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TRC Project Number: 115058

July 16, 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 – HB-23 Area PCB Impacted Soil Removal
New Bedford High School
230 Hathaway Boulevard, New Bedford, Massachusetts
Release Tracking Number (RTN) 4-21847

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. This submittal also includes the following Massachusetts Department of Environmental Protection (MassDEP) transmittal forms as attachments to the IRA Report:

- BWSC-105 – Immediate Response Action (IRA) Transmittal Form

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.

Sincerely,

A handwritten signature in cursive script that reads "David M. Sullivan".

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

IMMEDIATE RESPONSE ACTION COMPLETION REPORT AND IMMINENT HAZARD EVALUATION

**HB-23 Area Impacted Soil Removal
New Bedford High School
230 Hathaway Boulevard
New Bedford, Massachusetts
Release Tracking Number (RTN) 4-21847**

Prepared for:

Department of Environmental Stewardship
City of New Bedford
133 William Street
New Bedford, Massachusetts 02740

Prepared by:

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July 16, 2009

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

HB-23 Area PCB Impacted Soil Removal

New Bedford High School
230 Hathaway Boulevard
New Bedford, Massachusetts

Release Tracking Number (RTN) 4-21847

TRC Project Number: 115058

July 16, 2009

TRC Environmental Corporation (TRC) is submitting this Immediate Response Action (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 detection of polychlorinated biphenyls (PCBs) in surface soil at a sample location identified as HB-23 near the A-Block of the New Bedford High School (NBHS) campus (the Site) in excess of a concentration indicating a condition that could pose an Imminent Hazard (IH) as defined in 310 CMR 40.0321(2)(b) of the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). 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 PCBs above the “could pose” IH evaluation threshold, and triggered a 2-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0321(2) and 310 CMR 40.0311(7). TRC reported the condition to MassDEP via telephone in conjunction with the City on March 19, 2009. MassDEP orally approved IRA assessment (March 19, 2009) and removal (March 25, 2009) activities at the Site, and assigned Release Tracking Number (RTN) 4-21847. 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 HB-23 area Imminent Hazard Evaluation, Appendix B provides an soil sample laboratory analytical results, Appendix C provides the dust monitoring results, Appendix D contains copies of the Bill of Lading and Uniform Hazardous Waste Manifest (UHW) 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 December 2004, soil sampling was conducted at NBHS located at 230 Hathaway Boulevard in New Bedford, Massachusetts (Figure 1) by BETA Group, Inc. of Norwood, Massachusetts (BETA) as part of an investigation of the PSWS, which includes the NBHS campus (BETA, 2006). The results of the sampling were examined by TRC as part of an ongoing environmental investigation of the PSWS. Soil sample results for BETA soil boring HB-23 (0.75 to 3 feet below ground surface [bgs]) indicated PCBs at concentrations in excess of applicable S-1 Method 1 soil cleanup standards. TRC conducted additional soil sampling to further characterize/delineate soil contamination in this area to support remedial planning.

Soil samples (0-1 and 1-3 feet below grade) collected from the Site by TRC during this phase of investigation contained total PCBs at concentrations indicating a release condition that “could pose” an IH under 310 CMR 40.0321(2)(b). The IH-related release condition was reported to the MassDEP by TRC via telephone, in conjunction with representatives of the City, on March 19, 2009. MassDEP orally approved IRA assessment and subsequently the removal activities and assigned RTN 4-21847. Follow-up work completed as part of the IRA included analysis of additional soil samples to delineate the extent of elevated PCB concentrations in the soil, preparation of an IH evaluation, and removal of PCB contaminated soil. The IH evaluation concluded that an IH condition was present at the Site. The objectives of the IRA Plan were to:

1. Remove the top 3 feet of soil within the area defined by pre-excavation soil sampling as risk reduction measure;
2. Replace the removed soil with contaminant-free stone dust and loam; and
3. Transportation of the contaminated soil (remediation waste) to an appropriate disposal facility.

This IRA Completion Report documents soil excavation activities undertaken to remove the PCB contaminated soil from the HB-23 Area of NBHS, and its subsequent disposal at the CWM Chemical Services, LLC chemical and industrial waste management facility in Model City, New York.

Summary of Work

On March 10, 2009, TRC, on behalf of the City of New Bedford, conducted soil sampling at the HB-23 portion of the NBHS grounds to delineate the extent of previously detected concentrations of PCBs in soil and to determine the extent of soil removal that would be necessary to achieve a condition of no significant risk for the top three feet of soil within this area. This work was conducted in accordance with a TRC-prepared scope of work, approved by the City, for addressing 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 of Jamestown, Rhode Island. TRC completed a total of 10 soil borings and collected a total of twenty soil samples. Boring logs are included in Appendix F.

The protocol for the delineation sampling called for the collection of five soil samples (0 to 1 foot and 1 to 3 feet in depth) centered at the HB-23 location (designated "A") and within ten feet of the HB-23A sampling location to the north, east, south and west (designated "B" through "E"). The protocol further called for the collection of five additional "outer ring" samples twenty feet from the HB-23A sampling location (designated "F" through "J"). "Outer ring" samples were also collected from the 0 to 1 and 1 to 3 feet intervals. All samples were collected on March 10, 2009 and the "A" through "E" samples were authorized for PCB Aroclor analysis by Northeast Analytical, Inc. (NEA) of Schenectady, New York. The "F" through "J" samples were held at the laboratory, pending the results of the "A" through "E" sample analysis.

Total PCB concentrations were below the Method 1 S-1/GW-2 and S-1/GW-3 standards (2 mg/kg) at three of the five initial surface soil locations (HB-23B through HB-23D). However, at locations HB-23A and HB-23E, concentrations of 45.9 mg/kg and 13.5 mg/kg were detected in the 0 to 1 foot interval, respectively. Due to the detection of PCBs at levels greater than 10 mg/kg within the top 12 inches of soil at the HB-23A and HB-23E locations, the potential IH condition was reported and the "G" through "I" samples were immediately authorized for analysis to assess the extent of the elevated surficial PCBs. HB-23G was authorized primarily to determine the extent of PCBs in the 1 to 3 foot interval, while HB-23H and HB-23I, which flanked HB-23A and HB-23E, were authorized to determine the lateral extent of surficial soil (0 to 1 foot) PCBs.

As noted in the IH evaluation for the HB-23 Site, contained in Appendix A, the estimated cancer risk for the young child recreational user did exceed the MCP risk limits for an IH of an excess lifetime cancer risk (ELCR) with a value of 2E-05. The noncarcinogenic hazard quotient of 10 met the MCP hazard index (HI) limit of 10. The IH was identified at the HB-23 Site primarily due to the ingestion and dermal contact exposure pathways with PCB-containing surface soil. As a result, the IRA plan focused on the elevated PCB concentrations in the surface soil at the HB-23 Site.

Summary of Analytical Results Indicating a Potential Imminent Hazard

The HB-23 sampling location had been identified as an area requiring further delineation sampling within the NBHS campus, 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 HB-23 soil sample analytical results are presented in Appendix B. Two soil samples collected on March 10, 2009 exceeded the reporting thresholds for contamination that could pose an IH as defined under the MCP under 310 CMR 40.0321(2)(b). One sample collected at boring HB-23A from 0-1 foot bgs contained total PCBs at a concentration of 45.9 mg/kg, which exceeds the aforementioned reporting threshold of 10 mg/kg of PCBs as presented in 310 CMR 40.0321(2)(b). Soil sample HB-23E (0-1') also

exceeded the reporting threshold by exhibiting a concentration of 13.5 mg/kg. Analytical results from additional samples located in the vicinity of HB-23 indicated that concentrations of PCBs above IH thresholds were confined to a polygonal area within the landscaped area along Hathaway Boulevard, encompassing a total of 568 square feet to a depth of 3 feet (see Figure 2). The lateral extent of the excavation area was defined by PCB samples HB-23H to the northeast, HB-23G to the southeast, HB-23C to the south, HB-23B to the west, and HB-23I to the northwest (see Figure 3).

In March 2009 TRC oversaw the excavation of approximately 63.1 cubic yards of PCB-contaminated soil from the HB-23 Site. TRC conducted environmental monitoring during the removal as documented herein. The removal of the contaminated soil from the vicinity of HB-23 eliminated the IH condition, as noted in the IH evaluation included in Appendix A.

The soil was temporarily staged in polyethylene lined and covered roll-offs at the Shawmut Avenue Transfer Station. At that time, transportation to the Shawmut Avenue Transfer Station was documented under a MassDEP bill of lading (BOL). Following completion of waste characterization sampling, the soil was determined to contain PCBs in excess of 50 mg/kg, classifying the soil as PCB remediation waste. The soil was accepted for disposal by the Toxic Substance Control Act (TSCA) regulated CWM Chemical Services, LLC chemical and industrial waste management facility in Model City, NY. The soil was shipped for disposal under a uniform Hazardous Waste Manifest on June 25, 2009. Transport was performed by Triumvirate Environmental, Incorporated. Please see Section II for additional details.

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 RTN 4-21847 and is related to a release condition that could pose an IH that was identified near BETA soil sample location HB-23 near the A-Block of the NBHS campus. 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 of New Bedford on March 19, 2009. MassDEP orally approved IRA assessment and removal activities and assigned RTN 4-21847.

The Site is located within the PSWS (RTN 4-15685) that includes several properties in the area including municipal and residential properties to the west of the Site. Soil samples collected on Site that triggered the 2-hour reporting condition were collected during a March 2009 investigation of the PSWS.

Site Conditions

The New Bedford High School is located at 230 Hathaway Boulevard in New Bedford, Massachusetts. The HB-23 Site is a lawn area located along a tree belt at the western boundary of the NBHS property, adjacent to Hathaway Boulevard. Specifically, the HB-23 Site is positioned approximately 37 feet north of the main entrance, and 37 feet east of Hathaway Boulevard (Figure 1).

Surrounding Receptors

The HB-23 Site lies within 500 feet of both the NBHS building and the Keith Middle School (KMS) building. Residential areas are located in excess of 500 feet from the Site. Access to the area is not secure, and adults and children can pass over the area when going to and from school during the spring, winter, and fall seasons.

Groundwater categories at the NBHS include actual or potential GW-2, depending upon proximity to occupied structures (groundwater is expected to be less than 15 feet below ground surface based on data from nearby locations), and GW-3, which applies to all groundwater throughout the Commonwealth. However, groundwater impacts from contaminants associated with HB-23 are not expected. For example, recent groundwater monitoring conducted at NBHS in August and September 2008 and April 2009 in seven monitoring wells did not detect PCBs above groundwater standards or MCP Reportable Concentrations (RCs). These results are presented in Table 2.

Based on a 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).

The NBHS 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, MassDEP approved the following response action as an IRA (MassDEP, 2008):

- Assessment and monitoring only

Later, on March 25, 2009, MassDEP orally approved soil removal activities to mitigate the IH condition.

Initial assessment included advancement of ten soil borings (i.e., soil borings HB-23A through HB-23J) throughout the Site on March 10, 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 PCBs. During this phase of work, soil samples were found to contain concentrations of PCBs that “could pose” an IH in samples from two soil borings. One sample collected at boring HB-23A from 0-1 foot bgs contained total PCBs at a concentration of 45.9 mg/kg, which exceeds the aforementioned reporting threshold of 10 mg/kg of PCBs as presented in 310 CMR 40.0321(2)(b). Soil sample HB-23E (0-1’) also exceeded the reporting threshold by exhibiting a concentration of 13.5 mg/kg.

Due to the detection of PCBs at concentrations greater than 10 mg/kg within the top 12 inches of soil at the HB-23A and HB-23E locations, the IH-related release condition was reported and additional samples (i.e., the “G” through “I” samples) were immediately authorized for analysis to assess the extent of the elevated surficial PCBs. The additional samples were authorized primarily to determine the extent of PCBs in the 1 to 3 foot interval and/or to determine the lateral extent of surficial soil (0 to 1 foot) PCBs. The total PCB results for the HB-23G through HB-23I samples were reported by the laboratory on March 20, 2009. Figure 2 presents the sampling locations for the HB-23 area and corresponding laboratory analytical results.

An IH evaluation was initiated within 14 days of obtaining knowledge of the potential IH condition (Appendix A). For the HB-23 area, TRC’s risk assessment specialist conducted the IH calculations using the maximum detected concentration (45.9 mg/kg) as the Exposure Point Concentration (EPC) for PCBs. Arithmetic mean concentrations were used as EPCs for barium, chromium, and lead. Arsenic and cadmium were not considered further, because their maximum detected concentrations were less than the MassDEP background concentrations for natural soil. 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 31, 2009, satisfying the IH evaluation initiation timeline under the MCP. The risk assessment calculations indicate an IH existed at the HB-23 Site.

Analytical results of soil samples collected in the vicinity of HB-23 were used in the delineation of an approximate 568 square foot area to be excavated and removed. These results are presented in Table 1. The lateral extent of the soil excavation area was identified by sample locations conducted in advance of excavation. 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, in order to guide soil removal.

On March 28, 2009, with oral approval from MassDEP, D. W. White Construction, Incorporated of Acushnet, Massachusetts (DW White) excavated soils in the vicinity of the HB-23 Site containing elevated total PCB concentrations. Approximately 63.1 cubic yards of excavated soils were loaded directly into five roll-off containers lined with 6-mil polyethylene sheeting. All soils were excavated up to the staked excavation boundaries and down to 3 feet below grade. 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).

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 (PM₁₀). 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. There were no exceedances of TRC's prescribed action level of 150 ug/m³, sustained for 15 minutes, during soil excavation and loading. The maximum dust level measured during excavation and loading of site soil was 0.031 ug/m³. The fugitive dust monitoring data associated with the HB-23 Site excavation activities are presented in Appendix C.

The excavated area was backfilled on March 28, 2009 using a contaminant-free source. 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 improve the aesthetic appearance of the lawn.

A composite waste characterization soil sample (i.e., HB-23-Disposal) was collected from the excavated soils and submitted for laboratory analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total PCBs, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), and Resource and Conservation Recovery Act (RCRA) 8 metals (see Table 3). Additional volume was collected for Toxicity Characteristic Leaching Procedure (TCLP) metals analysis, contingent upon total metals results. All waste characterization analyses were conducted by ConTest Analytical Laboratory of East Longmeadow, Massachusetts.

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

The results of HB-23-Disposal waste characterization sample were received following transport to the Shawmut Avenue Transfer Station. The sample exhibited a cadmium concentration of 18.1 mg/kg (Table 3). The cadmium concentration exceeded the threshold for reuse via thermal processing. Toxicity Characteristic Leaching Procedure (TCLP) analysis was subsequently performed for all 8 RCRA metals. Following the TCLP analysis, extract from the soil contained only 0.521 mg/L of cadmium, which does not exceed the 1.0 mg/L identified as the regulatory level for cadmium by MassDEP in 310 CMR 30.125: Table 1 (see Table 4). However, sample HB-23-Disposal also exhibited a total PCB concentration of 59.9 mg/kg. The lined and covered roll-off containers were labeled with an EPA-required PCB label. This concentration is also greater than the threshold of 2 mg/kg required for off-site disposal or reuse via the all of methods presented in Table 3. Since the total PCB concentration of the soil is greater than 50 mg/kg, the soil is considered a hazardous waste under 310 CMR 30.131 and the soil is also regulated under TSCA, and must be disposed of at a TSCA regulated facility.

On June 25, 2009 TRC oversaw the loading and transportation of the HB-23 area soils from the Transfer Station to the CWM Chemical Services, LLC chemical and industrial waste management facility in Model City, NY. Norman's Enterprises Construction Corporation

(Norman's Enterprises) of New Bedford, Massachusetts conducted transfer activities in preparation for offsite disposal. Triumvirate Environmental, Incorporated of Somerville, Massachusetts provided transportation services to the approved TSCA-regulated disposal facility.

The five lined and covered roll-offs temporarily stored at the Shawmut Avenue Transfer Station did not meet specifications for transportation of the hazardous waste, but served to provide secure temporary storage until a suitable disposal facility was selected. As a result, the soil was removed from the polyethylene lined roll-offs, temporarily stockpiled on pavement on several layers of 6-mil polyethylene sheeting and subsequently loaded into trucks by Norman's Enterprises. The weatherproof covering was removed and the entire content of each roll-off, including the polyethylene liner, was transferred onto the staged polyethylene sheeting. Care was taken to ensure that the polyethylene liner of each roll-off was not compromised prior to transferring the soil material and remained intact during the dumping activities. At no point during any of the soil transfer activities was a polyethylene liner compromised and therefore no confirmatory wipe sampling was deemed necessary on any of the roll-offs. A front-end loader was then used to transfer the stockpiled soil into three trucks for offsite transportation and disposal. All of the soil transfer activities were conducted at the Shawmut Avenue Transfer Station.

During all soil transfer and management activities, TRC conducted 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 temporary soil stockpile 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 (PM₁₀). 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 activities. All of the data was downloaded at the end of the day.

It should be noted that, due to a memory malfunction on the upwind unit, the first approximately 1-hour of data was lost. However, at no point during that time period was the prescribed action level of 150 ug/m³, sustained for 15 minutes, exceeded in the downwind unit. Furthermore, the maximum dust level measured during that time period was 0.017 mg/m³. Both the upwind and downwind dust monitoring units functioned without issue for the remainder of the day.

Both the upwind and downwind dust monitoring units exhibited momentary spikes in excess of the prescribed action level of 150 ug/m³, however at no point were those levels sustained for a 15 minute period as prescribed by the action level. The maximum upwind and downwind dust levels measured during loading of Site soil were 0.313 and 0.214 ug/m³, respectively. It should be noted that, due to site constraints, both units were located near the active driveway leading to the Transfer Station. The maximum levels were detected during times of increased traffic on that driveway and therefore are likely related to normal vehicle traffic, not the soil loading activities. The fugitive dust monitoring data associated with the soil loading activities are presented in Appendix C.

On June 25, 2009, three trucks transported a total of approximately 84 tons of soil from the Shawmut Avenue Transfer Station to the Model City, New York 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 Uniform Hazardous Waste Manifest documentation (EPA Form 8700-22). Copies of the Generator's Initial Copy of the manifests are included in Appendix D. Pursuant to Massachusetts Hazardous Waste Regulations (310 CMR 30.000), final copies of the manifests will be submitted to the MassDEP following receipt from designated facility (310 CMR 30.313(4)). In accordance with 310 CMR 40.0030 of the MCP, all of the soil material was transported from the Site within 90 days of excavation.

(c) Statement of IRA Findings and Conclusions

TRC's March 31, 2009 IH evaluation indicated that at the HB-23 area of the NBHS campus an estimated cancer risk (2E-05) exceeded the MCP IH criterion, even though the HI of 10 meets but did not exceed the MCP IH limit of 10. The IH was identified at the HB-23 Site primarily due to the ingestion of and dermal contact with PCB-containing surface soil. The top 3 feet of soil was removed from the HB-23 Site on March 28, 2009. Risk calculations based on concentrations of soil that remain onsite demonstrate that the IH condition no longer exists at the HB-23 area of the NBHS campus and that the area can continue to be safely used. The hazard index (HI) of 2 and the ELCR of 2E-06 are below the MCP noncarcinogenic and carcinogenic IH limits of 10 and 1E-05, respectively.

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

On March 28, 2009 approximately 63.1 cubic yards of PCB-contaminated soil was excavated from the HB-23 area of the NBHS campus and transported to City's Transfer Station located at 1103 Shawmut Avenue, New Bedford, Massachusetts. All soils were moved from the Site to the Transfer Station under MassDEP BOLs (see Appendix D). Following receipt of waste characterization soil sample results, the material was staged at the Transfer Station in polyethylene lined roll-offs secured with a waterproof barrier pending acceptance to a suitable TSCA-regulated facility. On June 25, 2009, soils were transferred from the roll-offs, temporarily stockpiled on 6-mil polyethylene sheeting, loaded into trucks and transported from the Shawmut Avenue Transfer Station to CWM Chemical Services, LLC chemical and industrial waste management facility in Model City, NY under Uniform Hazardous Waste Manifests (see Appendix D).

(e) Ongoing Activities

The objective of this IRA was to assess and delineate the potential 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 Lading and Uniform Hazardous Waste Manifests 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, New Bedford High School, 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>

TABLES

**Table 1: Summary of Analytical Results for Soil Samples
 Immediate Response Action Completion Report
 HB-23 Excavation Area
 New Bedford, Massachusetts**

Analysis	Analyte	Sample Location:						HB23	HB-23A		HB-23B		HB-23C		HB-23D		HB-23E		HB-23F	
		Sample Depth (ft.):						0.75-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	
		Sample Date:						12/29/2004	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA													
PCBs (mg/kg)	Aroclor 1016/1242	2	2	3	3	2	1	0.064 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Aroclor 1016	2	2	3	3	2	1	NA	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1221	2	2	3	3	2	1	0.127 U	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1232	2	2	3	3	2	1	0.064 U	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1242	2	2	3	3	2	1	NA	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1248	2	2	3	3	2	1	0.064 U	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1254	2	2	3	3	2	1	25	45.9 *	4.12 *	0.786 *	0.915 *	1.41 *	4.74 *	1.50 *	19.9 *	13.5 *	16.8 *	NA	
	Aroclor 1260	2	2	3	3	2	1	0.064 U	1.72 U	0.197 U	0.0596 U	0.0585 U	0.0597 U	0.306 U	0.0545 U	0.532 U	0.568 U	0.601 U	NA	
	Aroclor 1262	2	2	3	3	2	1	0.756	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Aroclor 1268	2	2	3	3	2	1	0.064 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total PCBs		2	2	3	3	2	1	25.756	45.9	4.12	0.786	0.915	1.41	4.74	1.50	19.9	13.5	16.8	NA	
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Antimony	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	3.11	7.30	3.10 U	18.1	NA	NA	NA	NA	NA	
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	58.1	236	53.2	1,020	NA	NA	NA	NA	612	
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	0.37	1.14	0.31 U	3.86	NA	NA	NA	NA	2.20	
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	8.95	14.7	8.13	60.2	NA	NA	NA	NA	47.0	
	Lead	300	300	300	300	300	N/A	NA	NA	NA	48.5	169	42.9	1,460	NA	NA	NA	NA	893	
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Selenium	400	400	800	800	400	N/A	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	
	Thallium	8	8	60	60	8	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:
 mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
 NA - Sample not analyzed for the listed analyte.
 N/A - Not applicable.
 NS - No MassDEP GW-2 standards exist for this compound.
 U - Compound was not detected at specified quantitation limit.
 Values in Bold indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards.
 Values shown in Bold and boxed type exceed TSCA but are less than the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.
 PCBs - Polychlorinated Biphenyls.
 RC - Reportable Concentration.
 TSCA - Toxic Substances Control Act criteria.
 * - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
 ** - For reference purpose only.
 ^ - TRC developed Method 1 standards.

Table 1: Summary of Analytical Results for Soil Samples
Immediate Response Action Completion Report
HB-23 Excavation Area
New Bedford, Massachusetts

Analysis	Analyte	Sample Location:						HB-23G		HB-23H		HB-23I	
		Sample Depth (ft.):						0-1	1-3	0-1	1-3	0-1	1-3
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009
PCBs (mg/kg)	Aroclor 1016/1242	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA
	Aroclor 1016	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1221	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1232	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1242	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1248	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1254	2	2	3	3	2	1	0.943 *	4.94 *	2.53 *	0.0843 *	4.70 *	0.517 *
	Aroclor 1260	2	2	3	3	2	1	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA
	Aroclor 1268	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.943	4.94	2.53	0.0843	4.70	0.517
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA
	Antimony	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	2.90 U	6.77	3.42	17.7	7.29	10.6
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	55.1	297	343	269	311	1,210
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.29 U	1.28	0.61	3.31	1.03	4.06
	Chromium	30	30	200	200	30	N/A	15.4	29.7	26.9	36.8	36.7	35.2
	Lead	300	300	300	300	300	N/A	88.4	423	220	548	293	3,630
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA
	Thallium	8	8	60	60	8	N/A	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA

Notes:

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

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable.

NS - No MassDEP GW-2 standards exist for this compound.

U - Compound was not detected at specified quantitation limit.

Values in Bold indicate the compound was detected.

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

Values shown in Bold and boxed type exceed TSCA but are less than the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.

** - For reference purpose only.

^ - TRC developed Method 1 standards.

**Table 2: Summary of PCB Analytical Results for Groundwater Samples
New Bedford High School
New Bedford, Massachusetts**

Analysis	Analyte	Sample ID:		MW-4		MW-5	MW-6	MW-7	MW-8B	MW-HH-13		MW-HRC-33	
		Sample Date:		8/19/2008	8/19/2008	8/19/2008	8/19/2008	9/16/2008	9/16/2008	4/23/2009	4/23/2009	4/23/2009	4/23/2009
		GW-2	GW-3		Field Dup					Field Dup		Field Dup	
PCBs (ug/L)	Aroclor 1016	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1221	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1232	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1242	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1248	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1254	5	10	0.0500 U	0.0500 U	0.0731 J	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1260	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Total PCBs	5	10	0.0500 U	0.0500 U	0.0731 J	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U

Note:

ug/L - micrograms per liter.

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 MCP Method 1 standards.

PCBs - Polychlorinated Biphenyls.

Table 3: Summary of Analytical Results for Waste Characterization Soil Sample - March 2009
Immediate Response Action Completion Report
HB-23 Excavation Area
New Bedford, Massachusetts

Analysis	Analyte	Sample ID: HB-23-DISPOSAL					Sample Date: 3/28/2009
		Reuse Level*		Soil Recycling Facility Summary Levels**			
		Lined Landfills	Unlined Landfill	Hot Mix Asphalt Plants	Thermal Processing Plant	Cold Mix Emulsion Plant	
VOCs (mg/kg)	Acetone	NA	NA	NA	NA	NA	0.077 U
	tert-Amylmethyl Ether	NA	NA	NA	NA	NA	0.001 U
	Benzene	NA	NA	NA	NA	NA	0.002 U
	Bromobenzene	NA	NA	NA	NA	NA	0.002 U
	Bromochloromethane	NA	NA	NA	NA	NA	0.002 U
	Bromodichloromethane	NA	NA	NA	NA	NA	0.002 U
	Bromoform	NA	NA	NA	NA	NA	0.002 U
	Bromomethane	NA	NA	NA	NA	NA	0.008 U
	2-Butanone (MEK)	NA	NA	NA	NA	NA	0.031 U
	n-Butylbenzene	NA	NA	NA	NA	NA	0.002 U
	sec-Butylbenzene	NA	NA	NA	NA	NA	0.002 U
	tert-Butylbenzene	NA	NA	NA	NA	NA	0.002 U
	tert-Butylethyl Ether	NA	NA	NA	NA	NA	0.001 U
	Carbon Disulfide	NA	NA	NA	NA	NA	0.008 U
	Carbon Tetrachloride	NA	NA	NA	NA	NA	0.002 U
	Chlorobenzene	NA	NA	NA	NA	NA	0.002 U
	Chlorodibromomethane	NA	NA	NA	NA	NA	0.001 U
	Chloroethane	NA	NA	NA	NA	NA	0.016 U
	Chloroform	NA	NA	NA	NA	NA	0.004 U
	Chloromethane	NA	NA	NA	NA	NA	0.008 U
	2-Chlorotoluene	NA	NA	NA	NA	NA	0.002 U
	4-Chlorotoluene	NA	NA	NA	NA	NA	0.002 U
	1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	0.008 U
	1,2-Dibromoethane	NA	NA	NA	NA	NA	0.001 U
	Dibromomethane	NA	NA	NA	NA	NA	0.002 U
	1,2-Dichlorobenzene	NA	NA	NA	NA	NA	0.002 U
	1,3-Dichlorobenzene	NA	NA	NA	NA	NA	0.002 U
	1,4-Dichlorobenzene	NA	NA	NA	NA	NA	0.002 U
	Dichlorodifluoromethane	NA	NA	NA	NA	NA	0.016 U
	1,1-Dichloroethane	NA	NA	NA	NA	NA	0.002 U
	1,2-Dichloroethane	NA	NA	NA	NA	NA	0.002 U
	1,1-Dichloroethylene	NA	NA	NA	NA	NA	0.004 U
	cis-1,2-Dichloroethylene	NA	NA	NA	NA	NA	0.002 U
	trans-1,2-Dichloroethylene	NA	NA	NA	NA	NA	0.002 U
	1,2-Dichloropropane	NA	NA	NA	NA	NA	0.002 U
	1,3-Dichloropropane	NA	NA	NA	NA	NA	0.001 U
	2,2-Dichloropropane	NA	NA	NA	NA	NA	0.002 U
	1,1-Dichloropropene	NA	NA	NA	NA	NA	0.002 U
	cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	0.001 U
	trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	0.001 U
	Diethyl Ether	NA	NA	NA	NA	NA	0.016 U
	Diisopropyl Ether	NA	NA	NA	NA	NA	0.001 U
	1,4-Dioxane	NA	NA	NA	NA	NA	0.077 U
	Ethyl Benzene	NA	NA	NA	NA	NA	0.002 U
	Hexachlorobutadiene	NA	NA	NA	NA	NA	0.002 U
	2-Hexanone	NA	NA	NA	NA	NA	0.016 U
	Isopropylbenzene	NA	NA	NA	NA	NA	0.002 U
	p-Isopropyltoluene	NA	NA	NA	NA	NA	0.002 U
	MTBE	NA	NA	NA	NA	NA	0.004 U
	Methylene Chloride	NA	NA	NA	NA	NA	0.016 U
MIBK	NA	NA	NA	NA	NA	0.016 U	
Naphthalene	NA	NA	NA	NA	NA	0.008 U	
n-Propylbenzene	NA	NA	NA	NA	NA	0.002 U	
Styrene	NA	NA	NA	NA	NA	0.002 U	
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	0.002 U	
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	0.001 U	
Tetrachloroethylene	NA	NA	NA	NA	NA	0.002 U	
Tetrahydrofuran	NA	NA	NA	NA	NA	0.008 U	
Toluene	NA	NA	NA	NA	NA	0.002 U	
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	0.002 U	
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	0.002 U	
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	0.002 U	
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	0.002 U	
Trichloroethylene	NA	NA	NA	NA	NA	0.002 U	
Trichlorofluoromethane	NA	NA	NA	NA	NA	0.008 U	
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	0.002 U	
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	0.002 U	
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	0.002 U	
Vinyl Chloride	NA	NA	NA	NA	NA	0.008 U	
m + p Xylene	NA	NA	NA	NA	NA	0.004 U	
o-Xylene	NA	NA	NA	NA	NA	0.002 U	
	<i>Total VOCs</i>	10	4	30 to 1,800			ND

Table 3: Summary of Analytical Results for Waste Characterization Soil Sample - March 2009
Immediate Response Action Completion Report
HB-23 Excavation Area
New Bedford, Massachusetts

Analysis	Analyte	Sample ID: HB-23-DISPOSAL Sample Date: 3/28/2009					
		Reuse Level*		Soil Recycling Facility Summary Levels**			
		Lined Landfills	Unlined Landfill	Hot Mix Asphalt Plants	Thermal Processing Plant	Cold Mix Emulsion Plant	
SVOCs (mg/kg)	Acenaphthene	NA	NA	NA	NA	NA	0.410 U
	Acenaphthylene	NA	NA	NA	NA	NA	0.410 U
	Anthracene	NA	NA	NA	NA	NA	0.410 U
	Benzo(a)anthracene	NA	NA	NA	NA	NA	1.01
	Benzo(a)pyrene	NA	NA	NA	NA	NA	0.967
	Benzo(b)fluoranthene	NA	NA	NA	NA	NA	1.10
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	0.604
	Benzo(k)fluoranthene	NA	NA	NA	NA	NA	0.410 U
	Chrysene	NA	NA	NA	NA	NA	1.20
	Dibenz(a,h)anthracene	NA	NA	NA	NA	NA	0.410 U
	Fluoranthene	NA	NA	NA	NA	NA	1.57
	Fluorene	NA	NA	NA	NA	NA	0.410 U
	Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	0.697
	2-Methylnaphthalene	NA	NA	NA	NA	NA	0.410 U
	Naphthalene	NA	NA	NA	NA	NA	0.410 U
	Phenanthrene	NA	NA	NA	NA	NA	1.94
	Pyrene	NA	NA	NA	NA	NA	1.98
	Total SVOCs	100	100	NA	NA	NA	11.068
PCBs (mg/kg)	PCB 1016	NA	NA	NA	NA	NA	12.3 U
	PCB 1221	NA	NA	NA	NA	NA	12.3 U
	PCB 1232	NA	NA	NA	NA	NA	12.3 U
	PCB 1242	NA	NA	NA	NA	NA	12.3 U
	PCB 1248	NA	NA	NA	NA	NA	12.3 U
	PCB 1254	NA	NA	NA	NA	NA	59.9
	PCB 1260	NA	NA	NA	NA	NA	12.3 U
	PCB 1262	NA	NA	NA	NA	NA	12.3 U
	PCB 1268	NA	NA	NA	NA	NA	12.3 U
	Total PCBs	< 2	< 2	< 2	< 2	< 2	59.9
Metals, total (mg/L)	Mercury	10	10	10	3	10	0.217
	Arsenic	40	40	30	30	30	10.7
	Barium	NA	NA	NA	NA	NA	757
	Cadmium	80	30	30	11	30	18.1
	Chromium	1,000	1,000	500	500	500	79.2
	Lead	2,000	1,000	1,000	1,000	1,000	888
	Selenium	NA	NA	NA	NA	NA	6.15 U
	Silver	NA	NA	NA	NA	NA	1.04
Total Petroleum Hydrocarbon (mg/kg)	Unknown Hydrocarbons	5,000	2,500	5,000 to 60,000			430

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.

Values shown in Bold and shaded type exceed one or more of the listed criteria.

VOCs - Volatile Organic Compounds.

SVOCs - Semi-Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TCLP - Toxicity Characteristic Leaching Procedure.

* - Contaminant Levels for the Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, August 1997.

** - Massachusetts Soil Recycling Facility Summary Levels.

**Table 4: Summary of Analytical TCLP Results for Soil Sample - HB-23-Disposal
 Immediate Response Action Completion Report
 HB-23 Excavation Area
 New Bedford, Massachusetts**

Analysis	Analyte	Sample ID:	HB-23-DISPOSAL 3/28/2009
		Sample Date:	
		Maximum Concentration for Toxicity Characteristic*	
Metals, TCLP			
(mg/L)	Mercury	0.2	0.0001 U
	Arsenic	5.0	0.01 U
	Barium	100.0	4.23
	Cadmium	1.0	0.521
	Chromium	5.0	0.01 U
	Lead	5.0	4.71
	Selenium	1.0	0.05 U
	Silver	5.0	0.005 U

Notes:

ug/L - micrograms per liter.

TCLP - Toxicity Characteristic Leaching Procedure.

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

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

FIGURES

Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	4.70	0.517
Arsenic	7.29	10.6
Cadmium	1.03	
Chromium	36.7	35.2
Lead	293	3630

HB-23I

Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	13.5	16.8
Arsenic	NA	NA
Cadmium	NA	NA
Chromium	NA	NA
Lead	NA	NA

HB-23E

Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	45.9	4.12
Arsenic	NA	NA
Cadmium	NA	NA
Chromium	NA	NA
Lead	NA	NA

HB-23A

HB-23B

Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	0.786	0.915
Arsenic	3.11	7.3
Cadmium	0.37	1.14
Chromium	8.95	14.7
Lead	48.5	169

HB-23C

Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	1.41	4.74
Arsenic	3.1 U	18.1
Cadmium	0.31 U	3.86
Chromium	8.13	60.2
Lead	42.9	1460

Constituent	1.00 - 3.00
Total PCBs	NA
Arsenic	NA
Cadmium	2.2
Chromium	47
Lead	893

HB-23F

Constituent	0.75 - 3.00
Total PCBs	25.756
Arsenic	NA
Cadmium	NA
Chromium	NA
Lead	NA

HB-23D

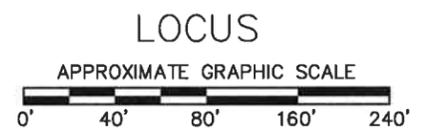
Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	1.50	19.9
Arsenic	NA	NA
Cadmium	NA	NA
Chromium	NA	NA
Lead	NA	NA

HB-23G



Constituent	0.00 - 1.00	1.00 - 3.00
Total PCBs	2.53	0.0843
Arsenic	3.42	17.7
Cadmium	0.61	3.31
Chromium	26.9	36.8
Lead	220	548

HB-23H



Summary of Regulatory Comparison Criteria for Soil (mg/kg)						
Contaminant	S-1 GW-2	S-1 GW-3	S-2 GW-2	S-2 GW-3	RCS-1	TSCA
Total PCBs	2	2	3	3	2	1
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.
 PCBs - POLYCHLORINATED BIPHENYLS.
 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.
 VALUES SHOWN IN YELLOW BACKGROUND EXCEED TSCA BUT ARE LESS THAN THE LISTED MASSDEP METHOD 1 STANDARDS AND RCS.

● SOIL BORING ● SOIL BORING THAT HAS CONCENTRATION WITH EXCEEDANCE

SAMPLE LOCATION	HB-23F
SAMPLE DATE	03/10/09
Constituent	1.00 - 3.00
Total PCBs	NA
Arsenic	NA
Cadmium	2.2
Chromium	47
Lead	893



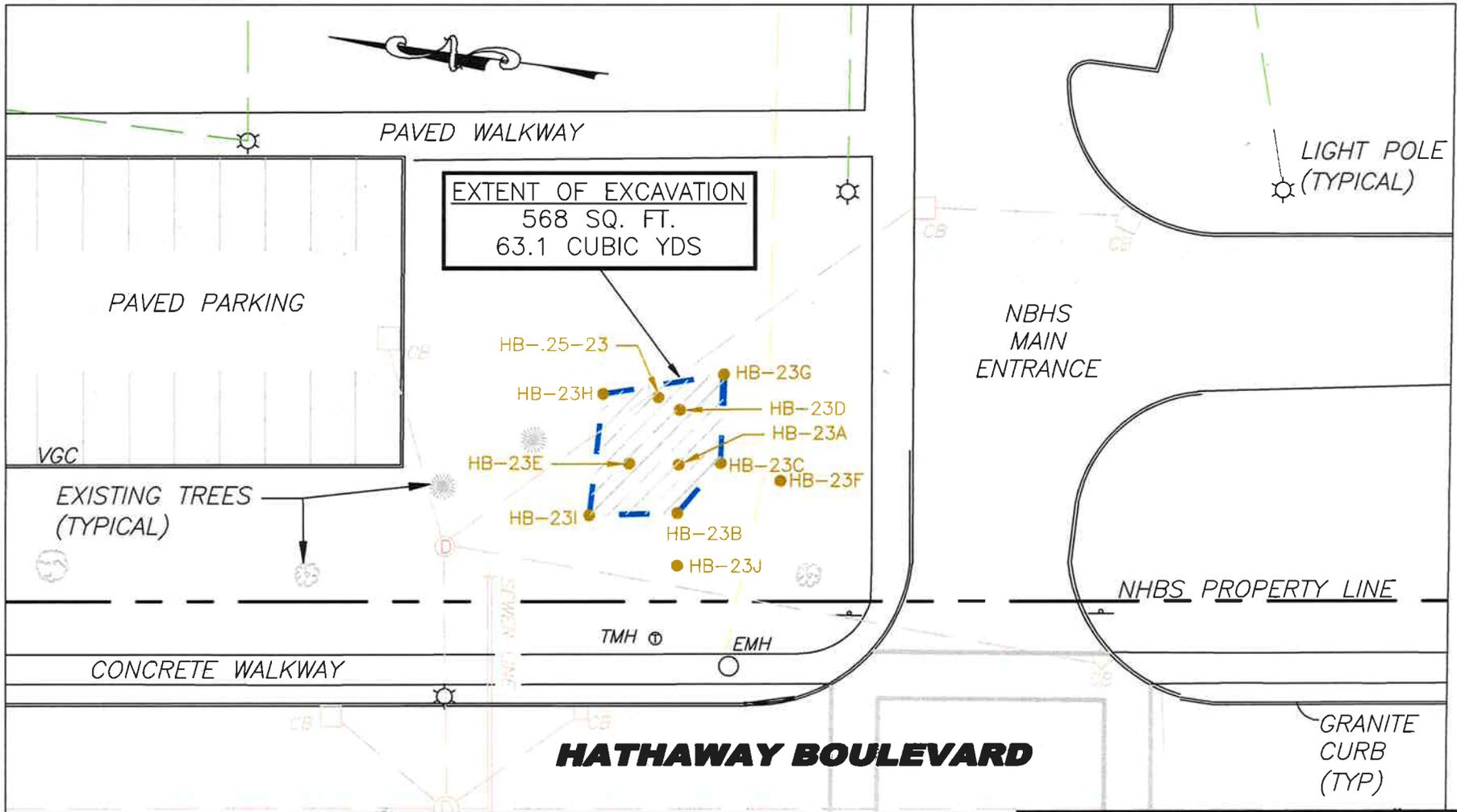
NEW BEDFORD HIGH SCHOOL - TREE BELTS AREA
NEW BEDFORD, MASSACHUSETTS
ANALYTICAL RESULTS
SUMMARY MAP

TRC Wannalancit Mills
 650 Suffolk Street
 Lowell, MA 01854
 (978) 970-5800

DRAWN BY: PZ
 CHECKED BY: DMS

DATE: MAY 2009

FIGURE 2



EXTENT OF EXCAVATION
 568 SQ. FT.
 63.1 CUBIC YDS

- HB-.25-23
- HB-23H
- HB-23E
- HB-23I
- HB-23G
- HB-23D
- HB-23A
- HB-23C
- HB-23F
- HB-23B
- HB-23J

LEGEND:

- SOIL EXCAVATED ON MARCH 28, 2009
- SOIL SAMPLE LOCATION
- UNDERGROUND DRAIN LINE
- UNDERGROUND CONCRETE CONDUIT
- UNDERGROUND ELECTRIC LINE



NOTE:
 FIGURE IS APPROXIMATE AND IS CONCEPTUAL.

**NEW BEDFORD HIGH SCHOOL
 NEW BEDFORD, MASSACHUSETTS**

HB-23 EXCAVATION AREA

	Wannalancit Mills 650 Suffolk Street Lowell, MA 01854 (978) 970-5600	FIGURE 3
	DRAWN BY: DMP CHECKED BY: RNS	

FILE: C:\Documents and Settings\dpetit\Desktop\hb-23 work.dwg

APPENDIX A

IMMINENT HAZARD EVALUATION SUMMARY

**IMMINENT HAZARD EVALUATION
HB-23 SURFACE SOIL
NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS**

Due to the potential Imminent Hazard (IH) condition that was triggered at the Site on March 19, 2009 for the detection of polychlorinated biphenyls (PCBs) in surface soil (0 to 1 foot in depth) at the HB-23 area of the New Bedford High School (NBHS) campus, an IH evaluation has been performed. The potential IH condition was discovered during additional investigation to delineate the extent of elevated levels of PCBs in soil within the tree belts on the NBHS campus 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 these areas. The HB-23 sampling location had been identified as one of three areas requiring further delineation sampling within the tree belt areas.

The protocol for the delineation sampling called for the collection of five soil samples (0 to 1 foot and 1 to 3 feet in depth) centered at the HB-23 location (designated "A") and within 10 feet of the HB-23A sampling location to the north, east, south and west (designated "B" through "E"). The protocol further called for the collection of five additional "outer ring" samples 20 feet from the original HB-23A sampling location (designated "F" through "J"). "Outer ring" samples were also collected from the 0 to 1 and 1 to 3 feet intervals. All samples were collected on March 10, 2009 and the "A" through "E" samples were authorized for PCB analysis. The "F" through "J" samples were held at the laboratory, pending the results of the "A" through "E" sample analysis.

Total PCB concentrations were below the Method 1 S-1/GW-2 and S-1/GW-3 standards (2 mg/kg) at three of the five initial surface soil locations (HB-23B through HB-23D). However, at locations HB-23A and HB-23E, concentrations of 45.9 mg/kg and 13.5 mg/kg were detected in the 0 to 1 foot interval, respectively. Due to the detection of PCBs at levels greater than 10 mg/kg within the top 12 inches of soil at the HB-23A and HB-23E locations, the potential IH condition was reported and the "G" through "I" samples were immediately authorized for analysis to determine the extent of the elevated surficial PCBs. HB-23G was authorized primarily to determine the extent of PCBs in the 1 to 3 foot interval, while HB-23H and HB-23I, which flanked HB-23A and HB-23E, were authorized to determine the extent of surficial PCBs.

The total PCB results for HB-23G through HB-23I were reported by the laboratory on March 20, 2009. The total PCB concentration in the HB-23G 0 to 1 foot sample was less than the Method 1 S-1 standard of 2 mg/kg, while total PCBs in HB-23H and HB-23I slightly exceeded the Method 1 S-1 standard (2.53 mg/kg and 4.7 mg/kg, respectively). These results confirmed that the extent of the surficial PCB contamination that triggered an IH conditions had been delineated.

Subsequent to the PCB sampling, 0 to 1 foot samples HB-23B, HB-23C, HB-23G, HB-23H and HB-23I, located at the perimeter of the delineated PCB area, were authorized for analysis for arsenic, barium, cadmium, chromium and lead to confirm that the five metals of historical concern in this general area were also within acceptable levels for the top foot of soil. All

sample results were below applicable Method 1 S-1 standards except for the chromium result at HB-23I of 36.7 mg/kg which slightly exceeded its Method 1 standard of 30 mg/kg. Sample-specific results for the HB-23 0 to 1 foot samples are presented in Table 1.

This IH evaluation reflects surface soil sampling conducted to date for the HB-23 area. The surface soil sample results are summarized in Table 2. Arsenic and cadmium were not considered further because their maximum detected concentrations were less than their Massachusetts Department of Environmental Protection (MassDEP) background concentrations for natural soil. Arithmetic mean concentrations were used as exposure point concentrations (EPCs) for barium, chromium and lead. However, because the maximum detected PCB concentration (45.9 mg/kg) is greater than the 10 mg/kg potential IH threshold, averaging of the 0 to 1 foot total PCB concentrations from the HB-23 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 EPC 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 for total PCBs.

The area of concern is located in front of the NBHS building, on a tree belt along Hathaway Boulevard. This area is only accessed by pedestrians walking through the neighborhood or by children on their way to and from school. The area is sparsely vegetated and periodically maintained by mowing. For the purposes of this IH evaluation, exposures are assumed to occur over 24 weeks, during the spring and fall when the ground is not frozen and school is in session. During this 24-week period, exposures are assumed to occur 5 days per week for 1 hour per day. These values are conservative because their use assumes that: (1) a child always contacts this small area when passing by the school; (2) children go to this area even during inclement weather; and (3) children remain at this location for 1 hour per day which is unlikely to occur due to small size and lack of attractive potential of this area.

To estimate exposures, a young child (age 1 to 6) was selected for evaluation because this age group may be present at this location, accompanying parents or older siblings on their way to and from school or through the neighborhood. Incidental ingestion of and dermal contact with impacted soils are assumed to occur while the young child plays at this location. The inhalation of fugitive dust generated while the child plays at this location is also considered a complete exposure pathway. Older children may also be exposed to the HB-23 surface soils, 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 3 through 6). Exposure assumptions selected for use are consistent with those used by MassDEP in the park visitor IH shortform, adjusted to be applicable to the 24-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 ug/m^3 . Inhalation rates used are age-specific values provided by MassDEP in the 1995 risk assessment guidance document.

The hazard index (HI) of 10 meets the MCP noncarcinogenic IH limit of 10. However, the excess lifetime cancer risk (ELCR) of $2E-05$ exceeds the MCP carcinogenic IH limit of $1E-05$. The IH is identified at the HB-23 area of the NBHS campus primarily due to the ingestion of and dermal contact with PCB-containing surface soil.

On March 28, 2009, soil in the vicinity of HB-23 was excavated. The limits of the excavation were defined by HB-23B, HB-23C, HB-23G, HB-23H, and HB-23I. Soil up to the excavation limits was removed to a depth of three feet below ground surface, including soil at the HB-23A, HB-23D and HB-23E locations. Table 7 presents summary statistics for soil that remains at the HB-23 area following the March 28, 2009 excavation. Risk calculations for these remaining concentrations are presented in Tables 8 through 11 and demonstrate that the IH condition no longer exists at the HB-23 area of the NBHS campus. The HI of 2 and the ELCR of $2E-06$ are below the MCP noncarcinogenic and carcinogenic IH limits of 10 and $1E-05$, respectively.

Table 1. Summary of Analytical Results for HB-23 Soil Samples - 0 to 1'
NBHS
New Bedford, Massachusetts

Analysis	Analyte	Sample Location:						HB-23A	HB-23B	HB-23C	HB-23D	HB-23E	HB-23G	HB-23H	HB-23I
		Sample Depth (ft.):						0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
		Sample Date:						3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA								
PCBs	Aroclor 1254	2	2	3	3	2	1	45.9 *	0.786 *	1.41 *	1.50 *	13.5 *	0.943 *	2.53 *	4.70 *
	Total PCBs	2	2	3	3	2	1	45.9	0.786	1.41	1.50	13.5	0.943	2.53	4.70
Metals	Arsenic	20	20	20	20	20	N/A	NA	3.11	3.10 U	NA	NA	2.90 U	3.42	7.29
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	58.1	53.2	NA	NA	55.1	343	311
	Cadmium	2	2	30	30	2	N/A	NA	0.37	0.31 U	NA	NA	0.29 U	0.61	1.03
	Chromium	30	30	200	200	30	N/A	NA	8.95	8.13	NA	NA	15.4	26.9	36.7
	Lead	300	300	300	300	300	N/A	NA	48.5	42.9	NA	NA	88.4	220	293

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.

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.

Values shown in **Bold and shaded type** exceed TSCA but are less than the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

* - The sample exhibits altered PCB pattern: best possible Aroclor match reported.

** - For reference purpose only.

Table 2. Summary Statistics for HB-23 Soil Samples - 0 to 1'

NBHS

New Bedford, Massachusetts

Analysis	Analyte				# of Samples	# of Detects	Freq. of Detects	Min. of Detects (mg/kg)	Max. of Detects (mg/kg)	Location of Max. Detected	Min. of Non-Detects (mg/kg)	Max. of Non-Detects (mg/kg)	Mean Concentration (mg/kg)	EPC (mg/kg)	EPC Rationale
		S-1/GW-2	S-1/GW-3	S-2/GW-2											
PCBs	Total PCBs	2	2	NS	8	8	100.0%	0.786	45.9	HB-23A	--	--	8.9E+00	4.6E+01	Maximum
Metals	Arsenic	20	20	20	5	3	60.0%	3.11	7.29	HB-23I	2.9	3.1	3.4E+00	NA	Below background
	Barium	1,000	1,000	50	5	5	100.0%	53.2	343	HB-23H	--	--	1.6E+02	1.6E+02	Mean
	Cadmium	2	2	2	5	3	60.0%	0.37	1.03	HB-23I	0.29	0.31	4.6E-01	NA	Below background
	Chromium	30	30	30	5	5	100.0%	8.13	36.7	HB-23I	--	--	1.9E+01	1.9E+01	Mean
	Lead	300	300	100	5	5	100.0%	42.9	293	HB-23I	--	--	1.4E+02	1.4E+02	Mean

Notes:

All units in mg/kg unless otherwise specified.

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

NA - Not available

SVOCs - Semi-volatile organic compounds

PCBs - Polychlorinated biphenyls

Background - Background Concentration for natural soil.

UCL - Upper confidence limit on the arithmetic mean concentration.

EPC - Exposure Point Concentration

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

Boxed maxima exceed natural soil background.

Table 3
 Pedestrian - Child
 Incidental Ingestion of Surface Soil
 New Bedford High School - HB-23 area (0-1')
 New Bedford, Massachusetts

Constituent	EPC	Exposure Estimates				Toxicity Values		Risk Estimates	
	Surface Soil Concentration (mg/kg)	RAF Ingestion Cancer (-)	1,ADD Cancer (mg/kg-d)	RAF Ingestion Noncancer (-)	ADD Noncancer (mg/kg-d)	Cancer Slope Factor (Oral) (mg/kg-d) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (-)	Hazard Quotient (-)
PCBs 1336-36-3 Total PCBs	45.9	8.5E-01	4.6E-06	8.5E-01	2.6E-04	2.0E+00	5.0E-05	9E-06	5.2E+00
Metals 7440-39-3 Barium	164	NC	NA	1.0E+00	1.1E-03	NA	7.0E-02	NA	1.6E-02
18540-29-9 Chromium	19.2	NC	NA	1.0E+00	1.3E-04	NA	2.0E-02	NA	6.4E-03
7439-92-1 Lead	138.6	NC	NA	5.0E-01	4.6E-04	NA	7.5E-04	NA	6.2E-01

	Cancer Risk	Hazard Index
TOTAL:	9E-06	6E+00

NA = Not Applicable
 NC = No Criteria
 Where:

$1,ADD_{cancer} = [Soil\ Concentration \times UC \times RAF \times IR \times EF \times ED \times EP] / [BW \times AP_{cancer}]$
 $ADD_{non-cancer} = [Soil\ Concentration \times UC \times RAF \times IR \times EF \times ED \times EP] / [BW \times AP_{non-cancer}]$
 Cancer Risk = $1,ADD_{cancer} \times Slope\ Factor$
 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_{cancer}) = 70 years [1]
 Averaging Period Noncancer ($AP_{noncancer}$) = 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 4
Pedestrian - Child
Dermal Contact with Surface Soil
New Bedford High School - HB-23 area (0-1')
New Bedford, Massachusetts

Constituent	EPC	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) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (-)	Hazard Quotient (-)
PCBs 1336-36-3 Total PCBs	46	0.16	6.8E-06	0.16	2.9E-04	2.0E+00	5.0E-05	1E-05	5.7E+00
Metals 7440-39-3 Barium	164	NC	NA	0.05	3.2E-04	NA	7.0E-02	NA	4.6E-03
18540-29-9 Chromium	19	NC	NA	0.09	6.7E-05	NA	2.0E-02	NA	3.4E-03
7439-92-1 Lead	139	NC	NA	0.006	3.2E-05	NA	7.5E-04	NA	4.3E-02

NA = Not Applicable
NC = No Criteria

Where:

$LADD_{cancer} = \text{Soil Concentration} \times UC1 \times SA \times SAF \times RAF \times EF \times ED \times EP / (BW \times AP_{cancer})$
 $ADD_{non-cancer} = \text{Soil Concentration} \times UC1 \times SA \times SAF \times RAF \times EF \times ED \times EP / (BW \times AP_{non-cancer})$
 Cancer Risk = $LADD_{cancer} \times \text{Slope Factor}$
 Hazard Quotient = $ADD_{non-cancer} / \text{Reference Dose}$

Unit Conversion (UC1) =	1E-06	kg/mg
Skin Surface Area (SA) - Noncancer =	1670	cm ² /d [1] - (1-2 year old)
Skin Surface Area (SA) - Cancer =	2231	cm ² /d [1] - (1-6 year old)
Soil Adherence Factor (SAF) =	0.35	mg/cm ² [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 _{cancer}) =	70	years [1]
Averaging Period Noncancer (AP _{noncancer}) =	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
TOTAL:	1E-05	6E+00

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

Table 5
Pedestrian - Young Child
Inhalation of Fugitive Dusts - Exposure Via the Lungs
New Bedford High School - HB-23 area (B-1')
New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates		Toxicity Values		Risk Estimates	
		IADFe _{10s} Cancer (ug/m ³)	ADFe _{10s} Noncancer (ug/m ³)	Unit Risk Factor (Inh) (ug/m ³) ⁻¹	Subchronic Noncancer Reference Conc. (Inh) (ug/m ³)	Cancer Risk (-)	Hazard Quotient (-)
PCBs							
1316-36-3 Total PCBs	46	2.0E-05	6.9E-04	1.0E-04	2.0E-02	2E-09	3.4E-02
Metals							
7440-39-3 Barium	164	7.3E-05	2.5E-03	NA	5.0E+00	NA	4.9E-04
18540-29-9 Chromium	19	8.5E-06	2.9E-04	1.2E-02	3.0E-01	1E-07	9.6E-04
7439-92-1 Lead	139	6.1E-05	2.1E-03	NA	1.0E+00	NA	2.1E-03

NA = Not Applicable

Where:

IADFe_{10s} = (OIM x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / (APcancer x BW)) x (BW assumed/IR assumed)
 ADFe_{10s} = (OIM x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / APnon-cancer x BW) x (BW assumed/IR assumed)
 Cancer Risk = IADFe_{10s} x Cancer Slope Factor
 Hazard Quotient = ADFe_{10s} / Reference Dose

	Cancer Risk	Hazard Index
TOTAL:	1E-07	4E-02

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

Respirable Dust (PM₁₀) = 60 ug/m³ [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_{cancer}) = 25550 days [1]
 Averaging Period Noncancer (AP_{noncancer}) = 126 days [5]
 Inhalation Rate assumed (IR assumed) = 20 m³/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 10⁻⁹ kg/ug; 0.001 m³/l)

[1] MassDEP, 2007; Park User Soil Inherent Hazard Short-term
 [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 6
 Pedestrian - Young Child
 Inhalation of Fugitive Dusts - Exposure Via the GI Tract
 New Bedford High School - HB-23 area (0-17)
 New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates				Toxicity Values		Risk Estimates	
		RAF Cancer Ing (-)	LADD _{Cancer} (mg/kg-day)	RAF Noncancer Ing (-)	ADD _{Noncancer} (mg/kg-day)	Cancer Slope Factor (Oral) (mg/kg-day) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-day)	Cancer Risk (-)	Hazard Quotient (-)
PCBs 1336-36-3 Total PCBs	46	8.5E-01	1.48E-08	8.50E-01	5.02E-07	2.0E+00	5.0E-05	3E-08	1.0E-02
Metals 7440-39-3 Barium	164	NC	NA	1.00E+00	2.11E-06	NA	7.0E-02	NA	3.0E-05
18540-29-9 Chromium	19	NC	NA	1.00E+00	2.47E-07	NA	2.0E-02	NA	1.2E-05
7439-92-1 Lead ¹	139	NC	NA	5.03E-01	8.91E-07	NA	7.5E-01	NA	1.2E-03

NA = Not Applicable

Where:

LADD_{Cancer} = (OIM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / (AP_{Cancer} x BW))
 ADD_{Non-cancer} = (OIM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / AP_{Non-cancer} x BW)
 Cancer Risk = LADD_{Cancer} x Cancer Slope Factor
 Hazard Quotient = ADD_{Non-cancer} / Reference Dose

Respirable Dust (PM ₁₀) =	60	ug/m ³ [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 _{Cancer}) =	25550	days [1]
Averaging Period Noncancer (AP _{Noncancer}) =	126	days [5]
Unit Conversion (UC1) =	6.09E-11	(60 min/hour; 1x 10 ⁻⁹ kg/ug; 0.001 m ³ /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 Judgement
- [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	3E-08
Hazard Index	1E-02
TOTAL:	

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

Table 7. Summary Statistics of HB-23 Post-Excavation Soil Samples - 0 to 1'

NBHS

New Bedford, Massachusetts

Analysis	Analyte				# of Samples	# of Detects	Freq. of Detects	Min. of Detects (mg/kg)	Max. of Detects (mg/kg)	Location of Max. Detected	Min. of Non-Detects (mg/kg)	Max. of Non-Detects (mg/kg)	Mean Concentration (mg/kg)	EPC (mg/kg)	EPC Rationale
		S-1/GW-2	S-1/GW-3	Background											
PCBs	Total PCBs	2	2	NS	5	5	100.0%	0.786	4.7	HB-23I	--	--	2.1E+00	4.7E+00	Maximum
Metals	Arsenic	20	20	20	5	3	60.0%	3.11	7.29	HB-23I	2.9	3.1	3.4E+00	NA	Below background
	Barium	1,000	1,000	50	5	5	100.0%	53.2	343	HB-23H	--	--	1.6E+02	1.6E+02	Mean
	Cadmium	2	2	2	5	3	60.0%	0.37	1.03	HB-23I	0.29	0.31	4.6E-01	NA	Below background
	Chromium	30	30	30	5	5	100.0%	8.13	36.7	HB-23I	--	--	1.9E+01	1.9E+01	Mean
	Lead	300	300	100	5	5	100.0%	42.9	293	HB-23I	--	--	1.4E+02	1.4E+02	Mean

Notes:

All units in mg/kg unless otherwise specified.

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

NA - Not available

SVOCs - Semi-volatile organic compounds

PCBs - Polychlorinated biphenyls

Background - Background Concentration for natural soil.

UCL - Upper confidence limit on the arithmetic mean concentration.

EPC - Exposure Point Concentration

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

Boxed maxima exceed natural soil background.

Table 8
Pedestrian - Child
Incidental Ingestion of Surface Soil
New Bedford High School - HB-23 post-excavation (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) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (-)	Hazard Quotient (-)
PCBs 1336-36-3 Total PCBs	4.7	8.5E-01	4.8E-07	8.5E-01	2.7E-05	2.0E+00	5.0E-05	1E-06	5.3E-01
Metals 7440-39-3 Barium	164	NC	NA	1.0E+00	1.1E-03	NA	7.0E-02	NA	1.6E-02
18540-29-9 Chromium	19.2	NC	NA	1.0E+00	1.3E-04	NA	2.0E-02	NA	6.4E-03
7439-92-1 Lead	138.6	NC	NA	5.0E-01	4.6E-04	NA	7.5E-04	NA	6.2E-01

	Cancer Risk	Hazard Index
TOTAL:	1E-06	1.2E+00

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_{cancer}) = 70 years [1]
 Averaging Period Noncancer (AP_{non-cancer}) = 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 2
 Pedestrian - Child
 Dermal Contact with Surface Soil
 New Bedford High School - HB-23 post-excavation (0-1')
 New Bedford, Massachusetts

Constituent	EPC	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) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-d)	Cancer Risk (-)	Hazard Quotient (-)
PCBs 1336-36-3 Total PCBs	4.7	0.16	7.0E-07	0.16	2.9E-05	2.0E+00	5.0E-05	1E-06	5.9E-01
Metals 7440-39-3 Barium	164	NC	NA	0.05	3.2E-04	NA	7.0E-02	NA	4.6E-03
18540-29-9 Chromium	19.2	NC	NA	0.09	6.7E-05	NA	2.0E-02	NA	3.4E-03
7439-92-1 Lead	138.6	NC	NA	0.006	3.2E-05	NA	7.5E-04	NA	4.3E-02

NA = Not Applicable
 NC = No Criteria

Where:

$LADD_{cancer} = \text{Soil Concentration} \times UC1 \times SA \times SAF \times RAF \times EF \times ED \times EP / (BW \times AP_{cancer})$
 $ADD_{non-cancer} = \text{Soil Concentration} \times UC1 \times SA \times SAF \times RAF \times EF \times ED \times EP / (BW \times AP_{non-cancer})$
 Cancer Risk = $LADD_{cancer} \times \text{Slope Factor}$
 Hazard Quotient = $ADD_{non-cancer} / \text{Reference Dose}$

Unit Conversion (UC1) =	1E-06	kg/mg
Skin Surface Area (SA) - Noncancer =	1670	cm ² /d [1] - (1-2 year old)
Skin Surface Area (SA) - Cancer =	2231	cm ² /d [1] - (1-6 year old)
Soil Adherence Factor (SAF) =	0.35	mg/cm ² [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 _{cancer}) =	70	years [1]
Averaging Period Noncancer (AP _{noncancer}) =	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
TOTAL:	1E-06	6.4E-01

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

Table 10
 Pedestrian - Young Child
 Inhalation of Fugitive Dusts - Exposure Via the Lungs
 New Bedford High School - HH-23 post-excavation (9-17)
 New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates		Toxicity Values		Risk Estimates	
		I.ADE ₂₅ Cancer (ug/m ³)	ADE ₂₅ Noncancer (ug/m ³)	Unit Risk Factor (Inh) (ug/m ³) ⁻¹	Subchronic Noncancer Reference Conc. (Inh) (ug/m ³)	Cancer Risk (-)	Hazard Quotient (-)
PCBs							
1336-36-3 Total PCBs	4.7	2.1E-06	7.1E-05	1.0E-04	2.0E-02	2E-10	3.5E-03
Metals							
7440-39-3 Barium	164	7.3E-05	2.5E-03	NA	5.0E+00	NA	4.9E-04
18540-29-9 Chromium	19.2	8.5E-06	2.9E-04	1.2E-02	3.0E-01	1E-07	9.6E-04
7439-92-1 Lead	138.6	6.1E-05	2.1E-03	NA	1.0E+00	NA	2.1E-03

NA = Not Applicable

Where:

I.ADE_{cancer} = (CHM x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / (AF_{cancer} x BW)) x (BW assumed/IR assumed)
 ADE_{non-cancer} = (CHM x 0.5 X PM10 x IR x RAF x EF x ED x EP x UC1 / AF_{non-cancer} x BW) x (BW assumed/IR assumed)
 Cancer Risk = I.ADE_{cancer} x Cancer Slope Factor
 Hazard Quotient = ADE_{non-cancer} / Reference Dose

	Cancer Risk	Hazard Index
TOTAL:	1E-07	7E-03

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

Respirable Dust (PM₁₀) = 60 ug/m³ [4]
 Relative Absorptive 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_{cancer}) = 25550 days [1]
 Averaging Period Noncancer (AP_{noncancer}) = 126 days [5]
 Inhalation Rate assumed (IR assumed) = 20 m³/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 10⁻⁹ kg/ug; 0.001 m³/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 11
 Pedestrian - Young Child
 Inhalation of Fugitive Dusts - Exposure Via the GI Tract
 New Bedford High School - HB-23 post-excavation (0-1')
 New Bedford, Massachusetts

Constituent	Surface Soil Concentration (mg/kg)	Exposure Estimates				Toxicity Values		Risk Estimates	
		RAF Cancer Ing (-)	LADD _{cancer} (mg/kg-day)	RAF Noncancer Ing (-)	ADD _{0.1/05} Noncancer (mg/kg-day)	Cancer Slope Factor (Oral) (mg/kg-day) ⁻¹	Subchronic Noncancer Reference Dose (Oral) (mg/kg-day)	Cancer Risk (-)	Hazard Quotient (-)
PCBs									
1336-36-3 Total PCBs	4.7	8.5E-01	1.52E-09	8.50E-01	5.14E-08	2.0E+00	5.0E-05	3E-09	1.0E-03
Metals									
7440-39-3 Barium	164	NC	NA	1.00E+00	2.11E-06	NA	7.0E-02	NA	3.0E-05
18540-29-9 Chromium	19.2	NC	NA	1.00E+00	2.47E-07	NA	2.0E-02	NA	1.2E-05
7439-92-1 Lead	138.6	NC	NA	5.00E-01	8.91E-07	NA	7.5E-01	NA	1.2E-03

NA = Not Applicable

Where:

LADD_{cancer} = (OHM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UCI / (AP_{noncancer} x BW))
 ADD_{0.1/05}cancer = (OHM x 1.5 X PM10 x IR x RAF x EF x ED x EP x UCI / AP_{noncancer} x BW)
 Cancer Risk = LADD_{cancer} x Cancer Slope Factor
 Hazard Quotient = ADD_{0.1/05}cancer / Reference Dose

Respirable Dust (PM ₁₀) =	60	ug/m ³ [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 _{cancer}) =	25550	days [1]
Averaging Period Noncancer (AP _{noncancer}) =	126	days [5]
Unit Conversion (UCI) =	6.00E-11	(60 min/hour; 1x 10 ⁻⁹ kg/ug; 0.001 m ³)

- [1] MassDEP, 2007; Part 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	3E-09
Hazard Index	2E-03
TOTAL:	

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

APPENDIX B

SAMPLE RESULTS FROM LABORATORY REPORTS

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-10</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-231 (0-1)</u>
Sample wt(Dry)/vol: <u>8.6903 g</u>	Lab Sample ID: <u>AM02164</u>
Percent Moisture: <u>14.6</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/19/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/20/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>4</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-344-3

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-383-3

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.230	U
1	11104-28-2	Aroclor 1221	0.230	U
1	11141-16-5	Aroclor 1232	0.230	U
1	53469-21-9	Aroclor 1242	0.230	U
1	12672-29-6	Aroclor 1248	0.230	U
1	11097-69-1	Aroclor 1254	4.70	AF
1	11096-82-5	Aroclor 1260	0.230	U

Laboratory Qualifiers:

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: Northeast Analytical, Inc.
 ELAP ID No: 11078
 Matrix: Soil
 Sample wt(Dry)/vol: 8.4986 g
 Percent Moisture: 18.4
 Extraction: SOXHLET
 Conc. Extract Volume: 25000 uL
 Method: SW-846 8082 (PCB)

SDG No: 09030050
 LRF ID: 09030050-12
 Client ID: HB-23H (0-1)
 Lab Sample ID: AM02166
 Date Received: 03/11/2009
 Date Extracted: 03/19/2009
 Date Analyzed: 03/20/2009
 Dilution Factor: 2
 Sulfur Cleanup: YES

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-344-5

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-383-5

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	Q
			UG/G	
1	12674-11-2	Aroclor 1016	0.118	U
1	11104-28-2	Aroclor 1221	0.118	U
1	11141-16-5	Aroclor 1232	0.118	U
1	53469-21-9	Aroclor 1242	0.118	U
1	12672-29-6	Aroclor 1248	0.118	U
1	11097-69-1	Aroclor 1254	2.53	AF
1	11096-82-5	Aroclor 1260	0.118	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-13</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23H (1-3)</u>
Sample wt(Dry)/vol: <u>7.9287 g</u>	Lab Sample ID: <u>AM02167</u>
Percent Moisture: <u>22.0</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/19/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/20/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>1</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-344-6

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-383-6

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.0631	U
1	11104-28-2	Aroclor 1221	0.0631	U
1	11141-16-5	Aroclor 1232	0.0631	U
1	53469-21-9	Aroclor 1242	0.0631	U
1	12672-29-6	Aroclor 1248	0.0631	U
1	11097-69-1	Aroclor 1254	0.0843	AF
1	11096-82-5	Aroclor 1260	0.0631	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 Note: There were several non-target peaks.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-14</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23E (0-1)</u>
Sample wt(Dry)/vol: <u>8.7997 g</u>	Lab Sample ID: <u>AM02168</u>
Percent Moisture: <u>15.8</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/16/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>10</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-379-20

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-340-20

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION UG/G	Q
1	12674-11-2	Aroclor 1016	0.568	U
1	11104-28-2	Aroclor 1221	0.568	U
1	11141-16-5	Aroclor 1232	0.568	U
1	53469-21-9	Aroclor 1242	0.568	U
1	12672-29-6	Aroclor 1248	0.568	U
1	11097-69-1	Aroclor 1254	13.5	AF
1	11096-82-5	Aroclor 1260	0.568	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-15</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23E (1-3)</u>
Sample wt(Dry)/vol: <u>8.3239 g</u>	Lab Sample ID: <u>AM02169</u>
Percent Moisture: <u>19.7</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/16/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>10</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-379-21

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-340-21

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.601	U
1	11104-28-2	Aroclor 1221	0.601	U
1	11141-16-5	Aroclor 1232	0.601	U
1	53469-21-9	Aroclor 1242	0.601	U
1	12672-29-6	Aroclor 1248	0.601	U
1	11097-69-1	Aroclor 1254	16.8	AF
1	11096-82-5	Aroclor 1260	0.601	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-18</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23B (0-1)</u>
Sample wt(Dry)/vol: <u>8.3878 g</u>	Lab Sample ID: <u>AM02172</u>
Percent Moisture: <u>17.1</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/17/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>1</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M, ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20F-379-23

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M, ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20B-340-23

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	Q
			UG/G	
1	12674-11-2	Aroclor 1016	0.0596	U
1	11104-28-2	Aroclor 1221	0.0596	U
1	11141-16-5	Aroclor 1232	0.0596	U
1	53469-21-9	Aroclor 1242	0.0596	U
1	12672-29-6	Aroclor 1248	0.0596	U
1	11097-69-1	Aroclor 1254	0.786	AF
1	11096-82-5	Aroclor 1260	0.0596	U

Laboratory Qualifiers:
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name:	<u>Northeast Analytical, Inc.</u>	SDG No:	<u>09030050</u>
ELAP ID No:	<u>11078</u>	LRP ID:	<u>09030050-19</u>
Matrix:	<u>Soil</u>	Client ID:	<u>HB-23B (1-3)</u>
Sample wt(Dry)/vol:	<u>8.5429 g</u>	Lab Sample ID:	<u>AM02173</u>
Percent Moisture:	<u>18.6</u>	Date Received:	<u>03/11/2009</u>
Extraction:	<u>SOXHLET</u>	Date Extracted:	<u>03/12/2009</u>
Conc. Extract Volume:	<u>25000 uL</u>	Date Analyzed:	<u>03/17/2009</u>
Method:	<u>SW-846 8082 (PCB)</u>	Dilution Factor:	<u>1</u>
		Sulfur Cleanup:	<u>YES</u>

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-340-24

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-379-24

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.0585	U
1	11104-28-2	Aroclor 1221	0.0585	U
1	11141-16-5	Aroclor 1232	0.0585	U
1	53469-21-9	Aroclor 1242	0.0585	U
1	12672-29-6	Aroclor 1248	0.0585	U
1	11097-69-1	Aroclor 1254	0.915	AF
1	11096-82-5	Aroclor 1260	0.0585	U

Laboratory Qualifiers:

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030050</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030050-20</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23A (0-1)</u>
Sample wt(Dry)/vol: <u>8.7233 g</u>	Lab Sample ID: <u>AM02174</u>
Percent Moisture: <u>15.3</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/17/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>30</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-379-27

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-340-27

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION UG/G	Q
1	12674-11-2	Aroclor 1016	1.72	U
1	11104-28-2	Aroclor 1221	1.72	U
1	11141-16-5	Aroclor 1232	1.72	U
1	53469-21-9	Aroclor 1242	1.72	U
1	12672-29-6	Aroclor 1248	1.72	U
1	11097-69-1	Aroclor 1254	45.9	AF
1	11096-82-5	Aroclor 1260	1.72	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-01</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23A (1-3)</u>
Sample wt(Dry)/vol: <u>7.6154 g</u>	Lab Sample ID: <u>AM02175</u>
Percent Moisture: <u>25.5</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/18/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>3</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-380-27

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-341-27

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.197	U
1	11104-28-2	Aroclor 1221	0.197	U
1	11141-16-5	Aroclor 1232	0.197	U
1	53469-21-9	Aroclor 1242	0.197	U
1	12672-29-6	Aroclor 1248	0.197	U
1	11097-69-1	Aroclor 1254	4.12	AF
1	11096-82-5	Aroclor 1260	0.197	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name:	<u>Northeast Analytical, Inc.</u>	SDG No:	<u>09030051</u>
ELAP ID No:	<u>11078</u>	LRF ID:	<u>09030051-02</u>
Matrix:	<u>Soil</u>	Client ID:	<u>HB-23D (0-1)</u>
Sample wt(Dry)/vol:	<u>9.1718 g</u>	Lab Sample ID:	<u>AM02176</u>
Percent Moisture:	<u>12.5</u>	Date Received:	<u>03/11/2009</u>
Extraction:	<u>SOXHLET</u>	Date Extracted:	<u>03/12/2009</u>
Conc. Extract Volume:	<u>25000 uL</u>	Date Analyzed:	<u>03/18/2009</u>
Method:	<u>SW-846 8082 (PCB)</u>	Dilution Factor:	<u>1</u>
		Sulfur Cleanup:	<u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20F-380-28

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20B-341-28

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	Q
			UG/G	
1	12674-11-2	Aroclor 1016	0.0545	U
1	11104-28-2	Aroclor 1221	0.0545	U
1	11141-16-5	Aroclor 1232	0.0545	U
1	53469-21-9	Aroclor 1242	0.0545	U
1	12672-29-6	Aroclor 1248	0.0545	U
1	11097-69-1	Aroclor 1254	1.50	AF
1	11096-82-5	Aroclor 1260	0.0545	U

Laboratory Qualifiers:
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-03</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23D (1-3)</u>
Sample wt(Dry)/vol: <u>9.3906 g</u>	Lab Sample ID: <u>AM02177</u>
Percent Moisture: <u>7.80</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/18/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>10</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20F-380-29

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
Injection Volume: 1.0 uL
Lab File ID: GC20B-341-29

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.532	U
1	11104-28-2	Aroclor 1221	0.532	U
1	11141-16-5	Aroclor 1232	0.532	U
1	53469-21-9	Aroclor 1242	0.532	U
1	12672-29-6	Aroclor 1248	0.532	U
1	11097-69-1	Aroclor 1254	19.9	AF
1	11096-82-5	Aroclor 1260	0.532	U

Laboratory Qualifiers:
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-04</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23C (0-1)</u>
Sample wt(Dry)/vol: <u>8.3701 g</u>	Lab Sample ID: <u>AM02178</u>
Percent Moisture: <u>19.2</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/18/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>1</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-380-30

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-341-30

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.0597	U
1	11104-28-2	Aroclor 1221	0.0597	U
1	11141-16-5	Aroclor 1232	0.0597	U
1	53469-21-9	Aroclor 1242	0.0597	U
1	12672-29-6	Aroclor 1248	0.0597	U
1	11097-69-1	Aroclor 1254	1.41	AF
1	11096-82-5	Aroclor 1260	0.0597	U

Laboratory Qualifiers:

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-05</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23C (1-3)</u>
Sample wt(Dry)/vol: <u>8.1778 g</u>	Lab Sample ID: <u>AM02179</u>
Percent Moisture: <u>20.1</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/12/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/18/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>5</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-380-31

Column 2 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-341-31

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.306	U
1	11104-28-2	Aroclor 1221	0.306	U
1	11141-16-5	Aroclor 1232	0.306	U
1	53469-21-9	Aroclor 1242	0.306	U
1	12672-29-6	Aroclor 1248	0.306	U
1	11097-69-1	Aroclor 1254	4.74	AF
1	11096-82-5	Aroclor 1260	0.306	U

Laboratory Qualifiers:

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-06</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23G (0-1)</u>
Sample wt(Dry)/vol: <u>8.7755 g</u>	Lab Sample ID: <u>AM02180</u>
Percent Moisture: <u>14.1</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/19/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/20/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>1</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-344-7

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-383-7

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.0570	U
1	11104-28-2	Aroclor 1221	0.0570	U
1	11141-16-5	Aroclor 1232	0.0570	U
1	53469-21-9	Aroclor 1242	0.0570	U
1	12672-29-6	Aroclor 1248	0.0570	U
1	11097-69-1	Aroclor 1254	0.943	AF
1	11096-82-5	Aroclor 1260	0.0570	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

**1D-1
PCB ANALYSIS DATA SHEET**

Laboratory Name: <u>Northeast Analytical, Inc.</u>	SDG No: <u>09030051</u>
ELAP ID No: <u>11078</u>	LRF ID: <u>09030051-07</u>
Matrix: <u>Soil</u>	Client ID: <u>HB-23G (1-3)</u>
Sample wt(Dry)/vol: <u>8.8697 g</u>	Lab Sample ID: <u>AM02181</u>
Percent Moisture: <u>13.0</u>	Date Received: <u>03/11/2009</u>
Extraction: <u>SOXHLET</u>	Date Extracted: <u>03/19/2009</u>
Conc. Extract Volume: <u>25000 uL</u>	Date Analyzed: <u>03/20/2009</u>
Method: <u>SW-846 8082 (PCB)</u>	Dilution Factor: <u>5</u>
	Sulfur Cleanup: <u>YES</u>

Column 1 Information:

GC Column: PHENOMENEX, NARROWBORE CAPILLARY, ZB-5, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20B-344-8

Column 2 Information:

GC Column: J&W, NARROWBORE CAPILLARY, DB-1, 30M; ID: 0.25 mm
 Injection Volume: 1.0 uL
 Lab File ID: GC20F-383-8

Column Number	CAS NO	COMPOUND NAME	CONCENTRATION	
			UG/G	Q
1	12674-11-2	Aroclor 1016	0.282	U
1	11104-28-2	Aroclor 1221	0.282	U
1	11141-16-5	Aroclor 1232	0.282	U
1	53469-21-9	Aroclor 1242	0.282	U
1	12672-29-6	Aroclor 1248	0.282	U
1	11097-69-1	Aroclor 1254	4.94	AF
1	11096-82-5	Aroclor 1260	0.282	U

Laboratory Qualifiers:
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 U - Denotes analyte not detected at concentration greater than or equal to the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.



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

4/1/2009
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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23B(0-1)

LIMS-BAT #: LIMIT-24303
Job Number: 115058

Sample ID : 09B09567 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	3.11	03/31/09	OP	3.06			

Field Sample #: HB-23B(1-3)

Sample ID : 09B09568 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	7.30	03/31/09	OP	3.17			

Field Sample #: HB-23C(0-1)

Sample ID : 09B09569 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	ND	03/31/09	OP	3.10			

Field Sample #: HB-23C(1-3)

Sample ID : 09B09570 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	18.1	03/31/09	OP	3.19			

Field Sample #: HB-23G(0-1)

Sample ID : 09B09571 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	ND	03/31/09	OP	2.90			

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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LOWELL, MA 01852

4/1/2009
Page 2 of 28

Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS

LIMS-BAT #: LIMIT-24303

Date Received: 3/28/2009

Job Number: 115058

Field Sample #: HB-23G(1-3)

Sample ID : 09B09572 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	6.77	03/31/09	OP	2.83			

Field Sample #: HB-23H(0-1)

Sample ID : 09B09565 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	3.42	03/31/09	OP	3.04			

Field Sample #: HB-23H(1-3)

Sample ID : 09B09566 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	17.7	03/31/09	OP	3.31			

Field Sample #: HB-23I(0-1)

Sample ID : 09B09563 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	7.29	03/31/09	OP	2.86			

Field Sample #: HB-23I(1-3)

Sample ID : 09B09564 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	10.6	03/31/09	OP	3.24			

RL = Reporting Limit

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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4/1/2009
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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23B(0-1)

LIMS-BAT #: LIMT-24303
Job Number: 115058

Sample ID: 09B09567 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	58.1	03/31/09	OP	6.12			

Field Sample #: HB-23B(1-3)

Sample ID: 09B09568 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	236	03/31/09	OP	6.34			

Field Sample #: HB-23C(0-1)

Sample ID: 09B09569 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	53.2	03/31/09	OP	6.20			

Field Sample #: HB-23C(1-3)

Sample ID: 09B09570 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	1020	03/31/09	OP	6.37			

Field Sample #: HB-23G(0-1)

Sample ID: 09B09571 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	55.1	03/31/09	OP	5.80			

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

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS

LIMS-BAT #: LIMIT-24303

Date Received: 3/28/2009

Job Number: 115058

Field Sample #: HB-23G(1-3)

Sample ID : 09B09572 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Barium	mg/kg dry wt	297	03/31/09	OP	5.65		

Field Sample #: HB-23H(0-1)

Sample ID : 09B09565 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Barium	mg/kg dry wt	343	03/31/09	OP	6.07		

Field Sample #: HB-23H(1-3)

Sample ID : 09B09566 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Barium	mg/kg dry wt	269	03/31/09	OP	6.61		

Field Sample #: HB-23I(0-1)

Sample ID : 09B09563 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Barium	mg/kg dry wt	311	03/31/09	OP	5.72		

Field Sample #: HB-23I(1-3)

Sample ID : 09B09564 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Barium	mg/kg dry wt	1210	03/31/09	OP	6.48		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23B(0-1)
Sample ID: 09B09567

LIMS-BAT #: LIMIT-24303
Job Number: 115058

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.37	03/31/09	OP	0.31			

Field Sample #: HB-23B(1-3)

Sample ID: 09B09568

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	1.14	03/31/09	OP	0.32			

Field Sample #: HB-23C(0-1)

Sample ID: 09B09569

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	ND	03/31/09	OP	0.31			

Field Sample #: HB-23C(1-3)

Sample ID: 09B09570

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	3.86	03/31/09	OP	0.32			

Field Sample #: HB-23G(0-1)

Sample ID: 09B09571

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	ND	03/31/09	OP	0.29			

RL = Reporting Limit

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23G(1-3)
Sample ID : 09B09572
Sample Matrix: SOIL

LIMS-BAT #: LIMT-24303
Job Number: 115058

‡Sampled : 3/10/2009
Not Specified

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	1.28	03/31/09	OP	0.29			

Field Sample #: HB-23H(0-1)

Sample ID : 09B09565

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	0.61	03/31/09	OP	0.31			

Field Sample #: HB-23H(1-3)

Sample ID : 09B09566

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	3.31	03/31/09	OP	0.34			

Field Sample #: HB-23I(0-1)

Sample ID : 09B09563

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	1.03	03/31/09	OP	0.29			

Field Sample #: HB-23I(1-3)

Sample ID : 09B09564

‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Cadmium	mg/kg dry wt	4.06	03/31/09	OP	0.33			

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23B(0-1)

LIMS-BAT #: LIMIT-24303
Job Number: 115058

Sample ID: 09B09567 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	8.95	03/31/09	OP	0.62			

Field Sample #: HB-23B(1-3)

Sample ID: 09B09568 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	14.7	03/31/09	OP	0.64			

Field Sample #: HB-23C(0-1)

Sample ID: 09B09569 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	8.13	03/31/09	OP	0.62			

Field Sample #: HB-23C(1-3)

Sample ID: 09B09570 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	60.2	03/31/09	OP	0.64			

Field Sample #: HB-23G(0-1)

Sample ID: 09B09571 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	15.4	03/31/09	OP	0.58			

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD NBHS
Date Received: 3/28/2009
Field Sample #: HB-23G(1-3)

LIMS-BAT #: LIMT-24303
Job Number: 115058

Sample ID : 09B09572 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	423	03/31/09	OP	0.85		

Field Sample #: HB-23H(0-1)

Sample ID : 09B09565 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	220	03/31/09	OP	0.92		

Field Sample #: HB-23H(1-3)

Sample ID : 09B09566 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	548	03/31/09	OP	1.00		

Field Sample #: HB-23I(0-1)

Sample ID : 09B09563 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	293	03/31/09	OP	0.86		

Field Sample #: HB-23I(1-3)

Sample ID : 09B09564 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	3630	03/31/09	OP	0.98		

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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD (NBHS)
Date Received: 4/7/2009
Field Sample #: HB-23F (1-3)

LIMS-BAT #: LIMIT-24535
Job Number: 115058

Sample ID : 09B10776 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Barium	mg/kg dry wt	612	04/09/09	OP	6.48			

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.



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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD (NBHS)
Date Received: 4/7/2009
Field Sample #: HB-23F (1-3)

LIMS-BAT #: LIMIT-24535
Job Number: 115058

Sample ID: 09B10776 ‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Cadmium	mg/kg dry wt	2.20	04/09/09	OP	0.33		

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.



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Purchase Order No.:

Project Location: CITY OF NEW BEDFORD (NBHS)
Date Received: 4/7/2009
Field Sample #: HB-23F (1-3)

LIMS-BAT #: LIMIT-24535
Job Number: 115058

Sample ID : 09B10776 ‡Sampled : 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Chromium	mg/kg dry wt	47.0	04/09/09	OP	0.65			

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

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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: CITY OF NEW BEDFORD (NBHS)

LIMS-BAT #: LIMIT-24535

Date Received: 4/7/2009

Job Number: 115058

Field Sample #: HB-23F (1-3)

Sample ID: 09B10776

‡Sampled: 3/10/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Lead	mg/kg dry wt	893	04/09/09	OP	0.98		

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

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APPENDIX C
DUST MONITORING RESULTS

TrakPro Version 3.6.2 ASCII Data File

Model: Dust Trak
 Model Number: 8520
 Serial Number: 85202265
 Test ID: 1
 Test Abbreviation: Downwind Data (032809)
 Start Date: 3/28/2009
 Start Time: 7:29:41
 Duration (dd:hh:mm:ss): 00:03:54:00
 Time constant (seconds): 10
 Log Interval (mm:ss): 1:00
 Number of points: 234
 Notes:

Statistics Channel: Aerosol
 Units: mg/m³
 Average: 0.004
 Minimum: 0
 Time of Minimum: 9:15:41
 Date of Minimum: 3/28/2009
 Maximum: 0.031
 Time of Maximum: 8:57:41
 Date of Maximum: 3/28/2009

Calibration Sensor: Aerosol
 Cal. date 1/18/2008

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m ³
3/28/2009	7:30:41	0.012
3/28/2009	7:31:41	0.007
3/28/2009	7:32:41	0.006
3/28/2009	7:33:41	0.007
3/28/2009	7:34:41	0.008
3/28/2009	7:35:41	0.01
3/28/2009	7:36:41	0.01
3/28/2009	7:37:41	0.014
3/28/2009	7:38:41	0.013
3/28/2009	7:39:41	0.011
3/28/2009	7:40:41	0.014
3/28/2009	7:41:41	0.008
3/28/2009	7:42:41	0.012
3/28/2009	7:43:41	0.013
3/28/2009	7:44:41	0.011
3/28/2009	7:45:41	0.013
3/28/2009	7:46:41	0.013
3/28/2009	7:47:41	0.013
3/28/2009	7:48:41	0.011
3/28/2009	7:49:41	0.009
3/28/2009	7:50:41	0.01
3/28/2009	7:51:41	0.015
3/28/2009	7:52:41	0.011
3/28/2009	7:53:41	0.01
3/28/2009	7:54:41	0.009
3/28/2009	7:55:41	0.006

3/28/2009	7:56:41	0.004
3/28/2009	7:57:41	0.003
3/28/2009	7:58:41	0.002
3/28/2009	7:59:41	0.005
3/28/2009	8:00:41	0.004
3/28/2009	8:01:41	0.005
3/28/2009	8:02:41	0.007
3/28/2009	8:03:41	0.005
3/28/2009	8:04:41	0.008
3/28/2009	8:05:41	0.008
3/28/2009	8:06:41	0.014
3/28/2009	8:07:41	0.007
3/28/2009	8:08:41	0.004
3/28/2009	8:09:41	0.005
3/28/2009	8:10:41	0.011
3/28/2009	8:11:41	0.012
3/28/2009	8:12:41	0.006
3/28/2009	8:13:41	0.006
3/28/2009	8:14:41	0.007
3/28/2009	8:15:41	0.006
3/28/2009	8:16:41	0.005
3/28/2009	8:17:41	0.004
3/28/2009	8:18:41	0.005
3/28/2009	8:19:41	0.005
3/28/2009	8:20:41	0.005
3/28/2009	8:21:41	0.012
3/28/2009	8:22:41	0.014
3/28/2009	8:23:41	0.005
3/28/2009	8:24:41	0.009
3/28/2009	8:25:41	0.004
3/28/2009	8:26:41	0.003
3/28/2009	8:27:41	0.004
3/28/2009	8:28:41	0.003
3/28/2009	8:29:41	0.003
3/28/2009	8:30:41	0.003
3/28/2009	8:31:41	0.003
3/28/2009	8:32:41	0.003
3/28/2009	8:33:41	0.003
3/28/2009	8:34:41	0.003
3/28/2009	8:35:41	0.003
3/28/2009	8:36:41	0.003
3/28/2009	8:37:41	0.002
3/28/2009	8:38:41	0.003
3/28/2009	8:39:41	0.014
3/28/2009	8:40:41	0.013
3/28/2009	8:41:41	0.003
3/28/2009	8:42:41	0.004
3/28/2009	8:43:41	0.008
3/28/2009	8:44:41	0.01
3/28/2009	8:45:41	0.002
3/28/2009	8:46:41	0.004
3/28/2009	8:47:41	0.007
3/28/2009	8:48:41	0.003
3/28/2009	8:49:41	0.003
3/28/2009	8:50:41	0.003

3/28/2009	8:51:41	0.004
3/28/2009	8:52:41	0.002
3/28/2009	8:53:41	0.003
3/28/2009	8:54:41	0.005
3/28/2009	8:55:41	0.005
3/28/2009	8:56:41	0.012
3/28/2009	8:57:41	0.031
3/28/2009	8:58:41	0.005
3/28/2009	8:59:41	0.004
3/28/2009	9:00:41	0.007
3/28/2009	9:01:41	0.003
3/28/2009	9:02:41	0.003
3/28/2009	9:03:41	0.002
3/28/2009	9:04:41	0.003
3/28/2009	9:05:41	0.003
3/28/2009	9:06:41	0.003
3/28/2009	9:07:41	0.007
3/28/2009	9:08:41	0.006
3/28/2009	9:09:41	0.003
3/28/2009	9:10:41	0.002
3/28/2009	9:11:41	0.002
3/28/2009	9:12:41	0.001
3/28/2009	9:13:41	0.004
3/28/2009	9:14:41	0.001
3/28/2009	9:15:41	0
3/28/2009	9:16:41	0.002
3/28/2009	9:17:41	0.001
3/28/2009	9:18:41	0
3/28/2009	9:19:41	0
3/28/2009	9:20:41	0
3/28/2009	9:21:41	0.002
3/28/2009	9:22:41	0.002
3/28/2009	9:23:41	0.007
3/28/2009	9:24:41	0.007
3/28/2009	9:25:41	0.002
3/28/2009	9:26:41	0.002
3/28/2009	9:27:41	0
3/28/2009	9:28:41	0.004
3/28/2009	9:29:41	0.001
3/28/2009	9:30:41	0.001
3/28/2009	9:31:41	0.002
3/28/2009	9:32:41	0.004
3/28/2009	9:33:41	0.003
3/28/2009	9:34:41	0.004
3/28/2009	9:35:41	0.008
3/28/2009	9:36:41	0.005
3/28/2009	9:37:41	0
3/28/2009	9:38:41	0.001
3/28/2009	9:39:41	0.001
3/28/2009	9:40:41	0.001
3/28/2009	9:41:41	0.001
3/28/2009	9:42:41	0
3/28/2009	9:43:41	0
3/28/2009	9:44:41	0
3/28/2009	9:45:41	0

3/28/2009	9:46:41	0.002
3/28/2009	9:47:41	0.003
3/28/2009	9:48:41	0
3/28/2009	9:49:41	0.002
3/28/2009	9:50:41	0.004
3/28/2009	9:51:41	0
3/28/2009	9:52:41	0.001
3/28/2009	9:53:41	0.003
3/28/2009	9:54:41	0.001
3/28/2009	9:55:41	0
3/28/2009	9:56:41	0
3/28/2009	9:57:41	0
3/28/2009	9:58:41	0
3/28/2009	9:59:41	0
3/28/2009	10:00:41	0.001
3/28/2009	10:01:41	0.001
3/28/2009	10:02:41	0.001
3/28/2009	10:03:41	0
3/28/2009	10:04:41	0.001
3/28/2009	10:05:41	0.001
3/28/2009	10:06:41	0.001
3/28/2009	10:07:41	0
3/28/2009	10:08:41	0
3/28/2009	10:09:41	0
3/28/2009	10:10:41	0
3/28/2009	10:11:41	0
3/28/2009	10:12:41	0
3/28/2009	10:13:41	0.001
3/28/2009	10:14:41	0.001
3/28/2009	10:15:41	0.001
3/28/2009	10:16:41	0.001
3/28/2009	10:17:41	0.001
3/28/2009	10:18:41	0
3/28/2009	10:19:41	0
3/28/2009	10:20:41	0.003
3/28/2009	10:21:41	0.003
3/28/2009	10:22:41	0.002
3/28/2009	10:23:41	0.002
3/28/2009	10:24:41	0.002
3/28/2009	10:25:41	0.002
3/28/2009	10:26:41	0.002
3/28/2009	10:27:41	0.003
3/28/2009	10:28:41	0.003
3/28/2009	10:29:41	0.002
3/28/2009	10:30:41	0.002
3/28/2009	10:31:41	0.003
3/28/2009	10:32:41	0.001
3/28/2009	10:33:41	0.002
3/28/2009	10:34:41	0.001
3/28/2009	10:35:41	0.001
3/28/2009	10:36:41	0
3/28/2009	10:37:41	0
3/28/2009	10:38:41	0.001
3/28/2009	10:39:41	0
3/28/2009	10:40:41	0.001

3/28/2009	10:41:41	0
3/28/2009	10:42:41	0.002
3/28/2009	10:43:41	0.003
3/28/2009	10:44:41	0.001
3/28/2009	10:45:41	0.002
3/28/2009	10:46:41	0
3/28/2009	10:47:41	0
3/28/2009	10:48:41	0
3/28/2009	10:49:41	0.001
3/28/2009	10:50:41	0.005
3/28/2009	10:51:41	0
3/28/2009	10:52:41	0
3/28/2009	10:53:41	0.001
3/28/2009	10:54:41	0
3/28/2009	10:55:41	0
3/28/2009	10:56:41	0
3/28/2009	10:57:41	0
3/28/2009	10:58:41	0
3/28/2009	10:59:41	0
3/28/2009	11:00:41	0
3/28/2009	11:01:41	0
3/28/2009	11:02:41	0.007
3/28/2009	11:03:41	0
3/28/2009	11:04:41	0.001
3/28/2009	11:05:41	0.004
3/28/2009	11:06:41	0.001
3/28/2009	11:07:41	0.006
3/28/2009	11:08:41	0.007
3/28/2009	11:09:41	0.002
3/28/2009	11:10:41	0.003
3/28/2009	11:11:41	0.001
3/28/2009	11:12:41	0.001
3/28/2009	11:13:41	0.002
3/28/2009	11:14:41	0.002
3/28/2009	11:15:41	0.004
3/28/2009	11:16:41	0.002
3/28/2009	11:17:41	0.001
3/28/2009	11:18:41	0.001
3/28/2009	11:19:41	0.003
3/28/2009	11:20:41	0.002
3/28/2009	11:21:41	0.005
3/28/2009	11:22:41	0.002
3/28/2009	11:23:41	0.002

TrakPro Version 3.41 ASCII Data File

Model: Dust Trak
 Serial Number: 85200990
 Test ID: 1
 Test Abbreviation: Upwind Data (Test 001)
 Start Date: 6/25/2009
 Start Time: 9:38:53
 Duration (dd:hh:mm:ss): 00:03:15:00
 Time constant (seconds): 60
 Log Interval (mm:ss): 1:00
 Number of points: 195
 Notes:

Statistics Channel: Aerosol
 Units: mg/m³
 Average: 0.003
 Minimum: -0.007
 Time of Minimum: 9:58:53
 Date of Minimum: 6/25/2009
 Maximum: 0.042
 Time of Maximum: 12:35:53
 Date of Maximum: 6/25/2009

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

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m ³
6/25/2009	9:39:53	-0.004
6/25/2009	9:40:53	-0.001
6/25/2009	9:41:53	-0.003
6/25/2009	9:42:53	-0.004
6/25/2009	9:43:53	-0.002
6/25/2009	9:44:53	-0.002
6/25/2009	9:45:53	-0.005
6/25/2009	9:46:53	-0.004
6/25/2009	9:47:53	-0.006
6/25/2009	9:48:53	-0.006
6/25/2009	9:49:53	-0.006
6/25/2009	9:50:53	-0.006
6/25/2009	9:51:53	-0.006
6/25/2009	9:52:53	-0.006
6/25/2009	9:53:53	-0.006
6/25/2009	9:54:53	-0.006
6/25/2009	9:55:53	-0.006
6/25/2009	9:56:53	-0.006
6/25/2009	9:57:53	-0.006
6/25/2009	9:58:53	-0.007
6/25/2009	9:59:53	-0.006
6/25/2009	10:00:53	-0.006
6/25/2009	10:01:53	-0.006
6/25/2009	10:02:53	-0.006
6/25/2009	10:03:53	-0.006
6/25/2009	10:04:53	-0.006
6/25/2009	10:05:53	-0.006

6/25/2009	10:06:53	-0.006
6/25/2009	10:07:53	-0.006
6/25/2009	10:08:53	-0.005
6/25/2009	10:09:53	-0.005
6/25/2009	10:10:53	-0.005
6/25/2009	10:11:53	-0.005
6/25/2009	10:12:53	-0.005
6/25/2009	10:13:53	-0.005
6/25/2009	10:14:53	-0.004
6/25/2009	10:15:53	-0.005
6/25/2009	10:16:53	-0.004
6/25/2009	10:17:53	-0.003
6/25/2009	10:18:53	-0.004
6/25/2009	10:19:53	-0.004
6/25/2009	10:20:53	-0.004
6/25/2009	10:21:53	-0.003
6/25/2009	10:22:53	-0.004
6/25/2009	10:23:53	-0.004
6/25/2009	10:24:53	-0.004
6/25/2009	10:25:53	-0.004
6/25/2009	10:26:53	-0.004
6/25/2009	10:27:53	-0.004
6/25/2009	10:28:53	-0.004
6/25/2009	10:29:53	-0.004
6/25/2009	10:30:53	-0.004
6/25/2009	10:31:53	-0.003
6/25/2009	10:32:53	-0.001
6/25/2009	10:33:53	-0.003
6/25/2009	10:34:53	-0.003
6/25/2009	10:35:53	-0.004
6/25/2009	10:36:53	-0.004
6/25/2009	10:37:53	-0.003
6/25/2009	10:38:53	-0.004
6/25/2009	10:39:53	-0.003
6/25/2009	10:40:53	-0.001
6/25/2009	10:41:53	0
6/25/2009	10:42:53	-0.002
6/25/2009	10:43:53	0.033
6/25/2009	10:44:53	-0.004
6/25/2009	10:45:53	0.018
6/25/2009	10:46:53	0.002
6/25/2009	10:47:53	-0.003
6/25/2009	10:48:53	0.001
6/25/2009	10:49:53	-0.002
6/25/2009	10:50:53	-0.003
6/25/2009	10:51:53	-0.004
6/25/2009	10:52:53	-0.004
6/25/2009	10:53:53	-0.004
6/25/2009	10:54:53	-0.004
6/25/2009	10:55:53	-0.004
6/25/2009	10:56:53	-0.004
6/25/2009	10:57:53	-0.004
6/25/2009	10:58:53	-0.004
6/25/2009	10:59:53	-0.003
6/25/2009	11:00:53	-0.003

6/25/2009	11:01:53	-0.003
6/25/2009	11:02:53	-0.002
6/25/2009	11:03:53	-0.003
6/25/2009	11:04:53	-0.003
6/25/2009	11:05:53	-0.004
6/25/2009	11:06:53	-0.003
6/25/2009	11:07:53	-0.003
6/25/2009	11:08:53	-0.002
6/25/2009	11:09:53	-0.003
6/25/2009	11:10:53	0.008
6/25/2009	11:11:53	0
6/25/2009	11:12:53	-0.002
6/25/2009	11:13:53	-0.002
6/25/2009	11:14:53	-0.003
6/25/2009	11:15:53	-0.002
6/25/2009	11:16:53	-0.002
6/25/2009	11:17:53	-0.002
6/25/2009	11:18:53	-0.002
6/25/2009	11:19:53	-0.002
6/25/2009	11:20:53	-0.002
6/25/2009	11:21:53	-0.002
6/25/2009	11:22:53	-0.002
6/25/2009	11:23:53	0
6/25/2009	11:24:53	0.01
6/25/2009	11:25:53	0.012
6/25/2009	11:26:53	0
6/25/2009	11:27:53	-0.002
6/25/2009	11:28:53	-0.002
6/25/2009	11:29:53	-0.002
6/25/2009	11:30:53	-0.003
6/25/2009	11:31:53	-0.002
6/25/2009	11:32:53	-0.002
6/25/2009	11:33:53	-0.001
6/25/2009	11:34:53	-0.002
6/25/2009	11:35:53	0.008
6/25/2009	11:36:53	0.023
6/25/2009	11:37:53	0.004
6/25/2009	11:38:53	-0.002
6/25/2009	11:39:53	-0.002
6/25/2009	11:40:53	0.018
6/25/2009	11:41:53	0
6/25/2009	11:42:53	0
6/25/2009	11:43:53	-0.001
6/25/2009	11:44:53	-0.001
6/25/2009	11:45:53	0.001
6/25/2009	11:46:53	0
6/25/2009	11:47:53	0.002
6/25/2009	11:48:53	0.007
6/25/2009	11:49:53	0.006
6/25/2009	11:50:53	0.003
6/25/2009	11:51:53	0.002
6/25/2009	11:52:53	0.003
6/25/2009	11:53:53	0.007
6/25/2009	11:54:53	0.005
6/25/2009	11:55:53	0.034

6/25/2009	11:56:53	0.018
6/25/2009	11:57:53	0.023
6/25/2009	11:58:53	0.023
6/25/2009	11:59:53	0.008
6/25/2009	12:00:53	0.008
6/25/2009	12:01:53	0.011
6/25/2009	12:02:53	0.015
6/25/2009	12:03:53	0.012
6/25/2009	12:04:53	0.014
6/25/2009	12:05:53	0.005
6/25/2009	12:06:53	0.021
6/25/2009	12:07:53	0.006
6/25/2009	12:08:53	0.008
6/25/2009	12:09:53	0.007
6/25/2009	12:10:53	0.016
6/25/2009	12:11:53	0.008
6/25/2009	12:12:53	0.003
6/25/2009	12:13:53	0.003
6/25/2009	12:14:53	0.004
6/25/2009	12:15:53	0.006
6/25/2009	12:16:53	0.01
6/25/2009	12:17:53	0.002
6/25/2009	12:18:53	0.025
6/25/2009	12:19:53	0.008
6/25/2009	12:20:53	0.02
6/25/2009	12:21:53	0.003
6/25/2009	12:22:53	0.011
6/25/2009	12:23:53	0.01
6/25/2009	12:24:53	0.003
6/25/2009	12:25:53	0.004
6/25/2009	12:26:53	0.012
6/25/2009	12:27:53	0.001
6/25/2009	12:28:53	0.013
6/25/2009	12:29:53	0.013
6/25/2009	12:30:53	0.018
6/25/2009	12:31:53	0.036
6/25/2009	12:32:53	0.006
6/25/2009	12:33:53	0.003
6/25/2009	12:34:53	0.014
6/25/2009	12:35:53	0.042
6/25/2009	12:36:53	0.002
6/25/2009	12:37:53	0.038
6/25/2009	12:38:53	0.008
6/25/2009	12:39:53	0.008
6/25/2009	12:40:53	0.017
6/25/2009	12:41:53	0.042
6/25/2009	12:42:53	0.01
6/25/2009	12:43:53	0.003
6/25/2009	12:44:53	0.003
6/25/2009	12:45:53	0.002
6/25/2009	12:46:53	0.002
6/25/2009	12:47:53	0.019
6/25/2009	12:48:53	0.004
6/25/2009	12:49:53	0.002
6/25/2009	12:50:53	0.005

6/25/2009	12:51:53	0.019
6/25/2009	12:52:53	0.016
6/25/2009	12:53:53	0.01

Model: Dust Trak
 Serial Number: 85200990
 Test ID: 2
 Test Abbreviation: Upwind Data (Test 002)
 Start Date: 6/25/2009
 Start Time: 12:56:21
 Duration (dd:hh:mm:ss): 00:01:12:00
 Time constant (seconds): 60
 Log Interval (mm:ss): 1:00
 Number of points: 72
 Notes:

Statistics	Channel:	Aerosol
	Units:	mg/m ³
	Average:	0.019
	Minimum:	0
	Time of Minimum:	13:06:21
	Date of Minimum:	6/25/2009
	Maximum:	0.313
	Time of Maximum:	14:07:21
	Date of Maximum:	6/25/2009

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

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m ³
6/25/2009	12:57:21	0.002
6/25/2009	12:58:21	0.002
6/25/2009	12:59:21	0.001
6/25/2009	13:00:21	0.004
6/25/2009	13:01:21	0.003
6/25/2009	13:02:21	0.002
6/25/2009	13:03:21	0.001
6/25/2009	13:04:21	0.016
6/25/2009	13:05:21	0.006
6/25/2009	13:06:21	0
6/25/2009	13:07:21	0.001
6/25/2009	13:08:21	0.002
6/25/2009	13:09:21	0.003
6/25/2009	13:10:21	0.001
6/25/2009	13:11:21	0.003
6/25/2009	13:12:21	0.004
6/25/2009	13:13:21	0.041
6/25/2009	13:14:21	0.002
6/25/2009	13:15:21	0.001
6/25/2009	13:16:21	0.002
6/25/2009	13:17:21	0.001
6/25/2009	13:18:21	0.002
6/25/2009	13:19:21	0.003
6/25/2009	13:20:21	0.003

6/25/2009	13:21:21	0.003
6/25/2009	13:22:21	0.004
6/25/2009	13:23:21	0.002
6/25/2009	13:24:21	0.002
6/25/2009	13:25:21	0.002
6/25/2009	13:26:21	0.024
6/25/2009	13:27:21	0.003
6/25/2009	13:28:21	0.003
6/25/2009	13:29:21	0.002
6/25/2009	13:30:21	0.005
6/25/2009	13:31:21	0.005
6/25/2009	13:32:21	0.005
6/25/2009	13:33:21	0.003
6/25/2009	13:34:21	0.005
6/25/2009	13:35:21	0.006
6/25/2009	13:36:21	0.006
6/25/2009	13:37:21	0.005
6/25/2009	13:38:21	0.015
6/25/2009	13:39:21	0.032
6/25/2009	13:40:21	0.012
6/25/2009	13:41:21	0.01
6/25/2009	13:42:21	0.008
6/25/2009	13:43:21	0.054
6/25/2009	13:44:21	0.036
6/25/2009	13:45:21	0.042
6/25/2009	13:46:21	0.044
6/25/2009	13:47:21	0.012
6/25/2009	13:48:21	0.017
6/25/2009	13:49:21	0.011
6/25/2009	13:50:21	0.073
6/25/2009	13:51:21	0.019
6/25/2009	13:52:21	0.027
6/25/2009	13:53:21	0.044
6/25/2009	13:54:21	0.016
6/25/2009	13:55:21	0.011
6/25/2009	13:56:21	0.006
6/25/2009	13:57:21	0.005
6/25/2009	13:58:21	0.01
6/25/2009	13:59:21	0.011
6/25/2009	14:00:21	0.014
6/25/2009	14:01:21	0.04
6/25/2009	14:02:21	0.013
6/25/2009	14:03:21	0.008
6/25/2009	14:04:21	0.006
6/25/2009	14:05:21	0.039
6/25/2009	14:06:21	0.062
6/25/2009	14:07:21	0.313
6/25/2009	14:08:21	0.171

TrakPro Version 3.41 ASCII Data File

Model: Dust Trak
 Serial Number: 85200311
 Test ID: 1
 Test Abbreviation: Downwind Data (Test 001)
 Start Date: 6/25/2009
 Start Time: 8:30:06
 Duration (dd:hh:mm:ss): 00:04:17:00
 Time constant (seconds): 60
 Log Interval (mm:ss): 1:00
 Number of points: 257
 Notes:

Statistics Channel: Aerosol
 Units: mg/m³
 Average: 0.005
 Minimum: -0.009
 Time of Minimum: 9:45:06
 Date of Minimum: 6/25/2009
 Maximum: 0.214
 Time of Maximum: 11:21:06
 Date of Maximum: 6/25/2009

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

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m ³
6/25/2009	8:31:06	0
6/25/2009	8:32:06	0.014
6/25/2009	8:33:06	-0.001
6/25/2009	8:34:06	-0.001
6/25/2009	8:35:06	-0.001
6/25/2009	8:36:06	0
6/25/2009	8:37:06	0
6/25/2009	8:38:06	0
6/25/2009	8:39:06	0
6/25/2009	8:40:06	0.001
6/25/2009	8:41:06	0.001
6/25/2009	8:42:06	0
6/25/2009	8:43:06	0.002
6/25/2009	8:44:06	0
6/25/2009	8:45:06	0.001
6/25/2009	8:46:06	0.002
6/25/2009	8:47:06	0
6/25/2009	8:48:06	0
6/25/2009	8:49:06	0.003
6/25/2009	8:50:06	0
6/25/2009	8:51:06	0.026
6/25/2009	8:52:06	0.013
6/25/2009	8:53:06	0.004
6/25/2009	8:54:06	0.001
6/25/2009	8:55:06	0
6/25/2009	8:56:06	-0.001
6/25/2009	8:57:06	-0.002

6/25/2009	8:58:06	-0.001
6/25/2009	8:59:06	-0.001
6/25/2009	9:00:06	0
6/25/2009	9:01:06	0.015
6/25/2009	9:02:06	-0.001
6/25/2009	9:03:06	-0.001
6/25/2009	9:04:06	-0.001
6/25/2009	9:05:06	-0.002
6/25/2009	9:06:06	0.001
6/25/2009	9:07:06	0.004
6/25/2009	9:08:06	0.001
6/25/2009	9:09:06	0.017
6/25/2009	9:10:06	0.038
6/25/2009	9:11:06	0.013
6/25/2009	9:12:06	-0.001
6/25/2009	9:13:06	-0.001
6/25/2009	9:14:06	0
6/25/2009	9:15:06	0
6/25/2009	9:16:06	-0.002
6/25/2009	9:17:06	-0.001
6/25/2009	9:18:06	0
6/25/2009	9:19:06	0.005
6/25/2009	9:20:06	0.002
6/25/2009	9:21:06	-0.001
6/25/2009	9:22:06	0.006
6/25/2009	9:23:06	0.012
6/25/2009	9:24:06	0.013
6/25/2009	9:25:06	0.013
6/25/2009	9:26:06	-0.002
6/25/2009	9:27:06	-0.004
6/25/2009	9:28:06	-0.004
6/25/2009	9:29:06	0.008
6/25/2009	9:30:06	-0.002
6/25/2009	9:31:06	-0.006
6/25/2009	9:32:06	-0.007
6/25/2009	9:33:06	-0.003
6/25/2009	9:34:06	-0.005
6/25/2009	9:35:06	0.008
6/25/2009	9:36:06	0.009
6/25/2009	9:37:06	-0.003
6/25/2009	9:38:06	-0.004
6/25/2009	9:39:06	0.006
6/25/2009	9:40:06	-0.003
6/25/2009	9:41:06	-0.008
6/25/2009	9:42:06	-0.008
6/25/2009	9:43:06	-0.008
6/25/2009	9:44:06	0
6/25/2009	9:45:06	-0.009
6/25/2009	9:46:06	-0.003
6/25/2009	9:47:06	-0.007
6/25/2009	9:48:06	0.014
6/25/2009	9:49:06	-0.004
6/25/2009	9:50:06	-0.007
6/25/2009	9:51:06	-0.009
6/25/2009	9:52:06	0

6/25/2009	9:53:06	0
6/25/2009	9:54:06	0.024
6/25/2009	9:55:06	0.017
6/25/2009	9:56:06	-0.003
6/25/2009	9:57:06	-0.002
6/25/2009	9:58:06	0.032
6/25/2009	9:59:06	0.004
6/25/2009	10:00:06	-0.007
6/25/2009	10:01:06	-0.006
6/25/2009	10:02:06	-0.001
6/25/2009	10:03:06	-0.006
6/25/2009	10:04:06	0.002
6/25/2009	10:05:06	-0.007
6/25/2009	10:06:06	-0.007
6/25/2009	10:07:06	-0.005
6/25/2009	10:08:06	0.008
6/25/2009	10:09:06	-0.004
6/25/2009	10:10:06	-0.005
6/25/2009	10:11:06	-0.007
6/25/2009	10:12:06	-0.005
6/25/2009	10:13:06	0.004
6/25/2009	10:14:06	0
6/25/2009	10:15:06	-0.001
6/25/2009	10:16:06	0.009
6/25/2009	10:17:06	0.019
6/25/2009	10:18:06	0
6/25/2009	10:19:06	-0.002
6/25/2009	10:20:06	-0.003
6/25/2009	10:21:06	0.001
6/25/2009	10:22:06	-0.002
6/25/2009	10:23:06	-0.005
6/25/2009	10:24:06	-0.006
6/25/2009	10:25:06	0.004
6/25/2009	10:26:06	-0.005
6/25/2009	10:27:06	-0.003
6/25/2009	10:28:06	-0.006
6/25/2009	10:29:06	-0.005
6/25/2009	10:30:06	-0.001
6/25/2009	10:31:06	-0.006
6/25/2009	10:32:06	-0.001
6/25/2009	10:33:06	-0.002
6/25/2009	10:34:06	-0.005
6/25/2009	10:35:06	-0.005
6/25/2009	10:36:06	0.045
6/25/2009	10:37:06	0.006
6/25/2009	10:38:06	0
6/25/2009	10:39:06	0.007
6/25/2009	10:40:06	-0.004
6/25/2009	10:41:06	0.032
6/25/2009	10:42:06	-0.002
6/25/2009	10:43:06	0.003
6/25/2009	10:44:06	0.005
6/25/2009	10:45:06	0.002
6/25/2009	10:46:06	0.051
6/25/2009	10:47:06	0.004

6/25/2009	10:48:06	0.03
6/25/2009	10:49:06	0.009
6/25/2009	10:50:06	0.002
6/25/2009	10:51:06	0
6/25/2009	10:52:06	-0.003
6/25/2009	10:53:06	-0.005
6/25/2009	10:54:06	-0.004
6/25/2009	10:55:06	-0.002
6/25/2009	10:56:06	0.024
6/25/2009	10:57:06	0.124
6/25/2009	10:58:06	0.012
6/25/2009	10:59:06	0.01
6/25/2009	11:00:06	-0.004
6/25/2009	11:01:06	0.03
6/25/2009	11:02:06	-0.004
6/25/2009	11:03:06	-0.003
6/25/2009	11:04:06	-0.004
6/25/2009	11:05:06	0.002
6/25/2009	11:06:06	-0.002
6/25/2009	11:07:06	0.007
6/25/2009	11:08:06	-0.003
6/25/2009	11:09:06	-0.003
6/25/2009	11:10:06	-0.003
6/25/2009	11:11:06	-0.003
6/25/2009	11:12:06	-0.003
6/25/2009	11:13:06	-0.003
6/25/2009	11:14:06	-0.003
6/25/2009	11:15:06	-0.001
6/25/2009	11:16:06	-0.002
6/25/2009	11:17:06	-0.003
6/25/2009	11:18:06	-0.003
6/25/2009	11:19:06	-0.002
6/25/2009	11:20:06	-0.003
6/25/2009	11:21:06	0.214
6/25/2009	11:22:06	0.021
6/25/2009	11:23:06	0.001
6/25/2009	11:24:06	0
6/25/2009	11:25:06	0.003
6/25/2009	11:26:06	0.006
6/25/2009	11:27:06	0.018
6/25/2009	11:28:06	0.001
6/25/2009	11:29:06	0.049
6/25/2009	11:30:06	0.014
6/25/2009	11:31:06	0.023
6/25/2009	11:32:06	0.029
6/25/2009	11:33:06	0.075
6/25/2009	11:34:06	0.024
6/25/2009	11:35:06	0.015
6/25/2009	11:36:06	-0.002
6/25/2009	11:37:06	-0.001
6/25/2009	11:38:06	0.003
6/25/2009	11:39:06	0.003
6/25/2009	11:40:06	0.001
6/25/2009	11:41:06	0
6/25/2009	11:42:06	0

6/25/2009	11:43:06	0.012
6/25/2009	11:44:06	0.001
6/25/2009	11:45:06	0
6/25/2009	11:46:06	0
6/25/2009	11:47:06	0.003
6/25/2009	11:48:06	0.008
6/25/2009	11:49:06	0.014
6/25/2009	11:50:06	0.002
6/25/2009	11:51:06	0.007
6/25/2009	11:52:06	0
6/25/2009	11:53:06	0.012
6/25/2009	11:54:06	0.003
6/25/2009	11:55:06	0.001
6/25/2009	11:56:06	0
6/25/2009	11:57:06	0
6/25/2009	11:58:06	0
6/25/2009	11:59:06	0
6/25/2009	12:00:06	0.004
6/25/2009	12:01:06	0.005
6/25/2009	12:02:06	0.004
6/25/2009	12:03:06	0
6/25/2009	12:04:06	0.004
6/25/2009	12:05:06	0.015
6/25/2009	12:06:06	0.002
6/25/2009	12:07:06	0
6/25/2009	12:08:06	0
6/25/2009	12:09:06	0.007
6/25/2009	12:10:06	0
6/25/2009	12:11:06	0.001
6/25/2009	12:12:06	0.002
6/25/2009	12:13:06	0.028
6/25/2009	12:14:06	0.013
6/25/2009	12:15:06	0.001
6/25/2009	12:16:06	0
6/25/2009	12:17:06	0
6/25/2009	12:18:06	0
6/25/2009	12:19:06	0
6/25/2009	12:20:06	0.011
6/25/2009	12:21:06	0.005
6/25/2009	12:22:06	0.001
6/25/2009	12:23:06	0
6/25/2009	12:24:06	0.01
6/25/2009	12:25:06	0.003
6/25/2009	12:26:06	0
6/25/2009	12:27:06	0.001
6/25/2009	12:28:06	0.001
6/25/2009	12:29:06	-0.001
6/25/2009	12:30:06	0.004
6/25/2009	12:31:06	0
6/25/2009	12:32:06	0.043
6/25/2009	12:33:06	0.028
6/25/2009	12:34:06	0.054
6/25/2009	12:35:06	0.009
6/25/2009	12:36:06	0.002
6/25/2009	12:37:06	0.004

6/25/2009	12:38:06	0.005
6/25/2009	12:39:06	0.002
6/25/2009	12:40:06	0
6/25/2009	12:41:06	0.035
6/25/2009	12:42:06	0
6/25/2009	12:43:06	0.009
6/25/2009	12:44:06	0.006
6/25/2009	12:45:06	0
6/25/2009	12:46:06	0
6/25/2009	12:47:06	0

Model: Dust Trak
 Serial Number: 85200311
 Test ID: 2
 Test Abbreviation: Downwind Data (Test 002)
 Start Date: 6/25/2009
 Start Time: 12:50:00
 Duration (dd:hh:mm:ss): 00:01:07:00
 Time constant (seconds): 60
 Log Interval (mm:ss): 1:00
 Number of points: 67
 Notes:

Statistics Channel: Aerosol
 Units: mg/m³
 Average: 0.054
 Minimum: 0.002
 Time of Minimum: 13:30:00
 Date of Minimum: 6/25/2009
 Maximum: 0.205
 Time of Maximum: 13:52:00
 Date of Maximum: 6/25/2009

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

Date	Time	Aerosol
MM/dd/yyyy	hh:mm:ss	mg/m ³
6/25/2009	12:51:00	0.008
6/25/2009	12:52:00	0.04
6/25/2009	12:53:00	0.035
6/25/2009	12:54:00	0.047
6/25/2009	12:55:00	0.056
6/25/2009	12:56:00	0.019
6/25/2009	12:57:00	0.035
6/25/2009	12:58:00	0.046
6/25/2009	12:59:00	0.04
6/25/2009	13:00:00	0.054
6/25/2009	13:01:00	0.01
6/25/2009	13:02:00	0.006
6/25/2009	13:03:00	0.031
6/25/2009	13:04:00	0.036
6/25/2009	13:05:00	0.032
6/25/2009	13:06:00	0.084
6/25/2009	13:07:00	0.116

6/25/2009	13:08:00	0.074
6/25/2009	13:09:00	0.061
6/25/2009	13:10:00	0.039
6/25/2009	13:11:00	0.062
6/25/2009	13:12:00	0.092
6/25/2009	13:13:00	0.126
6/25/2009	13:14:00	0.008
6/25/2009	13:15:00	0.133
6/25/2009	13:16:00	0.092
6/25/2009	13:17:00	0.101
6/25/2009	13:18:00	0.058
6/25/2009	13:19:00	0.093
6/25/2009	13:20:00	0.026
6/25/2009	13:21:00	0.01
6/25/2009	13:22:00	0.029
6/25/2009	13:23:00	0.075
6/25/2009	13:24:00	0.008
6/25/2009	13:25:00	0.049
6/25/2009	13:26:00	0.102
6/25/2009	13:27:00	0.009
6/25/2009	13:28:00	0.049
6/25/2009	13:29:00	0.009
6/25/2009	13:30:00	0.002
6/25/2009	13:31:00	0.003
6/25/2009	13:32:00	0.006
6/25/2009	13:33:00	0.014
6/25/2009	13:34:00	0.011
6/25/2009	13:35:00	0.004
6/25/2009	13:36:00	0.004
6/25/2009	13:37:00	0.07
6/25/2009	13:38:00	0.003
6/25/2009	13:39:00	0.141
6/25/2009	13:40:00	0.112
6/25/2009	13:41:00	0.09
6/25/2009	13:42:00	0.021
6/25/2009	13:43:00	0.057
6/25/2009	13:44:00	0.105
6/25/2009	13:45:00	0.135
6/25/2009	13:46:00	0.04
6/25/2009	13:47:00	0.025
6/25/2009	13:48:00	0.091
6/25/2009	13:49:00	0.137
6/25/2009	13:50:00	0.078
6/25/2009	13:51:00	0.148
6/25/2009	13:52:00	0.205
6/25/2009	13:53:00	0.03
6/25/2009	13:54:00	0.013
6/25/2009	13:55:00	0.028
6/25/2009	13:56:00	0.016
6/25/2009	13:57:00	0.007

APPENDIX D

**BILL OF LADING AND UNIFORM HAZARDOUS WASTE
MANIFEST 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 - 21847

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

Release Name (optional): New Bedford High School
 Street: 230 Hathaway Blvd. Location Ald: Front
 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(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: 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.



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 - 21847

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

Temporary Storage Address:

Street: Shawmut Avenue

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: _____

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: PCBs

Estimated Volume of Materials: Cubic Yards: <100 Tons: _____ Other: _____

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

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 Corp., Lowell, MA

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

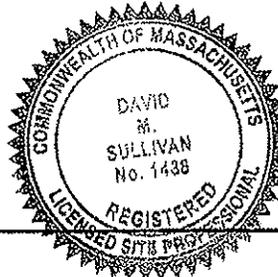
- (i) the standard of care in 309 CMR 4.02(1),
- (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
- (iii) the provisions of 309 CMR 4.03(5),

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: March 25, 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 - 21847

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:

3/24/2009

Name of Person (print):

SCOTT ALFONSE

Sample: HB23-0.75-3'		Analyst's Initials: DC
Case No.: Q0117-19		
Date Collected: 12/29/04		
Sample Matrix: Soil		
Subject: PCBs	Date Extracted	Date Analyzed
Prep Method: EPA 3541	1/25/05	2/2/05
Analytical Method: EPA 8082		
Compound	Concentration ug/kg* (ppb)	Reporting Limit
Aroclor-1221	N.D.	127
Aroclor-1232	N.D.	64
Aroclor-1016/1242	N.D.	64
Aroclor-1248	N.D.	64
Aroclor-1254	25000	64
Aroclor-1260	N.D.	64
Aroclor-1262	756	64
Aroclor-1268	N.D.	64
Surrogates:		
Compound	% Recovery	Limits
TCMX	75	19-139
DCBP	85	29-155

*Dry Weight Basis



CERTIFICATE OF ANALYSIS
03/18/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23A (0-1) NEA ID: AM02174 NEA LRF: 09030050-20
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 13:20
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	1.72	ug/g	03/17/2009	U
Aroclor 1221	ND	1.72	ug/g	03/17/2009	U
Aroclor 1232	ND	1.72	ug/g	03/17/2009	U
Aroclor 1242	ND	1.72	ug/g	03/17/2009	U
Aroclor 1248	ND	1.72	ug/g	03/17/2009	U
Aroclor 1254	45.9	1.72	ug/g	03/17/2009	AF
Aroclor 1260	ND	1.72	ug/g	03/17/2009	U
Total PCB Amount > Reporting Limit	45.9				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

William A. Kolas
Sr. Laboratory Representative
Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS

3/18/2009

TRC ENVIRONMENTAL

WANNALANCIT MILLS

650 SUFFOLK ST

LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23A (1-3)

MATRIX: SOIL

DATE RECEIVED: 3/11/2009 TIME: 09:12

SAMPLED BY: SAUNDERS/KITCHIN

CUSTOMER PO: N/A

NEA ID: AM02175 NEA LRF: 09030051-01

DATE SAMPLED: 03/10/2009 TIME: 13:25

PROJECT: 115058 NBHS PCB SAMPLING

LOCATION: NEW BEDFORD, MA

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.197	ug/g	03/18/2009	U
Aroclor 1221	ND	0.197	ug/g	03/18/2009	U
Aroclor 1232	ND	0.197	ug/g	03/18/2009	U
Aroclor 1242	ND	0.197	ug/g	03/18/2009	U
Aroclor 1248	ND	0.197	ug/g	03/18/2009	U
Aroclor 1254	4.12	0.197	ug/g	03/18/2009	AF
Aroclor 1260	ND	0.197	ug/g	03/18/2009	U
Total PCB Amount > Reporting Limit	4.12				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

William A. Kotas
Sr. Laboratory Representative
Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS
03/18/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23B (0-1)
MATRIX: SOIL
DATE RECEIVED: 03/11/2009 **TIME:** 09:12
SAMPLED BY: SAUNDERS/KITCHIN
CUSTOMER PO: N/A

NEA ID: AM02172 **NEALRF:** 09030050-18
DATE SAMPLED: 03/10/2009 **TIME:** 13:10
PROJECT: 115058 NBHS PCB SAMPLING
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0596	ug/g	03/17/2009	U
Aroclor 1221	ND	0.0596	ug/g	03/17/2009	U
Aroclor 1232	ND	0.0596	ug/g	03/17/2009	U
Aroclor 1242	ND	0.0596	ug/g	03/17/2009	U
Aroclor 1248	ND	0.0596	ug/g	03/17/2009	U
Aroclor 1254	0.786	0.0596	ug/g	03/17/2009	AF
Aroclor 1260	ND	0.0596	ug/g	03/17/2009	U
Total PCB Amount > Reporting Limit	0.786				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

William A. Kotas
 Sr. Laboratory Representative
 Robert E. Wagner
 Laboratory Director



CERTIFICATE OF ANALYSIS
03/18/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

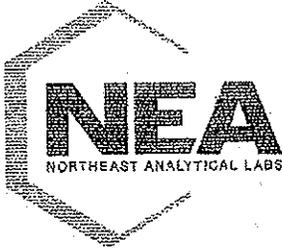
CUSTOMER ID: HB-23B (1-3) NEA ID: AM02173 NEA LRF: 09030050-19
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 13:15
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0585	ug/g	03/17/2009	U
Aroclor 1221	ND	0.0585	ug/g	03/17/2009	U
Aroclor 1232	ND	0.0585	ug/g	03/17/2009	U
Aroclor 1242	ND	0.0585	ug/g	03/17/2009	U
Aroclor 1248	ND	0.0585	ug/g	03/17/2009	U
Aroclor 1254	0.915	0.0585	ug/g	03/17/2009	AF
Aroclor 1260	ND	0.0585	ug/g	03/17/2009	U
Total PCB Amount > Reporting Limit	0.915				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Sr. Laboratory Representative
Robert E. Wagner
Laboratory Director



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3/18/2009

TRC ENVIRONMENTAL
WANNALANCIT MILLS

650 SUFFOLK ST

LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23C (0-1)

NEA ID: AM02178 NEA LRF: 09030051-04

MATRIX: SOIL

DATE SAMPLED: 03/10/2009 TIME: 13:40

DATE RECEIVED: 3/11/2009 TIME: 09:12

PROJECT: 115058 NBHS PCB SAMPLING

SAMPLED BY: SAUNDERS/KITCHIN

LOCATION: NEW BEDFORD, MA

CUSTOMER PO: N/A

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0597	ug/g	03/18/2009	U
Aroclor 1221	ND	0.0597	ug/g	03/18/2009	U
Aroclor 1232	ND	0.0597	ug/g	03/18/2009	U
Aroclor 1242	ND	0.0597	ug/g	03/18/2009	U
Aroclor 1248	ND	0.0597	ug/g	03/18/2009	U
Aroclor 1254	1.41	0.0597	ug/g	03/18/2009	AF
Aroclor 1260	ND	0.0597	ug/g	03/18/2009	U
Total PCB Amount > Reporting Limit	1.41				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Sr. Laboratory Representative

Robert E. Wagner
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650 SUFFOLK ST

LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23C(1-3)

MATRIX: SOIL

DATE RECEIVED: 3/11/2009 TIME: 09:12

SAMPLED BY: SAUNDERS/KITCHIN

CUSTOMER PO: N/A

NEA ID: AM02179 NEA LRF: 09030051-05

DATE SAMPLED: 03/10/2009 TIME: 13:45

PROJECT: 115058 NBHS PCB SAMPLING

LOCATION: NEW BEDFORD, MA

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.306	ug/g	03/18/2009	U
Aroclor 1221	ND	0.306	ug/g	03/18/2009	U
Aroclor 1232	ND	0.306	ug/g	03/18/2009	U
Aroclor 1242	ND	0.306	ug/g	03/18/2009	U
Aroclor 1248	ND	0.306	ug/g	03/18/2009	U
Aroclor 1254	4.74	0.306	ug/g	03/18/2009	AF
Aroclor 1260	ND	0.306	ug/g	03/18/2009	U
Total PCB Amount > Reporting Limit	4.74				

Notes: ND (Not Detected), Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit), Denotes lowest analyte concentration reportable for the sample.

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Sr. Laboratory Representative

Robert E. Wagner
Laboratory Director



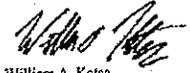
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TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23D (0-1) NEA ID: AM02176 NEALRF: 09030051-02
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 13:30
DATE RECEIVED: 3/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0545	ug/g	03/18/2009	U
Aroclor 1221	ND	0.0545	ug/g	03/18/2009	U
Aroclor 1232	ND	0.0545	ug/g	03/18/2009	U
Aroclor 1242	ND	0.0545	ug/g	03/18/2009	U
Aroclor 1248	ND	0.0545	ug/g	03/18/2009	U
Aroclor 1254	1.50	0.0545	ug/g	03/18/2009	AF
Aroclor 1260	ND	0.0545	ug/g	03/18/2009	U
Total PCB Amount > Reporting Limit	1.50				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:


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650 SUFFOLK ST

LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23D(1-3)
MATRIX: SOIL
DATE RECEIVED: 3/11/2009 TIME: 09:12
SAMPLED BY: SAUNDERS/KITCHIN
CUSTOMER PO: N/A

NEA ID: AM02177 NEA LRF: 09030051-03
DATE SAMPLED: 03/10/2009 TIME: 13:35
PROJECT: 115058 NBHS PCB SAMPLING
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.532	ug/g	03/18/2009	U
Aroclor 1221	ND	0.532	ug/g	03/18/2009	U
Aroclor 1232	ND	0.532	ug/g	03/18/2009	U
Aroclor 1242	ND	0.532	ug/g	03/18/2009	U
Aroclor 1248	ND	0.532	ug/g	03/18/2009	U
Aroclor 1254	19.9	0.532	ug/g	03/18/2009	AF
Aroclor 1260	ND	0.532	ug/g	03/18/2009	U
Total PCB Amount > Reporting Limit	19.9				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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650 SUFFOLK ST
LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23E (0-1)
MATRIX: SOIL
DATE RECEIVED: 03/11/2009 TIME: 09:12
SAMPLED BY: SAUNDERS/KITCHIN
CUSTOMER PO: N/A

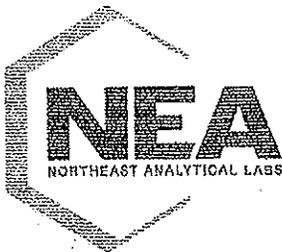
NEA ID: AM02168 NEA LRF: 09030050-14
DATE SAMPLED: 03/10/2009 TIME: 12:10
PROJECT: 115058 NBHS PCB SAMPLING
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.568	ug/g	03/16/2009	U
Aroclor 1221	ND	0.568	ug/g	03/16/2009	U
Aroclor 1232	ND	0.568	ug/g	03/16/2009	U
Aroclor 1242	ND	0.568	ug/g	03/16/2009	U
Aroclor 1248	ND	0.568	ug/g	03/16/2009	U
Aroclor 1254	13.5	0.568	ug/g	03/16/2009	AF
Aroclor 1260	ND	0.568	ug/g	03/16/2009	U
Total PCB Amount > Reporting Limit	13.5				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23E (1-3) NEA ID: AM02169 NEA LRF: 09030050-15
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 12:15
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.601	ug/g	03/16/2009	U
Aroclor 1221	ND	0.601	ug/g	03/16/2009	U
Aroclor 1232	ND	0.601	ug/g	03/16/2009	U
Aroclor 1242	ND	0.601	ug/g	03/16/2009	U
Aroclor 1248	ND	0.601	ug/g	03/16/2009	U
Aroclor 1254	16.8	0.601	ug/g	03/16/2009	AF
Aroclor 1260	ND	0.601	ug/g	03/16/2009	U
Total PCB Amount > Reporting Limit	16.8				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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03/20/2009

TRC ENVIRONMENTAL
WANNALANCIT MILLS

650 SUFFOLK ST

LOWELL, MA 01854

CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23G (0-1)
MATRIX: SOIL
DATE RECEIVED: 03/11/2009 TIME: 09:12
SAMPLED BY: SAUNDERS/KITCHIN
CUSTOMER PO: N/A

NEA ID: AM02180 NEA LRF: 09030051-06
DATE SAMPLED: 03/10/2009 TIME: 13:50
PROJECT: 115058 NBHS PCB SAMPLING
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0570	ug/g	03/20/2009	U
Aroclor 1221	ND	0.0570	ug/g	03/20/2009	U
Aroclor 1232	ND	0.0570	ug/g	03/20/2009	U
Aroclor 1242	ND	0.0570	ug/g	03/20/2009	U
Aroclor 1248	ND	0.0570	ug/g	03/20/2009	U
Aroclor 1254	0.943	0.0570	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.0570	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	0.943				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

William A. Kolas
Sr. Laboratory Representative
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CERTIFICATE OF ANALYSIS
03/20/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23G (1-3) NEA ID: AM02181 NEA LRF: 09030051-07
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 13:55
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.282	ug/g	03/20/2009	U
Aroclor 1221	ND	0.282	ug/g	03/20/2009	U
Aroclor 1232	ND	0.282	ug/g	03/20/2009	U
Aroclor 1242	ND	0.282	ug/g	03/20/2009	U
Aroclor 1248	ND	0.282	ug/g	03/20/2009	U
Aroclor 1254	4.94	0.282	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.282	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	4.94				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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TRC ENVIRONMENTAL
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650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-23H (0-1) NEA ID: AM02166 NEA LRF: 09030050-12
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 12:00
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.118	ug/g	03/20/2009	U
Aroclor 1221	ND	0.118	ug/g	03/20/2009	U
Aroclor 1232	ND	0.118	ug/g	03/20/2009	U
Aroclor 1242	ND	0.118	ug/g	03/20/2009	U
Aroclor 1248	ND	0.118	ug/g	03/20/2009	U
Aroclor 1254	2.53	0.118	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.118	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	2.53				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Laboratory Director



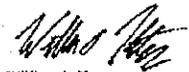
CERTIFICATE OF ANALYSIS
03/20/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

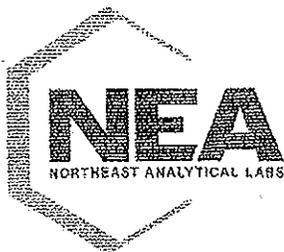
CUSTOMER ID: HB-23H (1-3) NEA ID: AM02167 NEA LRF: 09030050-13
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 12:05
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0631	ug/g	03/20/2009	U
Aroclor 1221	ND	0.0631	ug/g	03/20/2009	U
Aroclor 1232	ND	0.0631	ug/g	03/20/2009	U
Aroclor 1242	ND	0.0631	ug/g	03/20/2009	U
Aroclor 1248	ND	0.0631	ug/g	03/20/2009	U
Aroclor 1254	0.0843	0.0631	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.0631	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	0.0843				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
Note: There were several non-target peaks.

AUTHORIZED SIGNATURE:


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Sr. Laboratory Representative
Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS
03/20/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-231(0-1) NEA ID: AM02164 NEA LRF: 09030050-10
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 11:50
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.230	ug/g	03/20/2009	U
Aroclor 1221	ND	0.230	ug/g	03/20/2009	U
Aroclor 1232	ND	0.230	ug/g	03/20/2009	U
Aroclor 1242	ND	0.230	ug/g	03/20/2009	U
Aroclor 1248	ND	0.230	ug/g	03/20/2009	U
Aroclor 1254	4.70	0.230	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.230	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	4.70				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Robert E. Wagner
Laboratory Director



CERTIFICATE OF ANALYSIS
03/20/2009
TRC ENVIRONMENTAL
WANNALANCIT MILLS
650 SUFFOLK ST
LOWELL, MA 01854
CONTACT: DAVID SULLIVAN

CUSTOMER ID: HB-231(1-3) NEA ID: AM02165 NEA LRF: 09030050-11
MATRIX: SOIL DATE SAMPLED: 03/10/2009 TIME: 11:55
DATE RECEIVED: 03/11/2009 TIME: 09:12 PROJECT: 115058 NBHS PCB SAMPLING
SAMPLED BY: SAUNDERS/KITCHIN LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0645	ug/g	03/20/2009	U
Aroclor 1221	ND	0.0645	ug/g	03/20/2009	U
Aroclor 1232	ND	0.0645	ug/g	03/20/2009	U
Aroclor 1242	ND	0.0645	ug/g	03/20/2009	U
Aroclor 1248	ND	0.0645	ug/g	03/20/2009	U
Aroclor 1254	0.517	0.0645	ug/g	03/20/2009	AF
Aroclor 1260	ND	0.0645	ug/g	03/20/2009	U
Total PCB Amount > Reporting Limit	0.517				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
Note: There were several non-target peaks.

AUTHORIZED SIGNATURE:

William A. Kotus
Sr. Laboratory Representative
Robert E. Wagner
Laboratory Director



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 1

4 - 21407

I. LOAD INFORMATION: Load 1: Date of Shipment: 3/28/09 Time of Shipment: 08:15 Truck/Tractor Registration: 64198 MA (APPORTIONED) Trailer Registration (if any): Signature of Transporter Representative: <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: 3-28-09 Time of Receipt: 8:24 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons): 15y. 16.20 Ton
Load 2: Date of Shipment: 3-28-09 Time of Shipment: 09:15 Truck/Tractor Registration: 64198 Trailer Registration (if any): Signature of Transporter Representative: <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: 3-28-09 Time of Receipt: 9:25 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons): 15y. 18.92 Tons
Load 3: Date of Shipment: 3-28-09 Time of Shipment: Truck/Tractor Registration: 64198 Trailer Registration (if any): Signature of Transporter Representative: <input type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):
Load 4: Date of Shipment: Time of Shipment: Truck/Tractor Registration: Trailer Registration (if any): Signature of Transporter Representative: <input type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):
Load 5: Date of Shipment: Time of Shipment: Truck/Tractor Registration: Trailer Registration (if any): Signature of Transporter Representative: <input type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):
Load 6: Date of Shipment: Time of Shipment: Truck/Tractor Registration: Trailer Registration (if any): Signature of Transporter Representative: <input type="checkbox"/> AM <input type="checkbox"/> PM	Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):

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



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup.

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET 1 OF 1

4 - 21407

I. LOAD INFORMATION: Signature of Transporter Representative:		Receiving Facility/Temporary Storage Representative:	
Load 1: Date of Shipment: 3-28-09 Time of Shipment: 7:50 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: L61326 Trailer Registration (if any):		3/28/09 08:01 Date of Receipt: Time of Receipt: 15 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons): 16.71 Tons	
Load 2: Date of Shipment: 3-28-09 Time of Shipment: 8:55 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: L61326 L61326 Trailer Registration (if any):		Receiving Facility/Temporary Storage Representative: Date of Receipt: 3-28-09 Time of Receipt: 8:59 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons): 15y 17.85 Ton	
Load 3: Date of Shipment: 3/28/09 Time of Shipment: 9:05 AM <input type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: L61326 Trailer Registration (if any):		Receiving Facility/Temporary Storage Representative: Date of Receipt: 3-28-09 Time of Receipt: 10:01 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons): 15y 16.23 Tons	
Load 4: Date of Shipment: Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: Trailer Registration (if any):		Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):	
Load 5: Date of Shipment: Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: Trailer Registration (if any):		Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):	
Load 6: Date of Shipment: Time of Shipment: <input type="checkbox"/> AM <input type="checkbox"/> PM Truck/Tractor Registration: Trailer Registration (if any):		Receiving Facility/Temporary Storage Representative: Date of Receipt: Time of Receipt: <input type="checkbox"/> AM <input type="checkbox"/> PM Load Size (cu. yds./tons):	

J. LOG SHEET VOLUME INFORMATION:

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

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

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



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET

4 - 21847

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):

JAMES CORREIA

Title: TRUCK DRIVER

Signature:

Date: 3-28-2009

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

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

Signature: _____

Date: _____

Name of Person (print): _____

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NY 5089791487 762829	2. Page 1 of 1	3. Emergency Response Phone 800 966 9282	4. Manifest Tracking Number 002864887 FLE	
5. Generator's Name and Mailing Address City of New Bedford 330 Collette Street New Bedford, MA 02746 Generator's Phone: 508 979 1487			Generator's Site Address (if different than mailing address) City of New Bedford 330 Collette Street, 270 Highway 6100 New Bedford, MA 02746			
6. Transporter 1 Company Name Price Trucking Corp.			U.S. EPA ID Number NYD046765574			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address CWM Chemical Services 1550 Balmer Road PO Box 200 Model City, NY 14107 Facility's Phone: (716) 754-8231			U.S. EPA ID Number NYD049836679			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
			No.	Type		
	X	UN3432, RQ: Polychlorinated biphenyls, solid 9, II	001	DT	EST 30700	T
14. Special Handling Instructions and Additional Information 1. (X) NY288948 2. 3. 4. RB out of service 6/25						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offoror's Printed/Typed Name DAVID FREDETTE			Signature 		Month 6	Day 25
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: Date leaving U.S.:			
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name MAX ZUKIV			Signature 		Month 6	Day 25
Transporter 2 Printed/Typed Name			Signature		Month	Day
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator)			Manifest Reference Number: U.S. EPA ID Number			
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)			Signature		Month	Day
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name			Signature		Month	Day

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <i>NY 5089962829</i> <i>MP 5089791487</i>	2. Page 1 of <i>1</i>	3. Emergency Response Phone <i>800 966 9282</i>	4. Manifest Tracking Number 002864889 FLE		
5. Generator's Name and Mailing Address City of New Bedford 330 Collette Street New Bedford, MA 02746 Generator's Phone: <i>508-979-1487</i>			Generator's Site Address (if different than mailing address) City of New Bedford 330 Collette Street <i>230 Hathaway Blvd</i> New Bedford, MA 02746				
6. Transporter 1 Company Name Price Trucking Corp.			U.S. EPA ID Number NYD046765574				
7. Transporter 2 Company Name			U.S. EPA ID Number				
8. Designated Facility Name and Site Address CWM Chemical Services 1550 Balmer Road PO Box 200 Model City, NY 14107 Facility's Phone: <i>(716) 754-8231</i>			U.S. EPA ID Number NYD049836679				
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
			No.	Type			
	X	UN3432, RQ; Polychlorinated biphenyls, solid 9, II	001	OT PT	28.48	T	MA02 B007 L
	2.						
	3.						
4.							
14. Special Handling Instructions and Additional Information <i>PCB OUT OF SERVICE 6/25</i> 1- (X) NY209848 2- 3- 4-							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offor's Printed/Typed Name DAVID FREDETTE			Signature <i>David Fredette</i>		Month 16	Day 25	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <i>Wah Zinku</i>			Signature <i>Wah Zinku</i>		Month 06	Day 25	
Transporter 2 Printed/Typed Name			Signature		Month	Day	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____							
Facility's Phone: _____							
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. _____		2. _____		3. _____		4. _____	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a							
Printed/Typed Name			Signature		Month	Day	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NY200048	2. Page 1 of 1	3. Emergency Response Phone 800 956 9282	4. Manifest Tracking Number 002864888 FLE				
5. Generator's Name and Mailing Address City of New Bedford 330 Collette Street New Bedford, MA 02746 Generator's Phone: 508 979 1487				Generator's Site Address (if different than mailing address) City of New Bedford 330 Collette Street New Bedford, MA 02746 230 Hathaway Blvd					
6. Transporter 1 Company Name Price Trucking Corp.					U.S. EPA ID Number NYD046765574				
7. Transporter 2 Company Name					U.S. EPA ID Number				
8. Designated Facility Name and Site Address CWM Chemical Services 1550 Balmer Road PO Box 200 Modal City, NY 14107 Facility's Phone: (716) 754-8231					U.S. EPA ID Number NYD049836679				
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
				No.	Type				
	X	UN3432, RQ: Polychlorinated biphenyls, solid 9, II		001	PT TF	24.82	T	MA02	B007
14. Special Handling Instructions and Additional Information PCBs OUT OF SERVICE 6/25 1- (X) NY200048 2- 3- 4-									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Offoror's Printed/Typed Name DAVID FREDETTE					Signature <i>David Fredette</i>			Month Day Year 6 25 09	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name Christopher Baker					Signature <i>Christopher Baker</i>			Month Day Year 6 25 09	
Transporter 2 Printed/Typed Name					Signature			Month Day Year	
18. Discrepancy									
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____									
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. _____		2. _____		3. _____		4. _____			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name					Signature			Month Day Year	



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

REPORT DATE 4/7/2009

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

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-24326

JOB NUMBER: 115058

PROJECT LOCATION: NEW BEDFORD

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	8082 drywt	
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	8260 mcp drywt	
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	metals-8 slg icp	
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	pah - sludge	
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	solids (percent)	
HB-23-DISPOSAL	09B09660	SOIL	Not Specified	tph gc dry 8100m	
TB-01	09B09659	LIQUIDS	Not Specified	8260 mcp solid	



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REPORT DATE 4/7/2009

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LOWELL, MA 01852
ATTN: DAVID SULLIVAN

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-24326

JOB NUMBER: 115058

Comments :

LIMS BATCH NO. : LIMIT-24326

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

In method 8260 soil and solid, the initial and/or continuing calibration did not meet method specifications. For samples 09B09659 - 660, Acetone, 2-Butanone, Tetrahydrofuran, and 1,4-Dioxane were calibrated with a relative response factor <0.05.

In method 8260 soil and solid, any reported result for Dichlorodifluoromethane in samples 09B09659 - 660 is estimated and likely to be biased on the low side based on continuing calibration bias.

In method 8270, any reported result for Indeno(1,2,3-cd)pyrene and Benzo(g,h,i)perylene in sample 09B09660 is estimated and likely to be biased on the high side based on continuing calibration bias.

In method 8082, for sample 09B09660, the surrogate concentration is below detection limit due to dilution required for sample analysis and could not be reported.

There are no other analytical issues which affect the usability of the data.

DETAILED CASE NARRATIVE

METHOD SW846 8260 - ADDITIONAL DETAILS

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits somewhere between 40-160% are used and/or unless otherwise listed in this narrative.

Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, vinyl chloride, chloromethane, dichlorodifluoromethane, 2-hexanone, naphthalene, and bromomethane
Additional difficult analytes in water only: 2,2-dichloropropane and tetrachloroethylene
Additional difficult analytes in soil only: 1,2,3-trichloropropane, methylene chloride, n-butylbenzene, and tert-butylbenzene

Duplicate laboratory fortified blank RPDs were all within control limits specified by the method except for "difficult analytes" where RPDs of 50% are used and/or unless otherwise listed in this narrative.

Difficult analyte: 1,4-dioxane

All 8260 surrogate standard recoveries were within control limits specified by the method
Unless listed below: None outside of control limits

8260 QC SURROGATE RECOVERIES

BLANK-131229 and 131230



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REPORT DATE 4/7/2009

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

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-24326

JOB NUMBER: 115058

D4-1,2-DICHLOROETHANE: 103%
D8-TOLUENE: 99.7%
BROMOFLUOROBENZENE: 99.3%

LFBLANK-93455	LFB	LFB DUPLICATE
D4-1,2-DICHLOROETHANE:	106%	98.2%
D8-TOLUENE:	102%	102%
BROMOFLUOROBENZENE:	99.6%	102%

All analyte list compounds were reported for method 8260 unless noted below:

Only the MCP compounds were requested and reported.

METHOD SW846-7470A/7471A - ADDITIONAL DETAILS

Either the LFB or LFB duplicate recovery is outside control limits, but the other is within the limits.
Analysis in control.

METHOD SW846-8100m TPH

Solid samples, if any, in the batch were extracted on 03/31/2009 by the following method:
Microwave: SW-846 3546

METHOD SW846 8270 - ADDITIONAL DETAILS

Solid samples, if any, in the batch were extracted by the following method:
Microwave: SW-846 3546

All 8270 samples were analyzed undiluted unless specified below:

Sample	Dilution(s)
09B09660	x2 (sample matrix)

In method 8270, for Dibenz(a,h)anthracene in sample 09B09660, data is not affected by continuing calibration non-conformance since bias is on the high side and all results are "not detected".

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative.

Difficult analytes for soil LCS - limits between 10 and 180% depending on the compound (see QC summary report for limits): 3,3'-dichlorobenzidine, aniline, 2,4-dinitrophenol, and 4-chloroaniline.

Difficult analytes for water LCS - limits between 10 and 150% depending on the compound (see QC summary report for limits): dimethylphthalate, bis(2-chloroisopropyl)ether, 4-nitrophenol, and phenol.

Duplicate laboratory fortified blank RPDs were all less than or equal to 20% for water or 30% for soil except for "difficult analytes" where RPDs of 50% are used and/or otherwise listed below or elsewhere in this narrative.

Difficult analytes for water RPDs: aniline, dimethylphthalate,



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REPORT DATE 4/7/2009

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650 SUFFOLK STREET
LOWELL, MA 01852
ATTN: DAVID SULLIVAN

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-24326

JOB NUMBER: 115058

hexachloroethane, indeno(1,2,3-cd)pyrene, 2,4-dinitrophenol, 4-nitrophenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Difficult analytes for soil RPDs: 3,3'-dichlorobenzidine, 4-nitrophenol, and aniline.

Compounds outside of control limits: None outside of control limits

In method 8270, only PAH compounds were requested and reported.

8270 QC Surrogate Recoveries

BLANK-131390

Nitrobenzene-d5: 65%
2-Fluorobiphenyl: 63%
Terphenyl-d14: 75%

LFBLANK-93629 LFB LFB Duplicate

Nitrobenzene-d5: 60% 64%
2-Fluorobiphenyl: 55% 60%
Terphenyl-d14: 80% 75%

METHOD SW846 8082 - ADDITIONAL DETAILS

Solid samples, if any, in the batch were extracted by the following method:
Microwave: SW-846 3546

All 8082 samples were analyzed undiluted unless specified below:

Sample Dilution(s)
09B09660 x500

PCB QC Surrogate recoveries

BLANK-131384

Column #1
Tetrachloro-m-xylene: 120%
Decachlorobiphenyl: 125%

Column #2
Tetrachloro-m-xylene: 130%
Decachlorobiphenyl: 120 %

LFBLANK-93624 LFB LFB DUPLICATE

Column #1
Tetrachloro-m-xylene: 144% 125%
Decachlorobiphenyl: 145% 136%

Column #2
Tetrachloro-m-xylene: 157% 134%
Decachlorobiphenyl: 138% 129%

METHOD SW846-6010 - ADDITIONAL DETAILS



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

REPORT DATE 4/7/2009

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

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-24326
JOB NUMBER: 115058

Only RCRA 8 elements were requested and reported.

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 (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.

4/7/09

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Assistant 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

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

4/7/2009
Page 2 of 13

Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMIT-24326
Job Number: 115058

Sample ID : 09B09660 ‡Sampled : 3/28/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg dry wt	ND	03/30/09	MFF	0.077		
tert-Amyimethyl Ether	mg/kg dry wt	ND	03/30/09	MFF	0.001		
Benzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Bromobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Bromochloromethane	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Bromodichloromethane	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Bromoform	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Bromomethane	mg/kg dry wt	ND	03/30/09	MFF	0.008		
2-Butanone (MEK)	mg/kg dry wt	ND	03/30/09	MFF	0.031		
n-Butylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
sec-Butylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
tert-Butylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
tert-Butylethyl Ether	mg/kg dry wt	ND	03/30/09	MFF	0.001		
Carbon Disulfide	mg/kg dry wt	ND	03/30/09	MFF	0.008		
Carbon Tetrachloride	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Chlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Chlorodibromomethane	mg/kg dry wt	ND	03/30/09	MFF	0.001		
Chloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.016		
Chloroform	mg/kg dry wt	ND	03/30/09	MFF	0.004		
Chloromethane	mg/kg dry wt	ND	03/30/09	MFF	0.008		
2-Chlorotoluene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
4-Chlorotoluene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg dry wt	ND	03/30/09	MFF	0.008		
1,2-Dibromoethane	mg/kg dry wt	ND	03/30/09	MFF	0.001		
Dibromomethane	mg/kg dry wt	ND	03/30/09	MFF	0.002		
1,2-Dichlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
1,3-Dichlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
1,4-Dichlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002		
Dichlorodifluoromethane	mg/kg dry wt	ND	03/30/09	MFF	0.016		

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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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMIT-24326
Job Number: 115058

Sample ID: 09B09660 ‡Sampled: 3/28/2009
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	03/30/09	MFF	0.002			
1,2-Dichloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1-Dichloroethylene	mg/kg dry wt	ND	03/30/09	MFF	0.004			
cis-1,2-Dichloroethylene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
trans-1,2-Dichloroethylene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,2-Dichloropropane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,3-Dichloropropane	mg/kg dry wt	ND	03/30/09	MFF	0.001			
2,2-Dichloropropane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1-Dichloropropene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
cis-1,3-Dichloropropene	mg/kg dry wt	ND	03/30/09	MFF	0.001			
trans-1,3-Dichloropropene	mg/kg dry wt	ND	03/30/09	MFF	0.001			
Diethyl Ether	mg/kg dry wt	ND	03/30/09	MFF	0.016			
Diisopropyl Ether	mg/kg dry wt	ND	03/30/09	MFF	0.001			
1,4-Dioxane	mg/kg dry wt	ND	03/30/09	MFF	0.077			
Ethyl Benzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Hexachlorobutadiene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
2-Hexanone	mg/kg dry wt	ND	03/30/09	MFF	0.016			
Isopropylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
p-Isopropyltoluene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
MTBE	mg/kg dry wt	ND	03/30/09	MFF	0.004			
Methylene Chloride	mg/kg dry wt	ND	03/30/09	MFF	0.016			
MIBK	mg/kg dry wt	ND	03/30/09	MFF	0.016			
Naphthalene	mg/kg dry wt	ND	03/30/09	MFF	0.008			
n-Propylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Styrene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1,1,2-Tetrachloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1,2,2-Tetrachloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.001			
Tetrachloroethylene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Tetrahydrofuran	mg/kg dry wt	ND	03/30/09	MFF	0.008			

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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMT-24326
Job Number: 115058

Sample ID : 09B09660 ‡Sampled : 3/28/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,2,3-Trichlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,2,4-Trichlorobenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1,1-Trichloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,1,2-Trichloroethane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Trichloroethylene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Trichlorofluoromethane	mg/kg dry wt	ND	03/30/09	MFF	0.008			
1,2,3-Trichloropropane	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,2,4-Trimethylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
1,3,5-Trimethylbenzene	mg/kg dry wt	ND	03/30/09	MFF	0.002			
Vinyl Chloride	mg/kg dry wt	ND	03/30/09	MFF	0.008			
m + p Xylene	mg/kg dry wt	ND	03/30/09	MFF	0.004			
o-Xylene	mg/kg dry wt	ND	03/30/09	MFF	0.002			

Analytical Method:

SW846 8260

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

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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: TB-01

LIMS-BAT #: LIMIT-24326
Job Number: 115058

Sample ID : 09B09659 ‡Sampled : 3/28/2009
Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Acetone	mg/kg	ND	03/30/09	MFF	0.10		
tert-Amylmethyl Ether	mg/kg	ND	03/30/09	MFF	0.001		
Benzene	mg/kg	ND	03/30/09	MFF	0.002		
Bromobenzene	mg/kg	ND	03/30/09	MFF	0.002		
Bromochloromethane	mg/kg	ND	03/30/09	MFF	0.002		
Bromodichloromethane	mg/kg	ND	03/30/09	MFF	0.002		
Bromoform	mg/kg	ND	03/30/09	MFF	0.002		
Bromomethane	mg/kg	ND	03/30/09	MFF	0.010		
2-Butanone (MEK)	mg/kg	ND	03/30/09	MFF	0.040		
n-Butylbenzene	mg/kg	ND	03/30/09	MFF	0.002		
sec-Butylbenzene	mg/kg	ND	03/30/09	MFF	0.002		
tert-Butylbenzene	mg/kg	ND	03/30/09	MFF	0.002		
tert-Butylethyl Ether	mg/kg	ND	03/30/09	MFF	0.001		
Carbon Disulfide	mg/kg	ND	03/30/09	MFF	0.010		
Carbon Tetrachloride	mg/kg	ND	03/30/09	MFF	0.002		
Chlorobenzene	mg/kg	ND	03/30/09	MFF	0.002		
Chlorodibromomethane	mg/kg	ND	03/30/09	MFF	0.001		
Chloroethane	mg/kg	ND	03/30/09	MFF	0.020		
Chloroform	mg/kg	ND	03/30/09	MFF	0.004		
Chloromethane	mg/kg	ND	03/30/09	MFF	0.010		
2-Chlorotoluene	mg/kg	ND	03/30/09	MFF	0.002		
4-Chlorotoluene	mg/kg	ND	03/30/09	MFF	0.002		
1,2-Dibromo-3-Chloropropane	mg/kg	ND	03/30/09	MFF	0.010		
1,2-Dibromoethane	mg/kg	ND	03/30/09	MFF	0.001		
Dibromomethane	mg/kg	ND	03/30/09	MFF	0.002		
1,2-Dichlorobenzene	mg/kg	ND	03/30/09	MFF	0.002		
1,3-Dichlorobenzene	mg/kg	ND	03/30/09	MFF	0.002		
1,4-Dichlorobenzene	mg/kg	ND	03/30/09	MFF	0.002		
Dichlorodifluoromethane	mg/kg	ND	03/30/09	MFF	0.020		

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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
 Date Received: 3/28/2009
 Field Sample #: TB-01

LIMS-BAT #: LIMT-24326
 Job Number: 115058

Sample ID : 09B09659 ‡Sampled : 3/28/2009
 Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
1,1-Dichloroethane	mg/kg	ND	03/30/09	MFF	0.002			
1,2-Dichloroethane	mg/kg	ND	03/30/09	MFF	0.002			
1,1-Dichloroethylene	mg/kg	ND	03/30/09	MFF	0.004			
cis-1,2-Dichloroethylene	mg/kg	ND	03/30/09	MFF	0.002			
trans-1,2-Dichloroethylene	mg/kg	ND	03/30/09	MFF	0.002			
1,2-Dichloropropane	mg/kg	ND	03/30/09	MFF	0.002			
1,3-Dichloropropane	mg/kg	ND	03/30/09	MFF	0.001			
2,2-Dichloropropane	mg/kg	ND	03/30/09	MFF	0.002			
1,1-Dichloropropene	mg/kg	ND	03/30/09	MFF	0.002			
cis-1,3-Dichloropropene	mg/kg	ND	03/30/09	MFF	0.001			
trans-1,3-Dichloropropene	mg/kg	ND	03/30/09	MFF	0.001			
Diethyl Ether	mg/kg	ND	03/30/09	MFF	0.020			
Diisopropyl Ether	mg/kg	ND	03/30/09	MFF	0.020			
1,4-Dioxane	mg/kg	ND	03/30/09	MFF	0.10			
Ethyl Benzene	mg/kg	ND	03/30/09	MFF	0.002			
Hexachlorobutadiene	mg/kg	ND	03/30/09	MFF	0.002			
2-Hexanone	mg/kg	ND	03/30/09	MFF	0.020			
Isopropylbenzene	mg/kg	ND	03/30/09	MFF	0.002			
p-Isopropyltoluene	mg/kg	ND	03/30/09	MFF	0.002			
MTBE	mg/kg	ND	03/30/09	MFF	0.004			
Methylene Chloride	mg/kg	ND	03/30/09	MFF	0.020			
MIBK	mg/kg	ND	03/30/09	MFF	0.020			
Naphthalene	mg/kg	ND	03/30/09	MFF	0.010			
n-Propylbenzene	mg/kg	ND	03/30/09	MFF	0.002			
Styrene	mg/kg	ND	03/30/09	MFF	0.002			
1,1,1,2-Tetrachloroethane	mg/kg	ND	03/30/09	MFF	0.002			
1,1,1,2,2-Tetrachloroethane	mg/kg	ND	03/30/09	MFF	0.001			
Tetrachloroethylene	mg/kg	ND	03/30/09	MFF	0.002			
Tetrahydrofuran	mg/kg	ND	03/30/09	MFF	0.010			

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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: TB-01

LIMS-BAT #: LIMIT-24326
Job Number: 115058

Sample ID: 09B09659 ‡Sampled: 3/28/2009
Not Specified

Sample Matrix: LIQUIDS

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Toluene	mg/kg	ND	03/30/09	MFF	0.002			
1,2,3-Trichlorobenzene	mg/kg	ND	03/30/09	MFF	0.002			
1,2,4-Trichlorobenzene	mg/kg	ND	03/30/09	MFF	0.002			
1,1,1-Trichloroethane	mg/kg	ND	03/30/09	MFF	0.002			
1,1,2-Trichloroethane	mg/kg	ND	03/30/09	MFF	0.002			
Trichloroethylene	mg/kg	ND	03/30/09	MFF	0.002			
Trichlorofluoromethane	mg/kg	ND	03/30/09	MFF	0.010			
1,2,3-Trichloropropane	mg/kg	ND	03/30/09	MFF	0.002			
1,2,4-Trimethylbenzene	mg/kg	ND	03/30/09	MFF	0.002			
1,3,5-Trimethylbenzene	mg/kg	ND	03/30/09	MFF	0.002			
Vinyl Chloride	mg/kg	ND	03/30/09	MFF	0.010			
m + p Xylene	mg/kg	ND	03/30/09	MFF	0.004			
o-Xylene	mg/kg	ND	03/30/09	MFF	0.002			

Analytical Method:

SW846 8260

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

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

4/7/2009
 Page 8 of 13

Purchase Order No.:

Project Location: NEW BEDFORD
 Date Received: 3/28/2009
 Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMT-24326
 Job Number: 115058

Sample ID : 09B09660 ‡Sampled : 3/28/2009
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Arsenic	mg/kg dry wt	10.7	04/03/09	OP	3.08			
Barium	mg/kg dry wt	757	04/03/09	OP	6.15			
Cadmium	mg/kg dry wt	18.1	04/07/09	KSH	0.31			
Chromium	mg/kg dry wt	79.2	04/03/09	OP	0.62			
Lead	mg/kg dry wt	888	04/03/09	OP	0.93			
Mercury	mg/kg dry wt	0.217	04/01/09	MPF	0.021			
Selenium	mg/kg dry wt	ND	04/03/09	OP	6.15			
Silver	mg/kg dry wt	1.04	04/03/09	OP	0.62			

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

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009

LIMS-BAT #: LIMIT-24326
Job Number: 115058

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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DAVID SULLIVAN
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 650 SUFFOLK STREET
 LOWELL, MA 01852

4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
 Date Received: 3/28/2009
 Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMT-24326
 Job Number: 115058

Sample ID : 09B09660 ‡Sampled : 3/28/2009
 Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Acenaphthene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Acenaphthylene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Anthracene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Benzo(a)anthracene	mg/kg dry wt	1.01	04/02/09	FD	0.410			
Benzo(a)pyrene	mg/kg dry wt	0.967	04/02/09	FD	0.410			
Benzo(b)fluoranthene	mg/kg dry wt	1.10	04/02/09	FD	0.410			
Benzo(g,h,i)perylene	mg/kg dry wt	0.604	04/02/09	FD	0.410			
Benzo(k)fluoranthene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Chrysene	mg/kg dry wt	1.20	04/02/09	FD	0.410			
Dibenz(a,h)anthracene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Fluoranthene	mg/kg dry wt	1.57	04/02/09	FD	0.410			
Fluorene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	0.697	04/02/09	FD	0.410			
2-Methylnaphthalene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Naphthalene	mg/kg dry wt	ND	04/02/09	FD	0.410			
Phenanthrene	mg/kg dry wt	1.94	04/02/09	FD	0.410			
Pyrene	mg/kg dry wt	1.98	04/02/09	FD	0.410			
Extraction Date 8270		3/31/2009	04/02/09	FD				

Analytical Method:
 SW846 8270

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

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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

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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample # : HB-23-DISPOSAL

LIMS-BAT #: LIMIT-24326
Job Number: 115058

Sample ID : 09B09660 ‡Sampled : 3/28/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Solids, total	%	81.4	04/02/09	FD			

Analytical Method:

SM 2540G

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

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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.



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

4/7/2009
Page 12 of 13

Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009
Field Sample #: HB-23-DISPOSAL

LIMS-BAT #: LIMT-24326
Job Number: 115058

Sample ID: 09B09660 ‡Sampled: 3/28/2009
Not Specified

Sample Matrix: SOIL

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Unknown Hydrocarbons	mg/kg dry wt	430	04/01/09	CJM	52		

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

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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4/7/2009
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Purchase Order No.:

Project Location: NEW BEDFORD
Date Received: 3/28/2009

LIMS-BAT #: LIMIT-24326
Job Number: 115058

** END OF REPORT **

RL = Reporting Limit

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NM = Not Measured

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

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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: 4/7/2009

Lims Bat #: LIMIT-24326

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QC Batch Number: GC/ECD-12254

Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09660	Decachlorobiphenyl	Surrogate Recovery	N.M.	%	30-150
	Tetrachloro-m-Xylene	Surrogate Recovery	N.M.	%	30-150
BLANK-131384	PCB-1232	Blank	<0.100	mg/kg dry wt	
	PCB-1242	Blank	<0.100	mg/kg dry wt	
	PCB-1254	Blank	<0.100	mg/kg dry wt	
	PCB-1260	Blank	<0.100	mg/kg dry wt	
	PCB-1248	Blank	<0.100	mg/kg dry wt	
	PCB-1221	Blank	<0.100	mg/kg dry wt	
	PCB 1016	Blank	<0.100	mg/kg dry wt	
	PCB 1262	Blank	<0.100	mg/kg dry wt	
	PCB 1268	Blank	<0.100	mg/kg dry wt	
LFBLANK-93624	PCB-1260	Lab Fort Blank Amt.	0.040	mg/kg dry wt	
		Lab Fort Blk. Found	0.050	mg/kg dry wt	
		Lab Fort Blk. % Rec.	125.000	%	40-140
		Dup Lab Fort Bl Amt.	0.040	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.046	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	115.000	%	
		Lab Fort Blank Range	10.000	units	
		Lab Fort Bl. Av. Rec	120.000	%	
		LFB Duplicate RPD	8.333	%	0-30
	PCB 1016	Lab Fort Blank Amt.	0.040	mg/kg dry wt	
		Lab Fort Blk. Found	0.054	mg/kg dry wt	
		Lab Fort Blk. % Rec.	135.000	%	40-140
		Dup Lab Fort Bl Amt.	0.040	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.047	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	117.500	%	
		Lab Fort Blank Range	17.500	units	
		Lab Fort Bl. Av. Rec	126.250	%	
		LFB Duplicate RPD	13.861	%	0-30

QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

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Lims Bat # : LIMIT-24326

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QC Batch Number: GC/FID-23372

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-131424	Unknown Hydrocarbons	Blank	<8.4	mg/kg dry wt	
LFBLANK-93658	Unknown Hydrocarbons	Lab Fort Blank Amt.	33.3	mg/kg dry wt	
		Dup Lab Fort Bl Amt.	33.3	mg/kg dry wt	

QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

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QC Batch Number: GCMS/SEMI-12103

Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09660	Nitrobenzene-d5	Surrogate Recovery	54.0	%	30-130
	2-Fluorobiphenyl	Surrogate Recovery	48.0	%	30-130
	Terphenyl-d14	Surrogate Recovery	58.0	%	30-130
BLANK-131390	Naphthalene	Blank	<0.167	mg/kg dry wt	
	Acenaphthene	Blank	<0.167	mg/kg dry wt	
	Acenaphthylene	Blank	<0.167	mg/kg dry wt	
	Anthracene	Blank	<0.167	mg/kg dry wt	
	Benzo(a)anthracene	Blank	<0.167	mg/kg dry wt	
	Benzo(a)pyrene	Blank	<0.167	mg/kg dry wt	
	Benzo(b)fluoranthene	Blank	<0.167	mg/kg dry wt	
	Benzo(g,h,i)perylene	Blank	<0.167	mg/kg dry wt	
	Chrysene	Blank	<0.167	mg/kg dry wt	
	Dibenz(a,h)anthracene	Blank	<0.167	mg/kg dry wt	
	Fluoranthene	Blank	<0.167	mg/kg dry wt	
	Fluorene	Blank	<0.167	mg/kg dry wt	
	Indeno(1,2,3-cd)pyrene	Blank	<0.167	mg/kg dry wt	
	2-Methylnaphthalene	Blank	<0.167	mg/kg dry wt	
	Phenanthrene	Blank	<0.167	mg/kg dry wt	
	Pyrene	Blank	<0.167	mg/kg dry wt	
	Benzo(k)fluoranthene	Blank	<0.167	mg/kg dry wt	
LFBLANK-93629	Naphthalene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.937	mg/kg dry wt	
		Lab Fort Blk. % Rec.	56.259	%	40-140
		Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	61.099	%	
		Lab Fort Blank Range	4.839	units	
		Lab Fort Bl. Av. Rec	58.679	%	
		LFB Duplicate RPD	8.248	%	0-30
	Acenaphthene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.989	mg/kg dry wt	
		Lab Fort Blk. % Rec.	59.359	%	40-140
		Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.069	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	64.180	%	
		Lab Fort Blank Range	4.820	units	
		Lab Fort Bl. Av. Rec	61.770	%	
		LFB Duplicate RPD	7.803	%	0-30
	Acenaphthylene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.952	mg/kg dry wt	
		Lab Fort Blk. % Rec.	57.119	%	40-140



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Sample Matrix Spikes and Matrix Spike Duplicates

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Method Blanks

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QC Batch Number: GCMS/SEMI-12103

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93629	Acenaphthylene	Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.040	mg/kg dry wt	
		Dup Lab Fort BI %Rec	62.419	%	
		Lab Fort Blank Range	5.299	units	
		Lab Fort BI. Av. Rec	59.769	%	
		LFB Duplicate RPD	8.867	%	0-30
	Anthracene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.007	mg/kg dry wt	
		Lab Fort Blk. % Rec.	60.460	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.083	mg/kg dry wt	
		Dup Lab Fort BI %Rec	65.020	%	
	Benzo(a)anthracene	Lab Fort Blank Range	4.560	units	
		Lab Fort BI. Av. Rec	62.740	%	
		LFB Duplicate RPD	7.268	%	0-30
		Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.006	mg/kg dry wt	
		Lab Fort Blk. % Rec.	60.379	%	40-140
	Benzo(a)pyrene	Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.090	mg/kg dry wt	
		Dup Lab Fort BI %Rec	65.440	%	
		Lab Fort Blank Range	5.060	units	
		Lab Fort BI. Av. Rec	62.909	%	
		LFB Duplicate RPD	8.043	%	0-30
	Benzo(b)fluoranthene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	61.139	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.106	mg/kg dry wt	
		Dup Lab Fort BI %Rec	66.379	%	
	Benzo(g,h,i)perylene	Lab Fort Blank Range	5.239	units	
		Lab Fort BI. Av. Rec	63.759	%	
		LFB Duplicate RPD	8.218	%	0-30
		Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.905	mg/kg dry wt	
		Lab Fort Blk. % Rec.	54.339	%	40-140
	Dup Lab Fort BI Amt.	1.666	mg/kg dry wt		
	Dup Lab Fort BI. Fnd	0.999	mg/kg dry wt		
	Dup Lab Fort BI %Rec	59.979	%		
	Lab Fort Blank Range	5.640	units		
	Lab Fort BI. Av. Rec	57.159	%		
	LFB Duplicate RPD	9.867	%	0-30	
	Lab Fort Blank Amt.	1.666	mg/kg dry wt		



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QC Batch Number: GCMS/SEMI-12103

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93629	Benzo(g,h,i)perylene	Lab Fort Blk. Found	1.319	mg/kg dry wt	
		Lab Fort Blk. % Rec.	79.139	%	40-140
		Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.435	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	86.140	%	
		Lab Fort Blank Range	7.000	units	
		Lab Fort Bl. Av. Rec	82.639	%	
		LFB Duplicate RPD	8.470	%	0-30
	Chrysene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.992	mg/kg dry wt	
		Lab Fort Blk. % Rec.	59.519	%	40-140
		Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.069	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	64.159	%	
		Lab Fort Blank Range	4.639	units	
		Lab Fort Bl. Av. Rec	61.839	%	
	Dibenz(a,h)anthracene	LFB Duplicate RPD	7.503	%	0-30
		Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.305	mg/kg dry wt	
		Lab Fort Blk. % Rec.	78.299	%	40-140
		Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.433	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	85.999	%	
		Lab Fort Blank Range	7.699	units	
	Fluoranthene	Lab Fort Bl. Av. Rec	82.149	%	
		LFB Duplicate RPD	9.373	%	0-30
		Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.909	mg/kg dry wt	
Lab Fort Blk. % Rec.		54.579	%	40-140	
Dup Lab Fort Bl Amt.		1.666	mg/kg dry wt		
Dup Lab Fort Bl. Fnd		1.017	mg/kg dry wt		
Dup Lab Fort Bl %Rec		61.039	%		
Fluorene	Lab Fort Blank Range	6.459	units		
	Lab Fort Bl. Av. Rec	57.809	%		
	LFB Duplicate RPD	11.174	%	0-30	
	Lab Fort Blank Amt.	1.666	mg/kg dry wt		
	Lab Fort Blk. Found	1.105	mg/kg dry wt		
	Lab Fort Blk. % Rec.	66.340	%	40-140	
	Dup Lab Fort Bl Amt.	1.666	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	1.152	mg/kg dry wt		
Dup Lab Fort Bl %Rec	69.139	%			
Lab Fort Blank Range	2.799	units			
Lab Fort Bl. Av. Rec	67.739	%			



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QC SUMMARY REPORT

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Method Blanks

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QC Batch Number: GCMS/SEMI-12103

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93629	Fluorene	LFB Duplicate RPD	4.133	%	0-30
	Indeno(1,2,3-cd)pyrene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.357	mg/kg dry wt	
		Lab Fort Blk. % Rec.	81.460	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.488	mg/kg dry wt	
		Dup Lab Fort BI %Rec	89.320	%	
		Lab Fort Blank Range	7.859	units	
		Lab Fort Bl. Av. Rec	85.390	%	
		LFB Duplicate RPD	9.204	%	0-30
	2-Methylnaphthalene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.993	mg/kg dry wt	
		Lab Fort Blk. % Rec.	59.579	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.053	mg/kg dry wt	
		Dup Lab Fort BI %Rec	63.179	%	
		Lab Fort Blank Range	3.599	units	
		Lab Fort Bl. Av. Rec	61.379	%	
		LFB Duplicate RPD	5.865	%	0-30
	Phenanthrene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.015	mg/kg dry wt	
		Lab Fort Blk. % Rec.	60.919	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.094	mg/kg dry wt	
		Dup Lab Fort BI %Rec	65.639	%	
		Lab Fort Blank Range	4.720	units	
		Lab Fort Bl. Av. Rec	63.279	%	
		LFB Duplicate RPD	7.458	%	0-30
	Pyrene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	1.165	mg/kg dry wt	
		Lab Fort Blk. % Rec.	69.940	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.129	mg/kg dry wt	
		Dup Lab Fort BI %Rec	67.759	%	
		Lab Fort Blank Range	2.180	units	
		Lab Fort Bl. Av. Rec	68.849	%	
		LFB Duplicate RPD	3.166	%	0-30
	Benzo(k)fluoranthene	Lab Fort Blank Amt.	1.666	mg/kg dry wt	
		Lab Fort Blk. Found	0.972	mg/kg dry wt	
		Lab Fort Blk. % Rec.	58.359	%	40-140
		Dup Lab Fort BI Amt.	1.666	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	1.043	mg/kg dry wt	
		Dup Lab Fort BI %Rec	62.579	%	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93629	Benzo(k)fluoranthene	Lab Fort Blank Range	4.220	units	
		Lab Fort Bl. Av. Rec	60.469	%	
		LFB Duplicate RPD	6.978	%	0-30



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QC Batch Number: GCMS/VOL-21828

Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09659	1,2-Dichloroethane-d4	Surrogate Recovery	103.320	%	70-130
	Toluene-d8	Surrogate Recovery	99.480	%	70-130
	Bromofluorobenzene	Surrogate Recovery	97.800	%	70-130
BLANK-131229	Acetone	Blank	<0.10	mg/kg	
	Benzene	Blank	<0.002	mg/kg	
	Carbon Tetrachloride	Blank	<0.002	mg/kg	
	Chloroform	Blank	<0.004	mg/kg	
	1,2-Dichloroethane	Blank	<0.002	mg/kg	
	1,4-Dichlorobenzene	Blank	<0.002	mg/kg	
	Ethyl Benzene	Blank	<0.002	mg/kg	
	2-Butanone (MEK)	Blank	<0.040	mg/kg	
	MIBK	Blank	<0.020	mg/kg	
	Naphthalene	Blank	<0.010	mg/kg	
	Styrene	Blank	<0.002	mg/kg	
	Tetrachloroethylene	Blank	<0.002	mg/kg	
	Toluene	Blank	<0.002	mg/kg	
	1,1,1-Trichloroethane	Blank	<0.002	mg/kg	
	Trichloroethylene	Blank	<0.002	mg/kg	
	Trichlorofluoromethane	Blank	<0.010	mg/kg	
	o-Xylene	Blank	<0.002	mg/kg	
	m + p Xylene	Blank	<0.004	mg/kg	
	1,2-Dichlorobenzene	Blank	<0.002	mg/kg	
	1,3-Dichlorobenzene	Blank	<0.002	mg/kg	
	1,1-Dichloroethane	Blank	<0.002	mg/kg	
	1,1-Dichloroethylene	Blank	<0.004	mg/kg	
	1,4-Dioxane	Blank	<0.10	mg/kg	
	MTBE	Blank	<0.004	mg/kg	
	trans-1,2-Dichloroethylene	Blank	<0.002	mg/kg	
	Vinyl Chloride	Blank	<0.010	mg/kg	
	Methylene Chloride	Blank	<0.020	mg/kg	
	Chlorobenzene	Blank	<0.002	mg/kg	
	Chloromethane	Blank	<0.010	mg/kg	
	Bromomethane	Blank	<0.010	mg/kg	
	Chloroethane	Blank	<0.020	mg/kg	
	cis-1,3-Dichloropropene	Blank	<0.001	mg/kg	
	trans-1,3-Dichloropropene	Blank	<0.001	mg/kg	
	Chlorodibromomethane	Blank	<0.001	mg/kg	
	1,1,2-Trichloroethane	Blank	<0.002	mg/kg	
	Bromoform	Blank	<0.002	mg/kg	
	1,1,2,2-Tetrachloroethane	Blank	<0.001	mg/kg	
	2-Chlorotoluene	Blank	<0.002	mg/kg	
	Hexachlorobutadiene	Blank	<0.002	mg/kg	



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QC Batch Number: GCMS/VOL-21828

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-131229	Isopropylbenzene	Blank	<0.002	mg/kg	
	p-Isopropyltoluene	Blank	<0.002	mg/kg	
	n-Propylbenzene	Blank	<0.002	mg/kg	
	sec-Butylbenzene	Blank	<0.002	mg/kg	
	tert-Butylbenzene	Blank	<0.002	mg/kg	
	1,2,3-Trichlorobenzene	Blank	<0.002	mg/kg	
	1,2,4-Trichlorobenzene	Blank	<0.002	mg/kg	
	1,2,4-Trimethylbenzene	Blank	<0.002	mg/kg	
	1,3,5-Trimethylbenzene	Blank	<0.002	mg/kg	
	Dibromomethane	Blank	<0.002	mg/kg	
	cis-1,2-Dichloroethylene	Blank	<0.002	mg/kg	
	4-Chlorotoluene	Blank	<0.002	mg/kg	
	1,1-Dichloropropene	Blank	<0.002	mg/kg	
	1,2-Dichloropropane	Blank	<0.002	mg/kg	
	1,3-Dichloropropane	Blank	<0.001	mg/kg	
	2,2-Dichloropropane	Blank	<0.002	mg/kg	
	1,1,1,2-Tetrachloroethane	Blank	<0.002	mg/kg	
	1,2,3-Trichloropropane	Blank	<0.002	mg/kg	
	n-Butylbenzene	Blank	<0.002	mg/kg	
	Dichlorodifluoromethane	Blank	<0.020	mg/kg	
	Bromochloromethane	Blank	<0.002	mg/kg	
	Bromobenzene	Blank	<0.002	mg/kg	
	Carbon Disulfide	Blank	<0.010	mg/kg	
	2-Hexanone	Blank	<0.020	mg/kg	
	Diethyl Ether	Blank	<0.020	mg/kg	
	Bromodichloromethane	Blank	<0.002	mg/kg	
	1,2-Dibromo-3-Chloropropane	Blank	<0.010	mg/kg	
	1,2-Dibromoethane	Blank	<0.001	mg/kg	
	Tetrahydrofuran	Blank	<0.010	mg/kg	
	Diisopropyl Ether	Blank	<0.020	mg/kg	
	tert-Butylethyl Ether	Blank	<0.001	mg/kg	
	tert-Amylmethyl Ether	Blank	<0.001	mg/kg	

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
09B09660	1,2-Dichloroethane-d4	Surrogate Recovery	97.240	%	70-130
	Toluene-d8	Surrogate Recovery	98.920	%	70-130
	Bromofluorobenzene	Surrogate Recovery	97.000	%	70-130
BLANK-131230	Acetone	Blank	<0.10	mg/kg dry wt	
	Benzene	Blank	<0.002	mg/kg dry wt	
	Carbon Tetrachloride	Blank	<0.002	mg/kg dry wt	
	Chloroform	Blank	<0.004	mg/kg dry wt	
	1,2-Dichloroethane	Blank	<0.002	mg/kg dry wt	
	1,4-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	Ethyl Benzene	Blank	<0.002	mg/kg dry wt	
	2-Butanone (MEK)	Blank	<0.040	mg/kg dry wt	
	MIBK	Blank	<0.020	mg/kg dry wt	
	Naphthalene	Blank	<0.010	mg/kg dry wt	
	Styrene	Blank	<0.002	mg/kg dry wt	
	Tetrachloroethylene	Blank	<0.002	mg/kg dry wt	
	Toluene	Blank	<0.002	mg/kg dry wt	
	1,1,1-Trichloroethane	Blank	<0.002	mg/kg dry wt	
	Trichloroethylene	Blank	<0.002	mg/kg dry wt	
	Trichlorofluoromethane	Blank	<0.010	mg/kg dry wt	
	o-Xylene	Blank	<0.002	mg/kg dry wt	
	m + p Xylene	Blank	<0.004	mg/kg dry wt	
	1,2-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,3-Dichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloroethane	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloroethylene	Blank	<0.004	mg/kg dry wt	
	1,4-Dioxane	Blank	<0.10	mg/kg dry wt	
	MTBE	Blank	<0.004	mg/kg dry wt	
	trans-1,2-Dichloroethylene	Blank	<0.002	mg/kg dry wt	
	Vinyl Chloride	Blank	<0.010	mg/kg dry wt	
	Methylene Chloride	Blank	<0.020	mg/kg dry wt	
	Chlorobenzene	Blank	<0.002	mg/kg dry wt	
	Chloromethane	Blank	<0.010	mg/kg dry wt	
	Bromomethane	Blank	<0.010	mg/kg dry wt	
	Chloroethane	Blank	<0.020	mg/kg dry wt	
	cis-1,3-Dichloropropene	Blank	<0.001	mg/kg dry wt	
	trans-1,3-Dichloropropene	Blank	<0.001	mg/kg dry wt	
Chlorodibromomethane	Blank	<0.001	mg/kg dry wt		
1,1,2-Trichloroethane	Blank	<0.002	mg/kg dry wt		
Bromoform	Blank	<0.002	mg/kg dry wt		
1,1,2,2-Tetrachloroethane	Blank	<0.001	mg/kg dry wt		
2-Chlorotoluene	Blank	<0.002	mg/kg dry wt		
Hexachlorobutadiene	Blank	<0.002	mg/kg dry wt		



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-131230	Isopropylbenzene	Blank	<0.002	mg/kg dry wt	
	p-Isopropyltoluene	Blank	<0.002	mg/kg dry wt	
	n-Propylbenzene	Blank	<0.002	mg/kg dry wt	
	sec-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	tert-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	1,2,3-Trichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,2,4-Trichlorobenzene	Blank	<0.002	mg/kg dry wt	
	1,2,4-Trimethylbenzene	Blank	<0.002	mg/kg dry wt	
	1,3,5-Trimethylbenzene	Blank	<0.002	mg/kg dry wt	
	4-Chlorotoluene	Blank	<0.002	mg/kg dry wt	
	Dibromomethane	Blank	<0.002	mg/kg dry wt	
	cis-1,2-Dichloroethylene	Blank	<0.002	mg/kg dry wt	
	1,1-Dichloropropene	Blank	<0.002	mg/kg dry wt	
	1,2-Dichloropropane	Blank	<0.002	mg/kg dry wt	
	1,3-Dichloropropane	Blank	<0.001	mg/kg dry wt	
	2,2-Dichloropropane	Blank	<0.002	mg/kg dry wt	
	1,1,1,2-Tetrachloroethane	Blank	<0.002	mg/kg dry wt	
	1,2,3-Trichloropropane	Blank	<0.002	mg/kg dry wt	
	n-Butylbenzene	Blank	<0.002	mg/kg dry wt	
	Dichlorodifluoromethane	Blank	<0.020	mg/kg dry wt	
	Bromochloromethane	Blank	<0.002	mg/kg dry wt	
	Bromobenzene	Blank	<0.002	mg/kg dry wt	
	Carbon Disulfide	Blank	<0.010	mg/kg dry wt	
	2-Hexanone	Blank	<0.020	mg/kg dry wt	
	Diethyl Ether	Blank	<0.020	mg/kg dry wt	
	Bromodichloromethane	Blank	<0.002	mg/kg dry wt	
	1,2-Dibromo-3-Chloropropane	Blank	<0.010	mg/kg dry wt	
	1,2-Dibromoethane	Blank	<0.001	mg/kg dry wt	
	Tetrahydrofuran	Blank	<0.010	mg/kg dry wt	
	Diisopropyl Ether	Blank	<0.001	mg/kg dry wt	
	tert-Butylethyl Ether	Blank	<0.001	mg/kg dry wt	
	tert-Amylmethyl Ether	Blank	<0.001	mg/kg dry wt	
LFBLANK-93455	Acetone	Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.271	mg/kg dry wt	
		Lab Fort Blk. % Rec.	135.730	%	70-160
		Dup Lab Fort Bl Amt.	0.200	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.217	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	108.630	%	70-160
		Lab Fort Blank Range	27.100	units	
		Lab Fort Bl. Av. Rec	122.180	%	
		LFB Duplicate RPD	22.180	%	0-25
	Benzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455					
	Benzene	Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	97.500	%	70-130
		Lab Fort Blank Range	2.200	units	
		Lab Fort Bl. Av. Rec	96.400	%	
		LFB Duplicate RPD	2.282	%	0-25
	Carbon Tetrachloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.021	mg/kg dry wt	
		Lab Fort Blk. % Rec.	106.800	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.021	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	108.400	%	70-130
		Lab Fort Blank Range	1.600	units	
		Lab Fort Bl. Av. Rec	107.600	%	
		LFB Duplicate RPD	1.486	%	0-25
	Chloroform	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	99.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	101.000	%	70-130
		Lab Fort Blank Range	1.700	units	
		Lab Fort Bl. Av. Rec	100.150	%	
		LFB Duplicate RPD	1.697	%	0-25
	1,2-Dichloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	88.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.300	%	70-130
		Lab Fort Blank Range	5.700	units	
		Lab Fort Bl. Av. Rec	91.450	%	
		LFB Duplicate RPD	6.232	%	0-25
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	91.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	93.000	%	70-130
		Lab Fort Blank Range	1.700	units	
		Lab Fort Bl. Av. Rec	92.150	%	



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LFBLANK-93455	1,4-Dichlorobenzene	LFB Duplicate RPD	1.844	%	0-25	
		Lab Fort Blank Amt.	0.020	mg/kg dry wt		
		Lab Fort Blk. Found	0.018	mg/kg dry wt		
	Ethyl Benzene	Lab Fort Blk. % Rec.	91.000	%	70-130	
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt		
		Dup Lab Fort Bl %Rec	96.600	%	70-130	
		Lab Fort Blank Range	5.599	units		
		Lab Fort Bl. Av. Rec	93.800	%		
		2-Butanone (MEK)	LFB Duplicate RPD	5.970	%	0-25
			Lab Fort Blank Amt.	0.200	mg/kg dry wt	
			Lab Fort Blk. Found	0.199	mg/kg dry wt	
			Lab Fort Blk. % Rec.	99.820	%	70-160
			Dup Lab Fort Bl Amt.	0.200	mg/kg dry wt	
			Dup Lab Fort Bl. Fnd	0.187	mg/kg dry wt	
	MIBK	Dup Lab Fort Bl %Rec	93.840	%	70-160	
		Lab Fort Blank Range	5.980	units		
		Lab Fort Bl. Av. Rec	96.830	%		
		LFB Duplicate RPD	6.175	%	0-25	
		Lab Fort Blank Amt.	0.200	mg/kg dry wt		
		Lab Fort Blk. Found	0.166	mg/kg dry wt		
		Lab Fort Blk. % Rec.	83.470	%	70-160	
		Dup Lab Fort Bl Amt.	0.200	mg/kg dry wt		
		Dup Lab Fort Bl. Fnd	0.176	mg/kg dry wt		
		Dup Lab Fort Bl %Rec	88.150	%	70-160	
		Lab Fort Blank Range	4.680	units		
		Lab Fort Bl. Av. Rec	85.810	%		
	Naphthalene	LFB Duplicate RPD	5.453	%	0-25	
		Lab Fort Blank Amt.	0.020	mg/kg dry wt		
		Lab Fort Blk. Found	0.016	mg/kg dry wt		
		Lab Fort Blk. % Rec.	83.800	%	40-130	
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
		Dup Lab Fort Bl. Fnd	0.017	mg/kg dry wt		
Dup Lab Fort Bl %Rec		88.600	%	40-130		
Lab Fort Blank Range		4.799	units			
Lab Fort Bl. Av. Rec		86.200	%			
Styrene		LFB Duplicate RPD	5.568	%	0-25	
		Lab Fort Blank Amt.	0.020	mg/kg dry wt		
		Lab Fort Blk. Found	0.018	mg/kg dry wt		
	Lab Fort Blk. % Rec.	92.000	%	70-130		
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt			
	Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt			
Dup Lab Fort Bl %Rec	97.100	%	70-130			



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LFBLANK-93455	Styrene	Lab Fort Blank Range	5.100	units	
		Lab Fort Bl. Av. Rec	94.550	%	
		LFB Duplicate RPD	5.393	%	0-25
	Tetrachloroethylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	93.000	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	98.400	%	70-130
		Lab Fort Blank Range	5.400	units	
		Lab Fort Bl. Av. Rec	95.700	%	
		LFB Duplicate RPD	5.642	%	0-25
	Toluene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	89.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.400	%	70-130
		Lab Fort Blank Range	4.700	units	
		Lab Fort Bl. Av. Rec	92.050	%	
		LFB Duplicate RPD	5.105	%	0-25
	1,1,1-Trichloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	102.400	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	104.600	%	70-130
		Lab Fort Blank Range	2.199	units	
		Lab Fort Bl. Av. Rec	103.500	%	
		LFB Duplicate RPD	2.125	%	0-25
Trichloroethylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.017	mg/kg dry wt		
	Lab Fort Blk. % Rec.	89.100	%	70-130	
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	94.900	%	70-130	
	Lab Fort Blank Range	5.800	units		
	Lab Fort Bl. Av. Rec	92.000	%		
	LFB Duplicate RPD	6.304	%	0-25	
Trichlorofluoromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.021	mg/kg dry wt		
	Lab Fort Blk. % Rec.	108.000	%	70-130	
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		



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LFBLANK-93455	Trichlorofluoromethane	Dup Lab Fort Bl. Fnd	0.021	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	105.100	%	70-130
		Lab Fort Blank Range	2.900	units	
		Lab Fort Bl. Av. Rec	106.550	%	
		LFB Duplicate RPD	2.721	%	0-25
	o-Xylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	97.400	%	70-130
		Lab Fort Blank Range	6.900	units	
		Lab Fort Bl. Av. Rec	93.950	%	
		LFB Duplicate RPD	7.344	%	0-25
		Lab Fort Blank Amt.	0.040	mg/kg dry wt	
	m + p Xylene	Lab Fort Blk. Found	0.036	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.300	%	70-130
		Dup Lab Fort Bl Amt.	0.040	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.038	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	95.350	%	70-130
		Lab Fort Blank Range	5.050	units	
		Lab Fort Bl. Av. Rec	92.825	%	
		LFB Duplicate RPD	5.440	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
	1,2-Dichlorobenzene	Lab Fort Blk. % Rec.	92.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.200	%	70-130
		Lab Fort Blank Range	1.600	units	
		Lab Fort Bl. Av. Rec	93.400	%	
		LFB Duplicate RPD	1.713	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.200	%	70-130
	1,3-Dichlorobenzene	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.500	%	70-130
		Lab Fort Blank Range	2.299	units	
		Lab Fort Bl. Av. Rec	93.350	%	
		LFB Duplicate RPD	2.463	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.200	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
1,1-Dichloroethane	Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	94.500	%	70-130	



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LFBLANK-93455	1,1-Dichloroethane	Lab Fort Blk. % Rec.	93.900	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort BI %Rec	94.800	%	70-130
		Lab Fort Blank Range	0.900	units	
		Lab Fort BI. Av. Rec	94.350	%	
	1,1-Dichloroethylene	LFB Duplicate RPD	0.953	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	96.400	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.018	mg/kg dry wt	
	1,4-Dioxane	Dup Lab Fort BI %Rec	93.300	%	70-130
		Lab Fort Blank Range	3.099	units	
		Lab Fort BI. Av. Rec	94.850	%	
		LFB Duplicate RPD	3.268	%	0-25
		Lab Fort Blank Amt.	0.200	mg/kg dry wt	
		Lab Fort Blk. Found	0.148	mg/kg dry wt	
	MTBE	Lab Fort Blk. % Rec.	74.370	%	40-160
		Dup Lab Fort BI Amt.	0.200	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.155	mg/kg dry wt	
		Dup Lab Fort BI %Rec	77.750	%	40-160
		Lab Fort Blank Range	3.380	units	
		Lab Fort BI. Av. Rec	76.060	%	
	trans-1,2-Dichloroethylene	LFB Duplicate RPD	4.443	%	0-50
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	91.900	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.018	mg/kg dry wt	
	Dup Lab Fort BI %Rec	92.900	%	70-130	
	Lab Fort Blank Range	1.000	units		
	Lab Fort BI. Av. Rec	92.400	%		
	LFB Duplicate RPD	1.082	%	0-25	
	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.018	mg/kg dry wt		
	Lab Fort Blk. % Rec.	93.900	%	70-130	
	Dup Lab Fort BI Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort BI. Fnd	0.019	mg/kg dry wt		
	Dup Lab Fort BI %Rec	96.500	%	70-130	
	Lab Fort Blank Range	2.600	units		
	Lab Fort BI. Av. Rec	95.200	%		
	LFB Duplicate RPD	2.731	%	0-25	



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LFBLANK-93455	Vinyl Chloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	96.300	%	40-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	95.300	%	40-130
		Lab Fort Blank Range	0.999	units	
		Lab Fort Bl. Av. Rec	95.800	%	
		LFB Duplicate RPD	1.043	%	0-25
	Methylene Chloride	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	89.300	%	40-160
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	90.800	%	40-160
		Lab Fort Blank Range	1.500	units	
		Lab Fort Bl. Av. Rec	90.050	%	
		LFB Duplicate RPD	1.665	%	0-25
	Chlorobenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	89.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.800	%	70-130
		Lab Fort Blank Range	5.100	units	
		Lab Fort Bl. Av. Rec	92.250	%	
		LFB Duplicate RPD	5.528	%	0-25
	Chloromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	87.800	%	40-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.017	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	88.500	%	40-130
		Lab Fort Blank Range	0.700	units	
		Lab Fort Bl. Av. Rec	88.150	%	
		LFB Duplicate RPD	0.794	%	0-25
Bromomethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.016	mg/kg dry wt		
	Lab Fort Blk. % Rec.	84.100	%	40-130	
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.017	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	89.500	%	40-130	
	Lab Fort Blank Range	5.400	units		

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

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	Bromomethane	Lab Fort Bl. Av. Rec	86.800	%	
		LFB Duplicate RPD	6.221	%	0-25
	Chloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	94.000	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	91.000	%	70-130
		Lab Fort Blank Range	3.000	units	
		Lab Fort Bl. Av. Rec	92.500	%	
		LFB Duplicate RPD	3.243	%	0-25
	cis-1,3-Dichloropropene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	93.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	98.400	%	70-130
		Lab Fort Blank Range	4.899	units	
		Lab Fort Bl. Av. Rec	95.950	%	
		LFB Duplicate RPD	5.106	%	0-25
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.020	mg/kg dry wt	
		Lab Fort Blk. % Rec.	100.200	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	103.900	%	70-130
		Lab Fort Blank Range	3.700	units	
		Lab Fort Bl. Av. Rec	102.050	%	
		LFB Duplicate RPD	3.625	%	0-25
	Chlorodibromomethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	101.000	%	70-130
		Lab Fort Blank Range	5.500	units	
		Lab Fort Bl. Av. Rec	98.250	%	
		LFB Duplicate RPD	5.597	%	0-25
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	



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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

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	1,1,2-Trichloroethane	Dup Lab Fort Bl %Rec	96.000	%	70-130
		Lab Fort Blank Range	3.500	units	
		Lab Fort Bl. Av. Rec	94.250	%	
		LFB Duplicate RPD	3.713	%	0-25
	Bromoform	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	96.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	101.000	%	70-130
		Lab Fort Blank Range	4.499	units	
		Lab Fort Bl. Av. Rec	98.750	%	
	1,1,2,2-Tetrachloroethane	LFB Duplicate RPD	4.556	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	87.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	91.900	%	70-130
		Lab Fort Blank Range	4.600	units	
	2-Chlorotoluene	Lab Fort Bl. Av. Rec	89.600	%	
		LFB Duplicate RPD	5.133	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.500	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	98.400	%	70-130
	Hexachlorobutadiene	Lab Fort Blank Range	5.900	units	
		Lab Fort Bl. Av. Rec	95.450	%	
		LFB Duplicate RPD	6.181	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.900	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
Isopropylbenzene	Dup Lab Fort Bl %Rec	96.700	%	70-130	
	Lab Fort Blank Range	3.799	units		
	Lab Fort Bl. Av. Rec	94.800	%		
	LFB Duplicate RPD	4.008	%	0-25	
	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.020	mg/kg dry wt		
	Lab Fort Blk. % Rec.	102.400	%	70-130	



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Sample Matrix Spikes and Matrix Spike Duplicates

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	Isopropylbenzene	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.021	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	108.800	%	70-130
		Lab Fort Blank Range	6.399	units	
		Lab Fort Bl. Av. Rec	105.600	%	
		LFB Duplicate RPD	6.060	%	0-25
	p-Isopropyltoluene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.900	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	98.100	%	70-130
	n-Propylbenzene	Lab Fort Blank Range	2.199	units	
		Lab Fort Bl. Av. Rec	97.000	%	
		LFB Duplicate RPD	2.268	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	94.900	%	70-130
	sec-Butylbenzene	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	100.200	%	70-130
		Lab Fort Blank Range	5.299	units	
		Lab Fort Bl. Av. Rec	97.550	%	
		LFB Duplicate RPD	5.433	%	0-25
	tert-Butylbenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	93.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	97.700	%	70-130
	1,2,3-Trichlorobenzene	Lab Fort Blank Range	3.999	units	
		Lab Fort Bl. Av. Rec	95.700	%	
		LFB Duplicate RPD	4.179	%	0-25
Lab Fort Blank Amt.		0.020	mg/kg dry wt		
Lab Fort Blk. Found		0.018	mg/kg dry wt		
Lab Fort Blk. % Rec.		91.200	%	70-160	
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	94.300	%	70-160	
	Lab Fort Blank Range	3.099	units		
	Lab Fort Bl. Av. Rec	92.750	%		
	LFB Duplicate RPD	3.342	%	0-25	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	1,2,3-Trichlorobenzene	Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.800	%	70-130
		Lab Fort Blank Range	4.100	units	
		Lab Fort Bl. Av. Rec	92.750	%	
		LFB Duplicate RPD	4.420	%	0-25
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.100	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	93.400	%	70-130
		Lab Fort Blank Range	3.299	units	
		Lab Fort Bl. Av. Rec	91.750	%	
	1,2,4-Trimethylbenzene	LFB Duplicate RPD	3.596	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	95.700	%	70-130
		Lab Fort Blank Range	3.100	units	
	1,3,5-Trimethylbenzene	Lab Fort Bl. Av. Rec	94.150	%	
		LFB Duplicate RPD	3.292	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	100.000	%	70-130
	4-Chlorotoluene	Lab Fort Blank Range	4.700	units	
		Lab Fort Bl. Av. Rec	97.650	%	
		LFB Duplicate RPD	4.813	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	94.200	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
Dup Lab Fort Bl %Rec	97.600	%	70-130		
	Lab Fort Blank Range	3.400	units		
	Lab Fort Bl. Av. Rec	95.900	%		



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	4-Chlorotoluene	LFB Duplicate RPD	3.545	%	0-25
	Dibromomethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.100	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.000	%	70-130
		Lab Fort Blank Range	3.900	units	
		Lab Fort Bl. Av. Rec	92.050	%	
		LFB Duplicate RPD	4.236	%	0-25
	cis-1,2-Dichloroethylene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	94.400	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	96.800	%	70-130
		Lab Fort Blank Range	2.399	units	
		Lab Fort Bl. Av. Rec	95.600	%	
		LFB Duplicate RPD	2.510	%	0-25
	1,1-Dichloropropene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	99.400	%	70-130
		Lab Fort Blank Range	1.800	units	
		Lab Fort Bl. Av. Rec	98.500	%	
		LFB Duplicate RPD	1.827	%	0-25
	1,2-Dichloropropane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	86.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	90.800	%	70-130
		Lab Fort Blank Range	4.200	units	
		Lab Fort Bl. Av. Rec	88.700	%	
		LFB Duplicate RPD	4.735	%	0-25
	1,3-Dichloropropane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	88.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	93.900	%	70-130



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	1,3-Dichloropropane	Lab Fort Blank Range	5.199	units	
		Lab Fort Bl. Av. Rec	91.300	%	
		LFB Duplicate RPD	5.695	%	0-25
	2,2-Dichloropropane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.200	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	96.400	%	70-130
		Lab Fort Blank Range	0.800	units	
		Lab Fort Bl. Av. Rec	96.800	%	
		LFB Duplicate RPD	0.826	%	0-25
	1,1,1,2-Tetrachloroethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.400	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.020	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	102.400	%	70-130
		Lab Fort Blank Range	5.000	units	
		Lab Fort Bl. Av. Rec	99.900	%	
		LFB Duplicate RPD	5.005	%	0-25
	1,2,3-Trichloropropane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.016	mg/kg dry wt	
		Lab Fort Blk. % Rec.	80.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.016	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	82.400	%	70-130
		Lab Fort Blank Range	1.800	units	
		Lab Fort Bl. Av. Rec	81.500	%	
		LFB Duplicate RPD	2.208	%	0-25
	n-Butylbenzene	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.400	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	97.400	%	70-130
		Lab Fort Blank Range	1.999	units	
		Lab Fort Bl. Av. Rec	96.400	%	
		LFB Duplicate RPD	2.074	%	0-25
	Dichlorodifluoromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.900	%	40-160
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	Dichlorodifluoromethane	Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	94.000	%	40-160
		Lab Fort Blank Range	1.099	units	
		Lab Fort Bl. Av. Rec	93.450	%	
		LFB Duplicate RPD	1.177	%	0-25
	Bromochloromethane	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	95.700	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	97.300	%	70-130
		Lab Fort Blank Range	1.600	units	
	Bromobenzene	Lab Fort Bl. Av. Rec	96.500	%	
		LFB Duplicate RPD	1.658	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	92.400	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
	Carbon Disulfide	Dup Lab Fort Bl %Rec	98.600	%	70-130
Lab Fort Blank Range		6.199	units		
Lab Fort Bl. Av. Rec		95.500	%		
LFB Duplicate RPD		6.492	%	0-25	
Lab Fort Blank Amt.		0.020	mg/kg dry wt		
Lab Fort Blk. Found		0.020	mg/kg dry wt		
Lab Fort Blk. % Rec.		100.600	%	70-130	
2-Hexanone	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	96.700	%	70-130	
	Lab Fort Blank Range	3.899	units		
	Lab Fort Bl. Av. Rec	98.650	%		
	LFB Duplicate RPD	3.953	%	0-25	
	Lab Fort Blank Amt.	0.200	mg/kg dry wt		
Diethyl Ether	Lab Fort Blk. Found	0.171	mg/kg dry wt		
	Lab Fort Blk. % Rec.	85.600	%	70-160	
	Dup Lab Fort Bl Amt.	0.200	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.175	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	87.940	%	70-160	
	Lab Fort Blank Range	2.340	units		
	Lab Fort Bl. Av. Rec	86.770	%		
Diethyl Ether	LFB Duplicate RPD	2.696	%	0-25	
	Lab Fort Blank Amt.	0.020	mg/kg dry wt		
	Lab Fort Blk. Found	0.019	mg/kg dry wt		



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

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: 4/7/2009

Lims Bat #: LIMT-24326

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QC Batch Number: GCMS/VOL-21829

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	Diethyl Ether	Lab Fort Blk. % Rec.	96.900	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.017	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	87.800	%	70-130
		Lab Fort Blank Range	9.100	units	
		Lab Fort Bl. Av. Rec	92.350	%	
	Bromodichloromethane	LFB Duplicate RPD	9.853	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	90.600	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.018	mg/kg dry wt	
	1,2-Dibromo-3-Chloropropane	Dup Lab Fort Bl %Rec	94.700	%	70-130
		Lab Fort Blank Range	4.100	units	
		Lab Fort Bl. Av. Rec	92.650	%	
		LFB Duplicate RPD	4.425	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.016	mg/kg dry wt	
	1,2-Dibromoethane	Lab Fort Blk. % Rec.	82.300	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.016	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	83.900	%	70-130
		Lab Fort Blank Range	1.599	units	
		Lab Fort Bl. Av. Rec	83.100	%	
	Tetrahydrofuran	LFB Duplicate RPD	1.925	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	89.900	%	70-130
		Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt	
	Tetrahydrofuran	Dup Lab Fort Bl %Rec	96.600	%	70-130
		Lab Fort Blank Range	6.699	units	
		Lab Fort Bl. Av. Rec	93.250	%	
		LFB Duplicate RPD	7.184	%	0-25
		Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
Tetrahydrofuran	Lab Fort Blk. % Rec.	95.400	%	70-130	
	Dup Lab Fort Bl Amt.	0.020	mg/kg dry wt		
	Dup Lab Fort Bl. Fnd	0.019	mg/kg dry wt		
	Dup Lab Fort Bl %Rec	96.500	%	70-130	
	Lab Fort Blank Range	1.099	units		
	Lab Fort Bl. Av. Rec	95.950	%		
Tetrahydrofuran	LFB Duplicate RPD	1.146	%	0-25	



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

QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

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QC Batch Number: GCMS/VOL-21829

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93455	Diisopropyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.017	mg/kg dry wt	
		Lab Fort Blk. % Rec.	87.400	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.017	mg/kg dry wt	
		Dup Lab Fort BI %Rec	88.200	%	70-130
		Lab Fort Blank Range	0.799	units	
		Lab Fort BI. Av. Rec	87.800	%	
		LFB Duplicate RPD	0.911	%	0-25
	tert-Butylethyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.018	mg/kg dry wt	
		Lab Fort Blk. % Rec.	93.500	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort BI %Rec	95.400	%	70-130
		Lab Fort Blank Range	1.900	units	
		Lab Fort BI. Av. Rec	94.450	%	
		LFB Duplicate RPD	2.011	%	0-25
	tert-Amylmethyl Ether	Lab Fort Blank Amt.	0.020	mg/kg dry wt	
		Lab Fort Blk. Found	0.019	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.200	%	70-130
		Dup Lab Fort BI Amt.	0.020	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	0.019	mg/kg dry wt	
		Dup Lab Fort BI %Rec	97.600	%	70-130
		Lab Fort Blank Range	0.399	units	
		Lab Fort BI. Av. Rec	97.400	%	
		LFB Duplicate RPD	0.410	%	0-25



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QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

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Method Blanks

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QC Batch Number: HG-9992

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-131399	Mercury	Blank	<0.025	mg/kg dry wt	
LFBLANK-93639	Mercury	Lab Fort Blank Amt.	1.250	mg/kg dry wt	
		Lab Fort Blk. Found	1.432	mg/kg dry wt	
		Lab Fort Blk. % Rec.	114.608	%	72-128
		Dup Lab Fort Bl Amt.	1.250	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	1.507	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	120.622	%	72-128
		Lab Fort Blank Range	6.014	units	
		Lab Fort Bl. Av. Rec	117.615	%	
		LFB Duplicate RPD	5.113	%	



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QC SUMMARY REPORT

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QC Batch Number: ICP-21513

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-131450					
	Silver	Blank	<0.50	mg/kg dry wt	
	Arsenic	Blank	<2.50	mg/kg dry wt	
	Barium	Blank	<5.00	mg/kg dry wt	
	Cadmium	Blank	<0.25	mg/kg dry wt	
	Chromium	Blank	<0.50	mg/kg dry wt	
	Lead	Blank	<0.75	mg/kg dry wt	
	Selenium	Blank	<5.00	mg/kg dry wt	
LFBLANK-93687					
	Silver	Lab Fort Blank Amt.	62.40	mg/kg dry wt	
		Lab Fort Blk. Found	60.84	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.50	%	66-134
		Dup Lab Fort BI Amt.	62.40	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	64.06	mg/kg dry wt	
		Dup Lab Fort BI %Rec	102.66	%	66-134
		Lab Fort Blank Range	5.16	units	
		Lab Fort BI. Av. Rec	100.08	%	
		LFB Duplicate RPD	5.15	%	0-30
		Arsenic	Lab Fort Blank Amt.	123.00	mg/kg dry wt
	Lab Fort Blk. Found		129.21	mg/kg dry wt	
	Lab Fort Blk. % Rec.		105.04	%	83-117
	Dup Lab Fort BI Amt.		123.00	mg/kg dry wt	
	Dup Lab Fort BI. Fnd		135.94	mg/kg dry wt	
	Dup Lab Fort BI %Rec		110.52	%	83-117
	Lab Fort Blank Range		5.47	units	
	Lab Fort BI. Av. Rec		107.78	%	
	LFB Duplicate RPD		5.07	%	0-30
	Barium		Lab Fort Blank Amt.	256.00	mg/kg dry wt
		Lab Fort Blk. Found	273.97	mg/kg dry wt	
		Lab Fort Blk. % Rec.	107.01	%	80-120
		Dup Lab Fort BI Amt.	256.00	mg/kg dry wt	
		Dup Lab Fort BI. Fnd	288.14	mg/kg dry wt	
		Dup Lab Fort BI %Rec	112.55	%	80-120
		Lab Fort Blank Range	5.53	units	
		Lab Fort BI. Av. Rec	109.78	%	
		LFB Duplicate RPD	5.04	%	0-30
		Cadmium	Lab Fort Blank Amt.	258.00	mg/kg dry wt
	Lab Fort Blk. Found		254.65	mg/kg dry wt	
	Lab Fort Blk. % Rec.		98.70	%	84-117
	Dup Lab Fort BI Amt.		258.00	mg/kg dry wt	
	Dup Lab Fort BI. Fnd		253.44	mg/kg dry wt	
	Dup Lab Fort BI %Rec		98.23	%	84-117
	Lab Fort Blank Range		0.46	units	
	Lab Fort BI. Av. Rec		98.46	%	



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QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

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Lims Bat #: LIMIT-24326

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QC Batch Number: ICP-21513

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-93687					
	Cadmium	LFB Duplicate RPD	0.47	%	0-30
	Chromium	Lab Fort Blank Amt.	138.00	mg/kg dry wt	
		Lab Fort Blk. Found	148.77	mg/kg dry wt	
		Lab Fort Blk. % Rec.	107.80	%	82-118
		Dup Lab Fort Bl Amt.	138.00	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	151.07	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	109.47	%	82-118
		Lab Fort Blank Range	1.66	units	
		Lab Fort Bl. Av. Rec	108.63	%	
		LFB Duplicate RPD	1.53	%	0-30
	Lead	Lab Fort Blank Amt.	136.00	mg/kg dry wt	
		Lab Fort Blk. Found	132.99	mg/kg dry wt	
		Lab Fort Blk. % Rec.	97.78	%	81-120
		Dup Lab Fort Bl Amt.	136.00	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	142.09	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	104.47	%	81-120
		Lab Fort Blank Range	6.69	units	
		Lab Fort Bl. Av. Rec	101.13	%	
		LFB Duplicate RPD	6.61	%	0-30
	Selenium	Lab Fort Blank Amt.	199.00	mg/kg dry wt	
		Lab Fort Blk. Found	196.81	mg/kg dry wt	
		Lab Fort Blk. % Rec.	98.89	%	80-120
		Dup Lab Fort Bl Amt.	199.00	mg/kg dry wt	
		Dup Lab Fort Bl. Fnd	200.06	mg/kg dry wt	
		Dup Lab Fort Bl %Rec	100.53	%	80-120
		Lab Fort Blank Range	1.63	units	
		Lab Fort Bl. Av. Rec	99.71	%	
		LFB Duplicate RPD	1.63	%	0-30



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QC SUMMARY REPORT

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

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NOTES:

QC Batch No. : GC/ECD-12254
Sample ID : 09B09660
Analysis : Decachlorobiphenyl

SURROGATE CONCENTRATION BELOW DETECTION LIMIT DUE TO DILUTION REQUIRED
FOR SAMPLE ANALYSIS.

QC Batch No. : GC/ECD-12254
Sample ID : 09B09660
Analysis : Tetrachloro-m-Xylene

SURROGATE CONCENTRATION BELOW DETECTION LIMIT DUE TO DILUTION REQUIRED
FOR SAMPLE ANALYSIS.



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

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

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Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/7/2009

Lims Bat #: LIMT-24326

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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 #: LIMT-24326
Project Location: New Bedford	MADEP RTN ¹ :

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

09B09659- 09B09660

Sample Matrices: Groundwater Soil/Sediment Drinking Water Other: _____

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
C	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 ¹
D	<u>VPH and EPH Methods only:</u> 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 ¹

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

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

¹ 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>Michael Erickson</u>	Position: Assistant Laboratory Director
Printed Name: Michael Erickson	Date: <u>4/2/09</u>

www.contestlabs.com



39 Spruce St.
East Longmeadow, MA.
01028
P: 413-525-2332
F: 413-525-6405

Sample Receipt Checklist

CLIENT NAME: TRC MA RECEIVED BY: KO DATE: 3/28/09

1) Was the chain(s) of custody relinquished and signed? Yes No
2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice Direct from Sampling Ambient In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)? Yes No

Temperature °C by Temp blank 5.0 Temperature °C by Temp gun _____

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any samples "On Hold"? Yes No Stored where:

7) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

8) Location where samples are stored:

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

Containers sent in to Con-Test

		# of containers			# of containers
1 Liter Amber			8 oz clear jar		4
500 mL Amber			4 oz clear jar		
250 mL Amber (8oz amber)		1	2 oz clear jar		
1 Liter Plastic			Other glass jar		
500 mL Plastic			Plastic Bag / Ziploc		
250 mL plastic			Air Cassette		
40 mL Vial - type listed below		6	Brass Sleeves		
Colisure / bacteria bottle			Tubes		
Dissolved Oxygen bottle			Summa Cans		
Flashpoint bottle			Regulators		
Encore			Other		

DI VIALS / ENCORE
FROZEN AT:

Laboratory Comments:

03-28-09 13:39 OUT

40 mL vials: # HCl _____ # Methanol 2
Bisulfate _____ # DI Water 4
Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

Do all samples have the proper pH: Yes No N/A

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

July 16, 2009

TRC Reference Number: 115058.0000

Mayor Scott W. Lang
City Hall, Room 311
133 William Street
New Bedford, MA 02740

RE: Notice of Immediate Response Action Completion Report
New Bedford High School – Impacted Soil at the HB-23 Area, New Bedford,
Massachusetts; MassDEP RTN 4-21847

Dear Mayor Lang:

On behalf of the City of New Bedford, Massachusetts, and pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of an Immediate Response Action Completion Report pertaining to soils containing elevated concentrations of polychlorinated biphenyls (PCBs) at the New Bedford High School in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) by July 20, 2009.

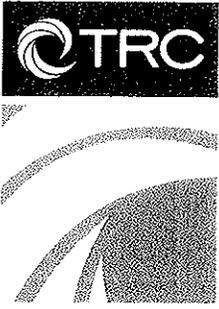
A copy of this document can be obtained from David Fredette in the Department of Environmental Stewardship. If you have any questions concerning this letter please contact me at (978) 656-3565.

Sincerely,
TRC Environmental Corporation

A handwritten signature in black ink 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

July 16, 2009

TRC Reference Number: 115058.0000

Marianne B. De Souza
Health Department
1213 Purchase Street
First Floor
New Bedford, MA 02740

RE: Notice of Immediate Response Action Completion Report
New Bedford High School – Impacted Soil at the HB-23 Area, New Bedford,
Massachusetts; MassDEP RTN 4-21847

Dear Ms. De Souza:

On behalf of the City of New Bedford, Massachusetts, and pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you of the submittal of an Immediate Response Action Completion Report pertaining to soils containing elevated concentrations of polychlorinated biphenyls (PCBs) at the New Bedford High School in New Bedford, Massachusetts. This submittal will be made to the Massachusetts Department of Environmental Protection (MassDEP) by July 20, 2009.

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 that reads "David M. Sullivan". The signature is written in a cursive style with a large, looped initial 'D'.

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 City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23A FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Center point of delineation ring GROUND ELEVATION (Feet, NAVD 88) 89.07
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
0	NA	48/36		S-1		8" Dark brown organic TOPSOIL, trace roots and grass, slightly moist, no odor, no staining.		HB-23A(0-1) 1320	No Monitoring Well Installed
1						6" Dark brown SILT with trace to little fill (coal, slag, glass), slightly moist, no odor, no staining.			
2						22" FILL (ash, coal, slag, and glass), mottled clay (very dense) from 30-34 inches, slightly moist, no odor, no staining.	0.0	HB-23A(1-3) 1325	
4						End of Boring - Terminated at 4 feet			



Wannalancit Mills
 650 Suffolk Street
 Lowell MA
 Telephone: 978-970-5600
 Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23B FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 10 feet West of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.19
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs

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		8" Dark brown organic TOPSOIL, trace roots and grass, slightly moist, no odor, no staining.		HB-23B(0-1) 1310	No Monitoring Well Installed
2						28" FILL (ash, coal, slag and glass), slightly moist, no odor, no staining.	0.0	HB-23B(1-3) 1315 Plus MS/Dup	
3									
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23C FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 10 feet South of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.29
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs

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	48/30		S-1		8" Dark brown organic TOPSOIL, trace roots, grass, and fine gravel, trace glass, slightly moist, no odor, no staining.		HB-23C(0-1) 1340	No Monitoring Well Installed	
2						22" FILL (ash, coal, slag, glass, trace plastic), slightly moist, no odor, no staining.	0.0	HB-23C(1-3) 1345		
4						End of Boring - Terminated at 4 feet				



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23D FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 10 feet East of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.14
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs

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	48/30		S-1		12" Dark brown organic TOPSOIL, trace roots, grass, fine gravel, glass and coal, slightly moist, no odor, no staining.		HB-23D(0-1) 1330	No Monitoring Well Installed
2						18" Tan fine SAND, little silt, trace medium to coarse sand, slightly moist, no odor, no staining (note: no obvious signs of fill at depth, could be close to drain line in area).	0.0	HB-23D(1-3) 1335	
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23E FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 10 feet North of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.06
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs

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	48/32		S-1		18" Dark brown organic TOPSOIL, trace grass, roots, fine gravel, and fill (glass and gray silty material), slightly moist, no odor, no staining.		HB-23E(0-1) 1210	No Monitoring Well Installed
2						14" FILL (ash, coal, slag, glass, trace possible roofing material, trace brick), slightly moist to moist, no odor, no staining.	0.0	HB-23E(1-3) 1215	
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23F FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 20 feet South of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.20
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs (Hold)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/30		S-1		8" Dark brown organic TOPSOIL, trace roots and grass, slightly moist, no odor, no staining.		HB-23F(0-1) 1410	No Monitoring Well Installed
1						22" FILL (ash, coal, slag, glass), slightly moist, no odor, no staining.	0.0	HB-23F(1-3) 1415	
2									
3									
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23G FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 20 feet Southeast of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.27
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig

NOTES Samples analyzed for PCBs (Hold)

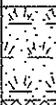
DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
0	NA	48/36		S-1		8" Dark brown organic TOPSOIL, trace roots, grass, and fine gravel.		HB-23G(0-1) 1350	No Monitoring Well Installed
1						2" Gray fine SAND, slightly moist, no odor, no staining.			
2						10" Dark brown SILT and fine SAND matrix with little to some fill (coal, slag, glass, and possible ash), slightly moist, no odor, no staining.	0.0	HB-23G(1-3) 1355	
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23H FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx.y 20 feet Northeast of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 88.77
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs (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	NA	48/30		S-1		8" Dark brown organic TOPSOIL, trace roots, grass, and fine gravel, slightly moist, no odor, no staining.		HB-23H(0-1) 1200	No Monitoring well installed
2						22" FILL (ash, coal, slag, glass, trace rusty coloration), slightly moist to moist, no odor, no staining. (Note: black material at 24-28" has slight creosote odor).	0.0	HB-23H(1-3) 1205	
3									
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)/115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23I FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 20 feet Northwest of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.00
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs (Hold)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/TIME	WELL DIAGRAM
	NA	48/38		S-1		8" Dark brown organic TOPSOIL, trace roots and grass, slightly moist, no odor, no staining.		HB-23I(0-1) 1150	No Monitoring Well Installed
1						8" Dark brown SILT and fine SAND matrix with some fill (glass, coal, and slag).			
2						22" FILL (ash, slag, coal, glass, trace rusty coloration), slightly moist, no odor, no staining.	0.0	HB-23I(1-3) 1155	
4						End of Boring - Terminated at 4 feet			



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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER City of New Bedford (NBHS)115058 SCREEN TYPE/SLOT NA
 BORING/WELL NUMBER HB-23J FILTER PACK TYPE NA
 TRC GEOLOGIST J. Saunders SEAL TYPE NA
 DRILLING CONTRACTOR/FOREMAN New England Geotech/Bill Meadows DEPTH TO WATER (Approximate Feet) NA
 DATE DRILLED 3/10/09 TOTAL DEPTH (Feet) 4
 LOCATION NBHS - Approx. 20 feet West of center point ("A") GROUND ELEVATION (Feet, NAVD 88) 89.57
 SAMPLING METHOD 48" Macrocore REFERENCE ELEVATION (Feet, NAVD 88) NA
 DRILLING METHOD Direct Push/5400 Truck Rig
 NOTES Samples analyzed for PCBs (Hold)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	TRC ID	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
	NA	48/34		S-1		8" Dark brown organic TOPSOIL, trace roots, grass, fine gravel and glass, slightly moist, no odor, no staining.		HB-23J(0-1) 1300	No Monitoring Well Installed
1						12" Tan fine SAND, little silt and medium to coarse sand, trace fine gravel, slightly moist, no odor, no staining.			
2						2" Dark brown SILT, trace roots, slightly moist, no odor, no staining. 12" Tan fine SAND, trace to little medium to coarse sand, trace fine gravel, slightly moist, no odor, no staining.	0.0	HB-23J(1-3) 1305	
4						End of Boring - Terminated at 4 feet			