



## **IMMEDIATE RESPONSE ACTION COMPLETION REPORT AND IMMINENT HAZARD EVALUATION**

**Soccer Field Soil Removal  
Dr. Paul F. Walsh Memorial Field  
Parker and Hunter Streets  
New Bedford, Massachusetts  
Release Tracking Number 4-21823**

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*Prepared for:*

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**August 17, 2009**



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TRC Project Number: 115058

August 17, 2009

Massachusetts Department of Environmental Protection  
Southeast Regional Office  
20 Riverside Drive  
Lakeville, Massachusetts 02347

**RE: Immediate Response Action (IRA) Completion Report and Imminent Hazard  
Evaluation – Soccer Field Soil Removal**  
Dr. Paul F. Walsh Memorial Field  
Parker and Hunter Streets  
New Bedford, Massachusetts  
Release Tracking Number (RTN) 4-21823

To Whom It May Concern:

Consistent with the requirements of the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000), specifically 310 CMR 40.0427, attached please find an Immediate Response Action (IRA) Completion Report for the above-referenced IRA condition in New Bedford, Massachusetts.

If you have any questions concerning the IRA Completion Report or transmittal forms, please do not hesitate to contact me at 978-656-3565 or via e-mail at [dsullivan@trcsolutions.com](mailto:dsullivan@trcsolutions.com).

Sincerely,

David M. Sullivan, LSP, CHMM  
Senior Project Manager

Attachment

cc. D. Fredette, S. Alfonse; Department of Environmental Stewardship  
M. Cote, G. Martin; MassDEP Southeast Regional Office

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**Immediate Response Action Completion Report  
and  
Imminent Hazard Evaluation**

**Soccer Field Soil Removal**

Dr. Paul F. Walsh Memorial Field  
Parker and Hunter Streets  
New Bedford, Massachusetts

Release Tracking Number 4-21823

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**August 17, 2009**

TRC Environmental Corporation (TRC) is submitting this Immediate Response Action Completion Report (IRA Completion Report) to the Massachusetts Department of Environmental Protection (MassDEP) on behalf of the City of New Bedford (City). This IRA Completion Report addresses the risk reduction measures that have been completed by the City at the Dr. Paul F. Walsh Memorial Field (Walsh Field) property located adjacent to the intersection of Parker and Hunter Streets in New Bedford, Massachusetts, specifically relative to the Soccer Field (the "Site"). Release Tracking Number (RTN) 4-21823 has been assigned to the Site, and is related to an Imminent Hazard (IH) condition associated with the Soccer Field that triggered a 2-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0321(2) and 310 CMR 40.0311(7). The IH-related reporting condition is associated with the concentration, depth below surface, proximity to a school or residential dwelling, and accessibility of the soil samples containing lead at a concentration above a calculated IH evaluation threshold. The IH condition was reported to the MassDEP by TRC via telephone, in conjunction with the City, on March 4, 2009. MassDEP orally approved IRA assessment and removal activities at the Site, and assigned RTN 4-21823. The Site is part of the larger Parker Street Waste Site (PSWS) that is tracked by MassDEP under RTN 4-15685.

This IRA Completion Report is organized as follows: Section I (Background) briefly summarizes information on TRC's involvement with the Site and the circumstances associated with the detection of the release condition; Section II (IRA Completion Report) provides the information required for an IRA Completion Report under the MCP, specifically 310 CMR 40.0427; Section III (References) lists information sources relied upon in the preparation of this IRA Completion Report. In addition, Appendix A provides the Imminent Hazard Evaluation, Appendix B provides the soil sample laboratory analytical results, Appendix C provides the dust monitoring results, Appendix D contains copies of the Bill of Lading forms, Appendix E contains copies of notifications to the City of New Bedford Mayor and Board of Health, and Appendix F contains pertinent soil boring logs.

## I. BACKGROUND

### Introduction

In February 2006, soil sampling was conducted at Walsh Field in New Bedford, Massachusetts (Figure 1) by BETA Group, Incorporated (BETA) of Norwood, Massachusetts as part of an investigation of the PSWS, which includes Walsh Field (BETA, 2006). The results of the sampling were examined by TRC as part of an ongoing environmental investigation of the PSWS. The WFE-5 sampling location was identified as one of two areas requiring further delineation sampling to support remedial planning in the Soccer Field area. Soil sample results for BETA soil boring WFE-5 (1.75 to 2.5 feet below ground surface [bgs]) indicated cadmium and lead at concentrations in excess of applicable S-1 Method 1 soil cleanup standards.

The “could pose” IH condition was discovered during the additional investigation to delineate the extent of previously detected concentrations of lead, cadmium and polycyclic aromatic hydrocarbons (PAHs) in soil at the Soccer Field area and to determine the extent of potential soil removal necessary to achieve a condition of no significant risk for the top three feet of soil within this area.

The contamination at WFE-5 and the rest of Walsh Field subsurface contamination is associated with historical landfilling activities. Boring logs indicate the presence of fill material containing ash, glass, and clinkers. The contaminated fill at Walsh Field is associated with the Parker Street Waste Site (PSWS) that is tracked under RTN 4-15685.

Soil samples (0-1 and 1-3 feet below grade) collected from the Site by TRC during this phase of investigation contained total lead at a concentration posing an IH under 310 CMR 40.0993(6). The IH-related release condition was reported to the MassDEP by TRC via telephone, in conjunction with representatives of the City, on March 4, 2009. MassDEP orally approved IRA assessment and removal activities and assigned RTN 4-21823. Follow-up work completed as part of the approved IRA activities included analysis of additional soil samples to delineate the extent of elevated lead concentrations in the soil, preparation of an IH evaluation and removal of lead contaminated soil. The IH evaluation concluded that an IH condition was present at the Site. The objectives of TRC’s IRA Plan (TRC, 2009a) were:

1. Collection of supplemental soil samples to delineate the extent of soils containing lead;
2. Preparation of an IH evaluation;
3. Removal of lead-contaminated surface soil to a depth of three (3) feet within the area defined by pre-excavation soil sampling as a risk reduction measure;
4. Replacement of the removed soil with contaminant-free stone dust and loam;
5. Ex-situ treatment of the excavated soil in order to facilitate reuse/disposal; and
6. Transportation of remediation waste to an appropriate disposal/recycling facility.

This IRA Completion Report documents soil excavation activities undertaken to remove the lead contaminated soil from the WFE-5 area of Walsh Field and the subsequent transport of the soil to the Crapo Hill Landfill in New Bedford, Massachusetts.

### Summary of Work

On February 23, 2009, TRC conducted soil sampling at the Soccer Field area of Walsh Field to delineate the extent of previously detected concentrations of lead, cadmium and PAHs in soil and to support remedial planning in this area. This work was conducted to address data gaps identified in the delineation of the PSWS.

TRC's environmental investigation consisted of direct push soil borings using a truck-mounted drill rig to sample soil and observe subsurface soil conditions. Drilling services and equipment were provided by New England Geotech, LLC (New England Geotech) of Jamestown, Rhode Island. TRC completed a total of eight (8) soil borings and collected a total of sixteen (16) soil samples (plus one laboratory duplicate) on February 23, 2009. Boring logs are included in Appendix F.

The protocol for the delineation sampling called for the collection of four "inner ring" soil samples (0-1 foot and 1-3 feet in depth) four feet away from the original WFE-5 sampling location at points to the north, east, south and west (designated "A" through "D", respectively; see Figure 2). The protocol further called for the collection of four additional "outer ring" samples eight feet from the original WFE-5 sampling location (designated "E" through "H") that would be authorized for analysis at the laboratory as needed to delineate the contamination. "Outer ring" samples were also collected from the 0-1 and 1-foot intervals also at points to the north, east, south and west. All samples were collected on February 23, 2009 and the "inner ring" samples were authorized for lead, cadmium and PAH analysis. The "outer ring" samples were held at the laboratory, pending the results of the "inner ring" sample analysis.

Cadmium and PAH concentrations in the four "inner ring" surface soil samples were below the natural background concentrations of chemicals in soil in Massachusetts established by MassDEP. Lead concentrations were below the MCP Method 1 S-1/GW-2 and S-1/GW-3 soil cleanup standards (300 mg/kg) at three of the four "inner ring" surface soil locations (WFE5-B through WFE5-D). However, at location WFE5-A, a concentration of 3,360 mg/kg was detected in the 0 to 1 foot interval. Due to the detection of lead at a concentration more than 10-fold the MCP Method 1 S-1 soil cleanup standard and in excess of the MCP Upper Concentration Limit (UCL) at the WFE-5A location, TRC was prompted to performed a preliminary IH analysis as a precaution. TRC determined that an IH condition was present using MassDEP risk characterization protocols. The IH condition was reported to MassDEP and the "outer ring" samples were immediately authorized for analysis to determine the extent of the elevated surficial lead.

Lead concentrations in 0-1 foot samples WFE5-E through WFE5-H, reported by the laboratory on March 6, 2009, were less than the MCP Method 1 S-1 soil cleanup standard of 300 mg/kg, with a maximum detected concentration of 220 mg/kg. Four additional locations were sampled

to the north of WFE5-E at two foot step-out intervals (WFE5-I through WFE5-L) on March 11, 2009, primarily to delineate lead in the 1 to 3 foot interval. Boring logs are included in Appendix F. The lead concentrations in the four 0-1 foot samples were also below MCP Method 1 S-1 soil cleanup standards, confirming that the extent of the surficial lead had been delineated. As noted in the IH evaluation for the Soccer Field area in Appendix A, the estimated cancer risk for the young child recreational user did not exceed the MCP risk limits for an IH of an excess lifetime cancer risk (ELCR) of 1E-05. However, the noncarcinogenic hazard quotient of 20 exceeded the MCP hazard index (HI) of 1 for lead. The IH was identified at the Soccer Field area primarily due to the exposure pathway of the ingestion of lead-containing surface soil.

### Summary of Analytical Results Indicating a Imminent Hazard

The WFE-5 sampling location had been identified as an area requiring further delineation sampling within the Soccer Field, based on prior analytical results. The laboratory analytical results for the soil samples collected to delineate documented contamination are summarized in Table 1. The laboratory reports containing the WFE-5 area soil sample analytical results are presented in Appendix B. One soil sample collected on February 23, 2009 at boring WFE-5A from 0-1 foot bgs contained lead at a concentration of 3,360 mg/kg, which prompted a preliminary IH evaluation and regulatory reporting. None of the additional samples analyzed following the observation of the high lead result at WFE-5A contained lead above the TRC calculated IH threshold. TRC's risk characterization determined that the removal of a rectangular area within the Soccer Field area, with approximate dimensions of 23.5 feet (north-south) by 15.1 feet (east-west) by 3 feet deep would be sufficient to address the IH condition and reduce risk. The lateral extent of the excavation area was defined by lead samples WFE-5B to the east, WFE-5G to the south, WFE-5H to the west and WFE-5L to the north (see Figure 3). TRC identified the excavation area to conservatively remove soil contaminated with lead in the vicinity of the IH condition.

## **II. IRA COMPLETION REPORT (310 CMR 40.0424)**

This IRA Completion Report is organized according to the minimum information needs set forth under 310 CMR 40.0427(4)(a) through (f) of the MCP.

### **(a) Description of Release, Threat of Release, Site Conditions, and Surrounding Receptors**

#### Description of Release/Threat of Release

The MCP RTN associated with the IRA at this Site is 4-21823 and is an IH-related release condition that was identified near BETA soil sample location WFE-5 in the Soccer Field area portion of the Walsh Field athletic complex. This release condition triggered a 2-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0321(2) and 310 CMR 40.0311(7). The IH-related release condition was reported to the MassDEP by TRC via telephone, in conjunction with the City, on March 4, 2009. MassDEP orally approved IRA assessment and removal activities and assigned RTN 4-21823.

The Site is located within the PSWS, which is tracked under RTN 4-15685, that includes several residential and municipal properties in the area including the New Bedford High School (NBHS) to the north of the Site. The IH-related reporting condition was discovered during additional investigation to delineate the extent of previously detected concentrations of lead, cadmium and PAHs in soil at the Soccer Field area and to determine the extent of potential soil removal necessary to achieve a condition of no significant risk for the top three feet of soil within this area. The WFE-5 sampling location had been identified as one of two areas requiring further delineation sampling within the soccer field area.

The contamination at WFE-5 and the rest of Walsh Field subsurface contamination is associated with historical landfilling activities. Boring logs included in Appendix F indicate the presence of fill material containing ash, glass, and clinkers. The contaminated fill at Walsh Field is associated with the PSWS tracked under RTN 4-15685.

### Site Conditions

The Soccer Field area, located in the northeastern corner of Walsh Field, is located to the southeast of the intersection of Parker and Hunter Streets in New Bedford, Massachusetts (see Figure 1). Topographically, the Site and the surrounding areas are flat.

### Surrounding Receptors

Walsh Field lies within 500 feet of residential dwellings and serves as the athletic field for the adjacent NBHS. The Soccer Field area is used for practices and games during the spring, summer, and fall soccer season. The Soccer Field area may also be used by other teams as a practice area during the spring and fall sport seasons (e.g., for field hockey practice). Walsh Field, which houses the soccer field and other athletic fields, is secured by a fence, limiting access only to those with permission to use or maintain the fields.

Groundwater categories at Walsh Field include actual or potential GW-2, depending upon proximity to occupied structures (groundwater is less than 15 feet below ground surface based on data from Walsh Field and from nearby locations), and GW-3, which applies to all groundwater throughout the Commonwealth of Massachusetts. However, groundwater impacts from contaminants associated with WFE-5, or Walsh Field in general, are not expected. For example, recent groundwater monitoring conducted at Walsh Field in March 2009, specifically at TRC monitoring well MW-WFE-5 which is collocated with soil boring WFE-5H (see Figure 3), did not exhibit contaminants above applicable MCP Reportable Concentrations (RCs) (see Appendix B). A monitoring well construction log for MW-WFE-5 is included in Appendix F.

Based on review of on-line MassDEP Priority Resource Map data available from Massachusetts Geographic Information System (MassGIS), the Site is not located within a Current or Potential Drinking Water Source Area (MassGIS, 2008).

Walsh Field is not located in a wetland resource area. No other documented sensitive ecological receptor areas (e.g., Areas of Critical Environmental Concern [ACECs]) are known to be located at or near the site.

**(b) Description of any Immediate Response Actions Undertaken to Date at the Site**

At the time of oral notification of the release condition on March 4, 2009, MassDEP approved the following response action as an IRA:

- Assessment and monitoring

Later on March 11, 2009, MassDEP provided oral approval for the following risk reduction measure:

- Soil excavation

***Imminent Hazard Analysis***

Initial assessment included advancement of eight soil borings (i.e., soil borings WFE-5A through WFE-5H) throughout the Site on February 23, 2009. This initial investigation was conducted as part of on-going assessment activities of the PSWS to delineate the extent of previously detected concentrations of lead, cadmium and PAHs in soil and to support remedial planning in this area. During this phase of work, one soil sample was found to contain lead at a concentration above a calculated IH evaluation threshold. Soil sample WFE5-A, collected from 0-1 foot bgs, contained a total lead concentration of 3,360 mg/kg. Lead concentrations were below the Method 1 S-1/GW-2 and S-1/GW-3 standards (300 mg/kg) at the remaining three “inner ring” surface soil locations (WFE5-B through WFE5-D).

Due to the detection of lead at a concentration more than 10-fold the MCP Method 1 S-1 soil cleanup standard and in excess of the MCP UCL at the WFE-5A location, TRC was prompted to performed a preliminary IH analysis as a precaution. TRC determined that an IH condition was present using MassDEP risk characterization protocols. The IH condition was reported and the “outer ring” samples (WFE-5E through WFE-5H) were immediately authorized for analysis to determine the extent of the elevated surficial lead.

Lead concentrations in 0-1 foot samples WFE5-E through WFE5-H, reported by the laboratory on March 6, 2009, were less than the Method 1 S-1 standard of 300 mg/kg, with a maximum detected concentration of 220 mg/kg. Four additional locations were sampled to the north of WFE5-E at two foot step-out intervals (WFE5-I through WFE5-L) on March 11, 2009, primarily to delineate lead in the 1 to 3 foot interval. However, lead concentrations in the four 0-1 foot samples were also below Method 1 S-1 standards, confirming that the extent of the surficial lead had been delineated. Figure 2 presents the sampling locations for the WFE-5 area and corresponding laboratory analytical results.

An IH evaluation, which is provided in Appendix A, was initiated within 14 days of obtaining knowledge of the IH condition. For the WFE-5 area, TRC's risk assessment specialist conducted the IH calculations using the maximum detected concentration (3,360 mg/kg) as the Exposure Point Concentration (EPC) for lead, and also used maximum detected concentrations as EPCs for other contaminants of potential concern such as cadmium and PAHs. TRC also used site-specific exposure assumptions that were more health-protective than used by MassDEP for a park visitor scenario, and default MassDEP toxicity criteria. TRC completed the IH analysis on March 16, 2009, satisfying the IH evaluation initiation timeline under the MCP. The risk assessment calculations indicated an IH existed at the Soccer Field at the time of reporting, but does not exist presently because of the risk reduction measures employed (soil excavation and removal).

### ***Soil Excavation and Removal***

Analytical results of soil samples collected in the vicinity of WFE-5A were used in the delineation of an approximate 23.5 foot by 15.1 foot area to be excavated and removed to a depth of three (3) feet (see Figure 3). The lateral extents of the soil excavation area were identified by sample locations evidencing concentrations of lead below the applicable MCP Method 1 S-1 soil cleanup standard. The locations of all TRC sampling points were surveyed by Land Planning, Incorporated of Hanson, Massachusetts (Land Planning). Land Planning field staked TRC's delineation sampling locations prior to excavation to guide soil removal.

Following receipt of verbal approval from MassDEP on March 11, 2009, D. W. White Construction, Incorporated of Acushnet, Massachusetts (DW White) excavated soils in the Soccer Field area that were determined to contain elevated lead concentrations on March 13, 2009. Approximately 41 cubic yards of excavated soils were loaded directly into roll-off containers lined with 10-mil polyethylene sheeting. All soils were excavated up to the staked excavation boundaries and down to 3 feet bgs. The dimensions of the excavation area were intended to be protective of potential soil exposure, consistent with the assumptions in TRC's IH evaluation (see Figure 3).

The excavated area was backfilled on March 13, 2009 using a contaminant-free source (stone dust). Approximately 2.5 vertical feet of stone dust was placed into the open excavation, followed by approximately 0.5 vertical feet of loam which was used to grade the area to the original surface elevation. Future grounds keeping activities are expected at the area to restore turf growth.

During IRA-related contaminated soil excavation and management activities, TRC conducted real-time field screening of dust levels using direct reading instruments that are designed to monitor air quality on a real-time basis at locations upwind and downwind of excavation and soil moving activities. The dust monitoring units were TSI Dustrak™ units with size-selective inlet for particles of 10 micrometers in diameter or less (PM<sub>10</sub>). The dust monitoring instruments were zeroed before use and at the end of the day. Data was logged at 60-second intervals and monitored periodically by field personnel during IRA-related excavation activities. Data was downloaded daily. The upwind sample was intended to provide a measurement of background ambient dust levels; however, this unit malfunctioned and did not record dust concentrations

throughout the day. There were no exceedances of TRC's prescribed action level of 150 ug/m<sup>3</sup> sustained for 15 minutes, during soil excavation and loading. The fugitive dust monitoring data associated with the WFE-5 area excavation and removal activities are presented in Appendix C.

### ***Waste Characterization Analysis***

A composite waste characterization soil sample (WFE-5W) was collected from the excavated soils, and submitted for laboratory analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total poly-chlorinated biphenyls (PCBs), PAHs, total petroleum hydrocarbons (TPH), and Resource and Conservation Recovery Act (RCRA) 8 metals. Additional volume was collected for Toxicity Characteristic Leaching Procedure (TCLP) metals analysis, contingent upon total metals results. All waste characterization analyses were conducted by Con-Test Analytical Laboratory of East Longmeadow, Massachusetts.

The three lined and covered roll-off containers containing the excavated soils were transported under a MassDEP Bill of Lading (BOL) to the Shawmut Avenue Transfer Station, owned by the City of New Bedford located at 1103 Shawmut Avenue, New Bedford, Massachusetts on March 13, 2009 for temporary storage consistent with 310 CMR 40.0034(4). A copy of the Bill of Lading is provided in Appendix D.

Soil sample WFE-5W exhibited a lead concentration of 655 mg/kg (Table 2). Since this concentration is greater than 20-times the allowable aqueous lead leachate level, the sample was analyzed for TCLP lead. Based on TCLP analysis, the extract from the soil contained a lead concentration of 8.04 mg/L (Table 3). This concentration exceeds the 5.0 mg/L concentration identified as the regulatory level for lead by MassDEP in 310 CMR 30.125: Table 1 (characteristic hazardous waste). As a result, the soil required lead stabilization treatment at the Shawmut Avenue Transfer Station in New Bedford, Massachusetts prior to final offsite management.

### ***IRA Status Report***

On July 10, 2009, TRC submitted an IRA Status Report to the MassDEP on behalf of the City in accordance with 310 CMR 40.0425 of the MCP. At that time IRA related activities were complete and no new Site information or data had been generated since submittal of the TRC's May 2009 IRA Plan. However, an IRA completion report could not be filed as the remediation waste had not been treated or disposed of offsite. The IRA Status Report served to outline the plans for management of the remediation waste that followed as detailed in the following sections (TRC, 2009b).

### ***Soil Stockpiling and Treatment***

On July 10, 2009 TRC oversaw the unloading and temporary stockpiling of the WFE-5 area soils. The temporary stockpiling was necessary to allow for proper application of the lead stabilization agent. Norman's Enterprises Construction Corporation (Norman's Enterprises) of New Bedford, Massachusetts was contracted by the City to conduct the transfer activities in preparation for soil stabilization treatment. Each of the three lined roll-off containers was

uncovered and sequentially dumped onto individually staged sections of 10-mil polyethylene sheeting. Care was taken to ensure that the polyethylene liner in each roll-off container was not compromised during the dumping activities. Each of the three stockpiles was securely covered with overlapped polyethylene sheeting and weighted to form a continuous waterproof barrier with no seams.

During the soil management activities on July 10, 2009, TRC conducted real-time field screening of dust levels using direct reading instruments consistent with previously described methods employed during soil excavation and removal activities. The upwind and downwind dust monitoring instruments (i.e., TSI Dustrak™) were zeroed before use and at the end of the day. Data was logged at 60-second intervals, monitored periodically by field personnel during soil management activities and the data was downloaded at the end of the day. There were no exceedances of TRC's prescribed action level of 150 ug/m<sup>3</sup> sustained for 15 minutes at the upwind unit during soil management activities. The maximum recorded reading from the upwind unit was 0.017 ug/m<sup>3</sup>. The downwind unit exhibited a single spike of 0.499 ug/m<sup>3</sup>, however this level was not sustained and represents the only occasion throughout fugitive dust monitoring that the 150 ug/m<sup>3</sup> level was momentarily exceeded. The fugitive dust monitoring data associated with the WFE-5 stockpiling activities are presented in Appendix C.

On July 13, 2009 TRC oversaw the stabilization treatment of the lead-contaminated soil from the WFE-5 area. As previously noted, due to the TCLP concentration in waste characterization sample WFE-5W exceeding the 5.0 mg/L regulatory level for lead, Triumvirate Environmental, Incorporated (Triumvirate) of Somerville, Massachusetts was procured by the City to treat the lead-containing soil with Free Flow Technologies® FF-200 chemical reagent that binds the lead to the soil, thereby inhibiting the leaching of lead from the soil. Triumvirate subcontracted Norman's Enterprises to conduct soil movement activities. The soil material from each of the three stockpiles was sequentially spread onto polyethylene sheeting. The soil material was spread in thin layers, progressively combining the three individual stockpiles into two larger stockpiles, while Triumvirate personnel manually applied the chemical reagent to the soil at the manufacturer recommended ratio and mix the soil and reagent in accordance with manufacturers' instructions. Please refer to TRC's July 2009 IRA Status Report for details on Triumvirate's working agreement for stabilization, transportation and disposal (TRC, 2009b). Following completion of the treatment process, the stockpiles were securely covered with overlapped polyethylene sheeting and weighted to form a continuous waterproof barrier with no seams.

During the soil treatment activities on July 13, 2009, TRC conducted real-time field screening of dust levels using direct reading instruments consistent with previously described methods employed during soil excavation, removal and management activities. The upwind and downwind dust monitoring instruments (i.e., TSI Dustrak™) were zeroed before use and at the end of the day. Data was logged at 60-second intervals, monitored periodically by field personnel during soil treatment activities and the data was downloaded at the end of the day. There were no exceedances of TRC's prescribed action level of 150 ug/m<sup>3</sup> sustained for 15 minutes at the upwind or downwind units during soil treatment activities. The maximum recorded readings from the upwind and downwind units were 0.125 and 0.187 ug/m<sup>3</sup>, respectively. The downwind unit exhibited a single spike of 0.187 ug/m<sup>3</sup>, however this level was not sustained and represents the only occasion throughout fugitive dust monitoring that the 150

ug/m<sup>3</sup> level was momentarily exceeded. The fugitive dust monitoring data associated with the WFE-5 treatment activities are presented in Appendix C.

Following completion of the treatment process, Triumvirate collected a composite sample of the stockpiled material for post-stabilization TCLP analysis. Sample “Stockpile Composite” was submitted to Alpha Analytical, Incorporated (Alpha) in Westborough, Massachusetts for TCLP lead analysis. The post-stabilization analytical data was received by Triumvirate on July 16, 2009 and indicated a TCLP concentration less than the 0.5 mg/L reporting limit (Table 3). The data package associated with the post-stabilization sampling is presented in Appendix B. The TCLP lead result indicated that the soil was no longer a characteristic hazardous waste and the soil could be immediately transported to an appropriately licensed landfill for reuse.

### ***Offsite Soil Management***

On July 20, 2009 TRC oversaw the loading and transportation of the stabilized WFE-5 area soils from the Shawmut Avenue Transfer Station to the Crapo Hill Landfill in New Bedford, Massachusetts. Triumvirate subcontracted Norman’s Enterprises to conduct the soil transfer and loading activities, while Triumvirate provided transportation services to the approved disposal facility. A Deere 410E backhoe was used to transfer the stockpiled soil into dual- or tri-axel trucks for offsite transportation and disposal. Following completion of the soil management activities, the backhoe was dry swept and loose soil material was consolidated with the soil for offsite disposal.

TRC conducted real-time field screening of dust levels using direct reading instruments, consistent with previously described methods, during the soil loading activities. The upwind and downwind dust monitoring instruments (i.e., TSI Dustrak™ ) were zeroed before use and at the end of the day. Data from the upwind unit was logged at 60-second intervals. Due to an oversight during program, the downwind unit was logged at 300-second intervals. Both units were monitored periodically by field personnel during soil treatment activities and the data was downloaded at the end of the day. There were no exceedances of TRC’s prescribed action level of 150 ug/m<sup>3</sup> sustained for 15 minutes at the upwind or downwind units during soil treatment activities. The maximum recorded readings from the upwind and downwind units were 0.070 and 0.035 ug/m<sup>3</sup>, respectively. The fugitive dust monitoring data associated with the WFE-5 treatment activities are presented in Appendix C.

Two trucks transported four individual loads and a total of 54.44 tons of soil from the Shawmut Avenue Transfer Station to the Crapo Hill Landfill facility in accordance with all United States Department of Transportation (DOT), United States Environmental Protection Agency (EPA) and MassDEP regulations. All soil transportation was conducted by a licensed hauler and was handled under MassDEP BOL documentation (MassDEP Form BWSC-012) pursuant to 310 CMR 30.0034 of the MCP. Copies of the final Bills of Lading are included in Appendix D. Each of the truck bodies was dry swept and loose material was consolidated for disposal following the hauling activities.

### **(c) Statement of IRA Findings and Conclusions**

TRC's March 16, 2009 IH evaluation, included in Appendix A, indicated that the estimated cancer risk for the young child recreational user did not exceed the MCP risk limits for an IH of an excess lifetime cancer risk (ELCR) of 1E-05 because no cancer toxicity values are available for lead. However, the noncarcinogenic hazard quotient of 20 exceeded the MCP hazard quotient of 1. The IH was identified at the Soccer Field area primarily due to the exposure pathway of the ingestion of lead-containing surface soil. The top 3 feet of soil was removed from the WFE-5 area on March 13, 2009. The excavation of the surface soil in the WFE-5 area of Walsh Field, specifically sample location WFE-5A, mitigated the IH condition as all remaining surface soil lead concentrations in this area are below Method 1 standards.

**(d) Management of Remediation Waste, Remedial Waste Water, and/or Remedial Additives**

On March 13, 2009, approximately 41 cubic yards of lead-contaminated soil was excavated from the WFE-5 area of the Walsh Field complex and transported in lined roll-off containers to City's Transfer Station located at 1103 Shawmut Avenue, New Bedford, Massachusetts for temporary storage prior to offsite disposal. All soils were moved from the Site to the Transfer Station under MassDEP BOLs (see Appendix D). Receipt of waste characterization soil sample results indicated a total concentration of lead greater than 20-times the allowable aqueous lead leachate level. The sample was subsequently analyzed for TCLP lead, and based on the TCLP analysis, the extract from the soil contained a lead concentration of 8.04 mg/L. This concentration exceeds the 5.0 mg/L concentration identified as the regulatory level for lead by MassDEP in 310 CMR 30.125: Table 1 (characteristic hazardous waste). As a result, the soil required lead stabilization treatment. On July 10, 2009 the soil material was removed from the lined roll-off containers and temporarily stockpiled in preparation for stabilization treatment. On July 13, 2009 the soil material was treated with the Free Flow Technologies® FF-200 chemical reagent to bind the lead to the soil. An additional TCLP waste characterization sample was collected to confirm that the chemical reagent had properly inhibited the leaching of lead from the soil. The post-stabilization waste characterization sample exhibited a TCLP concentration less than the 0.5 mg/L reporting limit, indicating that the soil was no longer a characteristic hazardous waste and the soil could be transported to an appropriately licensed landfill for reuse. On July 20, 2009 all soils associated with the WFE-5 IH condition were transported from the Shawmut Avenue Transfer Station to the Crapo Hill Landfill under MassDEP BOLs (see Appendix D).

**(e) Ongoing Activities**

The objective of this IRA was to assess and delineate the IH condition and to mitigate potential exposure to contaminated surface soils through excavation. This work has been completed. No additional activities relative to this IRA are planned.

**(f) Such Other Information that the Department May Deem Appropriate and Necessary**

See Appendix A for TRC's Imminent Hazard Evaluation. See Appendix B for the soil sample laboratory data reports. See Appendix C for results of dust monitoring conducted by TRC during

soil handling activities. See Appendix D for copies of Bills of relating to TRC's soil handling activities.

As required by 310 CMR 40.1403(3)(c), the Mayor and the Board of Health for the City of New Bedford have been notified of the availability of this IRA Completion Statement. Copies of the notification letters sent to the Mayor and Board of Health are provided in Appendix E. Pertinent soil boring logs are presented in Appendix F.

### III. REFERENCES USED TO PREPARE THIS IRA PLAN

- BETA, 2006. *Summary of Analytical Data, Walsh Field, New Bedford, Massachusetts.* Prepared for: City of New Bedford, 133 William Street, New Bedford, Massachusetts 02740. Prepared by: BETA Group, Incorporated, Norwood, Massachusetts. June 2006.
- MassGIS 2008. Massachusetts Geographic Information System (MassGIS), On-line MassDEP Priority Resource Map. Accessed July 28, 2008.  
<http://maps.massgis.state.ma.us/21e/viewer.htm>
- TRC 2009a. *Immediate Response Action Plan and Imminent Hazard Evaluation Analysis, Walsh Field – Soccer Field Soil Removal, New Bedford, Massachusetts.* Prepared for: City of New Bedford, 133 William Street, New Bedford, Massachusetts 02740. Prepared by TRC Environmental Corporation, Lowell, Massachusetts. May 2009.
- TRC 200b. *Immediate Response Action Status Report, Walsh Field – Soccer Field Soil Removal, New Bedford, Massachusetts,* Prepare for: City of New Bedford, 133 William Street, New Bedford, Massachusetts 02740. Prepared by TRC Environmental Corporation, Lowell, Massachusetts. July 2009.

## **TABLES**

**Table 1: Summary of Analytical Results for Soil Samples - 2006 and 2009**  
**Immediate Response Action Completion Report**  
**Walsh Field - Soccer Field**  
**New Bedford, Massachusetts**

Analysis	Analyte	Sample Location:						WFE-5	WFE-5-A		WFE-5-B			WFE-5-C		WFE-5-D		WFE-5-E		WFE-5-F	
		Sample Date:						2/23/2006	0-1	1-3	0-1	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3
		Sample Depth (ft.):						1.75-2.5	2/23/2009	2/23/2009	2/23/2009	2/23/2009	2/23/2009	2/23/2009	2/23/2009	2/23/2009	2/23/2009	02/23/09	02/23/09	02/23/09	02/23/09
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA														
<b>PAHs / Dibenzofuran</b> (mg/kg)	Dibenzofuran	NS	NS	NS	NS	100	N/A	0.065 U	NA	NA	NA	NA	NA								
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	0.212 U	0.229 U	0.238 U	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	0.212 U	0.229 U	0.238 U	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>0.305</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>2.00</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	<b>0.140</b>	0.236 U	<b>0.233</b>	0.202 U	0.233 U	<b>0.283</b>	<b>0.260</b>	<b>4.03</b>	<b>0.245</b>	0.238 U	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	<b>0.170</b>	0.236 U	0.225 U	0.202 U	0.233 U	<b>0.254</b>	<b>0.235</b>	<b>3.27</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	<b>0.110</b>	0.236 U	<b>0.237</b>	0.202 U	0.233 U	<b>0.281</b>	<b>0.263</b>	<b>3.77</b>	<b>0.231</b>	0.238 U	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	<b>0.077</b>	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>0.978</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	<b>0.210</b>	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>1.36</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	<b>0.130</b>	0.236 U	<b>0.296</b>	0.202 U	0.233 U	<b>0.338</b>	<b>0.290</b>	<b>3.93</b>	<b>0.293</b>	0.238 U	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>0.291</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	<b>0.270</b>	0.236 U	<b>0.489</b>	0.202 U	0.233 U	<b>0.488</b>	<b>0.443</b>	<b>6.48</b>	<b>0.371</b>	0.238 U	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	0.222 U	0.212 U	<b>0.617</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.065 U	0.236 U	0.225 U	0.202 U	0.233 U	<b>0.223</b>	0.212 U	<b>1.28</b>	0.229 U	0.238 U	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.065 U	0.236 U	0.225 U	0.202 U	<b>0.524</b>	0.222 U	0.212 U	0.212 U	0.229 U	<b>0.763</b>	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	<b>0.160</b>	0.236 U	<b>0.484</b>	0.202 U	0.233 U	<b>0.514</b>	<b>0.389</b>	<b>7.96</b>	<b>0.342</b>	0.238 U	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	<b>0.360</b>	0.236 U	<b>0.622</b>	<b>0.257</b>	<b>0.289</b>	<b>0.748</b>	<b>0.604</b>	<b>8.15</b>	<b>0.630</b>	<b>0.314</b>	NA	NA	NA	NA
<b>Metals, total</b> (mg/kg)	Mercury	20	20	30	30	20	N/A	<b>0.420</b>	NA	NA	NA	NA	NA								
	Arsenic	20	20	20	20	20	N/A	<b>9.31</b>	NA	NA	NA	NA	NA								
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	<b>224</b>	NA	NA	NA	NA	NA								
	Cadmium	2	2	30	30	2	N/A	<b>61.0</b>	<b>0.750</b>	<b>0.830</b>	0.310 U	<b>0.880</b>	<b>0.710</b>	<b>0.560</b>	<b>1.93</b>	<b>0.550</b>	<b>0.950</b>	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	<b>22</b>	NA	NA	NA	NA	NA								
	Lead	300	300	300	300	300	N/A	<b>562</b>	<b>3,360</b>	<b>1,830</b>	40.7	<b>268</b>	<b>254</b>	<b>214</b>	<b>654</b>	<b>253</b>	<b>1,040</b>	<b>91</b>	<b>2,500</b>	<b>4.83</b>	<b>839</b>
	Selenium	400	400	800	800	400	N/A	1.69 U	NA	NA	NA	NA	NA								
	Silver	100	100	200	200	100	N/A	0.85 U	NA	NA	NA	NA	NA								

Notes:  
All units in mg/kg unless otherwise specified.  
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).  
mg/L - milligrams per liter  
NA - Sample not analyzed for the listed analyte.  
N/A - Not applicable.  
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 Method 1 standards or TCLP standard, as applicable.**  
VOCs - Volatile Organic Compounds.  
PAHs - Polynuclear Aromatic Hydrocarbons.  
PCBs - Polychlorinated Biphenyls.  
RC - Reportable Concentration.  
TSCA - Toxic Substances Control Act criteria.  
2006 data are based on the "Summary of Analytical Data, Walsh Field" dated June 9, 2006, BETA Group, Inc.  
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.  
(2) - MassDEP RC for Dichloropropane used.  
(3) - MassDEP RC for Dichloropropene used.  
(4) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.

**Table 1: Summary of Analytical Results for Soil Samples - 2006 and 2009**  
**Immediate Response Action Completion Report**  
**Walsh Field - Soccer Field**  
**New Bedford, Massachusetts**

Analysis	Analyte	Sample Location:						WFE-5-G		WFE-5-H		WFE-5-I			WFE-5-J		WFE-5-K		WFE-5-L		
		S-1/GW-2		S-2/GW-3		RC S-1	TSCA	0-1	1-3	0-1	1-3	0-1	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	
		Sample Date:	Sample Depth (ft.):	2/23/2009	2/23/2009			02/23/09	02/23/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09	03/11/09
<b>PAHs / Dibenzofuran</b> (mg/kg)	Dibenzofuran	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.243 U	<b>0.214</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.243 U	<b>0.334</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.243 U	0.214 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.243 U	<b>0.249</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.243 U	<b>0.412</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Metals, total</b> (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	<b>100</b>	<b>303</b>	<b>220</b>	<b>267</b>	<b>217</b>	<b>239</b>	<b>1,250</b>	<b>108</b>	<b>1,490</b>	<b>142</b>	<b>482</b>	<b>219</b>	<b>277</b>	
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Notes:**  
All units in mg/kg unless otherwise specified.  
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).  
mg/L - milligrams per liter  
NA - Sample not analyzed for the listed analyte.  
N/A - Not applicable.  
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 Method 1 standards or TCLP standard, as applicable.**  
VOCs - Volatile Organic Compounds.  
PAHs - Polynuclear Aromatic Hydrocarbons.  
PCBs - Polychlorinated Biphenyls.  
RC - Reportable Concentration.  
TSCA - Toxic Substances Control Act criteria.  
2006 data are based on the "Summary of Analytical Data, Walsh Field" dated June 9, 2006, BETA Group, Inc.  
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.  
(2) - MassDEP RC for Dichloropropane used.  
(3) - MassDEP RC for Dichloropropene used.  
(4) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.

Table 2: Summary of Analytical Results for Waste Characterization Soil Sample  
 Immediate Response Action Completion Report  
 Walsh Field - Soccer Field  
 New Bedford, Massachusetts

Analysis	Analyte	Reuse Level*				Soil Recycling Facility Summary Levels**				Sample Location: WFE-5-W 0-3 Sample Depth (ft.): 3/13/2009
		Lined Landfills	Unlined Landfill	Hot Mix Asphalt Plants	Thermal Processing Plant	Cold Mix Emulsion Plant				
<b>VOCs</b> (mg/kg)	Acetone	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U
	tert-Amyl methyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U
	Benzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Bromobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	2-Butanone (MEK)	NA	NA	NA	NA	NA	NA	NA	NA	0.043 U
	n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	tert-Butylethyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U
	Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	0.007 U
	Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Chlorodibromomethane	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U
	Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	2-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	4-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,2-Dibromoethane	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U
	Dibromomethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U
	1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,1-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	cis-1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	trans-1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U
	2,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	1,1-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U
	trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	Diethyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U
	Diisopropyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U	
Ethyl Benzene	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U	
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U	
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
MTBE	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	
MIBK	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U	
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	0.022 U	
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Tetrachloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U	
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Trichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
Vinyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	0.003 U	
m + p Xylene	NA	NA	NA	NA	NA	NA	NA	NA	0.011 U	
o-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	
		10	4						NA	0.003 U
	<b>Total VOCs</b>							30 to 1,800		ND
<b>SVOCs</b> (mg/kg)	Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Acetophenone	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	<b>0.303</b>
	Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	<b>0.287</b>
	Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	<b>0.381</b>
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroisopropyl)ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	

**Table 2: Summary of Analytical Results for Waste Characterization Soil Sample**  
**Immediate Response Action Completion Report**  
**Walsh Field - Soccer Field**  
**New Bedford, Massachusetts**

Analysis	Analyte	Reuse Level*				Soil Recycling Facility Summary Levels**			Sample Location: Sample Depth (ft.): Sample Date:
		Lined Landfills		Unlined Landfill	Hot Mix Asphalt Plants	Thermal Processing Plant	Cold Mix Emulsion Plant		
		Lined Landfills	Unlined Landfill	Hot Mix Asphalt Plants	Thermal Processing Plant	Cold Mix Emulsion Plant			
	4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA
	Butylbenzylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	NA	NA	NA	NA	NA	NA	NA	<b>0.336</b>
	Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Dibenz(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
	1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
	Diethylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA
	Azobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	NA	NA	NA	NA	NA	NA	NA	<b>0.521</b>
	Fluorene	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Isophorone	NA	NA	NA	NA	NA	NA	NA	NA
	o-cresol	NA	NA	NA	NA	NA	NA	NA	NA
	m & p-cresol(s)	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	0.233 U
	Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	<b>0.558</b>
	Phenol	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	NA	NA	NA	NA	NA	NA	NA	<b>0.646</b>
	1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
	<b>Total SVOCs</b>	100	100	100	NA	NA	NA	NA	<b>3.032</b>
<b>PCBs</b> (mg/kg)	Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1221	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1248	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1254	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1260	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1262	NA	NA	NA	NA	NA	NA	NA	0.14 U
	Aroclor 1268	NA	NA	NA	NA	NA	NA	NA	0.14 U
	<b>Total PCBs</b>	<2	<2	<2	<2	<2	<2	<2	ND
<b>Metals, total</b> (mg/kg)	Mercury	10	10	10	10	3	10	10	<b>0.349</b>
	Arsenic	40	40	40	30	30	30	30	<b>15.7</b>
	Barium	NA	NA	NA	NA	NA	NA	NA	<b>278</b>
	Cadmium	80	30	30	30	11	30	30	<b>1.59</b>
	Chromium	1,000	1,000	500	500	500	500	500	<b>16.7</b>
	Lead	2,000	1,000	1,000	1,000	1,000	1,000	1,000	<b>655</b>
	Selenium	NA	NA	NA	NA	NA	NA	NA	6.99 U
	Silver	NA	NA	NA	NA	NA	NA	NA	0.70 U
<b>Total Petroleum Hydrocarbon</b> (mg/kg)	TPH	5,000	2,500	2,500	5,000 to 60,000	5,000 to 60,000	5,000 to 60,000	5,000 to 60,000	<b>240</b>

**Notes:**

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

NA - No listed Massachusetts criteria exist for this compound.

ND - Not detected.

U - Compound was not detected at specified quantitation limit.

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

VOCs - Volatile Organic Compounds.

SVOCs - Semi-Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

\* - MassDEP - Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, Policy # COMM 97-001.

\*\* - MassDEP - Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, #WSC-94-400

**Table 3: Summary of Analytical TCLP Results for Soil Samples  
 Immediate Response Action Completion Report  
 Walsh Field - Soccer Field  
 New Bedford, Massachusetts**

Analysis	Analyte	Sample ID:	WFE-5-W	Stockpile Composite
		Sample Date:	3/13/2009	7/13/2009
		Maximum Concentration for Toxicity Characteristic		
Metals, TCLP (mg/L)	Lead	5.00*	<b>8.04</b>	0.50 U

**Notes:**

ug/L - micrograms per liter.

U - Compound was not detected at specified quantitation limit.

TCLP - Toxicity Characteristic Leaching Procedure.

\*SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic.*

**Values shown in Bold and shaded type exceed the listed TCLP standard**

## **FIGURES**



WFE5-J	03/11/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	108	1490		

WFE5-K	03/11/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	142	482		

WFE5-L	03/11/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	219	277		

WFE5-E	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	91	2500		

WFE5-A	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	0.236 U	0.225 U		
Cadmium	0.75	0.83		
Lead	3360	1830		

WFE5-I	03/11/09	Constituent	0.00 - 1.00	DUP 0.00 - 1.00	1.00 - 3.00
BAP	NA	NA	NA		
Cadmium	NA	NA	NA		
Lead	217	239	1250		

WFE-05	02/23/06	Constituent	1.75 - 2.50
BAP	0.17		
Arsenic	9.31		
Cadmium	61		
Chromium	22		
Lead	562		

WFE5-D	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	0.229 U	0.238 U		
Cadmium	0.55	0.95		
Lead	253	1040		

WFE5-H	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	220	267		

WFE5-C	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	0.235	3.27		
Cadmium	0.56	1.93		
Lead	214	654		

WFE5-B	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00	DUP 1.00 - 3.00
BAP	0.202 U	0.233 U	0.254		
Cadmium	0.31 U	0.88	0.71		
Lead	40.7	268	254		

WFE5-G	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	0.243 U	0.214 U		
Cadmium	NA	NA		
Lead	100	303		

WFE5-F	02/23/09	Constituent	0.00 - 1.00	1.00 - 3.00
BAP	NA	NA		
Cadmium	NA	NA		
Lead	4.83	839		

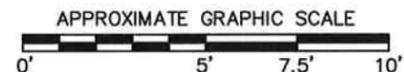
Contaminant	S-1 GW-2	S-1 GW-3	S-2 GW-2	S-2 GW-3	RC S-1	TSCA
Benzo(a)pyrene (BAP)	2	2	4	4	2	N/A
Arsenic	20	20	20	20	20	N/A
Cadmium	2	2	30	30	2	N/A
Chromium	30	30	200	200	30	N/A
Lead	300	300	300	300	300	N/A

NOTES:  
 ALL UNITS IN MG/KG UNLESS OTHERWISE SPECIFIED.  
 MG/KG - MILLIGRAMS PER KILOGRAM (DRY WEIGHT).  
 NA - SAMPLE NOT ANALYZED FOR THE LISTED ANALYTE.  
 N/A - NOT APPLICABLE.  
 RCS - REPORTABLE CONCENTRATIONS.  
 TSCA - TOXIC SUBSTANCES CONTROL ACT.  
 U - COMPOUND WAS NOT DETECTED AT SPECIFIED QUANTITATION LIMIT.

VALUES SHOWN IN PEACH BACKGROUND EXCEED ONE OR MORE OF THE LISTED MASSDEP METHOD 1 STANDARDS.

● SOIL BORING ● SOIL BORING THAT HAS CONCENTRATION WITH EXCEEDANCE

SAMPLE LOCATION	WFE-05
SAMPLE DATE	02/23/06
Constituent	1.75 - 2.50
BAP	0.17
Arsenic	9.31
Cadmium	61
Chromium	22
Lead	562



WALSH FIELD - SOCCER FIELD  
 NEW BEDFORD, MASSACHUSETTS  
 ANALYTICAL RESULTS SUMMARY MAP

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

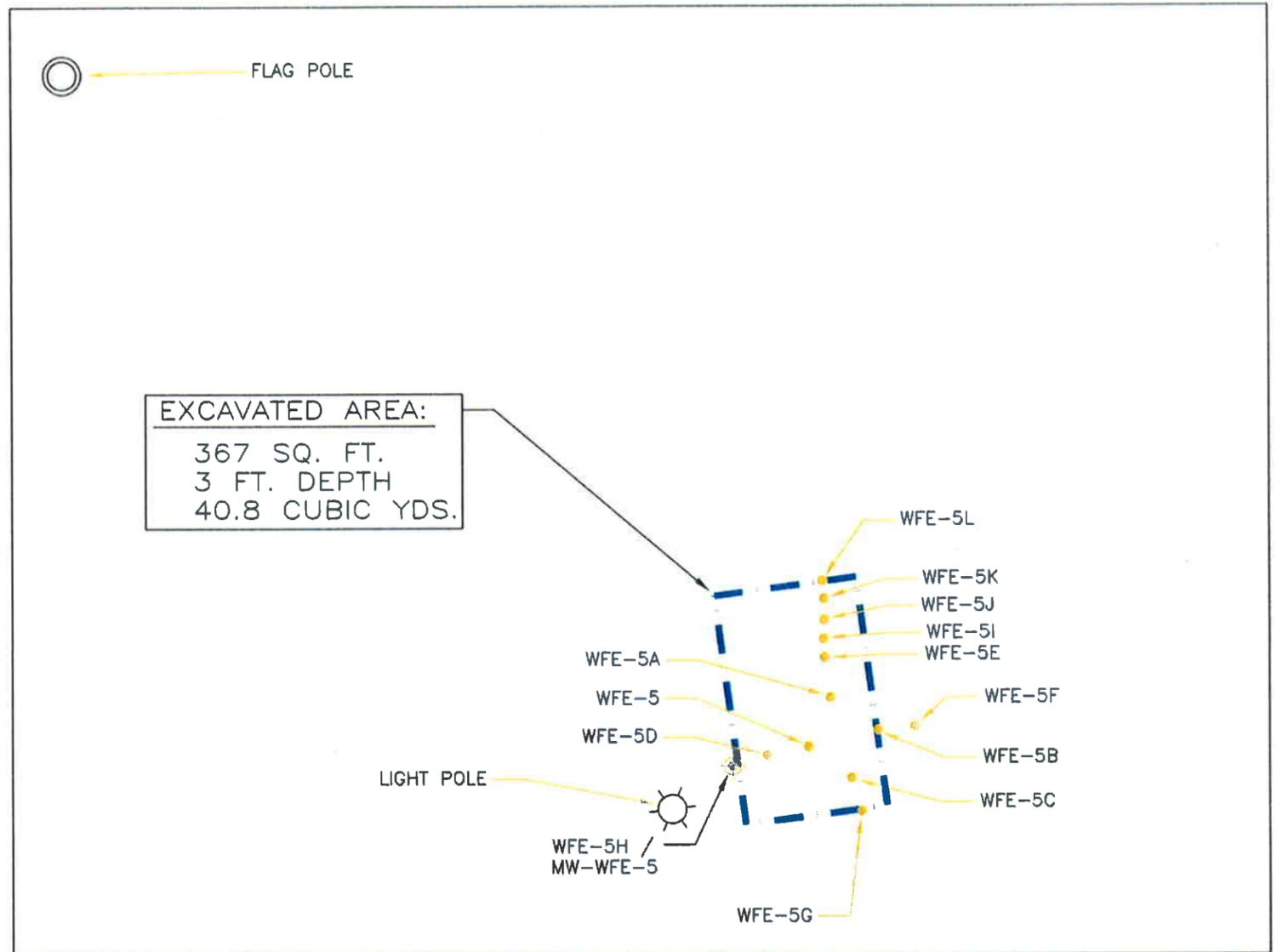
DRAWN BY: PZ  
 CHECKED BY: DMS

DATE:  
 MAY 2009

FIGURE 2



AREA PLAN  
APPROXIMATE SCALE: 1" = 90'



EXCAVATION PLAN  
APPROXIMATE GRAPHIC SCALE  
0' 7.5' 15' 30'

LEGEND:

-  SOIL EXCAVATED ON MARCH 13, 2009
-  EXTENT OF EXCAVATION LINE
-  FENCE
-  SOIL SAMPLE LOCATION
-  SOIL SAMPLE AND MONITORING WELL LOCATION

NOTE:

FIGURE IS APPROXIMATE AND IS CONCEPTUAL.

<b>WALSH FIELD - SOCCER FIELD NEW BEDFORD, MASSACHUSETTS</b>	
EXCAVATION PLAN	
 <b>TRC</b>	Wannalancit Mills 650 Suffolk Street Lowell, MA 01854 (978) 970-5800
DRAWN BY: DMP CHECKED BY: RSN	DATE: AUG 2009
FIGURE <b>3</b>	

**APPENDIX A**

**IMMINENT HAZARD EVALUATION SUMMARY**

**IMMINENT HAZARD EVALUATION  
SOCCER FIELD SURFACE SOIL  
WALSH FIELD  
NEW BEDFORD, MASSACHUSETTS**

Due to the potential Imminent Hazard (IH) condition that was triggered at the Site on March 4, 2009 for the detection of lead in surface soil (0 to 1 foot in depth) at the WFE-5 area of the Soccer Field area at Walsh Field of New Bedford High School (NBHS), an IH evaluation has been performed. The potential IH condition was discovered during additional investigation to delineate the extent of elevated levels of lead, cadmium and polycyclic aromatic hydrocarbons (PAHs) in soil at the Soccer Field area and to determine the extent of potential soil removal necessary to achieve a condition of no significant risk for the top three feet of soil within this area. The WFE-5 sampling location had been identified as one of three areas requiring further delineation sampling within the Soccer Field area.

The protocol for the delineation sampling called for the collection of four "inner ring" soil samples (0 to 1 foot and 1 to 3 feet in depth) four feet away from the original WFE-5 sampling location to the north, east, south and west (designated "A" through "D"). The protocol further called for the collection of four additional "outer ring" samples eight feet from the original WFE-5 sampling location (designated "E" through "H"). "Outer ring" samples were also collected from the 0 to 1 and 1 to 3 feet intervals. All samples were collected on February 23, 2009 and the "inner ring" samples were authorized for lead, cadmium and PAH analysis. The "outer ring" samples were held at the laboratory, pending the results of the "inner ring" sample analysis.

Cadmium and PAH concentrations in the four "inner ring" surface soil samples were below the Massachusetts Department of Environmental Protection (MassDEP) background concentration for natural soil. Lead concentrations were below the Method 1 S-1/GW-2 and S-1/GW-3 standards (300 mg/kg) at three of the four "inner ring" surface soil locations (WFE-5B through WFE-5D). However, at location WFE-5A, a concentration of 3,360 mg/kg was detected in the 0 to 1 foot interval. Due to the detection of lead at a concentration more than 10-fold the MCP Method 1 S-1 soil cleanup standard and in excess of the MCP Upper Concentration Limit (UCL) at the WFE-5A location, TRC was prompted to perform a preliminary IH analysis as a precaution. TRC determined that an IH condition was present using MassDEP risk characterization protocols. The potential IH condition was reported and the "outer ring" samples were immediately authorized for analysis to determine the extent of the elevated surficial lead.

Lead concentrations in 0 to 1 foot samples WFE-5E through WFE-5H, reported by the laboratory on March 6, 2009, were less than the Method 1 S-1 standard of 300 mg/kg, with a maximum detected concentration of 220 mg/kg. Four additional locations were sampled to the north of WFE-5E at two foot step-out intervals (WFE-5I through WFE-5L) on March 11, 2009, primarily to delineate lead in the 1 to 3 foot interval. However, lead concentrations in the four 0 to 1 foot samples were also below Method 1 S-1 standards, confirming that the extent of the surficial lead had been delineated.

This IH evaluation reflects surface soil sampling conducted to date for the Soccer Field area. The surface soil sample results are provided in Table 1. Surface soil contaminants of potential concern (COPCs) were selected for the WFE-5 area by comparing maximum detected concentrations of cadmium, lead and PAHs to MassDEP background concentrations for natural soils. Only lead exceeded its MassDEP background concentration and was selected as a COPC for further evaluation.

Because the maximum detected concentration (3,360 mg/kg) is more than 10-fold greater than the Method 1 S-1 standard, averaging of the 0 to 1 foot lead concentrations from the WFE-5 area is not appropriate. Therefore, the maximum detected concentration or a 95 percent upper confidence limit (95% UCL) on the arithmetic mean concentration may be used as the exposure point concentration to determine whether an IH condition exists at the site. However, due to the variability in the data set, the calculated 95% UCL was greater than the maximum detected concentration. Therefore, the maximum detected concentration was used as the EPC.

The area of concern is the Soccer Field, used for practices and games during the soccer season. The Soccer Field may also be used by other teams as a practice area during the spring and fall sport seasons (e.g., for field hockey practice). Walsh Field, which houses the Soccer Field and other athletic fields, is secured by a fence, limiting access only to those with permission to use the fields. For the purposes of this IH evaluation, exposures are assumed to occur during the sport season which consists of 3 weeks of pre-season practice, the 12-week season, and a 3-week post-season playoff time period. During this 18-week period, exposures are assumed to occur 5 days per week (4 practice days and one game day) for 4 hours per day. These values are conservative because their use assumes that: (1) no time is spent at a different field; (2) no cancellation of practice due to inclement weather; and (3) children are at the field for 4 hours per day, which is likely to only occur on game days since practices are for less than 4 hours each day.

To estimate exposures, a young child (age 1 to 6) was selected for evaluation because this age group may be present at the field, accompanying parents who are spectators at the practices and games. Incidental ingestion of and dermal contact with lead-impacted soils are assumed to occur while the young child plays at the field. The inhalation of fugitive dust generated while the older children practice or play the sport is also considered a complete exposure pathway. Older children engaging in the sport are also exposed, but a young child is evaluated as the most sensitive receptor due to their higher soil intake rate, lower body weight, and sensitive developmental stage.

Exposure assumptions applicable to the young child are provided on the risk calculation spreadsheets (Tables 2 through 5). Exposure assumptions selected for use are consistent with those used by MassDEP in the park visitor IH short-form, adjusted to be applicable to the 18-week exposure period of concern. For the fugitive dust pathway, methods and assumptions consistent with the MassDEP Technical Update "Characterization of Risks Due to Inhalation of Particulates by Construction Workers" (July 2008) were used including a  $PM_{10}$  of  $60 \mu g/m^3$ . Inhalation rates used are age-specific values provided by MassDEP in the 1995 risk assessment guidance document.

The estimated cancer risk for the young child recreational user did not exceed the MCP risk limit for an IH of an excess lifetime cancer risk (ELCR) of 1E-05 because no cancer toxicity values are available for lead. However, the Hazard Quotient of 20 exceeds the MCP IH limit of 1 for lead. The IH is identified at the WFE-5 area of the Soccer Field primarily due to the ingestion of lead-containing surface soil. However, the excavation of surface soil in the vicinity of WFE-5A would mitigate the IH condition since all remaining surface soil lead concentrations in this area are below the Method 1 standards. The excavation was conducted on March 13, 2009 and an IH condition no longer exists at the Soccer Field area in the vicinity of WFE5.

Summary of Surface Soil (0-1') Data - Soccer Field WFE5 area  
Walsh Field  
New Bedford, MA

Analysis	Analyte	Sample Location:			WFE-5-A	WFE-5-B	WFE-5-C	WFE-5-D	WFE-5-E	WFE-5-F	WFE-5-G	WFE-5-H	WFE-5-I		WFE-5-J	WFE-5-K	WFE-5-L
		Sample Date:			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
		Sample Depth (ft.):			2/23/2009	2/23/2009	2/23/2009	2/23/2009	02/23/09	02/23/09	02/23/09	02/23/09	03/11/09	03/11/09 Field Dup	03/11/09	03/11/09	03/11/09
		S-1/GW-2	S-1/GW-3	Background													
PAHs (mg/kg)	Benzo(a)anthracene	7	7	2	0.236 U	0.202 U	<b>0.260</b>	<b>0.245</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	2	0.236 U	0.202 U	<b>0.235</b>	0.229 U	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	2	0.236 U	0.202 U	<b>0.263</b>	<b>0.231</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	2	0.236 U	0.202 U	<b>0.290</b>	<b>0.293</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	4	0.236 U	0.202 U	<b>0.443</b>	<b>0.371</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	3	0.236 U	0.202 U	<b>0.389</b>	<b>0.342</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	4	0.236 U	<b>0.257</b>	<b>0.604</b>	<b>0.630</b>	NA	NA	0.243 U	NA	NA	NA	NA	NA	NA
Metals, total (mg/kg)	Cadmium	2	2	2	<b>0.750</b>	0.310 U	<b>0.560</b>	<b>0.550</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	100	<b>3,360</b>	<b>40.7</b>	<b>214</b>	<b>253</b>	<b>91</b>	<b>4.83</b>	<b>100</b>	<b>220</b>	<b>217</b>	<b>239</b>	<b>108</b>	<b>142</b>	<b>219</b>

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.  
U - Compound was not detected at specified quantitation limit.  
Values in **Bold** indicate the compound was detected.

**Boxed values exceed MassDEP natural soil background concentrations.**

Values shown in **Bold** and shaded type exceed one or more of the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.

Table 2  
 Park User - Child  
 Incidental Ingestion of Surface Soil  
 Walsh Field - WFES-A (0-1)  
 New Bedford, Massachusetts

Constituent	EPC	Exposure Estimates				Toxicity Values		Risk Estimates	
		Surface Soil Concentration (mg/kg)	RAF Ingestion Cancer (-)	LADD Cancer (mg/kg-d)	RAF Ingestion Noncancer (-)	ADD Noncancer (mg/kg-d)	Cancer Slope Factor (Oral) (mg/kg-d) <sup>-1</sup>	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (-)
Metals 1439-92-1 Lead	3360	NC	NA	5.0E-01	1.1E-02	NA	7.5E-04	NA	1.5E+01

	Cancer Risk	Hazard Index
TOTAL:	0E+00	1.5E+01

NA = Not Applicable  
 NC = No Criteria  
 Where:

$LADD_{cancer} = [Soil\ Concentration \times UC \times RAF \times IR \times EF \times ED \times EP] / [BW \times AP_{cancer}]$   
 $ADD_{non-cancer} = [Soil\ Concentration \times UC \times RAF \times IR \times EF \times ED \times EP] / [BW \times AP_{non-cancer}]$   
 $Cancer\ Risk = LADD_{cancer} \times Slope\ Factor$   
 $Hazard\ Quotient = ADD_{non-cancer} / Reference\ Dose$   
 Unit Conversion (UC) = 1.0E-06 kg/mg  
 Relative Absorption Factor (RAF) = CS (unitless) [1]  
 Ingestion Rate (IR) = 100 mg/d [1]  
 Exposure Duration (ED) = 1 day/event [1]  
 Exposure Frequency (EF) - Noncancer = 0.714 event/day [2] - 5 days/week  
 Exposure Frequency (EF) - Cancer = 0.247 event/day [2] - 5 days/week for 18 weeks  
 Exposure Period (EP) - Noncancer = 0.345 years [2] - 18 weeks  
 Exposure Period (EP) - Cancer = 5 years [1]  
 Body Weight (BW) - Noncancer = 10.7 kg (1-2 year old)[1]  
 Body Weight (BW) - Cancer = 15 kg (1-6 year old) [1]  
 Averaging Period Cancer (AP<sub>cancer</sub>) = 70 years [1]  
 Averaging Period Noncancer (AP<sub>non-cancer</sub>) = 0.345 years [2]

**Bold** = Cancer Risk > 1.0E-05 or Hazard Quotient > 1.0E+00

[1] MassDEP, 2007; Park User Soil Imminent Hazard Short-form  
 [2] Site-specific information for practices and games during 18-week sport season (includes pre-season and playoffs)

**Table 3**  
**Park User - Child**  
**Dermal Contact with Surface Soil**  
**Walsh Field - WFE5-A (0-1')**  
**New Bedford, Massachusetts**

Constituent	HPC	Exposure Estimates				Toxicity Values		Risk Estimates	
	Surface Soil Concentration (mg/kg)	RAF Dermal Cancer (--)	LADD Cancer (mg/kg-d)	RAF Dermal Noncancer (--)	ADD Noncancer (mg/kg-d)	Cancer Slope Factor (Oral) (mg/kg-d) <sup>-1</sup>	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (--)	Hazard Quotient (--)
Metals 7439-92-1 Lead	3360	NC	NA	0.006	7.9E-04	NA	7.5E-04	NA	1.0E+00

NA = Not Applicable  
 NC = No Criteria

Where:

LADD<sub>cancer</sub> = Soil Concentration x UC1 x SA x SAF x RAF x EF x ED x EP / (BW x AP<sub>cancer</sub>)  
 ADD<sub>non-cancer</sub> = Soil Concentration x UC1 x SA x SAF x RAF x EF x ED x EP / (BW x AP<sub>non-cancer</sub>)  
 Cancer Risk = LADD<sub>cancer</sub> x Slope Factor  
 Hazard Quotient = ADD<sub>non-cancer</sub> / Reference Dose

Unit Conversion (UC1) =	1E-06	kg/mg
Skin Surface Area (SA) - Noncancer =	1670	cm <sup>2</sup> /d [1] - (1-2 year old)
Skin Surface Area (SA) - Cancer =	2231	cm <sup>2</sup> /d [1] - (1-6 year old)
Soil Adherence Factor (SAF) =	0.35	mg/cm <sup>2</sup> [1]
Relative Absorption Factor (RAF) =	CS	(unitless) [1]
Exposure Duration (ED) =	1	day/event [1]
Exposure Frequency (EF) - Noncancer =	0.714	event/day [2] - 5 days/week
Exposure Frequency (EF) - Cancer =	0.247	event/day [2] - 5 days/week for 18 weeks
Exposure Period (EP) - Noncancer =	0.345	years [2] - 18 weeks
Exposure Period (EP) - Cancer =	5	years [1]
Body Weight (BW) - Noncancer =	10.7	kg (1-2 year old)[1]
Body Weight (BW) - Cancer =	15	kg (1-6 year old) [1]
Averaging Period Cancer (AP <sub>cancer</sub> ) =	70	years [1]
Averaging Period Noncancer (AP <sub>noncancer</sub> ) =	0.345	years [2]

[1] MassDEP, 2007; Park User Soil Imminent Hazard Short-form

[2] Site-specific information for practices and games during 18-week sport season (includes pre-season and playoffs)

	Cancer Risk	Hazard Index
<b>TOTAL:</b>	0E+00	1.0E+00

**Bold** = Cancer Risk > 1.0E-05 or Hazard Quotient > 1.0E+00

Table 4  
 Visitor - Young Child  
 Inhalation of Fugitive Dusts - Exposure Via the Lungs  
 Walsh Field - WFES-A (0-1')  
 New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates		Toxicity Values		Risk Estimates	
		LAD <sub>50</sub> Cancer (ug/m <sup>3</sup> )	AD <sub>50</sub> Noncancer (ug/m <sup>3</sup> )	Unit Risk Factor (Inh) (ug/m <sup>3</sup> ) <sup>-1</sup>	Subchronic Noncancer Reference Conc. (Inh) (ug/m <sup>3</sup> )	Cancer Risk (-)	Hazard Quotient (-)
Metals 7439-92-1 Lead	3360	1.5E-03	5.0E-02	NA	1.0E+00	NA	5.0E-02

NA = Not Applicable

Where:

LAD<sub>50cancer</sub> = (OHH x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / (AP<sub>cancer</sub> x BW)) x (BW assumed/IR assumed)  
 AD<sub>50non-cancer</sub> = (OHH x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / AP<sub>non-cancer</sub> x BW) x (BW assumed/IR assumed)  
 Cancer Risk = LAD<sub>50cancer</sub> x Cancer Slope Factor  
 Hazard Quotient = AD<sub>50non-cancer</sub> / Reference Dose

	Cancer Risk	Hazard Index
TOTAL:	0E+00	5E-02

**Bold** = Cancer Risk > 1.0E-05 or Hazard Quotient > 1.0E+00

Respirable Dust (PM<sub>10</sub>) = 60 ug/m<sup>3</sup> [4]  
 Relative Absorption Factor (RAF) = 1 unitless  
 Inhalation Rate (IR) - Noncancer (1-2 year old) = 8.92 l/min [4] - heavy exertion; 1-2 year old  
 Inhalation Rate (IR) - Cancer (1-6 year old) = 14.77 l/min [4] - heavy exertion; 1-6 year old  
 Exposure Frequency (EF) - Noncancer = 0.714 event/day [5] - 5 days/week  
 Exposure Frequency (EF) - Cancer = 0.247 event/day [5] - 5 days/week for 18 weeks  
 Exposure Duration (ED) = 4 hours/event [3]  
 Exposure Period (EP) - Noncancer = 126 days [5] - 18 weeks  
 Exposure Period (EP) - Cancer = 1825 days [1]  
 Body Weight (BW) - Noncancer = 10.7 kg (1-2 year old)[1]  
 Body Weight (BW) - Cancer = 14.8 kg (1-6 year old) [1]  
 Averaging Period Cancer (AP<sub>cancer</sub>) = 25550 days [1]  
 Averaging Period Noncancer (AP<sub>noncancer</sub>) = 126 days [5]  
 Inhalation Rate assumed (IR assumed) = 20 m<sup>3</sup>/day [2] - for adjustment of toxicity value  
 Body Weight (BW assumed) = 70 kg [2] - for adjustment of toxicity value  
 Unit Conversion (UC) = 6.00E-11 (60 min/hour; 1x 10<sup>-9</sup> kg/ug; 0.001 m<sup>3</sup>/l)

[1] MassDEP, 2007; Park User Soil Imminent Hazard Short-form  
 [2] MassDEP, 2008; Characterization of Risk Due to Inhalation of Particulates by Construction Workers  
 [3] Professional Judgment  
 [4] MassDEP, 1995; Guidance for Disposal Site Risk Characterization  
 [5] Site-specific information for practices and games during 18-week sport season (includes pre-season and playoffs)

Table 5  
 Visitor - Young Child  
 Inhalation of Fugitive Dusts - Exposure Via the GI Tract  
 Walsh Field - WFE5-A (0-1')  
 New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates				Toxicity Values		Risk Estimates	
		RAF Cancer Ing (-)	LADD <sub>GI-RA</sub> Cancer (mg/kg-day)	RAF Noncancer Ing (-)	ADD <sub>GI-RA</sub> Noncancer (mg/kg-day)	Cancer Slope Factor (Oral) (mg/kg-day) <sup>-1</sup>	Subchronic Noncancer Reference Dose (Oral) (mg/kg-day)	Cancer Risk (-)	Hazard Quotient (-)
Metals 7439-92-1 Lead	3360	NC	NA	5.00E-01	2.16E-05	NA	7.5E-04	NA	2.9E-02

NA = Not Applicable

Where:

LADD<sub>cancer</sub> = (OHM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / (AP<sub>cancer</sub> x BW))  
 ADD<sub>Enon-cancer</sub> = (OHM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / AP<sub>non-cancer</sub> x BW)  
 Cancer Risk = LADD<sub>cancer</sub> x Cancer Slope Factor  
 Hazard Quotient = ADD<sub>Enon-cancer</sub> / Reference Dose

Respirable Dust (PM <sub>10</sub> ) =	60	ug/m <sup>3</sup> [1]
Inhalation Rate (IR) - Noncancer (1-2 year old) =	8.92	l/min [4] - heavy exertion; 1-2 year old
Inhalation Rate (IR) - Cancer (1-6 year old) =	14.77	l/min [4] - heavy exertion; 1-6 year old
Exposure Frequency (EF) - Noncancer =	0.714	event/day [5] - 5 days/week
Exposure Frequency (EF) - Cancer =	0.247	event/day [5] - 5 days/week for 18 weeks
Exposure Duration (ED) =	4	hours/event [3]
Exposure Period (EP) - Noncancer =	126	days [5] - 18 weeks
Exposure Period (EP) - Cancer =	1825	days [1]
Body Weight (BW) - Noncancer =	10.7	kg (1-2 year old) [1]
Body Weight (BW) - Cancer =	14.8	kg (1-6 year old) [1]
Averaging Period Cancer (AP <sub>cancer</sub> ) =	25550	days [1]
Averaging Period Noncancer (AP <sub>noncancer</sub> ) =	126	days [5]
Unit Conversion (UC1) =	6.00E-11	(60 min/hour; 1x 10 <sup>-9</sup> kg/ug; 0.001 m <sup>3</sup> /l)

- [1] MassDEP, 2007; Park User Soil Imminent Hazard Short-form  
 [2] MassDEP, 2008; Characterization of Risk Due to Inhalation of Particulates by Construction Workers  
 [3] Professional Judgment  
 [4] MassDEP, 1995; Guidance for Disposal Site Risk Characterization  
 [5] Site-specific information for practices and games during 18-week sport season (includes pre-season and playoffs)

Cancer Risk Index	0E+00
Hazard Index	3E-02
<b>TOTAL:</b>	

**Bold** = Cancer Risk > 1.0E-05 or Hazard Quotient > 1.0E+00

## **APPENDIX B**

### **SAMPLE RESULTS FROM LABORATORY REPORTS**





39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 3 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (1-3) QC  
Sample ID : 09B05251  
Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.83	03/02/09	KSH	0.34			

Field Sample #: WFE-5-B (0-1)

Sample ID : 09B05254

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	ND	03/02/09	KSH	0.31			

Field Sample #: WFE-5-B (1-3)

Sample ID : 09B05255

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.88	03/02/09	KSH	0.35			

Field Sample #: WFE-5-C (0-1)

Sample ID : 09B05248

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.56	03/02/09	KSH	0.32			

Field Sample #: WFE-5-C (1-3)

Sample ID : 09B05249

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	1.93	03/02/09	KSH	0.32			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
850 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 4 of 27

Purchase Order No.:

Project Location: NEW BEOFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID : 09B05252                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.55	03/02/09	KSH	0.35			

Field Sample #: WFE-5-D (1-3)

Sample ID : 09B05253                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.95	03/02/09	KSH	0.36			

Field Sample #: WFE-5-D5 (1-3)

Sample ID : 09B05256                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.71	03/02/09	KSH	0.34			

Field Sample #: [REDACTED]

Sample ID : 09B05257                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.28			

Field Sample #: [REDACTED]

Sample ID : 09B05268                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.29			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled



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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 5 of 27

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Analytical Method:  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 6 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (0-1)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05250      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Extraction Date 6270		2/24/2009	03/01/09	BGL				

Analytical Method:

SW846 6270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/3/2009  
 Page 7 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
 Date Received: 2/23/2009  
 Field Sample #: WFE-5-A (1-3) QC

LIMS-BAT #: LIMT-23459  
 Job Number: 115058

Sample ID: 09B05251      ‡Sampled: 2/23/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Benzo(a)anthracene	mg/kg dry wt	0.233	03/01/09	BGL	0.225			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Benzo(b)fluoranthene	mg/kg dry wt	0.237	03/01/09	BGL	0.225			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Chrysene	mg/kg dry wt	0.296	03/01/09	BGL	0.225			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Fluoranthene	mg/kg dry wt	0.489	03/01/09	BGL	0.225			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.225			
Phenanthrene	mg/kg dry wt	0.484	03/01/09	BGL	0.225			
Pyrene	mg/kg dry wt	0.622	03/01/09	BGL	0.225			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
 SW646 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.





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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 9 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-B (1-3)  
Sample ID: 09B05255

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Benzo(e)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Dibenz(e,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Naphthalene	mg/kg dry wt	0.524	03/01/09	BGL	0.233			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.233			
Pyrene	mg/kg dry wt	0.289	03/01/09	BGL	0.233			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 6270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-C (1-3)

LIMS-BAT #: LIMT-23459  
Job Number: 115058

Sample ID: 09B05249      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Acenaphthylene	mg/kg dry wt	0.305	03/01/09	BGL	0.212		
Anthracene	mg/kg dry wt	2.00	03/01/09	BGL	0.212		
Benzo(a)anthracene	mg/kg dry wt	4.03	03/01/09	BGL	0.212		
Benzo(a)pyrene	mg/kg dry wt	3.27	03/01/09	BGL	0.212		
Benzo(b)fluoranthene	mg/kg dry wt	3.77	03/01/09	BGL	0.212		
Benzo(g,h,i)perylene	mg/kg dry wt	0.978	03/01/09	BGL	0.212		
Benzo(k)fluoranthene	mg/kg dry wt	1.36	03/01/09	BGL	0.212		
Chrysene	mg/kg dry wt	3.93	03/01/09	BGL	0.212		
Dibenz(a,h)anthracene	mg/kg dry wt	0.291	03/01/09	BGL	0.212		
Fluoranthene	mg/kg dry wt	6.48	03/01/09	BGL	0.212		
Fluorene	mg/kg dry wt	0.617	03/01/09	BGL	0.212		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	1.28	03/01/09	BGL	0.212		
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Phenanthrene	mg/kg dry wt	7.96	03/01/09	BGL	0.212		
Pyrene	mg/kg dry wt	8.15	03/01/09	BGL	0.212		
Extraction Date 8270		2/24/2009	03/01/09	BGL			

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID : 09B05252      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hf	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Benzo(a)anthracene	mg/kg dry wt	0.245	03/01/09	BGL	0.229			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Benzo(b)fluoranthene	mg/kg dry wt	0.231	03/01/09	BGL	0.229			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Chrysene	mg/kg dry wt	0.293	03/01/09	BGL	0.229			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Fluoranthene	mg/kg dry wt	0.371	03/01/09	BGL	0.229			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Phenanthrene	mg/kg dry wt	0.342	03/01/09	BGL	0.229			
Pyrene	mg/kg dry wt	0.630	03/01/09	BGL	0.229			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

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LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (1-3)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05253      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Naphthalene	mg/kg dry wt	0.763	03/01/09	BGL	0.238			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Pyrene	mg/kg dry wt	0.314	03/01/09	BGL	0.238			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:

SW648 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D5 (1-3)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05256      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Benzo(a)anthracene	mg/kg dry wt	0.283	03/01/09	BGL	0.222			
Benzo(a)pyrene	mg/kg dry wt	0.254	03/01/09	BGL	0.222			
Benzo(b)fluoranthene	mg/kg dry wt	0.281	03/01/09	BGL	0.222			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Chrysene	mg/kg dry wt	0.338	03/01/09	BGL	0.222			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Fluoranthene	mg/kg dry wt	0.488	03/01/09	BGL	0.222			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	0.223	03/01/09	BGL	0.222			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.222			
Phenanthrene	mg/kg dry wt	0.514	03/01/09	BGL	0.222			
Pyrene	mg/kg dry wt	0.748	03/01/09	BGL	0.222			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 B270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23459

Date Received: 2/23/2009

Job Number: 115058

Field Sample #: [REDACTED]

Sample ID: 09B05243

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.85			

Field Sample #: [REDACTED]

Sample ID: 09B05240

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	02/28/09	AMP	1.06			

Field Sample #: [REDACTED]

Sample ID: 09B05241

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	02/28/09	AMP	0.93			

Field Sample #: [REDACTED]

Sample ID: 09B05244

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.95			

Field Sample #: WFE-5-A (0-1)

Sample ID: 09B05250

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	3360	03/02/09	KSH	1.06			

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (1-3) QC

LIMS-BAT #: LIMT-23459  
Job Number: 115058

Sample ID : 09B05251      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	1830	03/02/09	KSH	1.02			

Field Sample #: WFE-5-B (0-1)

Sample ID : 09B05254      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	40.7	03/02/09	KSH	0.91			

Field Sample #: WFE-5-B (1-3)

Sample ID : 09B05255      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	268	03/02/09	KSH	1.05			

Field Sample #: WFE-5-C (0-1)

Sample ID : 09B05248      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	214	03/02/09	KSH	0.96			

Field Sample #: WFE-5-C (1-3)

Sample ID : 09B05249      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	654	03/02/09	KSH	0.96			

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3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05252      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	253	03/02/09	KSH	1.03			

Field Sample #: WFE-5-D (1-3)

Sample ID: 09B05253      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	1040	03/02/09	KSH	1.07			

Field Sample #: WFE-5-D5 (1-3)

Sample ID: 09B05256      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	254	03/02/09	KSH	1.00			

Field Sample #: [REDACTED]

Sample ID: 09B05257      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.87			

Field Sample #: [REDACTED]

Sample ID: 09B05258      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.87			

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3/3/2009  
Page 23 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23458

Data Received: 2/23/2009

Job Number: 115058

Field Sample #: ██████████

Sample ID: 09B05243

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
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Solids, total	%	██████	03/02/09	FD			
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Field Sample #: ██████████

Sample ID: 09B05240

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
--	-------	---------	---------------	---------	----	---------------------	-----

Solids, total	%	██████	03/02/09	FD			
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Field Sample #: ██████████

Sample ID: 09B05241

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
--	-------	---------	---------------	---------	----	---------------------	-----

Solids, total	%	██████	03/02/09	FD			
---------------	---	--------	----------	----	--	--	--

Field Sample #: ██████████

Sample ID: 09B05244

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
--	-------	---------	---------------	---------	----	---------------------	-----

Solids, total	%	██████	03/02/09	FD			
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Field Sample #: WFE-5-A (0-1)

Sample ID: 09B05250

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
--	-------	---------	---------------	---------	----	---------------------	-----

Solids, total	%	70.9	03/02/09	FD			
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3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)  
Sample ID: 09B05252

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	73.0	03/02/09	FD			

Field Sample #: WFE-5-D (1-3)

Sample ID: 09B05253

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	70.2	03/02/09	FD			

Field Sample #: WFE-5-D5 (1-3)

Sample ID: 09B05256

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	75.2	03/02/09	FD			

Field Sample #: [REDACTED]

Sample ID: 09B05257

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	[REDACTED]	03/02/09	FD			

Field Sample #: [REDACTED]

Sample ID: 09B05258

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	[REDACTED]	03/02/09	FD			

RL = Reporting Limit

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NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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‡ = See attached chain-of-custody record for time sampled



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3/3/2009  
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Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Analytical Method:

SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES  
CENTIGRADE.

RL = Reporting Limit

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NM = Not Measured

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SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.



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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/5/2009  
Page 1 of 5

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 3/4/2009  
Field Sample #: WFE-5-E (0-1)  
Sample ID : 09B06381  
Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23659  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	91.0	03/05/09	OP	0.97			

Field Sample #: WFE-5-E (1-3)

Sample ID : 09B06382 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	2500	03/05/09	OP	1.15			

Field Sample #: WFE-5-F (0-1)

Sample ID : 09B06385 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	4.83	03/05/09	OP	0.90			

Field Sample #: WFE-5-F (1-3)

Sample ID : 09B06386 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	639	03/05/09	OP	0.97			

Field Sample #: WFE-5-G (0-1)

Sample ID : 09B06379 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	100	03/05/09	OP	1.02			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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LOWELL, MA 01852

3/5/2009  
Page 2 of 5

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 3/4/2009  
Field Sample #: WFE-5-G (1-3)

LIMS-BAT #: LIMIT-23659  
Job Number: 115058

Sample ID: 09B06380      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	303	03/05/09	OP	0.99			

Field Sample #: WFE-5-H (0-1)

Sample ID: 09B06383      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	220	03/05/09	OP	1.04			

Field Sample #: WFE-5-H (1-3)

Sample ID: 09B06384      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	267	03/05/09	OP	1.03			

Analytical Method:

SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

RL = Reporting Limit

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NM = Not Measured

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3/5/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 3/4/2009  
Field Sample #: WFE-5-E (0-1)  
Sample ID : 09B06381

LIMS-BAT #: LIMIT-23659  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	77.7	03/05/09	FD			

Field Sample #: WFE-5-E (1-3)

Sample ID : 09B06382

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	65.7	03/05/09	FD			

Field Sample #: WFE-5-F (0-1)

Sample ID : 09B06385

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	83.7	03/05/09	FD			

Field Sample #: WFE-5-F (1-3)

Sample ID : 09B06386

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	77.7	03/05/09	FD			

Field Sample #: WFE-5-G (0-1)

Sample ID : 09B06379

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	73.6	03/05/09	FD			

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3/5/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23659

Date Received: 3/4/2009

Job Number: 115058

Field Sample #: WFE-5-G (1-3)

Sample ID: 09B06380      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	76.0	03/05/09	FD			

Field Sample #: WFE-5-H (0-1)

Sample ID: 09B08383      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	72.3	03/05/09	FD			

Field Sample #: WFE-5-H (1-3)

Sample ID: 09B08384      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	73.3	03/05/09	FD			

**Analytical Method:**

SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES CENTIGRADE.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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3/12/2009  
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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD

LIMS-BAT #: LIMIT-23844

Date Received: 3/11/2009

Job Number: 115058

Field Sample #: WFE5I(0-1)

Sample ID: 09B07318

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	217	03/12/09	OP	1.12		

Field Sample #: WFE5I(1-3)

Sample ID: 09B07319

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SDIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	1250	03/12/09	OP	1.20		

Field Sample #: WFE5J(0-1)

Sample ID: 09B07320

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	108	03/12/09	OP	1.03		

Field Sample #: WFE5J(1-3)

Sample ID: 09B07321

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	1490	03/12/09	OP	1.49		

Field Sample #: WFE5K(0-1)

Sample ID: 09B07322

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	142	03/12/09	OP	1.07		

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3/12/2009  
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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD  
Date Received: 3/11/2009  
Field Sample #: WFE5K(1-3)

LIMS-BAT #: LIMIT-23844  
Job Number: 115058

Sample ID : 09B07323      ‡Sampled : 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
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Lead mg/kg dry wt 462 03/12/09 OP 1.32

Field Sample #: WFE5L(0-1)

Sample ID : 09B07324      ‡Sampled : 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
--	-------	---------	---------------	---------	----	---------------------	------

Lead mg/kg dry wt 219 03/12/09 OP 1.20

Field Sample #: WFE5L(1-3)

Sample ID : 09B07325      ‡Sampled : 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
--	-------	---------	---------------	---------	----	---------------------	------

Lead mg/kg dry wt 277 03/12/09 OP 1.44

Field Sample #: WFE5Z(0-1)

Sample ID : 09B07326      ‡Sampled : 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
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Lead mg/kg dry wt 239 03/12/09 OP 1.08

Analytical Method:  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD  
Date Received: 3/11/2009  
Field Sample #: WFE5I(0-1)  
Sample ID: 09B07318  
Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23844  
Job Number: 115058

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Solids, total	%	67.1	03/12/09	FD				

Field Sample #: WFE5I(1-3)

Sample ID: 09B07319

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Solids, total	%	82.5	03/12/09	FD				

Field Sample #: WFE5J(0-1)

Sample ID: 09B07320

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Solids, total	%	72.9	03/12/09	FD				

Field Sample #: WFE5J(1-3)

Sample ID: 09B07321

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Solids, total	%	50.8	03/12/09	FD				

Field Sample #: WFE5K(0-1)

Sample ID: 09B07322

‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Solids, total	%	70.1	03/12/09	FD				

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3/12/2009  
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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD  
Date Received: 3/11/2009  
Field Sample #: WFE5K(1-3)

LIMS-BAT #: LIMIT-23844  
Job Number: 115058

Sample ID: 09B07323      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	57.2	03/12/09	FD			

Field Sample #: WFE5L(0-1)

Sample ID: 09B07324      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	63.0	03/12/09	FD			

Field Sample #: WFE5L(1-3)

Sample ID: 09B07325      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	52.2	03/12/09	FD			

Field Sample #: WFE5Z(0-1)

Sample ID: 09B07326      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	69.9	03/12/09	FD			

Analytical Method:

SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES CENTIGRADE.

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Project Location: NEW BEDFORD, MA.  
Date Received: 3/10/2009  
Field Sample #: MW-WFES  
Sample ID: 09B07220

Purchase Order No.:

LIMS-BAT #: LIMIT-23B19  
Job Number: 115058 TASK44

‡Sampled: 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Antimony	mg/l	ND	03/16/09	AMP	0.0015			
Arsenic	mg/l	0.007	03/16/09	OP	0.005			
Barium	mg/l	0.0588	03/16/09	OP	0.0500			
Beryllium	mg/l	ND	03/16/09	OP	0.0020			
Cadmium	mg/l	ND	03/16/09	OP	0.0025			
Chromium	mg/l	ND	03/16/09	OP	0.005			
Lead	mg/l	ND	03/16/09	OP	0.0075			
Nickel	mg/l	ND	03/16/09	OP	0.005			
Selenium	mg/l	ND	03/16/09	OP	0.03			
Silver	mg/l	ND	03/16/09	OP	0.003			
Thallium	mg/l	ND	03/16/09	AMP	0.0005			
Vanadium	mg/l	ND	03/16/09	OP	0.025			
Zinc	mg/l	0.147	03/16/09	OP	0.010			

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3/17/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA.  
Date Received: 3/10/2009  
Field Sample #: ██████████

LIMS-BAT #: LIMIT-23B19  
Job Number: 115058 TASK44

Sample ID : 09B07219      ‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
PCB 1018	ug/l	██████	03/13/09	JMR	0.20			
PCB-1221	ug/l	██████	03/13/09	JMR	0.20			
PCB-1232	ug/l	██████	03/13/09	JMR	0.20			
PCB-1242	ug/l	██████	03/13/09	JMR	0.20			
PCB-1248	ug/l	██████	03/13/09	JMR	0.20			
PCB-1254	ug/l	██████	03/13/09	JMR	0.20			
PCB-1260	ug/l	██████	03/13/09	JMR	0.20			
PCB 1262	ug/l	██████	03/13/09	JMR	0.20			
PCB 1268	ug/l	██████	03/13/09	JMR	0.20			
Extraction Date 608/8081/8082		3/12/2009	03/13/09	JMR				

Field Sample #: MW-WFES

Sample ID : 09B07220      ‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
PCB 1016	ug/l	ND	03/13/09	JMR	0.20			
PCB-1221	ug/l	ND	03/13/09	JMR	0.20			
PCB-1232	ug/l	ND	03/13/09	JMR	0.20			
PCB-1242	ug/l	ND	03/13/09	JMR	0.20			
PCB-1248	ug/l	ND	03/13/09	JMR	0.20			
PCB-1254	ug/l	ND	03/13/09	JMR	0.20			
PCB-1260	ug/l	ND	03/13/09	JMR	0.20			
PCB 1262	ug/l	ND	03/13/09	JMR	0.20			
PCB 1268	ug/l	ND	03/13/09	JMR	0.20			
Extraction Date 608/8081/6082		3/12/2009	03/13/09	JMR				

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Purchase Order No.:

Project Location: NEW BEDFORD, MA.  
Date Received: 3/10/2009  
Field Sample #: ██████████  
Sample ID : 09B07222

LIMS-BAT #: LIMIT-23819  
Job Number: 115058 TASK44

‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
C9-C18 Aliphatics	ug/l	██████	03/12/09	CJM	150			
C19-C38 Aliphatics	ug/l	██████	03/12/09	CJM	150			
Unadjusted C11-C22 Aromatics	ug/l	██████	03/12/09	CJM	100			
C11-C22 Aromatics	ug/l	██████	03/12/09	CJM	100			
Date Extracted EPH Water		3/11/2009	03/12/09	CJM				

Field Sample #: MW-WFES

Sample ID : 09B07223

‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
C9-C18 Aliphatics	ug/l	ND	03/12/09	CJM	150			
C19-C36 Aliphatics	ug/l	ND	03/12/09	CJM	150			
Unadjusted C11-C22 Aromatics	ug/l	ND	03/12/09	CJM	100			
C11-C22 Aromatics	ug/l	NO	03/12/09	CJM	100			
Date Extracted EPH Water		3/11/2009	03/12/09	CJM				

Field Sample #: ██████████

Sample ID : 09B07224

‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
C9-C18 Aliphatics	ug/l	██████	03/13/09	CJM	150			
C19-C36 Aliphatics	ug/l	██████	03/13/09	CJM	150			
Unadjusted C11-C22 Aromatics	ug/l	██████	03/13/09	CJM	100			
C11-C22 Aromatics	ug/l	██████	03/13/09	CJM	100			
Date Extracted EPH Water		3/11/2009	03/13/09	CJM				

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NM = Not Measured

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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Purchase Order No.:

Project Location: NEW BEDFORD, MA.  
Date Received: 3/10/2009  
Field Sample #: [REDACTED]

LIMS-BAT #: LIMIT-23819  
Job Number: 115058 TASK44

Sample ID : 09B07219      ‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Mercury	mg/l	[REDACTED]	03/16/09	KM	0.00010			

Field Sample #: MW-WFES

Sample ID : 09B07220      ‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Mercury	mg/l	ND	03/16/09	KM	0.00010			

Field Sample #: [REDACTED]

Sample ID : 09B07221      ‡Sampled : 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Mercury	mg/l	[REDACTED]	03/16/09	KM	0.00010			

Analytical Method:  
SW846 7470  
COLD VAPOR TECHNIQUE (FLAMELESS ABSORPTION AT 254 NM)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/17/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA.  
Date Received: 3/10/2009  
Field Sample #: MW-WFES  
Sample ID: \*09B07220

LIMS-BAT #: LIMIT-23819  
Job Number: 115058 TASK44

‡Sampled: 3/10/2009  
Not Specified

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	ug/l	ND	03/14/09	BGL	5.00			
Acenaphthylene	ug/l	ND	03/14/09	BGL	5.00			
Anthracene	ug/l	ND	03/14/09	BGL	8.00			
Benzo(a)anthracene	ug/l	ND	03/14/09	BGL	5.00			
Benzo(a)pyrene	ug/l	ND	03/14/09	BGL	5.00			
Benzo(b)fluoranthene	ug/l	ND	03/14/09	BGL	5.00			
Benzo(g,h,i)perylene	ug/l	ND	03/14/09	BGL	5.00			
Benzo(k)fluoranthene	ug/l	ND	03/14/09	BGL	5.00			
Chrysene	ug/l	ND	03/14/09	BGL	5.00			
Fluoranthene	ug/l	ND	03/14/09	BGL	5.00			
Fluorene	ug/l	ND	03/14/09	BGL	5.00			
Indeno(1,2,3-cd)pyrene	ug/l	ND	03/14/09	BGL	5.00			
2-Methylnaphthalene	ug/l	ND	03/14/09	BGL	5.00			
Naphthalene	ug/l	ND	03/14/09	BGL	5.00			
Phenanthrene	ug/l	ND	03/14/09	BGL	5.00			
Pyrene	ug/l	ND	03/14/09	BGL	5.00			
Extraction Date 625/8270		3/12/2009	03/14/09	BGL				

Analytical Method:  
625/8270

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE BY SEPARATORY FUNNEL LIQUID/LIQUID EXTRACTION, FOLLOWED BY KUDERNA-DANISH OR TURBOVAP EVAPORATIVE CONCENTRATION AND QUANTITATED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 1 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W  
 Sample ID : 09B07781  
 Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

‡Sampled : 3/12/2009  
 Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
PCB 1016	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1221	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1232	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1242	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1248	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1254	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1260	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB 1262	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB 1268	mg/kg dry wt	ND	03/18/09	JMR	0.140			
Extraction Date PCBs		3/17/2009	03/18/09	JMR				

Analytical Method:  
 SW846 8081/8082

SAMPLES ARE EXTRACTED BY PRESSURIZED FLUID EXTRACTION (SW848 3545) OR MICROWAVE (SW846 3546), CONCENTRATED, AND ANALYZED BY GAS CHROMATOGRAPHY WITH ELECTRON CAPTURE DETECTION.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 2 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Acetone	mg/kg dry wt	ND	03/16/09	MFF	0.11			
tert-Amylmethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Benzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromochloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromodichloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromoform	mg/kg dry wt	ND	03/16/09	MFF	0.011			
Bromomethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
2-Butanone (MEK)	mg/kg dry wt	ND	03/16/09	MFF	0.043			
n-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
sec-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
tert-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
tert-Butylethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Carbon Disulfide	mg/kg dry wt	ND	03/16/09	MFF	0.007			
Carbon Tetrachloride	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Chlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Chlorodibromomethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
Chloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Chloroform	mg/kg dry wt	ND	03/16/09	MFF	0.005			
Chloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
2-Chlorotoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
4-Chlorotoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dibromoethane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Dibromomethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,4-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Dichlorodifluoromethane	mg/kg dry wt	ND	03/16/09	MFF	0.022			

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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID: 09B07781      ‡Sampled: 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
1,1-Dichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.005			
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3-Dichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
2,2-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
cis-1,3-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
trans-1,3-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
Diethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Diisopropyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
1,4-Dioxane	mg/kg dry wt	ND	03/16/09	MFF	0.11			
Ethyl Benzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Hexachlorobutadiene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
2-Hexanone	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Isopropylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
p-Isopropyltoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
MTBE	mg/kg dry wt	ND	03/16/09	MFF	0.005			
Methylene Chloride	mg/kg dry wt	ND	03/16/09	MFF	0.022			
MIBK	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Naphthalene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
n-Propylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Styrene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Tetrachloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Tetrahydrofuran	mg/kg dry wt	ND	03/16/09	MFF	0.011			

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DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID: 09B07781      ‡Sampled: 3/12/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.005			
1,1,1-Trichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1,2-Trichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Trichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Trichlorofluoromethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,2,3-Trichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Vinyl Chloride	mg/kg dry wt	ND	03/16/09	MFF	0.011			
m + p Xylene	mg/kg dry wt	ND	03/16/09	MFF	0.005			
o-Xylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			

Analytical Method:

SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: TB-01

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID: 09B07780      ‡Sampled: 3/12/2009  
 Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acetone	mg/kg	ND	03/16/09	MFF	0.10			
tert-Amylmethyl Ether	mg/kg	ND	03/16/09	MFF	0.001			
Benzene	mg/kg	ND	03/16/09	MFF	0.002			
Bromobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Bromochloromethane	mg/kg	ND	03/16/09	MFF	0.002			
Bromodichloromethane	mg/kg	ND	03/16/09	MFF	0.002			
Bromoform	mg/kg	ND	03/16/09	MFF	0.010			
Bromomethane	mg/kg	ND	03/16/09	MFF	0.010			
2-Butanone (MEK)	mg/kg	ND	03/16/09	MFF	0.040			
n-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
sec-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
tert-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
tert-Butylethyl Ether	mg/kg	ND	03/16/09	MFF	0.001			
Carbon Disulfide	mg/kg	ND	03/16/09	MFF	0.006			
Carbon Tetrachloride	mg/kg	ND	03/16/09	MFF	0.002			
Chlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Chlorodibromomethane	mg/kg	ND	03/16/09	MFF	0.010			
Chloroethane	mg/kg	ND	03/16/09	MFF	0.020			
Chloroform	mg/kg	ND	03/16/09	MFF	0.004			
Chloromethane	mg/kg	ND	03/16/09	MFF	0.010			
2-Chlorotoluene	mg/kg	ND	03/16/09	MFF	0.002			
4-Chlorotoluene	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dibromo-3-Chloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dibromoethane	mg/kg	ND	03/16/09	MFF	0.001			
Dibromomethane	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,3-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,4-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Dichlorodifluoromethane	mg/kg	ND	03/16/09	MFF	0.020			

RL = Reporting Limit

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: TB-01  
Sample ID: 09B07780  
Sample Matrix: LIQUIDS

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

‡Sampled: 3/12/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
1,1-Dichloroethane	mg/kg	ND	03/16/09	MFF	0.002		
1,2-Dichloroethane	mg/kg	ND	03/16/09	MFF	0.002		
1,1-Dichloroethylene	mg/kg	ND	03/18/09	MFF	0.004		
cis-1,2-Dichloroethylene	mg/kg	ND	03/16/09	MFF	0.002		
trans-1,2-Dichloroethylene	mg/kg	ND	03/16/09	MFF	0.002		
1,2-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.002		
1,3-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.001		
2,2-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.002		
1,1-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.002		
cis-1,3-Dichloropropene	mg/kg	ND	03/16/09	MFF	0.010		
trans-1,3-Dichloropropene	mg/kg	ND	03/16/09	MFF	0.010		
Diethyl Ether	mg/kg	ND	03/16/09	MFF	0.020		
Diisopropyl Ether	mg/kg	ND	03/16/09	MFF	0.020		
1,4-Dioxane	mg/kg	ND	03/16/09	MFF	0.10		
Ethyl Benzene	mg/kg	ND	03/16/09	MFF	0.002		
Hexachlorobutadiene	mg/kg	ND	03/16/09	MFF	0.002		
2-Hexanone	mg/kg	ND	03/16/09	MFF	0.020		
Isopropylbenzene	mg/kg	ND	03/16/09	MFF	0.002		
p-Isopropyltoluene	mg/kg	ND	03/16/09	MFF	0.002		
MTBE	mg/kg	ND	03/16/09	MFF	0.004		
Methylene Chloride	mg/kg	ND	03/16/09	MFF	0.020		
MIBK	mg/kg	ND	03/16/09	MFF	0.020		
Naphthalene	mg/kg	ND	03/16/09	MFF	0.010		
n-Propylbenzene	mg/kg	ND	03/16/09	MFF	0.002		
Styrene	mg/kg	ND	03/16/09	MFF	0.010		
1,1,1,2-Tetrachloroethane	mg/kg	ND	03/16/09	MFF	0.002		
1,1,1,2,2-Tetrachloroethane	mg/kg	ND	03/16/09	MFF	0.001		
Tetrachloroethylene	mg/kg	ND	03/16/09	MFF	0.002		
Tetrahydrofuran	mg/kg	ND	03/16/09	MFF	0.010		

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 7 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: TB-01

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID: 09B07780      ‡Sampled: 3/12/2009  
Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg	ND	03/16/09	MFF	0.002			
1,2,3-Trichlorobenzene	mg/kg	ND	03/16/09	MFF	0.010			
1,2,4-Trichlorobenzene	mg/kg	ND	03/16/09	MFF	0.004			
1,1,1-Trichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
1,1,2-Trichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
Trichloroethylene	mg/kg	ND	03/16/09	MFF	0.002			
Trichlorofluoromethane	mg/kg	ND	03/16/09	MFF	0.010			
1,2,3-Trichloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,2,4-Trimethylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,3,5-Trimethylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
Vinyl Chloride	mg/kg	ND	03/16/09	MFF	0.010			
m + p Xylene	mg/kg	ND	03/16/09	MFF	0.004			
o-Xylene	mg/kg	ND	03/16/09	MFF	0.002			

Analytical Method:  
SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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650 SUFFOLK STREET  
LOWELL, MA 01852

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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID: 09B07781      ‡Sampled: 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Arsenic	mg/kg dry wt	15.7	03/20/09	OP	3.50			
Barium	mg/kg dry wt	278	03/20/09	OP	6.99			
Cadmium	mg/kg dry wt	1.59	03/20/09	OP	0.35			
Chromium	mg/kg dry wt	16.7	03/20/09	OP	0.70			
Lead	mg/kg dry wt	655	03/20/09	OP	1.05			
Mercury	mg/kg dry wt	0.349	03/18/09	KM	0.022			
Selenium	mg/kg dry wt	ND	03/20/09	OP	6.99			
Silver	mg/kg dry wt	ND	03/20/09	OP	0.70			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 9 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Analytical Method: Arsenic  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Barium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Cadmium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Chromium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Lead  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Mercury  
SW846 3050/7471

SAMPLES ARE DIGESTED WITH ACIDS AND THEN ANALYZED BY  
COLD VAPOR (FLAMELESS) ATOMIC ABSORPTION SPECTROPHOTOMETRY

Analytical Method: Selenium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Silver  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

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NM = Not Measured

SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled



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LOWELL, MA 01852

3/20/2009  
Page 10 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Umit Lo Hi	P/ F
Acenaphthene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Acenaphthylene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Anthracene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Benzo(a)anthracene	mg/kg dry wt	0.303	03/19/09	BGL	0.233		
Benzo(a)pyrene	mg/kg dry wt	0.287	03/19/09	BGL	0.233		
Benzo(b)fluoranthene	mg/kg dry wt	0.381	03/19/09	BGL	0.233		
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Chrysene	mg/kg dry wt	0.336	03/19/09	BGL	0.233		
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Fluoranthene	mg/kg dry wt	0.521	03/19/09	BGL	0.233		
Fluorene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
2-Methylnaphthalene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Naphthalene	mg/kg dry wt	ND	03/19/09	BGL	0.233		
Phenanthrene	mg/kg dry wt	0.558	03/19/09	BGL	0.233		
Pyrene	mg/kg dry wt	0.646	03/19/09	BGL	0.233		
Extraction Date 8270		3/17/2009	03/19/09	BGL			

Analytical Method:  
SWB46 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

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‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 11 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample # : WFE5W  
 Sample ID : 09B07781  
 Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

‡Sampled : 3/12/2009  
 Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Solids, total	%	71.6	03/17/09	FD			

Analytical Method:

SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES CENTIGRADE.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 12 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample # : WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Unknown Hydrocarbons	mg/kg dry wt	240	03/19/09	CJM	120		

Analytical Method:

MODIFIED SW848 8100

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE AND ANALYZED BY GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION (FID). ALL PEAKS ELUTING IN THE PETROLEUM FUEL REGION ARE QUANTITATED AS #2 FUEL OIL.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = e client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.





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REPORT DATE 4/1/2009

TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852  
ATTN: DAVID SULLIVAN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-24337  
JOB NUMBER: 115058 TASK 44

PROJECT LOCATION: NEW BEDFORD MA

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
WFESW	09B09717	SOIL	Not Specified	tcip - lead icp	

Comments :

LIMS BATCH NO. : LIMIT-24337

CASE NARRATIVE SUMMARY

Recommended sample holding times were not exceeded for all samples unless listed below.  
None Exceeded

All samples for the method(s) listed were received preserved properly in the proper containers at 4°C +/- 2 degrees as specified on the chain-of-custody form unless listed below.  
All properly preserved

There are no analytical issues which affect the useability of the data.

DETAILED CASE NARRATIVE

METHOD SW846-6010 - ADDITIONAL DETAILS

MS performed on sample 09B09717. Only Pb was requested and reported.  
The ms recovery is outside control limits for Pb. Sample to spike ratio is >4:1, therefore a representative recovery may not be obtainable.

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditallons only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and 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.

4/1/09

Tod Kopyscinski  
Air Laboratory Manager

Michael Erickson  
Asstiant Laboratory Director

SIGNATURE

DATE

Edward Denson  
Technical Director

Daren Damboragian  
Organics Department Supervisor

\* See end of data tabulation for notes and comments pertaining to this sample



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LOWELL, MA 01852

4/1/2009  
Page 1 of 2

Purchase Order No.:

Project Location: NEW BEDFORD MA  
Date Received: 3/30/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-24337  
Job Number: 115058 TASK 44

Sample ID: 09B09717      ‡Sampled: 3/13/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/l leachate	8.04	04/01/09	KSH	0.015	5		F

Analytical Method:  
SW846 1311/6010

SAMPLES ARE EXTRACTED INTO pH 5.0 BUFFER FOR 18-24 HOURS AND THEN ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY. WATER SAMPLES ARE FILTERED, NOT EXTRACTED.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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4/1/2009  
Page 2 of 2

Project Location: NEW BEDFORD MA  
Date Received: 3/30/2009

Purchase Order No.:

LIMS-BAT #: LIMIT-24337  
Job Number: 115058 TASK 44

**\*\* END OF REPORT \*\***

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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**QC SUMMARY REPORT**

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/1/2009

Lims Bat #: LIMT-24337

Page 1 of 2

QC Batch Number: ICP/TCLP-4752

Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09717	Lead	Sample Amount	8.042	mg/l leachate	
		Matrix Spk Amt Added	0.500	mg/l leachate	
		MS Amt Measured	8.728	mg/l leachate	
		Matrix Spike % Rec.	137.251	%	70-130
BLANK-131301	Lead	Blank	<0.015	mg/l leachate	
LFBLANK-93542	Lead	Lab Fort Blank Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.574	mg/l leachate	
		Lab Fort Blk. % Rec.	114.800	%	80-120
		Dup Lab Fort Bl Amt.	0.500	mg/l leachate	
		Dup Lab Fort Bl. Fnd	0.594	mg/l leachate	
		Dup Lab Fort Bl %Rec	118.880	%	
		Lab Fort Blank Range	4.059	units	
		Lab Fort Bl. Av. Rec	118.830	%	
		LFB Duplicate RPD	3.475	%	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates  
Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates  
Standard Reference Materials and Duplicates  
Method Blanks

Report Date: 4/1/2009

Lims Bat #: LIMT-24337

Page 2 of 2

QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.

LIMITS Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.

Sample Amount Amount of analyte found in a sample.

Blank Method Blank that has been taken though all the steps of the analysis.

LFBLANK Laboratory Fortified Blank (a control sample)

STDADD Standard Added (a laboratory control sample)

Matrix Spk Amt Added Amount of analyte spiked into a sample  
MS Amt Measured Amount of analyte found including amount that was spiked  
Matrix Spike % Rec. % Recovery of spiked amount in sample.

Duplicate Value The result from the Duplicate analysis of the sample.  
Duplicate RPD The Relative Percent Difference between two Duplicate Analyses.

Surrogate Recovery The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.

Sur. Recovery (ELCD) Surrogate Recovery on the Electrolytic Conductivity Detector.  
Sur. Recovery (PID) Surrogate Recovery on the Photoionization Detector.

Standard Measured Amount measured for a laboratory control sample  
Standard Amt Added Known value for a laboratory control sample  
Standard % Recovery % recovered for a laboratory control sample with a known value.

Lab Fort Blank Amt Laboratory Fortified Blank Amount Added  
Lab Fort Blk. Found Laboratory Fortified Blank Amount Found  
Lab Fort Blk % Rec Laboratory Fortified Blank % Recovered  
Dup Lab Fort Bl Amt Duplicate Laboratory Fortified Blank Amount Added  
Dup Lab Fort Bl Fnd Duplicate Laboratory Fortified Blank Amount Found  
Dup Lab Fort Bl % Rec Duplicate Laboratory Fortified Blank % Recovery  
Lab Fort Blank Range Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).

Lab Fort Bl. Av. Rec. Laboratory Fortified Blank Average Recovery

Duplicate Sample Amt Sample Value for Duplicate used with Matrix Spike Duplicate  
MSD Amount Added Matrix Spike Duplicate Amount Added (Spiked)  
MSD Amt Measured Matrix Spike Duplicate Amount Measured  
MSD % Recovery Matrix Spike Duplicate % Recovery  
MSD Range Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries

**MADEP MCP ANALYTICAL METHOD REPORT CERTIFICATION FORM**

Laboratory Name: **CON-TEST Analytical Laboratory**

Project #: **L1M7-24337**

Project Location: **New Bedford**

MADEP RTN<sup>1</sup>:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

**09809717**

Sample Matrices:  Groundwater  Soil/Sediment  Drinking Water  Other: \_\_\_\_\_

<b>MCP SW-846 Methods Used</b>	8260B ( )	8151A ( )	8330 ( )	6010B <input checked="" type="checkbox"/>	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M <sup>2</sup> ( )
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	8082 ( )	8021B ( )	EPH ( )	7000 S <sup>3</sup> ( )	7196A ( )

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**

<b>A</b>	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>B</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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>C</b>	Does the data included in this report meet all the analytical 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"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>D</b>	<b>VPH and EPH Methods only:</b> Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

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

<b>E</b>	Were all analytical QC performance standards and recommendations for the specified methods achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>F</b>	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>

<sup>1</sup>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.**

Signature: 

Position: **Assistant Laboratory Director**

Printed Name: **Michael Erickson**

Date: 4/1/09



**[tferrentino@contestlabs.com](mailto:tferrentino@contestlabs.com)**

---

**From:** "Sullivan, Dave (Lowell,MA-US)" <DSullivan@TRCSOLUTIONS.com>  
**To:** <tferrentino@contestlabs.com>  
**Sent:** Monday, March 30, 2009 5:04 PM  
**Attach:** walsh chain for LIMIT 23957.pdf  
**Subject:** Another Hold/Expedite

Theresa:

I lost track of this one.

I need TCLP lead.

Please see what you can do to get this in a hurry.

Thanks,

-Dave

**David M. Sullivan, LSP, CHMM**  
**Senior Project Manager**



**TRC**  
Wannalancit Mills  
650 Suffolk Street  
Lowell, Massachusetts 01854

978-656-3565 phone  
978-453-1995 fax  
978-758-2809 cell  
[dsullivan@trcsolutions.com](mailto:dsullivan@trcsolutions.com)

SAMPLE REACTIVATION FORM

COMPANY TRC Lowell LOCATION 5C

CONTACT \_\_\_\_\_ PROJECT ID \_\_\_\_\_

CONTACT PHONE \_\_\_\_\_ FAX \_\_\_\_\_

DATE 3/30/09 TIME 5:04 pm TAT 24-48hr DUE DATE \_\_\_\_\_

REQUEST TAKEN BY TR GIVEN TO login

ACTIVATION REQUEST:

*activate WFESW for TR pb*

SPECIAL INSTRUCTIONS AND TERMS:

FAXED TO CONTACT FOR APPROVAL: Y N

ACTIVATION IS CORRECT PER OUR REQUEST \_\_\_\_\_ DATE \_\_\_\_\_  
INITIALS

CONTEST FINAL APPROVAL \_\_\_\_\_



## ANALYTICAL REPORT

Lab Number:	L0909493
Client:	Triumvirate Environmental 3 Industrial Drive Smithfield, RI 02917
ATTN:	Jason Atwood
Project Name:	CITY OF NEW BEDFORD
Project Number:	Not Specified
Report Date:	07/16/09

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

---

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0909493-01	STOCKPILE COMPOSITE	WALSH SOCCER FIELD SOIL	07/13/09 16:00



**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

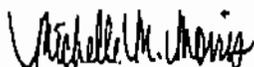
---

### Report Submission

At the client's request, all analyses were cancelled, with the exception of TCLP Lead.

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

Authorized Signature:



Title: Technical Director/Representative

Date: 07/16/09

# METALS



Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab Number: L0909493  
Report Date: 07/16/09

**SAMPLE RESULTS**

Lab ID: L0909493-01  
Client ID: STOCKPILE COMPOSITE  
Sample Location: WALSH SOCCER FIELD SOIL  
Matrix: Soil

Date Collected: 07/13/09 16:00  
Date Received: 07/14/09  
Field Prep: Not Specified  
TCLP/SPLP Ext. Date: 07/14/09 21:45

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Westborough Lab</b>										
Lead, TCLP	NO		mg/l	0.50	1	07/16/09 11:00	07/16/09 11:59	EPA 3015	1.6010B	MG



Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab Number: L0909493  
Report Date: 07/16/09

### Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG371166-1								
Lead, TCLP	ND	mg/l	0.50	1	07/16/09 11:00	07/16/09 11:53	1,6010B	MG

#### Prep Information

Digestion Method: EPA 3015  
TCLP Extraction Date: 07/14/09 21:45



# Lab Control Sample Analysis

Batch Quality Control

Project Name: CITY OF NEW BEDFORD

Project Number: Not Specified

Lab Num

Report D

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG371166-2				
Lead, TCLP	100	-	75-125	-

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Num**  
**Report C**

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG371166-4 QC Sample: L0909493-C COMPOSITE							
Lead, TCLP	ND	10	10	100	-	-	75-125

# Lab Duplicate Analysis

Project Name: CITY OF NEW BEDFORD

Batch Quality Control

Lab

Project Number: Not Specified

Rep

Parameter	Native Sample	Duplicate Sample	Units	RPD
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 COMPOSITE		QC Batch ID: WG371166-3	QC Sample: L0909493-0	
Lead, TCLP	ND	ND	mg/l	NC

Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab Number: L0909493  
Report Date: 07/16/09

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

#### Cooler Information

Cooler	Custody Seal
A	Absent

#### Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L0909493-01A	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01B	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01C	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01X	Plastic 250ml HNO3 preserved spl	A	<2	2	Y	Absent	PB-CI(180)

\*Hold days indicated by values in parentheses



**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- NI** - Not Ignitable.
- RDL** - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- RPD** - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

Report Format: Data Usability Report



**Project Name:** CITY OF NEW BEDFORD

**Lab Number:** L0909493

**Project Number:** Not Specified

**Report Date:** 07/16/09

### REFERENCES

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

### LIMITATION OF LIABILITIES

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

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



## Certificate/Approval Program Summary

Last revised July 7, 2009 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

*Drinking Water (Inorganic Parameters:* Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. *Organic Parameters:* Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water (Inorganic Parameters:* Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. *Organic Parameters:* PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil (Inorganic Parameters:* Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. *Organic Parameters:* PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons. )

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water (Inorganic Parameters:* SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. *Organic Parameters:* 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water (Inorganic Parameters:* EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. *Organic Parameters:* 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

#### *Drinking Water*

*Inorganic Parameters:* (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

*Organic Parameters:* (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *Non-Potable Water*

*Inorganic Parameters:*, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Tl,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

*Organic Parameters:* (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water)

600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.**

**Drinking Water**

**Microbiology Parameters:** SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.**

**Drinking Water (Inorganic Parameters:** SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. **Organic Parameters:** 504.1, 524.2, SM6251B.)

**Non-Potable Water (Inorganic Parameters:** SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. **Organic Parameters:** SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

**Solid & Chemical Materials (Inorganic Parameters:** SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. **Organic Parameters:** SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.**

**Drinking Water (Inorganic Parameters:** SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. **Organic Parameters:** 504.1, SM6251B, 524.2.)

**Non-Potable Water (Inorganic Parameters:** SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.2/1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. **Organic Parameters:** SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

**Solid & Chemical Materials (Inorganic Parameters:** SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. **Organic Parameters:** SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

**New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.**

**Drinking Water (Inorganic Parameters:** SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. **Organic Parameters:** EPA 524.2, 504.1.)

**Non-Potable Water (Inorganic Parameters:** SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO30F, EPA 354.1, SM4500-NO2-B, EPA 365.2, SM4500P-E, EPA 160.3, EPA 160.1, SM2540C, EPA 160.2, SM2540B, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. **Organic Parameters:** EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

**Solid & Hazardous Waste (Inorganic Parameters:** EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 9010B, 9030B. **Organic Parameters:** EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

**Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. NELAP Accredited.**

**Non-Potable Water (Organic Parameters:** EPA 3510C, 625, 608, 8081A, 8082, 8151A, 8270C, 8330)

**Solid & Hazardous Waste (Inorganic Parameters:** EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. **Organic Parameters:** 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.**

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Utah Department of Health Certificate/Lab ID: AAMA. *NELAP Accredited.***  
*Non-Potable Water (Inorganic Parameters: Chloride EPA 300.0)*



**APPENDIX C**  
**DUST MONITORING RESULTS**

Dust Monitoring Data - Downwind Unit  
(March 13, 2009)

TrakPro Version 3.6.2 ASCII Data File  
 Model: Dust Trak  
 Model Number: 8520  
 Serial Number: 85200726  
 Test ID: 1  
 Test Abbreviation:  
 Start Date: 3/13/2009  
 Start Time: 6:58:56  
 Duration (dd:hh:mm:ss): 00:02:47:00  
 Time constant (seconds): 60  
 Log Interval (mm:ss): 1:00  
 Number of points: 167  
 Notes:

Statistics	Channel:	Aerosol
	Units:	mg/m <sup>3</sup>
	Average:	0.021
	Minimum:	0.006
	Time of Minimum:	9:43:56
	Date of Minimum:	3/13/2009
	Maximum:	0.672
	Time of Maximum:	7:00:56
	Date of Maximum:	3/13/2009

Calibration	Sensor:	Aerosol
	Cal. date	2/11/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
3/13/2009	6:59:56	0.114
3/13/2009	7:00:56	0.672
3/13/2009	7:01:56	0.056
3/13/2009	7:02:56	0.013
3/13/2009	7:03:56	0.011
3/13/2009	7:04:56	0.009
3/13/2009	7:05:56	0.009
3/13/2009	7:06:56	0.011
3/13/2009	7:07:56	0.057
3/13/2009	7:08:56	0.009
3/13/2009	7:09:56	0.009
3/13/2009	7:10:56	0.009
3/13/2009	7:11:56	0.01
3/13/2009	7:12:56	0.01
3/13/2009	7:13:56	0.011
3/13/2009	7:14:56	0.011
3/13/2009	7:15:56	0.011
3/13/2009	7:16:56	0.014
3/13/2009	7:17:56	0.014
3/13/2009	7:18:56	0.045
3/13/2009	7:19:56	0.298
3/13/2009	7:20:56	0.01
3/13/2009	7:21:56	0.009
3/13/2009	7:22:56	0.01
3/13/2009	7:23:56	0.009
3/13/2009	7:24:56	0.011

Dust Monitoring Data - Downwind Unit  
(March 13, 2009)

3/13/2009	7:25:56	0.009
3/13/2009	7:26:56	0.009
3/13/2009	7:27:56	0.009
3/13/2009	7:28:56	0.009
3/13/2009	7:29:56	0.009
3/13/2009	7:30:56	0.009
3/13/2009	7:31:56	0.009
3/13/2009	7:32:56	0.009
3/13/2009	7:33:56	0.009
3/13/2009	7:34:56	0.01
3/13/2009	7:35:56	0.01
3/13/2009	7:36:56	0.01
3/13/2009	7:37:56	0.009
3/13/2009	7:38:56	0.01
3/13/2009	7:39:56	0.009
3/13/2009	7:40:56	0.012
3/13/2009	7:41:56	0.01
3/13/2009	7:42:56	0.01
3/13/2009	7:43:56	0.01
3/13/2009	7:44:56	0.01
3/13/2009	7:45:56	0.011
3/13/2009	7:46:56	0.012
3/13/2009	7:47:56	0.012
3/13/2009	7:48:56	0.011
3/13/2009	7:49:56	0.011
3/13/2009	7:50:56	0.011
3/13/2009	7:51:56	0.011
3/13/2009	7:52:56	0.011
3/13/2009	7:53:56	0.012
3/13/2009	7:54:56	0.012
3/13/2009	7:55:56	0.012
3/13/2009	7:56:56	0.011
3/13/2009	7:57:56	0.011
3/13/2009	7:58:56	0.012
3/13/2009	7:59:56	0.012
3/13/2009	8:00:56	0.012
3/13/2009	8:01:56	0.014
3/13/2009	8:02:56	0.011
3/13/2009	8:03:56	0.011
3/13/2009	8:04:56	0.01
3/13/2009	8:05:56	0.011
3/13/2009	8:06:56	0.164
3/13/2009	8:07:56	0.459
3/13/2009	8:08:56	0.01
3/13/2009	8:09:56	0.013
3/13/2009	8:10:56	0.012
3/13/2009	8:11:56	0.014
3/13/2009	8:12:56	0.01
3/13/2009	8:13:56	0.01
3/13/2009	8:14:56	0.01
3/13/2009	8:15:56	0.01
3/13/2009	8:16:56	0.011
3/13/2009	8:17:56	0.01
3/13/2009	8:18:56	0.01
3/13/2009	8:19:56	0.01

Dust Monitoring Data - Downwind Unit  
(March 13, 2009)

3/13/2009	8:20:56	0.011
3/13/2009	8:21:56	0.01
3/13/2009	8:22:56	0.011
3/13/2009	8:23:56	0.01
3/13/2009	8:24:56	0.01
3/13/2009	8:25:56	0.01
3/13/2009	8:26:56	0.01
3/13/2009	8:27:56	0.009
3/13/2009	8:28:56	0.009
3/13/2009	8:29:56	0.01
3/13/2009	8:30:56	0.01
3/13/2009	8:31:56	0.01
3/13/2009	8:32:56	0.01
3/13/2009	8:33:56	0.01
3/13/2009	8:34:56	0.009
3/13/2009	8:35:56	0.016
3/13/2009	8:36:56	0.009
3/13/2009	8:37:56	0.012
3/13/2009	8:38:56	0.009
3/13/2009	8:39:56	0.009
3/13/2009	8:40:56	0.013
3/13/2009	8:41:56	0.01
3/13/2009	8:42:56	0.008
3/13/2009	8:43:56	0.009
3/13/2009	8:44:56	0.01
3/13/2009	8:45:56	0.009
3/13/2009	8:46:56	0.009
3/13/2009	8:47:56	0.009
3/13/2009	8:48:56	0.097
3/13/2009	8:49:56	0.044
3/13/2009	8:50:56	0.008
3/13/2009	8:51:56	0.008
3/13/2009	8:52:56	0.009
3/13/2009	8:53:56	0.01
3/13/2009	8:54:56	0.008
3/13/2009	8:55:56	0.008
3/13/2009	8:56:56	0.008
3/13/2009	8:57:56	0.008
3/13/2009	8:58:56	0.008
3/13/2009	8:59:56	0.01
3/13/2009	9:00:56	0.01
3/13/2009	9:01:56	0.008
3/13/2009	9:02:56	0.008
3/13/2009	9:03:56	0.007
3/13/2009	9:04:56	0.007
3/13/2009	9:05:56	0.008
3/13/2009	9:06:56	0.009
3/13/2009	9:07:56	0.008
3/13/2009	9:08:56	0.008
3/13/2009	9:09:56	0.008
3/13/2009	9:10:56	0.008
3/13/2009	9:11:56	0.008
3/13/2009	9:12:56	0.008
3/13/2009	9:13:56	0.008
3/13/2009	9:14:56	0.009

Dust Monitoring Data - Downwind Unit  
(March 13, 2009)

3/13/2009	9:15:56	0.008
3/13/2009	9:16:56	0.008
3/13/2009	9:17:56	0.009
3/13/2009	9:18:56	0.008
3/13/2009	9:19:56	0.009
3/13/2009	9:20:56	0.008
3/13/2009	9:21:56	0.008
3/13/2009	9:22:56	0.008
3/13/2009	9:23:56	0.008
3/13/2009	9:24:56	0.009
3/13/2009	9:25:56	0.009
3/13/2009	9:26:56	0.009
3/13/2009	9:27:56	0.009
3/13/2009	9:28:56	0.01
3/13/2009	9:29:56	0.01
3/13/2009	9:30:56	0.009
3/13/2009	9:31:56	0.009
3/13/2009	9:32:56	0.009
3/13/2009	9:33:56	0.008
3/13/2009	9:34:56	0.008
3/13/2009	9:35:56	0.008
3/13/2009	9:36:56	0.008
3/13/2009	9:37:56	0.007
3/13/2009	9:38:56	0.007
3/13/2009	9:39:56	0.008
3/13/2009	9:40:56	0.008
3/13/2009	9:41:56	0.007
3/13/2009	9:42:56	0.007
3/13/2009	9:43:56	0.006
3/13/2009	9:44:56	0.007
3/13/2009	9:45:56	0.007

Dust Monitoring Data - Upwind Unit  
(July 10, 2009)

TrakPro Version 4.10 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200311  
Test ID: 1  
Test Abbreviation:  
Start Date: 7/10/2009  
Start Time: 8:37:44  
Duration (dd:hh:mm:ss): 0:01:29:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 1:00  
Number of points: 89  
Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: -0.005  
Minimum: -0.01  
Time of Minimum: 9:58:44  
Date of Minimum: 7/10/2009  
Maximum: 0.017  
Time of Maximum: 8:38:44  
Date of Maximum: 7/10/2009

Calibration Sensor: Aerosol  
Cal. date 4/2/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/10/2009	8:38:44	0.017
7/10/2009	8:39:44	-0.002
7/10/2009	8:40:44	-0.001
7/10/2009	8:41:44	0
7/10/2009	8:42:44	0
7/10/2009	8:43:44	-0.001
7/10/2009	8:44:44	-0.002
7/10/2009	8:45:44	-0.002
7/10/2009	8:46:44	-0.002
7/10/2009	8:47:44	-0.003
7/10/2009	8:48:44	-0.003
7/10/2009	8:49:44	-0.003
7/10/2009	8:50:44	-0.003
7/10/2009	8:51:44	-0.004
7/10/2009	8:52:44	0.013
7/10/2009	8:53:44	-0.004
7/10/2009	8:54:44	-0.004
7/10/2009	8:55:44	-0.005

Dust Monitoring Data - Upwind Unit  
(July 10, 2009)

7/10/2009	8:56:44	-0.005
7/10/2009	8:57:44	-0.004
7/10/2009	8:58:44	-0.005
7/10/2009	8:59:44	0.005
7/10/2009	9:00:44	-0.005
7/10/2009	9:01:44	-0.005
7/10/2009	9:02:44	-0.005
7/10/2009	9:03:44	-0.005
7/10/2009	9:04:44	-0.004
7/10/2009	9:05:44	-0.005
7/10/2009	9:06:44	0.015
7/10/2009	9:07:44	-0.006
7/10/2009	9:08:44	-0.006
7/10/2009	9:09:44	-0.001
7/10/2009	9:10:44	-0.006
7/10/2009	9:11:44	0.016
7/10/2009	9:12:44	-0.006
7/10/2009	9:13:44	-0.005
7/10/2009	9:14:44	-0.006
7/10/2009	9:15:44	-0.006
7/10/2009	9:16:44	-0.006
7/10/2009	9:17:44	-0.006
7/10/2009	9:18:44	-0.006
7/10/2009	9:19:44	-0.006
7/10/2009	9:20:44	-0.007
7/10/2009	9:21:44	-0.007
7/10/2009	9:22:44	-0.007
7/10/2009	9:23:44	-0.007
7/10/2009	9:24:44	0.002
7/10/2009	9:25:44	-0.008
7/10/2009	9:26:44	-0.008
7/10/2009	9:27:44	-0.008
7/10/2009	9:28:44	-0.008
7/10/2009	9:29:44	-0.007
7/10/2009	9:30:44	-0.007
7/10/2009	9:31:44	-0.008
7/10/2009	9:32:44	-0.008
7/10/2009	9:33:44	-0.008
7/10/2009	9:34:44	-0.008
7/10/2009	9:35:44	-0.008
7/10/2009	9:36:44	-0.008
7/10/2009	9:37:44	-0.008
7/10/2009	9:38:44	-0.008
7/10/2009	9:39:44	-0.008
7/10/2009	9:40:44	-0.008
7/10/2009	9:41:44	-0.009
7/10/2009	9:42:44	-0.009

Dust Monitoring Data - Upwind Unit  
(July 10, 2009)

7/10/2009	9:43:44	-0.009
7/10/2009	9:44:44	-0.009
7/10/2009	9:45:44	-0.009
7/10/2009	9:46:44	-0.009
7/10/2009	9:47:44	-0.009
7/10/2009	9:48:44	-0.009
7/10/2009	9:49:44	-0.008
7/10/2009	9:50:44	-0.009
7/10/2009	9:51:44	-0.009
7/10/2009	9:52:44	-0.008
7/10/2009	9:53:44	-0.009
7/10/2009	9:54:44	-0.009
7/10/2009	9:55:44	-0.009
7/10/2009	9:56:44	-0.009
7/10/2009	9:57:44	-0.009
7/10/2009	9:58:44	-0.01
7/10/2009	9:59:44	-0.01
7/10/2009	10:00:44	-0.009
7/10/2009	10:01:44	-0.01
7/10/2009	10:02:44	-0.01
7/10/2009	10:03:44	-0.01
7/10/2009	10:04:44	-0.01
7/10/2009	10:05:44	-0.01
7/10/2009	10:06:44	-0.01

Dust Monitoring Data - Downwind Unit  
(July 10, 2009)

TrakPro Version 4.10 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200990  
Test ID: 1  
Test Abbreviation:  
Start Date: 7/10/2009  
Start Time: 8:38:53  
Duration (dd:hh:mm:ss): 0:02:13:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 1:00  
Number of points: 133  
Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: 0  
Minimum: -0.009  
Time of Minimum: 8:51:53  
Date of Minimum: 7/10/2009  
Maximum: 0.499  
Time of Maximum: 9:36:53  
Date of Maximum: 7/10/2009

Calibration Sensor: Aerosol  
Cal. date 5/28/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/10/2009	8:39:53	-0.006
7/10/2009	8:40:53	-0.006
7/10/2009	8:41:53	-0.007
7/10/2009	8:42:53	-0.006
7/10/2009	8:43:53	-0.007
7/10/2009	8:44:53	-0.007
7/10/2009	8:45:53	-0.007
7/10/2009	8:46:53	-0.007
7/10/2009	8:47:53	-0.003
7/10/2009	8:48:53	-0.008
7/10/2009	8:49:53	-0.007
7/10/2009	8:50:53	-0.006
7/10/2009	8:51:53	-0.009
7/10/2009	8:52:53	-0.009
7/10/2009	8:53:53	-0.008
7/10/2009	8:54:53	-0.009
7/10/2009	8:55:53	-0.009
7/10/2009	8:56:53	0

Dust Monitoring Data - Downwind Unit  
(July 10, 2009)

7/10/2009	8:57:53	-0.005
7/10/2009	8:58:53	-0.008
7/10/2009	8:59:53	-0.009
7/10/2009	9:00:53	-0.003
7/10/2009	9:01:53	0.017
7/10/2009	9:02:53	0
7/10/2009	9:03:53	-0.005
7/10/2009	9:04:53	-0.003
7/10/2009	9:05:53	-0.007
7/10/2009	9:06:53	-0.005
7/10/2009	9:07:53	-0.007
7/10/2009	9:08:53	-0.004
7/10/2009	9:09:53	-0.008
7/10/2009	9:10:53	-0.007
7/10/2009	9:11:53	-0.008
7/10/2009	9:12:53	0.109
7/10/2009	9:13:53	-0.003
7/10/2009	9:14:53	-0.003
7/10/2009	9:15:53	0
7/10/2009	9:16:53	-0.007
7/10/2009	9:17:53	-0.008
7/10/2009	9:18:53	0
7/10/2009	9:19:53	-0.008
7/10/2009	9:20:53	-0.006
7/10/2009	9:21:53	-0.008
7/10/2009	9:22:53	-0.008
7/10/2009	9:23:53	0.001
7/10/2009	9:24:53	-0.008
7/10/2009	9:25:53	-0.006
7/10/2009	9:26:53	-0.003
7/10/2009	9:27:53	-0.003
7/10/2009	9:28:53	0
7/10/2009	9:29:53	-0.006
7/10/2009	9:30:53	-0.008
7/10/2009	9:31:53	-0.009
7/10/2009	9:32:53	-0.009
7/10/2009	9:33:53	-0.007
7/10/2009	9:34:53	-0.008
7/10/2009	9:35:53	-0.007
7/10/2009	9:36:53	0.499
7/10/2009	9:37:53	0.144
7/10/2009	9:38:53	0.004
7/10/2009	9:39:53	0
7/10/2009	9:40:53	-0.007
7/10/2009	9:41:53	-0.009
7/10/2009	9:42:53	-0.006
7/10/2009	9:43:53	-0.007

Dust Monitoring Data - Downwind Unit  
(July 10, 2009)

7/10/2009	9:44:53	-0.007
7/10/2009	9:45:53	0.018
7/10/2009	9:46:53	-0.005
7/10/2009	9:47:53	-0.007
7/10/2009	9:48:53	-0.006
7/10/2009	9:49:53	-0.005
7/10/2009	9:50:53	-0.005
7/10/2009	9:51:53	-0.007
7/10/2009	9:52:53	-0.007
7/10/2009	9:53:53	-0.007
7/10/2009	9:54:53	-0.007
7/10/2009	9:55:53	-0.007
7/10/2009	9:56:53	-0.007
7/10/2009	9:57:53	-0.008
7/10/2009	9:58:53	-0.007
7/10/2009	9:59:53	-0.007
7/10/2009	10:00:53	-0.008
7/10/2009	10:01:53	-0.005
7/10/2009	10:02:53	-0.007
7/10/2009	10:03:53	-0.007
7/10/2009	10:04:53	-0.008
7/10/2009	10:05:53	-0.008
7/10/2009	10:06:53	-0.006
7/10/2009	10:07:53	-0.005
7/10/2009	10:08:53	-0.005
7/10/2009	10:09:53	-0.008
7/10/2009	10:10:53	-0.008
7/10/2009	10:11:53	-0.009
7/10/2009	10:12:53	-0.008
7/10/2009	10:13:53	-0.008
7/10/2009	10:14:53	-0.008
7/10/2009	10:15:53	-0.001
7/10/2009	10:16:53	-0.002
7/10/2009	10:17:53	-0.008
7/10/2009	10:18:53	-0.008
7/10/2009	10:19:53	-0.008
7/10/2009	10:20:53	-0.006
7/10/2009	10:21:53	-0.007
7/10/2009	10:22:53	-0.008
7/10/2009	10:23:53	-0.006
7/10/2009	10:24:53	-0.007
7/10/2009	10:25:53	-0.007
7/10/2009	10:26:53	-0.007
7/10/2009	10:27:53	-0.005
7/10/2009	10:28:53	-0.006
7/10/2009	10:29:53	-0.006
7/10/2009	10:30:53	-0.007

Dust Monitoring Data - Downwind Unit  
(July 10, 2009)

7/10/2009	10:31:53	-0.006
7/10/2009	10:32:53	-0.006
7/10/2009	10:33:53	-0.007
7/10/2009	10:34:53	-0.007
7/10/2009	10:35:53	-0.007
7/10/2009	10:36:53	-0.007
7/10/2009	10:37:53	-0.007
7/10/2009	10:38:53	-0.007
7/10/2009	10:39:53	-0.007
7/10/2009	10:40:53	-0.007
7/10/2009	10:41:53	-0.007
7/10/2009	10:42:53	-0.004
7/10/2009	10:43:53	-0.004
7/10/2009	10:44:53	-0.006
7/10/2009	10:45:53	-0.005
7/10/2009	10:46:53	-0.006
7/10/2009	10:47:53	-0.005
7/10/2009	10:48:53	-0.007
7/10/2009	10:49:53	-0.006
7/10/2009	10:50:53	-0.007
7/10/2009	10:51:53	-0.005

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

TrakPro Version 4.10 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200311  
Test ID: 1  
Test Abbreviation: DW  
Start Date: 7/13/2009  
Start Time: 8:29:10  
Duration (dd:hh:mm:ss): 0:06:55:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 1:00  
Number of points: 415

Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: 0  
Minimum: -0.003  
Time of Minimum: 10:36:10  
Date of Minimum: 7/13/2009  
Maximum: 0.125  
Time of Maximum: 8:37:10  
Date of Maximum: 7/13/2009

Calibration Sensor: Aerosol  
Cal. date 4/2/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/13/2009	8:30:10	0.001
7/13/2009	8:31:10	0.002
7/13/2009	8:32:10	0.003
7/13/2009	8:33:10	0.016
7/13/2009	8:34:10	0.004
7/13/2009	8:35:10	0.001
7/13/2009	8:36:10	0.001
7/13/2009	8:37:10	0.125
7/13/2009	8:38:10	0
7/13/2009	8:39:10	0
7/13/2009	8:40:10	0
7/13/2009	8:41:10	0.001
7/13/2009	8:42:10	0
7/13/2009	8:43:10	0
7/13/2009	8:44:10	0
7/13/2009	8:45:10	0
7/13/2009	8:46:10	0
7/13/2009	8:47:10	0

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	8:48:10	0
7/13/2009	8:49:10	0
7/13/2009	8:50:10	0
7/13/2009	8:51:10	0
7/13/2009	8:52:10	0
7/13/2009	8:53:10	0
7/13/2009	8:54:10	0
7/13/2009	8:55:10	0
7/13/2009	8:56:10	0
7/13/2009	8:57:10	0
7/13/2009	8:58:10	0
7/13/2009	8:59:10	0
7/13/2009	9:00:10	0
7/13/2009	9:01:10	0
7/13/2009	9:02:10	0
7/13/2009	9:03:10	0
7/13/2009	9:04:10	0
7/13/2009	9:05:10	0
7/13/2009	9:06:10	-0.001
7/13/2009	9:07:10	0
7/13/2009	9:08:10	0
7/13/2009	9:09:10	0
7/13/2009	9:10:10	0
7/13/2009	9:11:10	0
7/13/2009	9:12:10	-0.001
7/13/2009	9:13:10	-0.001
7/13/2009	9:14:10	0
7/13/2009	9:15:10	-0.001
7/13/2009	9:16:10	-0.001
7/13/2009	9:17:10	0
7/13/2009	9:18:10	-0.001
7/13/2009	9:19:10	-0.001
7/13/2009	9:20:10	0
7/13/2009	9:21:10	-0.001
7/13/2009	9:22:10	-0.001
7/13/2009	9:23:10	-0.001
7/13/2009	9:24:10	-0.001
7/13/2009	9:25:10	-0.001
7/13/2009	9:26:10	-0.001
7/13/2009	9:27:10	-0.001
7/13/2009	9:28:10	-0.001
7/13/2009	9:29:10	-0.001
7/13/2009	9:30:10	0.002
7/13/2009	9:31:10	-0.001
7/13/2009	9:32:10	-0.001
7/13/2009	9:33:10	-0.001
7/13/2009	9:34:10	0

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	9:35:10	-0.002
7/13/2009	9:36:10	-0.001
7/13/2009	9:37:10	-0.001
7/13/2009	9:38:10	0
7/13/2009	9:39:10	-0.001
7/13/2009	9:40:10	-0.001
7/13/2009	9:41:10	-0.001
7/13/2009	9:42:10	0
7/13/2009	9:43:10	-0.001
7/13/2009	9:44:10	-0.001
7/13/2009	9:45:10	0.005
7/13/2009	9:46:10	0.008
7/13/2009	9:47:10	-0.002
7/13/2009	9:48:10	0.01
7/13/2009	9:49:10	0
7/13/2009	9:50:10	-0.001
7/13/2009	9:51:10	-0.001
7/13/2009	9:52:10	-0.001
7/13/2009	9:53:10	0
7/13/2009	9:54:10	-0.002
7/13/2009	9:55:10	0.004
7/13/2009	9:56:10	0.02
7/13/2009	9:57:10	0
7/13/2009	9:58:10	-0.001
7/13/2009	9:59:10	-0.002
7/13/2009	10:00:10	-0.002
7/13/2009	10:01:10	0
7/13/2009	10:02:10	0.002
7/13/2009	10:03:10	0.001
7/13/2009	10:04:10	-0.002
7/13/2009	10:05:10	-0.002
7/13/2009	10:06:10	-0.001
7/13/2009	10:07:10	-0.001
7/13/2009	10:08:10	-0.002
7/13/2009	10:09:10	-0.001
7/13/2009	10:10:10	-0.002
7/13/2009	10:11:10	-0.001
7/13/2009	10:12:10	-0.001
7/13/2009	10:13:10	-0.002
7/13/2009	10:14:10	0.014
7/13/2009	10:15:10	-0.001
7/13/2009	10:16:10	-0.001
7/13/2009	10:17:10	-0.002
7/13/2009	10:18:10	-0.001
7/13/2009	10:19:10	-0.002
7/13/2009	10:20:10	-0.002
7/13/2009	10:21:10	-0.001

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	10:22:10	-0.001
7/13/2009	10:23:10	-0.001
7/13/2009	10:24:10	-0.002
7/13/2009	10:25:10	-0.002
7/13/2009	10:26:10	-0.002
7/13/2009	10:27:10	-0.002
7/13/2009	10:28:10	-0.002
7/13/2009	10:29:10	-0.002
7/13/2009	10:30:10	-0.002
7/13/2009	10:31:10	-0.002
7/13/2009	10:32:10	-0.002
7/13/2009	10:33:10	-0.001
7/13/2009	10:34:10	-0.002
7/13/2009	10:35:10	-0.001
7/13/2009	10:36:10	-0.003
7/13/2009	10:37:10	-0.002
7/13/2009	10:38:10	-0.003
7/13/2009	10:39:10	-0.001
7/13/2009	10:40:10	-0.002
7/13/2009	10:41:10	-0.001
7/13/2009	10:42:10	-0.002
7/13/2009	10:43:10	-0.002
7/13/2009	10:44:10	-0.002
7/13/2009	10:45:10	-0.001
7/13/2009	10:46:10	-0.002
7/13/2009	10:47:10	-0.002
7/13/2009	10:48:10	-0.002
7/13/2009	10:49:10	-0.002
7/13/2009	10:50:10	-0.002
7/13/2009	10:51:10	-0.002
7/13/2009	10:52:10	0
7/13/2009	10:53:10	-0.001
7/13/2009	10:54:10	-0.002
7/13/2009	10:55:10	-0.002
7/13/2009	10:56:10	-0.002
7/13/2009	10:57:10	-0.002
7/13/2009	10:58:10	-0.002
7/13/2009	10:59:10	-0.002
7/13/2009	11:00:10	-0.002
7/13/2009	11:01:10	-0.002
7/13/2009	11:02:10	-0.002
7/13/2009	11:03:10	-0.002
7/13/2009	11:04:10	-0.002
7/13/2009	11:05:10	-0.002
7/13/2009	11:06:10	0
7/13/2009	11:07:10	-0.002
7/13/2009	11:08:10	-0.002

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	11:09:10	-0.001
7/13/2009	11:10:10	-0.002
7/13/2009	11:11:10	-0.002
7/13/2009	11:12:10	-0.002
7/13/2009	11:13:10	-0.002
7/13/2009	11:14:10	-0.001
7/13/2009	11:15:10	-0.002
7/13/2009	11:16:10	-0.002
7/13/2009	11:17:10	-0.001
7/13/2009	11:18:10	0.003
7/13/2009	11:19:10	-0.002
7/13/2009	11:20:10	-0.003
7/13/2009	11:21:10	-0.002
7/13/2009	11:22:10	-0.002
7/13/2009	11:23:10	-0.002
7/13/2009	11:24:10	-0.002
7/13/2009	11:25:10	-0.001
7/13/2009	11:26:10	-0.002
7/13/2009	11:27:10	-0.002
7/13/2009	11:28:10	-0.001
7/13/2009	11:29:10	-0.002
7/13/2009	11:30:10	-0.002
7/13/2009	11:31:10	-0.002
7/13/2009	11:32:10	-0.002
7/13/2009	11:33:10	-0.001
7/13/2009	11:34:10	-0.002
7/13/2009	11:35:10	-0.002
7/13/2009	11:36:10	-0.002
7/13/2009	11:37:10	-0.001
7/13/2009	11:38:10	-0.003
7/13/2009	11:39:10	-0.002
7/13/2009	11:40:10	-0.002
7/13/2009	11:41:10	-0.002
7/13/2009	11:42:10	-0.003
7/13/2009	11:43:10	-0.002
7/13/2009	11:44:10	-0.001
7/13/2009	11:45:10	-0.002
7/13/2009	11:46:10	-0.001
7/13/2009	11:47:10	-0.002
7/13/2009	11:48:10	0.039
7/13/2009	11:49:10	-0.001
7/13/2009	11:50:10	0
7/13/2009	11:51:10	-0.002
7/13/2009	11:52:10	-0.002
7/13/2009	11:53:10	-0.002
7/13/2009	11:54:10	-0.001
7/13/2009	11:55:10	-0.002

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	11:56:10	-0.002
7/13/2009	11:57:10	-0.002
7/13/2009	11:58:10	0.001
7/13/2009	11:59:10	0.003
7/13/2009	12:00:10	-0.002
7/13/2009	12:01:10	-0.001
7/13/2009	12:02:10	-0.001
7/13/2009	12:03:10	-0.002
7/13/2009	12:04:10	-0.002
7/13/2009	12:05:10	-0.002
7/13/2009	12:06:10	-0.001
7/13/2009	12:07:10	-0.002
7/13/2009	12:08:10	-0.001
7/13/2009	12:09:10	-0.001
7/13/2009	12:10:10	-0.002
7/13/2009	12:11:10	-0.001
7/13/2009	12:12:10	-0.001
7/13/2009	12:13:10	-0.001
7/13/2009	12:14:10	-0.002
7/13/2009	12:15:10	-0.001
7/13/2009	12:16:10	-0.001
7/13/2009	12:17:10	-0.001
7/13/2009	12:18:10	-0.002
7/13/2009	12:19:10	-0.002
7/13/2009	12:20:10	-0.001
7/13/2009	12:21:10	-0.001
7/13/2009	12:22:10	-0.001
7/13/2009	12:23:10	-0.002
7/13/2009	12:24:10	-0.002
7/13/2009	12:25:10	-0.002
7/13/2009	12:26:10	-0.001
7/13/2009	12:27:10	-0.001
7/13/2009	12:28:10	-0.002
7/13/2009	12:29:10	-0.002
7/13/2009	12:30:10	-0.002
7/13/2009	12:31:10	0.012
7/13/2009	12:32:10	0
7/13/2009	12:33:10	-0.002
7/13/2009	12:34:10	0
7/13/2009	12:35:10	-0.001
7/13/2009	12:36:10	-0.002
7/13/2009	12:37:10	-0.002
7/13/2009	12:38:10	-0.001
7/13/2009	12:39:10	-0.002
7/13/2009	12:40:10	-0.002
7/13/2009	12:41:10	-0.001
7/13/2009	12:42:10	-0.002

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	12:43:10	-0.001
7/13/2009	12:44:10	-0.001
7/13/2009	12:45:10	-0.002
7/13/2009	12:46:10	-0.002
7/13/2009	12:47:10	-0.002
7/13/2009	12:48:10	-0.001
7/13/2009	12:49:10	-0.001
7/13/2009	12:50:10	-0.002
7/13/2009	12:51:10	-0.001
7/13/2009	12:52:10	-0.002
7/13/2009	12:53:10	-0.002
7/13/2009	12:54:10	-0.001
7/13/2009	12:55:10	-0.001
7/13/2009	12:56:10	-0.001
7/13/2009	12:57:10	0
7/13/2009	12:58:10	-0.001
7/13/2009	12:59:10	-0.001
7/13/2009	13:00:10	0.018
7/13/2009	13:01:10	-0.001
7/13/2009	13:02:10	0
7/13/2009	13:03:10	0.02
7/13/2009	13:04:10	0.004
7/13/2009	13:05:10	-0.001
7/13/2009	13:06:10	0
7/13/2009	13:07:10	-0.001
7/13/2009	13:08:10	-0.001
7/13/2009	13:09:10	-0.001
7/13/2009	13:10:10	-0.001
7/13/2009	13:11:10	-0.002
7/13/2009	13:12:10	-0.002
7/13/2009	13:13:10	-0.001
7/13/2009	13:14:10	-0.001
7/13/2009	13:15:10	-0.001
7/13/2009	13:16:10	-0.001
7/13/2009	13:17:10	-0.001
7/13/2009	13:18:10	-0.002
7/13/2009	13:19:10	-0.001
7/13/2009	13:20:10	0
7/13/2009	13:21:10	-0.001
7/13/2009	13:22:10	-0.002
7/13/2009	13:23:10	0
7/13/2009	13:24:10	-0.001
7/13/2009	13:25:10	-0.002
7/13/2009	13:26:10	-0.002
7/13/2009	13:27:10	-0.001
7/13/2009	13:28:10	-0.002
7/13/2009	13:29:10	-0.002

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	13:30:10	-0.002
7/13/2009	13:31:10	-0.002
7/13/2009	13:32:10	-0.001
7/13/2009	13:33:10	0
7/13/2009	13:34:10	-0.001
7/13/2009	13:35:10	-0.001
7/13/2009	13:36:10	0
7/13/2009	13:37:10	-0.001
7/13/2009	13:38:10	0
7/13/2009	13:39:10	-0.001
7/13/2009	13:40:10	-0.002
7/13/2009	13:41:10	-0.001
7/13/2009	13:42:10	-0.001
7/13/2009	13:43:10	-0.001
7/13/2009	13:44:10	-0.002
7/13/2009	13:45:10	0
7/13/2009	13:46:10	0
7/13/2009	13:47:10	0
7/13/2009	13:48:10	0
7/13/2009	13:49:10	0.007
7/13/2009	13:50:10	0
7/13/2009	13:51:10	0
7/13/2009	13:52:10	-0.001
7/13/2009	13:53:10	-0.001
7/13/2009	13:54:10	0.002
7/13/2009	13:55:10	0.001
7/13/2009	13:56:10	-0.001
7/13/2009	13:57:10	-0.001
7/13/2009	13:58:10	-0.001
7/13/2009	13:59:10	0
7/13/2009	14:00:10	-0.001
7/13/2009	14:01:10	-0.001
7/13/2009	14:02:10	0.003
7/13/2009	14:03:10	-0.002
7/13/2009	14:04:10	-0.001
7/13/2009	14:05:10	-0.002
7/13/2009	14:06:10	-0.001
7/13/2009	14:07:10	0.001
7/13/2009	14:08:10	-0.001
7/13/2009	14:09:10	0
7/13/2009	14:10:10	0.006
7/13/2009	14:11:10	0
7/13/2009	14:12:10	0
7/13/2009	14:13:10	0
7/13/2009	14:14:10	0
7/13/2009	14:15:10	0
7/13/2009	14:16:10	0.001

Dust Monitoring Data - Upwind Unit  
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7/13/2009	14:17:10	0
7/13/2009	14:18:10	0
7/13/2009	14:19:10	0
7/13/2009	14:20:10	0
7/13/2009	14:21:10	0
7/13/2009	14:22:10	0
7/13/2009	14:23:10	0
7/13/2009	14:24:10	-0.001
7/13/2009	14:25:10	0
7/13/2009	14:26:10	0.001
7/13/2009	14:27:10	0
7/13/2009	14:28:10	0.002
7/13/2009	14:29:10	0
7/13/2009	14:30:10	-0.001
7/13/2009	14:31:10	-0.001
7/13/2009	14:32:10	0
7/13/2009	14:33:10	-0.001
7/13/2009	14:34:10	-0.001
7/13/2009	14:35:10	-0.001
7/13/2009	14:36:10	-0.001
7/13/2009	14:37:10	-0.001
7/13/2009	14:38:10	-0.001
7/13/2009	14:39:10	-0.001
7/13/2009	14:40:10	-0.001
7/13/2009	14:41:10	-0.001
7/13/2009	14:42:10	-0.001
7/13/2009	14:43:10	-0.002
7/13/2009	14:44:10	-0.001
7/13/2009	14:45:10	-0.001
7/13/2009	14:46:10	-0.001
7/13/2009	14:47:10	-0.001
7/13/2009	14:48:10	-0.001
7/13/2009	14:49:10	-0.002
7/13/2009	14:50:10	-0.001
7/13/2009	14:51:10	0
7/13/2009	14:52:10	0.001
7/13/2009	14:53:10	-0.001
7/13/2009	14:54:10	-0.001
7/13/2009	14:55:10	-0.002
7/13/2009	14:56:10	-0.001
7/13/2009	14:57:10	-0.001
7/13/2009	14:58:10	0
7/13/2009	14:59:10	0
7/13/2009	15:00:10	-0.001
7/13/2009	15:01:10	-0.002
7/13/2009	15:02:10	0
7/13/2009	15:03:10	-0.002

Dust Monitoring Data - Upwind Unit  
(July 13, 2009)

7/13/2009	15:04:10	-0.001
7/13/2009	15:05:10	-0.002
7/13/2009	15:06:10	-0.002
7/13/2009	15:07:10	-0.002
7/13/2009	15:08:10	-0.003
7/13/2009	15:09:10	-0.002
7/13/2009	15:10:10	-0.002
7/13/2009	15:11:10	-0.002
7/13/2009	15:12:10	-0.002
7/13/2009	15:13:10	-0.002
7/13/2009	15:14:10	-0.003
7/13/2009	15:15:10	-0.002
7/13/2009	15:16:10	-0.001
7/13/2009	15:17:10	-0.002
7/13/2009	15:18:10	0
7/13/2009	15:19:10	-0.002
7/13/2009	15:20:10	-0.002
7/13/2009	15:21:10	-0.001
7/13/2009	15:22:10	0.007
7/13/2009	15:23:10	-0.002
7/13/2009	15:24:10	-0.002

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

TrakPro Version 4.10 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200990  
Test ID: 1  
Test Abbreviation: UW  
Start Date: 7/13/2009  
Start Time: 8:24:44  
Duration (dd:hh:mm:ss): 0:07:01:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 1:00  
Number of points: 421

Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: 0.004  
Minimum: -0.003  
Time of Minimum: 8:29:44  
Date of Minimum: 7/13/2009  
Maximum: 0.187  
Time of Maximum: 10:44:44  
Date of Maximum: 7/13/2009

Calibration Sensor: Aerosol  
Cal. date 5/28/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/13/2009	8:25:44	0.019
7/13/2009	8:26:44	0.01
7/13/2009	8:27:44	-0.002
7/13/2009	8:28:44	-0.002
7/13/2009	8:29:44	-0.003
7/13/2009	8:30:44	-0.003
7/13/2009	8:31:44	-0.003
7/13/2009	8:32:44	-0.002
7/13/2009	8:33:44	0
7/13/2009	8:34:44	0
7/13/2009	8:35:44	0
7/13/2009	8:36:44	0.005
7/13/2009	8:37:44	-0.001
7/13/2009	8:38:44	-0.003
7/13/2009	8:39:44	-0.001
7/13/2009	8:40:44	-0.001
7/13/2009	8:41:44	-0.003
7/13/2009	8:42:44	-0.003

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(July 13, 2009)

7/13/2009	8:43:44	-0.002
7/13/2009	8:44:44	-0.002
7/13/2009	8:45:44	-0.003
7/13/2009	8:46:44	-0.002
7/13/2009	8:47:44	0
7/13/2009	8:48:44	-0.003
7/13/2009	8:49:44	-0.002
7/13/2009	8:50:44	-0.002
7/13/2009	8:51:44	-0.002
7/13/2009	8:52:44	-0.001
7/13/2009	8:53:44	0
7/13/2009	8:54:44	-0.003
7/13/2009	8:55:44	-0.002
7/13/2009	8:56:44	-0.002
7/13/2009	8:57:44	-0.003
7/13/2009	8:58:44	-0.003
7/13/2009	8:59:44	-0.003
7/13/2009	9:00:44	-0.003
7/13/2009	9:01:44	-0.002
7/13/2009	9:02:44	-0.003
7/13/2009	9:03:44	-0.002
7/13/2009	9:04:44	-0.002
7/13/2009	9:05:44	0
7/13/2009	9:06:44	0.002
7/13/2009	9:07:44	0.003
7/13/2009	9:08:44	0
7/13/2009	9:09:44	0
7/13/2009	9:10:44	0.014
7/13/2009	9:11:44	0.005
7/13/2009	9:12:44	0.011
7/13/2009	9:13:44	0.024
7/13/2009	9:14:44	0.018
7/13/2009	9:15:44	0
7/13/2009	9:16:44	0.031
7/13/2009	9:17:44	0.045
7/13/2009	9:18:44	0.004
7/13/2009	9:19:44	0.001
7/13/2009	9:20:44	-0.001
7/13/2009	9:21:44	0.005
7/13/2009	9:22:44	0
7/13/2009	9:23:44	0.004
7/13/2009	9:24:44	-0.002
7/13/2009	9:25:44	0.14
7/13/2009	9:26:44	-0.003
7/13/2009	9:27:44	0
7/13/2009	9:28:44	0.142
7/13/2009	9:29:44	0.002

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	9:30:44	0.005
7/13/2009	9:31:44	-0.002
7/13/2009	9:32:44	0
7/13/2009	9:33:44	0.005
7/13/2009	9:34:44	0.006
7/13/2009	9:35:44	0.009
7/13/2009	9:36:44	0.005
7/13/2009	9:37:44	0.005
7/13/2009	9:38:44	-0.002
7/13/2009	9:39:44	0
7/13/2009	9:40:44	-0.003
7/13/2009	9:41:44	-0.002
7/13/2009	9:42:44	-0.003
7/13/2009	9:43:44	-0.001
7/13/2009	9:44:44	0
7/13/2009	9:45:44	-0.002
7/13/2009	9:46:44	-0.002
7/13/2009	9:47:44	0
7/13/2009	9:48:44	-0.001
7/13/2009	9:49:44	-0.003
7/13/2009	9:50:44	-0.003
7/13/2009	9:51:44	-0.002
7/13/2009	9:52:44	-0.002
7/13/2009	9:53:44	-0.003
7/13/2009	9:54:44	-0.001
7/13/2009	9:55:44	-0.003
7/13/2009	9:56:44	-0.001
7/13/2009	9:57:44	-0.003
7/13/2009	9:58:44	-0.003
7/13/2009	9:59:44	-0.003
7/13/2009	10:00:44	-0.003
7/13/2009	10:01:44	-0.002
7/13/2009	10:02:44	-0.003
7/13/2009	10:03:44	-0.002
7/13/2009	10:04:44	-0.003
7/13/2009	10:05:44	-0.003
7/13/2009	10:06:44	-0.003
7/13/2009	10:07:44	-0.003
7/13/2009	10:08:44	-0.002
7/13/2009	10:09:44	-0.003
7/13/2009	10:10:44	-0.003
7/13/2009	10:11:44	-0.003
7/13/2009	10:12:44	-0.002
7/13/2009	10:13:44	0
7/13/2009	10:14:44	-0.002
7/13/2009	10:15:44	-0.002
7/13/2009	10:16:44	-0.003

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	10:17:44	-0.003
7/13/2009	10:18:44	-0.002
7/13/2009	10:19:44	-0.003
7/13/2009	10:20:44	-0.001
7/13/2009	10:21:44	-0.003
7/13/2009	10:22:44	-0.002
7/13/2009	10:23:44	-0.003
7/13/2009	10:24:44	-0.002
7/13/2009	10:25:44	-0.002
7/13/2009	10:26:44	-0.003
7/13/2009	10:27:44	-0.003
7/13/2009	10:28:44	-0.003
7/13/2009	10:29:44	-0.002
7/13/2009	10:30:44	-0.003
7/13/2009	10:31:44	-0.003
7/13/2009	10:32:44	0.008
7/13/2009	10:33:44	0.001
7/13/2009	10:34:44	-0.003
7/13/2009	10:35:44	0.004
7/13/2009	10:36:44	0.002
7/13/2009	10:37:44	-0.002
7/13/2009	10:38:44	0.051
7/13/2009	10:39:44	0
7/13/2009	10:40:44	-0.003
7/13/2009	10:41:44	0.005
7/13/2009	10:42:44	0
7/13/2009	10:43:44	0
7/13/2009	10:44:44	0.187
7/13/2009	10:45:44	0.005
7/13/2009	10:46:44	0
7/13/2009	10:47:44	0.003
7/13/2009	10:48:44	0.001
7/13/2009	10:49:44	0.031
7/13/2009	10:50:44	0
7/13/2009	10:51:44	0.016
7/13/2009	10:52:44	0.007
7/13/2009	10:53:44	0.005
7/13/2009	10:54:44	0.025
7/13/2009	10:55:44	-0.002
7/13/2009	10:56:44	0.076
7/13/2009	10:57:44	0.001
7/13/2009	10:58:44	-0.003
7/13/2009	10:59:44	0.004
7/13/2009	11:00:44	0.001
7/13/2009	11:01:44	0.003
7/13/2009	11:02:44	0.016
7/13/2009	11:03:44	0.006

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	11:04:44	-0.001
7/13/2009	11:05:44	-0.001
7/13/2009	11:06:44	0.006
7/13/2009	11:07:44	0.025
7/13/2009	11:08:44	0
7/13/2009	11:09:44	0.014
7/13/2009	11:10:44	0.009
7/13/2009	11:11:44	0.05
7/13/2009	11:12:44	0
7/13/2009	11:13:44	0.004
7/13/2009	11:14:44	0
7/13/2009	11:15:44	0.001
7/13/2009	11:16:44	0.004
7/13/2009	11:17:44	0.022
7/13/2009	11:18:44	-0.001
7/13/2009	11:19:44	-0.002
7/13/2009	11:20:44	-0.002
7/13/2009	11:21:44	-0.003
7/13/2009	11:22:44	0.02
7/13/2009	11:23:44	0
7/13/2009	11:24:44	0.005
7/13/2009	11:25:44	-0.003
7/13/2009	11:26:44	-0.002
7/13/2009	11:27:44	-0.003
7/13/2009	11:28:44	-0.002
7/13/2009	11:29:44	0.004
7/13/2009	11:30:44	0.009
7/13/2009	11:31:44	-0.001
7/13/2009	11:32:44	0.002
7/13/2009	11:33:44	0.001
7/13/2009	11:34:44	0.005
7/13/2009	11:35:44	0.001
7/13/2009	11:36:44	0.004
7/13/2009	11:37:44	-0.003
7/13/2009	11:38:44	-0.002
7/13/2009	11:39:44	-0.003
7/13/2009	11:40:44	0.002
7/13/2009	11:41:44	-0.002
7/13/2009	11:42:44	-0.003
7/13/2009	11:43:44	-0.002
7/13/2009	11:44:44	-0.001
7/13/2009	11:45:44	-0.001
7/13/2009	11:46:44	0.017
7/13/2009	11:47:44	0.008
7/13/2009	11:48:44	0.002
7/13/2009	11:49:44	0.009
7/13/2009	11:50:44	-0.002

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	11:51:44	0.002
7/13/2009	11:52:44	-0.003
7/13/2009	11:53:44	-0.003
7/13/2009	11:54:44	-0.003
7/13/2009	11:55:44	-0.002
7/13/2009	11:56:44	-0.002
7/13/2009	11:57:44	0.006
7/13/2009	11:58:44	-0.002
7/13/2009	11:59:44	-0.002
7/13/2009	12:00:44	0.001
7/13/2009	12:01:44	-0.003
7/13/2009	12:02:44	0.001
7/13/2009	12:03:44	0.002
7/13/2009	12:04:44	0.004
7/13/2009	12:05:44	0
7/13/2009	12:06:44	0.01
7/13/2009	12:07:44	0.004
7/13/2009	12:08:44	-0.002
7/13/2009	12:09:44	-0.002
7/13/2009	12:10:44	0
7/13/2009	12:11:44	0.071
7/13/2009	12:12:44	0.016
7/13/2009	12:13:44	0.001
7/13/2009	12:14:44	-0.002
7/13/2009	12:15:44	0.002
7/13/2009	12:16:44	0.02
7/13/2009	12:17:44	0.002
7/13/2009	12:18:44	0.005
7/13/2009	12:19:44	0.008
7/13/2009	12:20:44	0.069
7/13/2009	12:21:44	0.046
7/13/2009	12:22:44	0.003
7/13/2009	12:23:44	0.004
7/13/2009	12:24:44	0
7/13/2009	12:25:44	0.03
7/13/2009	12:26:44	0.089
7/13/2009	12:27:44	0
7/13/2009	12:28:44	-0.002
7/13/2009	12:29:44	-0.002
7/13/2009	12:30:44	0.002
7/13/2009	12:31:44	0.001
7/13/2009	12:32:44	-0.002
7/13/2009	12:33:44	0
7/13/2009	12:34:44	-0.001
7/13/2009	12:35:44	-0.002
7/13/2009	12:36:44	-0.002
7/13/2009	12:37:44	-0.002

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	12:38:44	-0.002
7/13/2009	12:39:44	-0.003
7/13/2009	12:40:44	-0.002
7/13/2009	12:41:44	-0.001
7/13/2009	12:42:44	-0.001
7/13/2009	12:43:44	-0.002
7/13/2009	12:44:44	-0.002
7/13/2009	12:45:44	-0.001
7/13/2009	12:46:44	-0.002
7/13/2009	12:47:44	-0.002
7/13/2009	12:48:44	-0.002
7/13/2009	12:49:44	-0.002
7/13/2009	12:50:44	-0.002
7/13/2009	12:51:44	-0.002
7/13/2009	12:52:44	-0.003
7/13/2009	12:53:44	-0.003
7/13/2009	12:54:44	-0.002
7/13/2009	12:55:44	-0.002
7/13/2009	12:56:44	-0.002
7/13/2009	12:57:44	-0.001
7/13/2009	12:58:44	-0.002
7/13/2009	12:59:44	0
7/13/2009	13:00:44	-0.002
7/13/2009	13:01:44	-0.001
7/13/2009	13:02:44	0.001
7/13/2009	13:03:44	0
7/13/2009	13:04:44	-0.001
7/13/2009	13:05:44	-0.002
7/13/2009	13:06:44	-0.002
7/13/2009	13:07:44	-0.002
7/13/2009	13:08:44	-0.002
7/13/2009	13:09:44	-0.002
7/13/2009	13:10:44	0.019
7/13/2009	13:11:44	0.001
7/13/2009	13:12:44	-0.001
7/13/2009	13:13:44	0
7/13/2009	13:14:44	-0.001
7/13/2009	13:15:44	-0.002
7/13/2009	13:16:44	-0.002
7/13/2009	13:17:44	0
7/13/2009	13:18:44	0.D25
7/13/2009	13:19:44	0.029
7/13/2009	13:20:44	0.004
7/13/2009	13:21:44	0
7/13/2009	13:22:44	0.001
7/13/2009	13:23:44	0.002
7/13/2009	13:24:44	0.003

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	13:25:44	0
7/13/2009	13:26:44	0.001
7/13/2009	13:27:44	-0.001
7/13/2009	13:28:44	0.003
7/13/2009	13:29:44	0.008
7/13/2009	13:30:44	0.004
7/13/2009	13:31:44	0.002
7/13/2009	13:32:44	-0.001
7/13/2009	13:33:44	0.003
7/13/2009	13:34:44	0
7/13/2009	13:35:44	0.001
7/13/2009	13:36:44	0.002
7/13/2009	13:37:44	0.001
7/13/2009	13:38:44	0.001
7/13/2009	13:39:44	-0.001
7/13/2009	13:40:44	0.025
7/13/2009	13:41:44	0.054
7/13/2009	13:42:44	0
7/13/2009	13:43:44	0
7/13/2009	13:44:44	0.038
7/13/2009	13:45:44	0.032
7/13/2009	13:46:44	0.001
7/13/2009	13:47:44	0.052
7/13/2009	13:48:44	0.007
7/13/2009	13:49:44	0
7/13/2009	13:50:44	0.004
7/13/2009	13:51:44	0
7/13/2009	13:52:44	0
7/13/2009	13:53:44	0
7/13/2009	13:54:44	0.001
7/13/2009	13:55:44	-0.001
7/13/2009	13:56:44	0.001
7/13/2009	13:57:44	0.002
7/13/2009	13:58:44	0.001
7/13/2009	13:59:44	0
7/13/2009	14:00:44	-0.001
7/13/2009	14:01:44	-0.001
7/13/2009	14:02:44	0
7/13/2009	14:03:44	-0.001
7/13/2009	14:04:44	0
7/13/2009	14:05:44	-0.001
7/13/2009	14:06:44	0
7/13/2009	14:07:44	-0.002
7/13/2009	14:08:44	-0.002
7/13/2009	14:09:44	-0.001
7/13/2009	14:10:44	0
7/13/2009	14:11:44	-0.002

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	14:12:44	0.004
7/13/2009	14:13:44	0.005
7/13/2009	14:14:44	0
7/13/2009	14:15:44	0
7/13/2009	14:16:44	0.006
7/13/2009	14:17:44	0.027
7/13/2009	14:18:44	0.066
7/13/2009	14:19:44	-0.001
7/13/2009	14:20:44	-0.001
7/13/2009	14:21:44	-0.001
7/13/2009	14:22:44	0
7/13/2009	14:23:44	0.002
7/13/2009	14:24:44	0
7/13/2009	14:25:44	-0.001
7/13/2009	14:26:44	0
7/13/2009	14:27:44	0.012
7/13/2009	14:28:44	0.002
7/13/2009	14:29:44	0.002
7/13/2009	14:30:44	0
7/13/2009	14:31:44	0.001
7/13/2009	14:32:44	0
7/13/2009	14:33:44	0.005
7/13/2009	14:34:44	0.006
7/13/2009	14:35:44	0
7/13/2009	14:36:44	-0.001
7/13/2009	14:37:44	-0.001
7/13/2009	14:38:44	-0.001
7/13/2009	14:39:44	-0.001
7/13/2009	14:40:44	-0.001
7/13/2009	14:41:44	0.004
7/13/2009	14:42:44	0
7/13/2009	14:43:44	-0.002
7/13/2009	14:44:44	0.002
7/13/2009	14:45:44	-0.002
7/13/2009	14:46:44	-0.002
7/13/2009	14:47:44	-0.001
7/13/2009	14:48:44	-0.002
7/13/2009	14:49:44	0.003
7/13/2009	14:50:44	0.008
7/13/2009	14:51:44	0.024
7/13/2009	14:52:44	0
7/13/2009	14:53:44	0
7/13/2009	14:54:44	0.013
7/13/2009	14:55:44	-0.001
7/13/2009	14:56:44	0
7/13/2009	14:57:44	0.003
7/13/2009	14:58:44	0

Dust Monitoring Data - Downwind Unit  
(July 13, 2009)

7/13/2009	14:59:44	-0.001
7/13/2009	15:00:44	0.001
7/13/2009	15:01:44	0
7/13/2009	15:02:44	0
7/13/2009	15:03:44	0
7/13/2009	15:04:44	-0.002
7/13/2009	15:05:44	0.001
7/13/2009	15:06:44	0.066
7/13/2009	15:07:44	0.003
7/13/2009	15:08:44	0.032
7/13/2009	15:09:44	-0.001
7/13/2009	15:10:44	-0.001
7/13/2009	15:11:44	-0.001
7/13/2009	15:12:44	-0.001
7/13/2009	15:13:44	0
7/13/2009	15:14:44	0
7/13/2009	15:15:44	0
7/13/2009	15:16:44	-0.002
7/13/2009	15:17:44	0.002
7/13/2009	15:18:44	0
7/13/2009	15:19:44	0
7/13/2009	15:20:44	0
7/13/2009	15:21:44	0
7/13/2009	15:22:44	0
7/13/2009	15:23:44	0.03
7/13/2009	15:24:44	-0.001
7/13/2009	15:25:44	-0.002

Dust Monitoring Data - Upwind Unit  
(July 20, 2009)

TrakPro Version 3.6.2 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200990  
Test ID: 1  
Test Abbreviation:  
Start Date: 7/20/2009  
Start Time: 8:14:37  
Duration (dd:hh:mm:ss): 00:03:15:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 1:00  
Number of points: 195  
Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: 0.02  
Minimum: 0.015  
Time of Minimum: 11:29:37  
Date of Minimum: 7/20/2009  
Maximum: 0.07  
Time of Maximum: 9:20:37  
Date of Maximum: 7/20/2009

Calibration Sensor: Aerosol  
Cal. date 5/28/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/20/2009	8:15:37	0.022
7/20/2009	8:16:37	0.021
7/20/2009	8:17:37	0.021
7/20/2009	8:18:37	0.022
7/20/2009	8:19:37	0.024
7/20/2009	8:20:37	0.022
7/20/2009	8:21:37	0.022
7/20/2009	8:22:37	0.022
7/20/2009	8:23:37	0.024
7/20/2009	8:24:37	0.022
7/20/2009	8:25:37	0.023
7/20/2009	8:26:37	0.024
7/20/2009	8:27:37	0.023
7/20/2009	8:28:37	0.021
7/20/2009	8:29:37	0.025
7/20/2009	8:30:37	0.023
7/20/2009	8:31:37	0.022
7/20/2009	8:32:37	0.019

Dust Monitoring Data - Upwind Unit  
(July 20, 2009)

7/20/2009	8:33:37	0.019
7/20/2009	8:34:37	0.02
7/20/2009	8:35:37	0.019
7/20/2009	8:36:37	0.021
7/20/2009	8:37:37	0.021
7/20/2009	8:38:37	0.02
7/20/2009	8:39:37	0.019
7/20/2009	8:40:37	0.018
7/20/2009	8:41:37	0.019
7/20/2009	8:42:37	0.019
7/20/2009	8:43:37	0.018
7/20/2009	8:44:37	0.018
7/20/2009	8:45:37	0.018
7/20/2009	8:46:37	0.018
7/20/2009	8:47:37	0.018
7/20/2009	8:48:37	0.018
7/20/2009	8:49:37	0.019
7/20/2009	8:50:37	0.02
7/20/2009	8:51:37	0.02
7/20/2009	8:52:37	0.018
7/20/2009	8:53:37	0.018
7/20/2009	8:54:37	0.018
7/20/2009	8:55:37	0.02
7/20/2009	8:56:37	0.019
7/20/2009	8:57:37	0.019
7/20/2009	8:58:37	0.02
7/20/2009	8:59:37	0.021
7/20/2009	9:00:37	0.019
7/20/2009	9:01:37	0.021
7/20/2009	9:02:37	0.022
7/20/2009	9:03:37	0.022
7/20/2009	9:04:37	0.022
7/20/2009	9:05:37	0.022
7/20/2009	9:06:37	0.02
7/20/2009	9:07:37	0.019
7/20/2009	9:08:37	0.02
7/20/2009	9:09:37	0.02
7/20/2009	9:10:37	0.019
7/20/2009	9:11:37	0.022
7/20/2009	9:12:37	0.02
7/20/2009	9:13:37	0.021
7/20/2009	9:14:37	0.02
7/20/2009	9:15:37	0.019
7/20/2009	9:16:37	0.018
7/20/2009	9:17:37	0.019
7/20/2009	9:18:37	0.019
7/20/2009	9:19:37	0.022

Dust Monitoring Data - Upwind Unit  
(July 20, 2009)

7/20/2009	9:20:37	0.07
7/20/2009	9:21:37	0.021
7/20/2009	9:22:37	0.021
7/20/2009	9:23:37	0.02
7/20/2009	9:24:37	0.019
7/20/2009	9:25:37	0.019
7/20/2009	9:26:37	0.019
7/20/2009	9:27:37	0.02
7/20/2009	9:28:37	0.019
7/20/2009	9:29:37	0.019
7/20/2009	9:30:37	0.019
7/20/2009	9:31:37	0.02
7/20/2009	9:32:37	0.02
7/20/2009	9:33:37	0.022
7/20/2009	9:34:37	0.021
7/20/2009	9:35:37	0.023
7/20/2009	9:36:37	0.02
7/20/2009	9:37:37	0.019
7/20/2009	9:38:37	0.018
7/20/2009	9:39:37	0.02
7/20/2009	9:40:37	0.021
7/20/2009	9:41:37	0.02
7/20/2009	9:42:37	0.019
7/20/2009	9:43:37	0.02
7/20/2009	9:44:37	0.024
7/20/2009	9:45:37	0.024
7/20/2009	9:46:37	0.022
7/20/2009	9:47:37	0.02
7/20/2009	9:48:37	0.021
7/20/2009	9:49:37	0.019
7/20/2009	9:50:37	0.019
7/20/2009	9:51:37	0.018
7/20/2009	9:52:37	0.038
7/20/2009	9:53:37	0.017
7/20/2009	9:54:37	0.017
7/20/2009	9:55:37	0.017
7/20/2009	9:56:37	0.017
7/20/2009	9:57:37	0.016
7/20/2009	9:58:37	0.017
7/20/2009	9:59:37	0.017
7/20/2009	10:00:37	0.018
7/20/2009	10:01:37	0.017
7/20/2009	10:02:37	0.017
7/20/2009	10:03:37	0.017
7/20/2009	10:04:37	0.018
7/20/2009	10:05:37	0.017
7/20/2009	10:06:37	0.017

Dust Monitoring Data - Upwind Unit  
(July 20, 2009)

7/20/2009	10:07:37	0.019
7/20/2009	10:08:37	0.021
7/20/2009	10:09:37	0.018
7/20/2009	10:10:37	0.018
7/20/2009	10:11:37	0.024
7/20/2009	10:12:37	0.022
7/20/2009	10:13:37	0.018
7/20/2009	10:14:37	0.02
7/20/2009	10:15:37	0.019
7/20/2009	10:16:37	0.018
7/20/2009	10:17:37	0.019
7/20/2009	10:18:37	0.02
7/20/2009	10:19:37	0.02
7/20/2009	10:20:37	0.021
7/20/2009	10:21:37	0.02
7/20/2009	10:22:37	0.021
7/20/2009	10:23:37	0.019
7/20/2009	10:24:37	0.016
7/20/2009	10:25:37	0.024
7/20/2009	10:26:37	0.017
7/20/2009	10:27:37	0.018
7/20/2009	10:28:37	0.016
7/20/2009	10:29:37	0.017
7/20/2009	10:30:37	0.016
7/20/2009	10:31:37	0.016
7/20/2009	10:32:37	0.016
7/20/2009	10:33:37	0.016
7/20/2009	10:34:37	0.017
7/20/2009	10:35:37	0.022
7/20/2009	10:36:37	0.022
7/20/2009	10:37:37	0.022
7/20/2009	10:38:37	0.017
7/20/2009	10:39:37	0.017
7/20/2009	10:40:37	0.016
7/20/2009	10:41:37	0.017
7/20/2009	10:42:37	0.016
7/20/2009	10:43:37	0.016
7/20/2009	10:44:37	0.018
7/20/2009	10:45:37	0.022
7/20/2009	10:46:37	0.022
7/20/2009	10:47:37	0.022
7/20/2009	10:48:37	0.024
7/20/2009	10:49:37	0.031
7/20/2009	10:50:37	0.022
7/20/2009	10:51:37	0.023
7/20/2009	10:52:37	0.02
7/20/2009	10:53:37	0.021

Dust Monitoring Data - Upwind Unit  
(July 20, 2009)

7/20/2009	10:54:37	0.019
7/20/2009	10:55:37	0.018
7/20/2009	10:56:37	0.017
7/20/2009	10:57:37	0.02
7/20/2009	10:58:37	0.02
7/20/2009	10:59:37	0.02
7/20/2009	11:00:37	0.018
7/20/2009	11:01:37	0.018
7/20/2009	11:02:37	0.019
7/20/2009	11:03:37	0.022
7/20/2009	11:04:37	0.018
7/20/2009	11:05:37	0.019
7/20/2009	11:06:37	0.018
7/20/2009	11:07:37	0.017
7/20/2009	11:08:37	0.024
7/20/2009	11:09:37	0.022
7/20/2009	11:10:37	0.02
7/20/2009	11:11:37	0.029
7/20/2009	11:12:37	0.02
7/20/2009	11:13:37	0.019
7/20/2009	11:14:37	0.017
7/20/2009	11:15:37	0.016
7/20/2009	11:16:37	0.016
7/20/2009	11:17:37	0.016
7/20/2009	11:18:37	0.022
7/20/2009	11:19:37	0.019
7/20/2009	11:20:37	0.017
7/20/2009	11:21:37	0.018
7/20/2009	11:22:37	0.02
7/20/2009	11:23:37	0.02
7/20/2009	11:24:37	0.019
7/20/2009	11:25:37	0.017
7/20/2009	11:26:37	0.018
7/20/2009	11:27:37	0.02
7/20/2009	11:28:37	0.016
7/20/2009	11:29:37	0.015

Dust Monitoring Data - Downwind Unit  
(July 20, 2009)

TrakPro Version 3.6.2 ASCII Data File

Model: Dust Trak  
Model Number: 8520  
Serial Number: 85200311  
Test ID: 2  
Test Abbreviation:  
Start Date: 7/20/2009  
Start Time: 8:12:43  
Duration (dd:hh:mm:ss): 00:03:15:00  
Time constant (seconds): 10  
Log Interval (mm:ss): 5:00  
Number of points: 39  
Notes:

Statistics Channel: Aerosol  
Units: mg/m<sup>3</sup>  
Average: 0.021  
Minimum: 0.015  
Time of Minimum: 9:02:43  
Date of Minimum: 7/20/2009  
Maximum: 0.035  
Time of Maximum: 11:27:43  
Date of Maximum: 7/20/2009

Calibration Sensor: Aerosol  
Cal. date 4/2/2009

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
7/20/2009	8:17:43	0.024
7/20/2009	8:22:43	0.021
7/20/2009	8:27:43	0.021
7/20/2009	8:32:43	0.021
7/20/2009	8:37:43	0.019
7/20/2009	8:42:43	0.017
7/20/2009	8:47:43	0.018
7/20/2009	8:52:43	0.022
7/20/2009	8:57:43	0.023
7/20/2009	9:02:43	0.015
7/20/2009	9:07:43	0.018
7/20/2009	9:12:43	0.021
7/20/2009	9:17:43	0.017
7/20/2009	9:22:43	0.017
7/20/2009	9:27:43	0.019
7/20/2009	9:32:43	0.023
7/20/2009	9:37:43	0.02
7/20/2009	9:42:43	0.021

Dust Monitoring Data - Downwind Unit  
(July 20, 2009)

7/20/2009	9:47:43	0.02
7/20/2009	9:52:43	0.03
7/20/2009	9:57:43	0.019
7/20/2009	10:02:43	0.016
7/20/2009	10:07:43	0.017
7/20/2009	10:12:43	0.032
7/20/2009	10:17:43	0.025
7/20/2009	10:22:43	0.023
7/20/2009	10:27:43	0.018
7/20/2009	10:32:43	0.016
7/20/2009	10:37:43	0.016
7/20/2009	10:42:43	0.017
7/20/2009	10:47:43	0.018
7/20/2009	10:52:43	0.022
7/20/2009	10:57:43	0.02
7/20/2009	11:02:43	0.029
7/20/2009	11:07:43	0.022
7/20/2009	11:12:43	0.019
7/20/2009	11:17:43	0.018
7/20/2009	11:22:43	0.019
7/20/2009	11:27:43	0.035

**APPENDIX D**  
**BILL OF LADING FORMS**



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number\*  
4 - 21823

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

Release Name (optional): Walsh Field  
 Street: Parker and Hunter Streets Location Aid: Soccer Field  
 City/Town: New Bedford ZIP Code: 02740  
 Date/Period of Generation: \_\_\_\_\_ to: \_\_\_\_\_  
 Additional Release Tracking Numbers Associated with this Bill of Lading: \_\_\_\_\_  
 \* Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

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

Name of Organization: City of New Bedford  
 Name of Contact: Scott Alfonse Title: Director, Dept. of Env. Stew.  
 Street: 133 William Street  
 City/Town: New Bedford State: MA ZIP Code: 02740  
 Telephone: (508) 979-1487 Ext.: \_\_\_\_\_

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

- RP or PRP Specify:  Owner  Operator  Generator  Transporter Other RP or PRP: Municipality  
 Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)  
 Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(f))  
 Other Person: \_\_\_\_\_

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: D.W. White/City of New Bedford  
 Contact Person: M. White/R. Labelle Title: Owner/Commissioner  
 Street: 867 Middle Road/1105 Shawmut Avenue  
 City/Town: Acushnet/New Bedford State: MA ZIP Code: 02743/02746  
 Telephone: (508) 951-9604 Ext.: \_\_\_\_\_

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: City of New Bedford/Shawmut Avenue Transfer Station  
 Contact Person: Ronald LaBelle Title: Commissioner  
 Street: Shawmut Avenue  
 City/Town: New Bedford State: MA ZIP Code: 02746  
 Telephone: 508-979-1556 Ext.: \_\_\_\_\_  
 Type of Facility: (check one)  Asphalt Batch/Cold Mix  Landfill/Disposal  Incinerator  Temporary Storage  
 Asphalt Batch/Hot Mix  Landfill/Daily Cover  Other: \_\_\_\_\_  
 Thermal Processing  Landfill/Structural Fill  
 EPA Identification #: \_\_\_\_\_

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

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): <120 days to: \_\_\_\_\_

Reason for Temporary Storage:  
Awaiting offsite reuse, recycling and/or disposal facility approval.

# COPY



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

**H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

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

Signature: Scott Alfonse

Date: 3/11/2009

Name of Person (print): SCOTT ALFONSE



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVE SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/5/2009  
Page 1 of 5

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 3/4/2009  
Field Sample #: WFE-5-E (0-1)

LIMS-BAT #: LIMIT-23659  
Job Number: 115058

Sample ID: 09B06381      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	91.0	03/05/09	OP	0.97			

Field Sample #: WFE-5-E (1-3)

Sample ID: 09B06382      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	2500	03/05/09	OP	1.15			

~~Field Sample #: WFE-5-E (1-3)~~

Sample ID: 09B06385      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>          </del>	03/05/09	OP	0.90			

~~Field Sample #: WFE-5-E (1-3)~~

Sample ID: 09B06388      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>          </del>	03/05/09	OP	0.97			

Field Sample #: ~~WFE-5-E (1-3)~~

Sample ID: 09B06378      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>          </del>	03/05/09	OP	1.02			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVE SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/5/2009  
Page 2 of 5

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 3/4/2009  
Field Sample #: ~~09B06380~~  
Sample ID : 09B06380

LIMS-BAT #: LIMIT-23659  
Job Number: 115056

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>0.99</del>	03/05/09	OP	0.99			

Field Sample #: ~~09B06381~~

Sample ID : 09B06383

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>1.04</del>	03/05/09	OP	1.04			

Field Sample #: ~~09B06382~~

Sample ID : 09B06384

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	<del>1.03</del>	03/05/09	OP	1.03			

Analytical Method:  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

RL = Reporting Limit

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NM = Not Measured

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38 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 3 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (1-3) QC

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05251      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.83	03/02/09	KSH	0.34			

Field Sample #: WFE-5-B (0-1)

Sample ID: 09B05254      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Cadmium	mg/kg dry wt	ND	03/02/09	KSH	0.31			

Field Sample #: WFE-5-B (1-3)

Sample ID: 09B05255      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.88	03/02/09	KSH	0.35			

Field Sample #: WFE-5-C (0-1)

Sample ID: 09B05248      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.56	03/02/09	KSH	0.32			

Field Sample #: WFE-5-C (1-3)

Sample ID: 09B05249      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Cadmium	mg/kg dry wt	1.93	03/02/09	KSH	0.32			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 4 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)  
Sample ID: 09B05252

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	0.55	03/02/09	KSH	0.35		

Field Sample #: WFE-5-D (1-3)

Sample ID: 09B05253

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	0.95	03/02/09	KSH	0.36		

Field Sample #: WFE-5-D5 (1-3)

Sample ID: 09B05256

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	0.71	03/02/09	KSH	0.34		

Field Sample #: WFF-5-D (0-1)

Sample ID: 09B05257

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	ND	03/02/09	KSH	0.29		

Field Sample #: WFF-5-D (1-3)

Sample ID: 09B05258

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	0.34	03/02/09	KSH	0.29		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 18 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: ~~WFE5-A(0-1)~~

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID : 09B05243 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>0.85</del>	03/02/09	KSH	0.85		

Field Sample #: ~~WFE5-A(0-1)~~

Sample ID : 09B05240 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>1.06</del>	02/28/09	AMP	1.06		

Field Sample #: ~~WFE5-A(0-1)~~

Sample ID : 09B05241 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>0.93</del>	02/28/09	AMP	0.93		

Field Sample #: ~~WFE5-A(0-1)~~

Sample ID : 09B05244 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>0.95</del>	03/02/09	KSH	0.95		

Field Sample #: WFE-5-A (0-1)

Sample ID : 09B05250 ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	3360	03/02/09	KSH	1.06		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 19 of 27

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23459

Date Received: 2/23/2009

Job Number: 115058

Field Sample #: WFE-5-A (1-3) QC

Purchase Order No.:

Sample ID: 09B05261      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	1830	03/02/09	KSH	1.02			

Field Sample #: WFE-5-B (0-1)

Sample ID: 09B05254      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	40.7	03/02/09	KSH	0.91			

Field Sample #: WFE-5-B (1-3)

Sample ID: 09B05256      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	268	03/02/09	KSH	1.05			

Field Sample #: WFE-5-C (0-1)

Sample ID: 09B05248      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	214	03/02/09	KSH	0.96			

Field Sample #: WFE-5-C (1-3)

Sample ID: 09B06249      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/kg dry wt	654	03/02/09	KSH	0.96			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 20 of 27

Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)  
Sample ID: 09B05252

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	253	03/02/09	KSH	1.03			

Field Sample #: WFE-5-D (1-3)

Sample ID: 09B05253

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	1040	03/02/09	KSH	1.07			

Field Sample #: WFE-5-D5 (1-3)

Sample ID: 09B05256

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	254	03/02/09	KSH	1.00			

Field Sample #: [REDACTED]

Sample ID: 09B06257

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.87			

Field Sample #: [REDACTED]

Sample ID: 09B05258

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Lead	mg/kg dry wt	[REDACTED]	03/02/09	KSH	0.87			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
Page 6 of 27

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (0-1)

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID : 09B05250                    ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.236			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

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NM = Not Measured

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TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-A (1-3) QC

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID : 09B05251      ‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Benzo(a)anthracene	mg/kg dry wt	0.233	03/01/09	BGL	0.225		
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Benzo(b)fluoranthene	mg/kg dry wt	0.237	03/01/09	BGL	0.225		
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Chrysene	mg/kg dry wt	0.296	03/01/09	BGL	0.225		
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Fluoranthene	mg/kg dry wt	0.489	03/01/09	BGL	0.225		
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.225		
Phenanthrene	mg/kg dry wt	0.484	03/01/09	BGL	0.225		
Pyrene	mg/kg dry wt	0.622	03/01/09	BGL	0.225		
Extraction Date 8270		2/24/2009	03/01/09	BGL			

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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LOWELL, MA 01852

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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23459

Date Received: 2/23/2009

Job Number: 115058

Field Sample #: WFE-5-B (0-1)

Sample ID: 09B05254

‡Sampled: 2/23/2009

Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Benzo(a)anthracene	mg/kg dry wt	NO	03/01/09	BGL	0.202			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.202			
Pyrene	mg/kg dry wt	0.257	03/01/09	BGL	0.202			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23459

Date Received: 2/23/2009

Job Number: 115058

Field Sample #: WFE-5-B (1-3)

Sample ID: 09805255

‡Sampled: 2/23/2009

Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Naphthalene	mg/kg dry wt	0.524	03/01/09	BGL	0.233		
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.233		
Pyrene	mg/kg dry wt	0.289	03/01/09	BGL	0.233		
Extraction Date 8270		2/24/2009	03/01/09	BGL			

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-C (0-1)

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

Sample ID: 09B05248      ‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Benzo(a)anthracene	mg/kg dry wt	0.260	03/01/09	BGL	0.212		
Benzo(a)pyrene	mg/kg dry wt	0.235	03/01/09	BGL	0.212		
Benzo(b)fluoranthene	mg/kg dry wt	0.283	03/01/09	BGL	0.212		
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Chrysene	mg/kg dry wt	0.290	03/01/09	BGL	0.212		
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Fluoranthene	mg/kg dry wt	0.443	03/01/09	BGL	0.212		
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.212		
Naphthalene	mg/kg dry wt	NO	03/01/09	BGL	0.212		
Phenanthrene	mg/kg dry wt	0.389	03/01/09	BGL	0.212		
Pyrene	mg/kg dry wt	0.604	03/01/09	BGL	0.212		
Extraction Date 8270		2/24/2009	03/01/09	BGL			

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH

LIMS-BAT #: LIMIT-23459

Date Received: 2/23/2009

Job Number: 115058

Field Sample #: WFE-5-C (1-3)

Sample ID: 09B05249

‡Sampled: 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.212			
Acenaphthylene	mg/kg dry wt	0.305	03/01/09	BGL	0.212			
Anthracene	mg/kg dry wt	2.00	03/01/09	BGL	0.212			
Benzo(a)anthracene	mg/kg dry wt	4.03	03/01/09	BGL	0.212			
Benzo(a)pyrene	mg/kg dry wt	3.27	03/01/09	BGL	0.212			
Benzo(b)fluoranthene	mg/kg dry wt	3.77	03/01/09	BGL	0.212			
Benzo(g,h,i)perylene	mg/kg dry wt	0.978	03/01/09	BGL	0.212			
Benzo(k)fluoranthene	mg/kg dry wt	1.36	03/01/09	BGL	0.212			
Chrysene	mg/kg dry wt	3.93	03/01/09	BGL	0.212			
Dibenz(a,h)anthracene	mg/kg dry wt	0.291	03/01/09	BGL	0.212			
Fluoranthene	mg/kg dry wt	6.48	03/01/09	BGL	0.212			
Fluorene	mg/kg dry wt	0.617	03/01/09	BGL	0.212			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	1.28	03/01/09	BGL	0.212			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.212			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.212			
Phenanthrene	mg/kg dry wt	7.96	03/01/09	BGL	0.212			
Pyrene	mg/kg dry wt	8.15	03/01/09	BGL	0.212			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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LOWELL, MA 01852

3/3/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (0-1)  
Sample ID: 09B05252

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Benzo(a)anthracene	mg/kg dry wt	0.245	03/01/09	BGL	0.229			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Benzo(b)fluoranthene	mg/kg dry wt	0.231	03/01/09	BGL	0.229			
Benzo(g,h,i)perylene	mg/kg dry wt	NO	03/01/09	BGL	0.229			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Chrysene	mg/kg dry wt	0.293	03/01/09	BGL	0.229			
Di(1,2,3,4)benz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Fluoranthene	mg/kg dry wt	0.371	03/01/09	BGL	0.229			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.229			
Phenanthrene	mg/kg dry wt	0.342	03/01/09	BGL	0.229			
Pyrene	mg/kg dry wt	0.630	03/01/09	BGL	0.229			
Extraction Date 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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3/3/2009  
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Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D (1-3)  
Sample ID: 09B05263

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled : 2/23/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(a)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(a)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(b)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Chrysene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Naphthalene	mg/kg dry wt	0.763	03/01/09	BGL	0.238			
Phenanthrene	mg/kg dry wt	ND	03/01/09	BGL	0.238			
Pyrene	mg/kg dry wt	0.314	03/01/09	BGL	0.238			
Extraction Data 8270		2/24/2009	03/01/09	BGL				

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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3/3/2009  
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Project Location: NEW BEDFORD-WALSH  
Date Received: 2/23/2009  
Field Sample #: WFE-5-D5 (1-3)  
Sample ID: 09B05256  
Sample Matrix: SOIL

Purchase Order No.:

LIMS-BAT #: LIMIT-23459  
Job Number: 115058

‡Sampled: 2/23/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo HI	P/F
Acenaphthene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Acenaphthylene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Benzo(a)anthracene	mg/kg dry wt	0.283	03/01/09	BGL	0.222		
Benzo(a)pyrene	mg/kg dry wt	0.254	03/01/09	BGL	0.222		
Benzo(b)fluoranthene	mg/kg dry wt	0.281	03/01/09	BGL	0.222		
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Chrysene	mg/kg dry wt	0.338	03/01/09	BGL	0.222		
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Fluoranthene	mg/kg dry wt	0.488	03/01/09	BGL	0.222		
Fluorene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	0.223	03/01/09	BGL	0.222		
2-Methylnaphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Naphthalene	mg/kg dry wt	ND	03/01/09	BGL	0.222		
Phenanthrene	mg/kg dry wt	0.514	03/01/09	BGL	0.222		
Pyrene	mg/kg dry wt	0.748	03/01/09	BGL	0.222		
Extraction Date 8270		2/24/2009	03/01/09	BGL			

Analytical Method:  
SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/12/2009  
Page 1 of 5

Purchase Order No.:

Project Location: CITY OF NEW BEDFORD  
Date Received: 3/11/2009  
Field Sample #: WFE5I(0-1)  
Sample ID: 09B07318  
Sample Matrix: SOIL

LIMS-BAT #: LIMIT-23844  
Job Number: 115058

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Lead	mg/kg dry wt	217	03/12/09	OP	1.12		

Field Sample #: WFE5I(1-3)  
Sample ID: 09B07319  
Sample Matrix: SOIL

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Lead	mg/kg dry wt	1250	03/12/09	OP	1.20		

Field Sample #: WFE5J(0-1)  
Sample ID: 09B07320  
Sample Matrix: SOIL

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Lead	mg/kg dry wt	108	03/12/09	OP	1.03		

Field Sample #: WFE5J(1-3)  
Sample ID: 09B07321  
Sample Matrix: SOIL

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Lead	mg/kg dry wt	1490	03/12/09	OP	1.49		

Field Sample #: WFE5K(0-1)  
Sample ID: 09B07322  
Sample Matrix: SOIL

‡Sampled: 3/11/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Lead	mg/kg dry wt	142	03/12/09	OP	1.07		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/12/2009  
Page 2 of 5

Purchase Order No.:

Project Location: CITY OF NEW BEDFORD  
Date Received: 3/11/2009  
Field Sample #: WFE5K(1-3)

LIMS-BAT #: LIMIT-23844  
Job Number: 115058

Sample ID: 09B07323      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>1.82</del>	03/12/09	OP	1.32		

Field Sample #: ~~WFE5L(0-1)~~

Sample ID: 09B07324      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	<del>1.76</del>	03/12/09	OP	1.20		

Field Sample #: ~~WFE5L(1-2)~~

Sample ID: 09B07325      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	277	03/12/09	OP	1.44		

Field Sample #: WFE5Z(0-1)

Sample ID: 09B07326      ‡Sampled: 3/11/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	239	03/12/09	OP	1.06		

Analytical Method:

SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET 1 OF 5

4 - 21823

**I. LOAD INFORMATION:**      Signature of Transporter Representative: \_\_\_\_\_

**Load 1:**      Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: 3/13/09      Time of Shipment: 0925  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: L61-326 MA      Trailer Registration (if any): Box #65       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 2:**      Signature of Transporter Representative: \_\_\_\_\_

Date of Shipment: 3/13/09      Time of Shipment: 1010  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: L61-326 MA      Trailer Registration (if any): Box       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 3:**      Signature of Transporter Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_      Time of Shipment: \_\_\_\_\_  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: \_\_\_\_\_      Trailer Registration (if any): \_\_\_\_\_       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 4:**      Signature of Transporter Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_      Time of Shipment: \_\_\_\_\_  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: \_\_\_\_\_      Trailer Registration (if any): \_\_\_\_\_       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 5:**      Signature of Transporter Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_      Time of Shipment: \_\_\_\_\_  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: \_\_\_\_\_      Trailer Registration (if any): \_\_\_\_\_       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 6:**      Signature of Transporter Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_      Time of Shipment: \_\_\_\_\_  AM  PM      Date of Receipt: \_\_\_\_\_      Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: \_\_\_\_\_      Trailer Registration (if any): \_\_\_\_\_       AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**J. LOG SHEET VOLUME INFORMATION:**

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

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

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





Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

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

Release Name (optional): Walsh Field - WFE-5 (Soccer Field Area)  
 Street: 230 Hathaway Boulevard Location Aid: New Bedford High School  
 City/Town: New Bedford ZIP Code: 02740  
 Date/Period of Generation: 3/2/09 to: present  
 Additional Release Tracking Numbers Associated with this Bill of Lading: \_\_\_\_\_  
 \* Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

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

Name of Organization: City of New Bedford  
 Name of Contact: David Fredette Title: Environmental Planner  
 Street: 133 William Street, Room 304  
 City/Town: New Bedford State: MA ZIP Code: 02740  
 Telephone: (508) 961-4576 Ext.: \_\_\_\_\_

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

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

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: Norman's Enterprises Construction Corp  
 Contact Person: Norman Fredette Title: Owner  
 Street: 16 Rene Street  
 City/Town: Acushnet State: MA ZIP Code: 02743  
 Telephone: \_\_\_\_\_ Ext.: \_\_\_\_\_

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Greater New Bedford Regional Refuse Management District (Crapo Hill Landf.)  
 Contact Person: Hank Van Laarhoven Title: Director of Operations  
 Street: 300 Samuel Barnet Blvd  
 City/Town: New Bedford State: MA ZIP Code: 02745  
 Telephone: 508 763 5924 Ext.: \_\_\_\_\_  
 Type of Facility: (check one)  Asphalt Batch/Cold Mix  Landfill/Disposal  Incinerator  Temporary Storage  
 Asphalt Batch/Hot Mix  Landfill/Daily Cover  Other: \_\_\_\_\_  
 Thermal Processing  Landfill/Structural Fill EPA Identification #: \_\_\_\_\_

Division of Hazardous Waste/Class A Permit #: \_\_\_\_\_ Division of Solid Waste Management Permit #: 93537

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): 3/30/09 to: 7/24/09

Reason for Temporary Storage:  
Transported to transfer facility for lead stabilization



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

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

Temporary Storage Address:

Street: 1103 Shawmut Ave (transfer station)

City/Town: New Bedford

State: MA

ZIP Code: \_\_\_\_\_

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

Contaminated Media (check all that apply):  Soil  Groundwater  Surface Water  Other: \_\_\_\_\_

Contaminated Debris (check all that apply):  Vegetation or Organic Debris  Demolition/Construction Waste

Inorganic Absorbant Materials  Other: Poly Sheeting

Non-hazardous Uncontainerized Waste (check all that apply):  Non-aqueous Phase Liquid  Other: \_\_\_\_\_

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

Engineered Impoundments  Other: \_\_\_\_\_

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

Kerosene  Jet Fuel  Other: Lead, Stabilized

Estimated Volume of Materials: Cubic Yards: 50 Tons: 100 Other: \_\_\_\_\_

Contaminant Source (check one/specify):  Transportation Accident  Underground Storage Tank  Other: \_\_\_\_\_

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

Utility-Related Abatement Measure  Limited Removal Action  Comprehensive Response Action  Other: \_\_\_\_\_

Remediation Waste Characterization Support Documentation attached:

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

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

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: TRC Environmental Corporation

LSP Name: David M. Sullivan Title: Sr. Project Manager

Telephone: 978-656-3565 Ext.: \_\_\_\_\_

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

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

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

LSP Signature: [Signature] Seal:

Date: 7/16/2009

License Number: 1488





Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

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

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Person (print): \_\_\_\_\_

*David J. Fredette*  
DAVID J FREDETTE

7/16/09



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET

OF

4 - 21823

<b>I. LOAD INFORMATION:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
<b>Load 1:</b> Date of Shipment: 7/20	Time of Shipment: 08:53 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	CHL [Signature] Date of Receipt: 7/20/09	Time of Receipt: 10:11 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration: #14	Trailer Registration (if any): F79629	Load Size (cu. yds./tons): 15.91	

<b>Load 2:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Date of Shipment: 7/20/09	Time of Shipment: 11:00 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	CHL [Signature] Date of Receipt: 7/20/09	Time of Receipt: 11:15 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration: F79629	Trailer Registration (if any): #14	Load Size (cu. yds./tons): 10.14	

<b>Load 3:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Date of Shipment:	Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM	Date of Receipt:	Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration:	Trailer Registration (if any):	Load Size (cu. yds./tons):	

<b>Load 4:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Date of Shipment:	Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM	Date of Receipt:	Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration:	Trailer Registration (if any):	Load Size (cu. yds./tons):	

<b>Load 5:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Date of Shipment:	Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM	Date of Receipt:	Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration:	Trailer Registration (if any):	Load Size (cu. yds./tons):	

<b>Load 6:</b> Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Date of Shipment:	Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM	Date of Receipt:	Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM
Truck/Tractor Registration:	Trailer Registration (if any):	Load Size (cu. yds./tons):	

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





BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET

4 - 21823

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

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

Receiving Facility/Temporary Storage Representative (print):

Crago Hill Landfill Randal Ferry Title: Scale Operator

Signature: *[Handwritten Signature]*

Date: 8/20/09

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

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

Signature: *[Handwritten Signature]*

Date: 8/6/09

Name of Person (print): DAVID J FREDETTE

**GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT**  
 300 SAMUEL BARNET BLVD., NEW BEDFORD, MA 02745 TEL: (508) 763-5924 FAX: (508) 763-8624

CRAGO HILL LANDFILL  
 SCALE PHONE 508-998-5674  
 Ticket: 285830  
 Date: 7/28/2009  
 Time: 11:15:58 - 11:16:15

Truck: 603-MCF  
 Customer: 321/TRIUMVIRATE  
 Carrier: 603/MISC. CARRIER  
 Truck Type: DUMP TRUCK

Gross: 52500 LB Scale  
 Tare: 32300 LB Scale  
 Net: 20200 LB

Comment: WALSH FIELD

Origin	Materials & Services	Quantity
NEW/NEW BEDFORD	52/C.H.L. SPECIAL WASTE	15.91 Tons

Driver: [Signature] Deputy Weighmaster: RANDAL FERRY

HAULER COPY

**GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT**  
 300 SAMUEL BARNET BLVD., NEW BEDFORD, MA 02745 TEL: (508) 763-5924 FAX: (508) 763-8624

CRAGO HILL LANDFILL  
 SCALE PHONE 508-998-5674  
 Ticket: 285830  
 Date: 7/28/2009  
 Time: 11:15:58 - 11:16:15

Truck: 603-MCF  
 Customer: 321/TRIUMVIRATE  
 Carrier: 603/MISC. CARRIER  
 Truck Type: DUMP TRUCK

Gross: 52500 LB Scale  
 Tare: 32300 LB PreTare  
 Net: 20200 LB

Comment: WALSH FIELD

Origin	Materials & Services	Quantity
NEW/NEW BEDFORD	52/C.H.L. SPECIAL WASTE	10.14 Tons

Driver: [Signature] Deputy Weighmaster: RANDAL FERRY

HAULER COPY



**Massachusetts Department of Environmental Protection**  
**Bureau of Waste Site Cleanup**

BWSC-012A

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

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

Release Name (optional): Walsh Field - WFE-5 (Soccer Field Area)

Street: 230 Hathaway Boulevard Location Adj: New Bedford High School

City/Town: New Bedford ZIP Code: 02740

Date/Period of Generation: 3/2/09 to: present

Additional Release Tracking Numbers Associated with this Bill of Lading:

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

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

Name of Organization: City of New Bedford

Name of Contact: David Fredette Title: Environmental Planner

Street: 133 William Street, Room 304

City/Town: New Bedford State: MA ZIP Code: 02740

Telephone: (508) 961-4576 Ext.:

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

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

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

**D. TRANSPORTER OR COMMON CARRIER INFORMATION:**

Transporter/Common Carrier Name: Norman's Enterprises Construction Corp

Contact Person: Norman Fredette Title: Owner

Street: 16 Rene Street

City/Town: Acushnet State: MA ZIP Code: 02743

Telephone: \_\_\_\_\_ Ext. \_\_\_\_\_

**E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:**

Operator/Facility Name: Greater New Bedford Regional Refuse Management District (Crapo Hill Landf.)

Contact Person: Hank Van Laarhoven Title: Director of Operations

Street: 300 Samuel Barnett Blvd

City/Town: New Bedford State: MA ZIP Code: 02745

Telephone: 508 763 5924 Ext. \_\_\_\_\_

- Type of Facility: (check one)
- |   |  |                                       |  |
|---|--|---------------------------------------|--|
| <input type="checkbox"/> Asphalt Batch/Cold Mix | <input type="checkbox"/> Landfill/Disposal               | <input type="checkbox"/> Incinerator  | <input type="checkbox"/> Temporary Storage |
| <input type="checkbox"/> Asphalt Batch/Hot Mix  | <input checked="" type="checkbox"/> Landfill/Daily Cover | <input type="checkbox"/> Other: _____ |  |
| <input type="checkbox"/> Thermal Processing     | <input type="checkbox"/> Landfill/Structural Fill        | EPA Identification #: _____           |  |

Division of Hazardous Waste/Class A Permit #: \_\_\_\_\_ Division of Solid Waste Management Permit #: 93537

Actual/Anticipated Period of Temporary Storage (specify dates if applicable), 3/30/09 to: 7/24/09

Reason for Temporary Storage:

Transported to transfer facility for lead stabilization



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number\*

4 - 21823

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

Temporary Storage Address:

Street: 1103 Shawmut Ave (transfer station)

City/Town: New Bedford

State: MA

ZIP Code: \_\_\_\_\_

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

- Contaminated Media (check all that apply):  Soil  Groundwater  Surface Water  Other: \_\_\_\_\_
- Contaminated Debris (check all that apply):  Vegetation or Organic Debris  Demolition/Construction Waste  
 Inorganic Absorbent Materials  Other: Poly Sheeting
- Non-hazardous Uncontainerized Waste (check all that apply):  Non-aqueous Phase Liquid  Other: \_\_\_\_\_
- Non-hazardous Containerized Waste (check all that apply):  Tank Bottoms/Sludges  Containers  Drums  
 Engineered Impoundments  Other: \_\_\_\_\_

Type of Contamination (check all that apply):  Gasoline  Diesel Fuel  #2 Oil  #4 Oil  #5 Oil  Waste Oil  
 Kerosene  Jet Fuel  Other: Lead, Stabilized

Estimated Volume of Materials: Cubic Yards: 50 Tons: 100 Other: \_\_\_\_\_

Contaminant Source (check one/specify):  Transportation Accident  Underground Storage Tank  Other: \_\_\_\_\_

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

Utility-Related Abatement Measure  Limited Removal Action  Comprehensive Response Action  Other: \_\_\_\_\_

Remediation Waste Characterization Support Documentation attached:

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

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

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: TRC Environmental Corporation

LSP Name: David M. Sullivan Title: Sr. Project Manager

Telephone: 978-656-3565 Ext.: \_\_\_\_\_

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

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

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

LSP Signature: [Signature] Seal

Date: 7/16/2009

License Number: 1488





**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC-012A**

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

Release Tracking Number

4 - 21823

**H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

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

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

7/16/09

Name of Person (print): \_\_\_\_\_

DAVID J FREDERIC



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012B

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

Release Tracking Number:

4 - 2183

**I. LOAD INFORMATION:**

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

7/20/09 0853  
Date of Shipment: Time of Shipment:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

#16 MA 79510

Receiving Facility/Temporary Storage Representative:

CHL RF  
Date of Receipt: Time of Receipt:

7/20/09 10:10  
\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

Load Size (cu. yds./tons): 18.87

**LOAD 2:** Signature of Transporter Representative:

7/20/09 11:00  
Date of Shipment: Time of Shipment:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

#16 MA 79510

Receiving Facility/Temporary Storage Representative:

CHL YK  
Date of Receipt: Time of Receipt:

7/20/09 11:32  
\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

Load Size (cu. yds./tons): 9.53

**LOAD 3:** Signature of Transporter Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Load Size (cu. yds./tons):

**LOAD 4:** Signature of Transporter Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Load Size (cu. yds./tons):

**LOAD 5:** Signature of Transporter Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Load Size (cu. yds./tons):

**LOAD 6:** Signature of Transporter Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Load Size (cu. yds./tons):

**LOAD 7:** Signature of Transporter Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Receiving Facility/Temporary Storage Representative:

\_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ (circle one) am/pm

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

Load Size (cu. yds./tons):

**J. LOG SHEET VOLUME INFORMATION:**

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

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

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





Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012C

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

Release Tracking Number:

4 - 2183

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

Receiving Facility/Temporary Location Representative (print): Randal Ferry Title: Scallop Operator  
Signature: [Signature] Date: 7/20/09

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

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

Signature: [Signature] Date: 8/6/09  
Name of Person (print): DAVID FREDETTE

# GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT

300 SAMUEL BARNET BLVD., NEW BEDFORD, MA 02745 TEL: (508) 763-5924 FAX: (508) 763-8624

Origin: NEW BEDFORD  
Materials & Services: 52/C.H.L.L. SPECIAL WASTE  
Quantity: 18.87 Tons  
Comments: WALSH FIELD

Origin	Materials & Services	Quantity
NEW/NEW BEDFORD	52/C.H.L.L. SPECIAL WASTE	18.87 Tons

Drivers: *Tom Johnson* Deputy Weighmaster: RANDAL FERRY

HAULER COPY

# GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT

300 SAMUEL BARNET BLVD., NEW BEDFORD, MA 02745 TEL: (508) 763-5924 FAX: (508) 763-8624

ORADO HILL LANDFILL  
SCALE PHONE 508-998-5674  
Trucks: 603-N16  
Customer: 321/TRIUMVIRATE  
Carrier: 603/MISC.CARRIER  
Truck Type: DUMP TRUCK  
Ticket: 285031  
Date: 7/20/2009  
Time: 11:32:31 - 11:32:45  
Gross: 50280 LB Scale  
Tare: 31240 LB PreTare  
Net: 19040 LB

Comment: WALSH FIELD

Origin	Materials & Services	Quantity
NEW/NEW BEDFORD	52/C.H.L.L. SPECIAL WASTE	9.52 Tons

Drivers: *Tom Johnson* Deputy Weighmaster: RANDAL FERRY

HAULER COPY



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 1 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781                    ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
PCB 1016	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1221	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1232	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1242	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1248	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1254	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB-1260	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB 1262	mg/kg dry wt	ND	03/18/09	JMR	0.140			
PCB 1268	mg/kg dry wt	ND	03/18/09	JMR	0.140			
Extraction Date PCBs		3/17/2009	03/18/09	JMR				

Analytical Method:  
SW846 8081/8082

SAMPLES ARE EXTRACTED BY PRESSURIZED FLUID EXTRACTION (SW846 3545) OR MICROWAVE (SW846 3546), CONCENTRATED, AND ANALYZED BY GAS CHROMATOGRAPHY WITH ELECTRON CAPTURE DETECTION.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 2 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781 ±Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P / F
						Lo	Hi	
Acetone	mg/kg dry wt	ND	03/16/09	MFF	0.11			
tert-Amylmethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Benzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromochloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromodichloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Bromoform	mg/kg dry wt	NO	03/16/09	MFF	0.011			
Bromomethene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
2-Butanone (MEK)	mg/kg dry wt	ND	03/16/09	MFF	0.043			
n-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
sec-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
tert-Butylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
tert-Butylethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Carbon Disulfide	mg/kg dry wt	ND	03/16/09	MFF	0.007			
Carbon Tetrachloride	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Chlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Chlorodibromomethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
Chloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Chloroform	mg/kg dry wt	ND	03/16/09	MFF	0.005			
Chloromethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
2-Chlorotoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
4-Chlorotoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dibromoethane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Dibromomethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,4-Dichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Dichlorodifluoromethane	mg/kg dry wt	ND	03/16/09	MFF	0.022			

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DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 3 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
1,1-Dichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.005			
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2-Dichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3-Dichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
2,2-Dichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
cis-1,3-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
trans-1,3-Dichloropropene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
Diethyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Diisopropyl Ether	mg/kg dry wt	ND	03/16/09	MFF	0.002			
1,4-Dioxane	mg/kg dry wt	ND	03/16/09	MFF	0.11			
Ethyl Benzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Hexachlorobutadiene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
2-Hexanone	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Isopropylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
p-Isopropyltoluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
MTBE	mg/kg dry wt	ND	03/16/09	MFF	0.005			
Methylene Chloride	mg/kg dry wt	ND	03/16/09	MFF	0.022			
MIBK	mg/kg dry wt	ND	03/16/09	MFF	0.022			
Naphthalene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
n-Propylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Styrene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.002			
Tetrachloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Tetrahydrofuran	mg/kg dry wt	ND	03/16/09	MFF	0.011			

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39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 4 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	03/18/09	MFF	0.005			
1,1,1-Trichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,1,2-Trichloroethane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Trichloroethylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Trichlorofluoromethane	mg/kg dry wt	ND	03/16/09	MFF	0.011			
1,2,3-Trichloropropane	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	03/16/09	MFF	0.003			
Vinyl Chloride	mg/kg dry wt	ND	03/16/09	MFF	0.011			
m + p Xylene	mg/kg dry wt	ND	03/16/09	MFF	0.005			
o-Xylene	mg/kg dry wt	ND	03/16/09	MFF	0.003			

Analytical Method:  
 SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

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\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 5 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: TB-01

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07780      ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acetone	mg/kg	ND	03/16/09	MFF	0.10			
tert-Amylmethyl Ether	mg/kg	ND	03/16/09	MFF	0.001			
Benzene	mg/kg	ND	03/16/09	MFF	0.002			
Bromobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Bromochloromethane	mg/kg	ND	03/16/09	MFF	0.002			
Bromodichloromethane	mg/kg	ND	03/16/09	MFF	0.002			
Bromoform	mg/kg	ND	03/16/09	MFF	0.010			
Bromomethane	mg/kg	ND	03/16/09	MFF	0.010			
2-Butanone (MEK)	mg/kg	ND	03/16/09	MFF	0.040			
n-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
sec-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
tert-Butylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
tert-Butylethyl Ether	mg/kg	ND	03/16/09	MFF	0.001			
Carbon Disulfide	mg/kg	ND	03/16/09	MFF	0.006			
Carbon Tetrachloride	mg/kg	ND	03/16/09	MFF	0.002			
Chlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Chlorodibromomethane	mg/kg	ND	03/16/09	MFF	0.010			
Chloroethane	mg/kg	ND	03/16/09	MFF	0.020			
Chloroform	mg/kg	ND	03/16/09	MFF	0.004			
Chloromethane	mg/kg	ND	03/16/09	MFF	0.010			
2-Chlorotoluene	mg/kg	ND	03/16/09	MFF	0.002			
4-Chlorotoluene	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dibromo-3-Chloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dibromoethane	mg/kg	ND	03/16/09	MFF	0.001			
Dibromomethane	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,3-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,4-Dichlorobenzene	mg/kg	ND	03/16/09	MFF	0.002			
Dichlorodifluoromethane	mg/kg	ND	03/16/09	MFF	0.020			

RL = Reporting Limit

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ND = Not Detected at or above the Reporting Limit

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‡ = See attached chain-of-custody record for time sampled

DAVID SULLIVAN  
TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 6 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: TB-01

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07780

‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/F
						Lo	Hi	
1,1-Dichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
1,1-Dichloroethylene	mg/kg	ND	03/16/09	MFF	0.004			
cis-1,2-Dichloroethylene	mg/kg	ND	03/16/09	MFF	0.002			
trans-1,2-Dichloroethylene	mg/kg	ND	03/16/09	MFF	0.002			
1,2-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,3-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.001			
2,2-Dichloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,1-Dichloropropene	mg/kg	ND	03/16/09	MFF	0.002			
cis-1,3-Dichloropropene	mg/kg	ND	03/16/09	MFF	0.010			
trans-1,3-Dichloropropene	mg/kg	ND	03/16/09	MFF	0.010			
Diethyl Ether	mg/kg	ND	03/16/09	MFF	0.020			
Diisopropyl Ether	mg/kg	ND	03/16/09	MFF	0.020			
1,4-Dioxane	mg/kg	ND	03/18/09	MFF	0.10			
Ethyl Benzene	mg/kg	ND	03/16/09	MFF	0.002			
Hexachlorobutadiene	mg/kg	ND	03/16/09	MFF	0.002			
2-Hexanone	mg/kg	ND	03/16/09	MFF	0.020			
Isopropylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
p-Isopropyltoluene	mg/kg	ND	03/16/09	MFF	0.002			
MTBE	mg/kg	ND	03/16/09	MFF	0.004			
Methylene Chloride	mg/kg	ND	03/16/09	MFF	0.020			
MIBK	mg/kg	ND	03/16/09	MFF	0.020			
Nephthalene	mg/kg	ND	03/16/09	MFF	0.010			
n-Propylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
Styrene	mg/kg	ND	03/16/09	MFF	0.010			
1,1,1,2-Tetrachloroethane	mg/kg	ND	03/16/09	MFF	0.002			
1,1,2,2-Tetrachloroethane	mg/kg	ND	03/16/09	MFF	0.001			
Tetrachloroethylene	mg/kg	ND	03/16/09	MFF	0.002			
Tetrahydrofuran	mg/kg	ND	03/16/09	MFF	0.010			

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled



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DAVID SULLIVAN  
 TRC SOLUTIONS - LOWELL  
 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 7 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: TB-01

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID : 09B07780      ‡Sampled : 3/12/2009  
 Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg	ND	03/16/09	MFF	0.002			
1,2,3-Trichlorobenzene	mg/kg	ND	03/16/09	MFF	0.010			
1,2,4-Trichlorobenzene	mg/kg	ND	03/16/09	MFF	0.004			
1,1,1-Trichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
1,1,2-Trichloroethane	mg/kg	ND	03/16/09	MFF	0.002			
Trichloroethylene	mg/kg	ND	03/16/09	MFF	0.002			
Trichlorofluoromethane	mg/kg	ND	03/16/09	MFF	0.010			
1,2,3-Trichloropropane	mg/kg	ND	03/16/09	MFF	0.002			
1,2,4-Trimethylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
1,3,5-Trimethylbenzene	mg/kg	ND	03/16/09	MFF	0.002			
Vinyl Chloride	mg/kg	ND	03/16/09	MFF	0.010			
m + p Xylene	mg/kg	ND	03/16/09	MFF	0.004			
o-Xylene	mg/kg	ND	03/16/09	MFF	0.002			

Analytical Method:  
 SW846 8260

SAMPLES ARE CONCENTRATED BY PURGE & TRAP, FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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 LOWELL, MA 01852

3/20/2009  
 Page 8 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID : 09B07781 ‡Sampled : 3/12/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	15.7	03/20/09	OP	3.50			
Barium	mg/kg dry wt	278	03/20/09	OP	6.99			
Cadmium	mg/kg dry wt	1.59	03/20/09	OP	0.35			
Chromium	mg/kg dry wt	16.7	03/20/09	OP	0.70			
Lead	mg/kg dry wt	655	03/20/09	OP	1.05			
Mercury	mg/kg dry wt	0.349	03/18/09	KM	0.022			
Selenium	mg/kg dry wt	ND	03/20/09	OP	6.99			
Silver	mg/kg dry wt	ND	03/20/09	OP	0.70			

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LOWELL, MA 01852

3/20/2009  
Page 9 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Analytical Method: Arsenic  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Barium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Cadmium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Chromium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Lead  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Mercury  
SW846 3050/7471

SAMPLES ARE DIGESTED WITH ACIDS AND THEN ANALYZED BY  
COLD VAPOR (FLAMELESS) ATOMIC ABSORPTION SPECTROPHOTOMETRY

Analytical Method: Selenium  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

Analytical Method: Silver  
SW846 3050/6010

SAMPLES ARE DIGESTED WITH NITRIC ACID AND THEN ANALYZED BY  
INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY.

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ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

‡ = See attached chain-of-custody record for time sampled

DAVID SULLIVAN  
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 650 SUFFOLK STREET  
 LOWELL, MA 01852

3/20/2009  
 Page 10 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
 Date Received: 3/13/2009  
 Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
 Job Number: 115058 TASK 44

Sample ID : 09B07781      ‡Sampled : 3/12/2009  
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Acenaphthylene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Anthracene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Benzo(a)anthracene	mg/kg dry wt	0.303	03/19/09	BGL	0.233			
Benzo(e)pyrene	mg/kg dry wt	0.287	03/19/09	BGL	0.233			
Benzo(b)fluoranthene	mg/kg dry wt	0.381	03/19/09	BGL	0.233			
Benzo(g,h,i)perylene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Benzo(k)fluoranthene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Chrysene	mg/kg dry wt	0.336	03/19/09	BGL	0.233			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Fluoranthene	mg/kg dry wt	0.521	03/19/09	BGL	0.233			
Fluorene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
2-Methylnaphthalene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Naphthalene	mg/kg dry wt	ND	03/19/09	BGL	0.233			
Phenanthrene	mg/kg dry wt	0.558	03/19/09	BGL	0.233			
Pyrene	mg/kg dry wt	0.646	03/19/09	BGL	0.233			
Extraction Date 8270		3/17/2009	03/19/09	BGL				

Analytical Method:

SW846 8270

SAMPLES ARE EXTRACTED IN METHYLENE CHLORIDE/ACETONE AND FOLLOWED BY GC/MS TARGET COMPOUND ANALYSIS.

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
Page 11 of 13

Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID: 09B07781      ‡Sampled: 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/F
Solids, total	%	71.6	03/17/09	FD			

Analytical Method:  
SM 2540G

PERCENT OF SAMPLE REMAINING AFTER DRYING OVERNIGHT AT 103-105 DEGREES CENTIGRADE.

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650 SUFFOLK STREET  
LOWELL, MA 01852

3/20/2009  
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Purchase Order No.:

Project Location: NEW BEDFORD, MA  
Date Received: 3/13/2009  
Field Sample #: WFE5W

LIMS-BAT #: LIMIT-23957  
Job Number: 115058 TASK 44

Sample ID : 09B07781 ‡Sampled : 3/12/2009  
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Unknown Hydrocarbons	mg/kg dry wt	240	03/19/09	CJM	120		

Analytical Method:

MODIFIED SW846 8100

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE AND ANALYZED BY GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION (FID). ALL PEAKS ELUTING IN THE PETROLEUM FUEL REGION ARE QUANTITATED AS #2 FUEL OIL.

RL = Reporting Limit

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NM = Not Measured

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REPORT DATE 4/1/2009

TRC SOLUTIONS - LOWELL  
650 SUFFOLK STREET  
LOWELL, MA 01852  
ATTN: DAVID SULLIVAN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

**ANALYTICAL SUMMARY**

LIMS BAT #: LIMIT-24337  
JOB NUMBER: 115058 TASK 44

PROJECT LOCATION: NEW BEDFORD MA

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (If any) Cert. Nos.
WFE5W	09B09717	SOIL	Not Specified	tcp - lead lcp	

Comments :

LIMS BATCH NO. : LIMIT-24337

**CASE NARRATIVE SUMMARY**

Recommended sample holding times were not exceeded for all samples unless listed below:  
None Exceeded

All samples for the method(s) listed were received preserved properly in the proper containers at 4°C +/- 2 degrees as specified on the chain-of-custody form unless listed below:  
All properly preserved

There are no analytical issues which affect the useability of the data.

**DETAILED CASE NARRATIVE**

**METHOD SW846-6010 - ADDITIONAL DETAILS**

MS performed on sample 09B09717. Only Pb was requested and reported.  
The ms recovery is outside control limits for Pb. Sample to spike ratio is >4:1, therefore a representative recovery may not be obtainable.

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAO) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and 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.

4/1/09

SIGNATURE

DATE

Tod Kopyscinski  
Air Laboratory Manager

Michael Erickson  
Assistant Laboratory Director

Edward Denson  
Technical Director

Daren Damboragian  
Organics Department Supervisor

\* See end of data tabulation for notes and comments pertaining to this sample



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650 SUFFOLK STREET  
LOWELL, MA 01852

4/1/2009  
Page 1 of 2

Purchase Order No.:

Project Location: NEW BEDFORD MA  
Date Received: 3/30/2009  
Field Sample #: WFE5W  
Sample ID : 09B09717  
Sample Matrix: SOIL

LIMS-BAT #: LIMIT-24337  
Job Number: 115058 TASK 44

‡Sampled : 3/13/2009  
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Lead	mg/l leachate	8.04	04/01/09	KSH	0.015		5	F

Analytical Method:  
SW846 1311/6010

SAMPLES ARE EXTRACTED INTO pH 5.0 BUFFER FOR 18-24 HOURS AND THEN ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY. WATER SAMPLES ARE FILTERED, NOT EXTRACTED.

RL = Reporting Limit

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LOWELL, MA 01852

4/1/2009  
Page 2 of 2

Purchase Order No.:

Project Location: NEW BEDFORD MA

LIMS-BAT #: LIMIT-24337

Date Received: 3/30/2009

Job Number: 115058 TASK 44

\*\* END OF REPORT \*\*

RL = Reporting Limit

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NM = Not Measured

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‡ = See attached chain-of-custody record for time sampled

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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**QC SUMMARY REPORT**

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/1/2009

Lims Bat #: LIMT-24337

Page 1 of 2

QC Batch Number: ICP/TCLP-4752

Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09717	Lead	Sample Amount	8.042	mg/l leachate	
		Matrix Spk Amt Added	0.500	mg/l leachate	
		MS Amt Measured	8.728	mg/l leachate	
		Matrix Spike % Rec.	137.251	%	70-130
BLANK-131301	Lead	Blank	<0.015	mg/l leachate	
LFBLANK-93542	Lead	Lab Fort Blenk Amt.	0.500	mg/l leachate	
		Lab Fort Blk. Found	0.574	mg/l leachate	
		Lab Fort Blk. % Rec.	114.800	%	80-120
		Dup Lab Fort Bl Amt.	0.500	mg/l leachate	
		Dup Lab Fort Bl. Fnd	0.594	mg/l leachate	
		Dup Lab Fort Bl %Rec	118.860	%	
		Lab Fort Blank Range	4.059	units	
		Lab Fort Bl. Av. Rec	116.830	%	
		LFB Duplicate RPD	3.475	%	



**MADEP MCP ANALYTICAL METHOD REPORT CERTIFICATION FORM**

Laboratory Name: <b>CON-TEST Analytical Laboratory</b>	Project #: <b>LWT- 24337</b>
Project Location: <i>New Bedford</i>	MADEP RTN <sup>1</sup> :

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]  
**09809717**

Sample Matrices:  Groundwater  Soil/Sediment  Drinking Water  Other: \_\_\_\_\_

<b>MCP SW-846 Methods Used</b>	8260B ( )	8151A ( )	8330 ( )	6010B <input checked="" type="checkbox"/>	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M <sup>2</sup> ( )
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	8082 ( )	8021B ( )	EPH ( )	7000 S <sup>3</sup> ( )	7196A ( )

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**

<b>A</b>	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>B</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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>C</b>	Does the data included in this report meet all the analytical 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"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>D</b>	<b><u>VPH and EPH Methods only.</u></b> Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

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

<b>E</b>	Were all analytical QC performance standards and recommendations for the specified methods achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>F</b>	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>

<sup>1</sup> 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.**

Signature: <u><i>M Erickson</i></u>	Position: Assistant Laboratory Director
Printed Name: Michael Erickson	Date: <u>4/6/09</u>



**tferrentino@contestlabs.com**

---

**From:** "Sullivan, Dave (Lowell,MA-US)" <DSullivan@TRCSOLUTIONS.com>  
**To:** <tferrentino@contestlabs.com>  
**Sent:** Monday, March 30, 2009 5:04 PM  
**Attach:** walsh chain for LIMT 23957.pdf  
**Subject:** Another Hold/Expedite

Theresa:

I lost track of this one.

I need TCLP lead.

Please see what you can do to get this in a hurry.

Thanks,

-Dave

**David M. Sullivan, LSP, CHMM**  
**Senior Project Manager**



**TRC**  
Wannalancit Mills  
650 Suffolk Street  
Lowell, Massachusetts 01854

978-656-3565 phone  
978-453-1995 fax  
978-758-2809 cell  
[dsullivan@trcsolutions.com](mailto:dsullivan@trcsolutions.com)

3/30/2009

SAMPLE REACTIVATION FORM

COMPANY TRC Lowell LOCATION 5C  
CONTACT \_\_\_\_\_ PROJECT ID \_\_\_\_\_  
CONTACT PHONE \_\_\_\_\_ FAX \_\_\_\_\_  
DATE 3/30/09 TIME 5:04 pm TAT 24-48hr DUE DATE \_\_\_\_\_  
REQUEST TAKEN BY TR GIVEN TO login

ACTIVATION REQUEST:

*activate WFESW for TEL pb*

SPECIAL INSTRUCTIONS AND TERMS:

FAXED TO CONTACT FOR APPROVAL: Y N

ACTIVATION IS CORRECT PER OUR REQUEST \_\_\_\_\_ DATE \_\_\_\_\_  
INITIALS

CONTEST FINAL APPROVAL \_\_\_\_\_



## ANALYTICAL REPORT

<b>Lab Number:</b>	<b>L0909493</b>
<b>Client:</b>	<b>Triumvirate Environmental 3 Industrial Drive Smithfield, RI 02917</b>
<b>ATTN:</b>	<b>Jason Atwood</b>
<b>Project Name:</b>	<b>CITY OF NEW BEDFORD</b>
<b>Project Number:</b>	<b>Not Specified</b>
<b>Report Date:</b>	<b>07/16/09</b>

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0909493-01	STOCKPILE COMPOSITE	WALSH SOCCER FIELD SOIL	07/13/09 16:00



Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab Number: L0909493  
Report Date: 07/16/09

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

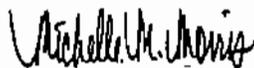
---

### Report Submission

At the client's request, all analyses were cancelled, with the exception of TCLP Lead.

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

Authorized Signature:



Title: Technical Director/Representative

Date: 07/16/09

# METALS

Project Number: Not Specified

Lab Number: L0909493

Report Date: 07/16/09

**SAMPLE RESULTS**

Lab ID: L0909493-01  
Client ID: STOCKPILE COMPOSITE  
Sample Location: WALSH SOCCER FIELD SOIL  
Matrix: Soil

Date Collected: 07/13/09 16:00  
Date Received: 07/14/09  
Field Prep: Not Specified  
TCLP/SPLP Ext. Date: 07/14/09 21:45

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**TCLP Metals by EPA 1311 - Westborough Lab**

Lead, TCLP	ND		mg/l	0.50	1	07/16/09 11:00	07/16/09 11:59	EPA 3015	1,6010B	MG
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Project Name: CITY OF NEW BEDFORD

Lab Number: L0909493

Project Number: Not Specified

Report Date: 07/16/09

### Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG371166-1								
Lead, TCLP	ND	mg/l	0.50	1	07/16/09 11:00	07/16/09 11:53	1,6010B	MG

#### Prep Information

Digestion Method: EPA 3015

TCLP Extraction Date: 07/14/09 21:45



**Lab Control Sample Analysis**

Batch Quality Control

Project Name: CITY OF NEW BEDFORD

Project Number: Not Specified

Lab Num

Report D

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG371166-2				
Lead, TCLP	100	-	75-125	-

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Num**  
**Report C**

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 COMPOSITE				QC Batch ID: WG371166-4		QC Sample: L0909493-C	
Lead, TCLP	ND	10	10	100	-	-	75-125

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab  
Rep

Parameter	Native Sample	Duplicate Sample	Units	RPD
EPA Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG371166-3 QC Sample: L0909493-0				
COMPOSITE				
Lead, TCLP	ND	ND	mg/l	NC

Project Name: CITY OF NEW BEDFORD  
Project Number: Not Specified

Lab Number: L0909493  
Report Date: 07/16/09

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

Cooler	Custody Seal
A	Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L0909493-01A	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01B	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01C	Amber 250ml unpreserved	A	N/A	2	Y	Absent	-
L0909493-01X	Plastic 250ml HNO3 preserved spl	A	<2	2	Y	Absent	PB-CI(180)

\*Hold days indicated by values in parentheses



**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD - Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND - Not detected at the reported detection limit for the sample.
- NI - Not Ignitable.
- RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- \* - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- N - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P - The RPD between the results for the two columns exceeds the method-specified criteria.
- R - Analytical results are from sample re-analysis.
- RE - Analytical results are from sample re-extraction.
- J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**Project Name:** CITY OF NEW BEDFORD  
**Project Number:** Not Specified

**Lab Number:** L0909493  
**Report Date:** 07/16/09

### REFERENCES

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

### LIMITATION OF LIABILITIES

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

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



## Certificate/Approval Program Summary

Last revised July 7, 2009 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water (Inorganic Parameters:* Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water (Inorganic Parameters:* Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil (Inorganic Parameters:* Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons. )

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water (Inorganic Parameters:* SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water (Inorganic Parameters:* EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

#### *Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *Non-Potable Water*

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.**

*Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.**

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

*Solid & Chemical Materials (Inorganic Parameters:* SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.2/1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

*Solid & Chemical Materials (Inorganic Parameters:* SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

**New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.**

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO30F, EPA 354.1, SM4500-NO2-B, EPA 365.2, SM4500P-E, EPA 160.3, EPA 160.1, SM2540C, EPA 160.2, SM2540B, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. NELAP Accredited.**

*Non-Potable Water (Organic Parameters:* EPA 3510C, 625, 608, 8081A, 8082, 8151A, 8270C, 8330)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.**

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Utah Department of Health Certificate/Lab ID: AAMA. *NELAP Accredited.***  
*Non-Potable Water (Inorganic Parameters: Chloride EPA 300.0)*



**APPENDIX E**

**COPIES OF NOTIFICATION LETTERS TO CITY OF NEW  
BEDFORD MAYOR AND BOARD OF HEALTH**



Wannalancit Mills  
650 Suffolk Street  
Lowell, MA 01854

978.970.5600 PHONE  
978.453.1995 FAX

www.TRCSolutions.com

TRC Reference Number: 115058.0000

August 17, 2009

Mayor Scott W. Lang  
City Hall, Room 311  
133 William Street  
New Bedford, MA 02740

**RE: Notice of Immediate Response Action Completion Report and Imminent Hazard  
Evaluation – Soccer Field Soil Removal**

Dr. Paul F. Walsh Memorial Field  
New Bedford, Massachusetts  
Release Tracking Number 4-21823

Ms. Mayor Lang:

On behalf of the City of New Bedford, Massachusetts, and pursuant to 310 CMR 40.1403(3)(e) of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of an Immediate Response Action Completion Report pertaining to soils containing lead at Walsh Field in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) by August 18, 2009.

The IRA performed at WFE-5 eliminated the Imminent Hazard, which was primarily associated with high concentrations of lead in the top 1 foot of soil. Please see Section II of the IRA Completion Report for additional details.

A copy of this document can be obtained from David Fredette in the Department of Environmental Stewardship. If you have any questions concerning this letter please contact me at (978) 656-3565.

Sincerely,  
TRC Environmental Corporation

A handwritten signature in cursive script that reads "David M. Sullivan".

David M. Sullivan, CHMM, LSP  
Sr. Project Manager

Cc: David Fredette, New Bedford Department of Environmental Stewardship



Wannalancit Mills  
650 Suffolk Street  
Lowell, MA 01854

978.970.5600 PHONE  
978.453.1995 FAX

[www.TRCSolutions.com](http://www.TRCSolutions.com)

TRC Reference Number: 115058.0000

August 17, 2009

Marianne B. De Souza  
Health Department  
1213 Purchase Street  
First Floor  
New Bedford, MA 02740

**RE: Notice of Immediate Response Action Completion Report and Imminent Hazard Evaluation – Soccer Field Soil Removal**  
Dr. Paul F. Walsh Memorial Field  
New Bedford, Massachusetts  
Release Tracking Number 4-21823

Ms. De Souza:

On behalf of the City of New Bedford, Massachusetts, and pursuant to 310 CMR 40.1403(3)(c) of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of an Immediate Response Action Completion Report pertaining to soils containing lead at Walsh Field in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) by August 18, 2009.

The IRA performed at WFE-5 eliminated the Imminent Hazard, which was primarily associated with high concentrations of lead in the top 1 foot of soil. Please see Section II of the IRA Completion Report for additional details.

A copy of this document can be obtained from David Fredette in the Department of Environmental Stewardship. If you have any questions concerning this letter please contact me at (978) 656-3565.

Sincerely,  
TRC Environmental Corporation

A handwritten signature in black ink, appearing to read "David M. Sullivan". The signature is written in a cursive, flowing style.

David M. Sullivan, CHMM, LSP  
Sr. Project Manager

Cc: David Fredette, New Bedford Department of Environmental Stewardship

**APPENDIX F**  
**BORING LOGS**



Wannalancit Mills  
 650 Suffolk Street  
 Lowell MA  
 Telephone: 978-970-5600  
 Fax: 978-453-1995

# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER Now Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-A FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 4' North of WFES GROUND ELEVATION (Feet, NAVD 88) 85.27  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
1		48/38		S-1		14" Brown to gray fine to medium SAND, some silt, trace fine gravel.	0.0	WFES-A (0-1 1155	No Monitoring Well Installed
2						20" FILL (coal, slag, ash, trace concrete, clinders, and coal).		WFES-A (1-3 1200 plus MS/Dup	
3						4" Organic PEAT, wet.			
4						End of Boring @ 4 feet			



Wannafancit Mills  
 650 Suffolk Street  
 Lowell MA  
 Telephone: 978-970-5600  
 Fax: 978-453-1995

# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFES-B FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 4' East of WFES GROUND ELEVATION (Feet, NAVD 88) 85.46  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1		48/40		S-1		10" Brown fine to medium SAND, some silt, trace organic topsoil and grass.	0.0	WFES-B (0-1) 1350	No Monitoring Well Installed
						4" Gray fine to medium SAND.		WFES-B (1-3) 1355	
2						6" Tan fine to coarse SAND, trace fine gravel.		WFES-D5 (1-3) (DUP) 1255	
3						20" Tan FILL (ash, coal slag, clnders, and glass), some fine to coarse sand throughout, wet at bottom.			
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-C FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 3.5 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 4' South of WFE5 GROUND ELEVATION (Feet, NAVD 88) 85.29  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
1		48/36		S-1		8" Brown fine to medium SAND, some silt, trace grass at surface.		WFE5-C (0-1) 1140	No Monitoring Well Installed
2						22" Tan-black-gray FILL (slag, glass, concrete, ash, cinders and coal, rusty), wet at -3.5'.	0.0	WFE5-C (1-3) 1145	
3						6" Organic PEAT, moist.			
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-D FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 3.5 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 7' West of WFE5 GROUND ELEVATION (Feet, NAVD 88) 85.12  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
1		48/34		S-1		10" Brown fine to medium SAND, some silt, trace fine gravel, grass et surface.		WFE5-D (0-1) 1335	No Monitoring Well Installed
2						24" Tan FILL (ash, cinders, slag, coal, and glass), some fine to coarse sand, trace fine gravel mixed in with fill, wet at bottom.	0.0	WFE5-D (1-3) 1340	
3									
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-E FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 3.5 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 8' North of WFE5 GROUND ELEVATION (Feet, NAVD 88) 85.24  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP) (HOLD)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1		48/38		S-1		12" Brown to gray fine to medium SAND, some silt, trace fine gravel.		WFE5-E (0-1) 1210	No Monitoring Well Installed
2						24" Gray to tan to black FILL (bricks, ash, concrete, cinders, slag, and rusty areas), bottom moist to wet.	0.0	WFE5-E (1-3) 1215	
4						2" Dark brown PEAT. End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-F FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 8' East of WFE5 GROUND ELEVATION (Feet, NAVD 88) 85.55  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP) (HOLD)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1		48/34		S-1		4" Brown fine to medium SAND, some topsoil, and silt.		WFE5-F (0-1) 1410	No Monitoring Well Installed
						6" Gray fine to medium SAND, some fine gravel.	0.0		
2						8" Brown fine to coarse SAND, some silt, trace fine gravel.			
3						16" Tan FILL (ash, cinders, coal, glass, and fine to coarse sand), some fine gravel.		WFE5-F (1-3) 1415	
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-G FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 8' South of WFE5 GROUND ELEVATION (Feet, NAVD 88) 65.32  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP) (HOLD)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
1		48/40		S-1		6" Dark-brown organic TOPSOIL, SILT and fine to medium SAND. 12" Brown to gray fine to coarse SAND, some fine gravel.	0.0	WFE5-G (0-1) 1125	No Monitoring Well Installed
2						18" Tan to rusty FILL (ash, cinders, slag, glass, and coal), moist.		WFE5-G (1-3) 1135	
3						4" Rusty to brown organic PEAT, moist.			
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-H FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/23/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 11' West of WFE5 GROUND ELEVATION (Feet, NAVD 88) 86.42  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5400 Truck Rig  
 NOTES Sampled for Pb, Cd and PAHs (BAP) (HOLD)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1		48/36		S-1		10" Brown fine to medium SAND, some silt, topsoil and grass at surface.		WFE5-H (0-1) 1320	No Monitoring Well Installed
2						26" Tan to black FILL (coal, ash, slag, cinders, and glass), some fine to coarse sand, wet at bottom (assumed that peat was pushed downward).	0.0	WFE5-H (1-3) 1325	
3									
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WF5-I FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Keith Precious DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 3/11/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 2' North of WF5-E GROUND ELEVATION (Feet, NAVD 88) 85.18  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5410 Truck Rig  
 NOTES Sampled for Pb.

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
1		48/40		S-1		8" Brown fine to coarse SAND, some silt and organic topsoil, trace gray fine to medium sand..	0.0	WF5-I (0-1) 1400	No Monitoring Well Installed
2						30" FILL and fine to coarse SAND (ash, slag, glass, coal, and cinders), wet at bottom.		WF5-Z (0-1) DUP 1300	
3						2" Organic PEAT, molst.		WF5-I (1-3) 1405	
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-J FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Keith Precious DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 3/11/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 4' North of WFE5-I GROUND ELEVATION (Feet, NAVD 88) 85.20  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5410 Truck Rig  
 NOTES Sampled for Pb.

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
		48/40		S-1		10" Brown TOPSOIL and fine to coarse SAND, trace grass, fine gravel, and gray sand at 8 Inches.		WFE5-J (0-1) 1415	No Monitoring Well Installed
1						26" FILL (ash, coal, slag, cinders, trace glass), some fine to coarse sand, wet at bottom.	0.0		
2								WFE5-J (1-3) 1420	
3						4" Organic PEAT, moist.			
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-K FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Keith Precious DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 3/11/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 2' North of WFE5-J GROUND ELEVATION (Feet, NAVD 88) 85.14  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5410 Truck Rig  
 NOTES Sampled for Pb.

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
		48/36		S-1		6" TOPSOIL with fine to coarse sand, trace grass and roots.		WFE5-K (0-1) 1430	No Monitoring Well Installed
1						30" FILL (slag, ash, coal and cinders), wet at bottom.	0.0		
2							WFE5-K (1-3) 1435		
3									
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT N/A  
 BORING/WELL NUMBER WFE5-L FILTER PACK TYPE N/A  
 TRC GEOLOGIST C. Foster SEAL TYPE N/A  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Keith Precious DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 3/11/09 TOTAL DEPTH (Feet) 4  
 LOCATION Walsh Field - 2' North of WFE5-K GROUND ELEVATION (Feet, NAVD 88) 85.14  
 SAMPLING METHOD 48" Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) N/A  
 DRILLING METHOD Direct Push 5410 Truck Rig  
 NOTES Sampled for Pb.

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
		48/38		S-1		8" Brown fine to coarse SAND, some silt, brown organic topsoil and grass.		WFE5-L (0-1) 1445	No Monitoring Well Installed
1						30" FILL (ash, coal, slag, cinders, trace glass).	0.0		
2								WFE5-L (1-3) 1450	
3									
4						End of Boring @ 4 feet			



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# BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER New Bedford/115058 SCREEN TYPE/SLOT 0.010 2-inch slotted PVC: 4-14 feet  
 BORING/WELL NUMBER MW-WFE5 FILTER PACK TYPE Sand  
 TRC GEOLOGIST C. Foster SEAL TYPE Bentonite  
 DRILLING CONTRACTOR/FOREMAN New England Geotech/H. Rembjas DEPTH TO WATER (Approximate Feet) 4 (perched)  
 DATE DRILLED 2/25/09 TOTAL DEPTH (Feet) 14  
 LOCATION Walsh Field - WFESH Location GROUND ELEVATION (Feet, NAVD 88) 85.22  
 SAMPLING METHOD 60° Macrocore Continuous REFERENCE ELEVATION (Feet, NAVD 88) 84.99  
 DRILLING METHOD Direct Push 6600DT Truck Rig  
 NOTES No Samples Collected

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
1	NA	48/36		S-1		10" Brown fine to medium SAND, some silt, topsoil and grass at surface.			<p>Concrete Seal/Roadbox          2-inch PVC Riser in Sand          1 foot Bentonite Seal          2-inch PVC Riser in Sand          0.010 Slotted PVC Screen in Sand</p>
2						26" Tan to black FILL (coal, ash, slag, cinders, and glass), some fine to coarse sand, wet at bottom (assumed that peat was pushed downward).	0.0		
3									
4	NA	60/30		S-2		6" Organic PEAT.			
5						24" Gray fine to medium SAND, trace silt, saturated.	0.0		
6									
7									
8									
9	NA	60/60		S-3		60" Gray fine to medium SAND, some silt, saturated.	0.0		
10									
11									
12									
13									
14									