Soil		✓	✓		2
.5	SPA-6	7/9/04	1450	Soil		✓	✓		2
.6	GRA-4	7/12/04	1130	Soil		✓	✓		2
.7	GRA-5	7/12/04	1330	Soil		✓	✓		2
.8	GRA-6	7/12/04	1340	Soil		✓	✓		2
.9	GRA-7	7/12/04	1350	Soil		✓	✓		2
.10	GRA-8	7/12/04	1400	Soil		✓	✓		2

Container Type: A A
Preservative: A A

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
		Yaniz King	7-20-04 1550

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO 07-03 std

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Catherine Regan

Project Number: 0010686.19

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0410872

Date Received: 01-OCT-2004

Date Reported: 05-OCT-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

Laboratory Job Number: L0410872
Date Reported: 05-OCT-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0410872-01	ROAD-9-30-04	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0410872

MCP Related Narratives

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0410872-01 ROAD-9-30-04
Sample Matrix: SOIL

Date Collected: 30-SEP-2004 14:45
Date Received : 01-OCT-2004
Date Reported : 05-OCT-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 7-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	94.	%	0.10	30	2540G		1005 08:35	JC
Total Metals by MCP 6000/7000 series				60	6010B			
Arsenic, Total	5.6	mg/kg	0.42	60	6010B	1004 15:00	1005 08:49	RW
Barium, Total	18.	mg/kg	0.42	60	6010B	1004 15:00	1005 08:49	RW
Cadmium, Total	ND	mg/kg	0.42	60	6010B	1004 15:00	1005 08:49	RW
Chromium, Total	9.8	mg/kg	0.42	60	6010B	1004 15:00	1005 08:49	RW
Lead, Total	16.	mg/kg	2.1	60	6010B	1004 15:00	1005 08:49	RW
Mercury, Total	ND	mg/kg	0.09	64	7471A	1004 14:55	1005 10:29	DM
Selenium, Total	ND	mg/kg	2.1	60	6010B	1004 15:00	1005 08:49	RW
Silver, Total	ND	mg/kg	0.42	60	6010B	1004 15:00	1005 08:49	RW
Hydrocarbon Scan by GC 8100M				1	8100M	1002 12:15	1004 18:53	MS
Mineral Spirits	ND	mg/kg	71.					
Gasoline	ND	mg/kg	71.					
Fuel Oil #2/Diesel	ND	mg/kg	71.					
Fuel Oil #4	ND	mg/kg	71.					
Fuel Oil #6	ND	mg/kg	71.					
Motor Oil	ND	mg/kg	71.					
Kerosene	ND	mg/kg	71.					
Transformer Oil	ND	mg/kg	71.					
Unknown Hydrocarbon	74.	mg/kg	71.					
Surrogate(s)	Recovery		QC Criteria					
o-Terphenyl	83.0	%	40-140					

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0410872

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01 (L0410872-01, WG182578)					
Solids, Total	94.	94.	%	0	
Hydrocarbon Scan by GC 8100M for sample(s) 01 (L0410872-01, WG182488)					
Mineral Spirits	ND	ND	mg/kg	NC	40
Gasoline	ND	ND	mg/kg	NC	40
Fuel Oil #2/Diesel	ND	ND	mg/kg	NC	40
Fuel Oil #4	ND	ND	mg/kg	NC	40
Fuel Oil #6	ND	ND	mg/kg	NC	40
Motor Oil	ND	ND	mg/kg	NC	40
Kerosene	ND	ND	mg/kg	NC	40
Transformer Oil	ND	ND	mg/kg	NC	40
Unknown Hydrocarbon	74.	ND	mg/kg	NC	40
Surrogate(s)	Recovery				QC Criteria
o-Terphenyl	83.0	48.0	%	53	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0410872

Parameter	% Recovery	QC Criteria
Hydrocarbon Scan by GC 8100M LCS for sample(s) 01 (WG182488)		
Petroleum Spike	84	40-140
Surrogate(s)		
o-Terphenyl	103	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0410872

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Total Metals by MCP 6000/7000 series for sample(s) 01 (WG182570-2, WG182570)					
Arsenic, Total	107	105	2	30	75-125
Barium, Total	95	94	1	30	75-125
Cadmium, Total	103	104	1	30	75-125
Chromium, Total	97	97	0	30	75-125
Lead, Total	108	104	4	30	75-125
Selenium, Total	109	107	2	30	75-125
Silver, Total	92	92	0	30	75-125
Total Metals by MCP 6000/7000 series for sample(s) 01 (WG182520-2, WG182520)					
Mercury, Total	100	99	1	30	75-125

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0410872

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG182570-1)								
Total Metals by MCP 6000/7000 series				60	6010B			
Arsenic, Total	ND	mg/kg	0.40	60	6010B	1004 15:00	1005 08:37	RW
Barium, Total	ND	mg/kg	0.40	60	6010B	1004 15:00	1005 08:37	RW
Cadmium, Total	ND	mg/kg	0.40	60	6010B	1004 15:00	1005 08:37	RW
Chromium, Total	ND	mg/kg	0.40	60	6010B	1004 15:00	1005 08:37	RW
Lead, Total	ND	mg/kg	2.0	60	6010B	1004 15:00	1005 08:37	RW
Selenium, Total	ND	mg/kg	2.0	60	6010B	1004 15:00	1005 08:37	RW
Silver, Total	ND	mg/kg	0.40	60	6010B	1004 15:00	1005 08:37	RW
Blank Analysis for sample(s) 01 (WG182520-1)								
Total Metals by MCP 6000/7000 series								
Mercury, Total	ND	mg/kg	0.08	64	7471A	1004 14:55	1005 09:58	DM
Blank Analysis for sample(s) 01 (WG182488-1)								
Hydrocarbon Scan by GC 8100M				1	8100M	1002 12:15	1004 15:42	MS
Mineral Spirits	ND	mg/kg	67.					
Gasoline	ND	mg/kg	67.					
Fuel Oil #2/Diesel	ND	mg/kg	67.					
Fuel Oil #4	ND	mg/kg	67.					
Fuel Oil #6	ND	mg/kg	67.					
Motor Oil	ND	mg/kg	67.					
Kerosene	ND	mg/kg	67.					
Transformer Oil	ND	mg/kg	67.					
Unknown Hydrocarbon	ND	mg/kg	67.					
Surrogate(s)	Recovery		QC Criteria					
o-Terphenyl	82.0	%	40-140					

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

60. Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

64. Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). August 2004.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0410872

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0410872-01A	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	TPH-8100
L0410872-01B	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	TPH-8100
L0410872-01C	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	TPH-8100
L0410872-01D	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	TS
L0410872-01E	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	MCP-7471T, MCP-AG-6010T, MCP-AS-6010T, MCP-BA-6010T, MCP-CD-6010T, MCP-CR-6010T, MCP-PB-6010T, MCP-SE-6010T, PREPT
L0410872-01F	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	MCP-7471T, MCP-AG-6010T, MCP-AS-6010T, MCP-BA-6010T, MCP-CD-6010T, MCP-CR-6010T, MCP-PB-6010T, MCP-SE-6010T, PREPT
L0410872-01G	Amber 100ml unpreserved	A	N/A	2.5 C	Y	Absent	MCP-7471T, MCP-AG-6010T, MCP-AS-6010T, MCP-BA-6010T, MCP-CD-6010T, MCP-CR-6010T, MCP-PB-6010T, MCP-SE-6010T, PREPT

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/1

ALPHA Job #: L0410872

ALPHA ANALYTICAL
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: ERM
Address: 399 Boylston St
Boston, MA 02116
Phone: 617 696 7800
Fax: 617 267 6447
Email: Catherine.regan@erm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon - Wayland
Project Location: Wayland, MA
Project #: 0010656.19
Project Manager: Catherine Regan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 10/1 Time: (pending approval Michelle Witta)

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are Drinking Water Samples Submitted?
☒ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: TPH 8100	ANALYSIS: RCRA 8 metals	SAMPLE HANDLING: Filtration / Preservation	Sample Specific Comments	TOTAL # BOTTLES
10872.1	road-9-30-04	9/30/04	1445	S	CR	4	3 @			7 @

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type	G	G	
Preservative	A	A	

Relinquished By:	Date/Time	Received By:	Date/Time
	10/1/04 1445		10/1 1430
	10/1 1930		10/1 1930

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Appendix D
Soil Specifications and Certification

AGRESOURCE

THE SOURCE FOR COMPOST & SOIL

FAX

Date: 1/26/05

To:
Environmental Resources Management
Catherine Regan
Phone: 617-646-7828
Fax: 617-267-6447

From:
Agresource, Inc.
Tim J. Gould
Phone: 800-313-3320
Fax: 978-388-4198

Pages: 4

Please call with any questions or if you need anything else. Original to follow in US Mail.

AGRESOURCE – *THE SOURCE* FOR COMPOST AND SOIL

January 26, 2005

Ms. Catherine Regan
Environmental Resources Management
399 Boylston Street, 6th floor
Boston, MA 02116

RE: Certification of Compliance for Wetland Soil

Dear Ms. Regan:

The purpose of this letter is to certify that the wetland soil delivered to the former Raytheon site in Wayland in 2003-2004 met specification requirements. Attached are soil reports from stockpiles used for the Wayland project. Leaf compost used in the soil came from the town of Needham.

The wetland soil delivered to this project is consistent with US Army Corp and MA Department of Environmental Protection guidelines for manufactured wetland soil. Agresource has delivered the same soil to many wetland restoration projects throughout Massachusetts and New England.

Sincerely,

Tim J. Gould, M.Sc.
Vice President

SOIL ANALYSIS REPORT FOR RESEARCH

09/03/03

SOIL AND PLANT TISSUE TESTING LAB
WEST EXPERIMENT STATION
UNIVERSITY OF MASSACHUSETTS
AMHERST, MA 01003

LAB NUMBER: S030829-103
BAG NUMBER: 55203

SOIL WEIGHT: 4.07 g/5cc

AGRESOURCE - TIM GOULD
100 MAIN ST
AMESBURY, MA 01913

CONCERNS:

ANALYSIS REPORT

SAMPLE ID: NEEDHAM WETLAND
SOIL TYPE:

SOIL PH 7.5
BUFFER PH 7.2

ALUMINUM (AL): 16 PPM (Soil Range: 10-300)
ORGANIC MATTER: 17.0 %. Desirable range 4-8%.

NUTRIENT LEVELS:		PPM	LOW MEDIUM HIGH VERY HIGH
PHOSPHORUS	(P)	82	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
POTASSIUM	(K)	1087	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CALCIUM	(CA)	3273	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
MAGNESIUM	(MG)	540	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
AMMONIUM	(NH4-N)	7	XXXXXXXXXXXXXX
NITRATE	(NO3-N)	23	XXXXXXXXXXXXXXXXX

CATION EXCH CAP
29.0 MEQ/100G

PERCENT BASE SATURATION
K=11.8 MG=18.8 CA=69.5

MICRONUTRIENT		PPM	SOIL RANGE
Boron	(B)	2.6	0.1-2.0
Manganese	(Mn)	34.0	3 - 20
Zinc	(Zn)	3.6	0.1- 70

MICRONUTRIENT		PPM	SOIL RANGE
Copper	(Cu)	0.8	0.3-8.0
Iron	(Fe)	7.6	1.0- 40

EXTRACTED LEAD (PB) 3 PPM.
EXTRACTED CADMIUM (CD) 0.0 PPM.
EXTRACTED NICKEL (NI) 0.2 PPM.

ESTIMATED TOTAL LEAD IS 69 PPM.

EXTRACTED CHROMIUM (CR) 0.2 PPM.

COMMENTS

COMPUTER PROGRAM & RECOMMENDATIONS BY DEPT OF PLANT & SOIL SCI UMASS-AMHERST.

UNIVERSITY of MASSACHUSETTS

UMass Extension

Agroecology Program
Soil and Plant Tissue Testing Laboratory
West Experiment Station
682 North Pleasant Street
Amherst, MA 01003-9302
413.545.2311
413.545.1931 fax
http://www.umass.edu/plsoils/soiltest

TEXTURAL ANALYSIS RESULTS

Customer Name: Agresource, Inc.
Tim Gould
100 Main Street
Amesbury, MA 01913

Sample ID: S030722-102

Customer Designation: Needham Wetland Soil

USDA SIZE FRACTIONS

Main Fractions	Size (mm)	Percent
Sand	0.05-2.0	53.8
Silt	0.002-0.05	38.8
Clay	< 0.002	7.4
Total	< 2.0	100.0

Sand Fractions	Size (mm)	Percent
Very Coarse	1.0-2.0	7.7
Coarse	0.5-1.0	9.5
Medium	0.25-0.5	10.8
Fine	0.10-0.25	13.6
Very Fine	0.05-0.10	12.2
		53.8

Silt Fractions	Size (mm)	Percent
Coarse	0.02-0.05	13.2
Medium	0.005-0.02	18.4
Fine	0.002-0.005	7.2
		38.8

USDA Textural Class = fine sandy loam

Gravel Content = 22.8%

PERCENT OF WHOLE SAMPLE PASSING

Size (mm)	Sieve #	%
2.00	#10	100
1.00	#18	94.1
0.50	#35	86.7
0.25	#60	78.4
0.10	#140	67.9
0.05	#270	58.5
0.02	20 um	48.4
0.005	5 um	34.2
0.002	2 um	28.6

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Ms. Rachel Leary

Project Number: 10686.8

Site: VERIFICATION SAMPLING

Laboratory Job Number: L0402209

Date Received: 09-MAR-2004

Date Reported: 11-MAR-2004

Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: James Todaro
This document electronically signed

Laboratory Job Number: L0402209
Date Reported: 11-MAR-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0402209-01	CF-1	RAYTHEON WAYLAND

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0402209

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

Extraction methods

Extraction method 3545 was used as the extraction method for the analysis of PCB by Method 8082.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0402209-01
CF-1
Sample Matrix: SOIL

Date Collected: 09-MAR-2004 15:45
Date Received : 09-MAR-2004
Date Reported : 11-MAR-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	55.	%	0.10	30	2540G		0309 21:43	HG
Total Metals				1	3051			
Arsenic, Total	3.5	mg/kg	0.36	54	6010B	0309 20:30	0310 14:37	MG
Chromium, Total	9.0	mg/kg	0.36	54	6010B	0309 20:30	0310 14:37	MG
Copper, Total	24.	mg/kg	0.36	54	6010B	0309 20:30	0310 14:37	MG
Lead, Total	57.	mg/kg	0.36	54	6010B	0309 20:30	0310 14:37	MG
Silver, Total	ND	mg/kg	0.18	54	6010B	0309 20:30	0310 14:37	MG
Polychlorinated Biphenyls by MCP 8082				54	8082	0310 16:00	0311 13:40	AK
Aroclor 1221	ND	ug/kg	45.4					
Aroclor 1232	ND	ug/kg	45.4					
Aroclor 1242/1016	ND	ug/kg	45.4					
Aroclor 1248	ND	ug/kg	45.4					
Aroclor 1254	ND	ug/kg	45.4					
Aroclor 1260	ND	ug/kg	45.4					
Aroclor 1262	ND	ug/kg	45.4					
Aroclor 1268	ND	ug/kg	45.4					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	61.0	%	30-150					
Decachlorobiphenyl	60.0	%	30-150					
Polychlorinated Biphenyls by MCP 8082				54	8082	0310 16:00	0311 13:40	AK
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	55.0	%	30-150					
Decachlorobiphenyl	48.0	%	30-150					

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0402209

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01 (L0402162-01, WG164961)					
Solids, Total	84.	84.	%	0	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0402209

Parameter	% Recovery	QC Criteria
Total Metals LCS for sample(s) 01 (WG164971)		
Arsenic, Total	101	75-125
Chromium, Total	89	75-125
Copper, Total	89	75-125
Lead, Total	94	75-125
Silver, Total	92	75-125
Polychlorinated Biphenyls by MCP 8082 LCS for sample(s) 01 (WG165098)		
Aroclor 1242/1016	79	40-140
Aroclor 1260	88	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	68	30-150
2,4,5,6-Tetrachloro-m-xylene	67	30-150
Decachlorobiphenyl	84	30-150
Decachlorobiphenyl	81	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0402209

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG164971-1)								
Total Metals				1	3051			
Arsenic, Total	ND	mg/kg	0.40	54	6010B	0309 20:30	0310 14:23	MG
Chromium, Total	ND	mg/kg	0.40	54	6010B	0309 20:30	0310 14:23	MG
Copper, Total	ND	mg/kg	0.40	54	6010B	0309 20:30	0310 14:23	MG
Lead, Total	ND	mg/kg	0.40	54	6010B	0309 20:30	0310 14:23	MG
Silver, Total	ND	mg/kg	0.20	54	6010B	0309 20:30	0310 14:23	MG
Blank Analysis for sample(s) 01 (WG165098-1)								
Polychlorinated Biphenyls by MCP 8082				54	8082	0310 16:00	0311 11:55	AK
Aroclor 1221	ND	ug/kg	25.0					
Aroclor 1232	ND	ug/kg	25.0					
Aroclor 1242/1016	ND	ug/kg	25.0					
Aroclor 1248	ND	ug/kg	25.0					
Aroclor 1254	ND	ug/kg	25.0					
Aroclor 1260	ND	ug/kg	25.0					
Aroclor 1262	ND	ug/kg	25.0					
Aroclor 1268	ND	ug/kg	25.0					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	74.0	%	30-150					
Decachlorobiphenyl	85.0	%	30-150					
Blank Analysis for sample(s) 01 (WG165098-1)								
Polychlorinated Biphenyls by MCP 8082				54	8082	0310 16:00	0311 11:55	AK
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	74.0	%	30-150					
Decachlorobiphenyl	82.0	%	30-150					

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0402209

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0402209-01A	Amber 250ml unpreserved	A	N/A	1.1 C	Y	Absent	AG-TI, AS-TI, CR-TI, CU-TI, MCP, MCP-8082, PB-TI, PREPT, TS

Container Comments

Container ID	Comments

CHAIN OF COUSTODY

ALPHA

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

PAGE 1 OF 1

Date Rec'd in Lab: 3/9/04

ALPHA Job #: L0402209

Client Information

Client: ERM - BOSTON
Address: 399 Boylston St 6TH FLOOR
BOSTON MA 02116
Phone: 617 267 8377
Fax: 617 267 6447
Email: Rachel.Leary@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Verification Sampling
Project Location: Wayland Wetlands
Project #: 10686.8
Project Manager: R. Leary
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved)
Date Due: 3/11/04 Time: 24hr

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are Drinking Water Samples Submitted?
☒ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCBs	As, Pb, Cu, Cr	PCBs	As, Pb, Cu, Cr	Sample Specific Comments	TOTAL # BOTTLES
~~2209.1~~	GDL-B	3/9/04	1445	W	JF	1	1				2
—	GDL-T	↓	1510	W	JF	1	1				2
—	LDR-B	↓	1505	W	JF	1	1				2
—	LDR-T	↓	~~1515~~ 1450	W	JF	1	1				2
2209.1	CF-1	3/9/04	1545	S	JF	~~1~~	~~1~~	1	1		1

Container Type	A	A	A	A
Preservative	O	C	A	A

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/9/04 1610	[signature]	3/9/04
[signature]	3/9/04 1705	[signature]	3/9/04 1705

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Appendix E
Deed Restrictions

2006 00025004
Bk: 46945 Pg: 9 Doc: NOT
Page: 1 of 20 02/08/2006 02:39 PM

Form 1075

NOTICE OF ACTIVITY AND USE LIMITATION

M.G.L. c. 21E, §6 and 310 CMR 40.0000

Disposal Site Name: Former Hamlen Property/Raytheon Company (FMR), 433 Boston Post Road, Wayland, MA
DEP Release Tracking Nos.: 3-13302

This Notice of Activity and Use Limitation ("**Notice**") is made as of this 27th day of January, 2006, by Raytheon Company with an address at 528 Boston Post Road, Sudbury, MA. 01776 together with his/her/its/their successors and assigns (collectively "**Owner**").

WITNESSETH:

WHEREAS, Raytheon Company, of Waltham, Middlesex County, Massachusetts is the owner in fee simple of that certain parcel of land located at 433 Boston Post Road, in Wayland, Middlesex County, Massachusetts, with the buildings and improvements thereon ("**Property**"). pursuant to a deed recorded with the Middlesex County Registry of Deeds in Book 41001, Page 463.

WHEREAS, said parcel of land, which is more particularly bounded and described in **Exhibit A**, attached hereto and made a part hereof ("Property") is subject to this Notice of Activity and Use Limitation. The Property is shown on a plan to be recorded herewith in the Middlesex County (South) Registry of Deeds and/ or on a sketch plan attached hereto and filed herewith for registration with the Middlesex County (South) Registry District of the Land Court.

WHEREAS, the Property comprises part of a disposal site as the result of a release of oil and/or hazardous material. Exhibit B-1 and Exhibit B-2 are sketch plans showing the relationship of the Property subject to this Notice of Activity and Use Limitation to the boundaries of said disposal site existing within the limits of the Property and to the extent such boundaries have been established. Exhibit B-1 and Exhibit B-2 are attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for the Property in accordance with M.G.L. c.21E ("**Chapter 21E**") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("**MCP**"). Said response actions are based upon (a) the restriction of human access to and contact with oil and/or hazardous material in soil and/ or groundwater and/or (b) the restriction of certain activities occurring in, on, through, over or under the Property. The basis for such restrictions is set forth in an Activity and Use

RETURN TO: DJO
SAH – Rackemann, Sawyer & Brewster
One Financial Center – 29th Floor
Boston, MA 02111

Limitation Opinion ("**AUL Opinion**"), dated 9 January 2006, (which is attached hereto as **Exhibit B** and made a part hereof); and

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in said AUL Opinion are as follows:

1. Permitted Activities and Uses Set Forth in the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare and the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Property:

(i) The Property may be used for passive recreation such as fishing, boating, etc; and

(ii) Such other activities or uses which, in the Opinion of the LSP, shall present no greater risk of harm to health, safety, public welfare and the environment than the activities and uses set forth in this Paragraph; and

(iii) All activities and uses consistent with those set forth in this Paragraph and not expressly prohibited by this Notice.

2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Property, may result in a significant risk of harm to health, safety, public welfare or the environment or in a substantial hazard, are as follows:

(i) Residential, childcare, daycare, commercial, industrial, agricultural, horticultural, or gardening activities, unless previously approved by the LSP in accordance with the obligations and conditions set forth in the AUL Opinion;

(ii) Groundwater use except for assessment or remedial purposes;

(iii) Other activities or uses that, in the Opinion of the LSP, would likely result in significant, risk from exposures to oil and/or hazardous material if site activities or uses were to take place on the Property.

3. Obligations and Conditions Set Forth in the AUL Opinion. If applicable, obligations and/or conditions to be undertaken and/or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

(i) Certification in the form of documentation bearing the original signature, date and Seal of the LSP must be obtained by the Owner prior to implementation of the following activities and uses:

a) use of the Property for residential, childcare, daycare, recreational, agricultural, horticultural, or gardening activities, or for unrestricted public access;

b) land development or construction involving changes in surface conditions (i.e., topography, surface cover, etc.).

(ii) Parties conducting activities and uses described in 3(i), above, that, in the Opinion of the LSP, may include disturbance of contaminated media, waste or debris, or that could render subsurface contaminated media, waste or debris accessible to exposure, shall submit, for approval by the LSP, a contingency plan for the management of contaminated media, waste or debris, if encountered, including:

a) procedures for monitoring of contaminated media, waste or debris;

b) procedures for notification to the LSP of the discovery of contaminated media, waste or debris;

c) a certification that all response actions will be conducted under the supervision of the LSP;

d) a soils management plan including contingencies for handling contaminated soil and/or groundwater if activities may extend below the water table;

e) a certification that response personnel will comply with applicable safety regulations, including 29 CFR 1910.120;

f) a certification that contaminated waste, debris or media or remediation waste (pursuant to 310 CMR 40.0000) generated by such activities shall be handled, stored, transported and disposed in accordance with the applicable federal, state and local regulations.

(iii) The responsible parties and their representatives shall be granted unrestricted assess to the Property in order to conduct any and all activities associated with the performance of response actions as defined under the MCP, or any other applicable regulation.

4. Proposed Changes in Activities and Uses. Any proposed changes in activities and uses at the Property which may result in higher levels of exposure to oil and/or hazardous material than currently exist shall be evaluated by the LSP who shall render an Opinion, in accordance with 310 CMR 40.1080 *et seq.*, as to whether the proposed changes will present a significant risk of harm to health, safety, public welfare and the environment. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.

5. Violation of a Response Action Outcome. The activities, uses and/or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, and the environment, or to create substantial hazards due to exposure to oil and/or hazardous material without the prior evaluation by the LSP in accordance with 310 CMR 40.1080 *et seq.*, and without additional response actions, if necessary, to achieve or maintain a condition of No Significant Risk or to eliminate substantial hazards.

If the activities, uses, and/or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by the LSP in accordance with 310 CMR 40.1080 *et seq.*, the owner or operator of the Portion of the Property subject to this Notice at the time that the activities, uses and/or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer. This Notice shall be incorporated either in full or by reference into all deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in and/or a right to use the Property or a portion thereof is conveyed.

Owner hereby authorizes and consents to the filing and recordation and/or registration of this Notice, said Notice to become effective when executed under seal by the undersigned LSP, and recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office(s).

WITNESS the execution hereof under seal this 21th day of January, 2006.

Owner: Raytheon Company

By: _____

Jay B. Stephens
Senior Vice President and General Counsel

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss January 27, 2006

Then personally appeared the above named Jay B. Stephens as Senior Vice President and General Counsel of Raytheon Company, and acknowledged the foregoing to be their free act and deed, and the free act and deed of said corporation as said general partner, before me,

NANCY L. MEAGHER
Notary Public
Commonwealth of Massachusetts
My Commission Expires Apr 26, 2007

Nancy L. Meagher
Notary Public Nancy L. Meagher
My Commission Expires: 4-26-07

The undersigned LSP-of-Record hereby certifies that he executed the aforesaid Activity and Use Limitation Opinion attached hereto as Exhibit B and Exhibit C, and made a part hereof and that in his Opinion this Notice of Activity and Use Limitation is consistent with the terms set forth in said Activity and Use Limitation Opinion.

Date: 1/09/06

John C. Drobinski, LSP Reg. No. 2196
[LSP SEAL]

COMMONWEALTH OF MASSACHUSETTS
JOHN C. DROBINSKI No. 2196 REGISTERED LICENSED SITE PROFESSIONAL

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss January 4, 2006

Then personally appeared the above named John C. Drobinski, and acknowledged the foregoing to be his free act and deed before me,

Notary Public
My Commission Expires: 3/24/11

Upon recording, return to:

EXHIBIT A

Property Description

Metes and Bounds Description

That certain parcel of unregistered vacant land in Wayland, Massachusetts, bounded and described in part by reference to plans of abutting land as follows:

Beginning at a drill hole at the southerly end of a 328 foot bound shown on Land Court Plan 17983A filed with South Middlesex District of the Land Court with Certificate of Title No. 49312 in Registration Book 326 at Page 97; thence running

N 11°48'20" W	by land of Raytheon Company, 328 feet to the northeast corner of the parcel; thence
S 71°01'00" W	by the Raytheon land, 842 feet, more or less, to the Sudbury River; thence
SOUTHERLY	by the River, about 200 feet to the Boston Post Road; thence
S 83°14'20" W	about 140 feet by the road as shown on a plan entitled "Plan of Road in the Town of Wayland Middlesex County Laid Out as a State Highway by the Department of Public Works Division of Highways" dated May 20, 1924 and filed with Middlesex South District Deeds in Plan Book 336 as Plan 17; thence
N 09°19'50" E	by the road as shown on the 1924 plan, about 40 feet; thence
S 78°06'00" E	by the road as shown on the 1924 plan, about 160 feet; and thence
N 69°42'20" E	by the Raytheon land, about 540 feet by estimation to the point of beginning.

Containing, according to assessment records, five and a half acres.

EXHIBIT B

LSP-of-Record Notice of AUL Opinion

EXHIBIT B

ACTIVITY & USE LIMITATION OPINION

433 BOSTON POST ROAD, WAYLAND, MASSACHUSETTS

This Activity & Use Limitation Opinion (AUL) Opinion is issued in support of the Notice of Activity and Use Limitation (Notice) filed on a the Property located at 433 Boston Post Road, Wayland Massachusetts. Pursuant to 310 CMR 40.0000, this AUL Opinion describes the basis for restrictions in activities on, and uses of, the Portion of the Property subject to this Notice and obligations and conditions to be undertaken and/or maintained to ensure protection of health, safety, public welfare and the environment. This AUL Opinion is certified by the Licensed Site Professional (LSP)-of-Record for Comprehensive Response Actions conducted in accordance with Permit No. 322-553 issued under the authority of the Massachusetts Department of Environmental Protection (MA DEP), Bureau of Waste Site Cleanup.

1.0 PHYSICAL DESCRIPTION AND LAND USE

The subject Property is an approximately 5.5 acre parcel located at 433 Boston Post Road in Wayland, Massachusetts (Exhibit A). The Property is bounded to the west by the Sudbury River, to north by undeveloped land including the Great Meadows National Wildlife Refuge, to the east by the former Raytheon Facility and to the South by Route 20. The property is the Former Hamlen Property.

Prior to 1955 the Property was a wetland and floodplain. Subsequent to 1955, the Property remained the same but was bordered by an engineering research and development facility that was decommissioned in 1995. The Property is currently a wetland and floodplain subject to the restrictions of the Wetlands Protection Act.

2.0 *BACKGROUND*

Releases of oil and/or hazardous materials (OHM) to soil and groundwater were discovered on the abutting Raytheon property during decommissioning of the former manufacturing facility. Concentrations of OHM were also discovered on the Property subsequent to the above investigation. Massachusetts General Law, Chapter 21E, requires assessment and, if necessary, remedial actions in accordance with requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000.

The MCP process allows up to five years for completion of those phases of assessment and/or remediation that are necessary to achieve regulatory closure. Assessment and/or remediation activities are conducted as "Comprehensive Response Actions" under the direction of the Licensed Site Professional (LSP) -of-Record. Upon satisfying all applicable MCP requirements, a Response Action Outcome (RAO) Statement, certified by the LSP, is filed with the MA DEP Bureau of Waste Site Cleanup, officially closing the site out of the MCP process. Once closure is obtained it is binding, subject however, to DEP audit for up to five years from the date of filing.

3.0 *PURPOSE AND APPLICABILITY OF THE NOTICE OF ACTIVITY AND USE LIMITATION*

The purpose of the Notice is to record on the registered property deed those activities and land uses that are consistent with continued protection of health, safety, public welfare and the environment, those that are specifically prohibited and obligations and conditions necessary to ensure continued protection.

This Notice is applicable to the Property as defined in Exhibit A. This Notice is being filed after completion of assessment and remedial actions required to achieve an RAO.

This Notice of AUL is recorded by the Property owner as a precautionary measure to ensure appropriate use of Property. In all cases, the LSP shall review this Notice of AUL, and if appropriate, terminate or amend this Notice of AUL prior to approval and filing of a RAO for the Property, or any portion thereof. All approvals and opinions required by a Licensed Site Professional to maintain compliance with this Notice and AUL Opinion shall be restricted to the Licensed Site Professional of Record for Comprehensive Response Actions, and any termination or amendment of this Notice of AUL pursuant to the prior sentence shall be based upon an opinion of the LSP of Record, only.

4.0 *SUMMARY OF PCB IMPACTS, REMEDIAL ACTION, AND USE RESTRICTIONS ON PROPERTY*

Pre-Excavation Extent and Concentrations of Contamination in Remediation Area

The primary source of impact to wetland sediments appeared to be historic releases of oil and/or hazardous material (OHM) to the storm water conveyance system, discharging at the storm water outfall OF-1. The primary contaminants of concern (COCs) identified in source structures (dry wells and manholes) connected to the storm water conveyance system included polyaromatic hydrocarbons (PAHs) and associated petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and heavy metals (chromium, copper, arsenic, silver and lead). Evaluation of the average concentrations of primary COCs versus distance from the outfall indicated concentrations were highest near the outfall, decreasing sharply within 200 feet from the outfall and then approaching background near the Sudbury River. The vertical extent of impact appeared to be largely limited to the top 18 inches of sediment, although local variations were noted. The sediment layer is confined by an underlying, silt/clay unit beneath the wetland.

Correlation of areas of COCs in sediment with the results of vegetative mapping and analysis of plant tissue defined an area of stunted vegetation estimated at approximately 0.6-acre in size. This condition constituted a condition of "readily apparent harm", defined by 310 CMR 40.0955(3) as "stressed vegetation attributable to Site OHM" and is interpreted to reflect the toxicity of heavy metals (e.g., chromium) to plants.

The remediation area was conducted in the Site wetland including the Former Hamlen Property and the Former Raytheon Property at 430 Boston Post Road in Wayland, Massachusetts. Pre-excavation total PCB minimum and maximum concentrations on the Former Hamlen Property

were 1.2 and 129 part per million (ppm), respectively (Figure 1). The total PCB concentration was calculated by summing analytical detections of PCBs and one-half the method detection limit for non-detect PCBs.

Specific details regarding the remediation area for the Toxic Substance Control Act (TSCA) (40 CFR 750 and 761) were presented in the Application for Risk-Based Disposal Approval submitted on 23 December 2002 (revision and additional information submitted on 3 April 2003, 8 May 2003, and 28 August 2003) and the Phase IV Remedy Implementation Plan dated 27 December 2002.

Description of Remedial Actions Undertaken Remediation Area

Comprehensive Remedial Actions were completed from October 2003 through October 2004 on the Property. Remedial Activities required the excavation of approximately 3,494 cubic yards (yd^3) of sediment material from a 0.9 acre to a depth of approximately 2.4 ft on the Property. Following verification sampling of the excavated area, engineered soil was brought in as fill and the remediation area was returned to its original grades.

Post-excavation total PCB minimum and maximum concentrations on the Former Hamlen Property were 0.116 and 3.1 ppm, respectively (Figure 2). The total PCB concentration was calculated by summing analytical detections of PCBs and one-half the method detection limit for non-detect PCBs.

Wetland restoration was completed on 20 February 2004 using the planting specifications submitted in the permit applications. Minor substitutions were made based on species availability at that time of year. All substitutions were made using comparable species and were planted in the same zones. Wetlands monitoring will continue for the next five years. Additional plantings and invasive species control will be planned as needed. To date, plantings cover the entire remedial area.

Description of Use Restrictions for the Remediation Area

Remediation and restoration of the wetland area provides a level of protection to human health consistent with EPA guidance. It restores the site to a condition of "no significant risk", meets the Massachusetts Contingency Plan (MCP) performance standards for filing of a Response Action Outcome and represents a Permanent Solution for the site.

The US EPA approval for risk-based PCB remediation contained the provision requiring a Deed Notice be applied to the property. This

Activities and Use Limitations for the Former Hamlen Property includes a description of Permitted Activities and Uses Set Forth in the AUL Opinion (Section 5.0), Activities and Uses Inconsistent with the AUL Opinion (Section 6.0), and Obligations and Conditions Set Forth in the AUL Opinion (Section 7.0).

5.0 *PERMITTED ACTIVITIES AND USES SET FORTH IN THE AUL OPINION*

The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare and the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Property:

(i) The Property may be used for passive recreation including boating, fishing, etc; and

(ii) Such other activities or uses which, in the Opinion of the LSP, shall present no greater risk of harm to health, safety, public welfare and the environment than the activities and uses set forth in this Paragraph; and

(iii) All activities and uses consistent with those set forth in this Paragraph and not expressly prohibited by this Notice.

6.0 *ACTIVITIES AND USES INCONSISTENT WITH THE AUL OPINION*

Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Property, may result in a significant risk of harm to health, safety, public welfare or the environment or in a substantial hazard, are as follows:

(i) Residential, childcare, daycare, agricultural, horticultural, gardening, commercial or industrial activities, unless previously approved by the LSP in accordance with the obligations and conditions set forth in the AUL Opinion;

(ii) Groundwater use except for assessment or remedial purposes;

(iii) Other activities or uses that, in the Opinion of the LSP, would likely result in significant, risk from exposures to oil and/or hazardous material if site activities or uses were to take place on the Portion of the Property.

7.0 *OBLIGATIONS AND CONDITIONS SET FORTH IN THE AUL OPINION*

If applicable, obligations and/or conditions to be undertaken and/or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

(i) Certification in the form of documentation bearing the original signature, date and Seal of the LSP must be obtained by the Owner prior to implementation of the following activities and uses:

a) expansion or relocation of existing buildings laterally or vertically;

b) use of the Property for residential, childcare, daycare, recreational, agricultural, horticultural, or gardening activities, or for unrestricted public access;

c) subsurface activities including; excavation, new construction below grade, and

d) land development or construction involving changes in surface conditions (i.e., topography, surface cover, etc.) including installation of pavement, or building foundations,.

(ii) Parties conducting activities and uses described in 6.0(i) above, that, in the Opinion of the LSP, may include disturbance of contaminated media, waste or debris, or that could render subsurface contaminated media, waste or debris accessible to exposure, shall submit, for approval by the LSP, a contingency plan for the management of contaminated media, waste or debris, if encountered, including:

a) procedures for monitoring of contaminated media, waste or debris;

b) procedures for notification to the LSP of the discovery of contaminated media, waste or debris;
c) a certification that all response actions will be conducted under the supervision of the LSP;
d) a soils management plan including contingencies for handling contaminated soil and/or groundwater if activities may extend below the water table;
e) a certification that response personnel will comply with applicable safety regulations, including 29 CFR 1910.120;
f) a certification that contaminated waste, debris or media or remediation waste (pursuant to 310 CMR 40.0000) generated by such activities shall be handled, stored, transported and disposed in accordance with the applicable federal, state and local regulations.

(iii) The responsible parties and their representatives shall be granted unrestricted assess to the Property in order to conduct any and all activities associated with the performance of response actions as defined under the MCP, or any other applicable regulation.

8.0 CERTIFICATION

The undersigned LSP-of-Record hereby certifies that the terms of this Activity and Use Limitation Opinion are consistent with those of the Notice for the subject Property located at 433 Boston Post Road, Wayland, Massachusetts.

Date: 1/09/06

John C. Drobinski, LSP Reg. No. 2196

[LSP SEAL]

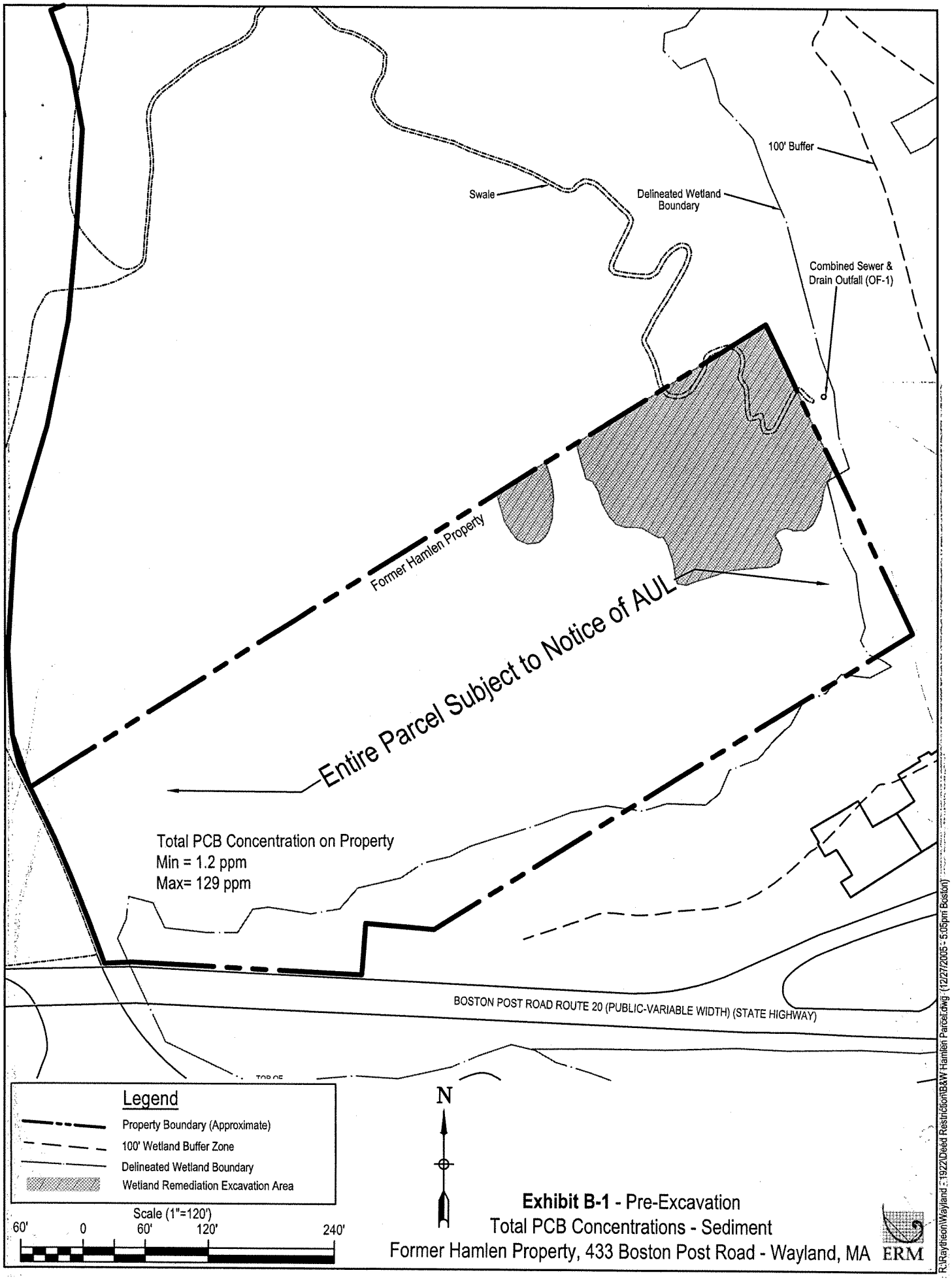

Exhibit B-1 - Pre-Excavation
Total PCB Concentrations - Sediment
Former Hamlen Property, 433 Boston Post Road - Wayland, MA

ERM

R:\Raytheon\Wayland :.1922\Deed Restriction\B&W Hamlen Parcel.dwg (12/27/2005 - 5:05pm Boston)

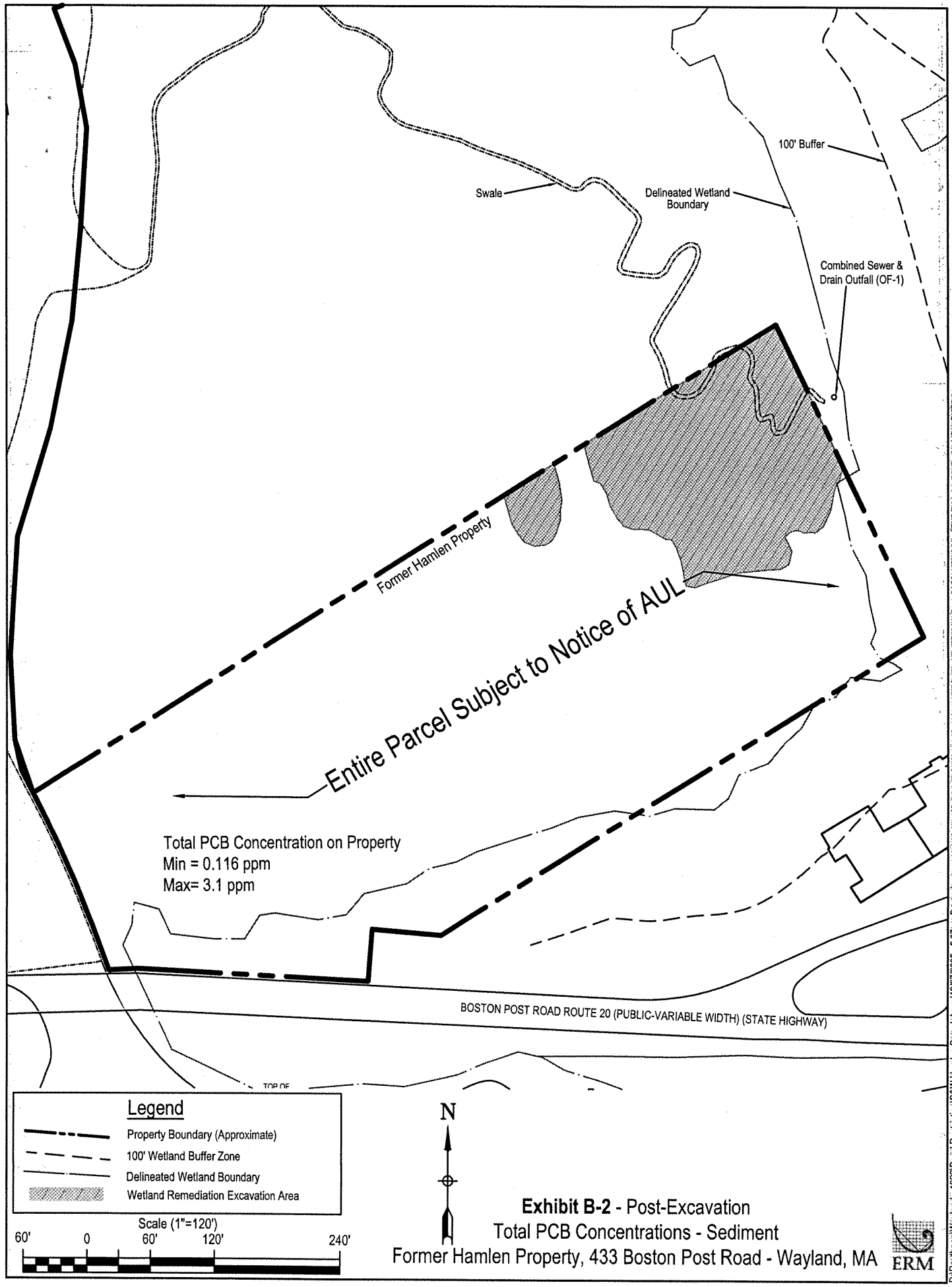

Exhibit B-2 - Post-Excavation
Total PCB Concentrations - Sediment
Former Hamlen Property, 433 Boston Post Road - Wayland, MA

ERM

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EXHIBIT C

BWSC Form 114, AUL Opinion Transmittal Form

Massachusetts Department of Environmental Protection **BWSC-114**

Bureau of Waste Site Cleanup

Release Tracking Number

3 - 13302

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

COMPLETE THIS FORM AND ATTACH AS AN EXHIBIT TO THE AUL DOCUMENT TO BE RECORDED AND/OR REGISTERED WITH THE REGISTRY OF DEEDS AND/OR LAND REGISTRATION OFFICE.

A. LOCATION OF DISPOSAL SITE AND PROPERTY SUBJECT TO AUL:

Disposal Site Name: Former Hamlen Property

Street: 433 Boston Post Road Location

City/Town: Wayland ZIP Code: 01778

Address of property subject to AUL, if different than above. Street:

City/Town: ZIP Code:

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

☑ Provide the LSP Opinion for a **Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1074 (complete all sections of this form).

☐ Provide the LSP Opinion for an **Amended Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1081(4) (complete all sections of this form).

☐ Provide the LSP Opinion for a **Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(3) (complete all sections of this form).

☐ Provide the LSP Opinion for a **Grant of Environmental Restriction**, pursuant to 310 CMR 40.1071, (complete all sections of this form).

☐ Provide the LSP Opinion for an **Amendment of Environmental Restriction**, pursuant to 310 CMR 40.1081(3) (complete all sections of this form).

☐ Provide the LSP Opinion for a **Release of Environmental Restriction**, pursuant to 310 CMR 40.1083(2) (complete all sections of this form).

C. LSP OPINION:

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

> *if Section B indicates that a **Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1074(1)(b);

> *if Section B indicates that an **Amended Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080(1) and 40.1081(1);

> *if Section B indicates that a **Termination of a Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083(3)(a);

> *if Section B indicates that a **Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1071(1)(b);

> *if Section B indicates that an **Amendment to a Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080(1) and 40.1081(1);

> *if Section B indicates that a **Release of Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083(3)(a).

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

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

See Section 4 of LSP Opinion

SECTION C IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection **BWSC-114**

Bureau of Waste Site Cleanup

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

Release Tracking Number: 3 - 13302

C. LSP OPINION: (continued)

LSP Name: John C. Drobinski LSP #: 2196 Stamp:

Telephone 617-646-7850 Ext.:

FAX: 617-267-6447

LSP Signature:

Date: 1/09/06

COMMONWEALTH OF MASSACHUSETTS JOHN C DROBINSKI No. 2196 REGISTERED LICENSED SITE PROFESSIONAL

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY FIND THE DOCUMENT TO BE INCOMPLETE.

FEB 08 2006

COMMONWEALTH OF MASSACHUSETTS,
MIDDLESEX S. S.
SOUTH DIST. REGISTRY OF DEEDS
CAMBRIDGE, MA
I HEREBY CERTIFY THE FOREGOING
IS A TRUE COPY OF A PAPER
RECORDED IN BOOK 46945
PAGE 9

REGISTER