PHASE II COMPREHENSIVE SITE ASSESSMENT ADDENDUM

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS
RTN 4-17604

Prepared for:

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EXECUTIVE SUMMARY

TRC Environmental Corporation (TRC) has prepared this Phase II Comprehensive Site Assessment (CSA) Addendum Report for the former Reliable Truss Company Site located at 246 River Road in New Bedford, Massachusetts (the "Site"). The Site is a Tier ID disposal site under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) that is tracked by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Number (RTN) 4-17604. TRC has completed this Phase II CSA submittal on behalf of the current property owner, the City of New Bedford (the "City").

The Site was developed as a commercial property beginning in 1924 and has a history of use as a lumber yard, manufacturer of wooden cabinets and a manufacturer of wooden trusses until about 2001, when the Site buildings were demolished. The property is currently owned by the City and is vacant. The future redevelopment scenario anticipated for the Site is a public waterfront park with a walking trail.

TRC performed Site investigation activities at the Site on behalf of the City between February 2006 and May 2007 to supplement existing site data. TRC completed a geophysical survey; the installation of eleven (11) soil borings, two of which were completed as overburden groundwater monitoring wells at new locations; and the installation of four additional soil borings which were completed as overburden monitoring wells to replace damaged or destroyed wells. TRC collected 32 soil samples for analysis of extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals. TRC also collected 6 groundwater samples for analysis of PAHs, total and dissolved metals, and methyl butyl ether (MTBE) to aid in determining the nature and extent of contamination at the Site. Based on the results of the Phase II CSA, TRC has developed the following conclusions:

- The Site is underlain by a fill layer, consisting of a heterogeneous mixture of sand, silt, gravel, brick, coal and coal ash, varying in thickness from approximately one to seven feet across the Site. Fine to coarse sand and gravel with lesser amount of fines and cobbles underlie the fill material.

- Concentrations of lead were reported above the Method 1 S-1 soil standard of 300 mg/kg in three separate areas of the Site, identified as Area 1, Area 2, and Area 3. Concentrations of lead above the Method 1 soil standard appear to be generally limited to the 0-4 foot depth interval and do not appear attributable to point-source contamination. Site lead contamination appears to be attributable to historic fill materials. A lead concentrations above Method 1 S-1 standard was reported in one deeper sample (in TRC-6 from 3 - 6.5 feet below grade), adjacent to Area 2.

- Individual samples concentrations of lead in soil were reported above the upper concentration limit (UCL) of 3,000 mg/kg in samples AB-13 (Area 1), TRC-4 (Area 2), AB-31 and AB-36 (Area 3) at depths limited to the 0-4 foot depth interval.

- Individual sample concentrations of antimony, barium, beryllium, mercury, nickel, and vanadium were detected in the fill material and native soil below applicable Method 1 S-1 soil standards. Cadmium and zinc were detected above the Method 1 S-1/GW-3 standard of 2 mg/kg and 2,500 mg/kg, respectively from one sample (TRC-8) from the 0-3 ft depth interval.

- Individual sample concentrations of several PAHs were detected in fill materials and native soil below applicable Method 1 S-2 soil standards. Benzo(a)pyrene, benzo(a)anthracene, and dibenzo(a,h)anthracene were identified in one sample (AB-9) above the Method 1 S-1 soil standards from the 0-4 foot depth interval.

- EPCs for VPH, EPH, PAHs, and PCBs do not exceed Method 1 soil standards under current or future use scenarios.

- EPCs for lead in accessible surface soils and potentially accessible subsurface soils impacted by historical fill were greater than applicable Method 1 S-1 and S-2 soil standards of 300 mg/kg. Individual sample concentrations of lead in four accessible surface soil samples and one potentially accessible subsurface soil sample were also greater than Upper Concentration Limit (UCL) of 3,000 mg/kg.

- EPCs for chromium in accessible surface soils impacted by historical fill were greater than the applicable Method 1 S-1 soil standard of 30 mg/kg.

- Groundwater results for total lead were reported above the Method 1 GW-3 groundwater cleanup standard in two wells (MW-2 and MW-4). However, the results of dissolved lead from these two wells were either reported well below the GW-3 standard or was not detected, strongly suggesting that the elevated total lead concentrations was a result of lead sorbed onto particulates in the sample and not indicative of the water quality of the aquifer.

The results of Numerical Ranking System (NRS) scoring reveal a Site score of 310. This score classifies this Site as a Tier II disposal site under the MCP.

A final Phase II outcome has not been achieved at this time. The extent of lead contamination in surficial Site soils further south of the Site's southern property boundary is not fully defined. Additionally, sediment samples are recommended to be collected near Area 3 to confirm the absence of Site contaminants and eliminate sediment as potential exposure point.

1.0 INTRODUCTION

TRC prepared this Phase II Comprehensive Site Assessment (CSA) Addendum Report for the former Reliable Truss Company Site located at 246 River Road in New Bedford, Massachusetts (the "Site"). The location of the Site is shown on Figure 1.

The Site is a Tier ID disposal site under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) tracked by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Number (RTN) 4-17604. TRC completed this Phase II CSA Addendum submittal on behalf of the current property owner, the City of New Bedford (the "City").

This Phase II CSA Addendum Report was prepared using data generated during investigations conducted at the Site as part of the City's Brownfields Program, funded by a grant from the United States Environmental Protection Agency (EPA). The work described herein was performed in accordance with EPA-approved TRC's Quality Assurance Project Plan (QAPP) dated February 2006 and QAPP Addendum D dated December 2006 prepared by TRC.

TRC performed Site investigation activities at the Site on behalf of the City between February 2006 and May 2007. TRC completed a geophysical survey, the installation of eleven (11) soil borings, two of which were completed as overburden groundwater monitoring wells at new locations; and the installation of four additional soil borings that were completed as overburden monitoring wells to replace damaged or destroyed wells. TRC collected 32 soil samples for analysis of extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals and six groundwater samples for analysis of PAHs, total and dissolved metals, and methyl butyl ether (MTBE) to determine the nature and extent of contamination at the Site.

The investigative work completed at the Site by TRC under the Brownfields program supplements previous assessment work at the Site by others. The results of TRC's investigative work were evaluated with respect to regulatory requirements under the MCP, and do not fulfill the data requirements for a Phase II CSA per the MCP (310 CMR 40.0830). Collection of soil and sediment data at the southern end of the Site is necessary complete Site characterization. A Stage I ecologic risk assessment is necessary to complete risk characterization.

This report is subject to the Limitations presented in Appendix A. A Comprehensive Response Action Transmittal Form (BWSC-108) is included in Appendix B. Other appendices provided herein include Appendix C (Geophysical Survey Report), Appendix D (Soil Boring Logs), Appendix E (Laboratory Data Reports), Appendix F (Risk Characterization Tables), and Appendix G (Numerical Ranking System [NRS] Scoresheet and Tier Classification Transmittal Form [BWSC107]). Copies of the public notification letters are provided in Appendix H.

1.1 Objectives

The objectives of this Phase II CSA Addendum are to evaluate the nature and extent of contamination at the Site, complete a risk characterization, and determine the need for additional remedial actions per the MCP (310 CMR 40.0833). Work performed at the Site by TRC

addressed data gaps and supplemented previous work at the Site, as presented in the following reports:

- Ambient, 2001. *Phase I Environmental Site Investigation Report, Reliable Truss Company Property, 246 River Road, New Bedford, Massachusetts 02745*. Ambient Engineering, Inc. February.

- Atlantic, 2002. *Phase II Comprehensive Site Assessment Report, River's End Park, 246 River Road, New Bedford, Massachusetts 02745*. Atlantic Environmental Technologies, Inc. September 25.

2.0 DISPOSAL SITE BACKGROUND INFORMATION

Consistent with 310 CMR 40.0835(4) subparts a through c, the following provides basic information related to the Disposal Site (name, location, etc.), detailed Disposal Site maps depicting relevant investigation and sampling points, and an updated Disposal Site History. This section also addresses other information that requires updating or was not fully addressed in the Phase II CSA prepared by Atlantic Environmental Technologies, Inc. (AET) and dated September 25, 2002 (Atlantic, 2002).

2.1 Disposal Site Information

Consistent with 310 CMR 40.0835(4)(a) of the MCP, the following table summarizes the required Disposal Site Information.

Site/Disposal Site Name	246 River Road (Former Reliable Truss)
Address	246 River Road
City	New Bedford
Release Tracking Number	4-17604

2.2 Disposal Site Maps

Consistent with 310 CMR 40.0835(4)(b), the following table summarizes the Disposal Site Maps and other supporting figures that are provided as part of this Phase II CSA Addendum.

Figure 1	Site Location Map
Figure 2	Disposal Site Plan
Figure 3	MassGIS 21-E Map
Figure 4	Estimated Groundwater Contour Plan
Figure 5	Extent of Lead in Groundwater
Figure 6	Extent of Lead in Soils 0-3 feet Below Ground Surface
Figure 7	Extent of Lead in Soils Greater Than 3 feet Below Ground Surface
Figure 8	Schematic Conceptual Site Model

2.3 Disposal Site History

Consistent with 310 CMR 40.0835(4)(c), the following presents an updated Site History. This section also includes an updated Site Description.

2.3.1 Site Description

The Site is an approximate 2.9-acre irregularly-shaped lot at 246 River Road in New Bedford, Massachusetts. The Universal Transverse Mercator (UTM) coordinates for the Site are N4503309 and E337987. A Site Location Map is provided as Figure 1.

The Site area was determined based on an evaluation of areas of fill as determined by boring logs and geophysical survey, the horizontal extent of soil contamination greater than background and MCP Method 1 Standards, and the areas of EPA soil and sediment cleanup in the Acushnet River abutting the Site. The Site is bounded by the Acushnet River to the east and north, River Road and residential housing to the west and an undeveloped section of Truro Street to the South. The horizontal extent of soil contamination beyond the southern portion of the Site is partially defined. A Disposal Site Map is presented as Figure 2.

Review of USGS Topographic Quadrangle New Bedford North, MA dated 1979 indicates that the Site is located approximately 40 feet above mean sea level (amsl). The topography of the Site is generally level with River Road with little relief except for a steep east-sloping embankment and concrete wall at the northern boundary of the Site, along the Acushnet River. The river shoreline at the Site is approximately 900-feet long.

There are no buildings on the Site. According to a Phase I Environmental Site Assessment (ESA) report by Ambient Engineering, Incorporated. (AEI), dated February 2001, all buildings and associated structures (lumber racks and sheds) were demolished and removed in 2001 (AEI, 2001). Structures remaining at the Site after the 2001 demolition include a 110-foot long concrete wall and stone embankment along the western shore of the Acushnet River near the northeast end of the Site. Remnants of a concrete foundation pad and a 20-foot square by 2-foot deep concrete vault that opens into the river are located south of this concrete wall were noted by AEI. The Site is unpaved with the exception of an approximately 2,000-foot square area of concrete and asphalt pavement located near the northwest corner of the Site along River Road. There is an approximately 4,000-sqare-foot square area of dense vegetation near the southeastern corner of the Site. A chain-link fence with locked access gates extends along the western and southern borders of the Site property. The River Road Site boundary is also protected by temporary concrete barriers. There are underground concrete storm water drains across the north and south ends of the Site, with outfalls to the Acushnet River. Two storm drain catch basins, which reportedly discharged to the Acushnet River, were formerly located on the west side of the former Site building. AEI and Atlantic Environmental Technologies, Incorporated (AET) reported that the catch basins and their outfall(s) were not observed during their Phase I and II investigations. A Site Plan is provided as Figure 2.

The Site is currently vacant with no on-site workers or residents. The western and southern boundaries of the Site are primarily fenced. However, it is possible for trespassers to access the Site from the Acushnet River or bypassing the fences. Surrounding properties include the Acushnet River to the north and east, an undeveloped parcel on the south side of Truro Street, and residential properties to the west across River Road.

The Site is not located within a USEPA Sole Source Aquifer or MassDEP approved Zone II, Interim Wellhead Protection Area (IWPA), Surface Water Supply Zone A, or Potentially Productive Aquifer (PPA). There are no Public Water Supplies within 0.5-miles of the Site. The Site is located within both high and medium yield Non-Potential Drinking Water Source Areas (NPDWSA). There are no Rare Wildlife, Certified Vernal Pools or Areas of Critical Environmental Concern (ACEC) on the Site. A wetland is located on the southeastern corner of the Site. The eastern boundary of the Site along the Acushnet River is located within a Federal

Emergency Management Agency (FEMA) 100 Year Floodplain. The Site is Protected Open Space. According to Massachusetts Geographic Information System (MassGIS) Demographic data viewer for Census 2000, the estimated total population within 0.5-miles of the Site is approximately 6,000. Review of the USGS Topographic Quadrangle New Bedford North, MA dated 1979 and MassGIS Assessor's 2005 Parcel data viewer indicates there are no schools within 500-feet of the Site. A MassGIS MassDEP Site Scoring Map is provided as Figure 3.

2.3.2 Site History

The Site was developed as a commercial property beginning in 1924 and has a history as a lumber yard, manufacture of wooden cabinets and wooden trusses until about 2001, when the Site buildings were demolished. The property is currently owned by the City and vacant. A detailed site history was provided in a February 2001 AEI Phase I ESA report and updated in the AET February 2002 Phase II CSA report. The future redevelopment scenario anticipated for the Site is a waterfront park and walking trail.

2.3.3 Petroleum and Hazardous Substance Storage History

According to the AEI Phase I Environmental Site Assessment (ESA) report reviewed by TRC, a 275-gallon single wall steel aboveground storage tank (AST) used to store kerosene for a heating system was formerly located outside the southeast corner of the former Site building. Another 275-gallon AST used to store diesel fuel for forks lifts was also formerly located outside the south wall of the former building at the Site. AEI reported that there was no visual evidence of leaks or spills at either AST location. The diesel fuel AST was removed from the Site and relocated to another Reliable Truss facility prior to February 2001 (Ambient, 2001). According to the AET Phase II CSA report reviewed by TRC, the kerosene AST was removed from the Site by October 2001 (Atlantic, 2002).

The February 2001 Phase I ESA report also identified several five-gallon or smaller containers of oil and other fluids (resins, solvents, lubricants, and unknown liquids) in the former Site building and sheds. One 55-gallon polyethylene drum with unknown contents was identified in a former shed near the southwest corner of the former Site building during a February 2001 inspection. The drum was reported to be full and closed with no evidence of leakage. AEI identified a 55-gallon steel drum identified as bar and chain oil inside the western corner of the former Site building. AEI also observed minor oil stains beneath the spout of the oil drum on the concrete floor of the former Site building (Ambient 2001). In addition, AEI identified one dry transformer located inside the "front" wall of the former Site building. No evidence of leaks or spills were observed near the transformer by AEI (Ambient, 2001).

Suspected asbestos containing materials (ACM) were observed in two locations in the former Site building by AEI in February 2001. Friable white insulating material covering a boiler was observed in a utility room at the "rear" of the former Site building. A protective panel located in front of the transformer at the "front" of the former Site building was constructed of cement like gray material (Ambient, 2001). According to the AET Phase II CSA report, all oil and hazardous materials containers and ACM had been removed from the Site by October 2001 as part of the demolition of Site buildings (Atlantic, 2002).

2.3.4 Previous Subsurface Investigations

Previous subsurface environmental investigations at the Site were conducted by AET on behalf of the United States Department of Commerce's (DOC) National Oceanic and Atmospheric Administration (NOAA) Habitat Conservation Division.

2.3.4.1 USEPA PCB Investigation and Cleanup.

According to the AET Phase II CSA report, areas of the Site along western the bank of the Acushnet River up to about 50-feet inland from the Mean High Water (MHW) level are located within the New Bedford Harbor Comprehensive Environmental Response and Liability Act (CERCLA) site number MAD980731335. The Site is within the section of the river located north of Wood Street in New Bedford MA and identified as Compliance Demonstration Area (CDA) Numbers 2 and 6.

In May 2001 sampling was performed in floodplain areas of the Acushnet River to identify PCBs concentrations by the USEPA. On May 21, 2001, 67 soil and sediment samples were collected from the ground surface to 1-foot below ground surface (bgs), 1 to 2-feet bgs and 2 to 3-feet bgs from 22 locations at the Site and analyzed for total PCBs. Total PCB concentrations in soil at the Site ranged from 0.014 to 0.85 milligrams per kilogram (mg/kg), which is less than EPA's Maximum Contaminant Level (MCL) established in the Record of Decision (ROD) and the current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standard of 2 mg/kg. Detected concentrations of PCBs in nine sediment samples collected from three locations near the high water line of the Acushnet River adjacent the Site ranged from 5.5 to 680 mg/kg. The PCB concentrations in sediment increased with depth at two of the three sampling locations (Atlantic, 2002).

PCB soil and sediment cleanup actions consisting of excavation and replacement with clean backfill were conducted within the CDAs adjacent to and including the Site by EPA between 2002 and 2003. According to an April 9, 2004 Plan entitled *Cleanup Zones and Residual PCB Levels Remaining after Cleanup North of Wood Street*, prepared by Tetra Tech FW, Incorporated, the average PCB concentrations in 48 post excavation samples collected from CDA 2 prior to the placement of clean backfill was 4.4 mg/kg. The average post excavation PCB concentration in 61 post excavation samples from CDA 6 was 7.0 mg/kg. The locations of CDA 2 and 6 are shown on Figure 2.

2.3.4.2 AET – Phase II CSA

In June and August 2002 AET conducted two phases of environmental field sampling at the Site on behalf of NOAA. In June 2002 AET drilled 12 soil borings (AB-1 through AB-12) at the Site and collected 12 soil samples from the ground surface to 4-feet bgs. AET also drilled and installed seven overburden groundwater monitoring wells (AW-1 through AW-7) with five foot long screen interval extending to depths of 8 to 10-feet below ground surface (bgs) at the Site. AET collected seven groundwater samples from these wells in June 2002. In August 2002, AET drilled 24 additional soil borings (AB-13 through AB-36) at the Site and collected 48 soil samples from the ground surface to 2-feet bgs and from 2-feet bgs to 4-feet bgs.

Soils encountered at the Site during 2002 subsurface investigation consisted of fill material reportedly extending to depths of 8 to 11-feet bgs and natural sediments from 12 to 15.5-feet bgs. AET reported that the fill material was primarily comprised of sand and gravel with lesser fractions of organic material, silt, course gravel, and pebbles. Metal, plastic, rubber and ceramic fragments and wood and coal ash were observed within the course gravel and pebble fraction of fill at the Site. AET reported that the natural sediments were primarily comprised of silt with lesser fractions of organic material and lenses of fine sand and gravel. Bedrock was not encountered at the Site during subsurface investigations by AET.

Groundwater depths measured at the Site by AET in June 2002 ranged from 7.5 to 9.5-feet bgs. Groundwater elevations were not determined during the AET investigation and monitoring wells AW-1 through AW-7 no longer exist at the Site.

AET Soil Sampling

Each of the 12 soil samples collected by AET in June 2002 were analyzed for Volatile petroleum hydrocarbon (VPH) and extractable petroleum hydrocarbon (EPH) carbon fractions by MassDEP Methods, Resource Conservation and Recovery Act (RCRA) metals by EPA Methods 6010B/7471A, volatile organic compounds (VOCs) by EPA Method 8260B, and semi-volatile organic compounds (SVOCs) by EPA Method 8270C. Three of the June 2002 soil samples (AB-2, AB-4 and AB-7) were also analyzed for total PCBs by EPA Method 8082. The 48 soil samples collected in August 2002 were analyzed for total lead by EPA Method 6010B.

Results of the 2002 soil sample chemical analysis indicated the following:

VOCs: No VOCs detected.

VPH: No VPH carbon fractions detected.

EPH: C19-C36 aliphatics and/or C11-C22 aromatics were detected at each of the 12 tested Site soil samples at concentrations less than current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standards.

SVOCs: Two or more SVOCs including; acenapthlylene; acenapthene; dibenzofuran; fluorene; phenanthrene; anthracene; fluoranthene; pyrene; benzo(a)anthracene; chrysene; benzo(b)fluoranthene; benzo(a)pyrene; indeno(1,2,3-cd)pyrene; dibenzo(a,h)anthracene; and benzo(g,h,i)perylene were detected in six of the 12 Site soil samples collected in June 2002. All detected SVOC concentrations were less than current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standards except for benzo(a)anthracene, benzo(a)pyrene; and dibenzo(a,h)anthracene in the AB-9 sample. AET reported that the AB-9 soil sample primarily consisted of coal ash and that the detected SVOCs were polycyclic aromatic hydrocarbons (PAH) characteristic of fill material containing coal and wood ash.

Metals: One or more metals including, antimony, barium, cadmium, chromium, lead, and mercury were detected in each of the 12 Site soil samples collected in June 2002. All detected

metals concentrations were less than current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standards except for antimony and cadmium in the AB-12 sample, chromium in the in the AB-2, AB-8 and AB-12 samples and lead in the AB-1, AB-2, AB-10, AB-11, AB-12 samples. Lead was also detected 40 of the 48 Site soil samples collected by AET in August 2002 with lead concentrations greater than the current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standard in 23 samples from 8 of 24 boring locations. Concentrations of lead detected in three samples (AB-13A, AB-31B, and AB-36B) collected by AET in 2002 were greater than the current MCP UCL of 3,000 mg/kg.

PCBs: Aroclor-1254 was detected at one (AB-2) of three Site soil samples tested for PCBs in June 2002. The detected concentration of Aroclor-1254 was less than the current MCP Method 1 S-1/GW-2 and S-1/GW-3 Standards.

Based on the results of soil testing at the Site, AET concluded that there were three distinct areas of elevated lead concentrations in soil. These areas are shown on Figure 2 as Areas 1, 2, and 3. Laboratory analysis results of June and August 2002 soil samples collected at the Site by AET are summarized in Table 2.

AET Groundwater Sampling

Seven groundwater samples collected by AET in June 2002 were analyzed for VPH and EPH carbon fractions by MassDEP Methods, 8 RCRA metals by USEPA Methods 6010B/7471A, and VOCs by USEPA 8260B.

Results of the 2002 groundwater sample chemical analysis indicated the following:

VOCs: No VOCs were detected in the seven groundwater samples except for 0.5 micrograms per liter (ug/l) MTBE at monitoring well AW-2. The detected MTBE concentration was less than the current MCP GW-2 and GW-3 Standards.

VPH: No VPH carbon fractions detected.

EPH: No EPH carbon fractions detected.

Metals: No metals were detected in the seven groundwater samples with the exception of 0.018 ug/l and 0.008 ug/l lead at monitoring wells AW-1 and AW-3, respectively. The detected lead concentrations were less than the current MCP GW-2 and GW-3 Standards.

2.4 Site Information Updates

As set forth in 310 CMR 40.0835(4) a through c, the following section provides or discusses updates to missing or changed information from the AET Phase II CSA report:

- **Radius Map.** The AET Phase II CSA did not include 500 foot and ½-mile radii on the Site Locus Map. Figures 1 and 3 of this report provide the required radii.

- **Groundwater Elevations/Map.** The AET Phase II CSA did include a determination and graphic depiction of groundwater elevations at the Site. TRC installed six monitoring wells at the Site and surveyed groundwater elevations. Groundwater elevations and flow are described in Section 3.2.2 of this report and are depicted on Figure 4.

- **Extent of Soil Contamination.** The horizontal and vertical extent of soil contamination in Site soil was not fully characterized in the February 2002 AET Phase II CSA. Therefore, TRC conducted a geophysical survey to identify filled areas of the Site and collected 32 soil samples for chemical analysis. The extent of soil contamination is discussed in Section 4.2.1 of this report and is depicted on Figures 6 and 7.

3.0 SITE HYDROGEOLOGICAL CHARACTERISTICS

TRC performed Site investigation activities at the Site on behalf of the City between February 2006 and May 2007. Unless otherwise specified, all work was performed in accordance with the January 2006 EPA-approved QAPP and the December 2006 EPA-approved QAAP Addendum D, both of which were prepared by TRC.

3.1 Relevant Subsurface Investigation/Documentation

Information and observations relative to Site geology and hydrogeology are summarized below. Observations provided by TRC field personnel represent Site conditions between February 2006 and May 2007 subsurface investigative activities at the Site.

3.1.1 Scope of TRC's 2006 Investigation

Based on the results of previous site investigations conducted by others, TRC identified areas of interest requiring further site testing including the following:

- **Fill Material.** Fill material was identified as the source of historical contamination at the Site. The horizontal and vertical extent of fill that was not fully defined in prior investigation was further investigated by TRC through a combination of geophysical surveys and soil borings with soil sampling.

- **Soil and Groundwater – Site Wide.** TRC conducted additional soil boring and monitoring wells installations and sampling to further evaluate the nature and extent of petroleum hydrocarbons, VOCs, SVOCs, metals, and PCBs in soil and groundwater at the Site and to further characterize Site hydrogeology. TRC's field investigation efforts are summarized below.

3.1.1.1 Geophysical Survey

Hager GeoScience, Incorporated. (HGI) performed a geophysical survey at the Site for TRC on February 27 and 28, 2006. The geophysical survey consisted of a ground penetrating radar (GPR) survey supplemented by electromagnetic (EM) conductivity techniques to enhance data interpretation. GPR and EM data were collected across accessible portions of the Site, along transects spaced ten-feet apart. Access to the southeastern portion of the Site was limited by dense vegetation. Acquired GPR and EM data were collected, processed, mapped and interpreted as described in detail in a March 13, 2006 Geophysical Survey Report prepared by HGI. A copy of the HGI report is provided in Appendix C.

3.1.1.2 Soil Boring Installation and Sampling

On April 5, 2006 TRC advanced 11 soil borings (TRC-1 through TRC-11) to the depth of native soil using direct-push drilling techniques using. Continuous soil samples were collected during drilling activities using a 60-inch long macrocore sampler with dedicated disposable acetate liners. Soil boring locations are shown on Figure 2.

TRC field personnel logged soils according to TRC Standard Operating Procedures (SOPs), generally accepted practice, and the Unified Soil Classification System (USCS). Boring logs are provided in Appendix D.

Soils collected during boring activities were screened visually for the presence of coal, coal ash, or wood ash and tested for the presence of organic vapors using MassDEP jar headspace method and a calibrated photoionization detector (PID). Between two and four soil samples were collected from the shallow (0 to 3-feet bgs), intermediate (3 to 6-feet bgs) and deep (greater than 6-feet bgs) intervals at each of boring and submitted for laboratory analysis. TRC submitted 28 soil samples collected on April 5, 2006 for analysis of EPH, VPH, PAHs, and 14 MCP metals. Two shallow soil samples from borings (TRC-4 and TRC-8) located within previously identified areas (Areas 2 and 3) with elevated soil contamination were also submitted for analysis of PCBs. Laboratory analysis data reports are provided in Appendix E.

3.1.1.3 Monitoring Well Construction and Groundwater Sampling

Two of the soil borings advanced on April 5, 2006 were completed as groundwater monitoring wells (MW-1 and MW-2) constructed of 2-inch inside diameter (I.D.) schedule 40 polyvinyl chloride (PVC) well materials. A six-foot and ten-foot length of 10-slot (0.010-inch machine slotted) PVC screen was installed across the water table in unconsolidated soils, for wells MW-1 and MW-2 respectively. The annulus around the well screen was filled with #2 well gravel to a level of approximately two feet above the top of the screen to create a sand filter pack. An approximately two-foot thick bentonite seal was installed above the sand pack, and the remainder of the annulus around the well riser was backfilled with native soil cuttings. Groundwater monitoring wells were installed with flush-mounted roadboxes set in cement at the ground surface.

Groundwater monitoring wells MW-1 and MW-2 were developed on April 5, 2006 using a dual stage submersible pump to purge water until it ran visibly clear. Groundwater generated during development was dispersed on the ground surface at each well location. The wells were allowed to stabilize for more than one week prior to sampling.

On January 24, 2007 TRC advanced four additional monitoring wells (MW-3 through MW-6) using an 8.5-inch diameter hollow-stem auger drill rig to replace select monitoring wells, which had likely been destroyed during 2001 demolition activities at the Site. During monitoring well drilling activities continuous soil samples were collected using a 24-inch long by 2-inch I.D. steel split spoon. Soil boring locations are shown on Figure 2.

TRC field personnel logged soils during well installation activities according to TRC SOPs, generally accepted practice, and the USCS. Boring and well construction logs are provided in Appendix D.

Soils collected during monitoring well activities were screened visually for the presence of coal, coal ash, or wood ash and tested for the presence of organic vapors using MassDEP jar headspace method and a calibrated PID. One shallow (0 to 3-feet bgs) and one deep (greater

than 6-feet bgs) interval soil sample was collected from the MW-5 and MW-6 borings and submitted for laboratory analysis. Four soil samples collected during monitoring well installation activities on January 24, 2007 were analyzed for PAHs and metals. Laboratory analysis data reports are provided in Appendix E.

Wells MW-3 though MW-6 were completed as groundwater monitoring wells constructed of 2-inch I.D. schedule 40 PVC riser with a ten-foot length of 10-slot (0.010-inch machine slotted) PVC screen installed across the water table in unconsolidated soils. The annulus around the well screen was filled with #2 well gravel to a level of approximately two feet above the top of the screen to create a sand filter pack. An approximately two-foot thick bentonite seal was inserted above the sand pack, and the remainder of the annulus around the well riser was backfilled with native soil cuttings. Groundwater monitoring wells were installed with flush-mounted roadboxes set in cement at the ground surface. Table 1 provides well construction details.

Groundwater monitoring wells MW-3 through MW-6 were developed on January 24, 2007 using a dual stage submersible pump to purge water until it ran visibly clear. Groundwater generated during development was dispersed on the ground surface at each well location. The wells were allowed to stabilize for more than one week prior to sampling.

Groundwater samples from six newly installed monitoring wells were collected on February 6, 2007 using EPA low stress (low flow) sampling methods through the use of submersible bladder pumps. Groundwater samples were submitted for laboratory analysis of PAH, total metals, dissolved lead, and MTBE. Each of the six groundwater samples were analyzed for PAHs and total metals. Groundwater samples from MW-2 and MW-4 were analyzed for dissolved lead. Two groundwater samples collected from well MW-3 and MW-4 were analyzed for MTBE. Dissolved lead samples were filtered in the field using a 0.45-micron in-line filter. Laboratory analysis data reports are provided in Appendix E.

3.1.1.4 Groundwater Elevation Survey

On May 3, 2007 TRC completed a relative elevation survey to estimate the slope of the groundwater potentiometric surface beneath the Site and evaluate the direction of groundwater flow. Depth to water measurements recorded on February 6, 2007 and May 3, 2007 and relative elevation data are provided in Table 1.

3.2 Site Geologic/Hydrogeologic Conditions

3.2.1 Site Geology

The geology across the Site primarily consists of a fill layer underlain by fine to coarse sand, gravel, and cobbles with minimal fine material. Because the areas of elevated lead concentrations appear to be contained within the fill material, the thickness of the fill layer was further characterized by conducting a geophysical survey in February 2006 and through the subsequent installation of additional soil borings. The fill material varies in thickness from an average of approximately one-to-two feet in the southern area of the Site, up to six or seven feet

in select northeastern and northwestern portions of the Site, near MW-1 and MW-4. The fill layer consists of a heterogeneous mixture of sand, silt, gravel, brick, coal, and coal ash.

3.2.2 Site Hydrogeology

On February 6 and May 3, 2007 TRC conducted groundwater measurements at monitoring wells MW-1 though MW-6 to determine relative groundwater elevations and to approximate the slope of the potentiometric surface of the groundwater table beneath the Site. Depths to groundwater on February 6, 2007 ranged from 3.59 to 6.48-feet bgs. Depths to groundwater on May 3, 2007 ranged from 3.33 to 5.38-feet bgs. The groundwater table beneath the Site is within the unconsolidated soil, primarily consisting of fill. Non-aqueous phase liquid (NAPL) was not detected in any monitoring well during this investigation based on measurement with an electronic interface probe.

Based on the data from February 6, 2007, the groundwater table slopes northeast toward the Acushnet River at an estimated gradient of 0.01 feet per foot. Relative groundwater elevations measured on May 3, 2007 were generally consistent with groundwater elevations collected on February 6, 2007. Groundwater elevations and estimated contours from February 6, 2007 are shown on Figure 4.

Groundwater elevations and flow direction at the Site are likely to vary daily because of influence from tidal fluctuations in the adjacent Acushnet River, which ranges up to approximately five feet.

3.2.3 Flooding Potential

As shown in Figure 3, the eastern portion of the Site, along the Acushnet River is within a 100 year flood plain based on MassGIS mapping.

4.0 NATURE AND EXTENT OF CONTAMINATION

Consistent with 310 CMR 40.0835(4)(f) of the MCP, the following presents an analysis of the nature and extent of compounds detected in soil and groundwater at this Site. Tables summarizing the results of chemical analyses for soil and groundwater samples collected at the Site by TRC are provided as Tables 2 and 3, respectively. The following sections summarize analytical results for soil and groundwater samples collected during TRC's investigation activities from February 2006 through May 2007. A data usability assessment was performed by TRC to evaluate suitability of the data obtained in fulfilling the project objectives. The data usability assessment is included in Section 7.0 of this report. Copies of the Laboratory Data Reports are provided in Appendix E.

As discussed in Section 6.0 of this Report, the applicable MCP Method 1 soil and groundwater categories for the Site under current conditions are S-1 and S-2 and S-3 Site soils and GW-3 for groundwater. Site soils were also compared to S-1 standards to evaluate potential unrestricted future use of this property. The soil analytical results were compared to MCP Method 1 S-1/GW-3 and S-2/GW-3 standards, and groundwater results are compared to MCP Method 1 GW-3 standards to evaluate the concentrations of the detected compounds. A MCP Method 1 Risk Characterization has been completed for this site and is presented in Section 6.0 of this Report.

4.1 Analytical Results

The following is a discussion of the results of laboratory analysis for soil and groundwater samples collected at the Site. Samples were collected in accordance with TRC's January 2006 EPA-approved QAPP and December 2006 EPA-approved QAPP Addendum D, unless otherwise noted. Tables summarizing the results of chemical analysis for soil and groundwater samples collected at the Site are provided in Tables 2 and 3, respectively, of this report. Copies of the Laboratory Data Reports are provided in Appendix E.

4.1.1 Soil Analytical Results

TRC submitted a total of 37 soil samples for laboratory analysis for one or more of the following parameters: EPH, VPH, PAHs, PCBs, and 14 MCP metals. Thirty three (33) soil samples were collected and submitted from 11 soil borings installed in April 2006 and four soil samples were collected and submitted from MW-5 and MW-6 (two soil samples from each) installed in January 2007. Results of laboratory analysis of Site soils are provided in Table 2.

4.1.1.1 Soil VPH Results

No PID readings above background levels were noted in the soil during TRC's investigative activities, nor was olfactory evidence suggesting petroleum contamination noted. Therefore, only one sample (1-2 ft from TRC-8) was submitted for VPH analysis to confirm field observations. No VPH compounds were reported above the laboratory's detection limits.

4.1.1.2 Soil EPH Results

No PID readings above background levels were noted in the soil during TRC's investigative activities, nor was olfactory evidence suggesting petroleum contamination noted. Therefore, only three samples (5-6 ft from TRC-1; 1-2 ft from TRC-4 and TRC-8) were submitted for EPH analysis to confirm field observations. C19-C36 aliphatics and C11-C22 aromatic hydrocarbons were detected in the samples collected from TRC-4 and TRC-8, but were below MCP S-1/GW-3 standards. EPH carbon fractions were not detected above the laboratory's detection limits in the sample collected from TRC-1.

4.1.1.3 Soil PAH Results

PAHs were either not detected or detected in low concentrations below MCP Method 1 S-1/GW-3 standards from the soil samples analyzed from the fill material. PAHs were not detected in the soil samples collected from the native soil (locations TRC-1, TRC-4, TRC-11, and MW-6).

4.1.1.4 Soil PCB Results

PCBs were not detected above the laboratory detection limits in the analyzed samples with the exception of the sample collected from TRC-1 from 0-3 ft bgs. One PCB aroclor (Aroclor-1254) was detected at a concentration of 0.13 mg/kg, below the MCP Method 1 S-1/GW-3 standard of 2 mg/kg.

4.1.1.5 Soil Metals Results

<u>Lead</u>

Lead was detected above the MCP Method 1 S-1/GW-3 standard of 300 mg/kg from surface soil samples (0-3 ft bgs) collected from locations TRC-4, TRC-8, TRC-9, TRC-10, TRC-11, and AET location MW-5 (MW-5 was collected from 2-4 ft bgs). The surface soil sample collected from TRC-4 (at 29,000 mg/kg) also exceeded the UCL of 3,000 mg/kg for lead; although this sample was collected from a known area of elevated lead in the soil. The deeper samples collected from these same locations yielded lead concentrations below the MCP Method 1 S-1/GW-3 standard.

One subsurface soil sample (>3 ft bgs) yielded a lead concentration above the MCP Method 1 S-1/GW-3 standard. The soil sample collected from TRC-6 from 3-6.5 ft bgs yielded a lead concentration of 4,800 mg/kg, which also exceeded the UCL for lead of 3,000 mg/kg.

<u>Other metals</u>

Various other metals were detected in the fill material and native soil at the site at low concentrations below the applicable MCP Method 1 S-1/GW-3 standards. Cadmium and zinc were detected above the MCP Method 1 S-1/GW-3 standard of 2 mg/kg and 2,500 mg/kg, respectively from one sample (TRC-8 from 0-3 ft bgs), but were below the MCP Method 1 S-

2/GW-3 standards. The deeper sample collected from TRC-8 yielded detectable concentrations of these metals, but was below the applicable MCP Method 1 S-1/GW-3 standard.

4.1.2 Groundwater Analytical Results

Groundwater samples were collected from each of the six new monitoring wells installed by TRC (MW-1 through MW-6). Groundwater samples were submitted for laboratory analysis for PAHs and 14 MCP metals. Samples collected from MW-3 and MW-4 were also analyzed for MTBE. Groundwater laboratory results are provided in Table 3.

4.1.2.1 Groundwater MTBE Results

MTBE was analyzed from groundwater samples collected from MW-3 and MW-4. MTBE was not detected above the laboratory detection limit of 2 ug/L from both samples.

4.1.2.2 Groundwater Metal Results

<u>Lead</u>

Total lead was detected above the MCP Method 1 GW-3 standard of 10 ug/L from the sample collected from MW-2 and from the duplicate sample collected from MW-4. The original sample collected from MW-4 yielded a lead concentration below the MCP GW-3 standard.

Total lead was not detected above the laboratory detection limit of 1 ug/L from samples collected from MW-3, MW-5, and MW-6. Total lead was detected in MW-1, but below the MCP GW-3 standard.

Due to elevated total lead concentrations identified in groundwater samples collected from MW-2 and the duplicate sample from MW-4, these samples were also analyzed for dissolved lead. Dissolved lead concentrations in sample MW-2 and the duplicate sample from MW-4 were 1 ug/L and not detected, respectively.

<u>Other metals</u>

Various other metals, including barium, cadmium, chromium, nickel, vanadium, and zinc were detected in one or more groundwater samples collected from the Site, but were reported below their respective MCP Method 1 GW-3 standard.

4.2 Extent of Contamination

This section describes the horizontal and vertical extent of contamination based on information gathered during TRC's investigations and information presented in previous reports for the Site.

4.2.1 Soil

Concentrations of analyzed constituents detected in Site soils in excess of their MCP Method 1 standards was generally limited to lead in the fill material on the Site. The concentrations of lead detected in Site soils between zero and three feet bgs and greater than three feet bgs are presented in Figures 6 and 7, respectively. Soil samples collected across the zero to four foot depth interval were conservatively categorized as surface soils.

Lead is present is Site soil above MCP Method 1 S-1/GW-3 standard in three areas of the Site, identified as Area 1, Area 2 and Area 3. These areas have been refined using the data collected during TRC's investigation, which are depicted on Figures 6 and 7. The approximate area of lead identified above Method 1 S-1/GW-3 standard of 300 mg/kg is 2,600 square feet in Area 1, 7,900 square feet in Area 2, and 20,000 square feet in Area 3. The concentrations of lead reported above the MCP Method 1 S-1/GW-3 standard are associated with the fill material that is ubiquitous across the Site. Furthermore, elevated concentrations of lead appear to be limited to soils in the 0-4 foot range. Soils below four feet contain lead concentrations below the MCP Method 1 standard, with the exception of one location (TRC-6) where lead was identified at a concentration of 4,800 mg/kg from 3-6.5 ft bgs.

The lateral extent of lead contamination above the MCP Method 1 S-1/GW-3 standard of 300 mg/kg appears to extend beyond the southern property boundary at the Site.

4.2.2 Groundwater

Concentrations of analyzed constituents detected in Site groundwater in excess of their MCP Method 1 standards was limited to lead. The concentrations of lead detected in Site groundwater are presented in Figure 5.

Lead was identified above the MCP Method 1 standard in MW-2 and in the duplicate sample collected from MW-4 on a total unfiltered basis. Both of these samples were collected from locations outside of the highest area of elevated lead in soil on the Site (Area 2, which includes MW-6). Furthermore, the dissolved lead results from these samples yielded lead concentrations of 1 ug/L and non-detect, respectively. Groundwater samples taken from monitoring wells often contain high levels of particulate matter which contain metals that are solubilized when acidified. Turbidity in groundwater measured during groundwater sample collection on February 6, 2007 was relatively highest at wells MW-2 and MW-4 and did not decrease below 20 nephelometric turbidity units (NTU), as recorded with a Lamotte turbidity meter. This indicates that the elevated total lead results for MW-2 and MW-4 were biased high and are not representative of groundwater chemistry.

5.0 FATE AND TRANSPORT ANALYSIS

Consistent with 310 CMR 40.0835(4) (e), the following section provides an analysis of the fate and transport of site-related compounds. This section summarizes environmental fate and transport characteristics of identified compounds and identifies existing and potential migration pathways of oil and hazardous material (OHM) at the Site.

5.1 Environmental Fate and Transport Characteristics

Compounds identified in Site soil include heavy metals (antimony, barium, cadmium, chromium, lead, mercury, nickel, vanadium, and zinc), PAHs, PCBs, and EPH-related carbon range aliphatics and aromatics (see Table 2) based on work performed by TRC and others. The distribution of chemical contamination is influenced, in part, by factors such as the physical and chemical properties of the constituents, the nature and location of sources, and Site characteristics such as geology, hydrology, and topography. Characteristics of these compounds that affect mobility, stability, volatility, persistence, and bioaccumulative potential are discussed herein.

5.1.1 Contaminant Properties

To evaluate the fate and transport of chemicals in the environment, it is important to identify the physical and chemical properties that influence fate and transport processes. Chemicals that are structurally similar tend to exhibit like behavior in the environment and as such are grouped into classes. Classes of chemicals detected in soil at the Site include heavy metals, PAHs, PCBs, and petroleum-related compounds.

General definitions of physical properties are discussed below, followed by a description of the characteristics of each chemical class.

Specific Gravity. The specific gravity of a chemical is the ratio of the mass of a given volume of the chemical to an equal volume of water at a specified temperature, usually four degrees Celsius (°C). Specific gravity is a relative measure of density. Compounds with specific gravities greater than 1.0, if they are immiscible with water, will separate as a sinking phase (as dense non-aqueous phase liquid; DNAPL). Immiscible compounds with specific gravities less than 1.0 will tend to float on water (as light non-aqueous phase liquid; LNAPL). LNAPL and DNAPL were not detected at the Site during previous investigations or TRC's investigation based on field instrument readings and visual observations of soil and groundwater samples collected at the Site.

Water Solubility. The solubility of a chemical in water is the maximum amount of chemical that will dissolve in pure water at a specific temperature and pressure. Water solubility is a general predictor of a chemical's potential mobility and distribution in the environment. Chemicals with moderate to high solubility (greater than 100 mg/L) can readily leach from soils into groundwater, and once there, are generally mobile. Compounds that are highly soluble in water will be less likely to volatilize from water and may be more susceptible to microbial degradation. Compounds detected at the Site generally exhibit a low solubility.

Vapor Pressure. The vapor pressure of a liquid or solid is a relative measure of its volatility in its pure form. This value expresses the pressure of the vapor phase of a compound in equilibrium with its liquid or solid phase of the compound at a given temperature. Vapor pressure is important in evaluating migration of chemicals to air from other environmental media; factors such as temperature, wind speed, water solubility and degree of adsorption also play a key role. Chemicals with vapor pressures greater than 10 millimeters of mercury (mm Hg) are considered to be highly volatile. The chemicals detected at the Site exhibit low (e.g., PAHs) to essentially non-existent (e.g., lead) vapor pressures.

Henry's Law Constant. Henry's Law Constant is another measure of chemical volatility. It is expressed as a ratio of concentration of a chemical in air to the chemical's concentration in water (i.e., dissolved state versus pure state). The higher the Henry's Law Constant value, the greater the tendency to volatilize. In general, compounds with values above 10-5 atmospheres-cubic meter per mole (atm-m3/mol) are considered highly volatile. The chemicals detected at the Site exhibit low Henry's Law Constants.

Organic Carbon Partition Coefficient (Koc). This value is a measure of the relative sorption potential of organic compounds. Koc reflects the tendency of an organic compound to be adsorbed onto soils and sediments and is generally independent of soil properties. This value is expressed as the ratio of the amount of a compound adsorbed per unit weight of organic carbon, to the concentration of the compound in solution at equilibrium. Chemicals with a high Koc (greater than 1,000 mL/g) may exhibit a high sorption potential in soils and are less likely to leach into groundwater. Koc values less than 100 mL/g indicate that the chemical has a high potential to leach into groundwater. Most of the chemicals at the Site (excluding lighter-end PAHs) have Koc values toward the higher end and tend to exhibit high sorption potential and limited potential to leach.

Log Kow (log octanol/water partition coefficient). This value is a measure of the tendency of a compound to partition between an organic phase (octanol) and an aqueous phase. Log Kow relates indirectly to water solubility and directly to soil adsorption. Chemicals with low partition coefficients (less than 10) have high water solubilities and low adsorption coefficients, and would, therefore, be expected to have a high potential to leach into groundwater. The main constituents detected in Site soils were PAHs and lead. Log Kow values for PAHs (e.g., benzo(a)pyrene, benzo(g,h,i)perylene, and acenaphthene) provided in the MCP (310 CMR 40.1514(2)) are high, indicating the affinity of these compounds to bind to organic matter rather than leach into groundwater. Lead is insoluble in water and, therefore, not likely to leach into groundwater.

5.1.2 Contaminant Types

Chemical classes detected at the Site include EPH, PAHs, PCBs, and metals. At this Site, the compounds detected in excess of MassDEP cleanup standards or guidance values appear to be associated with urban fill materials that contain coal ash/wood ash. EPH carbon ranges and PCBs were detected in Site soil, but at concentrations well below the MCP Method 1 Standards in soil. Barium, mercury, nickel, and vanadium were also detected in Site soil, but at

concentrations below MCP Method 1 standards in soil. Lead was detected in virtually all the soil samples analyzed, many of which were above the MCP Method 1 Standard. Three PAH compounds were detected in one sample (AB-9) above the applicable MCP Method 1 Standards. Antimony, cadmium, chromium, and zinc were detected in one or two soil samples above the applicable MCP Method 1 Standards (chromium was detected in three samples above the MCP standard).

Lead was the only analyzed constituent detected in groundwater above the MCP Method 1 Standard (in samples collected from MW-2 and MW-4). However, the dissolved lead results from these samples were either not detected or was identified well below the MCP Method 1 Standard suggesting that lead is not a contaminant of concern in groundwater. The characteristics of the various chemical classes detected at the Site (EPH carbon ranges, PAHs, PCBs, and metals) are described below.

Extractable Petroleum Hydrocarbons. EPH compounds consist of petroleum-related compounds containing 9 to 36 carbon atoms. These compounds are generally moderately mobile in soil and have moderate aqueous solubilities. These compounds generally are likely to be conveyed in the dissolved phase in groundwater.

Polycyclic Aromatic Hydrocarbons. PAHs are the products of incomplete combustion of fossil fuels. They are also components of petroleum and coal. Compounds in this class generally have low mobility in soil and possess very low aqueous solubility. Thus, compounds in this class, which include benzo(a)pyrene, dibenzo(a,h)anthracene, and benzo(a)anthracene, as examples, are not likely to be conveyed in the dissolved phase in groundwater. The result is that PAHs have low relative mobility. They can migrate with fugitive dusts due to their tendency to strongly partition (adsorb) to soil and soil organic phases.

Polychlorinated Biphenyls. PCBs are a mixture of up to 209 chlorinated compounds which do not occur naturally in the environment. PCBs have a very low solubility in water and have a tendency for bioaccumulation. PCBs were used as coolants and lubricants in electrical equipment such as transformers and capacitors. The manufacture of PCBs in the U.S. was terminated in 1977.

Antimony. Antimony can naturally occur in its elemental form but more commonly is found as in a sulfide mineral called stibnite. Antimony has a very low solubility in water. Antimony is used in flame-proofing, paints, ceramics, enamels, a wide variety of alloys, electronics, rubber, and used to increase the hardness and mechanical strength of lead. The transport potential for lead in Site soil and groundwater is similar to that of PAHs in that there is little potential for transport via groundwater in the dissolved phase.

Barium. Barium is naturally-occurring metal in the sulfate mineral barite, but not by itself due its reactivity in air, and has a low solubility in water. Barium compounds are used by the oil and gas industries to make drilling muds. Barium compounds are also used to make paint, bricks, ceramics, glass, and rubber. Unlike other heavy metals, barium does not tend to bioaccumulate.

Cadmium. Cadmium is a naturally-occurring metal with a low solubility in water and a tendency for bioaccumulation. Cadmium is used in rechargeable batteries, pigments, metal coatings, and stabilizers for plastics.

Chromium. Chromium is a naturally-occurring metal with a low solubility in water. Chromium has a wide variety of uses, especially in the chemical, metallurgical, and refractory industries, including chrome plating, paint pigments, leather tanning. Chromium is present in the environment in several different forms. The most common forms are chromium(0, the metal form), chromium(III), and chromium(VI).

Chromium(III) occurs naturally in the environment and is an essential nutrient. Chromium(VI) and chromium(0) are generally produced by industrial processes. Chromium(VI) requires extreme pH and Eh conditions to predominate over the less toxic Chromium(III). Such pH and Eh conditions are rarely encountered in the natural environment.

Mercury. Mercury is a naturally-occurring metal with very low solubility in water and a tendency for bioaccumulation. Metallic mercury is a liquid at room temperature and is used to produce chlorine gas and caustic soda, and is also used in thermometers, dental fillings, and batteries.

Nickel. Nickel is a naturally-occurring metal with very low solubility in water. Nickel is used in alloys, particularly to make stainless steel, nickel plating, to color ceramics, and batteries.

Lead. Lead is a naturally-occurring metal with very low solubility in water and a tendency for bioaccumulation. Lead is also a very commonly employed industrial chemical, and has been used in gasoline, paints, solders, glazes, electronics, batteries, etc. The transport potential for lead in Site soil and groundwater is similar to that of PAHs in that there is little potential for transport via groundwater in the dissolved phase.

Vanadium. Vanadium is a naturally-occurring metal with very low solubility in water. Vanadium is used in many alloys, primarily in steel used for automobile parts, springs, and ball bearings.

Zinc. Zinc is a naturally-occurring metal with very low solubility in water and a tendency for bioaccumulation. Zinc is used to in paint, rubber, dyes, wood preservatives, ointments, batteries, and used to prevent rust.

5.2 Migration Pathways

5.2.1 Soil

As discussed above, contaminants detected in Site soils above their applicable MCP Method 1 standards was primarily lead and to a lesser extent PAHs, antimony, cadmium, chromium, and zinc. The low mobility of these compounds coupled with the flat topography of the of the Site indicate little likelihood they will be transported off-Site; however, these compounds are relatively resistant to degradation or are elements that cannot be destroyed under normal

environmental conditions and will likely persist in Site soils. Future development of the Site could disturb the soil making it available for fugitive dust transport and stormwater runoff if appropriate engineering controls are not implemented during activities that could disturb the soil.

5.2.2 Groundwater

Total lead was the only contaminant detected in groundwater above the Method 1 GW-3 groundwater cleanup standards; however, dissolved lead was reported below the Method 1 GW-3 groundwater cleanup standard. Therefore, lead is not considered a contaminant of concern in groundwater at this Site.

5.2.3 Air

Contaminants that are present are inorganic (e.g., metals) or low volatility organics (e.g., PAHs), with relatively minor volatile organic compound (VOC) Site impacts; therefore, volatilization is not expected to be a significant migration mechanism at the Site.

5.2.4 Surface Water

The Acushnet River is located adjacent to the Site along the northern and eastern property boundaries. As discussed above, the contaminants of concern at this Site are confined to Site soils and are not readily mobile due to their low solubility and high retardation factors. Total lead was detected in groundwater at concentrations greater than MCP Method 1 GW-3 standards at two locations (MW-2 and MW-4) within 500-feet of surface water at the Site. However, concentrations of dissolved lead at these locations was either none detected and/or below MCP Method 1 GW-3 standards. Therefore, impacts to surface water are not expected to be a significant migration mechanism at the Site.

5.2.5 Sediment

The Acushnet River is located adjacent to the Site along the northern and eastern property boundaries. Lead and chromium were detected at concentrations greater than MCP Method 1 S-1/GW-3 standards in unpaved surface soil at the Site. Portions of the Site along the Acushnet River are also located within the 100-year floodplain. Therefore, there is a reasonable likelihood that hazardous materials in surface soil could migrate to sediment via runoff and flooding. However, areas of sediment at the Site are located within the USEPA New Bedford Harbor CERCLA Compliance Demonstration Areas CDA 2 and CDA 6, which underwent sediment dredging removal and replacement with a minimum of one foot of clean fill in 2003. Therefore potential historic impacts from the Site to sediment are expected to have been eliminated and any subsequent impacts since 2003 are expected to be negligible or indiscernible from background conditions on this long standing industrial/urban impacted surface water system.

5.2.6 Food Chain

The Acushnet River is located adjacent to the Site along the northern and eastern property boundaries. The Acushnet River is considered a fish habitat as defined in 310 CMR 40.0006 of the MCP.

6.0 HUMAN HEALTH RISK CHARACTERIZATION AND EXPOSURE ASSESSMENT

6.1 Introduction

This section was prepared consistent with 310 CMR 40.0835(4) g and h of the MCP and Appendix F of the MassDEP *Guidance for Disposal Site Risk Characterization* (MassDEP, 1995) and provides an exposure assessment and risk characterization for the Site. The risk characterization addresses human and environmental receptors reasonably expected to be at and near the disposal Site. As discussed herein, a combined Method 1 and 3 approach was selected to characterize risk at this Site.

6.2 Adequacy of Site Characterization

6.2.1 Impacted Media

As described in Sections 3 and 4, soil and groundwater at the Site have been evaluated during environmental investigations conducted by AET in 2002 and by TRC in 2006 and 2007. Results of these investigation show that contaminated media at the Site include soil and groundwater.

In addition, as described in Section 5, sediment and surface water are potential endpoints of contaminant migration from surface soil at the Site. No surface water or sediment samples were collected during environmental investigations at the Site by AET or TRC. However, as described in Section 2, soil and sediment in the floodplain at the Site and in the adjacent Acushnet River were investigated as part of the New Bedford Harbor CERCLA site PCB response actions for CDAs 2 and 6 in 2001. CERCLA response actions during 2003 included the excavation of PCB contaminated soil and sediment followed by replacement with a minimum of 1-foot of clean fill. Therefore, it is likely that past migration of contaminated soil at the Site to sediment, if any, was mitigated by the CERCLA response actions. Therefore, subsequent impacts, if any, would be indiscernible from background conditions of this long standing industrial/urban impacted surface water system.

TRC recommends that sediment investigation be conducted at the southern end of the Site, where lead concentrations in surface soil are greater than UCLs adjacent to wetlands, prior to Comprehensive Remedial Actions to verify the absence of potential ongoing migration of soil contamination to sediment.

6.2.2 Soil

Soil contamination consists of a continuous area of varied concentrations of metals, EPH and PAHs detected in historic fill beneath an unpaved surface at the Site. The fill thickness extends up to approximately seven feet bgs, with contamination detected at depths greater than three-feet bgs. For the purposes of this risk characterization the Site will be treated as one area of interest with Exposure Point Concentrations (EPCs) calculated for accessible surface soils (zero to three-feet bgs) and potentially accessible subsurface soil (greater than three-feet bgs).

Individual soil contamination concentrations at the Site were below MCP Method 1 S-1/GW-3 and S-2/GW-3 standards with the exception of PAHs at one location (AB-9), antimony at one location (AB-12), cadmium at two locations (AB-12 and TRC-8), chromium at three locations (AB-2, AB-8, and AB-12), and lead at 35 locations. Lead was also detected above UCLs at four locations in individual surface soil samples at the Site. Concentrations of lead in surface soil and subsurface soil are shown on Figures 6 and 7, respectively.

The horizontal and vertical extent of soil contamination detected above MCP Method 1 standards has been characterized with the exception of lead in surface soils at the southern end of the Site. The extent of historical fill associated with the lead contamination also extended beyond the southern limit of the geophysical survey conducted by TRC. Because the need for Comprehensive Remedial Actions is readily apparent and the data gap area is relatively small, the soil characterization data is adequate for this risk characterization. However, additional soil investigation at the southern end of the Site will be necessary prior to implementation of Comprehensive Remedial Actions.

6.2.3 Groundwater

No sources of groundwater contamination have been identified at the Site. Contaminants detected in groundwater during TRC's investigation were limited to metals. Total lead concentrations detected in groundwater at two of six monitoring wells (MW-2 and MW-4) were above the applicable MCP Method 1 Groundwater Category 3 (GW-3) standard. Turbidity in groundwater measured during groundwater sample collection on February 6, 2007 was relatively highest at wells MW-2 and MW-4 and did not decrease below 20 NTU, as recorded with a Lamotte turbidity meter. This indicates that the elevated total lead results for MW-2 and MW-4 were biased high and are not representative of groundwater chemistry. Concentrations of dissolved lead from the same MW-2 and MW-3 groundwater samples were below the MCP Method 1 GW-3 standard.

6.2.4 Extent of Contaminant Release

The nature and extent of contamination has been analyzed and is discussed in Section 4. The nature and extent contamination in soil and groundwater has been sufficiently delineated to support this risk characterization. Additional characterization of lead in surface soil on the southern end of the Site and investigation of lead in sediment on the southern end of the Site will be required prior to implementation of Comprehensive Remedial Actions.

Horizontal and Vertical Extent. The horizontal and vertical extent of contamination is discussed in Section 4. In general, soil contamination consists of a continuous area of varied concentrations of metals, EPH and PAHs detected in historic fill. Isolated detections of PAHs (AB-9), antimony (AB-12), cadmium (AB-12 and TRC-8), chromium (AB-2, AB-8, and AB-12) were identified above MCP Method 1 S-1/GW-3 standards in surface soils. Lead is present in historical fill throughout the Site with concentrations above the MCP Method 1 S-1/GW-3 standard in three areas (Area 1, Area 2 and Area 3) totaling approximately 0.71-acres. Elevated concentrations of lead appear to be associated with soils in the 0-4 foot range. Lead concentrations in soil greater than 4-feet bgs were below the MCP Method 1 S-1/GW-3 standard,

with the exception of one location (TRC-6) where lead was identified at a concentration of 4,800 mg/kg from 3-6.5 ft bgs. The horizontal extent of lead contamination above the MCP Method 1 S-1/GW-3 standard of 300 mg/kg appears to extend beyond the southern property boundary at the Site (Figure 6).

Contaminants detected in groundwater during TRC's investigation were limited to metals. Total lead concentrations detected in groundwater at two of six monitoring wells (MW-2 and MW-4) were above the applicable MCP Method 1 Groundwater Category 3 (GW-3) standard. Total lead concentrations in groundwater are considered to be biased high because of the presence of particulate matter. Concentrations of dissolved lead from the same MW-2 and MW-4 groundwater samples were below the MCP Method 1 GW-3 standard. The water table at the Site is located entirely within the historical fill at depths ranging from 3 to 6- feet bgs.

Background Concentrations. Site-specific background concentrations were not characterized in soil and groundwater.

For the purposes of this Phase II CSA and risk characterization, background for petroleum (VPH and EPH) is considered to be non-detect, except where the petroleum residues are considered incidental to the normal operation of motor vehicles. Motor vehicle operations in the vicinity of the Site are expected to be moderate along River Road. Historically, motor vehicle operations on the Site would have been incidental to lumber yard operations and wood products manufacturing. The extent of on-site motor vehicle operations is unknown.

Where appropriate, TRC will utilize MassDEP guidance entitled *Technical Update Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil* (MassDEP, 2002b) to establish background concentrations for PAHs and metals in soil, especially for comparison to areas of the Site impacted by coal and ash-laden historical fill.

Since total groundwater concentrations for dissolved lead are below applicable Method 1 Groundwater Standards, a discussion of background is not relevant.

Local soil, surface water and sediment conditions at the Site were impacted by PCBs in the Acushnet River related to the New Bedford Harbor CERCLA site. Total PCB concentrations in soil samples collected at the Site by the USEPA in May 2001 ranged from 0.014 to 0.85 mg/kg. The average PCB concentration in post excavation sediment samples collected from CDA 2 and CDA 6 adjacent the Site in 2003 was 4.4 mg/kg and 7.0 mg/kg, respectively.

Existing or Potential Migration Pathways. Existing and potential migration pathways were discussed in Section 5.2. Figure 8 illustrates the potential migration pathways for the Site.

Note that the triggering criteria set forth in the MCP (specifically 310 CMR 40.0904(2)(c) 1 through 6) were analyzed to determine the need to conduct surface water and sediment sampling at the Site in the Acushnet River. The triggering criteria analysis is summarized in the following table.

	Criteria per 310 CMR 40.0904(2)(c) 1 through 6	Yes/No/Unknown	Notes/Comments
1	Non-VOC hazardous materials present in groundwater within 200 feet of surface water body.	Yes	Extensive CERCLA dredging/capping completed in 2003.
2	Non-VOC hazardous materials present in groundwater at concentrations higher than GW-3 standards within 500 feet of a surface water body.	No	Dissolved lead was less than GW-3.
3	Non-aqueous phase liquid (NAPL) present within 200 feet of a surface water body.	No	No NAPL observed or measured.
4	Historical evidence indicative of past unpermitted discharge or dumping to the surface water body.	Yes	Historic fill adjacent river shoreline.
5	Evidence indicates current or past runoff of OHM from or with Site soil to the surface water body.	No	Site topography flat with rip/rap and concrete barrier wall.
6	Site-specific conditions indicate that OHM from the Site may reasonably be expected to be present in sediment or surface water at concentrations of potential ecological significance.	Yes	Surface soil adjacent wetland contains lead > UCLs

Total barium, cadmium, chromium, nickel, vanadium, and zinc were detected in groundwater at four monitoring wells (MW-1, MW-2, MW-3, and MW-6) within 200 feet of the Acushnet River at the Site. The detected concentrations of these metals were below MCP Method 1 GW-3 standards. Total lead concentrations greater than GW-3 standard were detected at two monitoring wells (MW-2 and MW-4) within 500-feet of the Acushnet River. The elevated total lead concentrations are attributable to particulate material in unfiltered groundwater samples. Concentrations of dissolved lead in these samples were below MCP Method 1 GW-3 standards. Based on the low solubility and high retardation of the detected metals and their low concentrations relative to the MCP Method 1 GW-3 standards, impacts to surface water from groundwater are not likely.

EPH and PAHs, and metals were detected in unpaved surface soils containing historic fill. Isolated detections of PAHs (AB-9), antimony (AB-12), cadmium (AB-12 and TRC-8), and chromium (AB-2, AB-8, and AB-12) were identified above MCP Method 1 S-1/GW-3 standards in surface soils. Lead is present surface soils throughout the Site with concentrations above the MCP Method 1 S-1/GW-3 standard in three areas totaling approximately 0.71-acres. Contaminated surface soil exceeding Method 1 S-1/GW-3 standards in Area 1 is located less than 10-feet west of the Acushnet River, but is isolated from the river by rip/rap and a concrete wall as described in Section 2. Contaminated surface soil exceeding Method 1 S-1/GW-3 standard in Area 2 is located about 50-feet west of the Acushnet River. Contaminated surface

soil exceeding Method 1 S-1/GW-3 standard and UCLs in Area 3 is located about 40-feet west of the Acushnet River and less than 10-feet north of an associated wetland.

CERCLA response actions during 2003 included the excavation of PCB contaminated soil and sediment in the Acushnet River adjacent the Site followed by replacement with a minimum of 1-foot of clean fill. Therefore, it is likely that past migration of contaminated soil at the Site to sediment, if any, was mitigated by the CERCLA response actions. Potential historic impacts from the Site to sediment are expected to have been eliminated and any subsequent impacts since 2003 are expected to be negligible or indiscernible from background conditions on this long standing industrial/urban impacted surface water system.

Sediment and surface water in the Acushnet River were not characterized as part of this Phase II CSA Addendum. Collection of sediment samples on the southern end of the Site where concentrations of lead in individual surface soil samples were greater than UCLs adjacent to wetlands is required to complete a Phase II CSA prior to implementation of Comprehensive Remedial Actions.

6.2.5 Representativeness

TRC conducted a data usability assessment, which is summarized in Section 7. In general, TRC concluded that the data are useable for MCP decisions based on the *Compendium of Analytical Methods* requirements for acceptable accuracy, precision, and sensitivity. Although there were select quality control (QC) non-conformances, the data are valid as reported and may be used for decision making purposes, except for the limited cautions and/or limitation set forth in the Data Usability Assessment (Section 7), which are referred to herein where applicable.

6.2.6 Compounds of Concern

Compounds of Concern are those with individual detected concentrations in excess of an applicable Method 1 Standard. In the absence of a Method 1 Standard a Reportable Concentration or noted guidance value was used to establish compounds of concern. The following table summarizes the contaminants detected at the Site above an applicable standard, RC, or guidance value and the media in which they were detected.

Compounds of Concern	
Compounds Detected Above Standards/RCs/Guidance Values	**Affected Media**
benzo(a)anthracene	soil
benzo(a)pyrene	soil
dibenzo(a,h)anthracene	soil
antimony	soil
cadmium	soil
chromium	soil
lead	soil and groundwater*

*Total (unfiltered) lead <GW-3; dissolved (filtered) lead <GW-3

6.3 Site Activities and Uses (Current and Foreseeable Future)

6.3.1 Current Uses

The Site is currently unoccupied vacant land with no buildings. A chain link fence with locked access gates extends along the northern, southern and western borders of the Site property. The River Road Site boundary is also protected by temporary concrete barriers. The Site is located in an urbanized location where surrounding land use consists of commercial and residential development. The Site property is not used for residential purposes. Surrounding properties include the Acushnet River to the north and east, an undeveloped parcel on the south side of Truro Street, and residential properties to the west across River Road and beyond the undeveloped parcel to the south. Current potential human receptors include trespassers.

6.3.2 Foreseeable Future Uses

The Site is Protected Open Space and the property owner plans to redevelop the Site as a waterfront park and walking trail. Potential future human receptors consistent with the property owner's redevelopment plans include utility and construction workers, trespassers, and passive recreational visitors.

Although residential use is not contemplated by the property owners, adult and child residential receptors are evaluated in the risk characterization to evaluate an unrestricted land use scenario.

There are no plans for institutional development at the Site (e.g., schools, senior housing, hospitals, etc.).

There are no plans for cultivation of soil at the Site in the foreseeable future.

There are no private drinking water wells within 500 feet of the Site. The area of the Site is serviced by the municipal water supply system and the Site is within a Non-Potential Drinking Water Source Area (NPDWSA).

6.4 Imminent Hazards

An Imminent Hazard is not presented by the OHM that has come to be located at this Site. This determination is based on a review of criteria for releases "deemed to pose" an Imminent Hazard under 310 CMR 40.0321(1) and the criteria for releases that "could pose" an Imminent Hazard under 310 CMR 40.0321(2). The results of this review are set forth below.

6.4.1 Criteria for Releases Deemed to Pose an Imminent Hazard – 310 CMR 40.0321(1)

The release to the environment did not result in the presence of OHM within buildings, structures, or underground utility conduits at a concentration equal to or greater than 10-percent of the Lower Explosive Limit (LEL), as set forth in 310 CMR 40.0321(1)(a). Therefore, conditions that might lead to an explosive condition are highly unlikely. In addition, VOCs were

not detected in groundwater and there are no buildings at the Site; therefore, vapor intrusion originating from Site groundwater is not expected.

The contaminants detected at the Site either do not possess reactive or explosive characteristics consistent with 310 CMR 40.0321(1)(b), or the contaminants are not present at concentrations that could cause an explosive condition.

The OHM detected at the Site does not appear to be related to a release to a roadway that could endanger public safety as set forth in 310 CMR 40.0321(1)(c).

The release would not pose a significant risk to human health if present for even a short period of time consistent with 310 CMR 40.0321(1)(d) and 310 MCR 40.0950.

Contamination was detected in surface soil in unpaved areas. However, the Site is partially secured with fencing and concrete barriers, thus limiting exposure to the areas of surface soil contamination detected at the Site. Further, there is no evidence of uncontrolled access to the Site.

Drinking water exposures are not a pathway associated with this Site posing significant risk.

The release did not result in immediate and acute adverse impacts to freshwater or saltwater fish populations consistent with 310 CMR 40.0321(e); no indication of such impacts is evident in the Acushnet River.

The release did not result in any apparent effects to human health such as respiratory distress or dermal irritations as set forth in 310 CMR 40.0321(1)(f). No such effects have been reported to public health agencies, the Site owner, or TRC.

6.4.2 Criteria for Release that Could Pose an Imminent Hazard – 310 CMR 40.0321(2)

There are no reports of the contamination detected at the Site resulting in the measurement of OHM in a private drinking water supply well at a concentration equal to or greater than ten-times the GW-1 Reportable Concentration (RC), as set forth in 310 CMR 40.0321(2)(a); Site groundwater contaminant concentrations are significantly lower than this threshold. In addition, no public or private drinking water supply wells are known to be present in the vicinity of the Site. The Site and surrounding area are supplied potable water by the municipality.

The total chromium concentration of 250 mg/kg measured in one soil sample (AB-2) collected from the ground surface to four-feet bgs in June 2002 was greater than the Imminent Hazard concentration threshold of 200 mg/kg established under 310 CMR 40.0321(2)(b). There are residential dwellings within 500-feet of the Site. The nearest residence is about 250-feet west of the AB-2 sample location, across River Road. The Site is partially secured with fencing and physical barriers (concrete blocks) along the northern, southern, and western boundaries; thus controlling access by children to the areas of surface soil contamination detected at the Site. Further, there is no evidence of uncontrolled access to the Site. Therefore, the Site does not pose an Imminent Hazard pursuant to 310 CMR 40.0321(2)(b).

Current exposures do not exceed ten-times the Cumulative Risk Limits set forth in 310 CMR 40.0321(2)(c) and 310 CMR 40.0993(6).

6.5 Appropriateness of the Use of Method 1

A combined Method 1/Method 3 risk Characterization approach, as described in 310 CMR 40.0970 and 310 CMR 40.0942(1)(b) and (c), was selected to characterize the risk of harm to health, public welfare and the environment. A Method 1 approach alone is not applicable to this Site for the following reasons:

- Materials known to bioaccumulate (lead) are present within 2 feet of the ground surface and there is the potential for environmental receptors to be present at the Site due to the proximity of the Acushnet River.

Consequently, a combined Method 1/Method 3 approach is suitable to address both human and environmental receptors.

6.6 Groundwater and Soil Categorization

The following sets forth the applicable groundwater and soil categories at the Site. This categorization was prepared consistent with 310 CMR 40.0932, 310 CMR 40.0933, and Table 40.0933(9) of the MCP.

6.6.1 Groundwater Categories

The groundwater categories for this Site were determined pursuant to 310 CMR 40.0932, research of available documentation, and through the use of MassGIS 21-E Map (see Figure 3). Based on the available information, groundwater category GW-3 applies to groundwater beneath this Site for the following reasons:

- GW-1: The Site is not located within the Zone II area for public water supply wells, an Interim Wellhead Protection Area, or within 500 feet of a private water supply well. The Site is located within a designated NPDWSA. Therefore, groundwater category GW-1 does not apply to the Site.

- GW-2: The groundwater beneath the Site is located less than 15 feet below grade. However, there are no existing buildings on the Site. In addition, the Site is Protected Open Space and future redevelopment plans for the Site are as a park with walking trails. It is not foreseeable that any building will be constructed on the Site. Therefore, groundwater category GW-2 does not apply to the Site.

- GW-3: All groundwater is thought to eventually discharge to surface water bodies; therefore groundwater category 3 (GW-3) is relevant to the entire Site.

6.6.2 Soil Categories

Consistent with 310 CMR 40.0933(4), the applicability of the MCP soil categories was determined based on consideration of the frequency of Site use, intensity of activities and the accessibility of the soil, as well as human receptor characteristics.

Direct exposure to Site soil is currently limited since the Site is fenced on three sides and abutted by the Acushnet River. Although there is no evidence of uncontrolled access, the Site will be considered accessible to trespassers.

Adult frequency of use at the Site is determined to be "Low" because the Site is inactive and vacant. Adult intensity of activity is determined to be "High" because the Site is unpaved or otherwise covered by building remnants and the identified contamination is located at depths less than three feet below grade. Although the Site is adjacent to a residential area, children are expected to be infrequent visitors to the Site because access is controlled by fences; therefore, frequency of Site use is determined to be "Low". However, the intensity of use by children cannot be reliably predicted, and given the presence of residential properties across River Road, the intensity of use by children is conservatively assumed to be "High".

Contaminated soil at the Site is found in the 0-3 foot depth interval throughout the Site, which is categorized as *accessible [surficial]* soil consistent with 310 CMR 40.0933(4)(c)(1). Soil contamination is found at depths greater than 3 feet isolated location, and is therefore considered *potentially accessible*, consistent with 310 CMR 40.0933(4)(c)(2).

Based on the above-summarized information, and Table 40.0933(9) of the MCP, soil categories S-1 and S-2 apply to Site soil, depending in part upon depth. Note that the Method 1 S-1 soil category will also be used to understand risk in an unrestricted future use scenario.

6.7 Exposure Point Concentrations

Exposure point concentrations for soil and groundwater were determined for the Site consistent with 310 CMR 40.0926 and supporting MassDEP guidance. In addition, the potential presence of hot spots was evaluated as set forth herein.

An exposure point concentration (EPC) is the measured or estimated amount of a constituent in the environmental medium of concern at the point of human contact. Based on MassDEP (1995) guidance, the EPCs for the environmental media typically correspond to the arithmetic mean of the reported results for each data set for areas of contiguous contamination that do not show evidence for the presence of hotspots. However, when soil or groundwater sample locations are not evenly distributed over the Site, or concentrations are highly variable over the Site, or where exposure frequencies are higher in some areas than others, the arithmetic mean may not represent the average exposure concentration. According to 310 CMR 40.0926(3), consideration of the observed distribution of the data, sampling strategy, graphical representation of analytical results, and/or statistical analyses with sufficient power and confidence may be used to demonstrate that the arithmetic mean concentration is unlikely to underestimate the average concentration of OHM at the exposure point.

The sampling strategy carried out for this Site was designed to identify areas where contamination was likely to be present based on a review of available Site history to determine potential OHM release source areas. Therefore the Site data provide a conservative evaluation of the overall exposures to human and ecological receptors since sampling was biased toward areas of potential contamination. Given the conservative bias in the sampling plan, the average concentrations from soil samples represents a conservative estimate of the EPC for the Site receptors at each area of identified contamination.

Tables F-1 and F-22 in Appendix F present the EPCs compared to the Method 1 Soil Standards for the appropriate groundwater category.

As shown in Tables F-1 and F-2 in Appendix F, EPCs for chromium and lead exceed applicable MCP Method 1 Soil Standards in surface soil at the Site and the EPC and the maximum individual samples concentration for lead exceeds the applicable MCP Method 1 Standards in subsurface soil. The EPC for chromium was consistent with background; however the maximum individual chromium concentration was greater than background. The results are evaluated in the following sections.

6.7.1 Exposure Point Concentrations for Soil

Soil EPCs are presented in Tables F-1 and F-2 in Appendix F. The soil EPCs were compared to MCP Method 1 S-1 and S-2 Soil Standards for GW-3 category groundwater. The max concentrations detected in soil may also be compared to MassDEP guidance-based background concentrations (MassDEP, 2002b) for an evaluation of consistency of soil concentrations with background levels. Locations of individual samples exceeding applicable MCP Method 1 soil standards are shown on Figures 6 and 7.

6.7.2 Exposure Point Concentrations for Groundwater

Each well at the Site was treated as an individual exposure point. The groundwater EPCs are based on analytical data obtained from the most recent round of groundwater sampling conducted at the Site by TRC in February 2007. Locations of all groundwater monitoring wells are depicted on Figure 2.

Table 3 summarizes analytical results representing each monitoring well exposure point location. The most recent groundwater data obtained by TRC demonstrates that OHM detected in groundwater at the Site does not exceed applicable groundwater standards in on-Site monitoring wells with the exception of total lead at wells MW-2 and MW-4. However, concentrations in dissolved lead in MW-2 and MW-4 groundwater samples did not exceed applicable groundwater standards. Groundwater samples taken from monitoring wells often contain high levels of particulate matter which contain metals that are solubilized when acidified. Results of turbidity measurements during groundwater sampling indicate that the MW-2 and MW-4 unfiltered groundwater samples were biased high. GW-3 groundwater exposures would not contain high particulate levels observed in monitoring wells samples. Therefore, the dissolved lead concentrations provide a more representative estimate of the EPC.

6.7.3 Exposure Point Concentrations for Sediment

No sediments samples were collected at the Site.

6.7.4 Exposure Point Concentrations for Surface Water

No surface water samples were collected at the Site.

6.7.5 Hot Spots

Four areas (TRC-4, TRC-13, AB-31 and AB-36) were identified where the concentrations of lead in surface soil were more than ten but less than 100 times the concentration of the surrounding area. There is no evidence that these areas would be associated with greater exposure potential than the surrounding areas of the Site. Given the concentration and distribution of lead concentrations in surface soil at the Site, sample locations TRC-13, AB-31 and AB-36 are not considered "Hot Spots." Based on the magnitude of the individual samples concentration of lead in surface soil at sample location TRC-4 relative to all other individual sample concentrations, this area is considered a "Hot Spot" from the ground surface to about three-feet bgs. One area (TRC-6) was identified where the concentration of lead in subsurface soil was more than 100 times the concentrations of the surrounding area. Therefore, the area at sample location TR-6 is considered a "Hot Spot" at greater than three-feet bgs, as required by 310 CMR 40.0006.

6.8 Background Concentrations

See Section 6.1.3 for a discussion of background concentrations for this Site.

6.9 Identification of Method 1 Standards

As discussed in Section 6.5.1, groundwater category GW-3 applies to the entire Site. As discussed in Section 6.5.2, soil categories S-1 and S-2 apply to Site soil, where appropriate. Consistent with these categorizations, tabulated soil and groundwater contaminant data from the Site have been compared to Method 1 Groundwater and Soil Standards obtained from tables in sections 310 CMR 40.0974 and 310 CMR 40.0975 of the MCP, respectively.

6.10 Method 1 Risk Characterization

The EPCs calculated for surface and subsurface soil are summarized in Tables F-1 through F-4 for accessible and potentially accessible soil, respectively. As shown in Tables F-1 through F-4, lead was the only compound having an EPC exceeding its MCP Method 1 S-1/GW-3 and/or S-2/GW-3 soil standards for both accessible and potentially accessible soils. As shown in Tables F-1 through F-4, the chromium EPC also exceeded its MCP Method 1 S-1/GW-3 soil standard for both accessible soils. The maximum concentrations of lead and chromium detected in soil from the Site also exceed the ash/fill background soil concentrations established in MassDEP guidance (MassDEP, 2002b). EPCs for lead and chromium in accessible soil and lead in

potentially accessible soil also exceed Method 1 S-1 Soil Standards representing future unrestricted use.

The EPCs for the accessible soil Hot Spot at the TRC-4 and the potentially accessible soil Hot Spot at TRC-6 exceed applicable Method 1soil standards and UCLs (Tables F-3 and F-4).

The concentrations of oil and hazardous materials within the fill material at the Site are not at a level of No Significant Risk under the current and anticipated future use scenario for the Site. Based on this evaluation, areas of soil within Site impacted by historical fill will require further response actions to achieve a condition of No Significant Risk.

6.11 Risk of Harm to Safety, Public Welfare, and the Environment

The following sections present a characterization of risk to safety, public welfare, and an environmental risk characterization.

6.11.1 Characterization of Risk to Safety

The risk of harm to safety, as described in 310 CMR 40.0960, was evaluated for the disposal Site. The Site location does not contain the following items related to a release of OHM:

- There are no rusted or corroded drums or containers, open pits or lagoons, at the Site.
- There is no threat of fire or explosion, or the presence of explosive vapors from the release of OHM; and
- There are no uncontainerized materials exhibiting the characteristics of corrosivity, reactivity, or flammability.

Based on the above information, it was determined that the Site does not pose a risk to safety due to the presence of dangerous structures related to the release of OHM.

6.11.2 Risk to Public Welfare

No community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater contamination at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater contamination at this Site.

Concentrations of lead in individual soil samples at four surface soil sample locations (TRC-4, TRC-13, AB-31 and AB-36) and one subsurface soil sample location (TRC-6) exceeded MCP Upper Concentrations Limits (UCLs). Concentrations of OHM in groundwater at the Site do not exceed UCLs.

Based on this evaluation, isolated areas of soil within Site impacted by historical fill will require further response actions to achieve a condition No Significant Risk to public welfare at the Site.

6.11.3 Environmental Risk Characterization

In general, the 2.9-acre Site is located within an urbanized setting that provides limited habitat for terrestrial ecological receptors. Currently, vegetation comprised primarily of early pioneering species is present within the southern portion of the Site but provides less than 1.0 acre of habitat. The most significant ecological areas at the Site are the Acushnet River that is present along eastern portion of the Site and a wetlands located near the southeastern corner of the Site. Land use surrounding the Site generally consists of commercial and residential development.

Contaminants present within surface soil may potentially adversely affect terrestrial ecological receptors and migration of surface soil contaminants to surface water and sediment associated with the Acushnet River and associated wetlands may potentially affect a variety of aquatic ecological receptors present within the sediment (e.g., benthic invertebrates) or water column (e.g., fishes). The primary ecological exposure pathway at the site would be the potential for contaminated surface water and/or sediments to adversely affect ecological receptors present within the river and wetlands.

At this time existing data for the Site is not sufficient to conduct a Stage I - Method 3 Environmental Risk Characterization (ERC) under the MCP in accordance with *Guidance for Disposal Site Risk Characterization, Method 3 - Environmental Risk Characterization.* Massachusetts Department of Environmental Protection, Interim Final Policy, WSC/ORS-95-141, dated April 1996 (MassDEP, 1996).

Based on this evaluation, collection of surface water and sediment data at the Site is necessary to characterize potential ecologic risk.

6.12 Conclusions

Soil contamination is present at the Site at concentrations above a level of No Significant Risk to human health in the historic fill area. Additional response actions will be required in this area to achieve a level of No Significant Risk.

No community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater contamination at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater contamination at this Site. However, soil contamination is present at the Site at concentrations above UCLs. Based on this information a condition of No Significant Risk to public welfare does not exist at this Site.

Contaminants present within surface soil may potentially adversely affect terrestrial ecological receptors and migration of surface soil contaminants to surface water and sediment associated

with the Acushnet River and associated wetlands may potentially affect aquatic ecological receptors. Existing Site data is not sufficient to conduct a Stage I Environmental Risk Characterization at this time. However, areas of sediment at the Site are located within the USEPA New Bedford Harbor CERCLA Compliance Demonstration Areas CDA 2 and CDA 6, which underwent sediment dredging removal and replacement with a minimum of one foot of clean fill in 2003. Therefore potential historic impacts from the Site to sediment are expected to have been eliminated and any subsequent impacts since 2003 are expected to be negligible or indiscernible from background conditions on this long standing industrial/urban impacted surface water system.

7.0 DATA USABILITY ASSESSMENT

The data associated with soil samples collected on April 5, 2006 were reviewed. In general, the data are usable for MCP decisions based on a review of accuracy, precision, and sensitivity of the data. Although there were select quality control (QC) nonconformances, the data are valid as reported and may be used for decision-making purposes with the exception of the cautions and/or limitations listed below.

- The results for benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene in samples TRC-8 3-12' and TRC-10 0-3' and benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene in sample TRC-11 0.5-3' cannot be used to achieve project objectives due to significantly low internal standard recoveries.

- Potential uncertainty exists for the lead results in samples TRC-5 3-6.5' and TRC-8 3-12' due to field and laboratory duplicate variability in combination with high recovery in the matrix spike analysis. These results fall below the MCP Method 1 standards by a minimal amount. Caution should be used with these results for decision-making purposes as the actual results may be higher and above the MCP Method 1 standards.

- Potential uncertainty exists for the benzo(a)pyrene result in sample TRC-6 5.5-6.5' due to an internal standard nonconformance. This result exceeds the MCP Method 1 standards by a minimal amount. Caution should be used with this result for decision-making purposes as the actual result may be lower and below the MCP Method 1 standards.

- The result for thallium in sample TRC-4 10-12' cannot be used to verify the achievement of the MCP Method 1 S-1/GW-2 and S-1/GW-3 standards as the quantitation limit for this metal is above the applicable MCP Method 1 standards.

Details on the data usability assessment are provided below.

Soil Samples Included in the Data Usability Assessment:
TRC-1: 0-3', 5-6', 3-10', 10-12.5'
TRC-2: 0-3', 1-3', 3-6.5'
TRC-3: 0-3', 3-6', 5-6
TRC-4: 0-3', 1-2', 3-10', 10-12'
TRC-5: 0-3', 3-6.5', 5.5-6.5'
TRC-6: 0-3', 3-6.5', 5.5-6.5'
TRC-7: 0-0.5', 0.5-3', 6-8'
TRC-8: 0-3', 1-2', 3-12'
TRC-9: 0.5-2', 0-3', 3-6'
TRC-10: 0-3'
TRC-11: 0-0.5', 0.5-3', 7-11'

Field Duplicate Samples: TRC-1 0-3' (metals), TRC-2 0-3' (lead), TRC-4 3-10' (PCBs), TRC-7 0.5-3' (PAHs), TRC-8 1-2' (VPH, EPH)

MS/MSD or Matrix Duplicate Analyses: TRC-1 3-10' (PCBs), TRC-1 0-3' (metals), TRC-11 7-11' (lead), TRC-9 3-6' (lead), TRC-9 0.5-2' (PAHs), TRC-1 5-6' (VPH, EPH)

There were no biases or uncertainty associated with the VPH analyses. Sensitivity was acceptable for the VPH, EPH, PAH, PCB, and the majority of metals analyses (i.e., quantitation limits for all nondetect results were below the applicable MCP Method 1 S-1/GW-2 and S-1/GW-3 standards). Sensitivity was not acceptable for thallium in the metals analysis of sample TRC-4 10-12' (i.e., the nondetect result exhibited a quantitation limit above the applicable Method 1 S-1/GW-2 and S-1/GW-3 standards). The following table summarizes the affected metal.

Analyte Affected	Affected Samples	S-1/GW-2 & S-1/GW-3 (mg/kg)	Quantitation Limit (mg/kg)
Thallium	TRC-4 10-12'	8	31

A. Low-Biased Results

Potential low bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process was not affected by the QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Low Bias	Reason Data Usability or Decision-making Process Not Affected
All soils	Antimony	Low recovery in MS	Nondetect results for antimony significantly below MCP Method 1 standards
TRC-4 10-12'	PAHs	Low surrogate recoveries	Results for these compounds significantly below MCP Method 1 standards
TRC-1 5-6'	Naphthalene, 2-methylnaphthalene, C_9-C_{18} aliphatics	Low recoveries in MS	Nondetect results for these compounds significantly below MCP Method 1 standards

B. Potential Uncertainty

Potential uncertainty exists for the positive results for lead in samples TRC-5 3-6.5' and TRC-8 3-12' due to field and laboratory duplicate variability in combination with high recovery in the matrix spike analysis. These results fall below the MCP Method 1 standards by a minimal amount and may have been affected by the QC nonconformance (i.e., the actual results may be higher and above the MCP Method 1 standards). In addition, potential uncertainty exists for the benzo(a)pyrene result in sample TRC-6 5.5-6.5' due to an internal standard nonconformance. This result exceeds the MCP Method 1 standards by a minimal amount and may have been affected by the QC nonconformance (i.e., the actual result may be lower and below the MCP Method 1 standards).

The results for benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene in samples TRC-8 3-12' and TRC-10 0-3' and benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene in sample TRC-11 0.5-3' were not usable for project objectives due to significantly low internal standard recoveries.

The overall data usability and decision-making process was not affected by the remaining QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
All soils	Beryllium	Laboratory duplicate variability	Results for beryllium significantly below the associated MCP Method 1 standards in associated samples
TRC-7 0-0.5', TRC-9 0.5-2', TRC-11 0-0.5', TRC-11 7-11'	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene	Low recovery of internal standard	Results for affected PAHs significantly below the associated MCP Method 1 standards
TRC-6 5.5-6.5'	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene	Low recovery of internal standard	Results for affected PAHs significantly below the associated MCP Method 1 standards
TRC-8 3-12', TRC-10 0-3'	Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene	Low recovery of internal standard	Results for affected PAHs significantly below the associated MCP Method 1 standards
TRC-11 0.5-3'	Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene	Low recovery of internal standard	Results for affected PAHs significantly below the associated MCP Method 1 standards

C. Other Issues

The VPH results were not corrected for moisture as per the requirements of the CAM methods. For EPH analyses, the laboratory did not subtract the target PAH concentrations from the C_{11}-C_{22} aromatic range prior to reporting these results. For PCB Aroclor and EPH analyses, the laboratory did not correct the quantitation limits for the actual weight extracted and the percent solids. TRC performed these corrections to the data; the data tables present the corrected data.

It should be noted that Presumptive Certainty does not exist for PCB Aroclor and EPH analyses due to the following issues:

- Dual column analyses were not performed for PCB Aroclors. As a result, the reported positive values were not confirmed. Results are still usable for project objectives without this confirmation analysis.

- Aroclors 1016 and 1260 were not spiked in the LCS, LCS Duplicate and MS/MSD samples as per the CAM. The laboratory included Aroclor 1254 in place of these two Aroclors. Since Aroclor 1254 was the only Aroclor detected, this deviation from the method does not adversely affect the usability of the data.

- Blank subtraction was performed for the EPH analyses due to the SPE cartridge contamination. A GC/MS analysis of the blank extract was not performed to confirm that the blank contamination was not due to petroleum hydrocarbons, as per the method. Therefore, this is considered a significant modification to the method. Since the results were so significantly below the MCP Method 1 standards, it is unlikely that the blank subtraction adversely affected the overall decision-making process for these samples.

The data associated with soil samples collected on January 24, 2007 and groundwater samples collected on February 6, 2007 were reviewed. In general, the data are usable for MCP decisions based on a review of accuracy, precision, and sensitivity of the data. Although there were select quality control (QC) non-conformances, the data are valid as reported and may be used for decision-making purposes with the exception of the caution listed below.

- Potential low bias exists for the chromium result in soil sample MW6-1012 due to low recoveries in the MS/MSD analyses. This result falls below the S-1/GW-2 and S-1/GW-3 standards by a minimal amount. Caution should be used with this result for decision-making purposes as the actual result may be higher and above the S-1/GW-2 and S-1/GW-3 standards.

- Potential uncertainty exists for the lead result in sample MW1 due to field duplicate variability. The result falls below the GW-3 standard by a minimal amount Caution should be used with this result for decision-making purposes as the actual result may be higher and above the GW-3 standard.

Details on the data usability assessment are provided below.

Soil Samples Included in the Data Usability Assessment: MW5-0204, MW5-0608, MW6-0003, MW6-1012

Groundwater Samples Included in the Data Usability Assessment: MW1, MW2, MW3, MW4, MW5, MW6

Field Duplicates: MW6-1012 (PAHs, metals), MW4 (MTBE, metals), MW5 (PAHs)

MS/MSDs or MS/DUPs: MW5-0608 (PAHs, metals), MW5-0204 (metals), MW6-1012 (metals), MW3 (MTBE, PAHs, metals)

I. Soil Samples

Sensitivity was acceptable for the metals analyses (i.e., quantitation limits for all nondetect results were below the applicable Method 1 S-1/GW-2 and S-1/GW-3 standards). Sensitivity was not acceptable for dibenz(a,h)anthracene in sample MW6-0003 (i.e., the nondetect result exhibited a quantitation limit of 0.74 mg/kg which is above the applicable Method 1 S-1/GW-2 and S-1/GW-3 standards of 0.7 mg/kg). In general, the decision-making process was not adversely affected by this minor sensitivity issue. Dibenz(a,h)anthracene would be reported if detected above the method detection limit, which was generally below the Method 1 S-1/GW-2 and S-1/GW-3 standards.

A. Low-Biased Results

Potential low bias exists for select results due to various QC nonconformances. The chromium result in sample MW6-1012 may be biased low due to low recoveries in the MS/MSD analysis. The result falls below the S-1/GW-2 and S-1/GW-3 standards by a minimal amount and may have been affected by the QC nonconformance (i.e., the actual result may be higher and above the S-1/GW-2 and S-1/GW-3 standards).

In general, the overall data usability and decision-making process were not affected by the remaining QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Low Bias	Reason Data Usability or Decision-making Process Not Affected
MW5-0608	PAHs	Low recoveries in MSD	Nondetect results for this compound significantly below S-1/GW-2 and S-1/GW-3 standards and all recoveries within acceptance criteria in MS.
MW5-0204, MW6-1012	Cadmium	Low recoveries in MS/MSD	Nondetect results for cadmium significantly below S-1/GW-2 and S-1/GW-3 standards.

B. Potential Uncertainty

Potential uncertainty exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by the QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
MW5-0204, |MW6-1012	Zinc	Low and high recoveries in MS/MSD	Results for zinc significantly below S-1/GW-2 and S-1/GW-3 standards.

Samples Affected	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
All soil samples	Lead	MS/MSD variability	Nondetect results for these compounds significantly below S-1/GW-2 and S-1/GW-3 standards or result exceeds standards by significant amount, whereby variability will most likely not affect the outcome.

I1. Groundwater Samples

There were no biases or uncertainty associated with the PAH and MTBE analyses of the groundwater samples. Sensitivity was acceptable for the metals and MTBE analyses (i.e., quantitation limits for all nondetect results were below the applicable Method 1 GW-2 and GW-3 standards). Sensitivity was not acceptable for pyrene in sample MW3 (i.e., the nondetect result exhibited a quantitation limit of 33 ug/L which is above the applicable Method 1 GW-3 standard of 20 ug/L). In general, the decision-making process was not adversely affected by this minor sensitivity issue. Pyrene would be reported if detected above the method detection limit, which was generally below the GW-3 standard.

A. Potential Uncertainty

Potential uncertainty exists for select results due to various QC nonconformances. Potential uncertainty exists for the lead result in sample MW1 due to field duplicate variability. The result falls below the GW-3 standard by a minimal amount and may have been affected by the QC nonconformance (i.e., the actual result may be higher and above the GW-3 standard).

In general, the overall data usability and decision-making process were not affected by the remaining QC nonconformances, as shown in the table below.

Samples Affected	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
All groundwater samples	Barium, chromium, nickel, vanadium, zinc	High RPDs in field duplicate analyses	Nondetect results significantly below GW-3 standards.

8.0 CONCLUSIONS

TRC completed a Phase II CSA Amendment at the former Former Reliable Truss Company Site located at 246 River Road in New Bedford, Massachusetts (MassDEP RTN 4-17604). The Phase II CSA included collection and laboratory analyses of soil and groundwater samples to characterize the nature and extent of OHM releases at the site. The Phase II CSA also included completion of an MCP Method 1 Risk Assessment to characterize the potential risk of harm to health, safety public welfare and the environment posed by the site.

Based on the results of the Phase II CSA, TRC has developed the following conclusions:

- The Site is underlain by a fill layer, consisting of a heterogeneous mixture of sand, silt, gravel, brick, coal and coal ash, varying in thickness from approximately one to seven feet across the Site. Fine to coarse sand and gravel with lesser amount of fines and cobbles underlie the fill material.

- Concentrations of lead were reported above the Method 1 S-1 soil standard of 300 mg/kg in three separate areas of the Site, identified as Area 1, Area 2, and Area 3. Concentrations of lead above the Method 1 soil standard appear to be generally limited to the 0-4 foot depth interval and do not appear attributable to point-source contamination. Site lead contamination appears to be attributable to historic fill materials. A lead concentrations above Method 1 S-1 standard was reported in one deeper sample (in TRC-6 from 3 - 6.5 feet below grade), adjacent to Area 2.

- Individual samples concentrations of lead in soil were reported above the upper concentration limit (UCL) of 3,000 mg/kg in samples AB-13 (Area 1), TRC-4 (Area 2), AB-31 and AB-36 (Area 3) at depths limited to the 0-4 foot depth interval.

- Individual sample concentrations of antimony, barium, beryllium, mercury, nickel, and vanadium were detected in the fill material and native soil below applicable Method 1 S-1 soil standards. Cadmium and zinc were detected above the Method 1 S-1/GW-3 standard of 2 mg/kg and 2,500 mg/kg, respectively from one sample (TRC-8) from the 0-3 ft depth interval.

- Individual sample concentrations of several PAHs were detected in fill materials and native soil below applicable Method 1 S-2 soil standards. Benzo(a)pyrene, benzo(a)anthracene, and dibenzo(a,h)anthracene were identified in one sample (AB-9) above the Method 1 S-1 soil standards from the 0-4 foot depth interval.

- EPCs for VPH, EPH, PAHs, and PCBs do not exceed Method 1 soil standards under current or future use scenarios.

- EPCs for lead in accessible surface soils and potentially accessible subsurface soils impacted by historical fill were greater than applicable Method 1 S-1 and S-2 soil standards of 300 mg/kg. Individual sample concentrations of lead in four accessible surface soil samples and

one potentially accessible subsurface soil sample were also greater than Upper Concentration Limit (UCL) of 3,000 mg/kg.

- EPCs for chromium in accessible surface soils impacted by historical fill were greater than the applicable Method 1 S-1 soil standard of 30 mg/kg.

- Groundwater results for total lead were reported above the Method 1 GW-3 groundwater cleanup standard in two wells (MW-2 and MW-4). However, the results of dissolved lead from these two wells were either reported well below the GW-3 standard or was not detected, strongly suggesting that the elevated total lead concentrations was a result of lead absorbed onto particulates in the sample and not indicative of the water quality of the aquifer.

The results of Numerical Ranking System (NRS) scoring reveal a Site score of 310. This score classifies this Site as a Tier II disposal site under the MCP.

9.0 PHASE II OUTCOME

In accordance with 310 CMR 40.0840, the following are possible outcomes upon completion of a Phase II CSA:

1. Comprehensive Remedial Actions are necessary at the Site to achieve a Response Action Outcome as described in 310 CMR 40.1000. A Phase II study for the identification, evaluation, and selection of Comprehensive Remedial Action Alternatives as described in 310 CMR 40.0850 is necessary to select a remedial action alternative; or

2. The requirements of a Class A or B Response Action Outcome under 310 CMR 40.1000 have been met, and a Response Action Outcome Statement supported by information from the Phase II report shall be submitted to the DEP.

Based on the results on the Phase II as described herein, at a minimum Comprehensive Remedial Actions are necessary to address lead contamination in surface soil at the Site to achieve a Response Action Outcome. However, a final Phase II outcome has not been achieved at this time because of a data gap represented by the lack of representative surface soil and sediment samples at the southern boundary of the Site. Therefore, this report is considered an interim Phase II report.

10.0 TIER CLASSIFICATION

In accordance with 310 CMR 40.0502(4), a Site determined by MassDEP to be a Tier 1D classified Site because the Site was not previously classified shall be classified pursuant to 310 CMR 40.0510. Therefore, the information presented in this report has been used to complete a Tier Classification for this disposal site. The disposal site received a score of 310 on the Numerical Ranking System (NRS) score sheet included in Appendix G. The Site has therefore been classified as Tier II disposal site.

Public notification of the availability of the Phase II report and Tier Classification for this disposal site has been performed in accordance with 310 CMR 40.0485. A legal notice of the Tier Classification will appear in the New Bedford Standard Times on May 30, 2007. Letters informing the Mayor of New Bedford and the Director of the Board of Health were mailed on May 24, 2007. Copies of letters and the legal notice are provided in Appendix H. A copy of the newspaper publication will be submitted to MassDEP after the notice has been published.

11.0 REFERENCES

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TABLES

Table 1
Summary of Monitoring Well Construction and Field Data
246 River Street, New Bedford, MA

WELL CONSTRUCTION					02/06/2007 MONITORING DATA											05/03/2007 MONITORING DATA			
Well ID	Installation Date	Well Diameter (in.)	Screen Internal (ft bgs)	TOC Elevation (ft)	Total Depth (ft.)	Depth to NAPL	DTW (ft.)	GW Elevation (ft.)	Temp. (C)	Conduct. (µmhos/cm)	Do (mg/l)	pH (Std.Units)	Eh (millivolts)	Turb. (NTU)	Flow (ml/min)	Depth to NAPL	Total Depth (ft.)	DTW (ft.)	GW Elevation (ft.)
MW-1	4/5/2006	2	4-10	98.020	9.65	ND	5.05	92.97	6.68	0.844	6.71	6.25	135.5	21.8	150	ND	9.8	3.69	94.33
MW-2	4/5/2006	2	4-14	97.070	12.53	ND	3.59	93.48	8.70	0.631	1.12	6.23	6.3	ER2	250	ND	12.75	2.34	94.73
MW-3	1/24/2007	2	3-13	99.310	12.20	ND	6.48	92.83	7.80	0.285	5.75	6.09	88.3	0.50	250	ND	12.39	5.38	93.93
MW-4	1/24/2007	2	4-14	99.150	~14	ND	5.10	94.05	10.19	0.671	1.61	6.96	-93.0	22.3	150	ND	13.24	3.94	95.21
MW-5	1/24/2007	2	2-12	100.160	11.65	ND	6.38	93.78	9.34	0.382	4.80	6.50	44.0	8.17	250	ND	11.87	4.87	95.29
MW-6	1/24/2007	2	3.5-13.5	99.090	12.95	ND	4.86	94.23	8.76	6.541	0.57	6.64	35.3	62.9	250	ND	13.15	3.33	95.76

Notes:
DTW - Depth to Water
GW - Groundwater
NM - Not Measured
NAPL - Non-aqueous phase liquid
All elevations measured relative to arbitrary benchmark of 100 ft

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	AB-1	AB-2	AB-3	AB-4	AB-5	AB-6	AB-7	AB-8	AB-9	AB-10	AB-11	AB-12	AB13A	AB13B	AB14A	AB14B	AB15A	AB15B
				Depth (feet):	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-2	2-4	0-2	2-4	0-2	2-4
				Date sampled:	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002
		S-1/GW-3	S-2/GW-3	UCLs																		
VOCs (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	**37**	**75**	**60**	**32**	**58**	**48**	**41**	**74**	**53**	**51**	**69**	**120**	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	**46**	**85**	**69**	31 U	**46**	**33**	33 U	**73**	**120**	**76**	**54**	**84**	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**0.43 J**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**0.56 J**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**0.42 J**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**0.77**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	0.38 U	**0.70**	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**9.7**	**0.92**	1.1	0.50 U	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**3.3**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	0.38 U	**0.74**	**0.44**	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**15**	**1.2**	**1.4**	**0.67**	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	0.38 U	**0.62**	**0.41**	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**12**	**0.95**	**1.1**	**0.54**	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	0.38 U	**0.43**	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**7.5**	**0.65**	**0.63**	0.50 U	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	0.38 U	**0.82**	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**6.5**	**0.64**	**0.68**	0.50 U	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	0.38 U	**0.49**	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**5.4**	**0.66**	**0.59**	0.50 U	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**3.9**	**0.49**	**0.53**	0.50 U	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**6.7**	**0.58**	**0.59**	0.50 U	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**4.6**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**1.2**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	**4.4**	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	**0.190**	NA	0.084 U	NA	NA	0.086 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	**3.2**	**18**	**8.5**	1.1 U	**11**	**7.0**	**7.4**	1.1 U	**2.4**	**3.4**	**19**	**27**	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	**120**	**55**	**110**	**37**	**570**	**170**	**100**	**150**	**39**	**120**	**420**	**880**	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	0.58 U	**1.5**	0.56 U	0.53 U	0.68 U	0.55 U	0.59 U	0.55 U	0.53 U	0.58 U	3.4 U	**6.2**	NA	NA	NA	NA	NA	NA
	Chromium	30	200	2,000	12 U	**250**	**25**	**30**	14 U	11 U	12 U	**96**	11 U	12 U	**16**	**46**	NA	NA	NA	NA	NA	NA
	Lead	300	300	3,000	**850**	**740**	**210**	11 U	**270**	**230**	**110**	**21**	**73**	**700**	**700**	**2200**	**5,300**	**130**	**12**	**800**	**49**	**1,300**
	Mercury	20	30	300	**0.074**	**0.39**	**0.075**	0.036	**0.057**	**0.13**	0.038 U	0.036 U	**0.069**	**3.0**	**0.39**	**1.1**	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	1000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				Standards to be compared:	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-2	S-1	S-1	S-1	S-1

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	AB16A	AB16B	AB17A	AB17B	AB18A	AB18B	AB19A	AB19B	AB20B	AB21A	AB21B	AB22A	AB22B	AB23A	AB23B	AB24A	AB24B
				Depth (feet):	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4
				Date sampled:	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/7/2002	8/7/2002
		S-1/GW-3	S-2/GW-3	UCLs																	
VOCs (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	3,000	**55**	11 U	**120**	12 U	**440**	**21**	**820**	**1,900**	**19**	**930**	**89**	**47**	11 U	**410**	**1,500**	**430**	**69**
	Mercury	20	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	1000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				Standards to be compared:	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	AB25A	AB25B	AB26A		AB26B		AB27A	AB27B	AB28A	AB28B	AB30A	AB30B	AB31A	AB31B	AB32A	AB32B	AB33A	AB33B
				Depth (feet):	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4
				Date sampled:	8/6/2002	8/6/2002	8/6/2002	8/7/2002	8/6/2002	8/7/2002	8/6/2002	8/6/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002
		S-1/GW-3	S-2/GW-3	UCLs																		
VOCs (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	200	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	3,000	**1,800**	**39**	**180**	**440**	11 U	11 U	11 U	**54**	**290**	**38**	**36**	**12**	**1,100**	**8,400**	**330**	**2,600**	**420**	**710**
	Mercury	20	30	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	1000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				Standards to be compared:	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	AB34A	AB34B	AB35A	AB35B	AB36A	AB36B	TRC-1					TRC-2				TRC-3		
				Depth (feet):	0-2	2-4	0-2	2-4	0-2	2-4	0-3	0-3	5-6	3-10	10-12.5	0-3	0-3	1-3	3-6.5	0-3	3-6	5-6
				Date sampled:	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	8/7/2002	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006
		S-1/GW-3	S-2/GW-3	UCLs								Field Dup					Field Dup					
VOCs (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	NA	NA	NA	NA	NA	NA	NA	NA	85 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	85 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	**0.42**	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	**0.45**	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	**0.40**	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	0.37 U	NA	0.85 U	NA	0.39 U	NA	NA	0.45 U	NA	NA	NA	0.37 U
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	NA	NA	NA	NA	NA	**0.13**	NA	NA	0.091 U	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	NA	NA	NA	NA	NA	NA	0.28 U	0.26 U	NA	NA	0.29 U	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	**25**	**24**	NA	NA	**17**	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	NA	NA	NA	NA	NA	NA	**0.13**	**0.13**	NA	NA	**0.16**	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	NA	NA	NA	NA	NA	NA	0.21 U	0.21 U	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	200	2,000	NA	NA	NA	NA	NA	NA	**9.2**	**7.0**	NA	NA	**6.9**	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	3,000	**450**	**2,000**	**200**	**2,000**	**310**	3,300	**32**	**34**	NA	**4.6**	**5.0**	**58**	**98**	NA	**11**	**20**	**10**	NA
	Mercury	20	30	300	NA	NA	NA	NA	NA	NA	**0.29**	**0.20**	NA	NA	0.11 U	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	NA	NA	NA	NA	NA	NA	**4.7**	**4.1**	NA	NA	**4.4**	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	1000	10,000	NA	NA	NA	NA	NA	NA	**14**	**12**	NA	NA	**8.8**	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	NA	NA	NA	NA	NA	NA	**28**	**22**	NA	NA	**15**	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				Standards to be compared:	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-1	S-2	S-2	S-2	S-1	S-1	S-1	S-2	S-1	S-2	S-2

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	TRC-4					TRC-5			TRC-6			TRC-7			
				Depth (feet):	0-3	1-2	3-10	3-10	10-12	0-3	3-6.5	5.5-6.5	0-3	3-6.5	5.5-6.5	0-0.5	0.5-3	0.5-3	6-8
				Date sampled:	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006
		S-1/GW-3	S-2/GW-3	UCLs				Field Dup										Field Dup	
VOCs (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	NA	**24 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	NA	**53 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**0.50**	0.37 U	0.35 U	0.36 U	0.37 U
	Phenanthrene	100	100	10,000	NA	**0.80**	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**6.6**	0.37 U	0.35 U	0.36 U	0.37 U
	Anthracene	1,000	2,500	10,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**1.5**	0.37 U	0.35 U	0.36 U	0.37 U
	Fluoranthene	1,000	3,000	10,000	NA	**0.80**	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**8.9**	0.37 U	0.35 U	0.36 U	0.37 U
	Pyrene	1,000	3,000	10,000	NA	**0.70 J**	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**9.3**	0.37 U	0.35 U	0.36 U	0.37 U
	Benzo(a)anthracene	7	40	3,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**4.0**	0.37 U	0.35 U	0.36 U	0.37 U
	Chrysene	7	10	400	NA	**0.60 J**	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**4.2**	0.37 U	0.35 U	0.36 U	0.37 U
	Benzo(b)fluoranthene	7	40	3,000	NA	**0.40 J**	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**4.2**	0.37 U	0.35 U	0.36 U	0.37 U
	Benzo(k)fluoranthene	70	400	10,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**3.4**	0.37 U	0.35 U	0.36 U	0.37 U
	Benzo(a)pyrene	2	4	300	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**3.8**	0.37 U	0.35 U	0.36 U	0.37 U
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**1.0**	0.37 U	0.35 U	0.36 U	0.37 U
	Dibenzo(a,h)anthracene	0.7	4	300	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	0.41 U	0.37 U	0.35 U	0.36 U	0.37 U
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	0.80 U	0.39 U	NA	0.43 U	NA	NA	0.38 U	NA	NA	**0.81**	0.37 U	0.35 U	0.36 U	0.37 U
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	NA	0.078 U	0.082 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	NA	NA	0.28 U	NA	0.29 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	NA	NA	**9.5**	NA	**340**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	NA	NA	**0.10**	NA	**0.24**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	NA	NA	0.21 U	NA	0.26 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	200	2,000	NA	NA	**5.0**	NA	**83**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	3,000	**29,000**	NA	**8.0**	NA	**3.3**	2.2 U	**200**	NA	**10**	**4,800**	NA	**12**	**7.2**	NA	**3.8**
	Mercury	20	30	300	NA	NA	0.10 U	NA	0.11 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	NA	NA	**4.3**	NA	**32**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	1000	10,000	NA	NA	**7.2**	NA	**70**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	NA	NA	**15**	NA	**64**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				Standards to be compared:	S-1	S-1	S-2	S-2	S-2	S-1	S-2	S-2	S-1	S-2	S-2	S-1	S-1	S-1	S-2

Table 2
Summary of Detected Analytical Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	TRC-8				TRC-9			TRC-10	TRC-11			MW5-0204	MW5-0608	MW6-0003	MW6-1012	
				Depth (feet):	0-3	1-2	1-2	3-12	0.5-2	0-3	3-6	0-3	0-0.5	0.5-3	7-11	2-4	6-8	0-3	10-12	10-12
				Date sampled:	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	1/24/2007	1/24/2007	1/24/2007	1/24/2007	1/24/2007
		S-1/GW-3	S-2/GW-3	UCLs			Field Dup													Field Dup
VOCs (mg/kg)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)					NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	5,000	20,000	NA	**85 J**	**130**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	2000	10,000	NA	**110**	**200**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	2,000	10,000	NA	0.96 U	1.1 U	0.37 U	0.44 U	NA	NA	0.44 U	0.42 U	0.44 U	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Phenanthrene	100	100	10,000	NA	0.96 U	**3.6**	0.37 U	0.44 U	NA	NA	0.44 U	**0.78**	**1.7**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Anthracene	1,000	2,500	10,000	NA	0.96 U	1.1 U	0.37 U	0.44 U	NA	NA	0.44 U	0.42 U	0.44 U	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Fluoranthene	1,000	3,000	10,000	NA	**1.7**	**3.7**	**0.40**	0.44 U	NA	NA	0.44 U	**0.71**	**1.4**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Pyrene	1,000	3,000	10,000	NA	**1.7**	**4.7**	**0.75**	0.44 U	NA	NA	**0.67**	**0.84**	**2.2**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Benzo(a)anthracene	7	40	3,000	NA	**1.3**	**1.9**	0.37 U	0.44 U	NA	NA	0.44 U	0.42 U	**0.71**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Chrysene	7	10	400	NA	**1.4**	**2.2**	0.37 U	0.44 U	NA	NA	0.44 U	0.42 U	**0.75**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Benzo(b)fluoranthene	7	40	3,000	NA	**1.4**	**1.3**	**0.51**	0.44 U	NA	NA	**0.50**	0.42 U	**0.77**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Benzo(k)fluoranthene	70	400	10,000	NA	**1.3**	**1.6**	R	0.44 U	NA	NA	R	0.42 U	R	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Benzo(a)pyrene	2	4	300	NA	**1.6**	**1.7**	R	0.44 U	NA	NA	R	0.42 U	**0.71**	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	**1.4**	**0.90 J**	R	0.44 U	NA	NA	R	0.42 U	R	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Dibenzo(a,h)anthracene	0.7	4	300	NA	0.96 U	1.1 U	R	0.44 U	NA	NA	R	0.42 U	R	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
	Benzo(ghi)perylene	1,000	2,500	10,000	NA	**0.90 J**	**0.7 J**	R	0.44 U	NA	NA	R	0.42 U	R	0.39 U	0.41 U	0.46 U	0.74 U	0.38 U	0.37 U
SVOCs (mg/kg)	Acenaphthylene	100	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	2,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	3,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	10	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	400	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	40	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	4	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	2	100	NA	NA	NA	0.074 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	30	300	0.31 U	NA	NA	0.27 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	3,000	10,000	**510**	NA	NA	**84**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	0.8	30	**0.30**	NA	NA	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	30	300	**11**	NA	NA	**0.70**	NA	NA	NA	NA	NA	NA	NA	0.41 U	NA	NA	0.36 U	0.40 U
	Chromium	30	200	2,000	**17**	NA	NA	**12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**29.3**	**28.4**
	Lead	300	300	3,000	**1,500**	NA	NA	**280**	NA	**970**	**29**	**1,300**	**82**	**420**	**4.5**	**768**	**15.5**	**31.5**	0.36 U	0.40 U
	Mercury	20	30	300	**0.41**	NA	NA	0.11 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	700	7,000	**18**	NA	NA	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**16.3**	**15.2**
	Vanadium	600	1000	10,000	**68**	NA	NA	**11**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	3,000	10,000	**3,100**	NA	NA	**550**	NA	NA	NA	NA	NA	NA	NA	**241**	NA	NA	**29.7**	**28.4**
Solids (%)	Solids	NS	NS	NS	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	**81**	**72**	**89**	**87**	**88**
		Standards to be compared:			S-1	S-1	S-1	S-2	S-1	S-1	S-2	S-1	S-1	S-1	S-2	S-1	S-2	S-1	S-2	S-2

Table 2
Summary of Analytical Detected Results for Soil Samples - 2002, 2006 and 2007
246 River Road
New Bedford, Massachusetts

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

J - Estimated value; below quantitation limit.

NA - Sample not analyzed for the listed analyte.

ND - Not detected.

NS - No standard available for this compound.

R - Rejected during data review due to poor internal standard response.

U - Compound was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed the listed S-1or S-2 standards.

Values shown in **Bold** and with double line border exceed the listed UCLs.

* - MCP standards for C9-C10 Aromatics used.

EPH - Extractable Petroleum Hydrocarbons.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

VOCs - Volatile Organic Compounds.

VPH - Volatile Petroleum Hydrocarbons.

EPC - Exposure Point Concentration, is the sum of half of the quantitation limits for non-detects plus any detected concentrations divided by the number of samples.

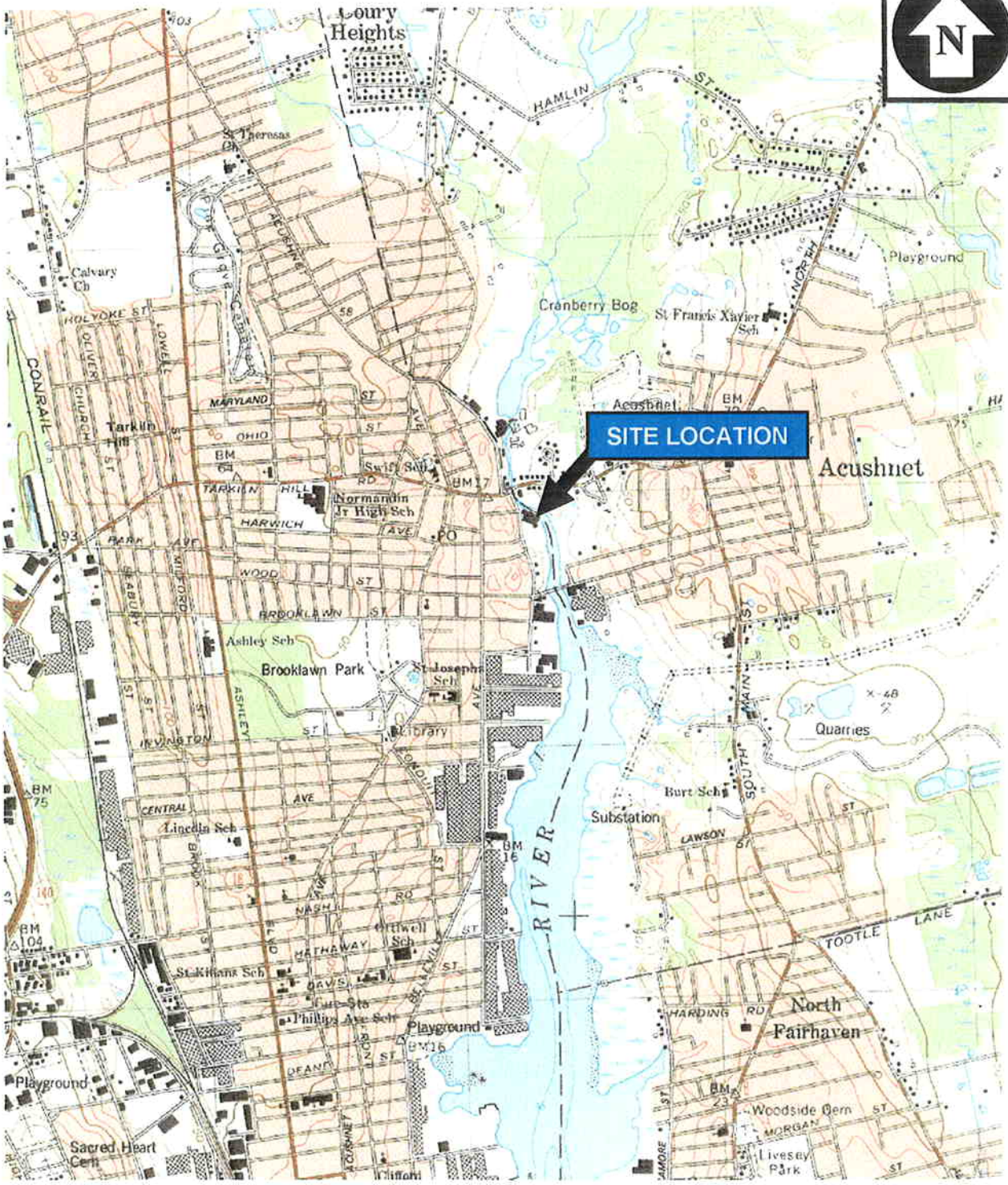
UCLs - MCP Method 2 Upper Concentration Limits.

Table 3
Summary of Analytical Results for Groundwater Samples - 2007
246 River Road
New Bedford, Massachusetts

Analysis	Analyte			Sample ID:	MW1-020607	MW2-020607	MW3-020607	MW4-020607		MW5-020607		MW6-020607
				Sample Date:	2/6/2007	2/6/2007	2/6/2007	2/6/2007	2/6/2007	2/6/2007	2/6/2007	2/6/2007
		GW-3	UCLs						Field Dup		Field Dup	
VOCs												
(ug/L)	Methyl Tert Butyl Ether	50,000	100,000		NA	NA	2.0 U	2.0 U	2.0 U	NA	NA	NA
PAHs												
(ug/L)	2-Methylnaphthalene	3,000	100,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Acenaphthene	5,000	50,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Acenaphthylene	3,000	30,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Anthracene	3,000	30,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Benz(a)anthracene	1000	10000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Benzo(a)pyrene	500	5,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Benzo(b)fluoranthene	400	4,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Benzo(ghi)perylene	3,000	30,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Benzo(k)fluoranthene	100	1,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Chrysene	3,000	30,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Dibenz(a,h)anthracene	40	400		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Fluoranthene	200	2,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Fluorene	3,000	30,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Indeno(1,2,3-cd)pyrene	100	1,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Naphthalene	20,000	100,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Phenanthrene	50	3,000		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
	Pyrene	20	800		10 U	10 U	33 U	10 U	NA	10 U	10 U	10 U
Metals, total												
(ug/L)	Antimony	8,000	80,000		5 U	5 U	5 U	5 U	5 U	5 U	NA	5 U
	Arsenic	900	9,000		4 U	4 U	4 U	4 U	4 U	4 U	NA	4 U
	Barium	50,000	100,000		**85**	**156**	**45**	**75**	**102**	**73**	NA	**53**
	Beryllium	50	500		1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U
	Cadmium	4	50		1 U	**1**	1 U	1 U	1 U	1 U	NA	1 U
	Chromium	300	3,000		**7**	**18**	1 U	**3.0**	**11**	1 U	NA	1 U
	Lead	10	150		**6**	**93**	1 U	**4**	**12**	1 U	NA	1 U
	Mercury	20	200		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U
	Nickel	200	2,000		**5**	**19**	1 U	**4**	**9**	**2**	NA	**2**
	Selenium	100	1,000		10 U	10 U	10 U	10 U	10 U	10 U	NA	10 U
	Silver	7	1,000		1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U
	Thallium	3,000	30,000		2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U
	Vanadium	4,000	40,000		**4**	**12**	2 U	**4**	**13**	2 U	NA	2 U
	Zinc	900	50,000		**18**	**557**	**4**	**12**	**29**	**61**	NA	**4**
Metals, dissolved												
(ug/L)	Lead	10	150		NA	**1**	NA	NA	1 U	NA	NA	NA

Notes:
All units in ug/L unless otherwise specified.
ug/L - micrograms per liter.
NA - Sample not analyzed for the listed analyte.
NS - No MADEP standards exist for this compound.
U - Compound was not detected at specified quantitation limit.
Values in Bold indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed standa
PAHs - Polynuclear Aromatic Hydrocarbons.
VOCs - Volatile Organic Compounds.
UCLs - MCP Method 2 Upper Concentration Limits.

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS TOPOGRAPHIC QUADRANGLES: NEW BEDFORD NORTH, MA 1979

0 1000 2000 3000

scale in feet

QUADRANGLE LOCATION

246 RIVER ROAD SITE, NEW BEDFORD, MASSACHUSETTS

SITE LOCATION MAP

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

FIGURE 1

Drawn: MAN	SCALE: AS SHOWN
Checked: RN	Date 11/20/06

T:\E_CAD\47284\246 River Rd TOPO.ppt

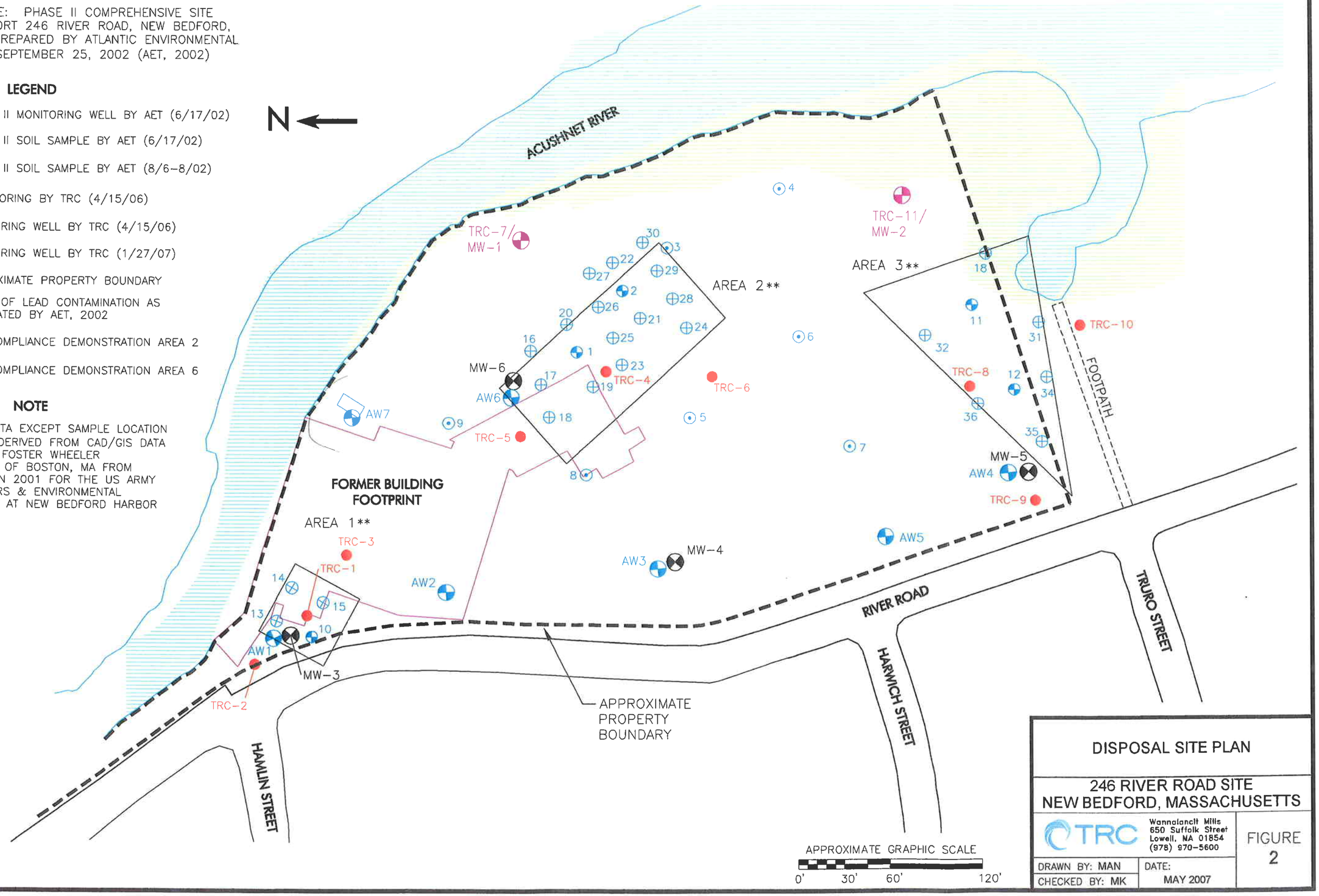
BASE MAP SOURCE: PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT 246 RIVER ROAD, NEW BEDFORD, MASSACHUSETTS PREPARED BY ATLANTIC ENVIRONMENTAL TECHNOLOGIES, SEPTEMBER 25, 2002 (AET, 2002)

LEGEND

- PHASE II MONITORING WELL BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (8/6-8/02)
- SOIL BORING BY TRC (4/15/06)
- MONITORING WELL BY TRC (4/15/06)
- MONITORING WELL BY TRC (1/27/07)
- APPROXIMATE PROPERTY BOUNDARY
- ** AREAS OF LEAD CONTAMINATION AS DELINEATED BY AET, 2002
- EPA COMPLIANCE DEMONSTRATION AREA 2
- EPA COMPLIANCE DEMONSTRATION AREA 6

NOTE

ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM CAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.



DISPOSAL SITE PLAN

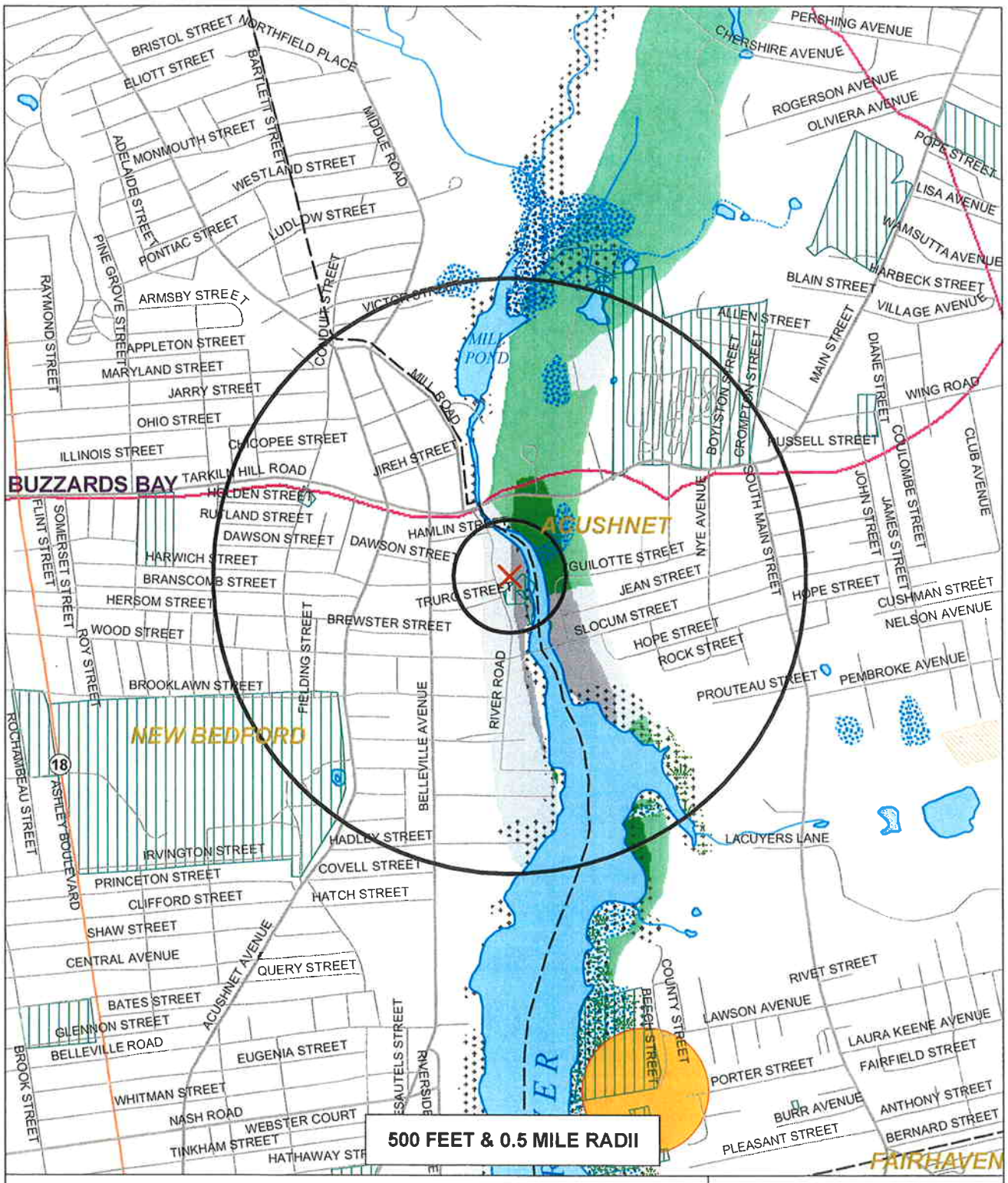
246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: MAN
CHECKED BY: MK
DATE: MAY 2007

FIGURE 2

FILE: T:\E_CAD\47284\246rr_disposal.dwg



Roads: Limited Access, Multi-Lane, Major/Minor

Major Basin, Perennial Str, Int Str, Aqueduct, Dam, Channel in Water

Wetland, Open Water, Reservoir, Tidal Flat/Shoal

Potentially Productive Aquifers: Medium, High Yield

Non-Potential Drinking Water Source Area: Medium, High Yield

EPA Sole Source Aquifer, FEMA 100 Yr Floodplain, DEP Solid Waste Facility

Public Water Supplies: Ground, Surface, Non-Community (NTNC, TNC)

Approved Zone II, IWPA, Surface Water Supply Zone A

Protected Open Space, ACEC

Rare Wildlife 2006, Certified Vernal Pool 2007

Source: MassGIS/EOEA

TRC

Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

FIGURE 3

MA DEP SITE SCORING MAP
246 RIVER ROAD
NEW BEDFORD, MA

0 625 1,250
Feet

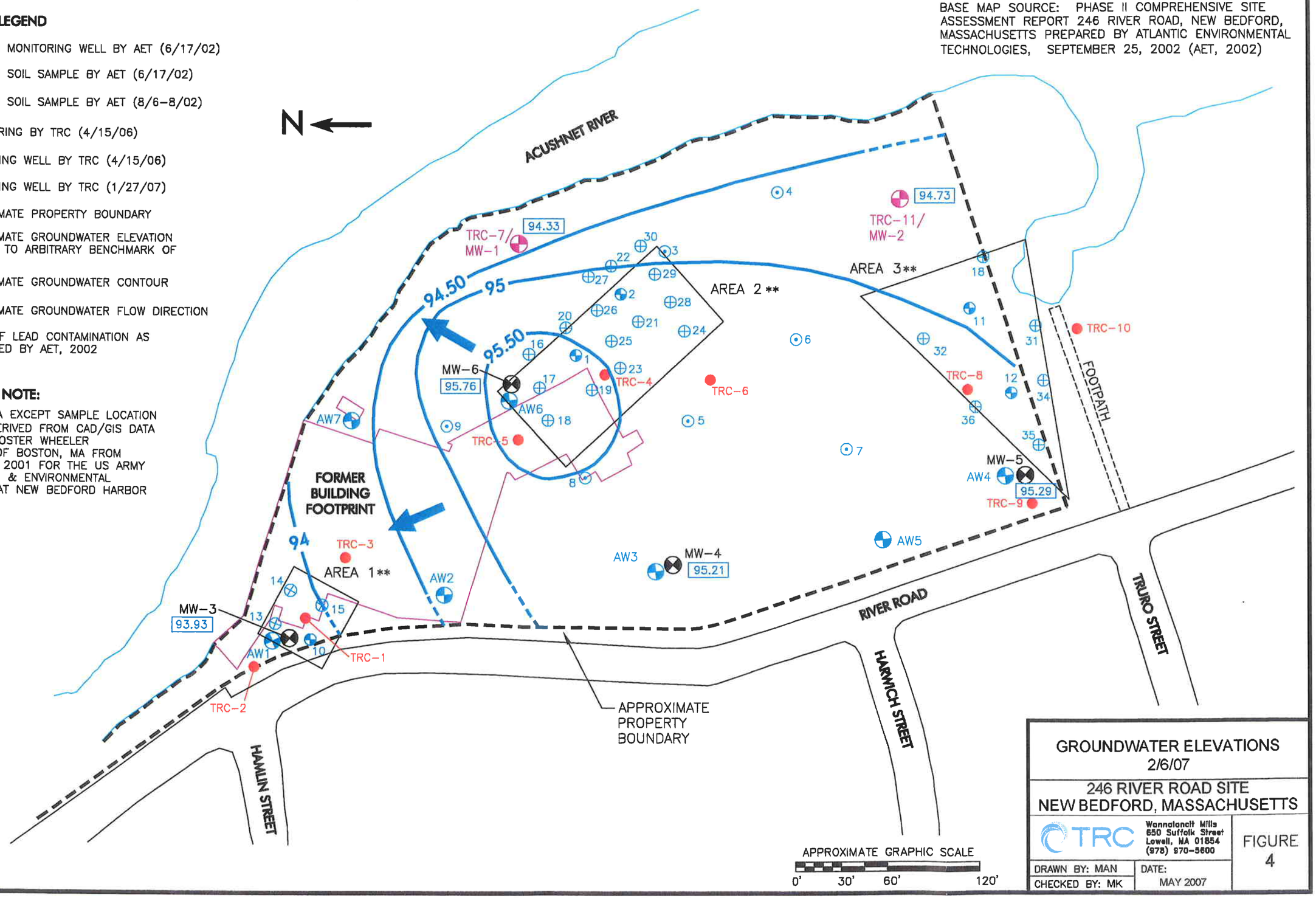
BASE MAP SOURCE: PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT 246 RIVER ROAD, NEW BEDFORD, MASSACHUSETTS PREPARED BY ATLANTIC ENVIRONMENTAL TECHNOLOGIES, SEPTEMBER 25, 2002 (AET, 2002)

LEGEND

- PHASE II MONITORING WELL BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (8/6–8/02)
- SOIL BORING BY TRC (4/15/06)
- MONITORING WELL BY TRC (4/15/06)
- MONITORING WELL BY TRC (1/27/07)
- APPROXIMATE PROPERTY BOUNDARY
- 95.21 APPROXIMATE GROUNDWATER ELEVATION RELATIVE TO ARBITRARY BENCHMARK OF 100 FT.
- APPROXIMATE GROUNDWATER CONTOUR
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- ** AREAS OF LEAD CONTAMINATION AS DELINEATED BY AET, 2002

NOTE:

ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM CAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.



GROUNDWATER ELEVATIONS
2/6/07

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: MAN
CHECKED BY: MK
DATE: MAY 2007

FIGURE 4

FILE: T:\E_CAD\47284\246rr_GW_ELEV.dwg

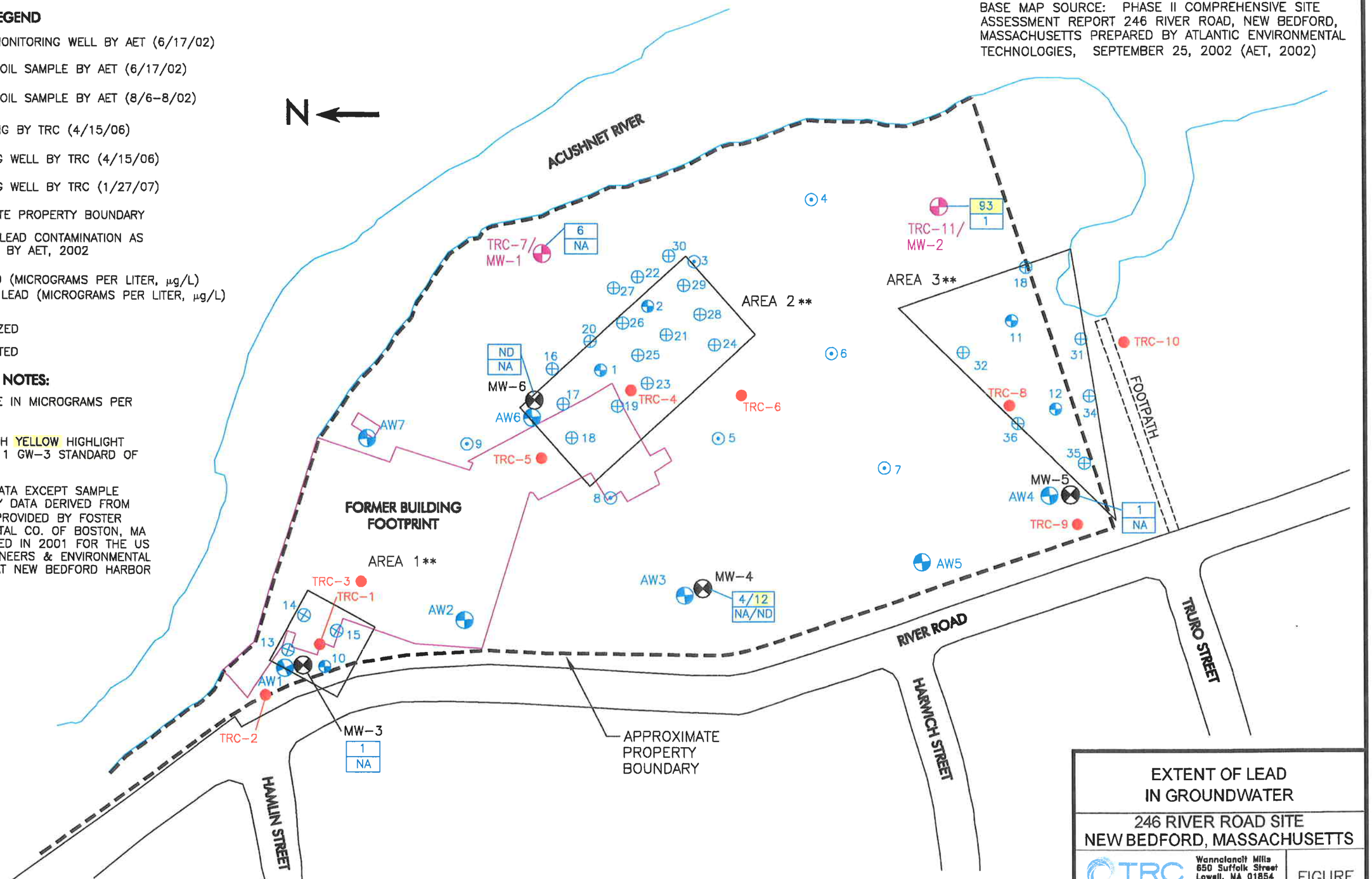
BASE MAP SOURCE: PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT 246 RIVER ROAD, NEW BEDFORD, MASSACHUSETTS PREPARED BY ATLANTIC ENVIRONMENTAL TECHNOLOGIES, SEPTEMBER 25, 2002 (AET, 2002)

LEGEND

- PHASE II MONITORING WELL BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (6/17/02)
- PHASE II SOIL SAMPLE BY AET (8/6–8/02)
- SOIL BORING BY TRC (4/15/06)
- MONITORING WELL BY TRC (4/15/06)
- MONITORING WELL BY TRC (1/27/07)
- APPROXIMATE PROPERTY BOUNDARY
- ** AREAS OF LEAD CONTAMINATION AS DELINEATED BY AET, 2002
- 93 / 1 — TOTAL LEAD (MICROGRAMS PER LITER, µg/L) / DISSOLVED LEAD (MICROGRAMS PER LITER, µg/L)
- NA — NOT ANALYZED
- ND — NOT DETECTED

NOTES:

1. VALUES SHOWN ARE IN MICROGRAMS PER LITER (µg/L)
2. VALUES SHOWN WITH YELLOW HIGHLIGHT EXCEED MCP METHOD 1 GW–3 STANDARD OF 10µg/L
3. ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM CAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.



EXTENT OF LEAD IN GROUNDWATER

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970–5600

DRAWN BY: MAN
CHECKED BY: MK
DATE: MAY 2007

FIGURE 5

FILE: T:\E_CAD\47284\246RR_EXTENT_LEAD.dwg

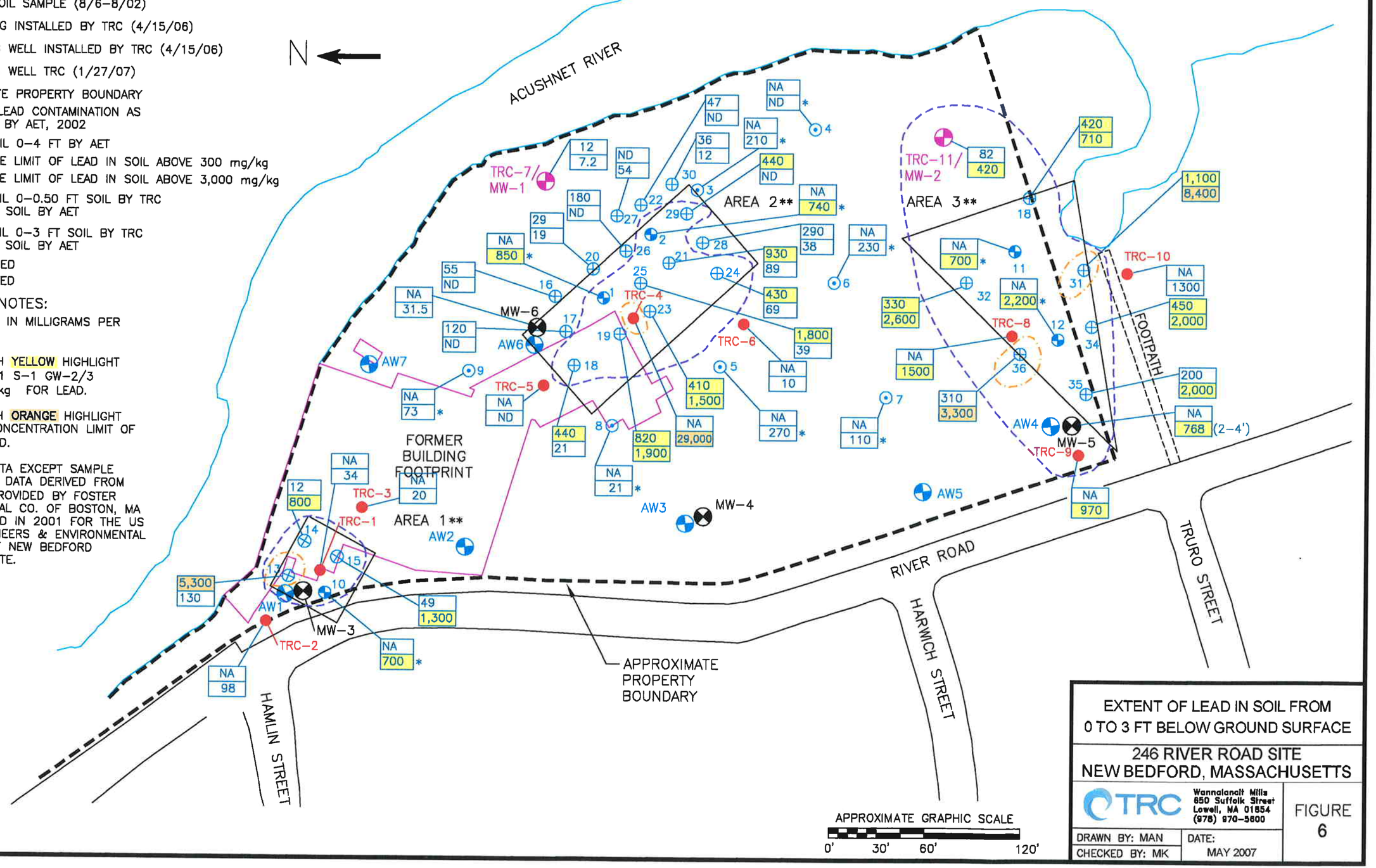
LEGEND

- PHASE II MONITORING WELL BY AET (6/17/02)
- PHASE II SOIL SAMPLE (6/17/02)
- PHASE II SOIL SAMPLE (8/6–8/02)
- SOIL BORING INSTALLED BY TRC (4/15/06)
- MONITORING WELL INSTALLED BY TRC (4/15/06)
- MONITORING WELL TRC (1/27/07)
- APPROXIMATE PROPERTY BOUNDARY
- ** AREAS OF LEAD CONTAMINATION AS DELINEATED BY AET, 2002
- * LEAD IN SOIL 0–4 FT BY AET
- APPROXIMATE LIMIT OF LEAD IN SOIL ABOVE 300 mg/kg
- APPROXIMATE LIMIT OF LEAD IN SOIL ABOVE 3,000 mg/kg
- 58 / 98 — LEAD IN SOIL 0–0.50 FT SOIL BY TRC OR 0–2 FT SOIL BY AET; LEAD IN SOIL 0–3 FT SOIL BY TRC OR 2–4 FT SOIL BY AET
- NA NOT ANALYZED
- ND NOT DETECTED

NOTES:

1. VALUES SHOWN ARE IN MILLIGRAMS PER KILOGRAM (mg/kg)
2. VALUES SHOWN WITH YELLOW HIGHLIGHT EXCEED MCP METHOD 1 S–1 GW–2/3 STANDARD OF 300mg/kg FOR LEAD.
3. VALUES SHOWN WITH ORANGE HIGHLIGHT EXCEED THE UPPER CONCENTRATION LIMIT OF 3,000 mg/kg FOR LEAD.
4. ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM CAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.

BASE MAP SOURCE: PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT 246 RIVER ROAD, NEW BEDFORD, MASSACHUSETTS PREPARED BY ATLANTIC ENVIRONMENTAL TECHNOLOGIES, SEPTEMBER 25, 2002 (AET, 2002)



EXTENT OF LEAD IN SOIL FROM 0 TO 3 FT BELOW GROUND SURFACE

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970–5600

DRAWN BY: MAN
CHECKED BY: MK
DATE: MAY 2007

FIGURE 6

FILE: T:\E_CAD\47284\246rr_LEAD_less_than3.dwg

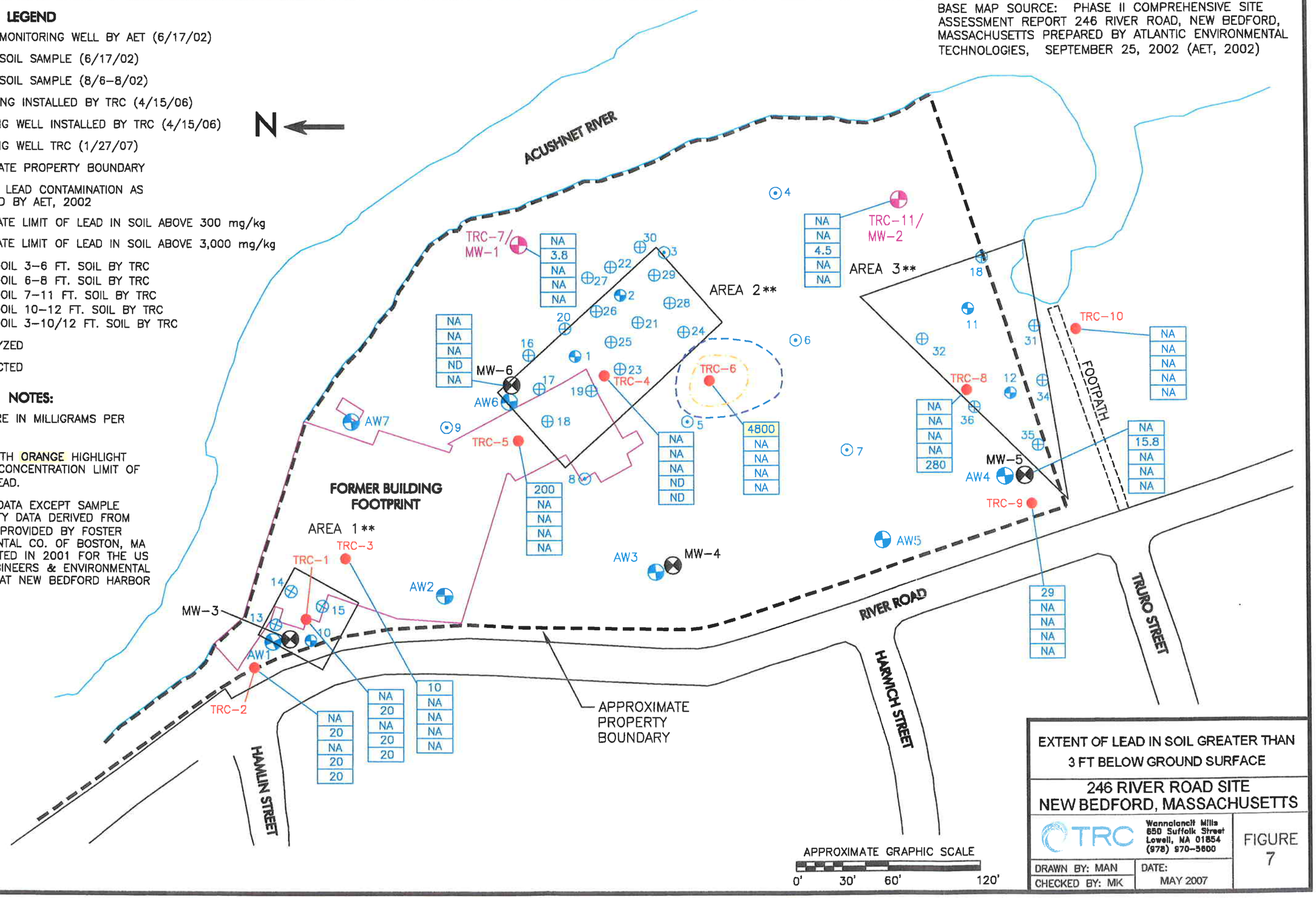
BASE MAP SOURCE: PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT 246 RIVER ROAD, NEW BEDFORD, MASSACHUSETTS PREPARED BY ATLANTIC ENVIRONMENTAL TECHNOLOGIES, SEPTEMBER 25, 2002 (AET, 2002)

LEGEND

- PHASE II MONITORING WELL BY AET (6/17/02)
- PHASE II SOIL SAMPLE (6/17/02)
- PHASE II SOIL SAMPLE (8/6–8/02)
- SOIL BORING INSTALLED BY TRC (4/15/06)
- MONITORING WELL INSTALLED BY TRC (4/15/06)
- MONITORING WELL TRC (1/27/07)
- APPROXIMATE PROPERTY BOUNDARY
- ** AREAS OF LEAD CONTAMINATION AS DELINEATED BY AET, 2002
- APPROXIMATE LIMIT OF LEAD IN SOIL ABOVE 300 mg/kg
- APPROXIMATE LIMIT OF LEAD IN SOIL ABOVE 3,000 mg/kg
- 11 — LEAD IN SOIL 3–6 FT. SOIL BY TRC
- NA — LEAD IN SOIL 6–8 FT. SOIL BY TRC
- NA — LEAD IN SOIL 7–11 FT. SOIL BY TRC
- NA — LEAD IN SOIL 10–12 FT. SOIL BY TRC
- NA — LEAD IN SOIL 3–10/12 FT. SOIL BY TRC
- NA — NOT ANALYZED
- ND — NOT DETECTED

NOTES:

1. VALUES SHOWN ARE IN MILLIGRAMS PER KILOGRAM (mg/kg)
2. VALUES SHOWN WITH ORANGE HIGHLIGHT EXCEED THE UPPER CONCENTRATION LIMIT OF 3,000 mg/kg FOR LEAD.
3. ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM CAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.



EXTENT OF LEAD IN SOIL GREATER THAN 3 FT BELOW GROUND SURFACE

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: MAN
CHECKED BY: MK
DATE: MAY 2007

FIGURE 7

FILE: T:\E_CAD\4728A\246rr_LEAD_GREATER_than3.dwg

PRIMARY SOURCE	PRIMARY RELEASE MECHANISM	SECONDARY SOURCE	SECONDARY RELEASE MECHANISM	EXPOSURE MEDIA	EXPOSURE ROUTE	POTENTIAL HUMAN RECEPTORS								POTENTIAL ECOLOGICAL RECEPTORS		
						CURRENT/ FUTURE			FUTURE		CURRENT/ FUTURE			CURRENT/ FUTURE		
						WORKER			RESIDENT		TRESSPASSER/VISITOR			TERRESTRIAL		AQUATIC
						MAINTENANCE/EMPLOYEES	UTILITY	CONSTRUCTION	ADULT	CHILD	ADULT	CHILD	YOUTH	PLANTS	ANIMALS	
CONTAMINATED FILL MATERIAL	FILL DEPOSITION	SOIL		SURFACE SOIL	INGESTION		X	X			X	X	X	X	X	
					DERMAL CONTACT		X	X			X	X	X	X	X	
					INHALATION (VAPOR PHASE)											
				SUBSURFACE SOIL	INGESTION		X	X								
					DERMAL CONTACT		X	X								
					INHALATION (VAPOR PHASE)											
			LEACHING	GROUNDWATER	INGESTION											
					DERMAL CONTACT		X	X								
					INHALATION (VAPOR PHASE)											
			RUNOFF/EROSION	SURFACE WATER/ SEDIMENT*	INGESTION		X	X			X	X	X		X	X
					DERMAL CONTACT		X	X			X	X	X		X	X
					INHALATION (VAPOR PHASE)											
			FUGITIVE DUST	AIR	INGESTION											
					DERMAL CONTACT											
					INHALATION (PARTICULATE PHASE)		X	X			X	X	X			

NOTES:

X POTENTIALLY COMPLETE EXPOSURE PATHWAYS IDENTIFIED

- - - → CURRENTLY ASSUMED TO BE AN INCOMPLETE PATHWAY

* SURFACE WATER AND SEDIMENT ARE PRESENT IN THE ACUSHNET RIVER.

246 RIVER ROAD SITE
NEW BEDFORD, MASSACHUSETTS

SCHEMATIC
CONCEPTUAL SITE MODEL

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

FIGURE 8

DRAWN BY: HWB
CHECKED BY: DMS
DATE: 5/21/07

FILE: T:\E_CAD\45830 (MONTACHUSETT)\Clinton-CHART.dwg PHASE II SCOPE

APPENDIX A

LIMITATIONS

LIMITATIONS

1. TRC Environmental Corporation's (TRC's) study was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and TRC observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. TRC's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied is made. Specifically, TRC does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by TRC during its study. Additionally, TRC makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a Massachusetts Department of Environmental Protection (MassDEP) audit.

2. This study and report have been prepared on behalf of and for the exclusive use of the MassDEP and the City of New Bedford (Client), solely for use in an environmental response actions at the 246 River Road Site in New Bedford, Massachusetts ("Site") under the Massachusetts Contingency Plan (MCP - 310 CMR 40.0000). This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of TRC.

3. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions referenced in our proposals with the City of New Bedford.

4. In preparing this report, TRC has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to TRC at the time of the study. Although there may have been some degree of overlap in the information provided by these various sources, TRC did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.

5. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to TRC's attention forthwith. TRC will evaluate such information and, on the basis of that evaluation, may modify the conclusions stated in this report.

6. The purpose of this report was to assess the Site with respect to the requirements of the MCP. No specific attempt was made to check on the compliance of present or past owners or operators of the Site with federal, state, or local laws and regulations, environmental or otherwise.

7. The conclusions and recommendations contained in this report are based in part upon the data obtained from a limited number of soil and groundwater samples obtained from subsurface and other explorations described herein. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

8. The generalized soil profile and groundwater elevation/depth contours described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more gradual. The depictions of groundwater represents a snapshot in time and is based on a limited number of groundwater monitoring wells, and represents a generalized professional interpretation.

9. Where quantitative laboratory analyses have been conducted by an outside laboratory, TRC has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.

10. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As may be indicated within the report, some of these data may be preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by TRC and the conclusions and recommendations presented herein modified accordingly.

11. Chemical analyses have been performed for specific parameters during the course of this Site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study could be present at the Site.

12. TRC's risk evaluation was performed in accordance with generally accepted practices of the Massachusetts Department of Environmental Protection and other consultants undertaking similar studies. The findings of the risk evaluation are dependent on numerous assumptions and uncertainties inherent in the risk assessment process. Sources of uncertainty may include the description of Site conditions and the nature and extent of chemical distribution and the use of toxicity information. Consequently, the findings of the risk assessment are not an absolute characterization of actual risks, but rather serve to highlight potential sources of risk at the Site. Although the range of uncertainties has not been quantified, the use of conservative assumptions and parameters throughout the assessment would be expected to err on the side of protection of human health and the environment.

APPENDIX B

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM (BWSC-108)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number: 4 - 17604

A. SITE LOCATION:

1. Site Name: RELIABLE TRUSS FMR
2. Street Address: 246 RIVER RD
3. City/Town: NEW BEDFORD 4. ZIP Code: 02745
5. UTM Coordinates: a. UTM N: 4503309 b. UTM E: 337987

☑ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☑ d. Tier II

7. If applicable, provide the Permit Number:

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

☐ 1. Submit a **Phase I Completion Statement**, pursuant to 310 CMR 40.0484.

☐ 2. Submit a **Revised Phase I Completion Statement**, pursuant to 310 CMR 40.0484.

☐ 3. Submit a **Phase II Scope of Work**, pursuant to 310 CMR 40.0834.

☑ 4. Submit an **interim Phase II Report**. This report does not satisfy the response action deadline requirements in 310 CMR 40.0500.

☐ 5. Submit a **final Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.

☐ 6. Submit a **Revised Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.

☐ 7. Submit a **Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.

☐ 8. Submit a **Revised Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.

☐ 9. Submit a **Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.

☐ 10. Submit a **Modified Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.

☐ 11. Submit an **As-Built Construction Report**, pursuant to 310 CMR 40.0875.

☐ 12. Submit a **Phase IV Status Report**, pursuant to 310 CMR 40.0877.

☐ 13. Submit a **Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

Specify the outcome of Phase IV activities: (check one)

☐ a. Phase V Operation, Maintenance or Monitoring of the Comprehensive Remedial Action is necessary to achieve a Response Action Outcome.

☐ b. The requirements of a Class A Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ c. The requirements of a Class C Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ d. The requirements of a Class C Response Action Outcome have been met. Further Operation, Maintenance or Monitoring of the remedial action is necessary to ensure that conditions are maintained and that further progress is made toward a Permanent Solution. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

(All sections of this transmittal form must be filled out unless otherwise noted above)

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

☐ 14. Submit a **Revised Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

☐ 15. Submit a **Phase V Status Report**, pursuant to 310 CMR 40.0892.

☐ 16. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)

a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report

b. Frequency of Submittal: (check all that apply)

☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.

☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.

☐ iii. A Remedial Monitoring Report(s) submitted concurrent with a Status Report.

c. Status of Site: (check one) ☐ i. Phase V ☐ ii. Remedy Operation Status ☐ iii. Class C RAO

d. Number of Remedial Systems and/or Monitoring Programs: _____

A separate BWSC108A, CRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

☐ 17. Submit a **Remedy Operation Status**, pursuant to 310 CMR 40.0893.

☐ 18. Submit a **Status Report to maintain a Remedy Operation Status**, pursuant to 310 CMR 40.0893(2).

☐ 19. Submit a **Modification of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(5).

☐ 20. Submit a **Termination of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(6).

☐ 21. Submit a **Phase V Completion Statement**, pursuant to 310 CMR 40.0894.

Specify the outcome of Phase V activities: (check one)

☐ a. The requirements of a Class A Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement (BWSC104) will be submitted to DEP.

☐ b. The requirements of a Class C Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ c. The requirements of a Class C Response Action Outcome have been met. Further Operation, Maintenance or Monitoring of the remedial action is necessary to ensure that conditions are maintained and/or that further progress is made toward a Permanent Solution. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ 22. Submit a **Revised Phase V Completion Statement**, pursuant to 310 CMR 40.0894.

☐ 23. Submit a **Post-Class C Response Action Outcome Status Report**, pursuant to 310 CMR 40.0898.

(All sections of this transmittal form must be filled out unless otherwise noted above)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number
4 - 17604

C. LSP SIGNATURE AND STAMP:

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

> *if Section B indicates that a **Phase I, Phase II, Phase III, Phase IV or Phase V Completion Statement** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that a **Phase II Scope of Work** or a **Phase IV Remedy Implementation Plan** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that an **As-Built Construction Report, a Remedy Operation Status**, a **Phase IV, Phase V or Post-Class C RAO Status Report, a Status Report to Maintain a Remedy Operation Status** and/or a **Remedial Monitoring Report** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

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

1. LSP #: 1488
2. First Name: DAVID M
3. Last Name: SULLIVAN
4. Telephone: (978) 656-3565
5. Ext.:
6. FAX:
7. Signature:
8. Date: 5/18/2007 (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

Release Tracking Number
4 - 17604

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

D. PERSON UNDERTAKING RESPONSE ACTIONS:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: NEW BEDFORD ~~DPW~~

3. Contact First Name: SCOTT 4. Last Name: ALFONSE

5. Street: 133 WILLIAM ST 6. Title: Director of Env. Stewardship

7. City/Town: NEW BEDFORD 8. State: MA 9. ZIP Code: 02740-0000

10. Telephone: (508) 979-1527 11. Ext.: 12. FAX:

E. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RESPONSE ACTIONS:

☑ 1. RP or PRP ☑ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify:

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

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

☐ 4. Any Other Person Undertaking Response Actions Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. 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.

☑ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.

☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase III Remedial Action Plan.

☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase IV Remedy Implementation Plan.

☐ 5. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of any field work involving the implementation of a Phase IV Remedial Action.

☐ 6. If submitting a Modification of a Remedy Operation Status, check here to certify that a statement detailing the compliance history, as per 310 CMR 40.0893(5), for the person making this submittal is attached.

☐ 7. If submitting a Modification of a Remedy Operation Status, check here to certify that written consent of the person who submitted the Remedy Operation Status submittal, as per 310 CMR 40.0893(5), is attached.

☐ 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Name. Send corrections to the DEP Regional Office.

☑ 9. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number
4 - 17604

G. CERTIFICATION OF PERSON UNDERTAKING RESPONSE ACTIONS:

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

2. By: [signature] 3. Title: Director of Env. Stewardship
Signature

4. For: **NEW BEDFORD ~~DPW~~** 5. Date: 5/21/07
(Name of person or entity recorded in Section D) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street:

8. City/Town: 9. State: 10. ZIP Code:

11. Telephone: 12. Ext.: 13. FAX:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

APPENDIX C

GEOPHYSICAL SURVEY REPORT

Hager GeoScience Inc.
596 Main Street Woburn, MA 01801
Tel 781-935-8111 Fax 781-935-2717

March 13, 2006
File 200604

Mr. Thomas Biolsi
TRC Solutions, Inc.
Boott Mills South
116 John Street
Lowell, MA 01852

Re: Geophysical Survey
246 River Road
New Bedford, Massachusetts

Dear Mr. Biolsi:

This letter details the results of a geophysical survey conducted by Hager GeoScience, Inc. (HGI) for TRC Solutions, Inc. (TRC) at the 246 River Road site in New Bedford, Massachusetts. The purpose of the investigation was to determine depth of landfill material in an area bounded to the north and south by soil borings AW1 and TRC-10 and in the north by the Acushnet River. The method chosen was ground penetrating radar (GPR).

The 246 River Road site includes the footprint of a building and surrounding area. HGI performed a site inspection with TRC on January 19th to determine the extent of clearing that might be required prior to the survey. It was determined that the survey area was mostly open and grassy, so that only minimal clearing would be required.

DATA ACQUISITION AND ANALYSIS

HGI performed the survey on February 27th and 28th, 2006. GPR was supplemented by EM terrain conductivity as a complementary technique to enhance data interpretation. Appendix A of this letter report contains descriptions of the two geophysical techniques and their limitations.

A survey grid was laid out using measuring tapes and spray paint. A TRC representative, who was present during the fieldwork, designated the survey areas. GPR data were collected across all accessible portions of the site along transects spaced 10 feet apart in east-west and north-south directions. EM data were collected at the same traverse spacing in an east-west direction.

HGI plotted the locations of the geophysical survey grids on maps produced from the HGI field notes. These were subsequently referenced to an AutoCAD base map provided by TRC and made into three plates (see below).

GPR Survey

HGI used a GSSI SIR 3000 system with 400-MHz antenna and survey wheel to collect the GPR data. The acquisition time window was set at 120 nanoseconds (ns) to record a range of signal penetration depth between 18 and 20 feet. GPR data were displayed in real time for quality control and initial data review purposes. GPR data were collected along 75 profiles (25 north-south and 50 east-west).

All acquired data were stored on the system's flash memory and transferred to PC for signal processing using GSSI's RADAN for Windows NT™ software. GPR data analysis was performed using RADAN'S Structural and Stratigraphic Interactive Interpretation Module®. Using the module, the interpreted horizons in the GPR records were defined by a series of points that stored the distance, travel time, and other pertinent information at each point. These data were stored in ASCII format and transferred to an Excel spreadsheet.

A color contour map was created from the points picked in RADAN, using Golden Software's Surfer for Windows® 8.0. The map was exported to AutoCAD as a .dxf file and saved as an AutoCAD drawing overlaid on the TRC base map (Plate 1).

In addition to mapping the base of fill, HGI organized the GPR data into a 3D block for spatial analysis. A slice from an approximate depth of 5 feet was selected from this block and used to create a map view of a representative portion of the data. This slice was then imported into AutoCAD as a raster image (Plate 2).

EM Survey

EM data were collected with a GSSI GEM-300 terrain conductivity profiler, which uses multiple EM frequencies to enhance the detection of targets at varying depths. Multi-frequency EM profiling is routinely employed to delineate zones of varying subsurface materials. This method measures both the in-phase (for metal) and quadrature-phase (for conductivity) response of buried objects to an induced electromagnetic field.

EM data were collected continuously and simultaneously at 4 transmitting frequencies (330, 3330, 6630, and 9930 Hertz). After completion of the fieldwork, the EM data were downloaded to a PC. Magmapper® software and Excel® were used to reduce the EM data and incorporate survey geometry.

Filled color contour plots were then prepared using Surfer. The most informative contour maps

were exported from Surfer into AutoCAD as .dxf files, saved as AutoCAD drawings, and overlaid on the TRC base map (Plate 3). The plots shown on Plate 3 were produced from the 3330-Hertz quadrature data.

The readings taken by the EM profiler are relative to a "zero" value calibrated at the site. High-conductivity anomalies (red) are typically associated with clays or iron-rich soils because of their conductive nature. Vegetation, rocks, or similar materials can produce low-conductivity anomalies (blue).

RESULTS

The results of the geophysical survey are shown on Plates 1 through 3 and described below.

GPR Survey

A database of 1237 GPR depth points was created for mapping a layer interpreted as the base of fill. The surveyed line data were used to calculate the easting and northing for each of the 1237 depth points. These points were used to interpolate a 2D base-of-fill surface grid using a kriging surface trend analytical algorithm from the Surfer contouring program. The grid was used to create a color-filled contour map for the survey area. The latter was imported into AutoCAD and overlaid onto the TRC base map, with the locations tied to the surveyed line locations (Plate 1).

The base-of-fill depths range from approximately 1 to 7 feet and vary on the color scale from pink (shallow) to blue (deep). The red and orange colors dominate the plot, indicating that most of the survey area consists of a thin layer of fill, generally 1 to 3 feet thick. The thickest fill areas are found in former excavations on the western side of the site and in the northeast portion, near the Acushnet River.

No additional horizon was found below this shallow mapped layer except in areas of the former building footprint. These additional layers, found below several of the high-amplitude GPR zones in the northern portion of the grid (Plate 2), are most likely associated with former excavations. They may be related to the removal of the building.

EM Survey

The EM results (Plate 3) delineate the boundaries of several features, which because of their geometry appear to be associated with man-made structures. The color scale ranges from red (conductive) to black (resistive). The more resistive signals appear to be derived from the former excavations. The conductive signals occur in the middle and the southern portions of the site. The central area of higher conductivity includes most of the northernmost lead contamination hotspot.

The higher conductivity EM region coincides with the majority of thinner fill zones mapped out with the GPR. One possible explanation for this correlation is that the fill is less conductive than the underlying natural soils, leading to higher conductivity values where less fill is present.

Please contact us at (781) 935-8111 if you have any questions or need additional information.

Respectfully yours,
HAGER GEOSCIENCE, INC.

Jutta Hager, Ph.D.
President

APPENDIX A. THE GEOPHYSICAL TECHNIQUES

A.1 GROUND PENETRATING RADAR

A.1.1. Description of the Method. The principle of ground penetrating radar (GPR) is the same as that used by police radar, except that GPR transmits electromagnetic energy into the ground, and the energy is reflected back to the surface from interfaces between materials with contrasting electrical (dielectric and conductivity) and physical properties. The greater the contrast between two materials in the subsurface, the stronger the reflection observed on the GPR record. The depth of GPR signal penetration depends on the properties of the subsurface materials and the frequency of the antenna used to collect radar data. The lower the antenna frequency, the greater the signal penetration, but the lower the signal resolution

A.1.2. Data Collection. We perform our GPR surveys using our Geophysical Survey Systems (GSSI) SIR 2/2000/3000 ground penetrating radar systems. GPR data are digitally recorded on the hard drive of the system, which allows the GPR operator to filter out noise attributed to conductive soil conditions and stack data for better signal penetration. The unit can be completely portable when the operator carries the electronics in a harness and pulls the antenna behind him at the end of a 3-meter attenuated control cable. For shallow surveys, we use a 400-or 1500-megahertz (MHz) antenna. For deeper penetration, we use lower frequency antennas ranging from 100-MHz to 15 MHz, depending on the anticipated depth of the target and the degree of signal penetration. All of these antenna configurations can collect data in continuous mode or as discrete point measurements using stacking techniques. Since there is a tradeoff between signal penetration and resolution, we frequently run test lines using antennas with several frequencies and use the highest frequency antenna that produces the highest quality data.
The horizontal scale of the GPR record shows distance along the survey traverse. In the continuous data collection mode, the horizontal scale on each GPR record is determined by the antenna speed. When a survey wheel is used, the GPR record is automatically marked at specified intervals along the survey line. The vertical scale of the radar records is determined by the recording time window or interval. The recording time interval represents the maximum two-way travel time in which data are recorded. The conversion of two-way travel time to depth depends on the propagation velocity of the GPR signal, which is site specific. When little or no information is available about the makeup of subsurface materials, we estimate propagation velocities from handbook values and experience at similar sites or by CDP velocity surveys with our bi-static antenna.

A.1.3. Data Processing. After completion of data collection, the GPR data are transferred to a PC for review and processing using RADAN f™ software. When appropriate, we prepare 3D models of GPR data, which can be sliced in the X, Y, and Z directions. For surveys to map rebar and conduits in concrete, HGI uses the Structure Scan II© system. Data are collected at 2-inch spacing in two directions on a 2x2-foot pad. The StructureScan II© software takes the input radar file and creates a 3D model of the grid area. Given the propagation velocity, the module automatically generates time slices of the developed model at user-chosen depth intervals. Migration techniques included in the module are used to constrain the actual position of rebar and pipe reflections in the records.

The size, shape, and amplitude of GPR reflections are used to interpret GPR data. Metal objects such as USTs and utilities produce reflections with high amplitude and distinctive hyperbolic shapes in GPR records when traverses are made perpendicular to their long axes. Clay or concrete pipes and boulders may produce radar signatures of similar shape but lower amplitude. The boundaries between saturated and unsaturated materials, sand and clay, and bedrock and overburden generally also produce strong reflections.

A.1.4. Limitations of the Method. GPR signal penetration is site specific, determined by the dielectric properties of local soil and fill materials. GPR signals propagate well in resistive materials such as sand and gravel; however, soils containing clay, ash- or cinder-laden fill, or fill saturated with brackish or otherwise conductive groundwater cause GPR signal attenuation and loss of target resolution. Concrete containing rebar or mesh also inhibits signal penetration.

Interpreted depths of objects detected using GPR are based on on-site calibration, handbook values, and/or estimated GPR signal propagation velocities from similar sites. GPR velocities and depth estimates may vary if the medium of investigation or soil water content is not uniform throughout the site.

Utilities are interpreted on the basis of reflectors of similar size and depth that show a linear trend, but GPR cannot unambiguously determine that all such reflectors are related. Fiberglass USTs or utilities composed of plastic or clay may be difficult to detect if situated in soils with similar electromagnetic properties. Objects buried beneath reinforced concrete pads may also be difficult, but possible, to detect.

Changes in the speed at which the GPR antenna is moved between stations causes slight variations in distance interpolations, and hence in interpreted object positions.

The GPR antenna produces a cone-shaped signal pattern that emanates approximately 45 degrees from horizontal fore and aft of the antenna. Therefore, buried objects may be detected before the antenna is located directly over them, and GPR anomalies may appear larger than actual target dimensions.

GPR is an interpretive method, based on the identification of reflection patterns that may not uniquely identify a subsurface target. Borings, test pits, or site utility plans must be used to verify the results.

A.2 EM TERRAIN CONDUCTIVITY

A.2.1. Description of the Method. The EM technique operates on the principle that secondary electric and magnetic currents can be induced in metal objects and conductive bodies, such as USTs, utilities, and leachate, when an electric field is applied. This instrumentation measures the secondary magnetic field strength relative to the primary magnetic field and converts it directly into a conductivity value. Both the quadrature-phase (conductivity) and in-phase components of the

secondary electric field are measured and values plotted in parts per million (ppm). In general, the quadrature-phase (conductivity) data provide information about soil and groundwater conditions, while the in-phase data provide information about metal objects. The instrument response is more affected by near surface than by deeper material.

We collect terrain conductivity data using a GEM-300 multi-frequency electromagnetic profiler. The GEM-300 is field-programmable to operate at simultaneous, multiple frequencies between 325 and 19975 Hz. The GEM sensor contains a transmitter and receiver coil separated by about 5.5 ft, along with a third "bucking coil" that removes the primary field from the receiver coil. All coils are molded into a single board in a fixed geometry.

A removable signal-processing console is attached to the board, from which data are downloaded to a computer and processed. The GEM-300 is capable of detecting underground targets and features to a depth of 26 feet.

A.2.2. Data Analysis and Interpretation. Terrain conductivity surveys are commonly used to determine the lateral extent of fill and detect buried metal objects, utilities, and conductive leachate plumes. Typically, terrain conductivity values measured on fill materials are irregular and highly variable over short distances due to metal and the heterogeneous materials in the subsurface. The edge of fill materials is marked by a change to smoothly varying terrain conductivity values that represent native soils.

At sites free of metal objects and other cultural interference, the soil lithology and/or the conductivity of the ground water control the terrain conductivity measured at a particular location. In the presence of metal, conductivity values are often negative ("polarity reversals") and highly irregular. However, the exact identification of objects cannot be determined from the terrain conductivity data alone. The in-phase component helps confirm the location of metal objects when correlated with conductivity data. Irregular or high positive or negative in-phase values may be caused by metal objects and help define their lateral extent.

Leachate plumes are generally recognized by relatively smoothly varying, but anomalously elevated, conductivity values, compared to background values for a given site. The value of the in-phase component resulting from conductive plumes generally shows little or no variation.

A.2.3. Limitations of the Method. EM conductivity values are influenced by proximity to aboveground metal objects, such as fences, vehicles, or buildings. Magnetic fields produced along overhead power lines also interfere with terrain conductivity readings.

The shape and amplitude of conductivity and in-phase anomalies do not uniquely describe a buried object or material. Rather, they are influenced by the orientation of EM survey lines and the buried object(s) relative to north, and the orientation of the EM sensor relative to this buried object(s). To better locate the source(s) of EM conductivity and in-phase anomalies, data are frequently collected in two perpendicular directions.
High ambient conductivity readings (from a conductivity plume, sludge, or naturally occurring

geologic condition) may mask anomalous conductivity values caused by metal objects. Evaluating the in-phase component of the data minimizes this effect.

Closely spaced buried utilities may produce anomalies that interfere with each other. Hence, in areas where numerous utilities are present, the observed anomaly may result from an interference pattern and may not uniquely describe the location of a specific utility. Further, anomalies often appear larger than the object that produces them.

Smaller utilities, or utilities constructed from reinforced concrete, may be masked by larger utilities constructed of metal. Nonmetallic fill such as unreinforced concrete rubble and utilities constructed from PVC, clay, or unreinforced concrete may not be detected.

LEGEND

- PHASE II MONITORING WELL
- PHASE II SOIL SAMPLE (6/17/02)
- PHASE II SOIL SAMPLE (8/6-8/02)
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- TRC PROPOSED SOIL BORING
- TRC PROPOSED MONITORING WELL
- APPROXIMATE PROPERTY BOUNDARY

ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM DAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.

GPR TRAVERSE

FORMER EXCAVATION

PLATE 1

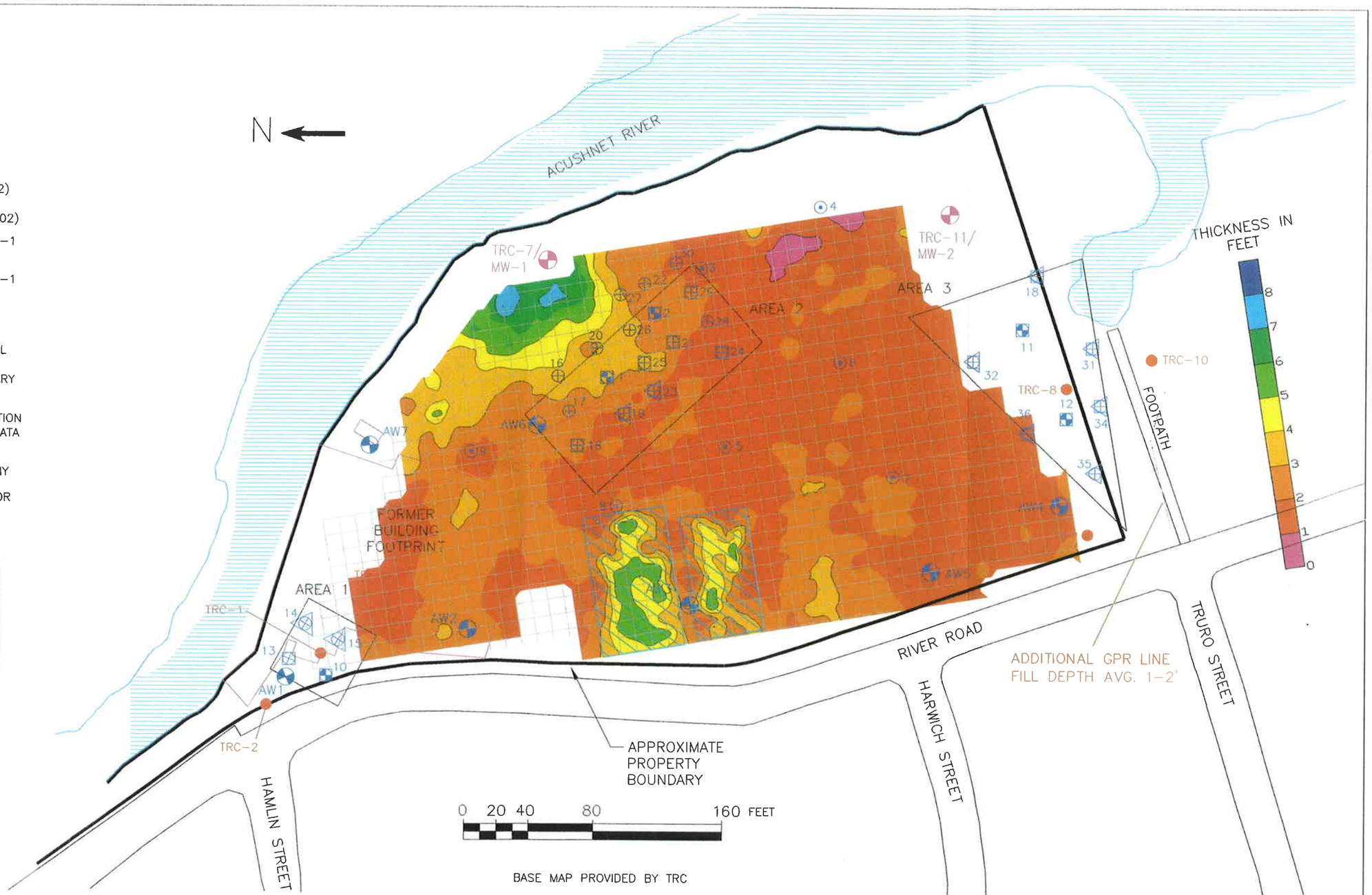
MARCH 2006	FILE NO. 200604

GPR - DEPTH TO BASE OF FILL

246 RIVER ROAD

NEW BEDFORD, MA

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com



LEGEND

- PHASE II MONITORING WELL
- PHASE II SOIL SAMPLE (6/17/02)
- PHASE II SOIL SAMPLE (8/6-8/02)
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- TRC PROPOSED SOIL BORING
- TRC PROPOSED MONITORING WELL
- APPROXIMATE PROPERTY BOUNDARY

ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM DAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.

GPR TRAVERSE

FORMER EXCAVATION

PLATE 2

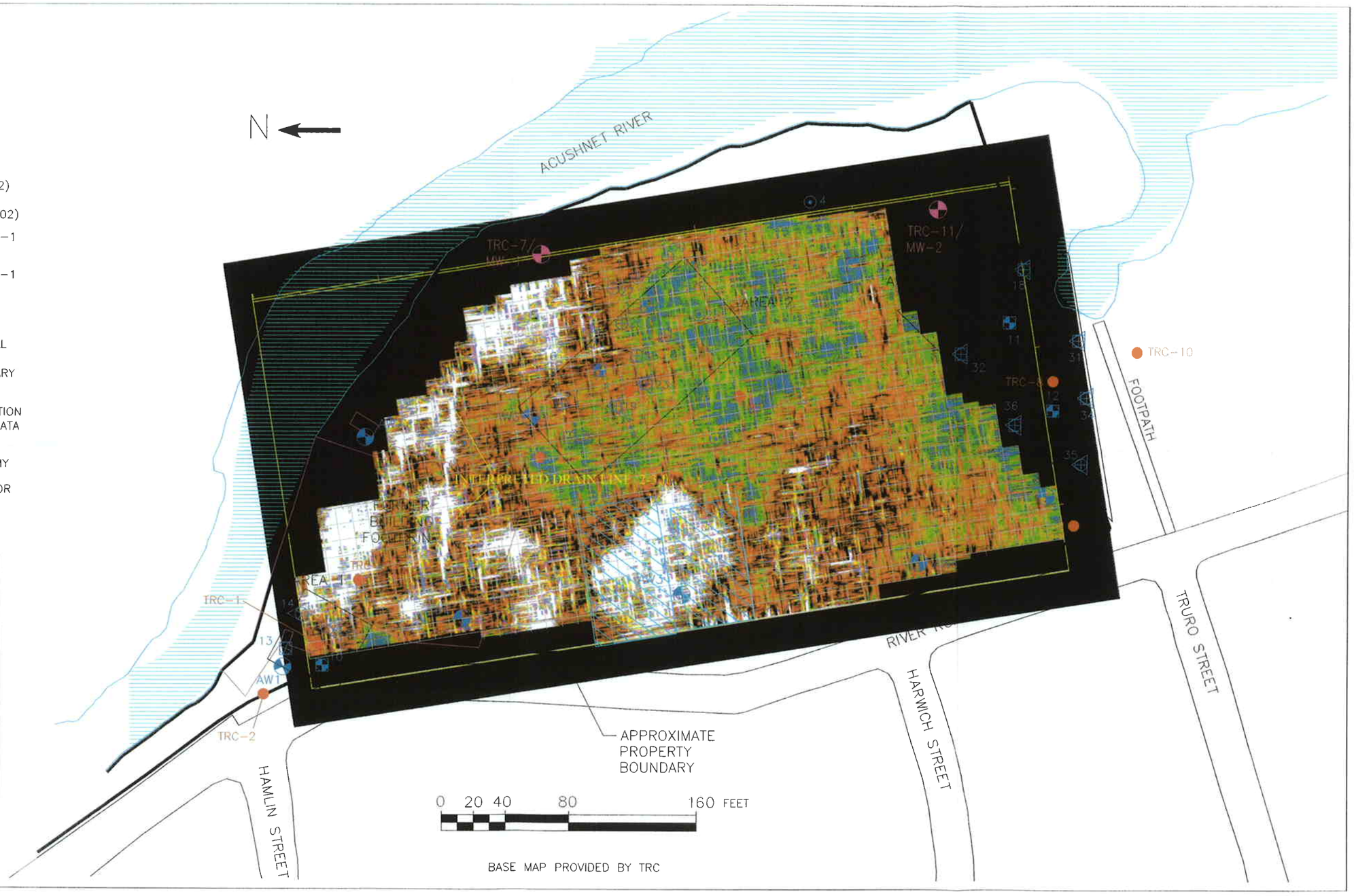
MARCH 2006	FILE NO. 200604

GPR - 3D MAPVIEW

246 RIVER ROAD

NEW BEDFORD, MA

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com



BASE MAP PROVIDED BY TRC

LEGEND

- PHASE II MONITORING WELL
- PHASE II SOIL SAMPLE (6/17/02)
- PHASE II SOIL SAMPLE (8/6-8/02)
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- SOIL SAMPLE EXCEEDS PB RC S-1 IN 0.0-2.0 INTERVAL
- TRC PROPOSED SOIL BORING
- TRC PROPOSED MONITORING WELL
- APPROXIMATE PROPERTY BOUNDARY

ALL GEOGRAPHIC DATA EXCEPT SAMPLE LOCATION & PROPERTY DATA DERIVED FROM DAD/GIS DATA FILES PROVIDED BY FOSTER WHEELER ENVIRONMENTAL CO. OF BOSTON, MA FROM WORK CONDUCTED IN 2001 FOR THE US ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY AT NEW BEDFORD HARBOR SUPERFUND SITE.

GPR TRAVERSE

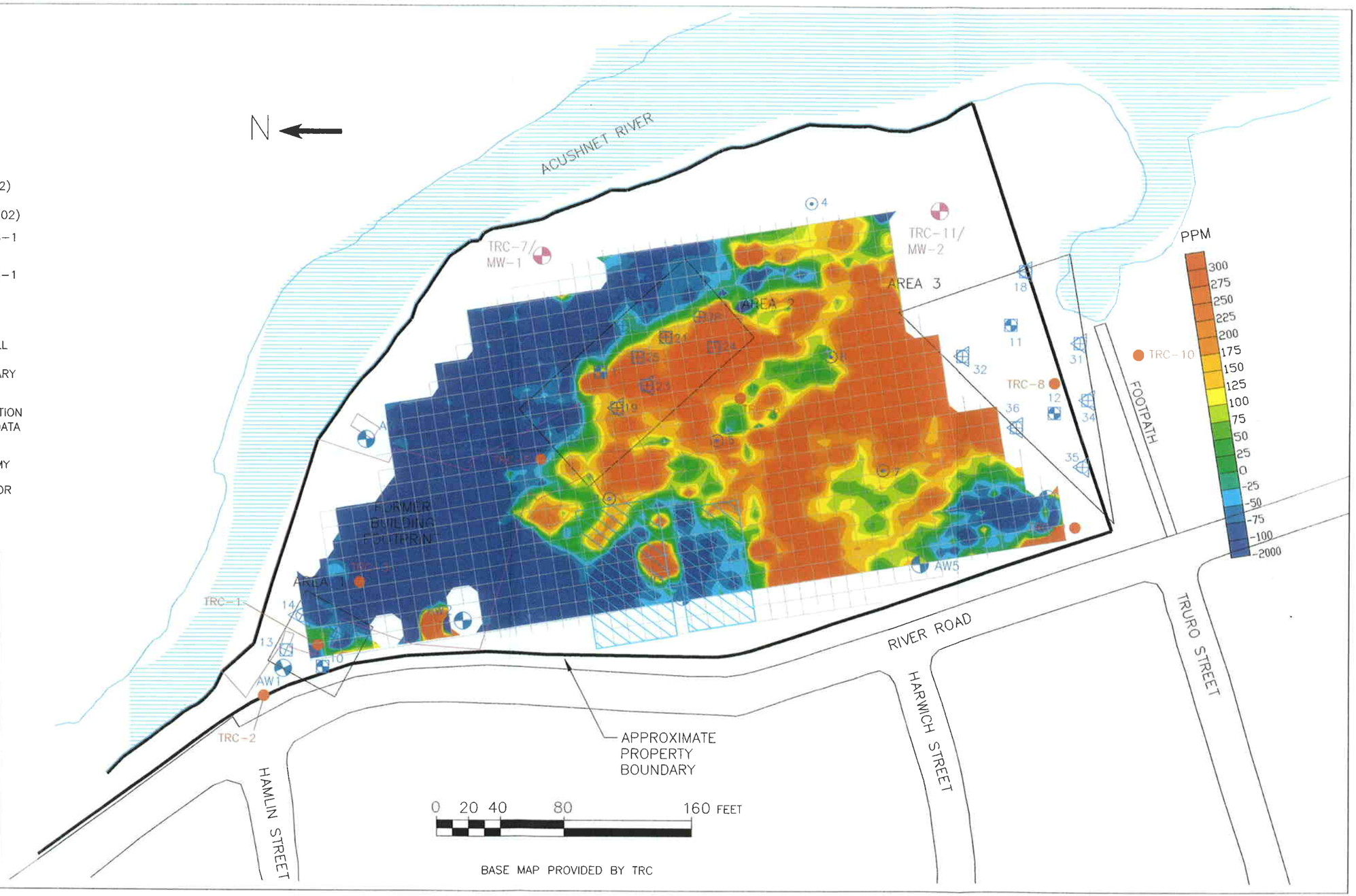
FORMER EXCAVATION

PLATE 3

MARCH 2006	FILE NO. 200604

EM INTERPRETATION PLOT
QUADRATURE-PHASE - 3330 Hz
246 RIVER ROAD
NEW BEDFORD, MA

Hager GeoScience, Inc.
596 Main Street, Woburn, MA 01801
(781) 935-8111 hgi@hagergeoscience.com



BASE MAP PROVIDED BY TRC

APPENDIX D

SOIL BORING AND WELL CONSTRUCTION LOGS

TRC
TRC Environmental Corporation
650 Suffolk Street, Suite 200
Lowell, Mass 01854
Telephone: 978-970-5600
Fax: 978-453-1995

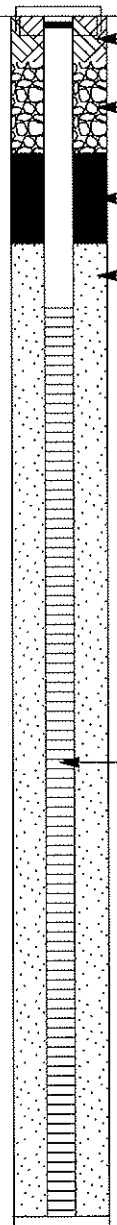
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER MW-3
LOCATION See site plan
DATE DRILLED 1/24/07
DRILLING CONTRACTOR Dragin Drilling
DRILLER FOREMAN Brett
DRILLING METHOD Hollow Stem Auger (GPX-1900XHR drill rig)
SCREEN TYPE/SLOT Schedule 40 0.01 slotted screen
SAMPLING METHOD 2 'Split Spoon
FILTER PACK TYPE #2 Filter Sand
GROUND ELEVATION
SEAL TYPE Bentonite
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
	7 12 7 5	14"				Dark brown SAND, SILT and ORGANIC TOPSOIL.	
1				SW		Orange-brown, dry SAND and gravel with trace fines, poorly graded.	
						No recovery.	0.0
2	4 5 27 23	16"		SP		Greenish-gray, dry, medium SAND, well graded, with cobble in tip.	0.0
3							
4	23 50 46 47	12"		SP		Greenish-gray, dry, medium SAND, well graded.	
				SP		Yellowish-orange brown SAND and COBBLES with trace fines and gravel, poorly graded.	
5						No recovery.	0.0
6	49 80 51 48	12"		SW		Yellowish-orange brown, moist SAND and COBBLES with trace fines and gravel, some silt, poorly graded.	0.0
7							
8	56 32 16 22	6"		SW		Yellowish-orange brown, moist SAND and COBBLES with trace fines and gravel, some silt, poorly graded.	0.0
9							
10	29 42 50 36	10"		SW		Yellowish-orange brown, moist SAND and COBBLES with trace fines and gravel, some silt, poorly graded.	0.0
11							
12		4"		SW		Yellowish-orange brown, moist SAND and COBBLES with trace fines and gravel, some silt, poorly graded.	
13							

WELL DIAGRAM



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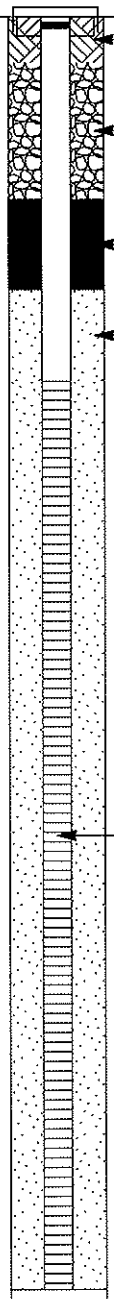
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER MW-4
LOCATION See site plan
DATE DRILLED 1/24/07
DRILLING CONTRACTOR Dragin Drilling
DRILLER FOREMAN Brett
DRILLING METHOD Hollow Stem Auger (GPX-1900XHR drill rig)
SCREEN TYPE/SLOT Schedule 40 0.01 slotted screen
SAMPLING METHOD 2 'Split Spoon
FILTER PACK TYPE #2 Filter Sand
GROUND ELEVATION
SEAL TYPE Bentonite
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
1	18 25 26 17	18"		SW		Olive brown, dry SAND with little gravel and trace fines, poorly graded.	0.0
2, 3	15 9 14 21	10"				Olive brown, dry SAND with little gravel and trace fines, trace brick fragments, poorly graded.	0.0
4, 5	16 12 8 5	0"				No Recovery	0.0
6	14 27 39 50	14"		SW		Weathered ROCk (granodiorite or diorite) with some gravel and sand, trace fines, poorly graded.	
7				SW		Olive brown, moist SAND with little gravel and trace fines, poorly graded.	
8						No recovery.	0.0
9		0"				Augered through cobbles/boulder.	
10	11 31 68 42	10"		SW		Dark brown, dry, coarse SAND with some gravel, trace fines, poorly graded.	0.0
11, 12				SW		Dark brown, dry, coarse SAND with some gravel, trace fines, poorly graded.	
13, 14	12 24 100	4"				Augered to 14 feet without sampling because of hard drilling.	0.0

WELL DIAGRAM



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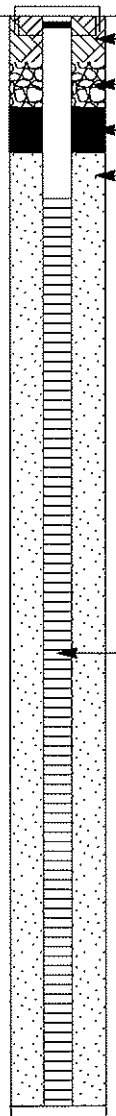
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	MW-5
LOCATION	See site plan	DATE DRILLED	1/24/07
DRILLING CONTRACTOR	Dragin Drilling	DRILLER FOREMAN	Brett
DRILLING METHOD	Hollow Stem Auger (GPX-1900XHR drill rig)	SCREEN TYPE/SLOT	Schedule 40 0.01 slotted screen
SAMPLING METHOD	2 'Split Spoon	FILTER PACK TYPE	#2 Filter Sand
GROUND ELEVATION		SEAL TYPE	Bentonite
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS			

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
	70 41 20 10	4"		SW		TOPSOIL.	
						Moderate olive brown SAND and GRAVEL. Drove cobble.	
1						No recovery.	0.0
2	6 6 6 10	18"				Dry CINDERS, ASH, COAL, SLAG and medium sand, poorly graded, some staining with no odor.	0.0
3							
4	12 4 4 5	4"		SP		Moderate olive, dry SAND with some gravel, poorly graded. Drove cobble. Spoon wet at 4.5 feet.	0.0
5							
6	4 3 3 5 4 4 8 10	22" 10"		SG		Dark brown, moist SILT and PEAT, little sand with some gravel, poorly graded. Strong decaying organic odor.	0.0
7							
8				SG		Dark brown, moist SILT and PEAT, little sand with some gravel, poorly graded. Strong decaying organic odor.	0.0
9						Light gray, medium SAND with trace fines, well graded. No odor.	
10						No recovery.	
	4 14 15 21	17"				Light gray, medium SAND with trace fines, well graded. No odor.	
11						Light gray, wet SILT and GRAVEL, poorly graded.	0.0
12							

WELL DIAGRAM



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Fax: 978-453-1995

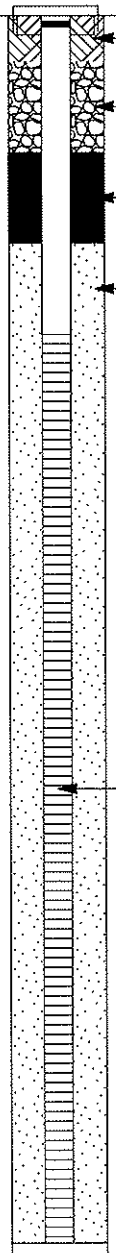
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER MW-6
LOCATION See site plan
DATE DRILLED 1/24/07
DRILLING CONTRACTOR Dragin Drilling
DRILLER FOREMAN Brett
DRILLING METHOD Hollow Stem Auger (GPX-1900XHR drill rig)
SCREEN TYPE/SLOT Schedule 40 0.01 slotted screen
SAMPLING METHOD 2 'Split Spoon
FILTER PACK TYPE #2 Filter Sand
GROUND ELEVATION
SEAL TYPE Bentonite
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
1	18 40 62 53	16"		SW		Moderate yellowish brown, dry SAND and GRAVEL, poorly graded.	
				SW		Black, dry SAND and GRAVEL, poorly graded.	0.0
2							
	27 36 57 16	16"		SM		Black, dry SAND and GRAVEL, poorly graded.	
3				SM		Gray, dry, fine SAND and GRAVEL, with little fines, graded.	0.0
4							
5	36 25 40 31	10"		SM		Gray, dry, fine SAND and GRAVEL, with little fines, graded. Drove cobble.	0.0
6							
7	43 24 36 41	8"		SM		Gray, wet, fine SAND and GRAVEL, with little fines, graded. Drove cobble.	0.0
8				SM		Gray, wet, fine SAND and GRAVEL, with little fines, graded. Drove cobble.	
9	17 41 48 44	16"		SM		Light olive brown, moist SAND and gravel with little fines, poorly graded.	0.0
10				SM		Light olive brown, wet SAND and gravel with little fines, poorly graded.	
11	10 32 39 100	22"		SM		Light olive brown, wet SAND and gravel with little fines, poorly graded.	0.0
12							
13	9 2 3 100	8"		SM		Light olive brown, wet SAND and gravel with little fines, poorly graded.	0.0

WELL DIAGRAM



TRC
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Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	TRC-01
LOCATION	See site plan	DATE DRILLED	4/5/06
DRILLING CONTRACTOR	Geosearch	DRILLER FOREMAN	John Chase
DRILLING METHOD	Geoprobe 6610DT	SCREEN TYPE/SLOT	NA
SAMPLING METHOD	5' Macrocore	FILTER PACK TYPE	NA
GROUND ELEVATION		SEAL TYPE	NA
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS			

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		29"				Pulverized CONCRETE.		
1				SW		Tan SAND, some gravel.		
				OL		Dark gray ORGANIC SOIL.		
2				SP		Light gray, fine to medium SAND, some gravel.		
3						No recovery.	0.0	
4								
5		28"				Brown, fine to medium SAND and SILT, moist.		
6				SM				
7				SW		Light gray fine SAND.		
				SP		Pulverized CONCRETE.		
						Light gray and orange, fine to medium SAND.		
8						No recovery.	0.0	
9								
10		28"		SP		Dark gray, moist, fine to medium SAND, some gravel.		
11				SM		Light gray, fine SAND, some silt.		
12						End of boring at 12.5 feet. Refusal		
							0.0	

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BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-02
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT NA
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE NA
GROUND ELEVATION
SEAL TYPE NA
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		22"				ORGANIC SOIL.		
				SP		Gray, fine to coarse SAND and GRAVEL.		
1				SM		Dark brown, fine to medium SAND ,some silt, little organic material.		
				SP		Tan to gray, fine to medium SAND, some gravel.		
2						No recovery.		
3							0.0	
4								
5		36"		SP		Tan to gray, fine to medium SAND, some gravel.		
6						Pulverized CONCRETE, little gravel and fine to medium sand.		
7				SM		Light gray, fine SAND, little silt.		
8							0.0	
						End of boring at 10 feet.		
9								
10								

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Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	TRC-03
LOCATION	See site plan	DATE DRILLED	4/5/06
DRILLING CONTRACTOR	Geosearch	DRILLER FOREMAN	John Chase
DRILLING METHOD	Geoprobe 6610DT	SCREEN TYPE/SLOT	NA
SAMPLING METHOD	5' Macrocore	FILTER PACK TYPE	NA
GROUND ELEVATION		SEAL TYPE	NA
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS			

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		13"				ORGANIC SOIL.		
				SP		Tan, fine to medium SAND and GRAVEL.		
1				SP		Dark brown, fine to medium SAND, some gravel, little silt.		
						No recovery.		
2								
3							0.0	
4								
5				SP		Dark brown, fine to medium SAND, some gravel, little silt.		
		15"				Pulverized CONCRETE.		
6				GP		Gray coarse SAND and GRAVEL.		
						No recovery.		
7								
8							0.0	
9								
10				GP		Gray, wet, coarse SAND and GRAVEL.		
		9"		SM		Light gray, wet, fine SAND, some silt.		
11						End of boring at 12.5 feet. Refusal.		
							0.0	
12								

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BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-04
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT NA
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE NA
GROUND ELEVATION
SEAL TYPE NA
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		21"				ORGANIC SOIL.		
1				SP		Light gray, fine to medium SAND and GRAVEL.		
						Black, fine to coarse SAND, little slag and coal particles.		
2						No recovery.		
3							0.0	
4								
5								
		36"				Black, fine to coarse SAND, little slag and coal particles.		
6				SP		Tan to gray, fine to coarse SAND and GRAVEL.		
						Tan, moist, medium to coarse SAND, sub-rounded, multi-colored gravel.		
7								
8							0.0	
9				GW				
10		24"						
11							0.0	
12						No recovery.		
13								
14								
15								
				GW		Tan, moist, medium to coarse SAND, sub-rounded, multi-colored gravel.		
16								
				SM		Light gray, wet, fine SAND, some silt. End of boring at 17 feet. Refusal.		
17								
18								

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BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	TRC-05
LOCATION	See site plan	DATE DRILLED	4/5/06
DRILLING CONTRACTOR	Geosearch	DRILLER FOREMAN	John Chase
DRILLING METHOD	Geoprobe 6610DT	SCREEN TYPE/SLOT	NA
SAMPLING METHOD	5' Macrocore	FILTER PACK TYPE	NA
GROUND ELEVATION		SEAL TYPE	NA
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS			

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		30"		SP		ORGANIC SOIL.		
						Dark gray and black, fine to medium SAND and gravel.		
1						Pulverized CONCRETE and medium to coarse sand.		
2				SP		Light gray, fine to coarse SAND and GRAVEL.		
3						No recovery.	0.0	
4								
5		24"		SP		Light gray, fine to coarse SAND and GRAVEL.		
6						Medium to coarse SAND and slag, coal fines and ceramic debris.		
						Pulverized CONCRETE.		
						Brown, moist SILT, some fine to coarse sand, little gravel.		
7						End of boring at 10. Refusal.		
8							0.0	
9								
10								

TRC Environmental Corporation
650 Suffolk Street, Suite 200
Lowell, Mass 01854
Telephone: 978-970-5600
Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-06
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT NA
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE NA
GROUND ELEVATION
SEAL TYPE NA
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS PID not working.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		43"				ORGANIC SOIL		
1				SP		Light gray, fine to medium SAND and GRAVEL.		
				SM		Light gray, fine to medium SAND and SILT.		
2						Pulverized CONCRETE, and fine to medium sand.		
						Light gray, fine to medium SAND, little ash.		
						Pulverized CONCRETE.		
3				SP		Light gray, fine to medium SAND and GRAVEL.	NA	
4						No recovery.		
5		26"		SP		Light gray, fine to medium SAND and GRAVEL.		
6				SP		Black, fine to medium SAND, some slag, coal particles and glass debris.		
				CL		Dark brown CLAY.		
7				SM		Light gray, fine to medium SAND, some silt, some gravel.		
8						No recovery.	NA	
9								
10		0"				End of boring at 11 feet. No recovery.		
11							NA	

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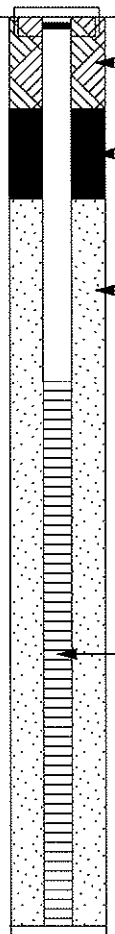
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	TRC-07/ MW -1
LOCATION	See site plan	DATE DRILLED	4/5/06
DRILLING CONTRACTOR	Geosearch	DRILLER FOREMAN	John Chase
DRILLING METHOD	Geoprobe 6610DT	SCREEN TYPE/SLOT	Schedule 40 0.01 slotted screen
SAMPLING METHOD	5' Macrocore	FILTER PACK TYPE	#2 Filter Sand
GROUND ELEVATION		SEAL TYPE	Bentonite
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS	PID not working.		

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
		27"		SP		ORGANIC MATERIAL. Gray, fine to medium SAND and GRAVEL.	
1				SW		Tan, fine SAND, some gravel.	
2		24"		PT		PEAT. No recovery.	NA
3							
4							
5		36"		ML		dark brown SILT, some sand.	
6				SP		Gray, fine to medium SAND, little gravel.	
7				SM		Light gray, fine to medium SAND, some silt.	
8				SP		Light gray, fine to medium SAND and rock fragments.	NA NA
9				SP		Light gray, fine to medium SAND and rock fragments.	
10				SP		Light gray, fine to medium SAND and rock fragments. End of boring at 12 feet.	
11							
12							

WELL DIAGRAM



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BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-08
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT NA
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE NA
GROUND ELEVATION
SEAL TYPE NA
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS PID not working.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		27"		SP		ORGANIC MATERIAL. Dark gray, fine to medium SAND, some ash, coal particles, slag, glass, concrete and brick debris.		
1								
2				SP		Tan, medium to coarse SAND.		
						No recovery.	NA	
3								
4								
5		33"		SP		Tan, medium to coarse SAND.		
6				PT		PEAT.		
7				SP		Dark gray, medium to coarse SAND.		
				SP		Light gray, fine to medium SAND, little rock fragments.	NA	
8						No recovery.		
9								
10		24"		SP		Gray, medium to coarse SAND. End of boring at12 feet. Refusal.	NA	
11								
12								

TRC
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Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-09
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT NA
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE NA
GROUND ELEVATION
SEAL TYPE NA
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS PID not working.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		25"				ORGANIC SOIL.		
1				SP		White, fine to medium SAND, some ash, coal particles, slag and glass debris.		
2				SP		Gray and orange, fine to medium SAND, some ash, coal particles, slag, and glass particles.		
3						No recovery.	NA	
4								
5		19"		SP		Gray and orange, fine to medium SAND, some ash, coal particles, slag, and glass particles.		
				SW		Brown, coarse SAND and GRAVEL.		
6						Pulverized CONCRETE.		
				SP		Light gray, fine to medium SAND and rock fragments.		
7						No recovery.		
8							NA	
9								
10		10"		SP		Light gray, wet, fine to medium SAND and rock fragments.		
11						End of boring at 12 feet. Refusal.	NA	
12								

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BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER	47284-0070-00000	BORING/WELL NUMBER	TRC-10
LOCATION	See site plan	DATE DRILLED	4/5/06
DRILLING CONTRACTOR	Geosearch	DRILLER FOREMAN	John Chase
DRILLING METHOD	Geoprobe 6610DT	SCREEN TYPE/SLOT	NA
SAMPLING METHOD	5' Macrocore	FILTER PACK TYPE	NA
GROUND ELEVATION		SEAL TYPE	NA
TOP OF PVC	NA	APPROXIMATE DEPTH TO WATER (Feet)	
LOGGED BY	S. Nabozny	GROUND WATER ELEVATION (feet)	
REMARKS	PID not working.		

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)	WELL DIAGRAM
		9"				ORGANIC SOIL.		
						White and gray, fine to medium SAND, some ash, slag and coal particles.		
1						No recovery.		
2								
3							NA	
4								
5		29"				Moist PEAT.		
6				PT				
7				SP		Gray, fine to medium SAND and rock fragments, drier than above.	NA	
8						End of boring at 9.5 feet. Refusal.		
9								

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Lowell, Mass 01854
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Fax: 978-453-1995

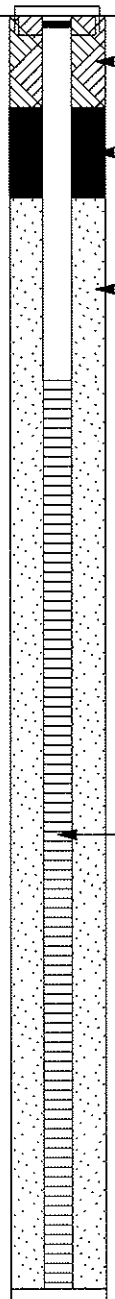
BORING/WELL CONSTRUCTION LOG

246 River Road, New Bedford, MA

PROJECT NUMBER 47284-0070-00000
BORING/WELL NUMBER TRC-11/ MW-2
LOCATION See site plan
DATE DRILLED 4/5/06
DRILLING CONTRACTOR Geosearch
DRILLER FOREMAN John Chase
DRILLING METHOD Geoprobe 6610DT
SCREEN TYPE/SLOT Schedule 40 0.01 slotted screen
SAMPLING METHOD 5' Macrocore
FILTER PACK TYPE #2 Filter Sand
GROUND ELEVATION
SEAL TYPE Bentonite
TOP OF PVC NA
APPROXIMATE DEPTH TO WATER (Feet)
LOGGED BY S. Nabozny
GROUND WATER ELEVATION (feet)
REMARKS PID not working.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	PID (ppm)
		21"		GW		ORGANIC SOIL. GRAVEL.	
1				SP		Dark gray, fine to medium SAND, some ash, glass, ceramic and concrete debris.	
2						No recovery.	
3							NA
4							
5		36"		SP		Tan and gray, moist, fine to medium SAND.	
6							
7				SP		Tan and gray, moist, medium to coarse SAND and sub-rounded gravel.	
8				SP		Tan and gray, moist, fine SAND and rock fragments.	NA
9						No recovery.	
10		8"		SW		Tan and gray, moist, fine SAND and rock fragments.	
11						End of boring at 14 feet. Refusal.	
12							NA
13							
14							

WELL DIAGRAM



APPENDIX E

LABORATORY DATA REPORTS

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

City of New Bedford
Attn: Mr. Scott Alfonse
Dept. of Env. Stewardship
133 William Street
New Bedford, MA 02746

Date Received: 04/10/2006
Date Reported: 04/28/2006
Date Revised: 05/01/2006
P.O. #:
Work Order #: 0604-06146

DESCRIPTION: 246 RIVER ROAD (THIRTY-NINE SOIL SAMPLES)

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 001
SAMPLE DESCRIPTION: TRC-1-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1254	0.13	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
MOISTURE	11		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE	SW-846 8082	04/13/2006	MFT
Tetrachloro-m-xylene (TCMX)	95		30-150%	SW-846 8082	04/13/2006	MFT
Decachlorobiphenyl	87		30-150%	SW-846 8082	04/13/2006	MFT
Extraction date	Extracted			SW846 3545	04/12/2006	OA
PAH						
Naphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	0.42	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	0.45	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	0.40	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	11		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	40		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	41		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	53		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
ANTIMONY	<0.28	0.28	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.2	4.2	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 001
SAMPLE DESCRIPTION: TRC-1-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
BARIUM	25	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
BERYLLIUM	0.13	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	<0.21	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	9.2	1.3	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	32	1.7	mg/kg dry	SW-846 6010	04/12/2006	LD
MERCURY	0.29	0.10	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	4.7	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<8.5	8.5	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.2	4.2	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	14	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	28	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 002
SAMPLE DESCRIPTION: TRC-1-0-30
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
ANTIMONY	<0.26	0.26	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
BARIUM	24	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
BERYLLIUM	0.13	0.02	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	<0.21	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	7.0	1.2	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	34	1.6	mg/kg dry	SW-846 6010	04/12/2006	LD
MERCURY	0.20	0.10	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	4.1	0.83	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<8.3	8.3	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	12	0.83	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	22	0.83	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 003
SAMPLE DESCRIPTION: TRC-1-3-10
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
MOISTURE	27		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE	SW-846 8082	04/13/2006	MFT
Tetrachloro-m-xylene (TCMX)	99		30-150%	SW-846 8082	04/13/2006	MFT
Decachlorobiphenyl	113		30-150%	SW-846 8082	04/13/2006	MFT
Extraction date	Extracted			SW846 3545	04/12/2006	OA
TOTAL METALS						
LEAD	4.6	2.2	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 004
SAMPLE DESCRIPTION: TRC-1-10-12.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluorene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Phenanthrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Chrysene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(b)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(k)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzo(a,h)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(g,h,i)perylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
2-Methylnaphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzofuran	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
MOISTURE	16		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/28/2006	RGM
Nitrobenzene-d5	38		23-120%	SW-846 8270C	04/28/2006	RGM
2-Fluorobiphenyl	39		30-115%	SW-846 8270C	04/28/2006	RGM
P-Terphenyl-d14	47		18-137%	SW-846 8270C	04/28/2006	RGM
Extraction date	Extracted			SW846 3545	04/11/2006	MC
TOTAL METALS						
ANTIMONY	<0.29	0.29	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
BARIUM	17	0.20	mg/kg dry	SW-846 6010	04/12/2006	LD
BERYLLIUM	0.16	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	<0.20	0.20	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	6.9	1.2	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	5.0	1.6	mg/kg dry	SW-846 6010	04/12/2006	LD
MERCURY	<0.11	0.11	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	4.4	0.82	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<8.2	8.2	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.1	4.1	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	8.8	0.82	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	15	0.82	mg/kg dry	SW-846 6010	04/12/2006	LD

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City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

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Sample #: 005
SAMPLE DESCRIPTION: TRC-1-5-6
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Unadjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
Methyl-tert-butylether	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Benzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Toluene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Ethylbenzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
m,p-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
o-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Naphthalene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
C9-C10 Aromatics(PID)	<2.0	2.0	mg/kg dry	MADEP	04/13/2006	CDC
MOISTURE	22		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE		04/13/2006	CDC
2,5-Dibromotoluene(PID)	106		70-130%	MADEP	04/13/2006	CDC
2,5-Dibromotoluene(FID)	101		70-130%	MADEP	04/13/2006	CDC
EPH/PAH						
C9-C18 Aliphatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
C19-C36 Aliphatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
C11-C22 Aromatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
Total EPH	<30		mg/kg dry	MADEP	04/13/2006	CY
TARGET PAH ANALYTES					04/13/2006	CY
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Acenaphthylene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Fluorene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Anthracene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Fluoranthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Pyrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(a)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Chrysene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(b)fluoranthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(k)fluoranthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(a)pyrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Indeno(1,2,3-cd)pyrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(g,h,i)perylene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
MOISTURE	22		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE		04/13/2006	CY

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City of New Bedford
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Sample #: 005
SAMPLE DESCRIPTION: TRC-1-5-6
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Chloro-octadecane	47		40-140%	MADEP	04/13/2006	CY
Ortho-terphenyl	48		40-140%	MADEP	04/13/2006	CY
FRACTIONATION SURROGATES			RANGE		04/13/2006	CY
2-Fluorobiphenyl	76		40-140%	MADEP	04/13/2006	CY
2-Bromonaphthalene	69		40-140%	MADEP	04/13/2006	CY
Extraction date	Extracted			MADEP	04/10/2006	MC

All QA/QC procedures required by the VPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the EPH Method with the following exception: C-range values may have been blank subtracted to minimize the effect of leachable plasticizers from the SPE cartridges.

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City of New Bedford
Date Received: 04/10/2006
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Sample #: 006
SAMPLE DESCRIPTION: TRC-2-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	58	2.1	mg/kg dry	SW-846 6010	04/12/2006	LD

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Date Received: 04/10/2006
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Sample #: 007
SAMPLE DESCRIPTION: TRC-2-3-6.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	11	1.8	mg/kg dry	SW-846 6010	04/12/2006	LD

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Date Received: 04/10/2006
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Sample #: 008
SAMPLE DESCRIPTION: TRC-2-1-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.45	0.45	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	27		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	39		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	40		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	55		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC

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City of New Bedford
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Sample #: 009
SAMPLE DESCRIPTION: TRC-2-0-30
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	98	1.9	mg/kg dry	SW-846 6010	04/12/2006	LD

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Sample #: 010
SAMPLE DESCRIPTION: TRC-3-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	20	2.2	mg/kg dry	SW-846 6010	04/12/2006	LD

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Date Received: 04/10/2006
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Sample #: 011
SAMPLE DESCRIPTION: TRC-3-3-6
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	10	2.1	mg/kg dry	SW-846 6010	04/12/2006	LD

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Date Received: 04/10/2006
Work Order #: 0604-06146

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Sample #: 012
SAMPLE DESCRIPTION: TRC-3-5-6
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Acenaphthylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Acenaphthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Fluorene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Phenanthrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(a)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Chrysene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(b)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(k)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(a)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Dibenzo(a,h)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(g,h,i)perylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
2-Methylnaphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Dibenzofuran	<0.37	0.37	mg/kg dry	SW-846 8270C	04/13/2006	RGM
MOISTURE	9		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/13/2006	RGM
Nitrobenzene-d5	25		23-120%	SW-846 8270C	04/13/2006	RGM
2-Fluorobiphenyl	30		30-115%	SW-846 8270C	04/13/2006	RGM
P-Terphenyl-d14	50		18-137%	SW-846 8270C	04/13/2006	RGM
Extraction date	Extracted			SW846 3545	04/11/2006	MC

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Sample #: 013
SAMPLE DESCRIPTION: TRC-4-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	29000	1.8	mg/kg dry	SW-846 6010	04/13/2006	LD

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Sample #: 014
SAMPLE DESCRIPTION: TRC-4-3-10
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
MOISTURE	15		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE	SW-846 8082	04/13/2006	MFT
Tetrachloro-m-xylene (TCMX)	98		30-150%	SW-846 8082	04/13/2006	MFT
Decachlorobiphenyl	101		30-150%	SW-846 8082	04/13/2006	MFT
Extraction date	Extracted			SW846 3545	04/12/2006	OA
PAH						
Naphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.39	0.39	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	15		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	30		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	38		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	59		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
ANTIMONY	<0.28	0.28	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD

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City of New Bedford
Date Received: 04/10/2006
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Sample #: 014
SAMPLE DESCRIPTION: TRC-4-3-10
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
BARIUM	9.5	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
BERYLLIUM	0.10	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	<0.21	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	5.0	1.3	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	8.0	1.7	mg/kg dry	SW-846 6010	04/13/2006	LD
MERCURY	<0.10	0.10	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	4.3	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<8.5	8.5	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	7.2	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	15	0.85	mg/kg dry	SW-846 6010	04/12/2006	LD

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Sample #: 015
SAMPLE DESCRIPTION: TRC-4-3-100
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
MOISTURE	19		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE	SW-846 8082	04/13/2006	MFT
Tetrachloro-m-xylene (TCMX)	95		30-150%	SW-846 8082	04/13/2006	MFT
Decachlorobiphenyl	86		30-150%	SW-846 8082	04/13/2006	MFT
Extraction date	Extracted			SW846 3545	04/12/2006	OA

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City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 016
SAMPLE DESCRIPTION: TRC-4-10-12
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.43	0.43	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	22		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	28		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	27		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	40		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
ANTIMONY	<0.29	0.29	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<7.8	7.8	mg/kg dry	SW-846 6010	04/12/2006	LD
BARIUM	340	0.26	mg/kg dry	SW-846 6010	04/17/2006	LD
BERYLLIUM	0.24	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	<0.26	0.26	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	83	1.6	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	3.3	2.1	mg/kg dry	SW-846 6010	04/12/2006	LD
MERCURY	<0.11	0.11	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	32	1.0	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<26	26	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<5.2	5.2	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<31	31	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	70	1.0	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	64	1.0	mg/kg dry	SW-846 6010	04/12/2006	LD

Thallium: Increased detection limit due to sample matrix.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
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Data Reporting

Sample #: 017
SAMPLE DESCRIPTION: TRC-4-1-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 12:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Unadjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
Methyl-tert-butylether	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Benzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Toluene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Ethylbenzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
m,p-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
o-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Naphthalene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
C9-C10 Aromatics(PID)	<2.0	2.0	mg/kg dry	MADEP	04/13/2006	CDC
MOISTURE	17		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE		04/13/2006	CDC
2,5-Dibromotoluene(PID)	90		70-130%	MADEP	04/13/2006	CDC
2,5-Dibromotoluene(FID)	86		70-130%	MADEP	04/13/2006	CDC
EPH/PAH						
C9-C18 Aliphatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
C19-C36 Aliphatics	24	10	mg/kg dry	MADEP	04/13/2006	CY
C11-C22 Aromatics	56	10	mg/kg dry	MADEP	04/13/2006	CY
Total EPH	80		mg/kg dry	MADEP	04/13/2006	CY
TARGET PAH ANALYTES					04/13/2006	CY
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Acenaphthylene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Fluorene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Phenanthrene	0.8	0.4	mg/kg dry	MADEP	04/13/2006	CY
Anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Fluoranthene	0.8	0.4	mg/kg dry	MADEP	04/13/2006	CY
Pyrene	0.7	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(a)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Chrysene	0.6	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(b)fluoranthene	0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(k)fluoranthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(a)pyrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Indeno(1,2,3-cd)pyrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(g,h,i)perylene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
MOISTURE	17		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE		04/13/2006	CY

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Sample #: 017
SAMPLE DESCRIPTION: TRC-4-1-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 12:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Chloro-octadecane	67		40-140%	MADEP	04/13/2006	CY
Ortho-terphenyl	66		40-140%	MADEP	04/13/2006	CY
FRACTIONATION SURROGATES			RANGE		04/13/2006	CY
2-Fluorobiphenyl	79		40-140%	MADEP	04/13/2006	CY
2-Bromonaphthalene	77		40-140%	MADEP	04/13/2006	CY
Extraction date	Extracted			MADEP	04/10/2006	MC

All QA/QC procedures required by the VPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the EPH Method with the following exception: C-range values may have been blank subtracted to minimize the effect of leachable plasticizers from the SPE cartridges.

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Data Reporting

Sample #: 018
SAMPLE DESCRIPTION: TRC-5-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	<2.2	2.2	mg/kg dry	SW-846 6010	04/12/2006	LD

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City of New Bedford
Date Received: 04/10/2006
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Approved by: _____
Data Reporting

Sample #: 019
SAMPLE DESCRIPTION: TRC-5-3-6.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	200	2.1	mg/kg dry	SW-846 6010	04/13/2006	LD

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City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 020
SAMPLE DESCRIPTION: TRC-5-5.5-6.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.38	0.38	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	13		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	33		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	34		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	44		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC

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City of New Bedford
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Data Reporting

Sample #: 021
SAMPLE DESCRIPTION: TRC-6-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	10	2.2	mg/kg dry	SW-846 6010	04/14/2006	LD

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City of New Bedford
Date Received: 04/10/2006
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Data Reporting

Sample #: 022
SAMPLE DESCRIPTION: TRC-6-3-6.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	4800	2.4	mg/kg dry	SW-846 6010	04/13/2006	LD

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Data Reporting

Sample #: 023
SAMPLE DESCRIPTION: TRC-6-5.5-6.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Acenaphthylene	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Acenaphthene	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Fluorene	0.50	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Phenanthrene	6.6	1.6	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Anthracene	1.5	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Fluoranthene	8.9	1.6	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Pyrene	9.3	1.6	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(a)anthracene	4.0	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Chrysene	4.2	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(b)fluoranthene	4.2	1.6	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(k)fluoranthene	3.4	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(a)pyrene	3.8	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Indeno(1,2,3-cd)pyrene	1.0	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Dibenzo(a,h)anthracene	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Benzo(g,h,i)perylene	0.81	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
2-Methylnaphthalene	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
Dibenzofuran	<0.41	0.41	mg/kg dry	SW-846 8270C	04/13/2006	RGM
MOISTURE	20		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/13/2006	RGM
Nitrobenzene-d5	50		23-120%	SW-846 8270C	04/13/2006	RGM
2-Fluorobiphenyl	70		30-115%	SW-846 8270C	04/13/2006	RGM
P-Terphenyl-d14	116		18-137%	SW-846 8270C	04/13/2006	RGM
Extraction date	Extracted			SW846 3545	04/11/2006	MC

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Data Reporting

Sample #: 024
SAMPLE DESCRIPTION: TRC-7-0-0.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Acenaphthylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Acenaphthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Fluorene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Phenanthrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(a)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Chrysene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(b)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(k)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(a)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Dibenzo(a,h)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(g,h,i)perylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
2-Methylnaphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Dibenzofuran	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
MOISTURE	10		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/27/2006	RGM
Nitrobenzene-d5	42		23-120%	SW-846 8270C	04/27/2006	RGM
2-Fluorobiphenyl	47		30-115%	SW-846 8270C	04/27/2006	RGM
P-Terphenyl-d14	78		18-137%	SW-846 8270C	04/27/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	12	2.1	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

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Work Order #: 0604-06146

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Data Reporting

Sample #: 025
SAMPLE DESCRIPTION: TRC-7-0.5-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.35	0.35	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	6		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	56		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	61		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	78		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	7.2	2.0	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

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City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 026
SAMPLE DESCRIPTION: TRC-7-0.5-30
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.36	0.36	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	7		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	54		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	58		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	81		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC

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City of New Bedford
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Sample #: 027
SAMPLE DESCRIPTION: TRC-7-3-6-8
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.37	0.37	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	11		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	39		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	41		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	57		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	3.8	2.1	mg/kg dry	SW-846 6010	04/12/2006	LD

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City of New Bedford
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Sample #: 028
SAMPLE DESCRIPTION: TRC-8-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
ANTIMONY	<0.31	0.31	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
BARIUM	510	0.22	mg/kg dry	SW-846 6010	04/17/2006	LD
BERYLLIUM	0.30	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	11	0.22	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	17	1.3	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	1500	1.7	mg/kg dry	SW-846 6010	04/13/2006	LD
MERCURY	0.41	0.12	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	18	0.87	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<65	65	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<6.5	6.5	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	68	0.87	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	3100	0.87	mg/kg dry	SW-846 6010	04/14/2006	LD

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Data Reporting

Sample #: 029
SAMPLE DESCRIPTION: TRC-8-3-12
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006 @ 16:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	04/13/2006	MFT
MOISTURE	10		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE	SW-846 8082	04/13/2006	MFT
Tetrachloro-m-xylene (TCMX)	71		30-150%	SW-846 8082	04/13/2006	MFT
Decachlorobiphenyl	77		30-150%	SW-846 8082	04/13/2006	MFT
Extraction date	Extracted			SW846 3545	04/12/2006	OA
PAH						
Naphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Acenaphthylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Acenaphthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Fluorene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Phenanthrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Fluoranthene	0.40	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Pyrene	0.75	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(a)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Chrysene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(b)fluoranthene	0.51	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(k)fluoranthene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(a)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Dibenzo(a,h)anthracene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Benzo(g,h,i)perylene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
2-Methylnaphthalene	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
Dibenzofuran	<0.37	0.37	mg/kg dry	SW-846 8270C	04/27/2006	RGM
MOISTURE	10		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/27/2006	RGM
Nitrobenzene-d5	54		23-120%	SW-846 8270C	04/27/2006	RGM
2-Fluorobiphenyl	56		30-115%	SW-846 8270C	04/27/2006	RGM
P-Terphenyl-d14	114		18-137%	SW-846 8270C	04/27/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
ANTIMONY	<0.27	0.27	mg/kg dry	SW-846 7041	04/14/2006	REA
ARSENIC	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD

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Sample #: 029
SAMPLE DESCRIPTION: TRC-8-3-12
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006 @ 16:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
BARIUM	84	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
BERYLLIUM	0.21	0.03	mg/kg dry	SW-846 7091	04/17/2006	REA
CADMIUM	0.70	0.21	mg/kg dry	SW-846 6010	04/12/2006	LD
CHROMIUM	12	1.3	mg/kg dry	SW-846 6010	04/12/2006	LD
LEAD	280	1.7	mg/kg dry	SW-846 6010	04/13/2006	LD
MERCURY	<0.11	0.11	mg/kg dry	SW-846 7471A	04/12/2006	REA
NICKEL	10	0.86	mg/kg dry	SW-846 6010	04/12/2006	LD
SELENIUM	<26	26	mg/kg dry	SW-846 6010	04/12/2006	LD
SILVER	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
THALLIUM	<4.3	4.3	mg/kg dry	SW-846 6010	04/12/2006	LD
VANADIUM	11	0.86	mg/kg dry	SW-846 6010	04/12/2006	LD
ZINC	550	0.86	mg/kg dry	SW-846 6010	04/14/2006	LD

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Sample #: 030
SAMPLE DESCRIPTION: TRC-8-1-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 16:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Unadjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
Methyl-tert-butylether	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Benzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Toluene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Ethylbenzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
m,p-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
o-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Naphthalene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
C9-C10 Aromatics(PID)	<2.0	2.0	mg/kg dry	MADEP	04/13/2006	CDC
MOISTURE	31		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE		04/13/2006	CDC
2,5-Dibromotoluene(PID)	91		70-130%	MADEP	04/13/2006	CDC
2,5-Dibromotoluene(FID)	89		70-130%	MADEP	04/13/2006	CDC
EPH/PAH						
C9-C18 Aliphatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
C19-C36 Aliphatics	85	10	mg/kg dry	MADEP	04/13/2006	CY
C11-C22 Aromatics	120	10	mg/kg dry	MADEP	04/13/2006	CY
Total EPH	205		mg/kg dry	MADEP	04/13/2006	CY
TARGET PAH ANALYTES					04/13/2006	CY
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Acenaphthylene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Fluorene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Fluoranthene	1.7	0.4	mg/kg dry	MADEP	04/13/2006	CY
Pyrene	1.7	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(a)anthracene	1.3	0.4	mg/kg dry	MADEP	04/13/2006	CY
Chrysene	1.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(b)fluoranthene	1.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(k)fluoranthene	1.3	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(a)pyrene	1.6	0.4	mg/kg dry	MADEP	04/12/2006	CY
Indeno(1,2,3-cd)pyrene	1.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(g,h,i)perylene	0.9	0.4	mg/kg dry	MADEP	04/12/2006	CY
MOISTURE	31		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE		04/13/2006	CY

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City of New Bedford
Date Received: 04/10/2006
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Sample #: 030
SAMPLE DESCRIPTION: TRC-8-1-2
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 16:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Chloro-octadecane	67		40-140%	MADEP	04/13/2006	CY
Ortho-terphenyl	62		40-140%	MADEP	04/13/2006	CY
FRACTIONATION SURROGATES			RANGE		04/13/2006	CY
2-Fluorobiphenyl	71		40-140%	MADEP	04/13/2006	CY
2-Bromonaphthalene	66		40-140%	MADEP	04/13/2006	CY
Extraction date	Extracted			MADEP	04/10/2006	MC

All QA/QC procedures required by the VPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the EPH Method with the following exception: C-range values may have been blank subtracted to minimize the effect of leachable plasticizers from the SPE cartridges.

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City of New Bedford
Date Received: 04/10/2006
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Sample #: 031
SAMPLE DESCRIPTION: TRC-8-1-20
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 16:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Unadjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
Methyl-tert-butylether	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Benzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Toluene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Ethylbenzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
m,p-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
o-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Naphthalene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
C9-C10 Aromatics(PID)	<2.0	2.0	mg/kg dry	MADEP	04/13/2006	CDC
MOISTURE	38		%	SM2540 G.	04/10/2006	MC
SURROGATE			RANGE		04/13/2006	CDC
2,5-Dibromotoluene(PID)	102		70-130%	MADEP	04/13/2006	CDC
2,5-Dibromotoluene(FID)	98		70-130%	MADEP	04/13/2006	CDC
EPH/PAH						
C9-C18 Aliphatics	<10	10	mg/kg dry	MADEP	04/13/2006	CY
C19-C36 Aliphatics	130	10	mg/kg dry	MADEP	04/13/2006	CY
C11-C22 Aromatics	220	10	mg/kg dry	MADEP	04/13/2006	CY
Total EPH	350		mg/kg dry	MADEP	04/13/2006	CY
TARGET PAH ANALYTES					04/13/2006	CY
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Acenaphthylene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Fluorene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Phenanthrene	3.6	0.4	mg/kg dry	MADEP	04/12/2006	CY
Anthracene	<0.4	0.4	mg/kg dry	MADEP	04/12/2006	CY
Fluoranthene	3.7	0.4	mg/kg dry	MADEP	04/12/2006	CY
Pyrene	4.7	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(a)anthracene	1.9	0.4	mg/kg dry	MADEP	04/12/2006	CY
Chrysene	2.2	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(b)fluoranthene	1.3	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(k)fluoranthene	1.6	0.4	mg/kg dry	MADEP	04/12/2006	CY
Benzo(a)pyrene	1.7	0.4	mg/kg dry	MADEP	04/12/2006	CY
Indeno(1,2,3-cd)pyrene	0.9	0.4	mg/kg dry	MADEP	04/12/2006	CY
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	MADEP	04/13/2006	CY
Benzo(g,h,i)perylene	0.7	0.4	mg/kg dry	MADEP	04/12/2006	CY
MOISTURE	38		%	SM2540 G.	04/10/2006	MC
SURROGATES			RANGE		04/13/2006	CY

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City of New Bedford
Date Received: 04/10/2006
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Data Reporting

Sample #: 031
SAMPLE DESCRIPTION: TRC-8-1-20
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 4/05/2006 @ 16:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Chloro-octadecane	66		40-140%	MADEP	04/13/2006	CY
Ortho-terphenyl	68		40-140%	MADEP	04/13/2006	CY
FRACTIONATION SURROGATES			RANGE		04/13/2006	CY
2-Fluorobiphenyl	78		40-140%	MADEP	04/13/2006	CY
2-Bromonaphthalene	73		40-140%	MADEP	04/13/2006	CY
Extraction date	Extracted			MADEP	04/10/2006	MC

All QA/QC procedures required by the VPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the EPH Method with the following exception: C-range values may have been blank subtracted to minimize the effect of leachable plasticizers from the SPE cartridges.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 032
SAMPLE DESCRIPTION: TRC-9-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	970	2.6	mg/kg dry	SW-846 6010	04/13/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 033
SAMPLE DESCRIPTION: TRC-9-3-6
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL METALS						
LEAD	29	2.2	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 034
SAMPLE DESCRIPTION: TRC-0.5-2
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.44	0.44	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	25		%	SM2540 G.	04/11/2006	MC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	45		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	50		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	77		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 035
SAMPLE DESCRIPTION: TRC-10-0-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluorene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Phenanthrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Pyrene	0.67	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Chrysene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(b)fluoranthene	0.50	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(k)fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzo(a,h)anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(g,h,i)perylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
2-Methylnaphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzofuran	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
MOISTURE	24		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/28/2006	RGM
Nitrobenzene-d5	53		23-120%	SW-846 8270C	04/28/2006	RGM
2-Fluorobiphenyl	63		30-115%	SW-846 8270C	04/28/2006	RGM
P-Terphenyl-d14	135		18-137%	SW-846 8270C	04/28/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	1300	2.4	mg/kg dry	SW-846 6010	04/13/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 036
SAMPLE DESCRIPTION: TRC-11-0-0.5
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthylene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Acenaphthene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluorene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Phenanthrene	0.78	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Anthracene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Fluoranthene	0.71	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Pyrene	0.84	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)anthracene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Chrysene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(b)fluoranthene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(k)fluoranthene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(a)pyrene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzo(a,h)anthracene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Benzo(g,h,i)perylene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
2-Methylnaphthalene	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
Dibenzofuran	<0.42	0.42	mg/kg dry	SW-846 8270C	04/26/2006	RGM
MOISTURE	20		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/26/2006	RGM
Nitrobenzene-d5	34		23-120%	SW-846 8270C	04/26/2006	RGM
2-Fluorobiphenyl	37		30-115%	SW-846 8270C	04/26/2006	RGM
P-Terphenyl-d14	66		18-137%	SW-846 8270C	04/26/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	82	2.4	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 037
SAMPLE DESCRIPTION: TRC-11-0.5-3
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluorene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Phenanthrene	1.7	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluoranthene	1.4	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Pyrene	2.2	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)anthracene	0.71	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Chrysene	0.75	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(b)fluoranthene	0.77	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(k)fluoranthene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)pyrene	0.71	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzo(a,h)anthracene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(g,h,i)perylene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
2-Methylnaphthalene	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzofuran	<0.44	0.44	mg/kg dry	SW-846 8270C	04/28/2006	RGM
MOISTURE	24		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/28/2006	RGM
Nitrobenzene-d5	48		23-120%	SW-846 8270C	04/28/2006	RGM
2-Fluorobiphenyl	52		30-115%	SW-846 8270C	04/28/2006	RGM
P-Terphenyl-d14	98		18-137%	SW-846 8270C	04/28/2006	RGM
Extraction date	Extracted			SW846 3545	04/14/2006	MC
TOTAL METALS						
LEAD	420	2.6	mg/kg dry	SW-846 6010	04/13/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 038
SAMPLE DESCRIPTION: TRC-11-7-11
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PAH						
Naphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Acenaphthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluorene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Phenanthrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Chrysene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(b)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(k)fluoranthene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(a)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Indeno(1,2,3-cd)pyrene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzo(a,h)anthracene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Benzo(g,h,i)perylene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
2-Methylnaphthalene	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
Dibenzofuran	<0.39	0.39	mg/kg dry	SW-846 8270C	04/28/2006	RGM
MOISTURE	15		%	SM2540 G.	04/11/2006	BC
SURROGATES			RANGE	SW-846 8270C	04/28/2006	RGM
Nitrobenzene-d5	48		23-120%	SW-846 8270C	04/28/2006	RGM
2-Fluorobiphenyl	48		30-115%	SW-846 8270C	04/28/2006	RGM
P-Terphenyl-d14	64		18-137%	SW-846 8270C	04/28/2006	RGM
Extraction date	Extracted			SW846 3545	04/11/2006	MC
TOTAL METALS						
LEAD	4.5	2.2	mg/kg dry	SW-846 6010	04/12/2006	LD

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 04/10/2006
Work Order #: 0604-06146

Approved by: _____
Data Reporting

Sample #: 039
SAMPLE DESCRIPTION: TRC-TB
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 4/05/2006

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TEMPERATURE UPON RECEIPT AT LAB	7.0		degrees C	EPA 170.1	04/10/2006	ALR
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Unadjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
Methyl-tert-butylether	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Benzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Toluene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Ethylbenzene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
m,p-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
o-Xylene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Naphthalene	<0.25	0.25	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C5-C8 Aliphatics(FID)	<3.0	3.0	mg/kg dry	MADEP	04/13/2006	CDC
Adjusted C9-C12 Aliphatics(FID)	<1.0	1.0	mg/kg dry	MADEP	04/13/2006	CDC
C9-C10 Aromatics(PID)	<2.0	2.0	mg/kg dry	MADEP	04/13/2006	CDC
SURROGATE			RANGE		04/13/2006	CDC
2,5-Dibromotoluene(PID)	110		70-130%	MADEP	04/13/2006	CDC
2,5-Dibromotoluene(FID)	102		70-130%	MADEP	04/13/2006	CDC

All QA/QC procedures required by the VPH Method were followed.
All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.
No significant modifications were made to the VPH Method.

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type T	Preservation Code P	Matrix Code M	Lead MCP 6010B	PAHs MCP 8270C	MCP Metals MCP 6010B/7000A	PCBs MCP 8082	EPH/VPH MADEP rev 1
4/5/06	0900	TRC-1-0-3 (MS/DUP for MCP metals)	C	2	I			X	X	X	
	0910	TRC-1-0-30	C	1	I				X		
	0915	TRC-1-3-10 SN ~~(MS/DUP for lead)~~ (MS/MSD for PCBs)	C	2	I		X			X	
	0930	TRC-1-10-12.5	C	2				X	X		
	0945	TRC-1-5-6 (MS/DUP)	G	4	I/M						X
	1000	TRC-2-0-3	C	1	I		X				
	1015	TRC-2-3-6.5	C	1	I		X				
	1030	TRC-2-1-3	C	1	I			X			
	1045	TRC-2-0-30	C	1	I		X				
	1100	TRC-3-0-3	C	1	I		X				
	1115	TRC-3-3-6	C	1	I		X				
	1130	TRC-3-5-6	C	1	I			X			
	1200	TRC-4-0-3	C	1	I		X				
	1215	TRC-4-3-10	C	2	I			X	X	X	

Client Information		Project Information		
Company Name:	TRC Environmental Corp	Project Name:	246 River Rd	
Address:	116 John St	P.O. Number:	Project Number:	
City / State / Zip:	Lowell MA 01852	Report To:	Phone:	Fax:
Telephone:	978-656-3577 Fax: 978-453-1995	Sampled by:	Steve Nakozny	
Contact Person:	Liz Denly	Quote No:	Email address:	

Relinquished By	Date	Time	Received By	Date	Time
Steve Nakozny	4/7/06	1700	Fed Ex # 6749 8818 8561		
			Sherry Blaschke	4-10-06	1200

Turn Around Time		
X	Normal	EMAIL Report
	5 Business days. Possible surcharge	
	Rush _____ (business days)	

Project Comments

Circle if applicable: GW-1, GW-2, GW-3 S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

e-mail results: edenly@trcsolutions.com

NOTE: Analize as per Feb 2006 QAAP

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
X	Shipped on ice
Workorder No:	D0061146

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile

Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=$Na_2S_2O_3$, Z=ZnOAc, I=Ice

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
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Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type[T]	Preservation Code[P]	Matrix Code[M]	Lead MCP 6010B	PAHs MCP 8270C	MCP Metals MCP 6010B/7000A	PCBs MCP 8082	EPH/VPH MADEP rev 1
4/5/06	1225	TRC-4-3-100	C	1	I	S				X	
	1230	TRC-4-10-12	C	2	I	S		X	X		
	1245	TRC-4-1-2	G	4	I/M	S					X
	1300	TRC-5-0-3	C	1	I	S	X				
	1315	TRC-5-3-6.5	C	1	I	S	X				
	1330	TRC-5-5.5-6.5	C	1	I	S		X			
	1400	TRC-6-0-3	C	1	I	S	X				
	1415	TRC-6-3-6.5	C	1	I	S	X				
	1430	TRC-6-5.5-6.5	C	1	I	S		X			
	1500	TRC-7-0-0.5	C	2	I	S	X	X			
	1515	TRC-7-0.5-3	C	1	I	S	X	X			
	1520	TRC-7-0.5-30	C	1	I	S		X			
	1530	TRC-7-3-6-8	C	1	I	S	X	X			
	1600	TRC-8-0-3	C	1	I	S			X		

Client Information		Project Information		
Company Name:	TRC Environmental Corp	Project Name:	246 River Rd	
Address:	116 John St	P.O. Number:	Project Number:	
City / State / Zip:	Lowell MA 01852	Report To:	Phone:	Fax:
Telephone:	978-656-3577 Fax: 978-453-1995	Sampled by:	Steve Nabozny	
Contact Person:	Liz Denly	Quote No:	Email address:	

Relinquished By	Date	Time	Received By	Date	Time
Steve Nabozny	4/7/06	1700	Fed Ex # 6749 8818 8561		
			Sherry Bloschak	4-10-06	1250

Turn Around Time	
X Normal	EMAIL Report
5 Business days. Possible surcharge	
Rush _____ (business days)	

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

e-mail results: ~~tdenly~~ edenly@trcsolutions.com

NOTE: Analize as per Feb 2006 QAAP

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
X	Shipped on ice
Workorder No	060446

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile

Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=$Na_2S_2O_3$, Z=ZnOAc, I=Ice

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type T	Preservation Code P	Matrix Code M	Lead MCP 6010B	PAHs MCP 8270C	MCP Metals MCP 6010B/7000A	EPH/VPH MADEP rev 1	PCBs MCP 8082
29 4/5/06	1615	TRC-8-3-12	C	1	I	S		X	X		X
	1630	TRC-8-1-2	G	4	I/M	S				X	
	1645	TRC-8-1-20	G	4	I/M	S				X	
	1700	TRC-9-0-3	C	1	I	S	X				
	1715	TRC-9-3-6 (DUP/MS)	C	1	I	S	X				
	1730	TRC-0.5-2 (MS/MSD)	C	1	I	S		X			
	1800	TRC-10-0-3	C	1	I	S	X	X			
	1900	TRC-11-0-0.5	C	2	I	S	X	X			
	1915	TRC-11-0.5-3	C	2	I	S	X	X			
	1930	TRC-11-7-11	C	2	I	S	X	X			
	—	TRC-TB		1	I					VPH X	
		COOLER TEMP BLANK	7°C								

Client Information		Project Information	
Company Name:	TRC Environmental Corp	Project Name:	246 River Rd
Address:	116 John St	P.O. Number:	Project Number:
City / State / Zip:	Lowell MA 01852	Report To:	Phone: Fax:
Telephone:	978-656-3577 Fax: 978-453-1995	Sampled by:	Steve Nabozny
Contact Person:	Liz Denly	Quote No:	Email address:

Relinquished By	Date	Time	Received By	Date	Time
Steve Nabozny	4/7/06	1700	Fed Ex # 6749 6818 8561		
			Sherry Bloschitzak	4-10-06	1200

Turn Around Time	
X Normal	EMAIL Report
5 Business days. Possible surcharge	
Rush _____ (business days)	

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

e-mail results: edenly@trcsolutions.com

NOTE: Analize as per Feb 2006 QAAP

*2 bottles broken samples transferred

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
X	Shipped on ice
Workorder No	06-0446

Container Types: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile

Preservation Codes: NP=None, N=HNO_3, H=HCl, S=H_2SO_4, SH=NaOH, SB=$NaHSO_4$, M=MeOH, T=$Na_2S_2O_3$, Z=ZnOAc, I=Ice

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=_____

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0604-06146
Date: 4/27/2006

-Method Blank Results-

Parameter	Units	Results	Date Analyzed
Silver	mg/kg dry	<5.0	4/12/2006
Arsenic	mg/kg dry	<5.0	4/12/2006
Beryllium	mg/kg dry	<0.02	4/17/2006
Cadmium	mg/kg dry	<0.25	4/12/2006
Chromium	mg/kg dry	<1.5	4/12/2006
Nickel	mg/kg dry	<1.0	4/12/2006
Lead	mg/kg dry	<2.0	4/12/2006
Antimony	mg/kg dry	<0.24	4/14/2006
Selenium	mg/kg dry	<10	4/12/2006
Thallium	mg/kg dry	<5.0	4/12/2006
Zinc	mg/kg dry	<1.0	4/12/2006
Mercury	mg/kg dry	<0.10	4/12/2006
Barium	mg/kg dry	<0.25	4/12/2006
Vanadium	mg/kg dry	<1.0	4/12/2006

-Method Blank Results-

Parameter	Units	Results	Date Analyzed
Lead	mg/kg dry	<2.0	4/12/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0604-06146
Date: 4/27/2006

-LCS-

Parameter	Units	Known Conc.	Detected Conc.	% Rec.	Date Analyzed
Silver	mg/kg dry	50	50	100	4/12/2006
Arsenic	mg/kg dry	50	48	96	4/12/2006
Beryllium	mg/kg dry	1.0	1.0	100	4/17/2006
Cadmium	mg/kg dry	50	51	102	4/12/2006
Chromium	mg/kg dry	50	52	104	4/12/2006
Nickel	mg/kg dry	50	52	104	4/12/2006
Lead	mg/kg dry	50	52	104	4/12/2006
Antimony	mg/kg dry	1.0	1.1	110	4/14/2006
Selenium	mg/kg dry	50	45	90	4/12/2006
Thallium	mg/kg dry	50	48	96	4/12/2006
Zinc	mg/kg dry	50	49	98	4/12/2006
Mercury	mg/kg dry	0.38	0.37	97	4/12/2006
Barium	mg/kg dry	50	53	106	4/12/2006
Vanadium	mg/kg dry	50	51	102	4/12/2006

-LCS-

Parameter	Units	Known Conc.	Detected Conc.	% Rec.	Date Analyzed
Lead	mg/kg dry	49	55	112	4/12/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0604-06146
Date: 4/27/2006

-LCS Dup-

Parameter	Units	Known Conc.	Detected Conc.	% Rec.	RPD	Date Analyzed
Silver	mg/kg dry	50	49	98	2	4/12/2006
Arsenic	mg/kg dry	50	47	94	2	4/12/2006
Beryllium	mg/kg dry	1.0	0.99	99	1	4/17/2006
Cadmium	mg/kg dry	50	50	100	2	4/12/2006
Chromium	mg/kg dry	50	51	102	2	4/12/2006
Nickel	mg/kg dry	50	51	102	2	4/12/2006
Lead	mg/kg dry	50	51	102	2	4/12/2006
Antimony	mg/kg dry	1.0	1.1	110	0	4/14/2006
Selenium	mg/kg dry	50	44	88	2	4/12/2006
Thallium	mg/kg dry	50	49	98	2	4/12/2006
Zinc	mg/kg dry	50	48	96	2	4/12/2006
Mercury	mg/kg dry	0.36	0.35	97	0	4/12/2006
Barium	mg/kg dry	50	53	106	0	4/12/2006
Vanadium	mg/kg dry	50	50	100	2	4/12/2006

-LCS Dup-

Parameter	Units	Known Conc.	Detected Conc.	% Rec.	RPD	Date Analyzed
Lead	mg/kg dry	47	52	111	1	4/12/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0604-06146
Date: 4/27/2006

-Replicate Sample Results-

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Silver	mg/kg dry	6146-1	<4.3	<4.2	<4.25	<4.2	0	4/12/2006
Arsenic	mg/kg dry	6146-1	<4.3	<4.2	<4.25	<4.2	0	4/12/2006
Beryllium	mg/kg dry	6146-1	0.10	0.16	0.13	0.13	46	4/17/2006
Cadmium	mg/kg dry	6146-1	<0.21	<0.21	<0.21	<0.21	0	4/12/2006
Chromium	mg/kg dry	6146-1	9.1	9.4	9.25	9.2	3	4/12/2006
Nickel	mg/kg dry	6146-1	4.8	4.6	4.7	4.7	4	4/12/2006
Lead	mg/kg dry	6146-1	36	29	32.5	32	22	4/12/2006
Antimony	mg/kg dry	6146-1	<0.27	<0.28	<0.275	<0.28	0	4/14/2006
Selenium	mg/kg dry	6146-1	<8.5	<8.5	<8.5	<8.5	0	4/12/2006
Thallium	mg/kg dry	6146-1	<4.3	<4.2	<4.25	<4.2	0	4/12/2006
Zinc	mg/kg dry	6146-1	28	28	28	28	0	4/12/2006
Mercury	mg/kg dry	6146-1	0.28	0.30	0.29	0.29	7	4/12/2006
Barium	mg/kg dry	6146-1	25	25	25	25	0	4/12/2006
Vanadium	mg/kg dry	6146-1	14	14	14	14	0	4/12/2006

-Replicate Sample Results-

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Lead	mg/kg dry	6146-38	5.2	3.8	4.5	4.5	31	4/12/2006

-Replicate Sample Results-

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Lead	mg/kg dry	6146-33	14	44	29	29	103	4/12/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0604-06146
Date: 4/27/2006

-Matrix Spike Results-

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Silver	mg/kg dry	6146-1	<4.2	42	40	95	4/12/2006
Arsenic	mg/kg dry	6146-1	<4.2	42	39	93	4/12/2006
Beryllium	mg/kg dry	6146-1	0.13	1.1	1.3	106	4/17/2006
Cadmium	mg/kg dry	6146-1	<0.21	42	41	98	4/12/2006
Chromium	mg/kg dry	6146-1	9.2	42	51	100	4/12/2006
Nickel	mg/kg dry	6146-1	4.7	42	45	96	4/12/2006
Lead	mg/kg dry	6146-1	32	42	72	95	4/12/2006
Antimony	mg/kg dry	6146-1	<0.28	1.1	0.28	25	4/14/2006
Selenium	mg/kg dry	6146-1	<8.5	42	32	76	4/12/2006
Thallium	mg/kg dry	6146-1	<4.2	42	34	81	4/12/2006
Zinc	mg/kg dry	6146-1	28	42	69	98	4/12/2006
Mercury	mg/kg dry	6146-1	0.29	0.42	0.72	102	4/12/2006
Barium	mg/kg dry	6146-1	25	42	70	107	4/12/2006
Vanadium	mg/kg dry	6146-1	14	42	56	100	4/12/2006

-Matrix Spike Results-

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Lead	mg/kg dry	6146-38	4.5	56	62	103	4/12/2006

-Matrix Spike Results-

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Lead	mg/kg dry	6146-33	29	55	140	202	4/13/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O.#: 0604-06146
Date: 04/26/06

-VPH Method Blank Results-

Parameter	Units	Results	Date Analyzed
Unadj C5-C8 Aliphatics(FID)	mg/kg dry	<3.0	04/13/2006
Unadj C9-C12 Aliphatics(FID)	mg/kg dry	<1.0	04/13/2006
Methyl-tert-butylether	mg/kg dry	<0.25	04/13/2006
Benzene	mg/kg dry	<0.25	04/13/2006
Toluene	mg/kg dry	<0.25	04/13/2006
Ethylbenzene	mg/kg dry	<0.25	04/13/2006
m,p-Xylene	mg/kg dry	<0.25	04/13/2006
o-Xylene	mg/kg dry	<0.25	04/13/2006
Naphthalene	mg/kg dry	<0.25	04/13/2006
adj C5-C8 Aliphatics(FID)	mg/kg dry	<3.0	04/13/2006
adj C9-C12 Aliphatics(FID)	mg/kg dry	<1.0	04/13/2006
C9-C10 Aromatics(PID)	mg/kg dry	<2.0	04/13/2006
SURROGATE			
2,5-Dibromotoluene(PID)	%	112	04/13/2006
2,5-Dibromotoluene(FID)	%	111	04/13/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O.#: 0604-06146
Date: 04/26/06

-VPH LCS Results-

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Methyl-tert-butylether	mg/kg dry	15.0	14.0	93	04/13/2006
Benzene	mg/kg dry	5.0	4.8	96	04/13/2006
Toluene	mg/kg dry	15.0	14.0	93	04/13/2006
Ethylbenzene	mg/kg dry	5.0	5.1	102	04/13/2006
m,p-Xylene	mg/kg dry	20.0	20.0	100	04/13/2006
o-Xylene	mg/kg dry	10.0	10.0	100	04/13/2006
Naphthalene	mg/kg dry	10.0	9.7	97	04/13/2006
SURROGATE					
2,5-Dibromotoluene(PID)	%			103	04/13/2006
2,5-Dibromotoluene(FID)	%			98	04/13/2006

-VPH LCS Duplicate Results-

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	RPD	Date Analyzed
Methyl-tert-butylether	mg/kg dry	15.0	14.0	93	0	04/13/2006
Benzene	mg/kg dry	5.0	4.9	98	2	04/13/2006
Toluene	mg/kg dry	15.0	15.0	100	7	04/13/2006
Ethylbenzene	mg/kg dry	5.0	5.2	104	2	04/13/2006
m,p-Xylene	mg/kg dry	20.0	20.0	100	0	04/13/2006
o-Xylene	mg/kg dry	10.0	10.0	100	0	04/13/2006
Naphthalene	mg/kg dry	10.0	11.0	110	12	04/13/2006
SURROGATE						
2,5-Dibromotoluene(PID)	%		110			04/13/2006
2,5-Dibromotoluene(FID)	%		103			04/13/2006

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O.#: 0604-06146
Date: 04/26/06

-VPH Replicate Sample Results-

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Unadj C5-C8 Aliphatics(FID)	mg/kg dry	06146-5	<3.0	<3.0	<3.0	<3.0	0	04/13/2006
Unadj C9-C12 Aliphatics(FID)	mg/kg dry	06146-5	<1.0	<1.0	<1.0	<1.0	0	04/13/2006
Methyl-tert-butylether	mg/kg dry	06146-5	<0.25	<0.3	<0.3	<0.3	0	04/13/2006
Benzene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
Toluene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
Ethylbenzene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
m,p-Xylene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
o-Xylene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
Naphthalene	mg/kg dry	06146-5	<0.25	<0.25	<0.25	<0.25	0	04/13/2006
adj C5-C8 Aliphatics(FID)	mg/kg dry	06146-5	<3.0	<3.0	<3.0	<3.0	0	04/13/2006
adj C9-C12 Aliphatics(FID)	mg/kg dry	06146-5	<1.0	<1.0	<1.0	<1.0	0	04/13/2006
C9-C10 Aromatics(PID)	mg/kg dry	06146-5	<2.0	<2.0	<2.0	<2.0	0	04/13/2006
SURROGATE								
2,5-Dibromotoluene(PID)	%		110	106				04/13/2006
2,5-Dibromotoluene(FID)	%		109	101				04/13/2006

-VPH Matrix Spike Results-

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Methyl-tert-butylether	mg/kg dry	06146-5	<0.25	14.0	14.0	100	04/13/2006
Benzene	mg/kg dry	06146-5	<0.25	4.6	4.5	98	04/13/2006
Toluene	mg/kg dry	06146-5	<0.25	14.0	12.0	86	04/13/2006
Ethylbenzene	mg/kg dry	06146-5	<0.25	4.6	3.9	85	04/13/2006
m,p-Xylene	mg/kg dry	06146-5	<0.25	18.0	18.0	100	04/13/2006
o-Xylene	mg/kg dry	06146-5	<0.25	9.3	9.4	101	04/13/2006
Naphthalene	mg/kg dry	06146-5	<0.25	9.3	8.6	92	04/13/2006
SURROGATE							
2,5-Dibromotoluene(PID)	%	106			100		04/13/2006
2,5-Dibromotoluene(FID)	%	101			94		04/13/2006

EPH METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Date: 4/27/2006 W.O.#: 0604-06146

COMPOUND	CONCENTRATION UNITS: mg/kg dry
C9-C18 Aliphatics (FID)	<10
C19-C36 Aliphatics (FID)	<10
C11-C22 Aromatics (PID)	<10
Naphthalene	<0.4
2-Methylnaphthalene	<0.4
Acenaphthylene	<0.4
Acenaphthene	<0.4
Fluorene	<0.4
Phenanthrene	<0.4
Anthracene	<0.4
Fluoranthene	<0.4
Pyrene	<0.4
Benzo(a)anthracene	<0.4
Chrysene	<0.4
Benzo(b)fluoranthene	<0.4
Benzo(k)fluoranthene	<0.4
Benzo(a)pyrene	<0.4
Indeno(1,2,3-cd)pyrene	<0.4
Dibenzo(a,h)anthracene	<0.4
Benzo(g,h,i)perylene	<0.4
EXTRACTION SURROGATE (40-140%)	
Chloro-octadecane	85
Ortho-terphenyl	83
FRACTIONATION SURROGATE (40-140%)	
2-Fluorobiphenyl	84
2-Bromonaphthalene	86

EPH MATRIX SPIKE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Matrix Spike Sample # 0604-06146-005 W.O. # 0604-06146

COMPOUND	SAMPLE CONC. mg/kg dry	SPIKE ADDED mg/kg dry	AMOUNT DETECTED mg/kg dry	% RECOVERY
C9-C18 Aliphatics (FID)	<10	26	10	38
C19-C36 Aliphatics (FID)	<10	34	30	88
C11-C22 Aromatics (PID)	<10	73	56	77
Naphthalene	<0.4	4.3	1.5	35
2-Methylnaphthalene	<0.4	4.3	1.6	37
Acenaphthylene	<0.4	4.3	1.8	42
Acenaphthene	<0.4	4.3	1.8	42
Fluorene	<0.4	4.3	2.0	47
Phenanthrene	<0.4	4.3	2.1	49
Anthracene	<0.4	4.3	2.1	49
Fluoranthene	<0.4	4.3	2.3	53
Pyrene	<0.4	4.3	2.2	51
Benzo(a)anthracene	<0.4	4.3	2.2	51
Chrysene	<0.4	4.3	2.3	53
Benzo(b)fluoranthene	<0.4	4.3	2.4	56
Benzo(k)fluoranthene	<0.4	4.3	2.4	56
Benzo(a)pyrene	<0.4	4.3	2.2	51
Indeno(1,2,3-cd)pyrene	<0.4	4.3	2.2	51
Dibenzo(a,h)anthracene	<0.4	4.3	2.0	47
Benzo(g,h,i)perylene	<0.4	4.3	1.9	44
EXTRACTION SURROGATE (40-140%)				
Chloro-octadecane			56	
Ortho-terphenyl			52	
FRACTIONATION SURROGATE (40-140%)				
2-Fluorobiphenyl			73	
2-Bromonaphthalene			67	

EPH LCS/LCS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Date: 4/27/2006 W.O. # 0604-06146

COMPOUND	SPIKE CONC. mg/kg dry	LCS CONC. mg/kg dry	LCS % REC.	LCS DUP. CONC. mg/kg dry	LCS DUP. % REC.	RPD
C9-C18 Aliphatics (FID)	20	12	60	14	70	15
C19-C36 Aliphatics (FID)	27	22	81	23	85	4
C11-C22 Aromatics (PID)	57	39	68	40	70	3
Naphthalene	3.3	1.7	52	1.8	55	6
2-Methylnaphthalene	3.3	1.9	58	1.9	58	0
Acenaphthylene	3.3	2.1	64	2.0	61	5
Acenaphthene	3.3	2.1	64	2.0	61	5
Fluorene	3.3	2.4	73	2.3	70	4
Phenanthrene	3.3	2.6	79	2.4	73	8
Anthracene	3.3	2.6	79	2.4	73	8
Fluoranthene	3.3	2.9	88	2.7	82	7
Pyrene	3.3	2.7	82	2.6	79	4
Benzo(a)anthracene	3.3	2.8	85	2.7	82	4
Chrysene	3.3	2.8	85	2.7	82	4
Benzo(b)fluoranthene	3.3	2.8	85	2.7	82	4
Benzo(k)fluoranthene	3.3	2.8	85	2.6	79	7
Benzo(a)pyrene	3.3	2.8	85	2.7	82	4
Indeno(1,2,3-cd)pyrene	3.3	3.1	94	3.2	97	3
Dibenzo(a,h)anthracene	3.3	2.6	79	2.5	76	4
Benzo(g,h,i)perylene	3.3	2.9	88	2.8	85	4
EXTRACTION SURROGATE (40-140%)						
Chloro-octadecane		85		89		
Ortho-terphenyl		79		75		
FRACTIONATION SURROGATE (40-140%)						
2-Fluorobiphenyl		77		75		
2-Bromonaphthalene		79		74		

EPH DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Duplicate Sample # 0604-06146-005

W.O. # 0604-06146

COMPOUND	SAMPLE RESULT mg/kg dry	DUPLICATE SAMPLE RESULT mg/kg dry	MEAN mg/kg dry	REPORTED VALUE mg/kg dry	RPD
C9-C18 Aliphatics (FID)	<10	<10	<10	<10	0
C19-C36 Aliphatics (FID)	<10	<10	<10	<10	0
C11-C22 Aromatics (PID)	<10	<10	<10	<10	0
Naphthalene	<0.4	<0.4	<0.4	<0.4	0
2-Methylnaphthalene	<0.4	<0.4	<0.4	<0.4	0
Acenaphthylene	<0.4	<0.4	<0.4	<0.4	0
Acenaphthene	<0.4	<0.4	<0.4	<0.4	0
Fluorene	<0.4	<0.4	<0.4	<0.4	0
Phenanthrene	<0.4	<0.4	<0.4	<0.4	0
Anthracene	<0.4	<0.4	<0.4	<0.4	0
Fluoranthene	<0.4	<0.4	<0.4	<0.4	0
Pyrene	<0.4	<0.4	<0.4	<0.4	0
Benzo(a)anthracene	<0.4	<0.4	<0.4	<0.4	0
Chrysene	<0.4	<0.4	<0.4	<0.4	0
Benzo(b)fluoranthene	<0.4	<0.4	<0.4	<0.4	0
Benzo(k)fluoranthene	<0.4	<0.4	<0.4	<0.4	0
Benzo(a)pyrene	<0.4	<0.4	<0.4	<0.4	0
Indeno(1,2,3-cd)pyrene	<0.4	<0.4	<0.4	<0.4	0
Dibenzo(a,h)anthracene	<0.4	<0.4	<0.4	<0.4	0
Benzo(g,h,i)perylene	<0.4	<0.4	<0.4	<0.4	0
EXTRACTION SURROGATE (40-140%)					
Chloro-octadecane	47	54			
Ortho-terphenyl	48	43			
FRACTIONATION SURROGATE (40-140%)					
2-Fluorobiphenyl	77	68			
2-Bromonaphthalene	69	67			

METHOD 8270

SEMI-VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL CLIENT: CITY OF NEW BEDFORD

W.O #: 0604-06146 prep batch 4/11/06

COMPOUND	CONCENTRATION UNITS: mg/kg dry
Naphthalene	<0.33
Acenaphthylene	<0.33
Acenaphthene	<0.33
Fluorene	<0.33
Phenanthrene	<0.33
Anthracene	<0.33
Fluoranthene	<0.33
Pyrene	<0.33
Benzo(a)anthracene	<0.33
Chrysene	<0.33
Benzo(b)fluoranthene	<0.33
Benzo(k)fluoranthene	<0.33
Benzo(a)pyrene	<0.33
Indeno(1,2,3-cd)pyrene	<0.33
Dibenzo(a,h)anthracene	<0.33
Benzo(g,h,i)perylene	<0.33
2-Methylnaphthalene	<0.33
Dibenzofuran	<0.33
Nitrobenzene-d5	44
2-Fluorobiphenyl	25
P-Terphenyl-d14	103

METHOD 8270

SEMI-VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O. # 0604-06146 prep batch 4/11/06

COMPOUND	SPIKE ADDED mg/kg dry	AMOUNT DETECTED mg/kg dry	% RECOVERY
Naphthalene	1.7	1.3	76
Acenaphthylene	1.7	1.5	88
Acenaphthene	1.7	1.5	88
Fluorene	1.7	1.6	94
Phenanthrene	1.7	1.5	88
Anthracene	1.7	1.6	94
Fluoranthene	1.7	1.6	94
Pyrene	1.7	1.5	88
Benzo(a)anthracene	1.7	1.5	88
Chrysene	1.7	1.5	88
Benzo(b)fluoranthene	1.7	1.5	88
Benzo(k)fluoranthene	1.7	1.6	94
Benzo(a)pyrene	1.7	1.6	94
Indeno(1,2,3-cd)pyrene	1.7	1.7	100
Dibenzo(a,h)anthracene	1.7	1.8	106
Benzo(g,h,i)perylene	1.7	1.7	100
2-Methylnaphthalene	1.7	1.3	76
Dibenzofuran	1.7	1.5	88
Nitrobenzene-d5			72
2-Fluorobiphenyl			75
P-Terphenyl-d14			99

METHOD 8270

SEMI-VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL CLIENT: CITY OF NEW BEDFORD

W.O #: 0604-06146 prep batch 4/14/06

COMPOUND	CONCENTRATION UNITS: mg/kg dry
Naphthalene	<0.33
Acenaphthylene	<0.33
Acenaphthene	<0.33
Fluorene	<0.33
Phenanthrene	<0.33
Anthracene	<0.33
Fluoranthene	<0.33
Pyrene	<0.33
Benzo(a)anthracene	<0.33
Chrysene	<0.33
Benzo(b)fluoranthene	<0.33
Benzo(k)fluoranthene	<0.33
Benzo(a)pyrene	<0.33
Indeno(1,2,3-cd)pyrene	<0.33
Dibenzo(a,h)anthracene	<0.33
Benzo(g,h,i)perylene	<0.33
2-Methylnaphthalene	<0.33
Dibenzofuran	<0.33
Nitrobenzene-d5	76
2-Fluorobiphenyl	78
P-Terphenyl-d14	91

METHOD 8270

SEMI-VOLATILE ORGANICS LCS/LCS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O. # 0604-06146 prep batch 4/14/06

COMPOUND	SPIKE CONC. mg/kg dry	LCS CONC. mg/kg dry	LCS % REC.	LCS DUP. CONC. mg/kg dry	LCS DUP. % REC.	RPD
Naphthalene	1.7	1.6	94	1.6	94	0
Acenaphthylene	1.7	1.5	88	1.5	88	0
Acenaphthene	1.7	1.4	82	1.5	88	7
Fluorene	1.7	1.5	88	1.5	88	0
Phenanthrene	1.7	1.5	88	1.5	88	0
Anthracene	1.7	1.5	88	1.5	88	0
Fluoranthene	1.7	1.5	88	1.5	88	0
Pyrene	1.7	1.6	94	1.6	94	0
Benzo(a)anthracene	1.7	1.6	94	1.6	94	0
Chrysene	1.7	1.5	88	1.6	94	6
Benzo(b)fluoranthene	1.7	1.6	94	1.6	94	0
Benzo(k)fluoranthene	1.7	1.6	94	1.6	94	0
Benzo(a)pyrene	1.7	1.6	94	1.6	94	0
Indeno(1,2,3-cd)pyrene	1.7	1.6	94	1.6	94	0
Dibenzo(a,h)anthracene	1.7	1.6	94	1.6	94	0
Benzo(g,h,i)perylene	1.7	1.5	88	1.5	88	0
2-Methylnaphthalene	1.7	1.9	112	1.9	112	0
Dibenzofuran	1.7	1.5	88	1.6	94	6
Nitrobenzene-d5			82		83	
2-Fluorobiphenyl			83		83	
P-Terphenyl-d14			102		102	

METHOD 8270

SEMI-VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Matrix Spike Sample # 0604-06146-034 W.O. # 0604-06146 prep batch 4/14/06

COMPOUND	SAMPLE CONC. mg/kg dry	SPIKE CONC. mg/kg dry	MS CONC. mg/kg dry	MS % REC.	MSD CONC. mg/kg dry	MSD % REC.	RPD
Naphthalene	<0.4	2.2	1.0	45	1.1	50	10
Acenaphthylene	<0.4	2.2	1.0	45	1.0	45	0
Acenaphthene	<0.4	2.2	1.1	50	1.2	55	9
Fluorene	<0.4	2.2	1.1	50	1.2	55	9
Phenanthrene	<0.4	2.2	1.2	55	1.2	55	0
Anthracene	<0.4	2.2	1.0	45	1.0	45	0
Fluoranthene	<0.4	2.2	1.1	50	1.0	45	10
Pyrene	<0.4	2.2	1.5	68	1.5	68	0
Benzo(a)anthracene	<0.4	2.2	1.1	50	1.0	45	10
Chrysene	<0.4	2.2	1.1	50	1.1	50	0
Benzo(b)fluoranthene	<0.4	2.2	1.2	55	1.1	50	9
Benzo(k)fluoranthene	<0.4	2.2	1.2	55	1.1	50	9
Benzo(a)pyrene	<0.4	2.2	0.66	30	0.62	28	6
Indeno(1,2,3-cd)pyrene	<0.4	2.2	0.44	20	0.4	18	10
Dibenzo(a,h)anthracene	<0.4	2.2	0.52	24	0.48	22	8
Benzo(g,h,i)perylene	<0.4	2.2	0.3	14	0.3	14	0
2-Methylnaphthalene	<0.4	2.2	1.1	50	1.1	50	0
Dibenzofuran	<0.4	2.2	1.1	50	1.1	50	0
Nitrobenzene-d5				43		48	
2-Fluorobiphenyl				47		51	
P-Terphenyl-d14				77		78	

PCB ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL CLIENT: CITY OF NEW BEDFORD

Date: 04/25/06 W.O #: 0604-06146

COMPOUND		CONCENTRATION UNITS: mg/kg dry
Aroclor-1016		<0.1
Aroclor-1221		<0.1
Aroclor-1232		<0.1
Aroclor-1242		<0.1
Aroclor-1248		<0.1
Aroclor-1254		<0.1
Aroclor-1260		<0.1
Tetrachloro-m-xylene (TCMX)	(30-150%)	99
Decachlorobiphenyl	(30-150%)	83

PCB ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

04/25/06

W.O. # 0604-06146

COMPOUND		SPIKE ADDED mg/kg dry	AMOUNT DETECTED mg/kg dry	% RECOVERY
Aroclor-1254		0.33	0.38	115
Tetrachloro-m-xylene (TCMX)	(30-150%)			92
Decachlorobiphenyl	(30-150%)			131

PCB ORGANICS LCS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

W.O. # 0604-06146

COMPOUND		SPIKE ADDED mg/kg dry	AMOUNT DETECTED mg/kg dry	% RECOVERY
Aroclor-1254		0.33	0.34	103
Tetrachloro-m-xylene (TCMX)	(30-150%)			86
Decachlorobiphenyl	(30-150%)			124

PCB ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Duplicate Sample # 0604-06146-003

W.O. #: 0604-06146

COMPOUND		SAMPLE RESULT mg/kg dry	DUPLICATE SAMPLE RESULT mg/kg dry	MEAN	REPORTED VALUE	RPD
Aroclor-1016		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1221		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1232		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1242		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1248		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1254		<0.1	<0.1	<0.1	<0.1	0
Aroclor-1260		<0.1	<0.1	<0.1	<0.1	0
Tetrachloro-m-xylene (TCMX)	(30-150%)	94	99			
Decachlorobiphenyl	(30-150%)	87	113			

PCB ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Matrx Spike Sample # 0604-06146-003

W.O. #: 0604-06146

COMPOUND	SAMPLE CONC. mg/kg dry	SPIKE CONC. mg/kg dry	MS CONC. mg/kg dry	MS % REC.	MSD CONC. mg/kg dry	MSD % REC.	RPD
Aroclor-1254	<0.1	0.45	0.36	80	0.51	113	34
Tetrachloro-m-xylene (TCMX) (30-150%)				99			
Decachlorobiphenyl (30-150%)				113			

R.I. Analytical

Specialists in Environmental Services

Customer Name : City of New Bedford

W.O. Number 0604-06146

MADEP MCP Response Action Analytical Report Certification Form	
Laboratory Name: R.I. Analytical Laboratories	Work Order No: 0604-06146
Project / Location: 246 RIVER ROAD (THIRTY-NINE SOIL SAMPLES)	MADEP RTN 1:
This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)] 0604-06146-001 thru -039	

Sample Matrices: ☐ Groundwater ☒ Soil / Sediment ☐ Drinking Water ☐ Other :

M C P SW-846	8260B ( )	8151A ( )	8330 ( )	6010B(X)	7470A/1A( )
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	8270C (X)	8081A ( )	VPH (X)	6020 ( )	9014M 2 ( )
	8082 (X)	8021B ( )	EPH (X)	7000 S 3 ( )	OTHER ( )

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series List individual method and analyte.

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of Custody documentation for the data set?	☒ Yes	☐ No 1
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	☐ No 1
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 Aquisition and Reporting of Analytical Data"?	☒ Yes	☐ No 1
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	☒ Yes	☐ No 1

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	☐ Yes	☒ No 1
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☒ Yes	☐ No 1

1 All NO answers must be addressed in an attached Environmental Laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature _____ Date: 05/02/06

Mike Hoban / QA/QC Manager

41 Illinois Avenue, Warwick, RI 02888
Tel: (401) 737-8500 Fax: (401) 738-1970

ACCREDITED IN ACCORDANCE WITH ilac

131 Coolidge Street, Bldg 2, Hudson, MA 01749
Tel: (978) 568-0041 Fax: (978) 568-0078

R.I. Analytical

Specialists in Environmental Services

Case Narrative

Date: 5/02/06

City of New Bedford
Attn: Mr. Scott Alfonse
Dept. of Env. Stewardship
133 William Street
New Bedford, MA 02746

Project: 246 RIVER ROAD

RIAL WO# 0604-06146

The following exceptions were noted for this Work Order:

Most of the Semi-Volatile Organic Compounds Method 8270C PAH matrix spike recoveries were within the recommended acceptance limits of 40-140% except for; Benzo(a)pyrene (30%, 28%) and Indeno(1,2,3-cd)pyrene (20%, 18%), Dibenzo(a,h)anthracene (24%,22%) and Benzo(g,h,i)perylene (14%,14%).

All Method 8270C PAH samples were extracted on April 11, 2006. This batch did not include a LCS Duplicate. All the samples were re-extracted on April 14, 2006.

Due to poor surrogate recovery for some of the samples associated with the 4/14 extraction, their results, presented in this Data Package, are from the 4/11 Prep Batch. These are samples: 06146-004, 060146-012, 06146-023 and 06146-038.

MCP Method states criteria of 50-200% as compared the daily CC.

For Sample 06146-023 the last IS was 28%, the extract was injected twice with similar results. The dilution run on this extract was within criteria.

For Sample 06146-024 the last IS was 27%, the extract was injected twice with similar results.

For Sample 06146-029 the last two IS were 35% and 13%, the extract was injected twice with similar results.

For Sample 06146-034 MS/MSD the last IS was 40%,32% and 31%. The extract was injected twice with similar results.

For Sample 06146-035 the last two IS were 40% and 16%, the extract was injected twice with similar results.

Project: 246 RIVER ROAD

RIAL WO# 0604-06146

For Sample 06146-036 the last IS was 34%, the extract was injected twice with similar results.

For Sample 06146-037 the last two IS were 45% and 17%, the extract was injected twice with similar results.

For Sample 06146-038 Duplicate the last IS was 41%.

Appears to be matrix related since all internals were within acceptable ranges on all associated QC samples.

Most of the EPH matrix spike recoveries were within the recommended acceptance limits of 40-140% except for; C9-C18 Aliphatics (FID) (38%).

Sample TRC-6-5.5-6.5 (-023) Method 8270C PAH detection limits for Phenanthrene (1.6 mg/kg dry), Fluoranthene (1.6 mg/kg dry), Pyrene (1.6 mg/kg dry) and Benzo(b)fluoranthene (1.6 mg/kg dry) were increased as a result of sample dilution (x4).Sample dilution was required to achieve target compound response within the calibration range of the analysis.

Sample TRC-1-0-3 (-001) was used to generate the Metals Replicate sample data and most of the Relative Percent Differences (RPDs) were within the acceptance limit of ≤35 except for; Beryllium (46%).

Sample TRC-1-0-3 (-001) was used to generate the recovery results for the Metals matrix spike and most of the recoveries were within the suggested acceptance limit of 75-125% except for Antimony (25%).

Sample TRC-9-3-6 (-033) was used to generate the Lead Replicate RPD and Matrix Spike % recovered, both were outside the acceptance limits due to sample homogeneity.

Michael J. Hobin

PHOENIX
Environmental Laboratories, Inc.

Wednesday, January 31, 2007

Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Client ID: NEW BEDFORD-RIVER RD
Sample ID#s: AH87001, AH87003 - AH87006

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003
PA Lab Registration #68-03530

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 02, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	9:10
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87001

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW5-0204

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Lead	768	0.5	mg/Kg	01/30/07		EKT	SW6010
Zinc	241	0.5	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	81		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW5-0204 Phoenix I.D.: AH87001

Parameter	Result	RL	Units	Date	Time	By	Reference
QA/QC Surrogates							
% 2-Fluorobiphenyl	59		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	58		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	73		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report

February 02, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	9:30
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH87001
Phoenix I.D.: AH87003

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW5-0608 MS/MSD

Parameter	Result	RL	Units	Date	Time	By	Reference
Lead	15.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	72		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	40		%	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW5-0608 MS/MSD

Phoenix I.D.: AH87003

Parameter	Result	RL	Units	Date	Time	By	Reference
% Nitrobenzene-d5	35		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	42		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 02, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:10
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH87001
Phoenix I.D.: AH87004

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW6-0003

Parameter	Result	RL	Units	Date	Time	By	Reference
Lead	31.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	89		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	79		%	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW6-0003 Phoenix I.D.: AH87004

Parameter	Result	RL	Units	Date	Time	By	Reference
% Nitrobenzene-d5	66		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	76		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 02, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:40
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87005

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW6-1012

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Chromium	30.3	0.5	mg/Kg	01/29/07		EKT	SW6010
Nickel	15.6	0.5	mg/Kg	01/29/07		EKT	SW6010
Lead	< 0.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Zinc	28.1	0.5	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	87		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	380	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW6-1012 Phoenix I.D.: AH87005

Parameter	Result	RL	Units	Date	Time	By	Reference
Phenanthrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	74		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	67		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	75		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

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ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 02, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:45
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87006

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD DUP 1

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Chromium	28.4	0.5	mg/Kg	01/29/07		EKT	SW6010
Nickel	15.2	0.5	mg/Kg	01/29/07		EKT	SW6010
Lead	< 0.5	0.5	mg/Kg	01/29/07		EKT	SW6010
Zinc	28.4	0.5	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	88		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	370	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD DUP 1 Phoenix I.D.: AH87006

Parameter	Result	RL	Units	Date	Time	By	Reference
Phenanthrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	117		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	117		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	140		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

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QA/QC Report

February 02, 2007

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 71126, Sample No: AH87001 (AH87001)								
ICP Metals - Soil								
Aluminum	BDL	8.30	111	103	7.5	NC	NC	NC
Antimony	BDL	NC	96.3	92.4	4.1	68.6	109	45.5
Arsenic	BDL	NC	94.8	91.0	4.1	77.0	74.2	3.7
Barium	BDL	13.6	104	99.2	4.7	79.1	82.6	4.3
Beryllium	BDL	NC	103	98.6	4.4	81.4	78.5	3.6
Boron	BDL	---	---	---	NC	---	---	NC
Cadmium	BDL	NC	90.9	86.8	4.6	71.8	71.2	0.8
Calcium	BDL	---	---	---	NC	---	---	NC
Chromium	BDL	3.20	103	98.1	4.9	91.3	78.6	14.9
Cobalt	BDL	2.00	102	96.9	5.1	80.0	77.3	3.4
Copper	BDL	31.4	108	102	5.7	71.6	42.5	51.0
Iron	BDL	6.20	---	---	NC	NC	NC	NC
Lead	BDL	116	99.4	95.6	3.9	NC	NC	NC
Magnesium	BDL	---	---	---	NC	---	---	NC
Manganese	BDL	BDL	112	106	5.5	124	>130	NC
Molybdenum	BDL	---	---	---	NC	---	---	NC
Nickel	BDL	8.90	103	98.2	4.8	83.0	76.1	8.7
Phosphorus	BDL	---	---	---	NC	---	---	NC
Potassium	BDL	---	---	---	NC	---	---	NC
Selenium	BDL	NC	90.1	86.7	3.8	73.3	71.0	3.2
Silver	BDL	NC	99.0	96.5	2.6	79.5	80.4	1.1
Sodium	BDL	---	---	---	NC	---	---	NC
Thallium	BDL	NC	97.9	94.6	3.4	76.3	74.3	2.7
Tin	BDL	---	---	---	NC	---	---	NC
Vanadium	BDL	5.50	105	99.9	5.0	84.2	79.6	5.6
Zinc	BDL	17.9	96.0	92.2	4.0	72.1	>130	NC

Comment: Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

QA/QC Batch 71047, Sample No: AH87003 (AH87001, AH87003, AH87004, AH87005, AH87006)								
ICP Metals - Soil								
Aluminum	1.3	1.30	105	111	5.6	NC	NC	NC
Antimony	BDL	NC	95.0	95.8	0.8	70.5	69.7	1.1

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Arsenic	BDL	NC	93.2	94.0	0.9	91.8	89.0	3.1
Barium	BDL	13.2	103	105	1.9	124	102	19.5
Beryllium	BDL	NC	102	103	1.0	98.9	96.8	2.1
Boron	BDL	---	---	---	NC	---	---	NC
Cadmium	BDL	NC	88.2	89.0	0.9	85.2	82.6	3.1
Calcium	BDL	---	---	---	NC	---	---	NC
Chromium	BDL	1.90	103	103	0.0	117	92.0	23.9
Cobalt	BDL	9.50	100	102	2.0	96.8	93.6	3.4
Copper	BDL	NC	106	107	0.9	>130	98.7	NC
Iron	1.3	11.3	---	---	NC	NC	NC	NC
Lead	BDL	NC	98.3	99.4	1.1	119	104	13.5
Magnesium	BDL	---	---	---	NC	---	---	NC
Manganese	BDL	6.90	112	111	0.9	>130	87.5	NC
Molybdenum	BDL	---	---	---	NC	---	---	NC
Nickel	BDL	5.40	101	103	2.0	99.0	93.0	6.3
Phosphorus	0.7	---	---	---	NC	---	---	NC
Potassium	BDL	---	---	---	NC	---	---	NC
Selenium	BDL	NC	88.8	89.2	0.4	87.6	85.3	2.7
Silver	BDL	NC	97.2	97.3	0.1	94.3	91.2	3.3
Sodium	BDL	---	---	---	NC	---	---	NC
Thallium	BDL	NC	96.5	97.8	1.3	91.7	90.9	0.9
Tin	BDL	---	---	---	NC	---	---	NC
Vanadium	BDL	14.2	104	104	0.0	103	94.8	8.3
Zinc	BDL	27.6	95.7	96.5	0.8	>130	96.9	NC

QA/QC Batch 71127, Sample No: AH87005 (AH87005)

ICP Metals - Soil

Aluminum	BDL	1.00	111	113	1.8	NC	NC	NC
Antimony	BDL	NC	94.6	95.0	0.4	70.4	68.4	2.9
Arsenic	BDL	NC	93.2	93.9	0.7	84.3	84.9	0.7
Barium	BDL	3.80	102	101	1.0	78.8	79.2	0.5
Beryllium	BDL	NC	101	102	1.0	88.4	88.6	0.2
Boron	BDL	---	---	---	NC	---	---	NC
Cadmium	BDL	NC	87.2	87.6	0.5	78.1	77.6	0.6
Calcium	BDL	---	---	---	NC	---	---	NC
Chromium	BDL	2.10	100	101	1.0	70.5	69.7	1.1
Cobalt	BDL	BDL	99.3	99.9	0.6	84.4	83.6	1.0
Copper	BDL	9.90	105	105	0.0	102	102	0.0
Iron	0.6	1.90	---	---	NC	NC	NC	NC
Lead	BDL	NC	97.7	98.0	0.3	83.2	82.6	0.7
Magnesium	BDL	---	---	---	NC	---	---	NC
Manganese	BDL	BDL	111	109	1.8	84.9	53.3	45.7

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Molybdenum	BDL	---	---	---	NC	---	---	NC
Nickel	BDL	BDL	101	102	1.0	83.4	82.7	0.8
Phosphorus	BDL	---	---	---	NC	---	---	NC
Potassium	BDL	---	---	---	NC	---	---	NC
Selenium	BDL	NC	88.5	89.0	0.6	80.9	81.4	0.6
Silver	BDL	NC	98.0	98.5	0.5	87.2	87.0	0.2
Sodium	BDL	---	---	---	NC	---	---	NC
Thallium	BDL	NC	96.9	97.9	1.0	84.3	84.4	0.1
Tin	BDL	---	---	---	NC	---	---	NC
Vanadium	BDL	4.50	102	103	1.0	83.6	84.8	1.4
Zinc	BDL	BDL	94.3	95.2	0.9	78.0	78.5	0.6

Comment: Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 02, 2007

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

QA/QC Report

February 02, 2007

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 71054, Sample No: AH87003 (AH87001, AH87003, AH87004, AH87005, AH87006)							
Semivolatiles							
2-Methylnaphthalene	ND	72	76	5.4			
Acenaphthene	ND	67	69	2.9	50	48	4.1
Acenaphthylene	ND	64	67	4.6			
Anthracene	ND	78	82	5.0			
Benz(a)anthracene	ND	85	90	5.7			
Benzo(a)pyrene	ND	83	88	5.8			
Benzo(b)fluoranthene	ND	95	102	7.1			
Benzo(ghi)perylene	ND	57	67	16.1			
Benzo(k)fluoranthene	ND	94	95	1.1			
Chrysene	ND	83	87	4.7			
Dibenz(a,h)anthracene	ND	66	75	12.8			
Fluoranthene	ND	78	83	6.2			
Fluorene	ND	74	78	5.3			
Indeno(1,2,3-cd)pyrene	ND	63	72	13.3			
Naphthalene	ND	72	75	4.1			
Phenanthrene	ND	75	79	5.2			
Pyrene	ND	78	82	5.0	62	59	5.0
% 2-Fluorobiphenyl	71	71	73	2.8	78	69	12.2
% Nitrobenzene-d5	69	76	79	3.9	77	73	5.3
% Terphenyl-d14	79	83	86	3.6	80	77	3.8

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
February 02, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. **Project #:**

Project Location: NEW BEDFORD-RIVER RD **MADEP RTN1:**

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

AH87001, AH87003, AH87004, AH87005, AH87006

Sample Matrices: ☐ Groundwater ☑ Soil/Sediment ☐ Drinking Water ☐ Other:

MCP SW-846 Methods Used	☐ 8260B	☐ 8151A	☐ 8330	☑ 6010B	☐ 7470A/1A
	☑ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	☐ 8082	☐ 8021B	☐ EPH	☐ 7000S3	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Metho
3 S - SW-846 Methods 7000 Series List individual method and analyte

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑ Yes ☐ No
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?	Refer to attached MCP Certification (s).
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Refer to attached MCP Certification (s).
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	Refer to attached MCP Certification (s).

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	Refer to attached MCP Certification (s).
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Yes ☑ No

All negative responses must be addressed in an attached Environmental Laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized Signature: Date: Thursday, February 01, 2007

Printed Name: Phyllis Shiller Position: Laboratory Director

CAM VII A, rev. 3.2 April 2004

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

MCP Certification Report

February 01, 2007

SDG I.D.: GAH87001

ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Icp8 01/29/07-1 (AH87001, AH87003, AH87004, AH87005, AH87006)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Tina Hall
Position: Chemist
Date: 1/29/07

Instrument: Icp8 01/30/07-1 (AH87001, AH87005)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Tina Hall
Position: Chemist
Date: 1/30/07

QC Comments: QC Batch 71126 01/26/07 (AH87001)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

QC Comments: QC Batch 71127 01/26/07 (AH87005)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

We attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

PAH Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Chem04 01/26/07-2 (AH87001, AH87003, AH87004, AH87005, AH87006)

The client requested PAH/base neutral compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds, CCCs, SPCCs and surrogates.
The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

PHOENIX

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

MCP Certification Report

February 01, 2007

SDG I.D.: GAH87001

Initial Calibration (5890/81000122):
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: No target compounds

Continuing Calibration:
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: No target compounds

Printed Name	Keith Aloisa
Position:	Chemist
Date:	1/26/07

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: service@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp Pg of

Data Delivery (check one):
☐ Fax #:
☐ Email:
Format: ☐ Excel ☐ Pdf ☐ Gis Key

Customer: TRC
Address: 650 Suffolk St
Lowell, MA 01854

Project: [illegible]
Report to: Tom [illegible]
Invoice to:

Project P.O: [illegible]
Phone #: [illegible]
Fax #: [illegible]

Client Sample - Information - Identification

Sampler's Signature [illegible] Date [illegible]

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=Oil
GW=groundwater SL=sludge A=air X=Other

Analysis Request

Item #	Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PB	Cadmium	Zn	Ni	PAHs	Chromium	Soil VOA Vial [ ] methanol [ ] Sod Bisulfate	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	[illegible]	MW3-0608	S	[illegible]	910	X	X	X		X											
	[illegible]	MW3-0608	S	[illegible]	[illegible]	X				X											
	[illegible]	MW3-0608 MS/MSD	S	[illegible]	910	X				X											
	[illegible]	MW6-0000	S	[illegible]	[illegible]	X				X											
	[illegible]	MW6-1012	S	[illegible]	[illegible]	X	X	X	X	X	X										
	[illegible]	DUP1	S	[illegible]	[illegible]	X	X	X	X	X	X										

Relinquished by:	Accepted by:	Date:	Time:
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Comments, Special Requirements or Regulations:
[illegible]
-See attached email

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other

* Surcharge Applies

Requirements for CT/RI
☐ Res. Criteria
☐ GW Protection
☐ GA Mobility
☐ GB Mobility
☐ SW Protection
☐ Res. Vol.
☐ Ind. Vol.
☐ RCP Certification

Requirements for MA
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MCP Certification
☐ Other

Bobbi - Phoenixlabs

From: Buchanan, Scott [SBuchanan@TRCSOLUTIONS.com]
Sent: Friday, January 26, 2007 10:46 AM
To: bobbi@phoenixlabs.com
Cc: Biolsi, Thomas; Denly, Elizabeth
Subject: New Bedford Brownfields: 246 River Road: Chain of Custody Edits

Bobbi,
I was just talking to Liz Denly about the analyses requested for the New Bedford Brownfields: 246 River Road project. We would like to edit the chain for a few samples.

Analyze MW6-1012 for Pb, Cr, Zn, Ni, Cd, and PAHs
Analyze DUP1 for Pb, Cr, Zn, Ni, Cd, and PAHs
Analyze MW5-0608 MS/MSD only for PAHs
Run a MS/DUP on MW5-0204 for Pb, Cd, and Zn
Run a MS/DUP on MW6-1012 for Ni, and Cr

If this is not clear or there is a problem with the amount of sample please feel free to contact me at 978-656-3518.

Thank you,
-Scott

PHOENIX
Environmental Laboratories, Inc.

Friday, February 16, 2007

Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Client ID: NEW BEDFORD-RIVER RD
Sample ID#s: AH87001, AH87003 - AH87006

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003
PA Lab Registration #68-03530

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

Phyllis Shiller

From: Phyllis Shiller [phyllis@phoenixlabs.com]
Sent: Friday, February 16, 2007 2:39 PM
To: 'Denly, Elizabeth (Lowell,MA-US)'
Subject: RE: 246 River Road Soil Data: AH87001 through AH87006

Hi Liz,
I have revised the report based on your comments.
Phyllis

-----Original Message-----
From: Denly, Elizabeth (Lowell,MA-US) [mailto:edenly@TRCSOLUTIONS.com]
Sent: Monday, February 05, 2007 12:07 PM
To: Bobbi - Phoenixlabs
Cc: Phyllis Shiller; scott.alfonse@ci.new-bedford.ma.us; Biolsi, Thomas (Lowell,MA-US)
Subject: 246 River Road Soil Data: AH87001 through AH87006

Hi Bobbi,

Please have the lab provide responses to the following issues regarding the above-referenced data.

1. The recovery of the surrogate terphenyl-d4 exceeded the acceptance limits in sample DUP-1. Please add this to the narrative.
Done

2. Why are the reporting limits of MW6-0003 740 ug/kg with 89% solids? Was a dilution done on this sample? If yes, please explain why and note in the narrative.
The sample extract was diluted prior to analysis due to the presence of non-target material. We have revised the report.

3. Why are the reporting limits of all metals 0.5 mg/kg? These must be corrected for the sample weight digested and the percent solids. Are these reporting limits verified by the analysis of a standard run at the reporting limit?
Done, we run a calibration curve that includes a standard slightly below the soil reporting level. Note that sample AH87001 was digested twice. Cadmium and Zinc are reported from the first digestion, lead is reported from the second digestion.

4. Please provide the reporting limits of the metals in all 3 method blanks.
All set

5. Please provide the reporting limits of the PAHs in the method blank.
All set

6. Please discuss the recovery nonconformances in the narrative for the MS/MSD analyses performed on sample MW5-0204 (Cd and Zn), MW6-1012 (Cr).

7. Why were only recoveries of acenaphthene and pyrene reported for the PAH MS? As per the CAM 8270C document, all target compounds are required to be spiked in the MS/MSD. If all target compounds were not spiked, please answer No to Question B on the Presumptive Certainty form.
Reprocessed samples, revised report to include all PAHs

8. The Presumptive Certainty form must provide Yes or No answers to Questions B, C, and D and must not just refer to the narrative.
Revised

9. For the laboratory duplicate analyses for metals, I have the following questions:

a. MW5-0204: The RPD of lead was 116. Please provide the duplicate result.
This is a mistake the duplicate was over-range. I have corrected with the diluted value and revised report. The sample result was 768, the duplicate result was 894. The new RPD is 15.2%.

b. MW5-0204: Why was the RPD of cadmium NC?
NC - no criteria. Both the sample and the duplicate were below the reporting level (BDL)

c. MW5-0608: Why was the RPD of Pb NC? Please provide the duplicate result since lead was detected in the original sample.
This is an error. The sample result is 15.5, the duplicate result is 28.2, the RPD is 58.1. The report and narrative have been revised.

d. MW6-1012: Why are the RPDs of Pb and Cd NC?

NC - no criteria. Both the sample and the duplicate were below the reporting level (BDL)

e. MW6-1012: Why are the RPDs of Ni and Zn BDL? This does not make sense. Please provide the duplicate results of these metals and the RPDs.
Our software does not handle RPDs less than 1% well. I have revised the report.
Because the batch QC was digested after the original prep, there are two digestions for this sample. I have revised the report to show the Ni, Cr, and Zn from the batch QC run from which the RPDs are calculated.
The Ni sample result was 16.3 and the duplicate result was 16.2 (RPD - 0.6%)
The Zn sample result was 29.7 and the duplicate result was 29.9 (RPD - 0.2%)
The Cr sample result was 29.3 and the duplicate result was 29.9 (RPD - 2.1%)

Elizabeth Denly
Senior QA Chemist

TRC

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854

978.656.3577 phone
978.453.1995 fax
978.328.2551 cell
edenly@trcsolutions.com

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report

February 16, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	9:10
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87001

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW5-0204

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.41	0.41	mg/Kg	01/29/07		EKT	SW6010
Lead	768	0.36	mg/Kg	01/30/07		EKT	SW6010
Zinc	241	0.41	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	81		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	410	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW5-0204 Phoenix I.D.: AH87001

Parameter	Result	RL	Units	Date	Time	By	Reference
QA/QC Surrogates							
% 2-Fluorobiphenyl	59		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	58		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	73		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report

February 16, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	9:30
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH87001
Phoenix I.D.: AH87003

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW5-0608 MS/MSD

Parameter	Result	RL	Units	Date	Time	By	Reference
Lead	15.5	0.50	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	72		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	460	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	40		%	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW5-0608 MS/MSD

Phoenix I.D.: AH87003

Parameter	Result	RL	Units	Date	Time	By	Reference
% Nitrobenzene-d5	35		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	42		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 16, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:10
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH87001
Phoenix I.D.: AH87004

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW6-0003

Parameter	Result	RL	Units	Date	Time	By	Reference
Lead	31.5	0.38	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	89		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Phenanthrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	740	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	79		%	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW6-0003 Phoenix I.D.: AH87004

Parameter	Result	RL	Units	Date	Time	By	Reference
% Nitrobenzene-d5	66		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	76		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report

February 16, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:40
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87005

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD MW6-1012

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.36	0.36	mg/Kg	01/29/07		EKT	SW6010
Chromium	29.3	0.39	mg/Kg	01/31/07		EKT	SW6010
Nickel	16.3	0.39	mg/Kg	01/31/07		EKT	SW6010
Lead	< 0.36	0.36	mg/Kg	01/29/07		EKT	SW6010
Zinc	29.7	0.39	mg/Kg	01/31/07		EKT	SW6010
Percent Solid	87		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	380	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD MW6-1012 Phoenix I.D.: AH87005

Parameter	Result	RL	Units	Date	Time	By	Reference
Phenanthrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	380	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	74		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	67		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	75		%	01/26/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
February 16, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
116 John Street
Lowell MA 01852

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/24/07	12:45
Location Code:	TRC-MA	Received by:	SW	01/25/07	16:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH87001
Phoenix I.D.: AH87006

Laboratory Data

Client ID: NEW BEDFORD-RIVER RD DUP 1

Parameter	Result	RL	Units	Date	Time	By	Reference
Cadmium	< 0.40	0.40	mg/Kg	01/29/07		EKT	SW6010
Chromium	28.4	0.40	mg/Kg	01/29/07		EKT	SW6010
Nickel	15.2	0.40	mg/Kg	01/29/07		EKT	SW6010
Lead	< 0.40	0.40	mg/Kg	01/29/07		EKT	SW6010
Zinc	28.4	0.40	mg/Kg	01/29/07		EKT	SW6010
Percent Solid	88		%	01/25/07		C/S/K	E160.3
Soil Ext. Semi-Vol BN	Completed			01/25/07		SJC/E	SW3545
Total Metals Digest	Completed			01/25/07		AG	SW846 - 3050
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Acenaphthylene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benz(a)anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(a)pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(ghi)perylene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Chrysene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Fluoranthene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Fluorene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Naphthalene	ND	370	ug/Kg	01/26/07		KCA	SW 8270

Client ID: NEW BEDFORD-RIVER RD DUP 1 Phoenix I.D.: AH87006

Parameter	Result	RL	Units	Date	Time	By	Reference
Phenanthrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
Pyrene	ND	370	ug/Kg	01/26/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	117		%	01/26/07		KCA	SW 8270
% Nitrobenzene-d5	117		%	01/26/07		KCA	SW 8270
% Terphenyl-d14	140		%	01/26/07		KCA	SW 8270

Comments:

* The terphenyl-d14 surrogate exceeded acceptance criteria. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

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QA/QC Report

February 16, 2007

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 71126, Sample No: AH87001 (AH87001)								
ICP Metals - Soil								
Aluminum	< 1.0	8.30	111	103	7.5	NC	NC	NC
Antimony	< 5.0	NC	96.3	92.4	4.1	68.6	109	45.5
Arsenic	< 1.0	NC	94.8	91.0	4.1	77.0	74.2	3.7
Barium	< 0.5	13.6	104	99.2	4.7	79.1	82.6	4.3
Beryllium	< 0.4	NC	103	98.6	4.4	81.4	78.5	3.6
Boron	< 2.0	---	---	---	NC	---	---	NC
Cadmium	< 0.5	NC	90.9	86.8	4.6	71.8	71.2	0.8
Calcium	< 1.0	---	---	---	NC	---	---	NC
Chromium	< 0.5	3.20	103	98.1	4.9	91.3	78.6	14.9
Cobalt	< 0.5	2.00	102	96.9	5.1	80.0	77.3	3.4
Copper	< 0.5	31.4	108	102	5.7	71.6	42.5	51.0
Iron	< 0.5	6.20	---	---	NC	NC	NC	NC
Lead	< 0.5	15.2	99.4	95.6	3.9	NC	NC	NC
Magnesium	< 0.5	---	---	---	NC	---	---	NC
Manganese	< 0.5	BDL	112	106	5.5	124	>130	NC
Molybdenum	< 0.5	---	---	---	NC	---	---	NC
Nickel	< 0.5	8.90	103	98.2	4.8	83.0	76.1	8.7
Phosphorus	< 0.5	---	---	---	NC	---	---	NC
Potassium	< 1.0	---	---	---	NC	---	---	NC
Selenium	< 2.5	NC	90.1	86.7	3.8	73.3	71.0	3.2
Silver	< 0.5	NC	99.0	96.5	2.6	79.5	80.4	1.1
Sodium	< 5.0	---	---	---	NC	---	---	NC
Thallium	< 0.5	NC	97.9	94.6	3.4	76.3	74.3	2.7
Tin	< 2.5	---	---	---	NC	---	---	NC
Vanadium	< 0.5	5.50	105	99.9	5.0	84.2	79.6	5.6
Zinc	< 0.5	17.9	96.0	92.2	4.0	72.1	>130	NC

Comment: Some compounds had spike recoveries outside of 75-125%. A matrix bias is not suspected because the LCS and LCSD were within control. No further action was required.

QA/QC Batch 71047, Sample No: AH87003 (AH87001, AH87003, AH87004, AH87005, AH87006)								
ICP Metals - Soil								
Aluminum	1.3	1.30	105	111	5.6	NC	NC	NC
Antimony	< 5.0	NC	95.0	95.8	0.8	70.5	69.7	1.1

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Arsenic	< 1.0	NC	93.2	94.0	0.9	91.8	89.0	3.1
Barium	< 0.5	13.2	103	105	1.9	124	102	19.5
Beryllium	< 0.4	NC	102	103	1.0	98.9	96.8	2.1
Boron	< 2.0	---	---	---	NC	---	---	NC
Cadmium	< 0.5	NC	88.2	89.0	0.9	85.2	82.6	3.1
Calcium	< 1.0	---	---	---	NC	---	---	NC
Chromium	< 0.5	1.90	103	103	0.0	117	92.0	23.9
Cobalt	< 0.5	9.50	100	102	2.0	96.8	93.6	3.4
Copper	< 0.5	NC	106	107	0.9	>130	98.7	NC
Iron	1.3	11.3	---	---	NC	NC	NC	NC
Lead	< 0.5	58.1	98.3	99.4	1.1	119	104	13.5
Magnesium	< 0.5	---	---	---	NC	---	---	NC
Manganese	< 0.5	6.90	112	111	0.9	>130	87.5	NC
Molybdenum	< 0.5	---	---	---	NC	---	---	NC
Nickel	< 0.5	5.40	101	103	2.0	99.0	93.0	6.3
Phosphorus	0.7	---	---	---	NC	---	---	NC
Potassium	< 1.0	---	---	---	NC	---	---	NC
Selenium	< 2.5	NC	88.8	89.2	0.4	87.6	85.3	2.7
Silver	< 0.5	NC	97.2	97.3	0.1	94.3	91.2	3.3
Sodium	< 5.0	---	---	---	NC	---	---	NC
Thallium	< 0.5	NC	96.5	97.8	1.3	91.7	90.9	0.9
Tin	< 2.5	---	---	---	NC	---	---	NC
Vanadium	< 0.5	14.2	104	104	0.0	103	94.8	8.3
Zinc	< 0.5	27.6	95.7	96.5	0.8	>130	96.9	NC

QA/QC Batch 71127, Sample No: AH87005 (AH87005)

ICP Metals - Soil

Aluminum	< 1.0	1.00	111	113	1.8	NC	NC	NC
Antimony	< 5.0	NC	94.6	95.0	0.4	70.4	68.4	2.9
Arsenic	< 1.0	NC	93.2	93.9	0.7	84.3	84.9	0.7
Barium	< 0.5	3.80	102	101	1.0	78.8	79.2	0.5
Beryllium	< 0.4	NC	101	102	1.0	88.4	88.6	0.2
Boron	< 2.0	---	---	---	NC	---	---	NC
Cadmium	< 0.5	NC	87.2	87.6	0.5	78.1	77.6	0.6
Calcium	< 1.0	---	---	---	NC	---	---	NC
Chromium	< 0.5	2.10	100	101	1.0	70.5	69.7	1.1
Cobalt	< 0.5	0.5	99.3	99.9	0.6	84.4	83.6	1.0
Copper	< 0.5	9.90	105	105	0.0	102	102	0.0
Iron	0.6	1.90	---	---	NC	NC	NC	NC
Lead	< 0.5	NC	97.7	98.0	0.3	83.2	82.6	0.7
Magnesium	< 0.5	---	---	---	NC	---	---	NC
Manganese	< 0.5	0.5	111	109	1.8	84.9	53.3	45.7

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Molybdenum	< 0.5	---	---	---	NC	---	---	NC
Nickel	< 0.5	0.6	101	102	1.0	83.4	82.7	0.8
Phosphorus	< 0.5	---	---	---	NC	---	---	NC
Potassium	< 1.0	---	---	---	NC	---	---	NC
Selenium	< 2.5	NC	88.5	89.0	0.6	80.9	81.4	0.6
Silver	< 0.5	NC	98.0	98.5	0.5	87.2	87.0	0.2
Sodium	< 5.0	---	---	---	NC	---	---	NC
Thallium	< 0.5	NC	96.9	97.9	1.0	84.3	84.4	0.1
Tin	< 2.5	---	---	---	NC	---	---	NC
Vanadium	< 0.5	4.50	102	103	1.0	83.6	84.8	1.4
Zinc	< 0.5	0.2	94.3	95.2	0.9	78.0	78.5	0.6

Comment: Some compounds had spike recoveries outside of 75-125%. A matrix bias is not suspected because the LCS and LCSD were within control. No further action was required.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

PHOENIX

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QA/QC Report

February 16, 2007

QA/QC Data

SDG I.D.: GAH87001

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 71054, Sample No: AH87003 (AH87001, AH87003, AH87004, AH87005, AH87006)							
Semivolatiles							
2-Methylnaphthalene	< 330	72	76	5.4	81	31	89.3
Acenaphthene	< 330	67	69	2.9	89	33	91.8
Acenaphthylene	< 330	64	67	4.6	74	30	84.6
Anthracene	< 330	78	82	5.0	90	33	92.7
Benz(a)anthracene	< 330	85	90	5.7	92	34	92.1
Benzo(a)pyrene	< 330	83	88	5.8	88	32	93.3
Benzo(b)fluoranthene	< 330	95	102	7.1	88	33	90.9
Benzo(ghi)perylene	< 330	57	67	16.1	94	36	89.2
Benzo(k)fluoranthene	< 330	94	95	1.1	95	30	104.0
Chrysene	< 330	83	87	4.7	93	34	92.9
Dibenz(a,h)anthracene	< 330	66	75	12.8	100	36	94.1
Fluoranthene	< 330	78	83	6.2	85	30	95.7
Fluorene	< 330	74	78	5.3	89	32	94.2
Indeno(1,2,3-cd)pyrene	< 330	63	72	13.3	97	35	93.9
Naphthalene	< 330	72	75	4.1	84	33	87.2
Phenanthrene	< 330	75	79	5.2	92	33	94.4
Pyrene	< 330	78	82	5.0	82	30	92.9
% 2-Fluorobiphenyl	71	71	73	2.8	90	40	76.9
% Nitrobenzene-d5	69	76	79	3.9	81	33	84.2
% Terphenyl-d14	79	83	86	3.6	84	33	87.2

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 16, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. **Project #:**

Project Location: NEW BEDFORD-RIVER RD **MADEP RTN1:**

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

AH87001, AH87003, AH87004, AH87005, AH87006

Sample Matrices: ☐ Groundwater ☑ Soil/Sediment ☐ Drinking Water ☐ Other:

MCP SW-846 Methods Used	☐ 8260B	☐ 8151A	☐ 8330	☑ 6010B	☐ 7470A/1A
	☑ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	☐ 8082	☐ 8021B	☐ EPH	☐ 7000S3	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Metho
3 S - SW-846 Methods 7000 Series List individual method and analyte

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑ Yes ☐ No
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 ☐ No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	☐ Yes ☐ No

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	☐ Yes ☑ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Yes ☑ No

All negative responses must be addressed in an attached Environmental Laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized Signature: Phyllis Shiller Date: Friday, February 16, 2007

Printed Name: Phyllis Shiller Position: Laboratory Director

CAM VII A, rev. 3.2 April 2004

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MCP Certification Report

February 16, 2007

SDG I.D.: GAH87001

ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Icp8 01/29/07-1 (AH87001, AH87001, AH87003, AH87003, AH87004, AH87004, AH87005, AH87005, AH87006, AH87006)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Tina Hall
Position: Chemist
Date: 1/29/2007

Instrument: Icp8 01/30/07-1 (AH87001, AH87001, AH87005, AH87005)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Tina Hall
Position: Chemist
Date: 1/30/2007

QC Comments: QC Batch 71126 01/26/07 (AH87001, AH87001)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is not suspected because the LCS and LCSD were within control. No further action was required.

QC Comments: QC Batch 71127 01/26/07 (AH87005, AH87005)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is not suspected because the LCS and LCSD were within control. No further action was required.

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

We attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

PAH Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Chem04 01/26/07-2 (AH87001, AH87001, AH87003, AH87003, AH87004, AH87004, AH87005, AH87005, AH87006, AH87006)

The client requested PAH/base neutral compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds,

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MCP Certification Report

February 16, 2007

SDG I.D.: GAH87001

CCCs, SPCCs and surrogates.
The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (5890/81000122):
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: No target compounds

Continuing Calibration:
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: No target compounds

Printed Name Keith Aloisa
Position: Chemist
Date: 1/26/2007

Instrument: Chem07 02/13/07-1 (AH87003)

The client requested PAH/base neutral compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds, CCCs, SPCCs and surrogates.
The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/8100212):
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: No target compounds

Continuing Calibration:
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: No target compounds

Printed Name Harry Mullin
Position: Chemist
Date: 2/13/2007

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

SDG Comments

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MCP Certification Report

February 16, 2007

SDG I.D.: GAH87001

Sample AH87006 (Dup-1) PAH analysis:
The terphenyld14 recovery of 140% exceeded the acceptance criteria of 30-130. A sample bias is not suspected because all compounds in this sample were "ND". Also note that the MCP guidelines allow for one acid and one base neutral surrogate compound to be outside of acceptance criteria.

Sample AH87004 (MW6-0003) PAH analysis:
The sample extract was diluted prior to analysis due to the presence of non-target material.

Batch QC PAHs:
The RPDs between the MS and MSD exceeded the acceptance criteria. Note the the RPDs between the LCS and LCSD were within criteria. Also noted is that all the recoveries in the MSD were very low - near the acceptance criteria - a poor extraction is suspected affecting only the MSD.

The client requested batch ICP QC on three samples within this delivery group.

As noted in the QC batch section of the ICP narration, some compounds had spike recoveries outside of the 75-125% acceptance criteria. For this project, cadmium and zinc for batch QC sample AH87001 (MW5-0204) and chromium for batch QC sample AH87005 (MW6-1012).

Note that for this project the RPD for the QC batch sample AH87003 (MW5-0608) was 58.1% for lead, this exceeds the MCP criteria of 30%. Because the LCS/LCSD RPD was within criteria, no further action was required.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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Client Services (860) 645-8726

Temp ( ) Pg 1 of 1

Data Delivery (check one):
☐ Fax #:
☐ Email:
Format: ☐ Excel ☐ Pdf ☐ Gis Key

Customer: TRC
Address: 650 Suffolk St
Lowell, MA 01854

Project: New Bedford - River Road
Report to: Tom Biolsi
Invoice to:

Project P.O: 47284-0070
Phone #: 978-970-5600
Fax #: 978-453-1995

Client Sample - Information - Identification

Sampler's Signature: [signature] Date 1/24/07

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=Oil
GW=groundwater SL=sludge A=air X=Other

Analysis Request

Item #	Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Pb	Cadmium	Zn	Ni	PAHs	Chromium						Bore Soil Jar	Soil VOA Vial [ ] methanol [ ] Sod Bisulfate	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	8/001	MW5-0204	S	1/24/07	940	X	X	X		X							1										
	~~8/002~~	MW5-0608	S		930	X				X							1										
	8/003	MW5-0608 MS/MSD	S		930	X				X							1										
	8/004	MW6-0005	S		1210	X				X							1										
	8/005	MW6-1017	S		1240	X	X	X	X	X	X						1										
	8/006	DUP1	S		1245	X	X	X	X	X	X						1										

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	1/24/7	10:00
[signature]	[signature]	1/25/7	1700

Comments, Special Requirements or Regulations:
- Deleted 8/002 1/26/07 (BO)
- See attached email

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other

* Surcharge Applies

Requirements for CT/RI
☐ Res. Criteria
☐ GW Protection
☐ GA Mobility
☐ GB Mobility
☐ SW Protection
☐ Res. Vol.
☐ Ind. Vol.
☐ RCP Certification

Requirements for MA
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☒ MCP Certification
☐ Other

Bobbi - Phoenixlabs

From: Buchanan, Scott [SBuchanan@TRCSOLUTIONS.com]
Sent: Friday, January 26, 2007 10:46 AM
To: bobbi@phoenixlabs.com
Cc: Biolsi, Thomas; Denly, Elizabeth
Subject: New Bedford Brownfields: 246 River Road: Chain of Custody Edits

Bobbi,
I was just talking to Liz Denly about the analyses requested for the New Bedford Brownfields: 246 River Road project. We would like to edit the chain for a few samples.

Analyze MW6-1012 for Pb, Cr, Zn, Ni, Cd, and PAHs
Analyze DUP1 for Pb, Cr, Zn, Ni, Cd, and PAHs
Analyze MW5-0608 MS/MSD only for PAHs
Run a MS/DUP on MW5-0204 for Pb, Cd, and Zn
Run a MS/DUP on MW6-1012 for Ni, and Cr

If this is not clear or there is a problem with the amount of sample please feel free to contact me at 978-656-3518.

Thank you,
-Scott

PHOENIX
Environmental Laboratories, Inc.

Friday, March 30, 2007

Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Client ID: CITY OF NEW BEDFORD-RIVER RD
Sample ID#s: AH90102 - AH90110

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003
PA Lab Registration #68-03530

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	11:45
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH90102
Phoenix I.D.: AH90102

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW4-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.075	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	0.003	0.001	mg/L	02/08/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.004	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	0.004	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	0.004	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.012	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Total Metals Digestion	Completed			02/07/07		AG	
Volatiles							
Methyl tert-butyl ether (MTBE)	<2.0	2.0	ug/L	02/08/07		R/J	8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	02/08/07		R/J	8260
% Bromofluorobenzene	81		%	02/08/07		R/J	8260
% Dibromofluoromethane	96		%	02/08/07		R/J	8260
% Toluene-d8	97		%	02/08/07		R/J	8260

Client ID: CITY OF NEW BEDFORD-RIVER RD MW4-020607 Phoenix I.D.: AH90102

Parameter	Result	RL	Units	Date	Time	By	Reference
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Chrysene	ND	10	ug/L	02/08/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluorene	ND	10	ug/L	02/08/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	52		%	02/08/07		KCA	SW 8270
% Nitrobenzene-d5	46		%	02/08/07		KCA	SW 8270
% Terphenyl-d14	10*		%	02/08/07		KCA	SW 8270

Comments:

* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	13:50
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH90102
Phoenix I.D.: AH90103

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW5-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.073	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.002	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	< 0.001	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	< 0.002	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.061	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Total Metals Digestion	Completed			02/07/07		AG	
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270

Client ID: CITY OF NEW BEDFORD-RIVER RD MW5-020607 Phoenix I.D.: AH90103

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Chrysene	ND	10	ug/L	02/08/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluorene	ND	10	ug/L	02/08/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	74		%	02/08/07		KCA	SW 8270
% Nitrobenzene-d5	66		%	02/08/07		KCA	SW 8270
% Terphenyl-d14	22*		%	02/08/07		KCA	SW 8270

Comments:

* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	15:10
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH90102
Phoenix I.D.: AH90104

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW6-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.053	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.002	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	< 0.001	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	< 0.002	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.004	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Total Metals Digestion	Completed			02/07/07		AG	
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270

Client ID: CITY OF NEW BEDFORD-RIVER RD MW6-020607 Phoenix I.D.: AH90104

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Chrysene	ND	10	ug/L	02/08/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluorene	ND	10	ug/L	02/08/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	69		%	02/08/07		KCA	SW 8270
% Nitrobenzene-d5	62		%	02/08/07		KCA	SW 8270
% Terphenyl-d14	37		%	02/08/07		KCA	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	15:30
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH90102
Phoenix I.D.: AH90105

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW1-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.085	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	0.007	0.001	mg/L	02/08/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.005	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	0.006	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	0.004	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.018	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Total Metals Digestion	Completed			02/07/07		AG	
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270

Client ID: CITY OF NEW BEDFORD-RIVER RD MW1-020607 Phoenix I.D.: AH90105

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Chrysene	ND	10	ug/L	02/08/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluorene	ND	10	ug/L	02/08/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	65		%	02/08/07		KCA	SW 8270
% Nitrobenzene-d5	60		%	02/08/07		KCA	SW 8270
% Terphenyl-d14	11*		%	02/08/07		KCA	SW 8270

Comments:

* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	0:00
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH90102
Phoenix I.D.: AH90106

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD DUP1-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.102	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	0.011	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Dissolved)	< 0.001	0.001	mg/L	03/08/07		RS	7421/239.2
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.009	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	0.012	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	0.013	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.029	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Dissolved Metals Preparation	Completed			03/07/06		X/AG	SW846-3005
Total Metals Digestion	Completed			02/07/07		AG	
Volatiles							
Methyl tert-butyl ether (MTBE)	<2.0	2.0	ug/L	02/08/07		R/J	8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	02/08/07		R/J	8260
% Bromofluorobenzene	85		%	02/08/07		R/J	8260
% Dibromofluoromethane	93		%	02/08/07		R/J	8260

Client ID: CITY OF NEW BEDFORD-RIVER RD DUP1-020607 Phoenix I.D.: AH90106

Parameter	Result	RL	Units	Date	Time	By	Reference
% Toluene-d8	98		%	02/08/07		R/J	8260

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	0:00
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-0070				

SDG I.D.: GAH90102
Phoenix I.D.: AH90107

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD DUP2-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benz(a)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		KCA	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Chrysene	ND	10	ug/L	02/08/07		KCA	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		KCA	SW 8270
Fluorene	ND	10	ug/L	02/08/07		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		KCA	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		KCA	SW 8270
Pyrene	ND	10	ug/L	02/08/07		KCA	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	63		%	02/08/07		KCA	SW 8270
% Nitrobenzene-d5	56		%	02/08/07		KCA	SW 8270
% Terphenyl-d14	11*		%	02/08/07		KCA	SW 8270

Comments:

* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	16:25
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH90102
Phoenix I.D.: AH90108

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW3-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.045	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	< 0.001	0.001	mg/L	02/08/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	< 0.002	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.004	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
QC for Volatile	Completed			02/09/07		HM	
QC for Mercury	Completed			02/08/07		RS	
QC for Volatile	Completed			02/12/07		JH	
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
MS/MSD Ext. for Semi-Vol.	Completed			02/08/07		PL	
Total Metals Digestion	Completed			02/07/07		AG	
MS/MSD Volatiles	Completed			02/12/07		JH	
Volatiles							
Methyl tert-butyl ether (MTBE)	<2.0	2.0	ug/L	02/12/07		R/J	8260

Client ID: CITY OF NEW BEDFORD-RIVER RD MW3-020607 Phoenix I.D.: AH90108

Parameter	Result	RL	Units	Date	Time	By	Reference
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	02/12/07		R/J	8260
% Bromofluorobenzene	96		%	02/12/07		R/J	8260
% Dibromofluoromethane	103		%	02/12/07		R/J	8260
% Toluene-d8	98		%	02/12/07		R/J	8260
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	33	ug/L	02/08/07		HM	SW 8270
Acenaphthene	ND	33	ug/L	02/08/07		HM	SW 8270
Acenaphthylene	ND	33	ug/L	02/08/07		HM	SW 8270
Anthracene	ND	33	ug/L	02/08/07		HM	SW 8270
Benz(a)anthracene	ND	33	ug/L	02/08/07		HM	SW 8270
Benzo(a)pyrene	ND	33	ug/L	02/08/07		HM	SW 8270
Benzo(b)fluoranthene	ND	33	ug/L	02/08/07		HM	SW 8270
Benzo(ghi)perylene	ND	33	ug/L	02/08/07		HM	SW 8270
Benzo(k)fluoranthene	ND	33	ug/L	02/08/07		HM	SW 8270
Chrysene	ND	33	ug/L	02/08/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	33	ug/L	02/08/07		HM	SW 8270
Fluoranthene	ND	33	ug/L	02/08/07		HM	SW 8270
Fluorene	ND	33	ug/L	02/08/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	ND	33	ug/L	02/08/07		HM	SW 8270
Naphthalene	ND	33	ug/L	02/08/07		HM	SW 8270
Phenanthrene	ND	33	ug/L	02/08/07		HM	SW 8270
Pyrene	ND	33	ug/L	02/08/07		HM	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	79		%	02/08/07		HM	SW 8270
% Nitrobenzene-d5	77		%	02/08/07		HM	SW 8270
% Terphenyl-d14	15*		%	02/08/07		HM	SW 8270

Comments:

* Poor surrogate recovery was observed. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	14:25
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH90102
Phoenix I.D.: AH90109

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD MW2-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	02/08/07		EKT	6010/200.7
Barium	0.156	0.002	mg/L	02/08/07		EKT	6010/200.7
Beryllium	< 0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Cadmium	0.001	0.001	mg/L	02/08/07		EKT	6010/200.7
Chromium	0.018	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Dissolved)	0.001	0.001	mg/L	03/08/07		RS	7421/239.2
Mercury	< 0.0002	0.0002	mg/L	02/08/07		RS	7470/E245.1
Nickel	0.019	0.001	mg/L	02/08/07		EKT	6010/200.7
Lead (Furnace)	0.093	0.001	mg/L	02/09/07		RS	7421/S3113B
Antimony	< 0.005	0.005	mg/L	02/08/07		EKT	6010/200.7
Selenium	< 0.01	0.01	mg/L	02/08/07		EKT	6010/200.7
Thallium	< 0.002	0.002	mg/L	02/09/07		RS	SW7841/279.2
Vanadium	0.012	0.002	mg/L	02/08/07		EKT	6010/200.7
Zinc	0.557	0.002	mg/L	02/08/07		EKT	6010/200.7
Mercury Digestion	Completed			02/08/07		D	7471/245.1
Semi-Volatile Extraction	Completed			02/07/07		O/K	SW3510/3520
Dissolved Metals Preparation	Completed			03/07/06		X/AG	SW846-3005
Total Metals Digestion	Completed			02/07/07		AG	
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	10	ug/L	02/08/07		HM	SW 8270
Acenaphthene	ND	10	ug/L	02/08/07		HM	SW 8270
Acenaphthylene	ND	10	ug/L	02/08/07		HM	SW 8270
Anthracene	ND	10	ug/L	02/08/07		HM	SW 8270

Client ID: CITY OF NEW BEDFORD-RIVER RD MW2-020607 Phoenix I.D.: AH90109

Parameter	Result	RL	Units	Date	Time	By	Reference
Benz(a)anthracene	ND	10	ug/L	02/08/07		HM	SW 8270
Benzo(a)pyrene	ND	10	ug/L	02/08/07		HM	SW 8270
Benzo(b)fluoranthene	ND	10	ug/L	02/08/07		HM	SW 8270
Benzo(ghi)perylene	ND	10	ug/L	02/08/07		HM	SW 8270
Benzo(k)fluoranthene	ND	10	ug/L	02/08/07		HM	SW 8270
Chrysene	ND	10	ug/L	02/08/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	10	ug/L	02/08/07		HM	SW 8270
Fluoranthene	ND	10	ug/L	02/08/07		HM	SW 8270
Fluorene	ND	10	ug/L	02/08/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	02/08/07		HM	SW 8270
Naphthalene	ND	10	ug/L	02/08/07		HM	SW 8270
Phenanthrene	ND	10	ug/L	02/08/07		HM	SW 8270
Pyrene	ND	10	ug/L	02/08/07		HM	SW 8270
QA/QC Surrogates							
% 2-Fluorobiphenyl	84		%	02/08/07		HM	SW 8270
% Nitrobenzene-d5	82		%	02/08/07		HM	SW 8270
% Terphenyl-d14	31		%	02/08/07		HM	SW 8270

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 29, 2007

FOR: Attn: Mr Tom Biolsi
TRC Environmental
650 Suffolk Wannalancit Mills
Lowell MA 01854

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/06/07	0:00
Location Code:	TRC-MA	Received by:	SW	02/07/07	17:00
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	47284-00				

SDG I.D.: GAH90102
Phoenix I.D.: AH90110

Laboratory Data

Client ID: CITY OF NEW BEDFORD-RIVER RD TB-020607

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
Methyl tert-butyl ether (MTBE)	<2.0	2.0	ug/L	02/12/07		R/J	8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	02/12/07		R/J	8260
% Bromofluorobenzene	95		%	02/12/07		R/J	8260
% Dibromofluoromethane	96		%	02/12/07		R/J	8260
% Toluene-d8	99		%	02/12/07		R/J	8260

Comments:

TRIP BLANK INCLUDED.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

Phyllis Shiller, Laboratory Director
March 29, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

QA/QC Report

March 21, 2007

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 70873, Sample No: AH85905 (AH90106, AH90109)								
Dissolved Metals								
Lead (Furnace)	< 0.001	NC	95.4	93.9	1.6	91.4		
Comment: NC - RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate lead concentration for this QC batch was <0.001 mg/L.								
QA/QC Batch 71367, Sample No: AH88216 (AH90102, AH90103, AH90104, AH90105, AH90106, AH90108, AH90109)								
Thallium	< 0.002	NC	95.3	94.9	0.4	95.1	93.3	1.9
Comment: NC - RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate thallium concentration for this QC batch was <0.002 mg/L.								
QA/QC Batch 71691, Sample No: AH90108 (AH90102, AH90103, AH90104, AH90105, AH90106, AH90108, AH90109)								
ICP Metals - Aqueous								
Aluminum	< 0.01	NC	98.6	98.8	0.2	97.6	96.8	0.8
Antimony	< 0.010	NC	97.0	98.4	1.4	99.1	97.0	2.1
Arsenic	< 0.004	NC	101	103	2.0	101	100	1.0
Barium	< 0.002	1.10	101	101	0.0	101	100	1.0
Beryllium	< 0.001	NC	103	104	1.0	102	101	1.0
Boron	< 0.05	---	---	---	NC	---	---	NC
Cadmium	< 0.001	NC	95.6	96.8	1.2	95.6	95.7	0.1
Calcium	0.004	---	---	---	NC	---	---	NC
Chromium	< 0.001	NC	104	104	0.0	103	103	0.0
Cobalt	< 0.002	NC	101	101	0.0	100	99.5	0.5
Copper	< 0.001	NC	102	102	0.0	101	101	0.0
Iron	< 0.002	NC	102	102	0.0	101	101	0.0
Lead	< 0.002	NC	102	102	0.0	101	101	0.0
Magnesium	< 0.01	---	---	---	NC	---	---	NC
Manganese	< 0.001	BDL	102	103	1.0	102	101	1.0
Molybdenum	< 0.01	---	---	---	NC	---	---	NC
Nickel	< 0.001	NC	103	103	0.0	102	101	1.0
Phosphorus	< 0.015	---	---	---	NC	---	---	NC
Potassium	< 1.0	---	---	---	NC	---	---	NC
Selenium	< 0.010	NC	99.8	104	4.1	103	100	3.0
Silver	< 0.001	NC	100	99.8	0.2	97.4	99.9	2.5
Sodium	< 1.0	---	---	---	NC	---	---	NC
Thallium	< 0.01	NC	99.3	99.6	0.3	98.4	97.9	0.5
Tin	< 0.02	---	---	---	NC	---	---	NC

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Vanadium	< 0.002	NC	102	103	1.0	101	100	1.0
Zinc	< 0.002	NC	101	102	1.0	101	99.8	1.2
QA/QC Batch 71694, Sample No: AH90108 (AH90102, AH90103, AH90104, AH90105, AH90106, AH90108, AH90109)								
Lead (Furnace)	< 0.001		99.3	104	4.6	103	98.6	4.4
Comment: RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate lead concentration for this QC batch was <0.001 mg/L.								
QA/QC Batch 71721, Sample No: AH90108 (AH90102, AH90103, AH90104, AH90105, AH90106, AH90108, AH90109)								
Mercury	< 0.0002	NC	99.6	98.4	1.2	97.6	96.0	1.7
Comment: NC - RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate concentration for this QC batch was <0.0002 mg/L.								
QA/QC Batch 73399, Sample No: AH90108 (ah90102, ah90103, ah90104, ah90105, ah90106, AH90108, ah90109)								
Thallium	< 0.002	NC	95.7	94.4	1.4	93.3	93.8	0.5
Comment: NC - RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate thallium concentration for this QC batch was <0.002 mg/L.								
QA/QC Batch 72245, Sample No: AH92985 (AH90106, AH90109)								
Lead (Furnace)	< 0.001		97.4	97.9	0.5	89.6	90.8	1.3
Comment: RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The sample and the duplicate lead concentration for this QC batch were 0.006 mg/L.								
QA/QC Batch 72693, Sample No: AH95473 (AH90106, AH90109)								
ICP Metals - Dissolved								
Aluminum	< 0.01	31.1	88.2	90.5	2.6	88.4	99.8	12.1
Antimony	< 0.005	NC	88.3	91.0	3.0	81.7	88.9	8.4
Arsenic	< 0.004	NC	89.5	92.3	3.1	87.6	97.0	10.2
Barium	< 0.002	5.90	90.1	92.8	3.0	86.3	95.9	10.5
Beryllium	< 0.001	NC	91.2	94.0	3.0	88.4	98.4	10.7
Boron	< 0.01	---	---	---	NC	---	---	NC
Cadmium	< 0.001	NC	85.2	88.6	3.9	81.6	92.4	12.4
Calcium	< 0.01	---	---	---	NC	---	---	NC
Chromium	< 0.001	NC	91.7	94.0	2.5	88.4	98.1	10.4
Cobalt	< 0.001	NC	90.5	93.2	2.9	87.3	96.6	10.1
Copper	< 0.001	26.8	89.9	92.5	2.9	90.0	101	11.5
Iron	< 0.002	39.1	91.9	94.6	2.9	90.3	112	21.5
Lead	< 0.002	NC	90.6	93.9	3.6	86.8	96.5	10.6
Magnesium	< 0.01	---	---	---	NC	---	---	NC
Manganese	< 0.001	42.6	93.1	96.2	3.3	89.0	99.0	10.6
Molybdenum	< 0.01	---	---	---	NC	---	---	NC
Nickel	< 0.002	NC	90.4	93.4	3.3	86.6	96.2	10.5
Phosphorus	< 0.015	---	---	---	NC	---	---	NC
Potassium	< 0.1	---	---	---	NC	---	---	NC
Selenium	< 0.010	NC	86.4	88.9	2.9	84.3	93.7	10.6
Silver	< 0.001	NC	96.6	97.2	0.6	80.6	98.2	19.7
Sodium	0.02	---	---	---	NC	---	---	NC

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Thallium	< 0.01	NC	89.3	92.0	3.0	85.7	94.8	10.1
Tin	< 0.02	---	---	---	NC	---	---	NC
Vanadium	< 0.002	NC	91.2	94.2	3.2	88.2	98.0	10.5
Zinc	< 0.002	13.8	91.9	94.4	2.7	87.6	97.1	10.3
QA/QC Batch 72761, Sample No: AH95810 (ah90106, ah90109)								
Lead (Furnace)	< 0.001		96.0	94.2	1.9	74.0	75.6	2.1

Comment: The sample and duplicate lead concentration for this QC batch were <RL.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller

Phyllis Shiller, Laboratory Director
March 21, 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

QA/QC Report

March 21, 2007

QA/QC Data

SDG I.D.: GAH90102

QA/QC Batch 71753, Sample No: AH89636 (ah90102, ah90106, ah90108, ah90109, ah90110)

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Volatiles Organics							
1,1,1,2-Tetrachloroethane	< 0.5	96	87	9.8	86	85	1.2
1,1,1-Trichloroethane	< 0.5	105	89	16.5	88	82	7.1
1,1,2,2-Tetrachloroethane	< 0.5	74	80	7.8	80	75	6.5
1,1,2-Trichloroethane	< 0.5	86	90	4.5	88	79	10.8
1,1-Dichloroethane	< 0.5	103	93	10.2	91	88	3.4
1,1-Dichloroethene	< 0.5	107	101	5.8	93	89	4.4
1,1-Dichloropropene	< 0.5	121	123	1.6	114	119	4.3
1,2,3-Trichlorobenzene	< 0.5	82	84	2.4	72	76	5.4
1,2,3-Trichloropropane	< 0.5	64	63	1.6	52	52	0.0
1,2,4-Trichlorobenzene	< 0.5	87	89	2.3	78	81	3.8
1,2,4-Trimethylbenzene	< 0.5	95	94	1.1	92	90	2.2
1,2-Dibromo-3-chloropropane	< 0.5	77	88	13.3	72	72	0.0
1,2-Dichlorobenzene	< 0.5	91	94	3.2	88	86	2.3
1,2-Dichloroethane	< 0.5	101	78	25.7	75	68	9.8
1,2-Dichloropropane	< 0.5	96	101	5.1	97	92	5.3
1,3,5-Trimethylbenzene	< 0.5	99	98	1.0	95	92	3.2
1,3-Dichlorobenzene	< 0.5	98	100	2.0	94	91	3.2
1,3-Dichloropropane	< 0.5	82	82	0.0	80	79	1.3
1,4-Dichlorobenzene	< 0.5	91	94	3.2	90	87	3.4
2,2-Dichloropropane	< 0.5	89	62	35.8	62	65	4.7
2-Chlorotoluene	< 0.5	100	102	2.0	99	96	3.1
4-Chlorotoluene	< 0.5	102	103	1.0	94	93	1.1
Benzene	< 0.5	104	107	2.8	102	98	4.0
Bromobenzene	< 0.5	91	98	7.4	91	90	1.1
Bromochloromethane	< 0.5	89	96	7.6	92	94	2.2
Bromodichloromethane	< 0.5	104	85	20.1	82	77	6.3
Bromoform	< 0.5	91	79	14.1	77	81	5.1
Bromomethane	< 0.5	87	70	21.7	62	61	1.6
Carbon tetrachloride	< 0.5	108	82	27.4	79	77	2.6
Chlorobenzene	< 0.5	97	101	4.0	101	98	3.0
Chloroethane	< 0.5	95	82	14.7	76	72	5.4
Chloroform	< 0.5	102	91	11.4	87	82	5.9

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Chloromethane	< 0.5	85	77	9.9	57	59	3.4
cis-1,2-Dichloroethene	< 0.5	98	106	7.8	102	104	1.9
cis-1,3-Dichloropropene	< 0.5	93	86	7.8	84	80	4.9
Dibromochloromethane	< 0.5	93	82	12.6	78	78	0.0
Dibromoethane	< 0.5	87	89	2.3	84	76	10.0
Dibromomethane	< 0.5	91	79	14.1	78	73	6.6
Dichlorodifluoromethane	< 0.5	98	56	54.5	34	37	8.5
Ethylbenzene	< 0.5	107	106	0.9	102	101	1.0
Hexachlorobutadiene	< 0.5	84	78	7.4	75	74	1.3
Isopropylbenzene	< 0.5	108	112	3.6	103	101	2.0
m&p-Xylene	< 0.5	104	104	0.0	102	101	1.0
Methyl t-butyl ether (MTBE)	< 2.0	87	74	16.1	75	72	4.1
Methylene chloride	< 0.5	86	84	2.4	79	76	3.9
n-Butylbenzene	< 0.5	94	95	1.1	89	86	3.4
n-Propylbenzene	< 0.5	102	108	5.7	103	100	3.0
Naphthalene	< 0.5	77	80	3.8	69	72	4.3
o-Xylene	< 0.5	98	100	2.0	98	96	2.1
p-Isopropyltoluene	< 0.5	100	102	2.0	94	92	2.2
sec-Butylbenzene	< 0.5	90	95	5.4	97	92	5.3
Styrene	< 0.5	90	90	0.0	88	88	0.0
tert-Butylbenzene	< 0.5	99	100	1.0	97	94	3.1
Tetrachloroethene	< 0.5	107	109	1.9	107	103	3.8
Toluene	< 0.5	105	109	3.7	104	100	3.9
trans-1,2-Dichloroethene	< 0.5	101	99	2.0	96	92	4.3
trans-1,3-Dichloropropene	< 0.5	80	66	19.2	66	69	4.4
Trichloroethene	< 0.5	112	113	0.9	112	106	5.5
Trichlorofluoromethane	< 0.5	126	89	34.4	78	76	2.6
Vinyl chloride	< 0.5	94	78	18.6	66	63	4.7
% 1,2-dichlorobenzene-d4	94	94	96	2.1	92	90	2.2
% Bromofluorobenzene	94	94	84	11.2	85	85	0.0
% Dibromofluoromethane	95	91	91	0.0	97	93	4.2
% Toluene-d8	99	98	98	0.0	98	97	1.0

QA/QC Batch 71898, Sample No: AH90108 (AH90108, ah90110)

Volatiles

1,1,1,2-Tetrachloroethane	< 1	98	113	14.2	110	114	3.6
1,1,1-Trichloroethane	< 1	87	102	15.9	102	109	6.6
1,1,2,2-Tetrachloroethane	< 1	102	107	4.8	125	117	6.6
1,1,2-Trichloroethane	< 1	91	100	9.4	106	102	3.8
1,1-Dichloroethane	< 1	84	95	12.3	95	103	8.1
1,1-Dichloroethene	< 1	96	110	13.6	105	113	7.3
1,1-Dichloropropene	< 1	91	101	10.4	103	107	3.8

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
1,2,3-Trichlorobenzene	< 1	84	118	33.7	100	122	19.8
1,2,3-Trichloropropane	< 1	117	108	8.0	126	103	20.1
1,2,4-Trichlorobenzene	< 1	86	112	26.3	100	111	10.4
1,2,4-Trimethylbenzene	< 1	93	103	10.2	109	111	1.8
1,2-Dibromo-3-chloropropane	< 1	110	103	6.6	123	110	11.2
1,2-Dichlorobenzene	< 1	95	101	6.1	108	109	0.9
1,2-Dichloroethane	< 1	98	107	8.8	104	105	1.0
1,2-Dichloropropane	< 1	85	97	13.2	99	100	1.0
1,3,5-Trimethylbenzene	< 1	95	102	7.1	108	108	0.0
1,3-Dichlorobenzene	< 1	94	102	8.2	108	109	0.9
1,3-Dichloropropane	< 1	93	105	12.1	111	107	3.7
1,4-Dichlorobenzene	< 1	94	107	12.9	109	111	1.8
2,2-Dichloropropane	< 1	91	103	12.4	104	110	5.6
2-Chlorotoluene	< 1	88	98	10.8	106	108	1.9
4-Chlorotoluene	< 1	90	101	11.5	105	108	2.8
Benzene	< 1	86	97	12.0	98	103	5.0
Bromobenzene	< 1	96	103	7.0	112	109	2.7
Bromochloromethane	< 1	88	98	10.8	101	103	2.0
Bromodichloromethane	< 1	98	109	10.6	109	111	1.8
Bromoform	< 1	106	115	8.1	125	114	9.2
Bromomethane	< 1	71	123	53.6	82	128	43.8
Carbon tetrachloride	< 1	100	115	14.0	113	116	2.6
Chlorobenzene	< 1	92	103	11.3	108	107	0.9
Chloroethane	< 1	95	109	13.7	100	113	12.2
Chloroform	< 1	87	101	14.9	96	105	9.0
Chloromethane	< 1	73	84	14.0	75	81	7.7
cis-1,2-Dichloroethene	< 1	82	96	15.7	97	104	7.0
cis-1,3-Dichloropropene	< 1	88	102	14.7	104	108	3.8
Dibromochloromethane	< 1	103	119	14.4	116	114	1.7
Dibromoethane	< 1	93	99	6.3	110	102	7.5
Dibromomethane	< 1	93	100	7.3	106	102	3.8
Dichlorodifluoromethane	< 1	62	66	6.3	71	74	4.1
Ethylbenzene	< 1	93	102	9.2	108	110	1.8
Hexachlorobutadiene	< 1	99	120	19.2	115	129	11.5
Isopropylbenzene	< 1	97	106	8.9	107	107	0.0
m&p-Xylene	< 2	92	103	11.3	108	109	0.9
Methyl Ethyl Ketone	< 5						
Methyl t-butyl ether (MTBE)	< 2	110	121	9.5	121	117	3.4
Methylene chloride	< 5	89	104	15.5	103	103	0.0
n-Butylbenzene	< 1	88	104	16.7	100	110	9.5
n-Propylbenzene	< 1	92	102	10.3	107	108	0.9
Naphthalene	< 1	68	114	50.5	83	126	41.1

QA/QC Data

SDG I.D.: GAH90102

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
o-Xylene	< 1	104	109	4.7	108	107	0.9
p-Isopropyltoluene	< 1	95	107	11.9	108	110	1.8
sec-Butylbenzene	< 1	85	95	11.1	105	108	2.8
Styrene	< 1	104	111	6.5	109	107	1.9
tert-Butylbenzene	< 1	91	101	10.4	107	108	0.9
Tetrachloroethene	< 1	91	103	12.4	107	106	0.9
Toluene	< 1	87	95	8.8	102	100	2.0
Total Xylenes	< 1						
trans-1,2-Dichloroethene	< 1	95	110	14.6	104	113	8.3
trans-1,3-Dichloropropene	< 1	94	108	13.9	110	112	1.8
Trichloroethene	< 1	80	91	12.9	94	99	5.2
Trichlorofluoromethane	< 1	197	232	16.3	>130	<130	NC
Vinyl chloride	< 1	85	96	12.2	94	101	7.2
% 1,2-dichlorobenzene-d4	108	104	103	1.0	106	108	1.9
% Bromofluorobenzene	97	104	103	1.0	104	102	1.9
% Dibromofluoromethane	108	102	110	7.5	100	105	4.9
% Toluene-d8	97	103	101	2.0	103	102	1.0

QA/QC Batch 71683, Sample No: AH90108 (AH90102, AH90103, AH90104, AH90105, AH90107, AH90108, AH90109)

Polynuclear Aromatic HC

2-Methylnaphthalene	< 10.0	83	79	4.9	79	77	2.6
Acenaphthene	< 10.0	88	84	4.7	83	80	3.7
Acenaphthylene	< 10.0	74	70	5.6	70	66	5.9
Anthracene	< 10.0	94	90	4.3	93	83	11.4
Benz(a)anthracene	< 10.0	89	87	2.3	88	74	17.3
Benzo(a)pyrene	< 10.0	87	86	1.2	81	69	16.0
Benzo(b)fluoranthene	< 10.0	94	92	2.2	91	75	19.3
Benzo(ghi)perylene	< 10.0	78	76	2.6	73	62	16.3
Benzo(k)fluoranthene	< 10.0	95	94	1.1	91	74	20.6
Chrysene	< 10.0	91	90	1.1	90	75	18.2
Dibenz(a,h)anthracene	< 10.0	80	81	1.2	77	64	18.4
Fluoranthene	< 10.0	96	91	5.3	93	83	11.4
Fluorene	< 10.0	92	88	4.4	87	84	3.5
Indeno(1,2,3-cd)pyrene	< 10.0	79	80	1.3	76	64	17.1
Naphthalene	< 10.0	80	77	3.8	76	74	2.7
Phenanthrene	< 10.0	92	89	3.3	92	84	9.1
Pyrene	< 10.0	95	91	4.3	92	82	11.5
% 2-Fluorobiphenyl	82	83	82	1.2	82	66	21.6
% Nitrobenzene-d5	82	79	75	5.2	76	65	15.6
% Terphenyl-d14	32	34	88	88.5	58	10	141.2

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
March 21, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. **Project #:**

Project Location: CITY OF NEW BEDFORD-RIVER RD **MADEP RTN1:**

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

AH90102, AH90103, AH90104, AH90105, AH90106, AH90107, AH90108, AH90109, AH90110

Sample Matrices: ☑ Groundwater ☐ Soil/Sediment ☐ Drinking Water ☐ Other:

MCP SW-846 Methods Used	☑ 8260B	☐ 8151A	☐ 8330	☑ 6010B	☑ 7470A/1A
	☑ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	☐ 8082	☐ 8021B	☐ EPH	☑ 7000S3	☐ 7196A
	1 List Release Tracking Number (RTN), if known 2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Metho 3 S - SW-846 Methods 7000 Series List individual method and analyte				

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑ Yes ☐ No
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 ☐ No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	☐ Yes ☐ No

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	☐ Yes ☑ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Yes ☑ No

All negative responses must be addressed in an attached Environmental Laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized Signature: _____ Date: Wednesday, March 21, 2007

Printed Name: Kathleen Cressia Position: QA/QC Officer

Printed Name: Phyllis Shiller Position: Laboratory Director

CAM VII A, rev. 3.2 April 2004

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. **Project #:**

Project Location: CITY OF NEW BEDFORD-RIVER RD **MADEP RTN1:**

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

AH90102, AH90103, AH90104, AH90105, AH90106, AH90107, AH90108, AH90109, AH90110

Sample Matrices: ✔ Groundwater ☐ Soil/Sediment ☐ Drinking Water ☐ Other:

MCP SW-846 Methods Used	✔ 8260B	☐ 8151A	☐ 8330	✔ 6010B	✔ 7470A/1A
	✔ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	☐ 8082	☐ 8021B	☐ EPH	✔ 7000S3	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Metho
3 S - SW-846 Methods 7000 Series List individual method and analyte

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	✔ Yes	☐ No
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	☐ No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✔ Yes	☐ No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	☐ Yes	☐ No

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	☐ Yes	✔ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Yes	✔ No

All negative responses must be addressed in an attached Environmental Laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized Signature: Date: Wednesday, March 21, 2007

Printed Name: Kathleen Cressia Position: QA/QC Officer

Printed Name: Phyllis Shiller Position: Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 6451102 Fax (860) 6450823

MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

Lead Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Zeeman 02/08/07-1 (AH90108, AH90108)

The initial calibration met all criteria including a standard run at the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 2/8/2007

Instrument: Zeeman 02/09/07-1 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90109, AH90109)

The initial calibration met all criteria including a standard run at the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 2/9/2007

Instrument: Zeeman 03/08/07-1 (AH90106, AH90106, AH90109, AH90109)

The initial calibration met all criteria including a standard run at the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 3/8/2007

QC Comments: QC Batch 71694 02/07/07 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate lead concentration for this QC batch was <0.001 mg/L.

PHOENIX

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Tel. (860) 6451102 Fax (860) 6450823

MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Selenium Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

QC Comments: QC Batch 71694 02/07/07 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate lead concentration for this QC batch was <0.001 mg/L.

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Thallium Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Deutrium 02/09/07-1 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

The initial calibration met all criteria including a standard run at the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 2/9/2007

QC Comments: QC Batch 71694 02/07/07 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate lead concentration for this QC batch was <0.001 mg/L.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 6451102 Fax (860) 6450823

MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Mercury Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Merlin 02/08/07-1 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 2/8/2007

QC Comments: QC Batch 71721 02/08/07 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

NC - RPD was not calculated because either the sample and/or the duplicate concentration was less than 5x the reporting level (RL). The duplicate concentration for this QC batch was <0.0002 mg/L.

All LCS recoveries were within 80 - 120 with the following exceptions: None.

All LCSD recoveries were within 80 - 120 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Icp8 02/08/07-1 (AH90102, AH90102, AH90103, AH90103, AH90104, AH90104, AH90105, AH90105, AH90106, AH90106, AH90108, AH90108, AH90109, AH90109)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.

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MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya
Position: Chemist
Date: 2/8/2007

Instrument: Icp8 03/07/07-1 (AH90106, AH90106, AH90109, AH90109, AH95674, AH95675)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya
Position: Chemist
Date: 3/7/2007

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

PAH Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? No.
Some of the terphenyl-d14 surrogate recoveries were below acceptance criteria.

Instrument: Chem04 02/08/07-2 (AH90108, AH90108, AH90109, AH90109)

The client requested PAH/base neutral compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds, CCCs, SPCCs and surrogates.
The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem04/81000208):
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: No target compounds

Continuing Calibration:
All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: None.

Printed Name Harry Mullin
Position: Chemist
Date: 2/8/2007

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MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Chem03 02/12/07-1 (AH90108, AH90108, AH90110, AH90110)

Initial Calibration Verification (chem03/1110):
All SPCCs, CCCs and >80% of target compounds met criteria.
The following compounds had %RSDs >30%: Acrolein

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Dichlorodifluoromethane, Trichlorofluoromethane, Acrolein

Printed Name Johanna Harrington
Position: Chemist
Date: 2/12/2007

Instrument: Chem08 02/07/07-1 (AH90102, AH90102, AH90106, AH90106)

Initial Calibration Verification (CHEM08/011607):
All SPCCs, CCCs and >80% of target compounds met criteria.
The following compounds had %RSDs >30%:None

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Dichlorodifluoromethane, Chloromethane, Bromomethane, Trichlorotrifluoroethane, Acrolein, Acrylonitrile, Tetrahydrofuran (THF), trans-1,4-Dichloro-2-butene, Hexachlorobutadiene, Naphthalene, 1,2,3-Trichlorobenzene

Printed Name Johanna Harrington
Position: Chemist
Date: 2/7/2007

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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 6451102 Fax (860) 6450823

MCP Certification Report

March 21, 2007

SDG I.D.: GAH90102

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichloropropane

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichloropropane, 2,2-Dichloropropane, Dichlorodifluoromethane, trans-1,3-Dichloropropene

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

SDG Comments

PAHs:
The samples in this SDG were extracted using continuous liquid-liquid method 3520.
Some of the terphenyl-d14 surrogate recoveries were below acceptance criteria. They are noted with an asterisk on the report and in the comment section of the report. Note that the MCP guidelines allow for one acid and one base neutral surrogate compound to be outside of acceptance criteria.
Sample AH90108 (MW3-020607) was extracted with a reduced volume: 300 ml for the sample, the MS and the MSD. The analyst made a note that only one liter was available. Two liters had actually been provided. When two liters are provided the laboratory usually extracts one liter for the sample and the remainder is split between the MS and MSD.

Metals:
In order to achieve lower reporting levels, lead and thallium were analyzed via graphite furnace.

Dissolved Lead:
The samples were placed on hold for the dissolved metals at the time of receipt. Two of the samples were requested later for dissolved metals. No request for client specific MS/MSD was made at that time. Batch QC is provided in this package.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: service@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6° Pg 1 of 1

Data Delivery (check one):
- [ ] Fax #:
- [ ] Email:

Format: [ ] Excel [ ] Pdf [x] Gis Key

Customer: TRC
Address: 650 Suffolk St
Lowell MA 01854

Project: City of New Bedford - River Road
Report to: Tom Bidsi
Invoice to: City of New Bedford

Project P.O: 47284-0070
Phone #: 978-970-5600
Fax #: 978-453-1995

Client Sample - Information - Identification

Sampler's Signature: [signature] Date 2/6/07

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=Oil
GW=groundwater SL=sludge A=air X=Other

Analysis Request

Item #	Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PAHs	MCP Metals	Dissolved MCP Metals	MTBE	PL HNO3 Dissolved Filtered	Soil VOA Vial [ ] methanol [ ] Sod Bisulfate	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [x] HCl	GL Amber 1000ml [x] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [x] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	90102	MW4-020607	GW	2/6/07	1145	X	X	X	X	1				1	1		1			
	90103	MW5-020607	GW	"	1350	X	X	X		1					1		1			
	90104	MW6-020607	GW	"	1510	X	X	X		1					1		1			
	90105	MW1-020607	GW	"	1530	X	X	X		1					1		1			
	90106	DUP1-020607	GW	"			X	X	X					1	1		1			
	90107	DUP2-020607	GW	"		X				1										
	90108	MW3-020607	GW	"	1625	X	X	X	X	1				1	1		1			
	90109	MW2-020607	GW	"	1425	X	X	X		1					1		1			
		MW3-020607 MS/MSD	GW	"	1425	X	X	X	X	1				1	1		1			
	90110	TB01-020607	GW	"					X					3						
	TOTAL									5				7	8		5			

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	2/7/06	1420
[signature]	[signature]	2-7-06	1700

Comments, Special Requirements or Regulations:

Hold all dissolved metals, run only w/ exceedances to GW-2 or -3 contact Tom Bidsi b4 running

Turnaround:
- [ ] 1 Day*
- [ ] 2 Days*
- [ ] 3 Days*
- [x] Standard
- [ ] Other

* Surcharge Applies

Requirements for CT/RI
- [ ] Res. Criteria
- [ ] GW Protection
- [ ] GA Mobility
- [ ] GB Mobility
- [ ] SW Protection
- [ ] Res. Vol.
- [ ] Ind. Vol.
- [ ] RCP Certification

Requirements for MA
- [ ] GW-1
- [x] GW-2
- [x] GW-3
- [ ] S-1
- [ ] S-2
- [ ] S-3
- [x] MCP Certification
- [ ] Other

APPENDIX F

RISK CHARACTERIZATION TABLES

Table F-1
Accessible Soil Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Analysis	Analyte	S-1/GW-3	UCLs	*	**	AB-1	AB-2	AB-3	AB-4	AB-5	AB-6	AB-7	AB-8	AB-9	AB-10	AB-11	AB-12	AB13A	AB13B	AB14A	AB14B	AB15A	AB15B	AB16A	AB16B
	Sample ID:					AB-1	AB-2	AB-3	AB-4	AB-5	AB-6	AB-7	AB-8	AB-9	AB-10	AB-11	AB-12	AB13A	AB13B	AB14A	AB14B	AB15A	AB15B	AB16A	AB16B
	Depth (feet):					0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4
	Date sampled:					6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002	8/6/2002
VOCs (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	20,000	NS	NS	37	75	60	32	58	48	41	74	53	51	69	120	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	10,000	NS	NS	46	85	69	31 U	46	33	33 U	73	120	76	54	84	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	10,000	1	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	10,000	3	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	10,000	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	10,000	4	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	10,000	4	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	3,000	2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	400	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	3,000	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	10,000	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	300	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	3,000	1	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	300	0.5	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	10,000	1	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Acenaphthylene	100	10,000	1	1	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	0.43 J	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	10,000	1	2	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	0.56 J	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NS	NS	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	0.42 J	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	10,000	1	2	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	0.77	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	10,000	3	20	0.38 U	0.70	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	9.7	0.92	1.1	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	10,000	1	4	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	3.3	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	10,000	4	10	0.38 U	0.74	0.44	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	15	1.2	1.4	0.67	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	10,000	4	20	0.38 U	0.62	0.41	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	12	0.95	1.1	0.54	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	3,000	2	9	0.38 U	0.43	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	7.5	0.65	0.63	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	400	2	7	0.38 U	0.82	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	6.5	0.64	0.68	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	3,000	2	8	0.38 U	0.49	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	5.4	0.66	0.59	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	10,000	1	4	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	3.9	0.49	0.53	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	300	2	7	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	6.7	0.58	0.59	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	3,000	1	3	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	4.6	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	300	0.5	1	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	1.2	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	10,000	1	3	0.38 U	0.39 U	0.38 U	0.35 U	0.44 U	0.37 U	0.37 U	0.36 U	4.4	0.36 U	0.44 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	100	NS	NS	NA	0.190	NA	0.084 U	NA	NA	0.086 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	300	1	7	3.2	18	8.5	1.1 U	11	7.0	7.4	1.1 U	2.4	3.4	19	27	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	10,000	50	50	120	55	110	37	570	170	100	150	39	120	420	880	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	30	0.4	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	300	2	3	0.58 U	1.5	0.56 U	0.53 U	0.68 U	0.55 U	0.59 U	0.55 U	0.53 U	0.58 U	3.4 U	6.2	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	2,000	30	40	12 U	250	25	30	14 U	11 U	12 U	96	11 U	12 U	16	46	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	3,000	100	600	850	740	210	11 U	270	230	110	21	73	700	700	2200	5,300	130	12	800	49	1,300	55	11 U
	Mercury	20	300	0.3	1	0.074	0.39	0.075	0.036	0.057	0.13	0.038 U	0.036 U	0.069	3.0	0.39	1.1	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	7,000	20	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	10,000	30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	10,000	100	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table F-1
Accessible Soil Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Analysis	Analyte	S-1/GW-3	UCLs	AB17A 0-2 8/6/2002	AB17B 2-4 8/6/2002	AB18A 0-2 8/6/2002	AB18B 2-4 8/6/2002	AB19A 0-2 8/6/2002	AB19B 2-4 8/6/2002	AB20B 2-4 8/6/2002	AB21A 0-2 8/6/2002	AB21B 2-4 8/6/2002	AB22A 0-2 8/6/2002	AB22B 2-4 8/6/2002	AB23A 0-2 8/6/2002	AB23B 2-4 8/6/2002	AB24A 0-2 8/7/2002	AB24B 2-4 8/7/2002	AB25A 0-2 8/6/2002	AB25B 2-4 8/6/2002	AB26A 0-2 8/6/2002	AB26A 2-4 8/7/2002	AB26B 0-2 8/6/2002	AB26B 2-4 8/7/2002	AB27A 0-2 8/6/2002
VOCs (mg/kg)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Acenaphthylene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	0.7	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	3,000	120	12 U	440	21	820	1,900	19	930	89	47	11 U	410	1,500	430	69	1,800	39	180	440	11 U	11 U	11 U
	Mercury	20	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids (%)	Solids	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table F-1
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Analysis	Analyte	S-1/GW-3	UCLs	AB27B 2-4 8/6/2002	AB28A 0-2 8/7/2002	AB28B 2-4 8/7/2002	AB30A 0-2 8/7/2002	AB30B 2-4 8/7/2002	AB31A 0-2 8/7/2002	AB31B 2-4 8/7/2002	AB32A 0-2 8/7/2002	AB32B 2-4 8/7/2002	AB33A 0-2 8/7/2002	AB33B 2-4 8/7/2002	AB34A 0-2 8/7/2002	AB34B 2-4 8/7/2002	AB35A 0-2 8/7/2002	AB35B 2-4 8/7/2002	AB36A 0-2 8/7/2002	AB36B 2-4 8/7/2002	TRC-1 0-3 4/5/2006	TRC-1 0-3 4/5/2006 Field Dup	TRC-2 0-3 4/5/2006	TRC-2 0-3 4/5/2006 Field Dup	TRC-2 1-3 4/5/2006
VOCs (mg/kg)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VPH (mg/kg)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C11 - C22 Aromatics	800	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (mg/kg)	Fluorene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Phenanthrene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.42**	NA	NA	NA	0.45 U
	Anthracene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Fluoranthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.45**	NA	NA	NA	0.45 U
	Pyrene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.40**	NA	NA	NA	0.45 U
	Benzo(a)anthracene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Chrysene	7	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Benzo(b)fluoranthene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Benzo(k)fluoranthene	70	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Benzo(a)pyrene	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Dibenzo(a,h)anthracene	0.7	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
	Benzo(ghi)perylene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	0.45 U
SVOCs (mg/kg)	Acenaphthylene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	7	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzo(a,h)anthracene	0.7	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor-1254	2	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.13**	NA	NA	NA	NA
Metals (mg/kg)	Antimony	20	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	0.26 U	NA	NA	NA
	Barium	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**25**	**24**	NA	NA	NA
	Beryllium	0.7	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.13**	**0.13**	NA	NA	NA
	Cadmium	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.21 U	0.21 U	NA	NA	NA
	Chromium	30	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9.2**	**7.0**	NA	NA	NA
	Lead	300	3,000	**54**	**290**	**38**	**36**	**12**	**1,100**	**8,400**	**330**	**2,600**	**420**	**710**	**450**	**2,000**	**200**	**2,000**	**310**	**3,300**	**32**	**34**	**58**	**98**	NA
	Mercury	20	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.29**	**0.20**	NA	NA	NA
	Nickel	20	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.7**	**4.1**	NA	NA	NA
	Vanadium	600	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14**	**12**	NA	NA	NA
	Zinc	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**28**	**22**	NA	NA	NA
Solids (%)	Solids	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table F-1
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Analysis	Analyte	S-1/GW-3	UCLs	TRC-3	TRC-4	TRC-5	TRC-6	TRC-7			TRC-8			TRC-9		TRC-10	TRC-11		MW5-0204	MW6-0003	EPC
				0-3 4/5/2006	1-2 4/5/2006	0-3 4/5/2006	0-3 4/5/2006	0-0.5 4/5/2006	0.5-3 4/5/2006	0.5-3 4/5/2006 Field Dup	0-3 4/5/2006	1-2 4/5/2006	1-2 4/5/2006 Field Dup	0.5-2 4/5/2006	0-3 4/5/2006	0-3 4/5/2006	0-0.5 4/5/2006	0.5-3 4/5/2006	2-4 1/24/2007	0-3 1/24/2007	
VOCs (mg/kg)				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
VPH (mg/kg)				NA	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	
EPH (mg/kg)	C19 - C36 Aliphatics	3,000	20,000	NA	**24 J**	NA	NA	NA	NA	NA	NA	**85 J**	**130**	NA	NA	NA	NA	NA	NA	NA	*62.286*
	C11 - C22 Aromatics	800	10,000	NA	**53 J**	NA	NA	NA	NA	NA	NA	**110**	**200**	NA	NA	NA	NA	NA	NA	NA	*69.357*
PAH (mg/kg)	Fluorene	1,000	10,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	0.96 U	1.1 U	0.44 U	NA	0.44 U	0.42 U	0.44 U	0.41 U	0.74 U	*0.264*
	Phenanthrene	100	10,000	NA	**0.80**	NA	NA	0.37 U	0.35 U	0.36 U	NA	0.96 U	**3.6**	0.44 U	NA	0.44 U	**0.78**	**1.7**	0.41 U	0.74 U	*0.742*
	Anthracene	1,000	10,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	0.96 U	1.1 U	0.44 U	NA	0.44 U	0.42 U	0.44 U	0.41 U	0.74 U	*0.264*
	Fluoranthene	1,000	10,000	NA	**0.80**	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.7**	**3.7**	0.44 U	NA	0.44 U	**0.71**	**1.4**	0.41 U	0.74 U	*0.722*
	Pyrene	1,000	10,000	NA	**0.70 J**	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.7**	**4.7**	0.44 U	NA	**0.67**	**0.84**	**2.2**	0.41 U	0.74 U	*0.908*
	Benzo(a)anthracene	7	3,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.3**	**1.9**	0.44 U	NA	0.44 U	0.42 U	**0.71**	0.41 U	0.74 U	*0.417*
	Chrysene	7	400	NA	**0.60 J**	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.4**	**2.2**	0.44 U	NA	0.44 U	0.42 U	**0.75**	0.41 U	0.74 U	*0.462*
	Benzo(b)fluoranthene	7	3,000	NA	**0.40 J**	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.4**	**1.3**	0.44 U	NA	**0.50**	0.42 U	**0.77**	0.41 U	0.74 U	*0.396*
	Benzo(k)fluoranthene	70	10,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.3**	**1.6**	0.44 U	NA	R	0.42 U	R	0.41 U	0.74 U	*0.378*
	Benzo(a)pyrene	2	300	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.6**	**1.7**	0.44 U	NA	R	0.42 U	**0.71**	0.41 U	0.74 U	*0.417*
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	**1.4**	**0.90 J**	0.44 U	NA	R	0.42 U	R	0.41 U	0.74 U	*0.358*
	Dibenzo(a,h)anthracene	0.7	300	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	0.96 U	1.1 U	0.44 U	NA	R	0.42 U	R	0.41 U	0.74 U	*0.273*
	Benzo(ghi)perylene	1,000	10,000	NA	0.80 U	NA	NA	0.37 U	0.35 U	0.36 U	NA	**0.90 J**	**0.7 J**	0.44 U	NA	R	0.42 U	R	0.41 U	0.74 U	*0.308*
SVOCs (mg/kg)	Acenaphthylene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.217*
	Acenaphthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.228*
	Dibenzofuran	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.216*
	Fluorene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.245*
	Phenanthrene	100	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1.166*
	Anthracene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.456*
	Fluoranthene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1.715*
	Pyrene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1.396*
	Benzo(a)anthracene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.899*
	Chrysene	7	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.851*
	Benzo(b)fluoranthene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.726*
	Benzo(k)fluoranthene	70	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.557*
	Benzo(a)pyrene	2	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.803*
	Indeno(1,2,3-cd)pyrene	7	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.564*
	Dibenzo(a,h)anthracene	0.7	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.281*
	Benzo(g,h,i)perylene	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.547*
PCBs (mg/kg)	Aroclor-1254	2	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.101*
Metals (mg/kg)	Antimony	20	300	NA	NA	NA	NA	NA	NA	NA	0.31 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	*7.735*
	Barium	1,000	10,000	NA	NA	NA	NA	NA	NA	NA	**510**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*236.143*
	Beryllium	0.7	30	NA	NA	NA	NA	NA	NA	NA	**0.30**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.215*
	Cadmium	2	300	NA	NA	NA	NA	NA	NA	NA	**11**	NA	NA	NA	NA	NA	NA	NA	0.41 U	NA	*1.552*
	Chromium	30	2,000	NA	NA	NA	NA	NA	NA	NA	**17**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*37.514*
	Lead	300	3,000	**20**	NA	2.2 U	**10**	**12**	**7.2**	NA	**1,500**	NA	NA	NA	**970**	**1,300**	**82**	**420**	**768**	**31.5**	*692.422*
	Mercury	20	300	NA	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*0.433*
	Nickel	20	7,000	NA	NA	NA	NA	NA	NA	NA	**18**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*11.350*
	Vanadium	600	10,000	NA	NA	NA	NA	NA	NA	NA	**68**	NA	NA	NA	NA	NA	NA	NA	NA	NA	*41.000*
	Zinc	2,500	10,000	NA	NA	NA	NA	NA	NA	NA	**3,100**	NA	NA	NA	NA	NA	NA	NA	**241**	NA	*1123.000*
Solids (%)	Solids	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**81**	**89**	

Table F-1
Accessible Soil Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

NA - Sample not analyzed for the listed analyte.

ND - Not detected.

NS - No standard available for this compound.

J - Estimated value; below quantitation limit.

R - Rejected during data review due to poor internal standard response.

U - Compound was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed the listed S-1 standards.

Values shown in **Bold** and with double line border exceed the listed UCLs.

+ - MCP standards for C9-C10 Aromatics used.

* - Background Concentration for natural soil.

** - Background Concentration for soil containing coal ash/wood ash.

EPH - Extractable Petroleum Hydrocarbons.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

VOCs - Volatile Organic Compounds.

VPH - Volatile Petroleum Hydrocarbons.

EPC - Exposure Point Concentration. EPCs were calculated using the arithmetic mean concentration for each analyte. For non-detect values (qualified with a "U"), half of the quantitation limit was used in the EPC calculation. For field duplicates, only the higher values of the pairs are used.

Table F-2
Potentially Accessible Soil Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Analysis	Analyte				Sample ID:	TRC-1			TRC-2	TRC-3		TRC-4			TRC-5		TRC-6	TRC-7	TRC-8	TRC-9	TRC-11	MW5-0608	MW6-1012		EPC
					Depth (feet):	5-6	3-10	10-12.5	3-6.5	3-6	5-6	3-10	3-10	10-12	3-6.5	5.5-6.5	5.5-6.5	6-8	3-12	3-6	7-11	6-8	10-12	10-12	
					Date sampled:	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/5/2006	1/24/2007	1/24/2007	1/24/2007	
		S-2/GW-3	UCLs	*	**								Field Dup											Field Dup	
EPH																									
(mg/kg)	C19 - C36 Aliphatics	5,000	20,000	NS	NS	85 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*42.500*
	C11 - C22 Aromatics	2000	10,000	NS	NS	85 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*42.500*
PAH																									
(mg/kg)	Fluorene	2,000	10,000	1	2	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**0.50**	0.37 U	0.37 U	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.241*
	Phenanthrene	100	10,000	3	20	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**6.6**	0.37 U	0.37 U	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.749*
	Anthracene	2,500	10,000	1	4	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**1.5**	0.37 U	0.37 U	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.324*
	Fluoranthene	3,000	10,000	4	10	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**8.9**	0.37 U	**0.40**	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.959*
	Pyrene	3,000	10,000	4	20	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**9.3**	0.37 U	**0.75**	NA	0.39 U	0.46 U	0.38 U	0.37 U	*1.021*
	Benzo(a)anthracene	40	3,000	2	9	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**4.0**	0.37 U	0.37 U	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.532*
	Chrysene	10	400	2	7	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**4.2**	0.37 U	0.37 U	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.549*
	Benzo(b)fluoranthene	40	3,000	2	8	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**4.2**	0.37 U	**0.51**	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.576*
	Benzo(k)fluoranthene	400	10,000	1	4	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**3.4**	0.37 U	R	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.510*
	Benzo(a)pyrene	4	300	2	7	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**3.8**	0.37 U	R	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.546*
	Indeno(1,2,3-cd)pyrene	40	3,000	1	3	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**1.0**	0.37 U	R	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.291*
	Dibenzo(a,h)anthracene	4	300	0.5	1	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	0.41 U	0.37 U	R	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.219*
	Benzo(ghi)perylene	2,500	10,000	1	3	0.85 U	NA	0.39 U	NA	NA	0.37 U	0.39 U	NA	0.43 U	NA	0.38 U	**0.81**	0.37 U	R	NA	0.39 U	0.46 U	0.38 U	0.37 U	*0.274*
PCBs																									
(mg/kg)	Aroclor-1254	2	100	NS	NS	NA	0.091 U	NA	NA	NA	NA	0.078 U	0.082 U	NA	NA	NA	NA	NA	0.074 U	NA	NA	NA	NA	NA	*0.041*
Metals																									
(mg/kg)	Antimony	30	300	1	7	NA	NA	0.29 U	NA	NA	NA	0.28 U	NA	0.29 U	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	NA	*0.141*
	Barium	3,000	10,000	50	50	NA	NA	**17**	NA	NA	NA	**9.5**	NA	**340**	NA	NA	NA	NA	**84**	NA	NA	NA	NA	NA	*112.625*
	Beryllium	0.8	30	0.4	0.9	NA	NA	**0.16**	NA	NA	NA	**0.10**	NA	**0.24**	NA	NA	NA	NA	**0.21**	NA	NA	NA	NA	NA	*0.177*
	Cadmium	30	300	2	3	NA	NA	0.2 U	NA	NA	NA	0.21 U	NA	0.26 U	NA	NA	NA	NA	**0.70**	NA	NA	NA	0.36 U	0.40 U	*0.247*
	Chromium	200	2,000	30	40	NA	NA	**6.9**	NA	NA	NA	**5.0**	NA	**83**	NA	NA	NA	NA	**12**	NA	NA	NA	**29.3**	**28.4**	*27.240*
	Lead	300	3,000	100	600	NA	**4.6**	**5.0**	**11**	**10**	NA	**8.0**	NA	**3.3**	**200**	NA	NA	**3.8**	**280**	**29**	**4.5**	**15.5**	0.36 U	0.40 U	*44.223*
	Mercury	30	300	0.3	1	NA	NA	0.11 U	NA	NA	NA	0.10 U	NA	0.11 U	NA	NA	NA	NA	0.11 U	NA	NA	NA	NA	NA	*0.054*
	Nickel	700	7,000	20	30	NA	NA	**4.4**	NA	NA	NA	**4.3**	NA	**32**	NA	NA	NA	NA	**10**	NA	NA	NA	**16.3**	**15.2**	*13.400*
	Vanadium	1000	10,000	30	30	NA	NA	**8.8**	NA	NA	NA	**7.2**	NA	**70**	NA	NA	NA	NA	**11**	NA	NA	NA	NA	NA	*24.250*
	Zinc	3,000	10,000	100	300	NA	NA	**15**	NA	NA	NA	**15**	NA	**64**	NA	NA	NA	NA	**550**	NA	NA	NA	**29.7**	**28.4**	*134.740*
Solids																									
(%)	Solids	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**72**	**87**	**88**	

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

NA - Sample not analyzed for the listed analyte.

NS - No standard available for this compound.

U - Compound was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceedthe listed S-2 standards.

* - Background Concentration for natural soil.

** - Background Concentration for soil containing coal ash/wood ash.

EPH - Extractable Petroleum Hydrocarbons.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

EPC - Exposure Point Concentration. EPCs were calculated using the arithmetic mean concentration for each analyte. For non-detect values (qualified with a "U"), half of the quantitation limit was used in the EPC calculation. For field duplicates, only the higher values of the pairs are used.

Table F-3
Accessible Soil Hot Spot Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Analysis	Analyte				Sample ID: Depth (feet): Date sampled:	TRC-4 0-3 4/5/2006
		S-1/GW-3	UCLs	*	**	
Metals (mg/kg)	Lead	300	3,000	100	600	**29,000**

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed the listed UCLs.

* - Background Concentration for natural soil.

** - Background Concentration for soil containing coal ash/wood ash.

Table F-4
Potentially Accessible Soil Hot Spot Exposure Point Concentration
246 River Road
New Bedford, Massachusetts

Analysis	Analyte					Sample ID: Depth (feet): Date sampled:	TRC-6 3-6.5 4/5/2006
		S-2/GW-3	UCLs	*	**		
Metals (mg/kg)	Lead	300	3,000	100	600		**4,800**

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the UCLs

* - Background Concentration for natural soil.

** - Background Concentration for soil containing coal ash/wood ash.

APPENDIX G

TIER CLASSIFICATION, NUMERICAL RANKING SYSTEM (NRS) SCORESHEET, AND TIER II COMPLIANCE HISTORY TRANSMITTAL FORMS (BWSC-107, BWSC-107A AND BWSC-107B)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107

TIER CLASSIFICATION TRANSMITTAL FORM

Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number
4 - 17604

A. DISPOSAL SITE LOCATION:

1. Disposal Site Name: RELIABLE TRUSS FMR

2. Street Address: 246 RIVER RD

3. City/Town: NEW BEDFORD 4. ZIP Code: 02745

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

☐ 1. Submit a new **Tier Classification Submittal for a Tier I Site**, including a **Numerical Ranking Scoresheet** (BWSC107A) (check one) A Tier I Permit Application must also be submitted.

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC

☑ 2. Submit a new **Tier Classification Submittal for a Tier II Site**, including the **Numerical Ranking Scoresheet** (BWSC107A) and the **Tier II Compliance History** (BWSC107B)

☐ 3. Submit a **Phase I Completion Statement** as per 310 CMR 40.0480

If previously submitted, provide date _____ mm/dd/yyyy

☐ 4. Submit a **Phase II Scope of Work** as per 310 CMR 40.0834

If previously submitted, provide date _____ mm/dd/yyyy

☐ 5. Submit a **Phase II Conceptual Scope of Work supporting a Tier Classification Submittal**

☐ 6. Submit a **Tier II Extension Submittal** for Response Actions at a Tier II Site including the **Tier II Compliance History** (BWSC107B)

☐ 7. Submit a **Tier II Transfer Submittal** for a change in person(s) undertaking Response Actions at a Tier II Site including the **Tier II Compliance History** (BWSC107B) and the **Tier II Transferor Certification** (BWSC107C)

Proposed effective date of transfer : _____
mm/dd/yyyy

☐ 8. Submit a **Revised Tier Classification Submittal,** including a **Numerical Ranking Scoresheet** (BWSC107A) A Major Permit Modification may also need to be submitted.

If this revised submittal is re-classifying the site check the new classification.

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☐ d. Tier II

☐ 9. Submit a **Notice that an additional Release Tracking Number(s) is (are) being linked to this Tier Classified Site** (Primary RTN). Future response actions addressing the Release or Threat of Release notification condition associated with additional Release Tracking Numbers (RTNs) will be conducted as part of the Response Actions planned or ongoing at the Primary Site listed above. For a previously Tier Classified Primary Site, if there is a reasonable likelihood that the addition of the new secondary RTN(s) would change the classification of the site, a **Revised Tier Classification Submittal** must also be made.

Provide Release Tracking Number(s): a. ☐ - ☐ b. ☐ - ☐

All future Response Actions must occur according to the deadlines applicable to the Primary RTN. Use only the Primary RTN when making future submittals for this site unless specifically relating to response actions started before the linking occurred.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107

Release Tracking Number
4 - 17604

TIER CLASSIFICATION TRANSMITTAL FORM
Pursuant to 310 CMR 40.0500 (Subpart E)

C. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> *if Section B of this form indicates that a **Tier I or Tier II Classification Submittal** including the **Numerical Ranking System Scoresheet** is being submitted*, this Tier Classification Submittal has been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Phase I Completion Statement** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Phase II Scope of Work** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Tier II Extension Submittal** or a **Tier II Transfer Submittal** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

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

1. LSP #: 1488

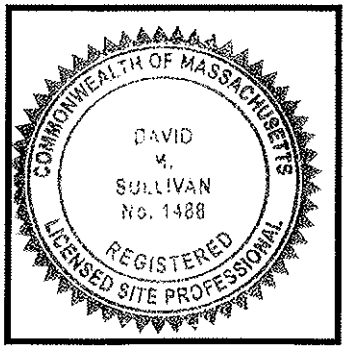
2. First Name: DAVID M 3. Last Name: SULLIVAN

4. Telephone: (978) 656-3565 5. Ext.: 6. FAX:

7. Signature:

8. Date: 5/18/2007
mm/dd/yyyy

9. LSP Stamp:



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107

TIER CLASSIFICATION TRANSMITTAL FORM
Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number
4 - 17604

D. PERSON MAKING SUBMITTAL:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: NEW BEDFORD ~~DPW~~

3. Contact First Name: SCOTT 4. Last Name: ALFONSE

5. Street: 133 WILLIAM ST 6. Title: Director of Env. Stewardship

7. City/Town: NEW BEDFORD 8. State: MA 9. ZIP Code: 02740-0000

10. Telephone: (508) 979-1527 11. Ext.: 12. FAX:

E. RELATIONSHIP OF PERSON MAKING SUBMITTAL TO DISPOSAL SITE:

☑ 1. RP or PRP ☑ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify:

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

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

☐ 4. Any Other Person Making Submittal Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. 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.

☑ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.

☑ 3. Check here to certify that a Legal Notice of a Tier Classification or Re-classification Submittal has been or will be made according to 310 CMR 40.1403, and a copy of the notice sent to DEP, the Chief Municipal Officer and the Local Board of Health.

☐ 4. For a Tier II Extension Submittal, check here to certify that a statement summarizing why a Permanent or Temporary Solution has not been achieved at the Disposal Site is attached.

☐ 5. For a Tier II Transfer Submittal, check here to certify that a statement summarizing the reasons for the proposed change in person(s) undertaking the Response Actions is attached. All Response Actions must be completed by the deadline applicable to the person who first filed either a Tier Classification Submittal for the Disposal Site or received a Waiver of Approvals.

☐ 6. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.

☑ 7. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107

Release Tracking Number
4 - 17604

TIER CLASSIFICATION TRANSMITTAL FORM
Pursuant to 310 CMR 40.0500 (Subpart E)

G. CERTIFICATION OF PERSON MAKING SUBMITTAL:

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

If submitting a Tier II Classification, Extension or Transfer, I also attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the/those Licensed Site Professional(s) employed or engaged to render Professional Services for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made learn(s) that it/they is/are unable to proceed with the necessary response actions.

2. By: Scott Alfonse — Signature

3. Title: Director of Env. Stewardship

4. For: NEW BEDFORD ~~DPW~~ (Name of person or entity recorded in Section D)

5. Date: 5-21-07 mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY):

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107A

NUMERICAL RANKING SYSTEM (NRS) SCORESHEET

Pursuant to 310 CMR 40.1511 (Subpart O)

Release Tracking Number
4 - 17604

A. NRS SCORESHEET SUMMARY SECTION:

1. Classification Submittal: (check one) ☑ a. Initial NRS Score ☐ b. Revised NRS Score

2. Disposal Site Score:

II	III	IV	V	VI	Total
120	95	15	120	-40	310

3. Disposal Site Classification: (check one)

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☑ d. Tier II

B. DISPOSAL SITE INFORMATION (NRS SECTION I):

1. UTM Coordinates: a. UTM N: 4503309 b. UTM E: 337987

2. Check which, if any, of the Tier I inclusionary criteria are met by the Disposal Site, pursuant to 310 CMR 40.0520(2):

☐ a. Groundwater is located within an Interim Wellhead Protection Area or a Zone II, and there is evidence of groundwater contamination by an Oil or Hazardous Material at the time of Tier Classification at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360.

☐ b. An Imminent Hazard is present at the time of Tier Classification.

C. EXPOSURE PATHWAYS (NRS SECTION II):

1. Exposure Pathways, and Oil and Hazardous Material (OHM) Sources:

For A. through D., score according to 310 CMR 40.1512 - Exposure Pathway Designation Criteria and NRS Table II.
For E., score using NRS Table II.E.

	Score
A. Soil (includes sediment)	100
B. Groundwater	20
C. Surface Water (includes wetlands)	0
D. Air	0
E. Number of OHM Sources	0
Total NRS Section II Score (15 - 700)	120

2. Was Section G (NRS Section VI) used to amend the score for this Section of the NRS? ☑ a. Yes ☐ b. No

3. Summary Rationale for Exposure Pathway Values, A. through D., and Phase I Report References:

Soil: OHM identified at concentrations >RCs. Site is fenced with locked gate along western (street side) and some of southern side; not along river

GW: Lead identified at concentrations >RCs in unfiltered water. Dissolved lead identified <RCs

~~Surface waters: OHM not anticipated to be identified in surface waters due to the very low solubility of contaminants identified at Site~~

Air: OHM not anticipated to be identified in air due to the very low volatility of contaminants identified at the Site.

D. DISPOSAL SITE CHARACTERISTICS (NRS SECTION III):

1. Oil and Hazardous Material (OHM) Toxicity Score (NRS Section III.A.):

a. List the Four Highest OHM Toxicity Scores from NRS Table III.A.:

OHM Scored	Concentration and Media	Toxicity Score (1 - 80)
Lead	29,000 mg/kg (soil)	50
Zinc	3,100 mg/kg (soil)	20
Cadmium	11 mg/kg (soil)	20
C11-C22 Aromatic hydrocarbons	200 mg/kg (soil)	15

b. Score using NRS Worksheet III.A.1. to determine the OHM Toxicity Score for OHM not listed in NRS Table III.A.:

OHM	Human Health-based Toxicity Value	Concentration (Soil - ug/g)	Concentration (Water - ug/l)	Toxicity Score
				0
				0
				0
				0

c. Use the Highest OHM Toxicity Score from either NRS Table III.A. or Worksheet III.A.1.:

OHM Scored	Toxicity Score
Lead	50

2. Multiple OHMs (NRS Section III.B.):

Was the Toxicity Score of more than one OHM greater than or equal to 30? ☐ a. Yes (30) ☑ b. No (0)

3. OHM Mobility and Persistence (NRS Section III.C.):

Score according to 310 CMR 40.1514 - OHM Mobility and Persistence

a. OHM Scored	b. Score (0 - 50)
Lead	25

4. Disposal Site Hydrogeology (NRS Section III.D.):

Score according to 310 CMR 40.1515 - Soil Permeability, and NRS Table III.D.

Site Hydrogeology Score (2-20)
20

5. Total NRS Section III Score:

A.	B.	C.	D.	Total for Section III (3 - 180)
50	0	25	20	95

6. Was Section G (NRS Section VI) used to amend the score for this Section of the NRS? ☐ a. Yes ☑ b. No

E. HUMAN POPULATION AND LAND USES (NRS SECTION IV):

1. Human Population (NRS Section IV.A.):

Score using NRS Table IV.A.

Residential Population within 1/2 Mile	Institutions within 500 Feet	On-site Workers	Population Score (0 - 40)
15	0	0	15

2. Aquifers (NRS Section IV.B.):

a. Sole Source Aquifer: ☐ i. Yes (25) ii. Name: _____ ☑ iii. No (0)

b. Potentially Productive Aquifer: ☐ i. Medium or High (15) ☑ ii. No (0)

3. Water Use (NRS Section IV.C.):

Score using NRS Table IV.C.

Proximity to Public Drinking Water Source	Persons Served by Public Drinking Water Supply	Private Water Supplies within 500 Feet	Alternate Public Water Supply Available	Water Use Score (0 -125)
0	0	0	0	0

4. Total NRS Section IV Score:

A.	B.	C.	Total for Section IV (0 - 205)
15	0	0	15

5. Was Section G (NRS Section VI) used to amend the score for this Section of the NRS? ☐ a. Yes ☑ b. No

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107A

NUMERICAL RANKING SYSTEM (NRS) SCORESHEET
Pursuant to 310 CMR 40.1511 (Subpart O)

Release Tracking Number
4 - 17604

F. ECOLOGICAL POPULATION (NRS SECTION V):

1. Environmental Resource Areas (NRS Section V.A.): Score using NRS Table V.A.

Area of Critical Environmental Concern	Species of Special Concern, Threatened or Endangered Species Habitat	Wetlands, Certified Vernal Pool, or Outstanding Resource Water	Fish Habitat	Protected Open Space	Environmental Resource Area Score (0 - 150)
0	0	30	30	30	90

2. Environmental Toxicity Score (NRS Section V.B.):

Score only if Environmental Resource Area Score is greater than or equal to 30.

a. List the Three Highest Environmental Toxicity Scores from NRS Table V.B.:

OHM Scored	Concentration and Media	Toxicity Score (0 - 35)
Lead	29,000 mg/kg (soil)	30
Zinc	3,100 mg/kg (soil)	20
C11-C22 Aromatic hydrocarbons	200 mg/kg (soil)	20

b. Score using NRS Worksheet V.B.1. to determine the Environmental Toxicity Score for OHM not listed in NRS Table V.B. See 310 CMR 40.1516 for Environmental Toxicity Values for each OHM.

OHM	Environmental Toxicity Value	Concentration (Soil - ug/g)	Concentration (Water - ug/l)	Environmental Toxicity Score
Cadmium	40	11.0000		20
				0
				0

c. Use the Highest Environmental Toxicity Score from either NRS Table V.B. or from Worksheet V.B.1.:

OHM Scored	Toxicity Score
Lead	30

3. Total NRS Section V Score:

A.	B.	Total for Section V (0 - 185)
90	30	120

4. Was Section G (NRS Section VI) used to amend the score for this Section of the NRS? ☐ a. Yes ☑ b. No

G. MITIGATING DISPOSAL SITE -SPECIFIC CONDITIONS (NRS SECTION VI):

1. Disposal site-specific conditions that warrant amending the site score. Changes directly related to NRS Sections or Subsection scores may not reduce the score more than the relevant subsection value assigned for the disposal site in that subsection. Section VI must reference specific pages of the Phase I. Section VI may not exceed plus or minus 50 points and may be scored only in 5-point increments.

Section IIA: (-30pts): A fence surrounds the western (street side) and a portion of the southern property boundary with a locked gate to restrict access. The site boundary along the Acushnet River is not fenced but there is no evidence of repeated access.

Section IIB: (-10pts): Total lead was identified at concentrations on Site in groundwater >RC, but filtered (dissolved) lead was identified below RC.

☐ 2. Check here if additional pages are provided in an attachment.

3. Disposal Site Amendment (Not to exceed plus or minus 50 points):

Total Score Section VI
-40

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107B

Release Tracking Number
4 - 17604

TIER II COMPLIANCE HISTORY

Pursuant to 310 CMR 40.0540 (Subpart E)

A. DISPOSAL SITE COMPLIANCE HISTORY SUMMARY:

☐ 1. Check here if a Tier II Compliance History of the person listed in BWSC107, Section D, was previously submitted, and there has been no change in that person's compliance history. If this box is checked, this section does not have to be completed.

2. List all permits or licenses that have been issued by the Department that are relevant to this Disposal Site:

Program	Permit Number	Permit Category	Facility ID
a. Air Quality			
b. Hazardous Waste (M.G.L. c. 21C)			
c. Solid Waste			
d. Industrial Wastewater Management			
e. Water Supply			
f. Water Pollution Control/Surface Water			
g. Water Pollution Control/Groundwater			
h. Water Pollution Control/Sewer Connection			
i. Wetland & Waterways			

3. List all other Federal, state or local permits, licenses, certifications, registrations, variances, or approvals that are relevant to this Disposal Site:

Issuing Authority or Program, or Documentation Type	Identification Number	Date Issued mm/dd/yyyy

☑ 4. Check here to certify that, if needed, a statement further describing the Compliance History of this Disposal Site is attached.

This statement must describe the compliance history of the person or entity named in BWSC107, Section D with the following: (1) DEP regulations; and (2) other laws for the protection of health, safety, public welfare and the environment administered or enforced by any other government agency. Such a statement should identify information such as: (1) actions relevant to the Disposal Site taken by the Department to enforce its requirements including, but not limited to, a Notice of Noncompliance (NON), Notice of Intent to Assess Civil Administrative Penalty (PAN), Notice of Intent to Take Response Action (NORA), and an administrative enforcement order; (2) administrative consent orders; (3) judicial consent judgements; (4) similar administrative actions taken by other Federal, state or local agencies; (5) civil or criminal actions relevant to the Disposal Site brought on behalf of the DEP or other Federal, state, or local agencies; and (6) any additional relevant information. For each action identified, provide the following information: (1) name of the issuing authority, type of action, identification number and date issued; (2) description of noncompliance cited; (3) current status of the matter; and (4) final disposition, if any.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE
20 RIVERSIDE DRIVE, LAKEVILLE, MA 02347 508-946-2700

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

ARLEEN O'DONNELL
Commissioner

April 24, 2007

Mr. Scott Alphonse
City of New Bedford
868 Pleasant Street
New Bedford, Massachusetts 02740

RE: NEW BEDFORD- BWSC
RTN: 4-17604
246 River Road
NON-SE-07-3P-019

NOTICE OF NONCOMPLIANCE

THIS IS AN IMPORTANT NOTICE. FAILURE TO TAKE ADEQUATE ACTION IN RESPONSE TO THIS NOTICE COULD RESULT IN SERIOUS LEGAL CONSEQUENCES.

Dear Mr. Alphonse:

The Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup ("MassDEP"), is tasked with ensuring the permanent cleanup of oil and hazardous material releases pursuant to Massachusetts General Law Chapter 21E ("Chapter 21E"). The law is implemented through regulations known as the Massachusetts Contingency Plan, 310 CMR 40.0000 et seq. (the "MCP").

Through the MCP, MassDEP is currently regulating a release of hazardous material that has occurred at 246 River Road, New Bedford, Massachusetts. MassDEP was first notified of the release on January 27, 2003.

MassDEP's records indicate that you (as used in this Notice, "you" refers to City of New Bedford) are a Potentially Responsible Party ("PRP") for this release.

This Notice is provided to inform you that you are not in compliance with the MCP. MassDEP has no record of your completing the response actions required by the MCP to address this release.

Attachment A of this Notice is a Noncompliance Summary sheet that outlines the provisions of the MCP that you have not complied with. Contained within the Noncompliance Summary are the necessary action(s) you must complete to return to compliance. Additionally, there is a prescribed deadline for your completion of the action(s).

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD Service - 1-800-298-2207.

DEP on the World Wide Web: http://www.mass.gov/dep
Printed on Recycled Paper

MassDEP may assess a Civil Administrative Penalty potentially in excess of several thousand dollars if you continue to be in noncompliance with the violation(s) cited herein.

Notwithstanding this Notice of Noncompliance ("NON"), MassDEP reserves the right to exercise the full extent of its legal authority in order to obtain full compliance with all applicable requirements, including, but not limited to, criminal prosecution, civil action including court-imposed civil penalties, or administrative penalties assessed by MassDEP.

Finally, Attachment 2 of this Notice is a fact sheet containing supplemental information regarding this NON.

If you have any questions regarding this matter, or if you would like to discuss compliance with this Notice, please contact Courtland Ridings, at the letterhead address or by telephone at 508-946-2722. All future communications regarding this matter must reference Release Tracking Number 4-17604.

Very truly yours,

Gerard M. R. Martin, Chief
Site Management & Enforcement Section

M/CJR/re
4-17604.non.doc

Attachments: Attachment 1: Noncompliance Summary Sheet
Attachment 2: Supplemental Information Regarding this Notice of Noncompliance

CERTIFIED MAIL #7006 2760 0001 5208 7944

fc: Office of the Mayor
Health Dept.

ec: DEP-SERO
Attn: Deneen Simpson, REO
Attn: Data Entry

cc: Regional Enforcement Office

ATTACHMENT 1

NOTICE OF NONCOMPLIANCE
NONCOMPLIANCE SUMMARY

ENTITY/POTENTIALLY RESPONSIBLE PARTY IN NONCOMPLIANCE:

City of New Bedford
868 Pleasant Street
New Bedford, Massachusetts 02740

LOCATION WHERE NONCOMPLIANCE OCCURRED OR WAS OBSERVED:

4-17604
246 River Road
New Bedford

DATE(S) WHEN NONCOMPLIANCE OCCURRED OR WAS OBSERVED:

January 27, 2004

DESCRIPTION OF ACTIVITY OR CONDITION RESULTING IN NONCOMPLIANCE:

1. You have not submitted a Response Action Outcome (RAO) Statement, Tier Classification Submittal or Downgradient Property Status Submittal to MassDEP. One of the above referenced documents is required to be submitted to MassDEP within 1 year of notification that a release of oil and/or hazardous material has occurred, as is required by 310 CMR 40.0501(3).

DESCRIPTION OF REQUIREMENT NOT COMPLIED WITH:

1. Pursuant to 310 CMR 40.0501(3), except where a site has filed a Response Action Outcome (RAO) or a Downgradient Property Status Submittal, all sites for which MassDEP receives notification of a release or threat of release of oil and/or hazardous material pursuant to 310 CMR 40.0300 on or after October 1, 1993, shall be classified as either a Tier I or Tier II disposal site in accordance with 310 CMR 40.0500. A Tier Classification submittal and, if applicable, a Tier I Permit application, shall be submitted to MassDEP within one year of the earliest date computed in accordance with 310 CMR 40.0404(3).

DESCRIPTION AND DEADLINES OF ACTIONS TO BE TAKEN:

To avoid imposition of a Civil Administrative Penalty potentially in excess of several thousand dollars for violations of the MCP, you must complete the following action(s) within thirty (30) days of your receipt of this NON:

1. Submit to MassDEP either a Response Action Outcome Statement, Downgradient Property Status Statement, or a Tier Classification with, if necessary, a completed Tier I Initial Permit Application.

   All items must be prepared in full accordance with the MCP. Notwithstanding this NON, MassDEP reserves the right to exercise the full extent of its legal authority to obtain full compliance with all applicable requirements, including but not limited to, criminal prosecution, civil action including court-imposed civil penalties, and Civil Administrative Penalties issued by MassDEP.

applicable requirements, including but not limited to, criminal prosecution, civil action including court-imposed civil penalties, and Civil Administrative Penalties issued by MassDEP.

ATTACHMENT 2:
SUPPLEMENTAL INFORMATION REGARDING THIS NOTICE OF NONCOMPLIANCE

This attachment further explains why this Notice of Noncompliance (NON) has been issued to you.

Why was I issued this NON?

MassDEP's records indicate that you have not submitted one or more of the documents listed in the attached NON. This NON was issued to inform you of this fact and offer you an opportunity to come back into compliance by submitting the missing information to MassDEP by the deadlines specified in the NON. You are listed in MassDEP's records as the person who is responsible for cleaning up the release cited in the attached NON. For example, at the time you or another party notified MassDEP that the release occurred, you either informed MassDEP that you accepted responsibility for the cleanup or you were sent a "Notice of Responsibility" (NOR) by MassDEP informing you that we found you responsible for the release. In either case, MassDEP has reason to believe that you are an owner, operator, generator, transporter, disposer, or person who otherwise caused the release or threat of release of oil and/or hazardous materials cited in the attached NON. This means that, under Section 5 of M.G.L. Chapter 21E, you are a *Potentially Responsible Party* (PRP) and liable for response action costs associated with the release. As a PRP, you are required to conduct and complete certain response actions outlined in the MCP to clean up the release of oil and/or hazardous materials expeditiously.

What happens if I fail to comply with or respond to the NON?

You have 30 days from the date you receive the NON to comply. If you fail to comply, you will be assessed a penalty by MassDEP.

Your total penalty exposure can be considerable. For example, penalties can be assessed for **each day** you remain in noncompliance. Note that MassDEP is allowed by law to back calculate daily penalties to begin on the date you **received** the NON. **You can be penalized thousands of dollars should you fail to comply with or respond to the NON by the 30-day deadline.** Please refer to the Civil Administrative Penalty Statute, Chapter 21A, Section 16 and 310 CMR 5.00, the Civil Administrative Penalty Regulations, for complete details on the Administrative Penalty rules.

When the cleanup contractor finished the work in the field, I thought my dealings with MassDEP were finished. What more do I have to do?

This is a common question asked when a NON is received. PRPs often think their dealings with MassDEP are over when, for example, the fieldwork is completed by a cleanup contractor. Examples of this type of fieldwork include cleaning up a spill from a saddle tank leak on a roadway, or removing contaminated soil from a tank grave during a tank replacement or oil-contaminated debris from a storage tank after a fire. The fieldwork may be complete, but you still must submit some paperwork to MassDEP to prove that the cleanup was undertaken in compliance with the MCP.

The MCP includes deadlines by which you must complete response actions and submit information about those response actions to MassDEP. We track the progress of cleanups by checking to see if you are sending information about your cleanup progress to MassDEP on time. For example, if we do not receive

a Response Action Outcome Statement (RAO) before the 1-year anniversary date of the release, we must assume that the environmental cleanup has not been completed. For work to continue after the 1-year anniversary date of the release, the MCP requires that you submit a Tier I or Tier II Classification to MassDEP. If MassDEP does not receive either an RAO or Tier Classification by the 1-year anniversary date, we must assume that you are not implementing any cleanup at all. Without your cooperation in obtaining the cleanup information, MassDEP does not know whether serious environmental problems are being addressed. If work is not being performed, MassDEP must take action to ensure it happens. On the other hand, you may have finished the cleanup but neglected to forward the cleanup documentation required by the MCP.

What do I have to do to comply with the NON?

First, all response actions not directly managed by MassDEP staff must be overseen and directed by a "Licensed Site Professional" or LSP. LSPs are licensed by the Commonwealth, and their stamp and signature are required (together with yours) on all but one form you must submit to MassDEP. If you don't already have the forms and information required for you to comply with this NON, contact the consultant and/or cleanup contractor who worked on your cleanup. If you have not undertaken any cleanup work, contact an LSP immediately. A list of LSPs may be obtained by calling (617) 556-1091 or viewing the list on the Internet at http://www.state.ma.us/lsp.

The documents you must submit to MassDEP require LSP stamp and signature. For example, when a cleanup is completely finished, the MCP requires that you submit a document called a "Response Action Outcome" (RAO) to MassDEP in which you attest that you have completed the cleanup in accordance with the MCP. If you do not submit an RAO to MassDEP, the case remains open in MassDEP's files even if the fieldwork is completely finished. If you received this NON and you think the fieldwork is completely finished, call your cleanup contractor and LSP to find out how to have an RAO prepared and submitted to MassDEP.

If more environmental studies or cleanup are needed (for example, following the initial cleanup of a highway spill or soil contamination found during a tank replacement), you must submit forms describing your plans to continue the work in a timely manner. Again, these forms must contain an LSP's stamp and signature, and be co-signed by you. Depending on the circumstances, the possible submittals are an Immediate Response Action (IRA) Plan, IRA Status Report, IRA Completion Statement, and/or a Tier Classification Submittal and Tier I Permit Application.

You should also be aware that MassDEP does not become involved in or help mediate billing disputes with insurance companies, cleanup contractors, or LSPs. A common response to a NON is that an insurance company is slow on paying cleanup bills or will not cover various cleanup costs. We also hear that cleanup firms and LSPs will not send in RAOs and other forms because their clients have not paid their bills. These matters must be resolved privately by you. You ultimately must comply with the attached NON or be subject to significant penalties from MassDEP.

Dept. of Environmental Protection
20 Riverside Drive
Lakeville, MA 02347

7006 2760 0001 5208 7944

UNITED STATES POSTAGE
PITNEY BOWES
02 1A
0004359607 MAY 21 2007
$ 03.23⁰
MAILED FROM ZIP CODE 02347

Mr. Scott Alphonse
City of New Bedford
133 William Street
New Bedford, MA 02741

7006 2760 0001 5208 7944

APPENDIX H

PUBLIC NOTIFICATION LETTERS

Wannalancit Mills
650 Suffolk Street, Suite 200
Lowell, MA 01854

978.970.5600 PHONE
978.453.1995 FAX

www.TRCsolutions.com

TRC Reference Number: 108528-0070 (47284-0070)

June 15, 2007

Honorable Scott W. Lang
City Hall
133 William Street
New Bedford, MA 02740

RE: Notice of Phase II Comprehensive Site Assessment Report and Tier Classification – 246 River Road, New Bedford, Massachusetts MassDEP Site # 4-0017604.

Dear Mr. Lang:

On behalf of the City of New Bedford (the City), and pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of a Phase II Comprehensive Site Assessment Report and a Tier Classification for the 246 River Road property in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) on June 19, 2007. The site has been classified as a Tier II site under the MCP.

A legal notice of the Tier Classification of this site will be published in The New Bedford Standard Times on June 20, 2007. A copy of the legal notice is attached to this letter.

If you have any questions concerning this letter or would like a copy of the documents submitted, please contact David Sullivan at TRC at (978) 656-3565.

Sincerely,
TRC Environmental Corporation

David Sullivan, CHMM, LSP
Sr. Project Manager

Cc: Scott Alfonse, City of New Bedford Environmental Stewardship

L2007-255

Wannalancit Mills
650 Suffolk Street, Suite 200
Lowell, MA 01854

978.970.5600 PHONE
978.453.1995 FAX

www.TRCsolutions.com

TRC Reference Number: 108528-0070 (47284-0070)

June 15, 2007

Health Department
City Hall
133 William Street
New Bedford, MA 02740

RE: Notice of Phase II Comprehensive Site Assessment Report and Tier Classification – 246 River Road, New Bedford, Massachusetts MassDEP Site # 4-0017604.

To Whom It May Concern:

On behalf of the City of New Bedford (the City), and pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of a Phase II Comprehensive Site Assessment Report and a Tier Classification for the 246 River Road property in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) on June 19, 2007. The site has been classified as a Tier II site under the MCP.

A legal notice of the Tier Classification of this site will be published in The New Bedford Standard Times on June 20, 2007. A copy of the legal notice is attached to this letter.

If you have any questions concerning this letter or would like a copy of the documents submitted, please contact David Sullivan at TRC at (978) 656-3565.

Sincerely,
TRC Environmental Corporation

David Sullivan, CHMM, LSP
Sr. Project Manager

Cc: Scott Alfonse, City of New Bedford Environmental Stewardship

L2007-255

NOTICE OF PHASE II COMPREHENSIVE SITE ASSESSMENT REPORT AND TIER II CLASSIFICATION

FORMER RELIABLE TRUSS COMPANY
246 RIVER ROAD
MassDEP RELEASE TRACKING NUMBER 4-0014604

A release of oil and/or hazardous materials has occurred at this location, which is a disposal site as defined by M.G.L. c. 21E, § 2 and the Massachusetts Contingency Plan, 310 CMR 40.0000. To evaluate the release, a Phase II Comprehensive Site Assessment was performed pursuant to 310 CMR 40.0830. As a result of this investigation, the site has been classified as Tier II pursuant to 310 CMR 40.0500**.** A Tier II Classification Submittal was submitted to the Department of Environmental Protection (MassDEP) on June 19, 2007. To obtain more information on this disposal site, please contact David Sullivan, LSP, TRC Environmental Corporation, 650 Suffolk Street, Lowell, MA at (978) 656-3565.

The Tier II Classification Submittal and the disposal site file can be reviewed at MassDEP, Southeast Regional Office, 20 Riverside Drive, Lakeville, Massachusetts, 02347, (508) 946-2700. Additional public involvement opportunities are available under 310 CMR 40.1403(9) and 310 CMR 40.1404.