IMMEDIATE RESPONSE ACTION STATUS REPORT

New Bedford High School Substantial Release Migration / Critical Exposure Pathway
230 Hathaway Boulevard
New Bedford, Massachusetts
Release Tracking Number 4-22409

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Immediate Response Action Status Report

New Bedford High School – Substantial Release Migration / Critical Exposure Pathway

230 Hathaway Boulevard, New Bedford, Massachusetts

Release Tracking Number (RTN) 4-22409

TRC Project Number: 115058

May 29, 2012

TRC Environmental Corporation (TRC) is submitting this Immediate Response Action Status Report (IRA Status Report) to the Massachusetts Department of Environmental Protection (MassDEP) on behalf of the City of New Bedford (City) through the City's Department of Environmental Stewardship and per the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). This IRA Status Report addresses a Condition of Substantial Release Migration (SRM) at the New Bedford High School (NBHS) campus located at 230 Hathaway Boulevard in New Bedford, Massachusetts (the "Site") as defined under 310 CMR 40.0006 of the MCP. The City reported the condition to the MassDEP per 310 CMR 40.0313(5) and 310 CMR 40.0412(2) via telephone with TRC on January 29, 2010 at approximately 11:05 AM. MassDEP verbally approved IRA assessment and mitigation activities at the Site, and assigned Release Tracking Number (RTN) 4-22409. An IRA Plan was submitted by the City to MassDEP on March 22, 2010 (TRC, 2010a). The NBHS Campus is part of the Parker Street Waste Site (PSWS) that is tracked by MassDEP under RTN 4-15685. Response actions at the PSWS are conducted under a Special Project designation (310 CMR 40.0060). The location of the Site is shown on Figure 1.

This IRA Status Report is organized as follows: Section I (Background) briefly summarizes information on TRC's involvement with the Site, the circumstances of the release, and the response actions conducted at the Site under MassDEP verbal approval. Section II (IRA Status Report) provides the contents of an IRA Status Report as set forth under the MCP, specifically 310 CMR 40.0425. Section III (References) lists information sources relied upon in the preparation of this IRA Status Report.

I BACKGROUND

The SRM condition was discovered during investigation of water pooled on the lower floors of the Mechanical Room (Room B-114) of the NBHS building. Several samples of the pooled water, which appeared to be seeping through cracks or seams in the floor, were collected and submitted for laboratory analysis. Analytical results for these samples suggested the potential for chlorinated volatile organic compounds (VOCs) to be present in indoor air in the building, which led to the reporting condition and the initiation of IRA assessment activities.

(a) Release Discovery

A detailed description of the release discovery in the Mechanical Room of the NBHS building is presented in the IRA Plan submitted to MassDEP on March 22, 2010 (TRC, 2010a) and subsequent IRA Status Reports (TRC 2010b, c and TRC 2011b, c) and plan modifications (TRC 2011a) associated with RTN 4-22409. A brief summary is provided herein.

On December 2, 2009, aqueous samples were collected from four locations (BRM-S-1 through BRM-S-3 and FIP-S-1) where water had pooled on the lower floor of the Mechanical Room of the NBHS building (see Figures 2 and 3). The pooled water appeared to have seeped into the Mechanical Room through cracks and seams in the lower concrete floor. The detected concentration of vinyl chloride (VC) in seep sample BRM-S-3 (2.1 micrograms per liter; µg/L) was greater than the MCP Method 1 GW-2 groundwater standard of 2 µg/L (see Table 1).

To verify the detection of VC, additional samples of the pooled water were collected for VOC analysis on January 7, 2010. As indicated in Table 1, chlorinated VOCs were not detected in two out of four samples (BRM-S-1 and BRM-S-2). Chlorinated VOCs were detected in sample BRM-S-3 (chlorobenzene, 1,3-dichlorobenzene [1,3-DCB], 1,4-dichlorobenzene [1,4-DCB], cis-1,2-dichlorobenzene [cis-1,2-DCE], trans-1,2-dichlorobenzene [trans-1,2-DCE], trichloroethylene [TCE] and VC) and FIP-S-1 (cis-1,2-DCE and trans-1,2-DCE).

On January 6 and 7, 2010, groundwater samples were collected from monitoring wells MW-4, MW-5, MW-6, and MW-7 constructed on the NBHS campus in 2008 (see Figure 2). Chlorinated VOCs were detected in groundwater samples from two of the monitoring wells (MW-5 and MW-7). Specifically, cis-1,2-DCE was detected at a concentration of 3.7 µg/L (4.1 µg/L in the duplicate) in monitoring well MW-5, located inside the Boiler Room and adjacent to the Mechanical Room, which is below the MCP Method 1 GW-2 groundwater standard (see Table 2). Also, tetrachloroethylene (PCE; 63 µg/L) and VC (3.4 µg/L) were detected in monitoring well MW-7, located in front (west side) of NBHS near the flagpole. The concentrations of PCE and VC in the sample from MW-7 were above their respective MCP Method 1 GW-2 groundwater standards (see Table 2).

In parallel with the aforementioned investigation activities, the City evaluated building structural features that might influence fate and transport in the groundwater beneath the NBHS building, the results of which have been provided in the aforementioned status reports.

(b) Release Reporting

On January 28, 2010 at approximately 3:30 PM, the City's Department of Environmental Stewardship was advised that the seep and impacted water and the underdrain system represented two potential SRM conditions as defined in 310 CMR 40.0006:

- Releases to the groundwater that have migrated or are expected to migrate more than 200 feet per year; or

- Releases to the groundwater or to the vadose zone that have resulted or are within one year likely to result in the discharge of vapors into school buildings or occupied residential dwellings.

Either of these conditions constitute a 72-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0313(5).

The SRM conditions described above were reported by the City to the MassDEP via telephone with TRC on January 29, 2010 at approximately 11:05 AM. MassDEP verbally approved the IRAs at the Site, and assigned RTN 4-22409.

The MassDEP-approved IRA consisted of the following:

- Monitoring of indoor air locations, including the Mechanical Room, for VOCs with expedited analysis. Recognizing that indoor air in the Mechanical Room may reflect materials stored in this area, MassDEP suggested taking an inventory of chemicals stored at the NBHS building, relocation of indoor chemical sources, and ventilation of the Mechanical Room would be appropriate prior to re-sampling in this area;
- Re-sampling of seeps in the Mechanical Room; and
- Sealing of the floor seep.

(c) Analysis for a Potential Imminent Hazard

An evaluation into whether the VOC concentrations in the seep were associated with a potential Imminent Hazard (IH) Condition was conducted based on fate and transport modeling of seep-water VOC concentrations to indoor air concentrations and subsequent risk and hazard estimation. The potential air concentrations in the Mechanical Room where the seeps were located were mathematically modeled. The potential concentrations of chlorinated VOCs in the air were calculated using the equation in the United States Environmental Protection Agency's (EPA's) *Risk Management Program Guidance for Offsite Consequence Analysis* (EPA, 2009) to calculate evaporation rates of water and VOCs as functions of air velocity over the pooled seep water to estimate the mass balance for all detected compounds. The initial risk evaluation, based on the modeled indoor air concentrations, concluded that an IH condition was not present (see Appendix A of the IRA Plan [TRC 2010a]).

Indoor air data was also collected in the field using a photoionization detector (PID) and TCE- and VC-specific Draeger® tubes, neither of which indicated the presence of measurable VOC impacts in the breathing zone in the Mechanical Room where the seep water was present. The Draeger® Tube field screening activity included TCE tubes, with a measuring range from 2 to 50 parts per million by volume (ppmv) and VC tubes, with a measuring range from 0.5 to 5 ppmv. Twenty-one locations were sampled, including one location several inches above seep BRM-S-3. The lower end of the Draeger® tube ranges is adequate to determine that an IH Condition is not present.

The indoor air results were evaluated by performing site-specific risk and hazard calculations for each room where an indoor air sample had been collected. The updated risk hazard calculations, provided in Appendix D of the IRA Status Report dated May 31, 2011(TRC 2011b), assume a chronic worker exposure scenario (8 hours of exposure per day, 250 days per year for 27 years). The calculations indicated that risks and hazards are at or below the MCP Risk Limits of an Excess Lifetime Cancer Risk (ELCR) of 1E-05 and a Hazard Index (HI) of 1 for each room evaluated. The site-specific risk and hazard calculation protocol is consistent with that conducted for the neighboring Keith Middle School (KMS) for VOCs and polychlorinated biphenyls (PCBs).

The evaluation indicates that, based on the sampling conducted in January, April and August 2010 and April 2011, there is no IH Condition or chronic risk/hazard above MCP risk limits associated with current indoor air exposures. All compounds detected in indoor air were included in the risk and hazard calculations even though some of the detections may be associated with VOC sources unrelated to vapor intrusion.

(d) IRA Activities Performed Prior to this Status Period

Following the reporting of the release condition to MassDEP on Friday, January 29, 2010, the City undertook investigations of indoor air, subslab soil vapors, groundwater, aqueous seeps, storm sewer infrastructure, and sanitary sewer infrastructure to evaluate the SRM and the nature and extent of impacts at NBHS. Sample locations from the investigation are shown on Figure 2.

The results of IRA investigation activities conducted prior to this IRA Status Report are detailed in the following documents:

- *Immediate Response Action Plan – New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* March 2010. (TRC 2010a)
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* May 2010. (TRC 2010b)
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* November 2010. (TRC 2010c)
- *Immediate Response Action Plan Modification – New Bedford High School, 230 Hathaway Boulevard, New Bedford, Massachusetts.* January 2011. (TRC 2011a)
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* May 2011. (TRC 2011b)
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* November 2011. (TRC 2011c)

IRA Plan Modification (January 2011)

The IRA Plan Modification (TRC 2011a) dated January 18, 2011 added to the previously approved IRA activities and potential Critical Exposure Pathway (CEP) mitigation measures the removal of chlorinated VOC-impacted groundwater in the vicinity of MW-27. The specific activities outlined in the IRA Plan Modification included:

- **Extraction -** One or more short-term pumping events (Total Fluid Extraction [TFE]) at monitoring well MW-27R;
- **Containerization -** Containment of extracted groundwater in the vacuum truck;
- **Disposal -** Off-site disposal of extracted groundwater at an appropriate facility; and
- **Groundwater sampling -** Collection of post-extraction groundwater samples in accordance with EPA Region 1 low-flow sampling techniques.

On February 23, 2011, the MassDEP issued an approval of the IRA Plan Modification. A copy of the approval letter was included as Appendix B of the IRA Status Report submitted to MassDEP on May 31, 2011.

Total Fluid Extraction

Based on the October and November 2010 groundwater sampling results, the lateral and vertical extent of VOC impacts in the vicinity of the Mechanical Room became more defined. Because significant concentrations of chlorinated VOCs were not measured in samples collected from any of the surrounding monitoring wells, the mass of chlorinated VOCs was judged to be relatively small. Targeted source-area multi-phase extraction (also known as total fluid extraction, or TFE) was selected to achieve contaminant mass reduction in the short-term.

The IRA Plan Modification dated January 18, 2011 (TRC 2011a) proposed to conduct one or more short-term pumping events at monitoring well MW-27R, extracting both groundwater and soil vapors from this well via TFE using a vacuum truck (see Figures 2 and 3). The original one-inch well installed as MW-27 was replaced on December 28 and 29, 2010 with a four-inch diameter well (MW-27R) to allow for more efficient groundwater extraction. Well MW-27R is located immediately adjacent to former monitoring well MW-27, which was subsequently abandoned in place by sealing with bentonite on March 21, 2011.

A vacuum seal manifold was fabricated by TRC for use with the vacuum truck hose, and four TFE events were conducted between February and April 2011, with a total removal of approximately 1,990 gallons of groundwater. The vacuum truck and operator were provided by Triumvirate Environmental, Incorporated (TEI) of Somerville, Massachusetts and TRC provided oversight during all TFE activities. Laboratory analytical results including grab groundwater, oil and absorbent sock samples collected to date are included in Tables 3, 4 and 5, respectively.

Following the initial TFE event, in addition to vacuum extraction from well MW-27R, a submersible pump was used to pump impacted groundwater from monitoring well MW-32. As described in the IRA Plan Modification, following each pumping event, groundwater samples were collected from monitoring wells in the vicinity of the TFE activities.

A further evaluation of the vacuum extraction events was conducted following the fourth TFE event and receipt of the subsequent groundwater sampling results. The evaluation is described in the IRA Status Report dated November 22, 2011 (TRC 2011c) and a summary is provided herein:

- Post-extraction groundwater concentrations of chlorinated VOCs measured in well MW-27R increased after the first two TFE events (February 25 and March 11, 2011) prior to decreasing over the two subsequent TFE events (April 5 and April 25, 2011).
- TCE concentrations measured in samples collected 3 to 4 days after a TFE event were higher (i.e., by a factor of 3 to 10) compared to groundwater concentrations measured 10 to 20 days after a TFE event.
- TCE concentrations observed in MW-27R shortly after an extraction event (3 to 4 days) are thought to represent an emulsion caused by localized agitation from the high rate of vacuum imposed on the formation around the well, while the results obtained after 10 to 20 days are more likely to be representative of dissolved-phase aquifer conditions. This demonstrates the efficacy of the vacuum extraction mass removal approach.
- Increased chlorinated VOC concentrations were also detected in nearby monitoring well MW-32 following the initial TFE event, rose further following the second extraction event, and then decreased significantly following the subsequent extraction events (see Table 2). Once again, this demonstrates the efficacy of the vacuum extraction mass removal approach.

A fifth TFE event was conducted on July 28, 2011, removing approximately 609 gallons of groundwater. A total of approximately 2,599 gallons of groundwater (approximately 2,154 gallons of which was removed from MW-27R) were removed from the two monitoring wells during the five TFE events.

Consistent with the previous TFE events, a submersible pump was used to pump impacted groundwater from monitoring well MW-32 concurrent with the TFE applied to MW-27R. Upon arrival at the Site, the vacuum truck tank was noted by TRC onsite personnel as containing approximately 30 gallons of oil.

On August 2, 2011, the City was notified by TEI that the waste shipment was not accepted by United Industrial Services of Meriden, Connecticut (United) for disposal. Pursuant to United's Waste Analysis Plan, the delivered material was analyzed to verify that the material matched the pre-shipment waste profile for proper storage, treatment and/or recycling in accordance with the receiving facility's permit criteria. The sample collected by United (S080211-038) from the vacuum truck exhibited total PCB Aroclors at a concentration of 160 parts per million (ppm; see

Table 4). The City notified the MassDEP and EPA Region 1 PCB Coordinator of the rejected shipment via telephone with TRC on August 2, 2011.

The City accepted the rejected vacuum truck load back to the NBHS campus on August 3, 2011. TEI transferred the contents of the vacuum truck into Department of Transportation (DOT) 500-gallon totes and 55-gallon drums. The vacuum truck was decontaminated and the rinse water was also drummed for offsite disposal. Potentially impacted equipment (e.g., vacuum hose) was secured in a cubic yard box for offsite disposal. The totes, drums, and cubic yard box were relocated to the secure City-owned Shawmut Avenue Transfer Station pending offsite disposal. All containers were appropriately labeled/marked as to the waste contents.

The detection of PCBs required the waste material to be classified as PCB Remediation Waste and led to EPA regulation under the Toxic Substance Control Act (TSCA). The containerized contents of vacuum truck, the vacuum truck decontamination fluids and the cubic yard box containing the vacuum truck hose were transported offsite for disposal at the CWM Chemical Services, LLC facility in Model City, New York on August 16, 2011, August 19, 2011 and August 24, 2011, respectively.

Pursuant to the New York Register and Official Compilation of Codes, Rules and Regulations (NYCRR) under Chapter 6 Part 373-2.5(b)(l)(v), on December 13, 2011 the City received a discrepancy notification letter from the receiving facility noting the following:

- One drum of the three required off-site landfill disposal. The drum was noted on a new manifest to reflect the proper waste, handling and management method codes; and
- Select waste codes required adjustment.

A copy of the December 13, 2011 notification letter and the associated corrected manifest are included herein as Appendix A.

On May 2, 2012, the City received manifest correction notification from the receiving facility in association with the August 16, 2011 shipment. The original manifest was adjusted to reflect the proper New York State handling and management method codes. On May 10, 2012, the City received a manifest correction notification from the receiving facility in association with the August 24, 2011 shipment. A waste code and New York handling code were added to the manifest. Copies of the notification letters and associated adjusted manifests are included in Appendix A.

Following the detection of PCBs in the waste shipment by the receiving facility, the City expeditiously evaluated and investigated the source and extent of potential PCB impacts in the vicinity of the Mechanical Room.

Indoor Air Sampling

The presence of TCE in MW-32 is interpreted as potentially being associated with the flow of impacted groundwater through a portion of the underdrain network that runs from the vicinity of

MW-27R near MW-32 (see Figure 4). Monitoring well MW-27R is located adjacent to an upgradient reach of an underdrain line that flows towards the southeast. A branch (lateral) of this same drain network passes near MW-32. Flow in the underdrains potentially occurs during periods of seasonal/weather-related high water table. Based on historical groundwater elevation data for monitoring wells located in the vicinity of the Mechanical Room, the groundwater elevation could be sufficiently high to facilitate flow in the underdrain system during portions of the year (i.e., seasonal high water table).

As described in the IRA Status Report submitted on May 31, 2011 (TRC 2011b), following the detection of VOCs in monitoring well MW-32 on March 8 and March 25, 2011, indoor air samples were collected from selected rooms located along the underdrain line flowing from the vicinity of MW-27R, past MW-32, and discharging to a footing drain near Room B-106 (Storage Room) to help evaluate the potential impact of migration in the underdrain. Additional indoor air samples were collected on April 8, 2011 from the following bottom floor interior locations at NBHS, illustrated on Figure 4:

- Storage Room (B-106) – Sample designation B-106
- Senior Honors Lounge (B-109) – Sample designation B-109 (duplicate analysis performed)
- Can Wash (B-147) – Sample designation B-147

As indicated in Table 6, each of the samples (including the field duplicate) exhibited concentrations of TCE above the MassDEP Commercial Indoor Air Threshold Values[1] (IATV; MassDEP 2010). As previously noted, there is no IH condition or chronic risk/hazard above MCP risk limits associated with current indoor air exposures. No additional VOCs were detected in excess of Commercial IATVs. Based on these data, the potential for some of the VOCs in indoor air to originate from subsurface impacts exists. However, immediate sampling of the rooms did not allow for the inventory and/or relocation of products stored in these areas. Therefore, the potential also exists for VOCs in indoor air to originate from other sources.

A detailed description of IRA-related activities conducted since the submittal of the previous IRA Status Report dated May 31, 2011 (TRC 2011b), including the submittal of an additional IRA Plan Modification (TRC 2012) and the associated activities is provided in Section II below.

[1] The MassDEP has established indoor air threshold values to indicate when additional characterization is appropriate at a site. The screening levels are set at Hazard Quotient (HQ) of 0.2, an excess lifetime cancer risk (ELCR) of 1E-06, a typical indoor air background value, or an analytical detection limit. A site-specific evaluation is recommended in situations where these threshold values are exceeded.

II IMMEDIATE RESPONSE ACTION STATUS REPORT (310 CMR 40.0425)

This IRA Status Report is organized according to the information needs set forth under 310 CMR 40.0425(3)(a) through (e) of the MCP. This section describes activities performed subsequent to activities described in IRA Plan (TRC 2010a), the previous IRA Status Reports (TRC 2010b, TRC 2010c, TRC 2011b and TRC 2011c) and in the IRA Plan Modifications (TRC 2011a and TRC 2012). The status period for this report is from November 29, 2011 through May 15, 2012.

(a) The Status of Assessment and/or Remedial Actions

The detection of chlorinated VOCs in groundwater (MW-27, MW-28 and MW-32), seep water (BRM-S-3 and FIP-S-1), and indoor air (TRC-IA-1) confirms a CEP in the Mechanical Room at NBHS. During this reporting period, the City submitted and commenced implementation of a second IRA Plan Modification and conducted supplemental investigatory sampling. The IRA Plan Modification was submitted to the MassDEP on February 24, 2012 (TRC 2012). Following verbal approval from the MassDEP, the IRA Plan Modification activities completed to date and the results of additional investigation activities are described herein. Laboratory data packages associated with samples discussed in the following sections are included in Appendix B.

The previous MassDEP-approved IRA Plan Modification submitted in January 2011 (TRC 2011a) also outlined potential CEP mitigation measures to be undertaken during the IRA. Those mitigation measures implemented to date (pre- and post-modification) are described in the IRA Plan (TRC 2010a), the previous IRA Status Reports (TRC 2010b, 2010c, 2011b and 2011c) and in the IRA Plan Modification (TRC 2011a). Evaluation and implementation of select mitigation measures (e.g., seep mitigation) are ongoing; however additional seep mitigation measures were not implemented during this reporting period. The previous application of the Contite® penetrating mortar by Hydra Concrete Waterproofing of Holliston, Massachusetts (Hydra) was successful in eliminating seepage throughout a large portion of the Mechanical Room and additional crack sealing activities have not been implemented to date. However, limited seeps historically present on the south side of the Chiller Deck in the vicinity of the access door to the Boiler Room (C-101) and within the former incinerator pit will continue to be monitored by City personnel as described herein.

2012 IRA Plan Modification

The IRA Plan Modification (TRC 2012) dated February 24, 2012 added to the previously approved IRA activities and potential CEP mitigation measures. Additional activities to further investigate and control migration of chlorinated VOC-impacts in the vicinity of MW-27 described in the IRA Plan Modification included:

- **Migration Control** – Installation, operation and maintenance of a hydraulic control system in the vicinity of MW-27R within the NBHS Mechanical Room; and

- **Impact Investigation –** Additional investigation of soil, groundwater and non-aqueous phase liquid (NAPL) impacts in the Mechanical Room area using a Membrane Interface Probe System (MIPS).

On March 15, 2012, in advance of starting the hydraulic control system and initiating the MIPS investigation, the MassDEP provided verbal approval of the IRA Plan Modification. A summary of IRA Plan Modification activities completed to date is provided herein.

Hydraulic Control System

The purpose of the hydraulic control system that has been installed is to mitigate the potential for impacted groundwater in the vicinity of 4-inch recovery well MW-27R to enter into the underdrain system that was installed beneath the building during construction of the NBHS (see Figure 4). This system is a temporary remedy, designed to control migration of impacted groundwater during periods of high groundwater. Laboratory analysis of the groundwater near MW-27R detected a mix of organic chemical constituents including petroleum, PCBs, and chlorinated VOCs. The system is designed to pump groundwater to maintain a groundwater elevation below the invert of the underdrain system beneath the floor of the Mechanical Room, treat impacted groundwater, then discharge the treated water to the municipal sewer system in accordance with a discharge permit that was obtained from the City's Department of Public Infrastructure (DPI). A copy of this discharge permit is included as Appendix C.

Hydraulic Control System Installation

Following review of the available subsurface utility information and de-energizing of the appropriate portions of the Mechanical Room electrical system, installation of the hydraulic control system was initiated on February 14, 2012. GTS Environmental Technology, Incorporated of Hudson, New Hampshire (GTS) was engaged to design and construct the hydraulic control system as described in the IRA Plan Modification (TRC 2012). The remediation system process and instrumentation diagram is provided as Figure 5.

Groundwater is pumped from the MW-27R recovery well using a submersible pump to two 500-gallon capacity accumulation/settling tanks. These tanks provide separation/removal of particulates and non-aqueous phase liquids and allow break-up of any oil emulsions. Recovered groundwater is then pumped through two bag filters. Bag Filter No. 1 is equipped with an oil absorbing 25-micron filter bag to remove oil and provide filtration of coarse particulates. Bag Filter No. 2 is equipped with a 1-micron filter to remove fine particulates. The second filter discharges to an organo-clay vessel with 300 pounds of mixed anthracite clay and granular activated carbon. The organo-clay filter media provides for the removal of oil emulsions that may remain following settling and bag filtration. The organo-clay vessel is followed by two carbon vessels, each with 300 pounds of granular activated carbon.

The IRA Plan Modification had specified that the organo-clay vessel and carbon vessels would be sized at 240 pounds and 200 pounds, respectively. The larger units were selected because they were judged to be more cost-effective.

Treated groundwater is discharged to the City's sanitary sewer system via a floor drain located in the former incinerator pit in accordance with the Industrial Discharge Permit (#S-123) obtained by TRC from the City's DPI.

The hydraulic control system equipment is installed in the former incinerator pit inside the Mechanical Room and adjacent to the recovery well. Recovery well MW-27R has a maximum yield in the range of approximately one to two gallons per minute (gpm); however, the hydraulic control system is designed to accommodate as much as 10 gpm. The design flow rate for the system is based on hydraulic calculations by TRC (see Appendix A of the IRA Plan Modification [TRC 2012]) and would accommodate the installation of a second (contingency) recovery well if needed.

Sub-slab vapors in the vicinity of recovery well MW-27R are also collected to prevent migration of impacted vapors to the dewatered underdrain system. A vacuum blower is used to extract vapor from MW-27R through the exposed (i.e., above the water table) screen interval of the well. The extracted vapors then pass through two 200-pound (lb) vapor phase carbon vessels installed immediately downstream of the blower to remove organic contaminants from the exhaust stream. The IRA Plan Modification had specified a single carbon canister; a second canister was added to improve the system's effectiveness. The treated vapors are then discharged to an existing exhaust stack that previously served the former incinerator. The vapor collection and treatment configuration is depicted on the same process and instrumentation diagram as the hydraulic control system, Figure 5.

At the request of MassDEP, a passive vent that initially extended from the settling tanks to the stack was rerouted to pass through the blower and the carbon vessels prior to discharge to the stack (see Figure 5 for the current configuration).

The combined hydraulic control and localized venting system was charged and leak tested during the week of March 12, 2012. System operation was initiated on March 19, 2012.

Routine System Inspections

Routine hydraulic control system inspections were performed weekly during the first month of operation, and then decreased to a biweekly basis, which, as of the date of this IRA Status Report, is the current inspection frequency. Routine system inspections were performed on the following dates:

- After Day 1 - March 20, 2012
- Week 1 - March 27, 2012
- Week 2 - April 3-4, 2012
- Week 3 - April 10, 2012
- Week 4 - April 17, 2012
- Week 6 - May 1, 2012
- Week 8 - May 14, 2012

Pursuant to 310 CMR 40.0041(9) of the MCP, a Grade 2 certified treatment plant operator has performed and will continue to perform the system inspections, a minimum of once a month, for the first three months following commencement of discharge. The certified operator performed the Week 4 and Week 8 system inspections noted above. Additional inspections were performed by qualified TRC personnel. MassDEP performed a system inspection on March 27, one week after system startup.

A routine inspection of the hydraulic control system includes a set of maintenance procedures, system measurements, and collection of aqueous and vapor samples. System operation and maintenance logs are included as Appendix D. The maintenance procedures include the following:

- Check holding tanks for turbidity and liquid level
- Check air filter
- Check fault controls
- Check bag filters

System operating data includes the items listed below. Refer to Figure 5 for the locations of sample ports (SP), pressure gauges (PG), valves (V), and vapor sample ports (VSP):

- Flow totalizer
- Temperature
- Valve positions (PG-1, PG-3, V-2, V-5)
- Pressure, PSI (PG-1, PG-3, PG-4, PG-5, PG-6, PG-7, PG-8)
- Turbidity of water in system (SP-1, SP-2, SP-4, SP-5, SP-6, SP-7)
- Vapor concentrations measured with PID (SP-1, SP-2, SP-4, SP-5, SP-6, SP-7, VSP-1, VSP-2, VSP-3, VSP-4, VSP-5)
- Vacuum in vapor system, inches of water (VSP-4, VSP-5, VG-1, VG-2, PG-9)
- Gauge depth to water in selected wells (including MW-27R, MW-27D, MW-31, MW-28, MW-32)

Influent, in-line, and effluent samples are collected during routine system inspection of the hydraulic control system. Influent and effluent water samples were collected following the first day of system operation (March 20, 2012) and in conjunction with weekly system inspections for the first month and monthly system inspections thereafter. In addition, pre-carbon vessel and intra-carbon vessel samples have been collected in conjunction with selected system inspections. A summary of the aqueous sampling results is provided in Section II(b) below

Emission samples were collected in conjunction with inspection of the vapor collection system during the system inspections conducted Week 1, Week 2 and Week 4. After the first month of operation, vapor samples are collected monthly and vapor screening (with a PID) is performed biweekly. Additional in-line vapor samples have been collected from the vapor inlet (Week 1

and Week 4), tank vent (Week 1) and mid-carbon vessel sample port (Week 1). A summary of the emission monitoring results is provided in Section II(b) below.

In accordance with 310 CMR 40.0425(6) and 310 CMR 40.0027, a Remedial Monitoring Report (RMR) will be submitted concurrently with this IRA Status Report via eDEP.

Non-Routine System Maintenance

An auto-dialer was installed to provide remote notification to the system operator of unexpected system shutdowns. Response to unexpected system shutdowns may result in non-routine system maintenance events. Such events occurring during the first two months of operation are described further below and in the RMR submitted via eDEP.

(b) New Site Information and Data

Supplemental investigation activities completed under the IRA during this reporting period included: additional aqueous seep sampling, additional groundwater sampling in association with the commencement of hydraulic control system activities, supplemental well gauging activities, hydraulic control system effluent monitoring, subslab vapor mitigation monitoring and MIPS investigation to further evaluate the extents of impacts beneath the Mechanical Room.

Supplemental Seep Sampling

As described in the IRA Status Report dated May 31, 2011 (TRC 2011b), Hydra was contracted to seal cracks throughout the Mechanical Room using Contite® Crystalline Technology between December 2010 and April 2011.

Seep mitigation crack sealing was initiated by Hydra during the NBHS school vacation week on December 28 through 30, 2010. TRC provided oversight throughout the seep mitigation activities. Based on an inspection by TRC on April 25, 2011, the application of the Contite® penetrating mortar was successful in reducing the amount of seepage from the cracks in the Mechanical Room. However, seepage was not completely mitigated in select areas. Limited seeps were present on the south side of the Chiller Deck in the vicinity of the access door to the Boiler Room (C-101), on the northeast side of the Chiller Deck near the base of the ramp, and within the former incinerator pit. The seasonally elevated water table and associated increased hydraulic head is likely contributing to the persistence of the seepage, particularly in the former incinerator pit.

Following the April 2011 inspection and given the seasonally low water table and associated decreased hydraulic head, no additional investigation and/or crack sealing activities were implemented between April 2011 and February 2012. However, the presence/absence of limited seeps historically visible on the south side of the Chiller Deck in the vicinity of the access door to the Boiler Room (C-101), on the northeast side of the Chiller Deck near the base of the ramp, and within the former incinerator pit were monitored by City personnel during this time period.

In February 2012, limited seeps were found to be present within the Mechanical Room. On February 27, 2012, aqueous seep samples were collected from the two areas within the Mechanical Room where seepage was occurring. The seep sample locations ("West Seep" and "East Seep") correspond to previous seep sample locations BRM-S-2 and BRM-S-3, respectively (see Figure 3). The aqueous samples were analyzed for VOCs (SW-846 Method 8260B) by Alpha Analytical Laboratories of Westborough, Massachusetts (Alpha).

As indicated in Table 1, no VOCs were detected in either of the aqueous seep samples collected in February 2012 and there are no data quality issues with the VOC data. However, upon review by TRC's Senior Quality Control Chemist, a potential data usability concern was noted with the "EAST SEEP" sample. The sample was analyzed at a 10-fold dilution and as result the detection limit for vinyl chloride was above the MCP Method 1 GW-2 groundwater standard[2]. In association with the required dilution factor, the laboratory noted the sample as exhibiting foaminess upon analysis[3].

Following review of the analytical results, the City was prepared to collect an additional aqueous seep sample in March 2012 in order to try to achieve a lower laboratory detection limit. However, no aqueous seeps were present within the Mechanical Room following the February 2012 sampling and therefore no additional samples have been collected to date. The locations of previous seeps will continue to be monitored by City personnel.

Pre-System Startup Groundwater Sampling

On February 27, 2012 groundwater samples were collected from monitoring wells in the vicinity of MW-27R to establish baseline conditions prior to the commencement of active hydraulic control system operation and maintenance. A total of six monitoring wells (MW-5, MW-5D, MW-27D, MW-27R, MW-28 and MW-32) were sampled in accordance with EPA Region 1 low-flow sampling techniques. The wells locations are illustrated on Figures 2 and 3. Groundwater sampling logs associated with the sampling event are provided in Appendix E. The groundwater samples were submitted to Alpha for analysis of VOCs (SW-846 Method 8260B) and Pace analytical of Schenectady, New York (Pace) for analysis of PCB Aroclors (SW-846 Method 8082). The results of these analyses are summarized in Table 2.

Consistent with previous analytical results, no VOCs were detected in excess of MCP Method 1 GW-2 groundwater standards in monitoring well MW-5. No VOCs were detected in excess of the MCP Method 1 GW-2 groundwater standards in monitoring well MW-5D following the detection of TCE (31 µg/L) in August 2011. Chlorinated compounds were detected in MW-27D (including duplicate analysis), MW-27R, MW-28 and MW-32 in excess of MCP Method 1 GW-

[2] There were additional detection limits above the associated MCP Method 1 GW-2 groundwater standards in aqueous seep sample "EAST SEEP"; however these limits were not associated with chemicals of concern based on the results of previous samples collected in the vicinity of the Mechanical Room.

[3] Foaming exhibited during laboratory VOC analysis of a liquid matrix can be associated with the presence of surfactants and is primarily handled by laboratories through the use of dilution or anti-foaming agents. In this case, the laboratory applied a 10-fold dilution to the sample.

2 groundwater standards. The compounds and concentrations of VOCs detected in these monitoring wells were generally consistent with previous sampling events.

PCB Aroclors were detected in the six (6) monitoring wells (including the duplicate analysis) sampled on February 27, 2012 at concentrations ranging from 0.0283 µg/L (MW-5D) to 24.5 µg/L (MW-27R). Groundwater samples from MW-27R (including duplicate analysis) and MW-28 exhibited Total PCB Aroclor concentrations in excess of the MCP Method 1 GW-2 groundwater standard (see Table 2). The absence of significant concentrations of PCBs measured in samples collected from the monitoring wells surrounding MW-27R indicated that the extent of the PCB impacts prior to operation of the hydraulic control system were relatively limited and likely co-located with the chlorinated VOC impacts.

Post-System Startup Groundwater Sampling

Groundwater samples were collected following commencement of the hydraulic control system operation on April 10 and 11, 2012 (i.e., during Week 3 of system operation). The groundwater samples were collected from monitoring wells in the vicinity of MW-27R to evaluate the lateral and vertical extents of groundwater VOC and PCB impacts following initiation of groundwater and subslab vapor extraction. A total of eight monitoring wells (MW-5, MW-5D, MW-18, MW-27D, MW-28, MW-29, MW-31, MW-32 and MW-33) were sampled in accordance with EPA Region 1 low-flow sampling techniques. Monitoring well MW-27R was not sampled due to active pumping of the well during sample collection. The monitoring well locations are illustrated on Figures 2 and 3. Groundwater sampling logs associated with the sampling event are provided in Appendix E.

The groundwater samples were submitted to Alpha for analysis of VOCs (SW-846 Method 8260B) and Pace for analysis of PCB Aroclors (SW-846 Method 8082). The results of these analyses are summarized in Table 2. It should be noted that one of the sample bottles (MW-31) broke during shipment to the laboratory. The City was notified of the breakage and a replacement sample was collected on April 18, 2012.

Consistent with previous analytical results, no VOCs were detected in excess of MCP Method 1 GW-2 groundwater standards in monitoring well MW-5, MW-18, MW-29, MW-31 and MW-33. Consistent with the previous sampling event, monitoring well MW-5D, which exhibited a concentration of TCE (31 µg/L) in August 2011, did not exhibit any concentrations of VOCs in excess of the MCP Method 1 GW-2 groundwater standard. In addition, for the first time since April 2011 and likely as a result of active groundwater extraction, no chlorinated compounds were detected in monitoring well MW-27D (including the duplicate analysis) in excess of the MCP Method 1 GW-2 groundwater standards.

Monitoring wells MW-28 and MW-32 continued to exhibited concentrations of chlorinated VOCs in excess of the MCP Method 1 GW-2 groundwater standards. The concentrations of cis-1,2-DCE, trans-1,2-DCE, TCE and VC in monitoring well MW-28 are generally exhibiting a upward trend. However, the detected concentrations of VOCs in MW-32 have generally exhibited a decreasing trend since March 2011. For example, historically present cis-1,2-DCE

was below the MCP Method 1 GW-2 groundwater standard in February 2012 and non-detect in April 2012 (see Table 2).

No PCB Aroclors were detected in monitoring well MW-5D or MW-18. The detected concentrations of PCB Aroclors in the other six monitoring wells sampled in April 2012 ranged from 0.0470 µg/L (MW-33) to 15.02 µg/L (MW-28). The groundwater sample from MW-28 exhibited total PCB Aroclors in excess of the MCP Method 1 GW-2 groundwater standard (see Table 2). The absence of significant concentrations of PCBs measured in samples collected from monitoring wells surrounding MW-27R continues to indicate that the extent of the PCB impact is relatively limited and likely co-located with the chlorinated VOC impacts.

The City is currently evaluating remedial approach alternatives, including further investigation of the lateral and vertical extents of subsurface impacts in the vicinity of the Mechanical Room and a permanent remedy that meets both MassDEP and EPA remedial goals under the MCP and TSCA. Additional investigatory activities and a determination of the remedial approach will be discussed in future regulatory submittals, including additional IRA Status Reports and/or an IRA Plan Modification.

Supplemental Groundwater Elevation Gauging

Prior to February 2012, six synoptic well gauging events were performed at the NBHS campus on February 17, 2010, April 7, 2010, May 17, 2010, September 7, 2010, January 20, 2011 and June 24, 2011. Consistent with historical well gauging data, the groundwater was observed to generally flow from north to south across the NBHS campus. However, localized groundwater mounding has been observed in the vicinity of B-Block, immediately north of the Mechanical Room and, at a minimum, a seasonal high groundwater elevation was observed during the April 2010 gauging event. In addition, the extensive underdrain system beneath the NBHS building appears to divert groundwater to the storm sewer during high water events, and appears to influence the contour of the water table.

An additional synoptic well gauging event was conducted at the NBHS campus on February 27, 2012. Groundwater elevation data, including the previous synoptic well gauging events, are provided in Table 9. A revised interpreted groundwater contour map is presented as Figure 6. The groundwater contour map depicts a decrease in the groundwater elevation throughout the NBHS campus when compared to the June 24, 2011 gauging event. Groundwater flow continues to generally trend from north to south across the NBHS campus, while shifting to a more southwesterly direction in the southern portion of the campus.

As discussed in Section II(a) above, following initiation of groundwater extraction activities, localized drawdown has been observed within the Mechanical Room within the vicinity of MW-27R. Additional synoptic well gauging events (as needed) will be discussed in future regulatory submittals.

Influent & Effluent Monitoring Results

Hydraulic control system influent (SP-1) and effluent (SP-7) samples were collected following the first day of system operation (March 20, 2012), in conjunction with weekly system inspections for the first month, and during monthly system inspections thereafter. Selected samples were also collected from sample ports SP-2, SP-3, SP-5 and SP-6. The hydraulic control system monitoring samples were submitted to Alpha for analysis of VOCs (SW-846 Method 8260B) and to Pace for analysis of PCBs (SW-846 Method 8082). Analytical results available as of the submittal of this IRA Status Report (through Week 4) are included in Table 7. Additional monitoring results will be included in a future regulatory submittal.

Influent samples collected through Week 4 of system operation have exhibited concentrations of VOCs (1,4-DCE, cis-1,2-DCE, ethylbenzene, styrene, trans-1,2-DCE, TCE, 1,2,4-trichlorobenzene and/or VC) throughout operation of the system. Concentrations of cis-1,2-DCE (ranging from 1,600 to 3,300 µg/L), TCE (ranging from 3,200 to 19,000 µg/L), trans-1,2-DCE (ranging from 400 to 1,100 µg/L) and VC (ranging from 320 to 550 µg/L) were detected in the influent during each of the sampling events. PCBs have been detected in the influent samples at concentrations ranging from 178 to 5,120 µg/L.

VOCs have also been detected in both the post-bag filter (cis-1,2-DCE, trans-1,2-DCE, TCE and VC) and intra-carbon vessel (tetrahydrofuran; THF) samples. PCBs have also been detected in the pre-bag filter (278 µg/L), post-bag filter (165 µg/L) and pre-carbon vessel (ranging from 0.424 to 2.80 µg/L) samples. All of these concentrations correspond to samples collected prior to carbon treatment.

To date, effluent samples have only exhibited detectable concentrations of acetone, 2-butanone, and THF. Acetone and 2-butanone are common laboratory contaminants. The presence of THF is likely a result of the construction of the treatment system, as THF is a typical component present in adhesives commonly used to join polyvinyl chloride (PVC) piping.

Emissions Monitoring Results

Venting system emission samples were collected in conjunction with the Week 1, Week 2 and Week 4 system inspections. During some of the sample events, additional samples were also collected from in-line venting system locations including the vapor inlet (Week 1 and Week 4), tank vent (Week 1), and mid-carbon vessel sample port (Week 1). Venting system monitoring samples were submitted to Alpha for analysis of VOCs (Method TO-15) and Pace for analysis of PCBs (Method TO-10A/8082). Analytical results available as of submittal of this IRA Status Report (through Week 4) are included in Table 8. Additional monitoring results will be included in a future regulatory submittal.

A biweekly screening of venting system emissions was performed on May 1, 2012 using a PID. No volatile emissions were detected in this screening event. Considering the total emission concentrations summarized in Table 8 (less than 0.2 mg/m^3, or less than 0.1 ppmv) and the

sensitivity of the PID (about 1 ppmv), TRC does not anticipate VOC detections via PID in future biweekly screening events.

Benzene (1.50 µg/m^3), TCE (62.3 µg/m^3), VC (6.29 µg/m^3) and total PCBs (0.599 µg/m^3) have all been detected in vapor inlet samples above MassDEP Allowable Ambient Limits (AALs). Benzene and/or VC were also detected in the tank vent and mid-carbon vessel sample port in excess of MassDEP AALs.

Vinyl chloride has been detected in the vapor discharge samples in excess of MassDEP AALs at concentrations ranging from 1.31 to 6.39 µg/m^3. Benzene was detected at 0.655 micrograms per cubic meter (µg/m^3) [above the associated MassDEP AAL] in the batch quality control laboratory duplicate[4] analysis performed on the vapor discharge sample collected on April 4, 2012 (see Table 8) and was also detected above the AAL in the March 27, 2012 emission sample. Chloroform and TCE were detected at concentrations above AALs in the emission sample collected on March 27, 2012; however, these analytes have not been detected in subsequent emission samples. No additional VOCs or PCBs were detected in vapor discharge samples in excess of associated MassDEP AALs.

In response to multiple detections of VC and benzene at concentrations exceeding AALs in vapor emission samples, TRC conducted air dispersion modeling for the emissions. Different models were employed to evaluate exposures to the NBHS air intake vent and exterior playground and parking areas (both shown in a figure provided in Appendix F):

- **NBHS Air Intake Vent** - The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Incorporated (ASHRAE) analysis was used to find the dilution of the exhaust at the location of the air intake vent located on the east side of C-Block. Due to the intake vent being on the same building as the stack itself, the ASHRAE analysis was used since it takes into account the specific location from the stack to the vent along with the unique air flow around a small stretch of building.

- **Playground & Parking Lot Areas** - An AERSCREEN was used to model the playground and parking lot area. The AERSCREEN is an EPA approved screening level air quality model based on AERMOD that creates its own meteorological wind field rather than requiring station observations from a nearby airport or monitoring location (EPA, 2004). Due to the unique shape of the NBHS building, the structure was approximated using Geographic Information System (GIS) software and input into the AERSCREEN model to provide a reasonable representation of the stack and NBHS building sizes and relative locations.

The air dispersion modeling results indicate that the concentrations of VC and benzene at the NBHS building air intake, playground and parking lot area potential receptors are significantly below the associated MassDEP AAL for vinyl chloride and benzene. The approximate receptor locations, input values and resulting modeled concentrations are presented herein as Appendix F.

[4] The batch quality control duplicate analysis is a duplicate analysis of vapors from the same sample container.

Hydraulic Control and Venting System Operation and Maintenance Summary

In addition to effluent and vapor sample results, summarized above, system inspection logs (see Appendix D) provided the following information:

- The flow meter recorded 33,525 gallons treated and discharged during the first 8 weeks of operation. The flow rate during this period dropped from an average of 1.25 gallons per minute for the first day to 0.42 average over the 8-week period. The reduction in flow rate is attributable to a seasonal lowering of the water table and a period of time in early May 2012 when the pump was operating intermittently.
- The flow rate of the venting system was measured on April 17, 2012 to be 5,600 to 5,650 feet per minute, which equates to 110 cubic feet per minute (cfm).
- The hydraulic control system experienced some down time on or about May 1, 2012, when the pump ceased operating due to excess siltation. Much of the silt was removed, but the pump operated intermittently for the next several days until it was replaced by an above-ground centrifugal pump. The reduced flow during this period is estimated to be equivalent to 4 or 5 days of unscheduled down time.
- System operating temperature ranged from 70 °F to 77 °F.
- Pump influence (shown on the March 20, 2012 inspection report) was measured in all of the monitoring wells located within the Mechanical Room, some of them located over 30 feet from MW-27R.
- Vacuum influence (shown on the March 20, 2012 inspection report) was measured in all of the monitoring wells located within the Mechanical Room, some of them located over 30 feet from MW-27R.
- Breakthrough was not detected in liquid or vapor phase samples collected from mid-carbon sample ports. Therefore, carbon change out is not required at this time for either of the carbon treatment systems.

Mechanical Room Soil Investigation

The NBHS Mechanical Room soil investigation was conducted between April 17 and 20, 2012 (during school vacation week). The investigation was performed using MIPS and macro-core sampling techniques to assess the nature and extent of subsurface impacts in the vicinity of recovery well MW-27R in order to provide information to evaluate potential remedial options.

Drilling services were provided by ARS Technologies, Inc. of New Brunswick, New Jersey; the MIPS equipment was operated by Stone Environmental Inc. of Montpelier, Vermont. A Geoprobe® model 540M drill rig was utilized to advance a total of 21 borings in the Mechanical Room area (see Figure 7). The initial boring locations were determined by overlaying a 2.5-foot sample grid throughout the target investigation area around well MW-27R, with some locations adjusted slightly due to underground utilities and/or other logistical constraints. "Step-out" borings were advanced off of the locations that exhibited signs of impacts based on MIPS data or PID headspace screening results (at macro-core locations). In addition, soil samples were collected for off-site laboratory analysis from one of the boring locations that was sampled using

both the MIPS and macro-cores (MIP-S-3/MIP-B-S-3) to provide a correlation between MIPS data and laboratory data. Select air ducts in the room were temporarily removed prior to drilling to provide additional overhead clearance for the Geoprobe® rig where required.

MIPS equipment used during the investigation consisted of a Geoprobe® model MP6520 probe, MP6505 controller and FI6000 field instrument, and a Hewlett Packard 5890 series II gas chromatogram. The MIPS equipment was used to continuously monitor subsurface soil for electrical conductivity, VOC levels (via a PID and a flame ionization detector [FID]), and electron-absorbing components (chlorinated compounds). MIPS field data was recorded from immediately below the concrete floor to the target depth (generally 12 feet below grade) at 13 locations (MIP-NW-1, MIP-NNW-1, MIP-N-1, MIP-NNE-1, MIP-NE-1, MIP-WNW-1, MIP-W-3, MIP-W-2, MIP-W-1, MIP-SSW-1, MIP-S-1, MIP-S-2, and MIP-S-3). Eight additional boring locations were completed using standard Geoprobe® macro-core sampling techniques (B-E-1, B-N-1, B-NE-1, B-NW-1, B-SE-1, B-SSE-1, MIP-B-S-3, and MIP-B-W-1), with soil samples logged continuously in two-foot intervals, field screening conducted using a PID per the MassDEP jar headspace procedure, and soil samples collected for off-site laboratory analysis.

Soil samples obtained during the investigation were submitted to Alpha for analysis of VOCs, total petroleum hydrocarbons (TPH), PCBs and/or total organic carbon. Further, additional soil samples were collected from the borings that exhibited the most evidence of impacts for subsequent use in a bench scale study to evaluate potential remedial options for the MW-27R area. Laboratory analytical results are summarized in Table 10; copies of the laboratory reports are included in Appendix B. Boring locations from the Mechanical Room investigation are shown on Figure 7. MIPS field data, and boring logs for the macro-core borings are presented in Appendix G.

Based on the results obtained from the Mechanical Room investigation, it appears impacted soil in the vicinity of MW-27R is limited to a relatively small area beneath the floor of the Mechanical Room. Preliminary interpretation of the MIPS data indicates that extent of contamination has been defined to the north, east, and west of MW-27R, with some uncertainty remaining to the south (toward MW-28). TRC's evaluation of the MIPS results is ongoing and will be supplemented by standard Geoprobe® investigation. Additional soil sampling activities in the Mechanical Room area are expected to take approximately one day and can be completed using Geoprobe® macro-core sampling techniques.

(c) Plans for the Management of Investigation or Remediation Waste

Prior to submittal of the initial IRA Plan Modification on January 18, 2011, activities had been limited to assessment and CEP mitigation measures at the NBHS campus. These activities generated a limited amount of investigation-derived wastes which were described in previous IRA Status Reports.

Pursuant to the NYCRR, on December 13, 2011 the City received discrepancy notification letter from the receiving facility noting the following in regard to the shipment on August 19, 2011:

- One drum of the three required offsite landfill disposal. The drum was noted on a new manifest to reflect the proper waste, handling and management method codes; and
- Select waste codes required adjustment.

A copy of the December 13, 2011 notification letter and the associated corrected manifest are included as Appendix A.

On May 2, 2012, the City received a manifest correction notification from the receiving facility in association with the August 16, 2011 shipment. The original manifest was adjusted to reflect the proper New York State handling and management method codes. On May 10, 2012, the City received a manifest correction notification from the receiving facility in association with the August 24, 2011 shipment. A waste code and New York handling code were added to the manifest. Copies of the notification letters and associated adjusted manifests are included in Appendix A.

No additional TFE events are anticipated as of the submittal of the IRA Status Report dated November 22, 2011 (TRC 2011c).

Groundwater extracted and treated under the IRA Plan Modification dated February 24, 2012 is discharged from the hydraulic control system to the City's sanitary sewer system via a floor drain located in the former incinerator pit. The remedial wastewater has been managed in a manner consistent with 310 CMR 40.0041, General Provisions for the Management of Remedial Wastewater and/or Remedial Additives; 310 CMR 40.0043: Remedial Wastewater Discharges to Publicly Owned Treatment Works (POTW); and 310 CMR 40.0047, Reporting Requirements for Discharges of Remedial Wastewater and Remedial Additives. Discharge to the sanitary sewer system is conducted in accordance with the Industrial Discharge Permit (#S-123) obtained by TRC from the City's DPI. A copy of the permit is included as Appendix C.

Other waste products generated by the hydraulic control system include spent bag filters, spent carbon, spent organo-clay, and sediments accumulated in the settling tanks. Bag filters have been replaced several times since system startup. Spent bag filters have been maintained in an overpack drum for eventual off-site disposal. Carbon and organo-clay will be removed from the Site for appropriate off-site disposal when the effluent or in-line samples indicate that the adsorbent in one or more of the canisters is spent or when the system operation is discontinued. Sediment collected in the settling tanks will be removed from the Site for off-site disposal at a future time when the system operation is discontinued.

Other waste products generated by the venting system include spent vapor-phase carbon. The spent carbon will be removed from the Site for appropriate off-site disposal when the emissions or in-line samples indicate that the adsorbent in one or more of the canisters is spent or when the system operation is discontinued.

No other remediation waste has been generated or managed to date during IRA related activities. Descriptions of any additional investigation-derived and/or remediation wastes generated under this IRA will be included in a future regulatory submittal.

(d) MassDEP-Required Information

Based on the sampling conducted in January, April and August 2010 and April 2011, there is no IH Condition or chronic risk/hazard above MCP risk limits associated with current indoor air exposures.

An IH screening evaluation was performed and submitted with the IRA Plan and an updated version was included in the previous IRA Status Reports submitted to MassDEP on May 24, 2010 (TRC, 2010b) and November 29, 2010 (TRC, 2010c). A further update was provided in the IRA Status Report dated May 31, 2011 (TRC, 2011b).

The presence of PCBs in groundwater in the vicinity of the Mechanical Room is unlikely to be contributing to concentrations of PCBs detected in indoor air samples collected from the NBHS building. Indoor air samples collected from the Mechanical Room (B-114) and adjacent shipping and receiving area (B-113) on February 23, 2011 were below the Acceptable Long-Term Average Exposure Concentration established by the EPA for the KMS and NBHS PCB air monitoring programs of 0.3 $\mu g/m^3$ total PCBs.

The extent of groundwater PCB impacts in the vicinity of the Mechanical Room is relatively limited. The three NBHS rooms (Room A-110-1, A-315-1, and A-203-2) where total PCBs have been detected in indoor air samples at levels greater than 0.3 $\mu g/m^3$ are located outside the limits of groundwater PCB impacts in the vicinity of the Mechanical Room, are not located on the ground floor (A-203-2 and A-315-1), and/or are hydraulically cross-gradient to the groundwater flow direction in the vicinity of the Mechanical Room (A-110-1).

No additional information was requested by MassDEP.

(e) LSP Opinion

The objectives of this IRA have been to characterize groundwater, seep water, soil vapor and indoor air to determine if vapor migration has occurred, to characterize VOCs in groundwater, storm sewer lines and sanitary sewer lines to determine if any VOC migration from the groundwater to the storm and sanitary sewer infrastructure has occurred, and to implement mitigation measures associated with the SRM condition at the NBHS building.

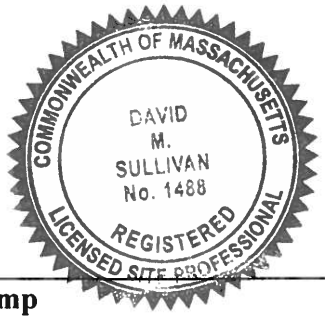
The IRA Plan Modifications dated January 18, 2011(TRC 2011a) and February 24, 2012 (TRC, 2012) added to the previously approved IRA activities the removal of chlorinated VOC-impacted groundwater in the vicinity of MW-27. The additional activities conducted under the second IRA Plan Modification are described herein, and include installation, operation and maintenance of a hydraulic control system in the vicinity of monitoring well MW-27R and further investigation of the soil, groundwater and NAPL impacts using MIPS technology.

The City is currently evaluating remedial approaches, including further investigation of the lateral and vertical extents of impacts in the vicinity of the Mechanical Room and a viable permanent remedy that meets both MassDEP and EPA remedial goals under the MCP and TSCA. Additional investigatory activities and a determination of the remedial approach will be discussed in future submittals, including additional IRA Status Reports and/or IRA Plan Modifications.

This IRA Status Report has been prepared in accordance with 310 CMR 40.0425 as set forth in the MCP.

David M. Sullivan, LSP
TRC Environmental Corporation
Licensed Site Professional No. 1488

Date May 29, 2012



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III REFERENCES

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TABLES

Table 1
Summary of Analytical Results for Aqueous Seep Samples
(December 2009 through February 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample Location:	**NBHSBRM**	**BRM-S-1**			**BRM-S-2**				**BRM-S-3**					**FIP-S-1**		
			Sample ID:	NBHSBRM	BRM-S-1			BRM-S-2			WEST SEEP	BRM-S-3				EAST SEEP	FIP-S-1		
			Sample Date:	2/20/2009	12/2/2009	1/7/2010	1/30/2010	12/2/2009	1/7/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010
		GW-2	GW-3												Field Dup				
VOCs																			
(ug/L)	Methylene Chloride	10,000	50,000	NA	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	1.0 U	2.0 U	5.0 U	5.0 U	1.0 U	1.0 U	20 U	5.0 U	5.0 U	1.0 U
	1,1-Dichloroethane	1,000	20,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Chloroform	50	20,000	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	2.0 U	2.0 U	1.0 U
	Carbon Tetrachloride	2	5,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	1,2-Dichloropropane	3	50,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Chlorodibromomethane	20	50,000	NA	0.50 U	10 U	1.0 U	0.50 U	10 U	1.0 U	1.0 U	0.50 U	10 U	1.0 U	1.0 U	10 U	0.50 U	10 U	1.0 U
	1,1,2-Trichloroethane	900	50,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.5**	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Trichlorofluoromethane (Freon 11)	NS	NS	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloroethane	5	20,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Bromodichloromethane	6	50,000	NA	1.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	10 U	1.0 U	5.0 U	1.0 U
	trans-1,3-Dichloropropene	10[2]	200[2]	NA	0.50 U	5.0 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	5.0 U	0.50 U	5.0 U	0.50 U
	cis-1,3-Dichloropropene	10[2]	200[2]	NA	0.50 U	5.0 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	5.0 U	0.50 U	5.0 U	0.50 U
	1,1-Dichloropropene	NS	NS	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	20 U	2.0 U	2.0 U	1.0 U
	Bromoform	700	50,000	NA	5.0 U	10 U	1.0 U	5.0 U	10 U	1.0 U	2.0 U	5.0 U	10 U	1.0 U	1.0 U	20 U	5.0 U	10 U	1.0 U
	1,1,2,2-Tetrachloroethane	9	50,000	NA	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	1.0 U	0.50 U	0.50 U	2.0 U	2.0 U	10 U	0.50 U	0.50 U	2.0 U
	Benzene	2,000	10,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	Toluene	50,000	40,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Ethylbenzene	20,000	5,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Chloromethane	NS	NS	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	20 U	2.0 U	2.0 U	1.0 U
	Bromomethane	7	800	NA	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	5.0 U	5.0 U	20 U	2.0 U	2.0 U	5.0 U
	Vinyl Chloride	2	50,000	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	**2.1**	**34**	**1.4**	**1.3**	10 U	2.0 U	2.0 U	**1.3**
	Chloroethane	NS	NS	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	20 U	2.0 U	2.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**14**	**57**	**8.2**	**8.1**	10 U	1.0 U	**1.0**	**1.4**
	Trichloroethylene	30	5,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.0**	**1.2**	**1.3**	10 U	1.0 U	1.0 U	1.0 U
	1,2-Dichlorobenzene	2,000	2,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.8**	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Methyl tert-Butyl Ether (MTBE)	50,000	50,000	NA	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	20 U	1.0 U	1.0 U	2.0 U
	m+p Xylene	9,000	5,000	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U
	o-Xylene	9,000	5,000	NA	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	10 U	1.0 U	1.0 U	2.0 U
	cis-1,2-Dichloroethylene	100	50,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**54**	**180**	**24**	**23**	10 U	1.0 U	**5.6**	**7.2**
	Dibromomethane	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	1,2,3-Trichloropropane	NS	NS	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	20 U	2.0 U	2.0 U	1.0 U
	Styrene	100	6,000	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
	Dichlorodifluoromethane (Freon 12)	NS	NS	NA	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	20 U	2.0 U	2.0 U	1.0 U
	Acetone	50,000	50,000	NA	50 U	50 U	5.0 U	50 U	50 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U	50 U	50 U	50 U	5.0 U
	Carbon Disulfide	NS	NS	NA	3.0 U	5.0 U	1.0 U	3.0 U	5.0 U	1.0 U	2.0 U	3.0 U	5.0 U	1.0 U	1.0 U	20 U	3.0 U	5.0 U	1.0 U
	2-Butanone (MEK)	50,000	50,000	NA	20 U	20 U	10 U	20 U	20 U	10 U	5.0 U	20 U	20 U	10 U	10 U	50 U	20 U	20 U	10 U
	4-Methyl-2-pentanone (MIBK)	50,000	50,000	NA	10 U	10 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	50 U	10 U	10 U	5.0 U
	2-Hexanone (MBK)	NS	NS	NA	10 U	10 U	1.0 U	10 U	10 U	1.0 U	5.0 U	10 U	10 U	1.0 U	1.0 U	50 U	10 U	10 U	1.0 U
	Bromochloromethane	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	Tetrahydrofuran	NS	NS	NA	10 U	10 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	50 U	10 U	10 U	5.0 U
	2,2-Dichloropropane	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	1,2-Dibromoethane (EDB)	2	50,000	NA	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	1.0 U	2.0 U	0.50 U	0.50 U	1.0 U	1.0 U	20 U	0.50 U	0.50 U	1.0 U
	1,3-Dichloropropane	NS	NS	NA	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	1.0 U	2.0 U	0.50 U	0.50 U	1.0 U	1.0 U	20 U	0.50 U	0.50 U	1.0 U
	1,1,1,2-Tetrachloroethane	10	50,000	NA	1.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	10 U	1.0 U	5.0 U	1.0 U
	Bromobenzene	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	n-Butylbenzene	7,000[1]	50,000[1]	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	sec-Butylbenzene	7,000[1]	50,000[1]	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	tert-Butylbenzene	7,000[1]	50,000[1]	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	2-Chlorotoluene	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U

Table 1
Summary of Analytical Results for Aqueous Seep Samples
(December 2009 through February 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample Location:	**NBHSBRM**	**BRM-S-1**			**BRM-S-2**				**BRM-S-3**					**FIP-S-1**		
			Sample ID:	NBHSBRM	BRM-S-1			BRM-S-2			WEST SEEP	BRM-S-3				EAST SEEP	FIP-S-1		
			Sample Date:	2/20/2009	12/2/2009	1/7/2010	1/30/2010	12/2/2009	1/7/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010
		GW-2	GW-3												Field Dup				
	4-Chlorotoluene	NS	NS	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	1,2-Dibromo-3-chloropropane (DBCP)	NS	NS	NA	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	2.0 U	5.0 U	10 U	5.0 U	5.0 U	20 U	5.0 U	10 U	5.0 U
	Hexachlorobutadiene	1	3,000	NA	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	0.50 U	0.60 U	1.0 U	1.0 U	0.50 U	0.50 U	6.0 U	1.0 U	1.0 U	0.50 U
	Isopropylbenzene (Cumene)	7,000(1)	50,000(1)	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	Naphthalene	1,000	20,000	NA	5.0 U	2.0 U	5.0 U	5.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	5.0 U	5.0 U	20 U	5.0 U	2.0 U	5.0 U
	n-Propylbenzene	7,000(1)	50,000(1)	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	1,2,3-Trichlorobenzene	NS	NS	NA	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	20 U	5.0 U	5.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	NA	5.0 U	1.0 U	2.0 U	5.0 U	1.0 U	2.0 U	2.0 U	5.0 U	1.0 U	2.0 U	2.0 U	20 U	5.0 U	1.0 U	2.0 U
	1,3,5-Trimethylbenzene	7,000(1)	50,000(1)	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	1,2,4-Trimethylbenzene	7,000(1)	50,000(1)	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U
	Diethyl Ether	NS	NS	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U
	Diisopropyl Ether (DIPE)	NS	NS	NA	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	20 U	0.50 U	0.50 U	2.0 U
	tert-Butyl Ethyl Ether (TBEE)	NS	NS	NA	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	20 U	0.50 U	0.50 U	2.0 U
	tert-Amyl Methyl Ether (TAME)	NS	NS	NA	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	0.50 U	2.0 U	2.0 U	20 U	0.50 U	0.50 U	2.0 U
	1,4-Dioxane	6,000	50,000	NA	50 U	50 U	100 U	50 U	50 U	100 U	250 U	50 U	50 U	100 U	100 U	2,500 U	50 U	50 U	100 U
EPH																			
(ug/L)	C9-C18 Aliphatics	5,000	50,000	NA	150 U	NA	NA	150 U	NA	NA	NA	150 U	NA	NA	NA	NA	150 U	NA	NA
	C19-C36 Aliphatics	NS	50,000	NA	**190**	NA	NA	150 U	NA	NA	NA	150 U	NA	NA	NA	NA	150 U	NA	NA
	C11-C22 Aromatics	50,000	5,000	NA	100 U	NA	NA	100 U	NA	NA	NA	100 U	NA	NA	NA	NA	100 U	NA	NA
	Acenaphthene	NS	6,000	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Acenaphthylene	10,000	40	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Anthracene	NS	30	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Benzo(a)anthracene	NS	1,000	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Benzo(a)pyrene	NS	500	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Benzo(b)fluoranthene	NS	400	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Benzo(g,h,i)perylene	NS	20	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Benzo(k)fluoranthene	NS	100	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Chrysene	NS	70	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Dibenz(a,h)anthracene	NS	40	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Fluoranthene	NS	200	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Fluorene	NS	40	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Indeno(1,2,3-cd)pyrene	NS	100	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	2-Methylnaphthalene	2,000	20,000	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Naphthalene	1,000	20,000	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Phenanthrene	NS	10,000	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
	Pyrene	NS	20	NA	2.0 U	NA	NA	2.0 U	NA	NA	NA	2.0 U	NA	NA	NA	NA	2.0 U	NA	NA
PAHs																			
(ug/L)	Acenaphthene	NS	6,000	NA	0.30 U	NA	NA	0.30 U	NA	NA	NA	0.30 U	NA	NA	NA	NA	0.30 U	NA	NA
	Acenaphthylene	10,000	40	NA	0.30 U	NA	NA	0.30 U	NA	NA	NA	0.30 U	NA	NA	NA	NA	0.30 U	NA	NA
	Anthracene	NS	30	NA	0.20 U	NA	NA	0.20 U	NA	NA	NA	0.20 U	NA	NA	NA	NA	0.20 U	NA	NA
	Benzo(a)anthracene	NS	1,000	NA	0.050 U	NA	NA	0.050 U	NA	NA	NA	0.050 U	NA	NA	NA	NA	0.050 U	NA	NA
	Benzo(a)pyrene	NS	500	NA	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA	NA	NA	0.10 U	NA	NA
	Benzo(b)fluoranthene	NS	400	NA	0.050 U	NA	NA	0.050 U	NA	NA	NA	0.050 U	NA	NA	NA	NA	0.050 U	NA	NA
	Benzo(g,h,i)perylene	NS	20	NA	0.50 U	NA	NA	0.50 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	0.50 U	NA	NA
	Benzo(k)fluoranthene	NS	100	NA	0.20 U	NA	NA	0.20 U	NA	NA	NA	0.20 U	NA	NA	NA	NA	0.20 U	NA	NA
	Chrysene	NS	70	NA	0.20 U	NA	NA	0.20 U	NA	NA	NA	0.20 U	NA	NA	NA	NA	0.20 U	NA	NA
	Dibenz(a,h)anthracene	NS	40	NA	0.20 U	NA	NA	0.20 U	NA	NA	NA	0.20 U	NA	NA	NA	NA	0.20 U	NA	NA
	Fluoranthene	NS	200	NA	0.50 U	NA	NA	0.50 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	0.50 U	NA	NA
	Fluorene	NS	40	NA	1.0 U	NA	NA	1.0 U	NA	NA	NA	1.0 U	NA	NA	NA	NA	1.0 U	NA	NA
	Indeno(1,2,3-cd)pyrene	NS	100	NA	0.20 U	NA	NA	0.20 U	NA	NA	NA	0.20 U	NA	NA	NA	NA	0.20 U	NA	NA
	2-Methylnaphthalene	2,000	20,000	NA	1.0 U	NA	NA	1.0 U	NA	NA	NA	1.0 U	NA	NA	NA	NA	1.0 U	NA	NA
	Naphthalene	1,000	20,000	NA	1.0 U	NA	NA	1.0 U	NA	NA	NA	1.0 U	NA	NA	NA	NA	1.0 U	NA	NA
	Phenanthrene	NS	10,000	NA	0.050 U	NA	NA	0.050 U	NA	NA	NA	0.050 U	NA	NA	NA	NA	0.050 U	NA	NA
	Pyrene	NS	20	NA	1.0 U	NA	NA	1.0 U	NA	NA	NA	1.0 U	NA	NA	NA	NA	1.0 U	NA	NA

Table 1
Summary of Analytical Results for Aqueous Seep Samples
(December 2009 through February 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample Location:	**NBHSBRM**	**BRM-S-1**			**BRM-S-2**				**BRM-S-3**					**FIP-S-1**		
			Sample ID:	NBHSBRM	BRM-S-1			BRM-S-2			WEST SEEP	BRM-S-3				EAST SEEP	FIP-S-1		
			Sample Date:	2/20/2009	12/2/2009	1/7/2010	1/30/2010	12/2/2009	1/7/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010	1/30/2010	2/27/2012	12/2/2009	1/7/2010	1/30/2010
		GW-2	GW-3												Field Dup				
PCBs																			
(ug/L)	Aroclor 1016	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1221	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1232	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1242	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1248	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1254	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Aroclor 1260	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
	Total PCB Amount	5	10	1.0 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA
Metals, total																			
(ug/L)	Antimony	NS	8,000	40.0 U	40 U	NA	NA	40 U	NA	NA	NA	40 U	NA	NA	NA	NA	40 U	NA	NA
	Arsenic	NS	900	5.0 U	**9.2**	NA	NA	**11**	NA	NA	NA	**10**	NA	NA	NA	NA	**5.8**	NA	NA
	Barium	NS	50,000	**288**	**98**	NA	NA	**76**	NA	NA	NA	**140**	NA	NA	NA	NA	50 U	NA	NA
	Beryllium	NS	200	2.0 U	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Cadmium	NS	4	**3.7**	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Chromium	NS	300	**30.0**	5.0 U	NA	NA	5.0 U	NA	NA	NA	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA
	Lead	NS	10	**50.8**	7.5 U	NA	NA	7.5 U	NA	NA	NA	**220**	NA	NA	NA	NA	7.5 U	NA	NA
	Mercury	NS	20	**0.36**	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA	NA	NA	0.10 U	NA	NA
	Nickel	NS	200	**26.0**	5.0 U	NA	NA	5.0 U	NA	NA	NA	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA
	Selenium	NS	100	30.0 U	25 U	NA	NA	25 U	NA	NA	NA	25 U	NA	NA	NA	NA	25 U	NA	NA
	Silver	NS	7	3.0 U	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Thallium	NS	3,000	30.0 U	30 U	NA	NA	30 U	NA	NA	NA	30 U	NA	NA	NA	NA	30 U	NA	NA
	Vanadium	NS	4,000	25.0 U	25 U	NA	NA	25 U	NA	NA	NA	25 U	NA	NA	NA	NA	25 U	NA	NA
	Zinc	NS	900	**1,870**	**260**	NA	NA	**51**	NA	NA	NA	**150**	NA	NA	NA	NA	**21**	NA	NA
Metals, dissolved																			
(ug/L)	Antimony	NS	8,000	NA	40 U	NA	NA	40 U	NA	NA	NA	40 U	NA	NA	NA	NA	40 U	NA	NA
	Arsenic	NS	900	NA	**6.5**	NA	NA	**8.9**	NA	NA	NA	**8.4**	NA	NA	NA	NA	**6.0**	NA	NA
	Barium	NS	50,000	NA	**79**	NA	NA	**73**	NA	NA	NA	**67**	NA	NA	NA	NA	50 U	NA	NA
	Beryllium	NS	200	NA	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Cadmium	NS	4	NA	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Chromium	NS	300	NA	5.0 U	NA	NA	5.0 U	NA	NA	NA	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA
	Lead	NS	10	NA	7.5 U	NA	NA	7.5 U	NA	NA	NA	7.5 U	NA	NA	NA	NA	7.5 U	NA	NA
	Mercury	NS	20	NA	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA	NA	NA	0.10 U	NA	NA
	Nickel	NS	200	NA	5.0 U	NA	NA	5.0 U	NA	NA	NA	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA
	Selenium	NS	100	NA	25 U	NA	NA	25 U	NA	NA	NA	25 U	NA	NA	NA	NA	25 U	NA	NA
	Silver	NS	7	NA	2.5 U	NA	NA	2.5 U	NA	NA	NA	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA
	Thallium	NS	3,000	NA	30 U	NA	NA	30 U	NA	NA	NA	30 U	NA	NA	NA	NA	30 U	NA	NA
	Vanadium	NS	4,000	NA	25 U	NA	NA	25 U	NA	NA	NA	25 U	NA	NA	NA	NA	25 U	NA	NA
	Zinc	NS	900	NA	**160**	NA	NA	**43**	NA	NA	NA	**48**	NA	NA	NA	NA	**25**	NA	NA

Notes:
ug/L - micrograms per liter.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP 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 MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
EPH - Extractable Petroleum Hydrocarbons.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	**CLEAN OUT**	**MW-4**						**MW-5**											
			Sample Date:	4/28/2011	8/19/2008	8/19/2008	1/6/2010	2/17/2010	4/9/2010	9/13/2010	8/19/2008	1/6/2010	1/6/2010	2/17/2010	4/8/2010	9/10/2010	3/8/2011	4/11/2011	4/29/2011	8/24/2011	2/27/2012	4/10/2012
		GW-2	GW-3			Field Dup							Field Dup										
VOCs																							
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	2,000	10,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U
	Vinyl Chloride	2	50,000	1.0 U	NA	NA	2.0 U	1.0 U	1.0 U	1.0 U	NA	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethylene	30	5,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.8**	**2.1**	**4.4**	1.0 U	**5.3**	**2.9**
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	1.0 U	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	**3.7**	**4.1**	**5.9**	**3.2**	**7.1**	**3.8**	**4.0**	**5.1**	**3.1**	**8.3**	**4.0**
	Carbon Disulfide	NS	NS	2.0 U	NA	NA	5.0 U	2.0 U	2.0 U	2.0 U	NA	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	NA	NA	1.0 U	2.0 U	2.0 U	2.0 U	NA	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	NA	NA	1.0 U	2.0 U	2.0 U	2.0 U	NA	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PAHs																							
(ug/L)	Phenanthrene	NS	10,000	NA	0.05 U	0.05 U	NA	NA	NA	NA	**0.18**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																							
(ug/L)	Aroclor 1221	5	10	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0521 U	0.050 U	**0.0202 J**
	Aroclor 1242	5	10	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0521 U	0.050 U	0.0500 U
	Aroclor 1248	5	10	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	**0.129**	**0.0595**	**0.0727 J**
	Aroclor 1254	5	10	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	**0.0731 J**	NA	NA	NA	NA	NA	NA	NA	NA	0.0521 U	**0.0319 J**	**0.0373 J**
	Total PCBs	5	10	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	**0.0731 J**	NA	NA	NA	NA	NA	NA	NA	NA	**0.129**	**0.0914 J**	**0.1302 J**
Metals, total																							
(ug/L)	Arsenic	NS	900	NA	**7.0**	5.0 U	NA	NA	NA	NA	**15.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	50 U	50 U	NA	NA	NA	NA	**122**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	5.0 U	5.0 U	NA	NA	NA	NA	**52.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	7.5 U	7.5 U	NA	NA	NA	NA	**19.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	5.0 U	5.0 U	NA	NA	NA	NA	**20.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	3.0 U	3.0 U	NA	NA	NA	NA	**5.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	1.0 U	1.0 U	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	**12.0**	**16.0**	NA	NA	NA	NA	**68.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																							
(ug/L)	Arsenic	NS	900	NA	10 U	10 U	NA	NA	NA	NA	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	50 U	50 U	NA	NA	NA	NA	**64.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	5.0 U	5.0 U	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	2.5 U	2.5 U	NA	NA	NA	NA	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	**11**	**119**	NA	NA	NA	NA	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																							
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10,000 U	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6,800**	NA	NA	NA	NA	NA	NA

Notes:

ug/L - micrograms per liter.

B - Compound detected in associated method blank

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP 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 MassDEP Method 1 standards.

VOCs - Volatile Organic Compounds.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.

(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-5D						MW-6			MW-7							MW-7D		MW-8A	MW-8B
			Sample Date:	9/10/2010	4/8/2011	4/28/2011	8/24/2011	2/27/2012	4/10/2012	8/19/2008	1/7/2010	2/18/2010	9/16/2008	1/7/2010	2/17/2010	2/17/2010	4/7/2010	9/9/2010	10/22/2010	9/9/2010	9/9/2010	2/18/2010	9/16/2008
		GW-2	GW-3													Field Dup					Field Dup		
VOCs																							
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**2.9**	1.0 U	NA
	Tetrachloroethylene	50	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	**63**	**60**	**64**	**64**	**25**	**26**	**1.3**	1.0 U	1.0 U	NA
	Chlorobenzene	200	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**2.7**	1.0 U	NA
	Benzene	2,000	10,000	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	Vinyl Chloride	2	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2.0 U	1.0 U	NA	**3.4**	**9.2**	**9.9**	**1.6**	**1.4**	**3.7**	1.0 U	1.0 U	1.0 U	NA
	1,1-Dichloroethylene	80	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	trans-1,2-Dichloroethylene	90	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	Trichloroethylene	30	5,000	**1.1**	**3.4**	**3.5**	**31**	**7.5**	**5.9**	NA	1.0 U	1.0 U	NA	**6.8**	**5.8**	**6.5**	**4.5**	**14**	1.0 U	**13**	**10**	1.0 U	NA
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	1,4-Dichlorobenzene	200	8,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
	cis-1,2-Dichloroethylene	100	50,000	1.0 U	1.0 U	1.0 U	**6.3**	**7.4**	**5.7**	NA	1.0 U	1.0 U	NA	**20**	**30**	**30**	**9.6**	**47**	**49**	**2.2**	**1.8**	1.0 U	NA
	Carbon Disulfide	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	5.0 U	2.0 U	NA	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	1.0 U	2.0 U	NA	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	1.0 U	2.0 U	NA	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
PAHs																							
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	**0.09**	NA	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
PCBs																							
(ug/L)	Aroclor 1221	5	10	NA	NA	NA	0.0500 U	0.050 U	0.0500 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U
	Aroclor 1242	5	10	NA	NA	NA	0.0500 U	0.050 U	0.0500 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U
	Aroclor 1248	5	10	NA	NA	NA	0.0500 U	0.050 U	0.0500 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U
	Aroclor 1254	5	10	NA	NA	NA	0.0500 U	**0.0283 J**	0.0500 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U
	Total PCBs	5	10	NA	NA	NA	0.0500 U	**0.0283 J**	0.0500 U	0.0500 U	NA	NA	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U
Metals, total																							
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	**13.0**	NA	NA	2.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	50 U	NA	NA	**254**	NA	NA	NA	NA	NA	NA	NA	NA	NA	250 U
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	5.0 U	NA	NA	50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	50 U
	Lead	NS	10	NA	NA	NA	NA	NA	NA	7.5 U	NA	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	5.0 U	NA	NA	**29.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	25 U
	Silver	NS	7	NA	NA	NA	NA	NA	NA	**3.0**	NA	NA	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 U
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	1.0 U	NA	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.29**
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	**110**	NA	NA	**894**	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U
Metals, dissolved																							
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	**10**	NA	NA	**2.41**	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	50 U	NA	NA	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	250 U
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	5.0 U	NA	NA	**27.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	25 U
	Silver	NS	7	NA	NA	NA	NA	NA	NA	**2.6**	NA	NA	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 U
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	10 U	NA	NA	**870**	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U
General Chemistry																							
(ug/L)	Nitrogen, Nitrate	NS	NS	**280**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	100 U	100 U	NA	NA
	Sulfate	NS	NS	**10,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**25,000**	NA	**20,000**	**20,000**	NA	NA
	Total Organic Carbon	NS	NS	**2,900**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7,400**	NA	**6,100**	**6,100**	NA	NA

Notes:
ug/L - micrograms per liter.
B - Compound detected in associated method blank
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP 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 MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.
* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-11			MW-12	MW-13	MW-14	MW-15	MW-16		MW-17	MW-18					MW-19	MW-20		MW-21	
			Sample Date:	2/19/2010	4/7/2010	9/13/2010	2/18/2010	2/19/2010	2/19/2010	2/18/2010	2/19/2010	4/28/2011	2/18/2010	2/18/2010	4/9/2010	9/13/2010	4/28/2011	4/10/2012	2/18/2010	4/8/2010	9/10/2010	4/8/2010	9/13/2010
		GW-2	GW-3																				
VOCs																							
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	2,000	10,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Vinyl Chloride	2	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethylene	30	5,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	1.0 U	1.0 U	1.0 U
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	**1.8**	1.0 U	1.0 U
	Carbon Disulfide	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.3**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PAHs																							
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																							
(ug/L)	Aroclor 1221	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA
	Aroclor 1242	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA
	Aroclor 1248	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA
	Aroclor 1254	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA
	Total PCBs	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	NA	NA	NA	NA	NA
Metals, total																							
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																							
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																							
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.
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* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
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Analysis	Analyte		Sample ID:	MW-22			MW-23		MW-24				MW-25	MW-26	MW-27		MW-27D					
			Sample Date:	4/8/2010	4/8/2010	9/13/2010	4/8/2010	9/13/2010	4/8/2010	9/10/2010	10/21/2010	10/21/2010	9/8/2010	9/8/2010	9/9/2010	10/21/2010	11/18/2010	3/8/2011	3/25/2011	4/8/2011	4/29/2011	4/29/2011
		GW-2	GW-3		Field Dup							Field Dup										Field Dup
VOCs																						
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	2,000	10,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Vinyl Chloride	2	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.8**	**1.5**	**1.2**	**1.2**	1.0 U	1.0 U	**550.0**	**10.3 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**700**	**26.5 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethylene	30	5,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**31,000**	**4,500**	1.0 U	**1.4**	**0.71 J**	**1.7**	**3.8**	**3.8**
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.8**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4,100**	**290**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Carbon Disulfide	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	800 U	200 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	**6.2**	**6.2**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	800 U	200 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	800 U	200 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PAHs																						
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																						
(ug/L)	Aroclor 1221	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1242	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1248	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1254	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total																						
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																						
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																						
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,000**	NA	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**21,000**	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8,700**	NA	NA	NA	NA	NA	NA	NA

Notes:
ug/L - micrograms per liter.
B - Compound detected in associated method blank
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP 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 MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.
* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-27D						MW-27R							MW-27R				
			Sample Date:	7/27/2011	8/25/2011	2/27/2012	2/27/2012	4/11/2012	4/11/2012	3/8/2011	3/8/2011	3/25/2011	4/8/2011	4/29/2011	7/27/2011	7/27/2011	8/2/2011	8/25/2011	8/25/2011	2/27/2012	2/27/2012
		GW-2	GW-3				Field Dup		Field Dup		Field Dup					Field Dup			Field Dup		Field Dup
VOCs																					
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	Tetrachloroethylene	50	30,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	Chlorobenzene	200	1,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	Benzene	2,000	10,000	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	100 U	50 U	120 U	100 U	100 U	50 U	NA
	Vinyl Chloride	2	50,000	**35**	**9.8**	**26**	**28**	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	**1,900**	**1,300**	**510**	**1,000**	**990**	**1,800**	NA
	1,1-Dichloroethylene	80	30,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	trans-1,2-Dichloroethylene	90	50,000	**7.5**	**2.2**	**22**	**23**	1.0 U	1.0 U	**2,500**	**2,500**	**2,600**	**1,900**	**1,400**	**2,200**	**1,700**	**940**	**1,700**	**1,700**	**1,700**	NA
	Trichloroethylene	30	5,000	**15**	**4.8**	**2.9**	**3.9**	1.0 U	1.0 U	**210,000**	**180,000**	**410,000**	**130,000**	**38,000**	**16,000**	**13,000**	**23,000**	**27,000**	**28,000**	**4,300**	NA
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	1,4-Dichlorobenzene	200	8,000	**3.0**	**1.3**	2.0 U	2.0 U	1.0 U	1.0 U	2,000 U	2,000 U	2,000 U	1,000 U	500 U	200 U	100 U	250 U	200 U	200 U	100 U	NA
	cis-1,2-Dichloroethylene	100	50,000	**45**	**12**	**110**	**120**	1.0 U	1.0 U	**11,000**	**12,000**	**9,500**	**7,400**	**4,600**	**14,000**	**11,000**	**5,400**	**22,000**	**22,000**	**8,500**	NA
	Carbon Disulfide	NS	NS	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4,000 U	4,000 U	4,000 U	2,000 U	1,000 U	400 U	200 U	500 U	400 U	400 U	200 U	NA
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4,000 U	4,000 U	4,000 U	2,000 U	1,000 U	400 U	200 U	500 U	400 U	400 U	200 U	NA
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4,000 U	4,000 U	4,000 U	2,000 U	1,000 U	400 U	200 U	500 U	400 U	400 U	200 U	NA
PAHs																					
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																					
(ug/L)	Aroclor 1221	5	10	NA	0.150 U	0.10 U	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	2.50 U	3.00 U	3.5 U	3.54 U
	Aroclor 1242	5	10	NA	0.150 U	0.10 U	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	**7.62**	**7.52**	3.5 U	3.54 U
	Aroclor 1248	5	10	NA	**0.358**	**0.206**	NA	0.0500 U	0.0500 U	NA	NA	NA	NA	NA	NA	NA	NA	2.50 U	3.00 U	**11.5**	**9.99**
	Aroclor 1254	5	10	NA	**1.20**	**0.605**	NA	**0.0973 J**	**0.102 J**	NA	NA	NA	NA	NA	NA	NA	NA	**30.0**	**33.80**	**13.0**	**10.6**
	Total PCBs	5	10	NA	**1.558**	**0.811**	NA	**0.0973 J**	**0.102 J**	NA	NA	NA	NA	NA	NA	NA	NA	**37.62**	**41.32**	**24.5**	**20.59**
Metals, total																					
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																					
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																					
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/L - micrograms per liter.

B - Compound detected in associated method blank

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP standards exist for this compound.

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VOCs - Volatile Organic Compounds.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.

(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-28											MW-29		MW-30	MW-31				
			Sample Date:	9/9/2010	10/21/2010	3/8/2011	3/25/2011	4/11/2011	4/28/2011	7/27/2011	8/2/2011	8/25/2011	2/27/2012	4/11/2012	9/10/2010	4/10/2012	10/22/2010	10/21/2010	3/8/2011	4/11/2011	8/24/2011	4/10/2012
		GW-2	GW-3																			*
VOCs																						
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	1.0 U	2.5 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	1.0 U	2.5 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	**38**	**8.5**	1.0 U	2.5 U	1.0 U	5.0 U	**28**	**39**	**35**	**4.2**	**11**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	1.0 U	2.5 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	2,000	10,000	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	**0.56**	1.2 U	**0.65**	0.5 U	2.5 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U
	Vinyl Chloride	2	50,000	**9.7**	**3.8**	**10**	**22**	**23**	**7.4**	**36**	**42**	**55**	**90**	**130**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	1.0 U	2.5 U	1.0 U	**2.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	**9.2**	**2.9**	**15**	**40**	**36**	**12**	**51**	**42**	**51**	**100**	**95**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethylene	30	5,000	**11**	**5.0**	**110**	**220**	**200**	**150**	**87**	**52**	**78**	**190**	**180**	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,2-Dichlorobenzene	2,000	2,000	**2.0**	1.0 U	1.0 U	2.5 U	1.0 U	5.0 U	1.0 U	2.5 U	**1.2**	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	**9.9**	**2.5**	1.0 U	**0.84 J**	1.0 U	5.0 U	**3.8**	**6.0**	**6.2**	**1.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	**48**	**11**	**2.7**	**3.4**	**3.8**	5.0 U	**12**	**23**	**25**	**3.5**	**9.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	**25**	**11**	**70**	**180**	**170**	**56**	**170**	**140**	**200**	**680**	**660**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Carbon Disulfide	NS	NS	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	10 U	2.0 U	5.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	10 U	2.0 U	5.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	2.0 U	2.0 U	**1.3 J**	2.0 U	10 U	2.0 U	5.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PAHs																						
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																						
(ug/L)	Aroclor 1221	5	10	NA	NA	NA	NA	NA	NA	NA	NA	1.10 U	2.0 U	**3.31 J**	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	0.0532 U
	Aroclor 1242	5	10	NA	NA	NA	NA	NA	NA	NA	NA	**3.98**	2.0 U	0.500 U	NA	0.0500 U	NA	NA	NA	NA	0.0500 U	0.0532 U
	Aroclor 1248	5	10	NA	NA	NA	NA	NA	NA	NA	NA	1.10 U	**7.85**	**6.12 J**	NA	**0.0329 J**	NA	NA	NA	NA	0.0500 U	0.0532 U
	Aroclor 1254	5	10	NA	NA	NA	NA	NA	NA	NA	NA	**10.9**	**9.53**	**5.59 J**	NA	**0.0371 J**	NA	NA	NA	NA	**0.0685**	**0.0547 J**
	Total PCBs	5	10	NA	NA	NA	NA	NA	NA	NA	NA	**14.88**	**17.38**	**15.02 J**	NA	**0.0700 J**	NA	NA	NA	NA	**0.0685**	**0.0547 J**
Metals, total																						
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																						
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																						
(ug/L)	Nitrogen, Nitrate	NS	NS	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**110**	**110**	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	**13,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10,000 U	10,000 U	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	**5,200**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4,700**	**4,700**	NA	NA	NA	NA	NA	NA

Notes:

ug/L - micrograms per liter.

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(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-32													MW-33				
			Sample Date:	10/21/2010	3/8/2011	3/25/2011	3/25/2011	4/8/2011	4/8/2011	4/28/2011	7/27/2011	8/2/2011	8/2/2011	8/25/2011	2/27/2012	4/11/2012	10/21/2010	3/8/2011	4/12/2011	8/24/2011	4/11/2012
		GW-2	GW-3				Field Dup		Field Dup				Field Dup								
VOCs																					
(ug/L)	1,1-Dichloroethane	1,000	20,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethylene	50	30,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	200	1,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	2,000	10,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	25 U	12 U	25 U	12 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U
	Vinyl Chloride	2	50,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	**2.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1-Dichloroethylene	80	30,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	1.0 U	500 U	**230**	**220**	200 U	200 U	200 U	50 U	**27**	50 U	**29**	**3.5**	**6.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethylene	30	5,000	**1.1**	**17,000**	**26,000**	**26,000**	**21,000**	**21,000**	**4,700**	**2,600**	**2,500**	**2,000**	**2,800**	**110**	**170**	1.0 U	1.0 U	1.0 U	**1.1**	1.0 U
	1,2-Dichlorobenzene	2,000	2,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	200	8,000	1.0 U	500 U	100 U	100 U	200 U	200 U	200 U	50 U	25 U	50 U	25 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	**4.5**	**910**	**980**	**1,000**	**480**	**470**	**250**	**200**	**220**	**180**	**250**	**50**	**190**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Carbon Disulfide	NS	NS	2.0 U	1,000 U	200 U	200 U	400 U	400 U	400 U	100 U	50 U	100 U	50 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	2.0 U	1,000 U	200 U	200 U	400 U	400 U	400 U	100 U	50 U	100 U	50 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	2.0 U	1,000 U	200 U	200 U	400 U	400 U	400 U	100 U	50 U	100 U	50 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PAHs																					
(ug/L)	Phenanthrene	NS	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																					
(ug/L)	Aroclor 1221	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0500 U	0.0500 U	NA	NA	NA	0.0500 U	0.0500 U
	Aroclor 1242	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0500 U	0.0500 U	NA	NA	NA	0.0500 U	0.0500 U
	Aroclor 1248	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	**0.0889**	**0.0858 J**	NA	NA	NA	0.0500 U	**0.0242 J**
	Aroclor 1254	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.121**	**0.2420**	**0.147 J**	NA	NA	NA	**0.0630**	**0.0228 J**
	Total PCBs	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.121**	**0.3309**	**0.2328 J**	NA	NA	NA	**0.0630**	**0.0470 J**
Metals, total																					
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Thallium	NS	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, dissolved																					
(ug/L)	Arsenic	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NS	50,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	NS	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	NS	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	NS	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry																					
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/L - micrograms per liter.

B - Compound detected in associated method blank

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP 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 MassDEP Method 1 standards.

VOCs - Volatile Organic Compounds.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.

(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 2
Summary of Analytical Results for Groundwater Samples
(2008 through 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-HH-13			MW-HRC-33		
			Sample Date:	4/23/2009	4/23/2009	2/18/2010	4/23/2009	4/23/2009	2/17/2010
		GW-2	GW-3		Field Dup			Field Dup	
VOCs									
(ug/L)	1,1-Dichloroethane	1,000	20,000	NA	NA	1.0 U	NA	NA	1.0 U
	Tetrachloroethylene	50	30,000	NA	NA	1.0 U	NA	NA	1.0 U
	Chlorobenzene	200	1,000	NA	NA	1.0 U	NA	NA	1.0 U
	1,1,1-Trichloroethane	4,000	20,000	NA	NA	1.0 U	NA	NA	1.0 U
	Benzene	2,000	10,000	NA	NA	1.0 U	NA	NA	1.0 U
	Vinyl Chloride	2	50,000	NA	NA	1.0 U	NA	NA	1.0 U
	1,1-Dichloroethylene	80	30,000	NA	NA	1.0 U	NA	NA	1.0 U
	trans-1,2-Dichloroethylene	90	50,000	NA	NA	1.0 U	NA	NA	1.0 U
	Trichloroethylene	30	5,000	NA	NA	1.0 U	NA	NA	1.0 U
	1,2-Dichlorobenzene	2,000	2,000	NA	NA	1.0 U	NA	NA	1.0 U
	1,3-Dichlorobenzene	2,000	50,000	NA	NA	1.0 U	NA	NA	1.0 U
	1,4-Dichlorobenzene	200	8,000	NA	NA	1.0 U	NA	NA	1.0 U
	cis-1,2-Dichloroethylene	100	50,000	NA	NA	1.0 U	NA	NA	1.0 U
	Carbon Disulfide	NS	NS	NA	NA	2.0 U	NA	NA	2.0 U
	p-Isopropyltoluene (p-Cymene)	7,000(1)	50,000(1)	NA	NA	2.0 U	NA	NA	2.0 U
	1,2,4-Trichlorobenzene	2,000	50,000	NA	NA	2.0 U	NA	NA	2.0 U
PAHs									
(ug/L)	Phenanthrene	NS	10,000	0.05 U	0.05 U	NA	0.05 U	NA	NA
PCBs									
(ug/L)	Aroclor 1221	5	10	0.050 U	NA	NA	0.050 U	0.050 U	NA
	Aroclor 1242	5	10	0.050 U	NA	NA	0.050 U	0.050 U	NA
	Aroclor 1248	5	10	0.050 U	NA	NA	0.050 U	0.050 U	NA
	Aroclor 1254	5	10	0.050 U	NA	NA	0.050 U	0.050 U	NA
	Total PCBs	5	10	0.050 U	NA	NA	0.050 U	0.050 U	NA
Metals, total									
(ug/L)	Arsenic	NS	900	5.0 U	5.0 U	NA	5.0 U	NA	NA
	Barium	NS	50,000	**5,570**	**5,710**	NA	**157**	NA	NA
	Chromium	NS	300	5.0 U	5.0 U	NA	5.0 U	NA	NA
	Lead	NS	10	7.5 U	7.5 U	NA	**10.5**	NA	NA
	Nickel	NS	200	5.0 U	5.0 U	NA	5.0 U	NA	NA
	Silver	NS	7	3.0 U	3.0 U	NA	3.0 U	NA	NA
	Thallium	NS	3,000	30.0 U	30.0 U	NA	30.0 U	NA	NA
	Zinc	NS	900	**17.0**	**20.0**	NA	**300**	NA	NA
Metals, dissolved									
(ug/L)	Arsenic	NS	900	5.0 U	5.0 U	NA	5.0 U	NA	NA
	Barium	NS	50,000	**5,340**	**5,490**	NA	**141**	NA	NA
	Nickel	NS	200	5.0 U	5.0 U	NA	5.0 U	NA	NA
	Silver	NS	7	3.0 U	3.0 U	NA	3.0 U	NA	NA
	Zinc	NS	900	**14.0**	**15.0**	NA	**270**	NA	NA
General Chemistry									
(ug/L)	Nitrogen, Nitrate	NS	NS	NA	NA	NA	NA	NA	NA
	Sulfate	NS	NS	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	NS	NS	NA	NA	NA	NA	NA	NA

Notes:
ug/L - micrograms per liter.
B - Compound detected in associated method blank
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP 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 MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.
* - Sample collected on 4/10/2012 for PCB analysis was broken and was recollected on 4/18/2012.

Table 3
Summary of Analytical Results for Grab Samples (April through August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-27R			MW-32	VAC TRUCK	VC072811	VAC EFF
			Sample Date:	4/5/2011	4/25/2011	8/2/2011	8/2/2011	4/25/2011	7/28/2011	8/3/2011
		GW-2	GW-3							
VOCs										
(ug/L)	Methylene Chloride	10,000	50,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,1-Dichloroethane	1,000	20,000	500 U	400 U	NA	NA	25 U	NA	NA
	Chloroform	50	20,000	500 U	400 U	NA	NA	25 U	NA	NA
	Carbon Tetrachloride	2	5,000	500 U	400 U	NA	NA	25 U	NA	NA
	1,2-Dichloropropane	3	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	Chlorodibromomethane	20	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	1,1,2-Trichloroethane	900	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	Tetrachloroethylene	50	30,000	500 U	400 U	NA	NA	25 U	2.5 U	NA
	Chlorobenzene	200	1,000	500 U	400 U	NA	NA	25 U	NA	NA
	Trichlorofluoromethane (Freon 11)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2-Dichloroethane	5	20,000	500 U	400 U	NA	NA	25 U	NA	NA
	1,1,1-Trichloroethane	4,000	20,000	500 U	400 U	NA	NA	25 U	NA	NA
	Bromodichloromethane	6	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	trans-1,3-Dichloropropene	10(2)	200(2)	250 U	200 U	NA	NA	12 U	NA	NA
	cis-1,3-Dichloropropene	10(2)	200(2)	250 U	200 U	NA	NA	12 U	NA	NA
	1,1-Dichloropropene	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Bromoform	700	50,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,1,2,2-Tetrachloroethane	9	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	Benzene	2,000	10,000	500 U	400 U	NA	NA	25 U	NA	NA
	Toluene	50,000	40,000	500 U	400 U	NA	NA	25 U	NA	NA
	Ethylbenzene	20,000	5,000	500 U	400 U	NA	NA	25 U	NA	NA
	Chloromethane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Bromomethane	7	800	1,000 U	800 U	NA	NA	50 U	NA	NA
	Vinyl Chloride	2	50,000	500 U	400 U	NA	NA	25 U	5.0 U	NA
	Chloroethane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,1-Dichloroethylene	80	30,000	500 U	400 U	NA	NA	25 U	2.5 U	NA
	trans-1,2-Dichloroethylene	90	50,000	500 U	**910**	NA	NA	25 U	3.8 U	NA
	Trichloroethylene	30	5,000	**35,000**	**29,000**	NA	NA	**1,600**	**180**	NA
	1,2-Dichlorobenzene	2,000	2,000	500 U	400 U	NA	NA	25 U	NA	NA
	1,3-Dichlorobenzene	2,000	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	1,4-Dichlorobenzene	200	8,000	500 U	400 U	NA	NA	25 U	NA	NA
	Methyl tert-Butyl Ether (MTBE)	50,000	50,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	m+p Xylene	9,000	5,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	o-Xylene	9,000	5,000	500 U	400 U	NA	NA	25 U	NA	NA

Table 3
Summary of Analytical Results for Grab Samples (April through August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-27R			MW-32	VAC TRUCK	VC072811	VAC EFF
			Sample Date:	4/5/2011	4/25/2011	8/2/2011	8/2/2011	4/25/2011	7/28/2011	8/3/2011
		GW-2	GW-3							
	cis-1,2-Dichloroethylene	100	50,000	**1,800**	**3,400**	NA	NA	**89**	**36**	NA
	Dibromomethane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2,3-Trichloropropane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Styrene	100	6,000	500 U	400 U	NA	NA	25 U	NA	NA
	Dichlorodifluoromethane (Freon 12)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Acetone	50,000	50,000	2,500 U	2,000 U	NA	NA	120 U	NA	NA
	Carbon Disulfide	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	2-Butanone (MEK)	50,000	50,000	2,500 U	2,000 U	NA	NA	120 U	NA	NA
	4-Methyl-2-pentanone (MIBK)	50,000	50,000	2,500 U	2,000 U	NA	NA	120 U	NA	NA
	2-Hexanone (MBK)	NS	NS	2,500 U	2,000 U	NA	NA	120 U	NA	NA
	Bromochloromethane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Tetrahydrofuran	NS	NS	2,500 U	2,000 U	NA	NA	120 U	NA	NA
	2,2-Dichloropropane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2-Dibromoethane (EDB)	2	50,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,3-Dichloropropane	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,1,1,2-Tetrachloroethane	10	50,000	500 U	400 U	NA	NA	25 U	NA	NA
	Bromobenzene	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	n-Butylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	sec-Butylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	tert-Butylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	2-Chlorotoluene	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	4-Chlorotoluene	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2-Dibromo-3-chloropropane (DBCP)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Hexachlorobutadiene	1	3,000	300 U	240 U	NA	NA	15 U	NA	NA
	Isopropylbenzene (Cumene)	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	p-Isopropyltoluene (p-Cymene)	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	Naphthalene	1,000	20,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	n-Propylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2,3-Trichlorobenzene	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2,4-Trichlorobenzene	2,000	50,000	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,3,5-Trimethylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,2,4-Trimethylbenzene	7,000[1]	50,000[1]	1,000 U	800 U	NA	NA	50 U	NA	NA
	Diethyl Ether	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	Diisopropyl Ether (DIPE)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	tert-Butyl Ethyl Ether (TBEE)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	tert-Amyl Methyl Ether (TAME)	NS	NS	1,000 U	800 U	NA	NA	50 U	NA	NA
	1,4-Dioxane	6,000	50,000	120,000 U	100,000 U	NA	NA	6,200 U	NA	NA

Table 3
Summary of Analytical Results for Grab Samples (April through August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample ID:		MW-27R			MW-32	VAC TRUCK	VC072811	VAC EFF
		Sample Date:		4/5/2011	4/25/2011	8/2/2011	8/2/2011	4/25/2011	7/28/2011	8/3/2011
		GW-2	GW-3							
PCBs										
(ug/L)	Aroclor 1016	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1221	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1232	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1242	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1248	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1254	5	10	NA	NA	**161**	0.25 U	NA	NA	**279**
	Aroclor 1260	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1262	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Aroclor 1268	5	10	NA	NA	12.5 U	0.25 U	NA	NA	12.5 U
	Total PCBs	5	10	NA	NA	**161**	0.25 U	NA	NA	**279**
Total Petroleum Hydrocarbons										
(ug/L)	Total Petroleum Hydrocarbons (C9-C44)	5,000	5,000	NA	NA	**262 B**	66 U	NA	NA	**43,000**

Notes:

ug/L - micrograms per liter.

B - Compound detected in associated method blank

NA - Sample not analyzed for the listed analyte.

NS - No MassDEP 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 MassDEP Method 1 standards.

VOCs - Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

(1) - MassDEP Method 1 standards for C9-C10 aromatic hydrocarbons used.

(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

Table 4
Summary of Analytical Results for Oil Samples
(August 2010 through August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Sample ID:	S080211-038	MW-27		MW-27R	VAC NAPL
	Sample Date:	8/2/2011	8/30/2010		8/22/2011	8/3/2011
	Analyte					
VOCs						
(mg/kg)	Acetone	NA	**140**	**JB**	NA	NA
	tert-Amyl Methyl Ether (TAME)	NA	45	U	NA	NA
	Benzene	NA	22	U	NA	NA
	Bromobenzene	NA	22	U	NA	NA
	Bromochloromethane	NA	22	U	NA	NA
	Bromodichloromethane	NA	45	U	NA	NA
	Bromoform	NA	220	U	NA	NA
	Bromomethane	NA	**14**	**J**	NA	NA
	2-Butanone (MEK)	NA	450	U	NA	NA
	n-Butylbenzene	NA	**1.3**	**J**	NA	NA
	sec-Butylbenzene	NA	22	U	NA	NA
	tert-Butylbenzene	NA	22	U	NA	NA
	tert-Butyl Ethyl Ether (TBEE)	NA	45	U	NA	NA
	Carbon Disulfide	NA	**57**	**J**	NA	NA
	Carbon Tetrachloride	NA	220	U	NA	NA
	Chlorobenzene	NA	22	U	NA	NA
	Chlorodibromomethane	NA	90	U	NA	NA
	Chloroethane	NA	450	U	NA	NA
	Chloroform	NA	45	U	NA	NA
	Chloromethane	NA	45	U	NA	NA
	2-Chlorotoluene	NA	22	U	NA	NA
	4-Chlorotoluene	NA	22	U	NA	NA
	1,2-Dibromo-3-chloropropane (DBCP)	NA	220	U	NA	NA
	1,2-Dibromoethane (EDB)	NA	90	U	NA	NA
	Dibromomethane	NA	22	U	NA	NA
	1,2-Dichlorobenzene	NA	**22**		NA	NA
	1,3-Dichlorobenzene	NA	22	U	NA	NA
	1,4-Dichlorobenzene	NA	**29**		NA	NA
	Dichlorodifluoromethane (Freon 12)	NA	45	U	NA	NA
	1,1-Dichloroethane	NA	22	U	NA	NA
	1,2-Dichloroethane	NA	22	U	NA	NA
	1,1-Dichloroethylene	NA	**15**	**J**	NA	NA
	cis-1,2-Dichloroethylene	NA	**990**		NA	NA
	trans-1,2-Dichloroethylene	NA	**87**		NA	NA
	1,2-Dichloropropane	NA	22	U	NA	NA
	1,3-Dichloropropane	NA	11	U	NA	NA
	2,2-Dichloropropane	NA	220	U	NA	NA
	1,1-Dichloropropene	NA	45	U	NA	NA
	cis-1,3-Dichloropropene	NA	45	U	NA	NA
	trans-1,3-Dichloropropene	NA	45	U	NA	NA
	Diethyl Ether	NA	45	U	NA	NA
	Diisopropyl Ether (DIPE)	NA	11	U	NA	NA
	1,4-Dioxane	NA	2,200	U	NA	NA
	Ethylbenzene	NA	**47**		NA	NA
	Hexachlorobutadiene	NA	22	U	NA	NA
	2-Hexanone (MBK)	NA	900	U	NA	NA
	Isopropylbenzene (Cumene)	NA	**2.0**	**J**	NA	NA
	p-Isopropyltoluene (p-Cymene)	NA	**7.0**	**J**	NA	NA

Table 4
Summary of Analytical Results for Oil Samples
(August 2010 through August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Sample ID:	S080211-038	MW-27		MW-27R		VAC NAPL	
	Sample Date:	8/2/2011	8/30/2010		8/22/2011		8/3/2011	
	Analyte							
	Methyl tert-Butyl Ether (MTBE)	NA	90	U	NA		NA	
	Methylene Chloride	NA	110	U	NA		NA	
	4-Methyl-2-pentanone (MIBK)	NA	450	U	NA		NA	
	Naphthalene	NA	**27**	**J**	NA		NA	
	n-Propylbenzene	NA	22	U	NA		NA	
	Styrene	NA	**480**		NA		NA	
	1,1,1,2-Tetrachloroethane	NA	90	U	NA		NA	
	1,1,2,2-Tetrachloroethane	NA	45	U	NA		NA	
	Tetrachloroethylene	NA	**10**	**J**	NA		NA	
	Tetrahydrofuran	NA	220	U	NA		NA	
	Toluene	NA	**12**	**J**	NA		NA	
	1,2,3-Trichlorobenzene	NA	**230**		NA		NA	
	1,2,4-Trichlorobenzene	NA	**1,000**		NA		NA	
	1,1,1-Trichloroethane	NA	45	U	NA		NA	
	1,1,2-Trichloroethane	NA	22	U	NA		NA	
	Trichloroethylene	NA	**220,000**		NA		NA	
	Trichlorofluoromethane (Freon 11)	NA	45	U	NA		NA	
	1,2,3-Trichloropropane	NA	45	U	NA		NA	
	1,2,4-Trimethylbenzene	NA	**3.1**	**J**	NA		NA	
	1,3,5-Trimethylbenzene	NA	**1.3**	**J**	NA		NA	
	Vinyl Chloride	NA	**7.2**	**J**	NA		NA	
	m+p Xylene	NA	**13**	**J**	NA		NA	
	o-Xylene	NA	22	U	NA		NA	
	TICs	NA	ND		NA		NA	
PCBs								
(mg/kg)	Aroclor 1016	NA	NA		3,810	U	29.6	U
	Aroclor 1221	NA	NA		3,810	U	29.6	U
	Aroclor 1232	NA	NA		3,810	U	29.6	U
	Aroclor 1242	NA	NA		3,810	U	29.6	U
	Aroclor 1248	NA	NA		3,810	U	19.7	U
	Aroclor 1254	**160**	NA		**246,000**	**B**	**179**	
	Aroclor 1260	NA	NA		3,810	U	19.7	U
	Aroclor 1262	NA	NA		3,810	U	9.87	U
	Aroclor 1268	NA	NA		3,810	U	9.87	U
	Total PCBs	**160**	NA		**246,000**		**179**	
Total Petroleum Hydrocarbons								
(mg/kg)	Total Petroleum Hydrocarbons (C9-C44)	NA	NA		**466,000**		**486,000**	

Notes:

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

B - Compound detected in associated method blank

J - Estimated value; detected below quantitation limit.

NA - Sample not analyzed for the listed analyte.

ND - Not detected.

U - Compound was not detected at specified quantitation limit.

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

VOCs - Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TICs- Tentatively Identified Compounds.

Table 5
Summary of Analytical Results for Absorbent Sock Sample
(August 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Sample ID:	MW27R WIPE	
	Sample Date:	8/5/2011	
	Analyte		
PCBs			
(ug abs)	Aroclor 1016	1,500	U
	Aroclor 1221	1,500	U
	Aroclor 1232	1,500	U
	Aroclor 1242	1,500	U
	Aroclor 1248	1,000	U
	Aroclor 1254	**17,500**	
	Aroclor 1260	1,000	U
	Aroclor 1262	500	U
	Aroclor 1268	500	U
	Total PCBs	**17,500**	

Notes:

ug - micrograms.

U - Compound was not detected at specified quantitation limit.

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

PCBs - Polychlorinated Biphenyls.

Table 6
Summary of Analytical Results for Indoor Air Samples (2010 and 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample Locatoin:	Mechanical Room B-114			Classroom B-116	Senior Honor Lounge Room B-109			Cafeteria Storage Room	Classroom A-112-3				Classroom A-115-4
		Sample ID:	TRC-IA-1	TRC-IA-1	IA-2	TRC-IA-2	TRC-IA-3	B109		TRC-IA-4	TRC-IA-5	TRC-IA-5	IA-1		TRC-IA-6
		Sample Date:	1/31/2010	4/20/2010	8/24/2010	1/31/2010	1/31/2010	4/8/2011	4/8/2011	1/31/2010	1/31/2010	4/20/2010	8/24/2010	8/24/2010	4/20/2010
		IATV							Field Dup					Field Dup	
TO-15															
(ug/m3)	Dichlorodifluoromethane	N/A	**2.00**	**2.27**	**3.11**	**2.02**	**2.08**	**2.34**	**2.24**	**2.13**	**3.36**	**2.55**	**2.52**	**2.92**	**3.09**
	Chloromethane	N/A	**1.11**	**1.04**	**1.10**	**1.03**	**0.92**	1.03 U	1.03 U	**1.16**	**1.29**	**1.29**	**1.04**	**1.09**	**1.54**
	Vinyl chloride	0.39	**0.562**	**0.853**	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	**0.531**	0.051 U	0.051 U	0.051 U	0.051 U
	Acetone	230	**3.40**	**2.58**	**7.86**	**3.57**	**29.6**	**4.57**	**5.31**	**3.68**	2.37 U	**4.83**	**7.52**	**8.21**	**6.81**
	Trichlorofluoromethane	N/A	1.12 U	**1.25**	**1.82**	1.12 U	1.12 U	**1.18**	**1.10**	1.12 U	**4.92**	**1.37**	**1.5**	**1.6**	**1.57**
	Methylene chloride	11	1.74 U	1.74 U	4.86 U	1.74 U	1.74 U	4.86 U	4.86 U	1.74 U	1.74 U	1.74 U	4.86 U	4.86 U	1.74 U
	trans-1,2-Dichloroethene	20	**2.38**	**5.62**	**0.23**	0.079 U	0.079 U	**0.083**	**0.095**	0.079 U	**1.72**	0.079 U	0.079 U	0.079 U	0.079 U
	Methyl tert butyl ether	880	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	0.072 U	0.072 U	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U
	2-Butanone	1,500	**1.01**	**4.57**	**3.04**	0.589 U	0.589 U	**0.784**	**1.35**	0.589 U	**1.89**	0.589 U	0.589 U	**0.628**	0.589 U
	cis-1,2-Dichloroethene	10	**4.27**	**15.2**	**0.103**	**0.087**	0.079 U	**0.551**	**0.539**	0.079 U	**3.58**	0.079 U	0.079 U	0.079 U	**0.103**
	Chloroform	3	0.098 U	**0.161**	**2.34**	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	**0.283**	0.098 U	**1.31**	**0.146**	0.098 U
	1,2-Dichloroethane	0.13	0.081 U	**0.109**	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
	1,1,1-Trichloroethane	1,500	1.09 U	1.09 U	**1.31**	1.09 U	1.09 U	**1.85**	**1.78**	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
	Benzene	11	**0.865**	**5.50**	**1.52**	**0.424**	**0.447**	**0.495**	**0.498**	**0.479**	**2.55**	**0.345**	0.319 U	0.319 U	**0.405**
	Carbon tetrachloride	0.86	**0.578**	**0.509**	**0.66**	**0.484**	**0.390**	**0.396**	**0.377**	**0.490**	**0.559**	**0.566**	**0.654**	**0.666**	**0.629**
	Bromodichloromethane	0.19	0.134 U	0.134 U	**0.355**	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
	Trichloroethene	2	**2.20**	**10.9**	**0.204**	0.107 U	0.107 U	**17.5**	**17.2**	0.107 U	**1.12**	0.107 U	0.107 U	0.107 U	**0.172**
	4-Methyl-2-pentanone	880	0.819 U	0.819 U	**0.876**	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	**1.21**	0.819 U	0.819 U	0.819 U	0.819 U
	Toluene	1,500	**1.97**	**42.0**	**9.47**	0.753 U	**4.18**	**1.30**	**1.44**	0.753 U	**13.1**	0.753 U	**0.922**	**0.979**	**0.874**
	Tetrachloroethene	4.1	0.136 U	0.136 U	0.136 U	0.136 U	0.136 U	**0.142**	**0.142**	0.136 U	0.136 U	0.136 U	0.136 U	0.136 U	0.136 U
	Ethylbenzene	290	0.868 U	**5.99**	**1.43**	0.868 U	**3.06**	**0.160**	**0.212**	0.868 U	**1.80**	0.868 U	0.868 U	0.868 U	0.868 U
	p/m-Xylene	29	1.74 U	**24.4**	**6.13**	1.74 U	**9.61**	**0.408**	**0.616**	1.74 U	**7.55**	1.74 U	1.74 U	1.74 U	1.74 U
	o-Xylene	29	0.868 U	**7.49**	**1.90**	0.868 U	**2.03**	**0.148**	**0.226**	0.868 U	**2.44**	0.868 U	0.868 U	0.868 U	0.868 U
	Xylenes (total)	29	1.74 U	**31.89**	**8.03**	1.74 U	**11.64**	**0.556**	**0.842**	1.74 U	**9.99**	1.74 U	1.74 U	1.74 U	1.74 U
	Styrene	6	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.085 U	0.085 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U
	n-Propylbenzene	44(a)	0.982 U	**1.49**	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
	1,3,5-Trimethybenzene	44(a)	0.982 U	**2.54**	0.982 U	0.982 U	0.982 U	0.098 U	0.098 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
	1,2,4-Trimethylbenzene	44(a)	0.982 U	**9.04**	**2.36**	0.982 U	0.982 U	0.098 U	**0.157**	0.982 U	**3.18**	0.982 U	0.982 U	0.982 U	0.982 U
	Naphthalene	2.7	0.262 U	**0.681**	0.262 U	0.262 U	**0.665**	0.262 U	0.262 U	0.262 U	**0.325**	0.262 U	0.262 U	0.262 U	0.262 U

Notes:

ug/m3 - micrograms per cubic meter.

N/A - No MassDEP criteria exist for this analyte.

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 IATV.

TO - Toxic organics.

IATV - MassDEP, Indoor Air Threshold Values (IATV), Commercial/ Industrial, Vapor Intrusion Guidance- Interim Draft, December 2010.

(a) - IATV criteria for C9-C10 aromatics used.

Table 6
Summary of Analytical Results for Indoor Air Samples (2010 and 2011)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample Locatoin:	Classroom A-105-4	Classroom A-115-3	Classroom A-105-3	Classroom A-115-2	Classroom A-105-2	Classroom A-116-1	Classroom A-112-2	Classroom A-110-1	Lecture Room D-120		Storage Room	Can Wash
		Sample ID:	TRC-IA-7	TRC-IA-8	TRC-IA-9	TRC-IA-10	TRC-IA-11	TRC-IA-12	TRC-IA-13	TRC-IA-14	TRC-IA-15	IA-3	B106	B147
		Sample Date:	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	8/24/2010	4/8/2011	4/8/2011
		IATV												
TO-15														
(ug/m3)	Dichlorodifluoromethane	N/A	**2.16**	**2.31**	**1.95**	**2.21**	**2.20**	**2.85**	**2.56**	**2.23**	**2.28**	**3.06**	**2.33**	**2.21**
	Chloromethane	N/A	**1.11**	**1.09**	**1.08**	**1.19**	**1.07**	**1.33**	**1.42**	**1.01**	**1.12**	**1.23**	1.03 U	1.03 U
	Vinyl chloride	0.39	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
	Acetone	230	**5.18**	**7.56**	**5.78**	**4.64**	**7.75**	**5.30**	**5.02**	**4.62**	**8.21**	**9.90**	**59.1**	**6.11**
	Trichlorofluoromethane	N/A	1.12 U	**1.25**	1.12 U	**1.20**	**1.18**	**1.48**	**1.36**	**1.21**	**1.58**	**2.03**	**1.16**	**1.14**
	Methylene chloride	11	1.74 U	1.74 U	**2.87**	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	4.86 U	4.86 U	4.86 U
	trans-1,2-Dichloroethene	20	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
	Methyl tert butyl ether	880	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	0.720 U	**4.74**	0.720 U	0.072 U	0.072 U
	2-Butanone	1,500	0.589 U	**0.922**	0.589 U	0.589 U	**0.746**	**0.648**	0.589 U	0.589 U	**2.44**	**1.79**	**0.996**	**1.16**
	cis-1,2-Dichloroethene	10	**0.246**	0.079 U	**0.119**	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	**0.226**	**0.254**
	Chloroform	3	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	**0.590**	**0.107**	**0.098**	**0.107**
	1,2-Dichloroethane	0.13	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
	1,1,1-Trichloroethane	1,500	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	**7.14**	1.09 U	**1.10**	**1.07**
	Benzene	11	0.319 U	0.319 U	**0.354**	0.319 U	0.319 U	**0.358**	**0.322**	0.319 U	**4.48**	**0.348**	**0.447**	**0.492**
	Carbon tetrachloride	0.86	**0.478**	**0.484**	**0.541**	**0.490**	**0.509**	**0.610**	**0.578**	**0.484**	**0.478**	**0.679**	**0.390**	**0.383**
	Bromodichloromethane	0.19	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
	Trichloroethene	2	**0.462**	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	0.107 U	**0.107**	0.107 U	**7.25**	**7.42**
	4-Methyl-2-pentanone	880	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U
	Toluene	1,500	**1.41**	0.753 U	**0.915**	0.753 U	**1.31**	0.753 U	0.753 U	0.753 U	**36.9**	**3.54**	**1.30**	**1.37**
	Tetrachloroethene	4.1	0.136 U	0.136 U	**0.196**	0.136 U	0.136 U	0.136 U	0.136 U	0.136 U	**1.76**	**0.136**	0.136 U	0.136 U
	Ethylbenzene	290	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	**6.00**	0.868 U	**0.260**	**0.252**
	p/m-Xylene	29	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	**18.8**	**2.41**	**0.720**	**0.781**
	o-Xylene	29	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	0.868 U	**6.69**	0.868 U	**0.317**	**0.321**
	Xylenes (total)	29	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	**25.49**	**2.41**	**1.037**	**1.102**
	Styrene	6	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	**0.294**	0.085 U
	n-Propylbenzene	44(a)	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	**1.48**	0.982 U	0.982 U	0.982 U
	1,3,5-Trimethybenzene	44(a)	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	**2.11**	0.982 U	0.098 U	0.098 U
	1,2,4-Trimethylbenzene	44(a)	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	**6.96**	0.982 U	**0.182**	**0.167**
	Naphthalene	2.7	0.262 U	0.262 U	0.262 U	0.262 U	0.262 U	0.262 U	0.262 U	0.262 U	**0.644**	0.262 U	0.262 U	0.262 U

Notes:

ug/m3 - micrograms per cubic meter.

N/A - No MassDEP criteria exist for this analyte.

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 IATV.

TO - Toxic organics.

IATV - MassDEP, Indoor Air Threshold Values (IATV), Commercial/ Industrial, Vapor Intrusion Guidance- Interim Draft, December 2010.

(a) - IATV criteria for C9-C10 aromatics used.

Table 7
Summary of Hydraulic Control System Results for Water Samples
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample Port:	SP-1					SP-2	SP-3	SP-5				SP-6				SP-7				
		Sample ID:	INFLUENT	INFLUENT	INFLUENT	INFLUENT	INFLUENT	PRE BAG FILTER	POST BAG FILTER	POST CLAY BED	PRE CARBON	POST CLAY BED	POST CLAY BED	INTRA CARBON	INTRA CARBON	INTRA CARBON	INTRA CARBON	EFFLUENT	EFFLUENT	EFFLUENT	EFFLUENT	EFFLUENT
		Sample Date:	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/27/2012	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012
		Limits*																				
VOCs																						
(ug/L)	Methylene chloride	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chloroform	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Carbon tetrachloride	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,2-Dichloropropane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Dibromochloromethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,2-Trichloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Tetrachloroethene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chlorobenzene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichlorofluoromethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,1,1-Trichloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Bromodichloromethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,3-Dichloropropene	N/A	100 U	120 U	50 U	50 U	10 U	NA	100 U	NA	NA	NA	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	cis-1,3-Dichloropropene	N/A	100 U	120 U	50 U	50 U	10 U	NA	100 U	NA	NA	NA	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	1,1-Dichloropropene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromoform	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,2,2-Tetrachloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Benzene	N/A	100 U	120 U	50 U	50 U	10 U	NA	100 U	NA	NA	NA	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	Toluene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Ethylbenzene	N/A	200 U	250 U	100 U	100 U	**30**	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chloromethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromomethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Vinyl chloride	N/A	**350**	**320**	**400**	**440**	**550**	NA	**280**	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Chloroethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-Dichloroethene	N/A	**1,100**	**460**	**490**	**400**	**550**	NA	**810**	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Trichloroethene	N/A	**19,000**	**24,000**	**8,900**	**6,800**	**3,200**	NA	**15,000**	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,2-Dichlorobenzene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,3-Dichlorobenzene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1,4-Dichlorobenzene	N/A	200 U	250 U	100 U	100 U	**38**	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Methyl tert butyl ether	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p/m-Xylene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Xylene	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-Dichloroethene	N/A	**3,300**	**1,600**	**1,900**	**1,600**	**1,800**	NA	**3,000**	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Dibromomethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,3-Trichloropropane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Styrene	N/A	200 U	250 U	100 U	100 U	**21**	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Dichlorodifluoromethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Acetone	N/A	1,000 U	1,200 U	500 U	500 U	100 U	NA	1,000 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	**98**	**17.0**	5.0 U	5.0 U	5.0 U
	Carbon disulfide	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	2-Butanone	N/A	1,000 U	1,200 U	500 U	500 U	100 U	NA	1,000 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	**6.8**	5.0 U	5.0 U	5.0 U	5.0 U
	4-Methyl-2-pentanone	N/A	1,000 U	1,200 U	500 U	500 U	100 U	NA	1,000 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	2-Hexanone	N/A	1,000 U	1,200 U	500 U	500 U	100 U	NA	1,000 U	NA	NA	NA	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	Bromochloromethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Tetrahydrofuran	N/A	1,000 U	1,200 U	500 U	500 U	100 U	NA	1,000 U	NA	NA	NA	NA	**8.2**	**8.2**	**9.1**	**8.5**	**11.0**	**14.0**	**14.0**	**17.0**	**16.0**
	2,2-Dichloropropane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dibromoethane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,3-Dichloropropane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,1,2-Tetrachloroethane	N/A	200 U	250 U	100 U	100 U	20 U	NA	200 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Bromobenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	n-Butylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	sec-Butylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	tert-Butylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Chlorotoluene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Chlorotoluene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dibromo-3-chloropropane	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Hexachlorobutadiene	N/A	120 U	150 U	60 U	60 U	12 U	NA	120 U	NA	NA	NA	NA	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
	Isopropylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 7
Summary of Hydraulic Control System Results for Water Samples
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample Port:	SP-1					SP-2	SP-3	SP-5				SP-6				SP-7				
		Sample ID:	INFLUENT	INFLUENT	INFLUENT	INFLUENT	INFLUENT	PRE BAG FILTER	POST BAG FILTER	POST CLAY BED	PRE CARBON	POST CLAY BED	POST CLAY BED	INTRA CARBON	INTRA CARBON	INTRA CARBON	INTRA CARBON	EFFLUENT	EFFLUENT	EFFLUENT	EFFLUENT	EFFLUENT
		Sample Date:	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/27/2012	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012	3/20/2012	3/27/2012	4/3/2012	4/10/2012	4/17/2012
		Limits*																				
	p-Isopropyltoluene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Naphthalene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	n-Propylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,3-Trichlorobenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	N/A	400 U	500 U	200 U	200 U	**73**	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,3,5-Trimethylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trimethylbenzene	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Ethyl ether	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Isopropyl Ether	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Ethyl-Tert-Butyl-Ether	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Tertiary-Amyl Methyl Ether	N/A	400 U	500 U	200 U	200 U	40 U	NA	400 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,4-Dioxane	N/A	50,000 U	62,000 U	25,000 U	25,000 U	5,000 U	NA	50,000 U	NA	NA	NA	NA	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
PCBs																						
(ug/L)	Aroclor 1016	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1221	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1232	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1242	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1248	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1254	N/A	**5,120**	**75.9**	**6,800**	**683**	**178**	**278**	**165**	**2.80**	**2.12**	**1.54**	**0.424**	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1260	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1262	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Aroclor 1268	N/A	250 U	5.00 U	500 U	25.2 U	5.05 U	12.5 U	12.5 U	0.250 U	0.250 U	0.252 U	0.250 U	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U
	Total PCBs	5	**5,120**	**75.9**	**6,800**	**683**	**178**	**278**	**165**	**2.80**	**2.12**	**1.54**	**0.424**	NA	NA	NA	NA	0.250 U	0.250 U	0.250 U	0.252 U	0.250 U

Notes:

ug/L - micrograms per liter.

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable.

U - Compound was not detected at specified quantitation limit.

Values in **Bol**d indicate the compound was detected.

Values shown in Bold and shaded type exceed the listed criteria.

VOCs - Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

* - City of New Bedford Industrial Discharge Limits.

Table 8
Summary of Sub-Slab Vapor Mitigation System Emission Results
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	VSP #:	VSP-1		VSP-4	VSP-2	VSP-3		
		Sample ID:	Vapor Inlet		TANK VENT	MID CARBON	Vapor Discharge**		
		Sample Date:	3/27/2012	4/17/2012	3/27/2012	3/27/2012	3/27/2012	4/4/2012	4/17/2012
		AALs*							
TO-15									
(ug/m3)	Vinyl chloride	0.38	0.511 U	**6.29**	**244**	**0.734**	**1.31**	**3.53**	**6.39**
	Bromomethane	2.64	0.777 U	0.777 U	35.6 U	0.777 U	0.078 U	0.078 U	0.078 U
	Acetone	160.54	2.38 U	2.38 U	109 U	**10.3**	**8.58**	**5.65**	**6.94**
	1,1-Dichloroethene	0.02	0.793 U	0.793 U	36.3 U	0.793 U	0.079 U	0.079 U	0.079 U
	Methylene chloride	0.24	4.86 U	4.86 U	223 U	4.86 U	4.86 U	4.86 U	4.86 U
	trans-1,2-Dichloroethene	107.81[a]	**5.27**	**14.1**	**366**	0.793 U	0.793 U	0.793 U	0.793 U
	1,1-Dichloroethane	NS	0.809 U	0.809 U	37.1 U	0.809 U	0.809 U	0.809 U	0.809 U
	Methyl tert butyl ether	NS	0.721 U	0.721 U	33.0 U	0.721 U	0.721 U	0.721 U	0.721 U
	2-Butanone	10	**4.45**	**9.32**	27.0 U	**2.22**	**3.89**	**2.34**	**2.62**
	cis-1,2-Dichloroethene	107.81[a]	**13.4**	**51.9**	**1,260**	0.793 U	0.793 U	0.793 U	0.793 U
	Chloroform	0.04	0.977 U	**1.04**	44.7 U	0.977 U	0.098 U	0.098 U	0.098 U
	1,2-Dichloroethane	0.04	0.809 U	0.809 U	37.1 U	0.809 U	0.081 U	0.081 U	0.081 U
	1,1,1-Trichloroethane	1038.37	1.09 U	1.09 U	50.0 U	1.09 U	1.09 U	1.09 U	1.09 U
	Benzene	0.12	**1.50**	**0.716**	29.3 U	**5.14**	**0.370**	**0.601**	0.319 U
	Carbon tetrachloride	0.07	1.26 U	1.26 U	57.6 U	1.26 U	0.126 U	0.126 U	0.126 U
	1,2-Dichloropropane	0.05	0.924 U	0.924 U	42.3 U	0.924 U	0.092 U	0.092 U	0.092 U
	Bromodichloromethane	NS	1.34 U	1.34 U	61.4 U	1.34 U	1.34 U	1.34 U	1.34 U
	1,4-Dioxane	0.24	0.721 U	0.721 U	33.0 U	0.721 U	0.360 U	0.360 U	0.360 U
	Trichloroethene	0.61	**62.3**	**133**	**15,200**	1.07 U	**0.199**	0.107 U	0.107 U
	cis-1,3-Dichloropropene	NS	0.908 U	0.908 U	41.6 U	0.908 U	0.908 U	0.908 U	0.908 U
	4-Methyl-2-pentanone	55.7	0.820 U	0.820 U	37.5 U	0.820 U	0.820 U	0.820 U	0.820 U
	trans-1,3-Dichloropropene	NS	0.908 U	0.908 U	41.6 U	0.908 U	0.908 U	0.908 U	0.908 U
	1,1,2-Trichloroethane	0.06	1.09 U	1.09 U	50.0 U	1.09 U	0.109 U	0.109 U	0.109 U
	Toluene	20	**8.67**	**5.46**	34.5 U	**1.91**	**2.62**	**11.0**	**1.23**
	Dibromochloromethane	NS	1.70 U	1.70 U	78.0 U	1.70 U	1.70 U	1.70 U	1.70 U
	1,2-Dibromoethane	NS	1.54 U	1.54 U	70.4 U	1.54 U	1.54 U	0.137 U	1.54 U
	Tetrachloroethene	0.1	1.36 U	1.36 U	62.1 U	1.36 U	0.136 U	0.136 U	0.136 U
	Chlorobenzene	6.26	0.921 U	0.921 U	42.2 U	0.921 U	0.921 U	0.921 U	0.921 U
	Ethylbenzene	300	**1.45**	**1.59**	39.8 U	0.869 U	0.869 U	**8.51**	0.869 U
	p/m-Xylene	11.8	**3.86**	**5.12**	79.5 U	1.74 U	**2.13**	**35.6**	1.74 U
	Bromoform	NS	2.07 U	2.07 U	94.7 U	2.07 U	2.07 U	2.07 U	2.07 U
	Styrene	2	0.852 U	0.852 U	39.0 U	0.852 U	0.852 U	0.852 U	0.852 U
	1,1,2,2-Tetrachloroethane	0.02	1.37 U	1.37 U	62.9 U	1.37 U	0.137 U	0.137 U	0.137 U
	o-Xylene	11.8	**1.37**	**1.92**	39.8 U	0.869 U	0.869 U	**12.8**	0.869 U
	1,3-Dichlorobenzene	NS	1.20 U	1.20 U	55.1 U	1.20 U	1.20 U	1.20 U	1.20 U
	1,4-Dichlorobenzene	0.18	1.20 U	1.20 U	55.1 U	1.20 U	0.120 U	0.120 U	0.120 U
	1,2-Dichlorobenzene	81.74	1.20 U	1.20 U	55.1 U	1.20 U	1.20 U	1.20 U	1.20 U
	1,2,4-Trichlorobenzene	NS	1.48 U	1.48 U	68.0 U	1.48 U	1.48 U	1.48 U	1.48 U
	Naphthalene	14.25	1.05 U	1.05 U	48.0 U	1.05 U	1.05 U	1.05 U	1.05 U
	Hexachlorobutadiene	NS	2.13 U	2.13 U	97.7 U	2.13 U	2.13 U	2.13 U	2.13 U
	Xylenes (total)	11.8	**5.23**	**7.04**	79.5 U	1.74 U	**2.13**	**48.4**	1.74 U
PCBs									
(ug/m3)	Aroclor 1016	NS	0.0833 U	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1221	NS	0.0833 U	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1232	NS	0.0833 U	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1242	NS	0.0833 U	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1248	NS	**0.159 J**	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1254	NS	**0.440 J**	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Aroclor 1260	NS	0.0833 U	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U
	Total PCBs	0.0005	**0.599 J**	0.0833 U	NA	NA	0.0833 U	0.0833 U	0.0833 U

Notes:
ug/m3 - micrograms per cubic meter.
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP limits exist for this analyte.
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 MassDEP AALs.
TO - Toxic organics.
PCBs - Polychlorinated Biphenyls.
* - MassDEP Allowable Ambient Limits (AALs), January 2012.
** - The SIM results with lower reporting limites were used.
a - Used AAL for 1,2-Dichloroethylene.

Table 9
Groundwater Elevations
New Bedford High School
New Bedford, Massachusetts

Well Location	Ground/Floor Elevation	Reference Elevation [1]	February 2010			April 2010			May 2010			September 2010			January 2011		
			Gauging Date	Depth to Water [2]	Groundwater Elevation	Gauging Date	Depth to Water [2]	Groundwater Elevation	Gauging Date	Depth to Water [2]	Groundwater Elevation	Gauging Date	Depth to Water [2]	Groundwater Elevation	Gauging Date	Depth to Water [2]	Groundwater Elevation
MW-4 [4]	84.68	84.53	2/17/2010	1.97	82.56	4/9/2010	0.89	83.64	5/17/2010	2.20	82.33	9/7/2010	3.90	80.63	1/20/2011	2.42	82.11
MW-5 [4]	84.71	84.55	2/17/2010	1.95	82.60	4/7/2010	1.43	83.12	5/17/2010	2.02	82.53	9/7/2010	3.73	80.82	1/20/2011	2.23	82.32
MW-5D	84.26	83.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	3.15	80.83	NM	NM	NM
MW-6 [3]	84.74	84.52	2/17/2010	1.54	83.05	4/9/2010	0.67	83.92	5/17/2010	1.70	82.82	9/7/2010	3.47	81.12	1/20/2011	1.90	82.62
MW-7	91.38	91.10	2/17/2010	8.67	82.43	4/7/2010	7.14	83.96	5/17/2010	8.85	82.25	9/7/2010	10.64	80.46	1/20/2011	9.18	81.92
MW-7D	91.30	90.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	10.57	80.28	1/20/2011	NA	NM
MW-8A [4]	89.57	89.35	2/17/2010	4.11	85.24	4/7/2010	2.56	86.79	5/17/2010	4.48	84.87	9/7/2010	5.97	83.38	NM	NM	NM
MW-8B [4]	89.59	89.50	NM	NM	NM	4/7/2010	2.71	86.79	5/17/2010	4.60	84.90	9/7/2010	6.12	83.38	NM	NM	NM
MW-11	83.97	83.86	2/17/2010	0.29	83.57	4/7/2010	0.00	83.86	5/17/2010	1.47	82.39	9/7/2010	3.14	80.72	1/20/2011	1.62	82.24
MW-12	89.70	89.37	2/17/2010	6.39	82.98	4/7/2010	5.06	84.31	5/17/2010	6.56	82.81	9/7/2010	8.40	80.97	1/20/2011	6.95	82.42
MW-13	84.23	83.86	2/17/2010	0.90	82.97	4/7/2010	0.12	83.75	5/17/2010	1.10	82.76	9/7/2010	2.82	81.04	1/20/2011	1.17	82.69
MW-14	84.02	83.64	2/17/2010	0.48	83.16	4/7/2010	0.08	83.56	5/17/2010	0.67	82.97	9/7/2010	2.37	81.27	1/20/2011	0.81	82.83
MW-15	89.46	89.23	2/17/2010	5.94	83.29	4/7/2010	5.28	83.95	5/17/2010	6.11	83.12	9/7/2010	7.80	81.43	NM	NM	NM
MW-16	84.12	83.85	2/19/2010	1.00	82.85	4/7/2010	1.06	82.79	5/17/2010	0.86	82.99	9/7/2010	2.85	81.00	1/20/2011	1.18	82.67
MW-17	89.88	89.66	2/17/2010	6.71	82.96	4/7/2010	5.86	83.81	5/17/2010	6.88	82.78	9/7/2010	8.65	81.01	1/20/2011	7.17	82.49
MW-18	84.28	84.09	2/17/2010	0.36	83.73	4/7/2010	0.85	83.24	5/17/2010	1.50	82.59	9/7/2010	3.20	80.89	1/20/2011	1.55	82.54
MW-19	88.76	88.58	2/17/2010	6.26	82.32	4/7/2010	4.59	83.99	5/17/2010	6.50	82.08	9/7/2010	8.57	80.01	1/20/2011	6.94	81.64
MW-20	95.78	95.40	NA	NA	NA	4/7/2010	12.12	83.28	5/17/2010	13.52	81.88	9/7/2010	15.10	80.30	1/20/2011	13.73	81.67
MW-21	92.56	92.22	NA	NA	NA	4/7/2010	8.27	83.95	5/17/2010	9.71	82.51	9/7/2010	11.55	80.67	1/20/2011	10.19	82.03
MW-22	90.85	90.46	NA	NA	NA	4/7/2010	6.43	84.03	5/17/2010	8.03	82.43	9/7/2010	9.85	80.61	1/20/2011	5.42	85.04
MW-23	89.42	89.12	NA	NA	NA	4/7/2010	5.21	83.91	5/17/2010	7.21	81.91	9/7/2010	8.79	80.33	1/20/2011	7.30	81.82
MW-24	89.21	88.75	NA	NA	NA	4/7/2010	5.27	83.48	5/17/2010	7.91	80.84	9/7/2010	9.20	79.55	1/20/2011	7.88	80.87
MW-25	87.53	87.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	8.11	79.17	1/20/2011	6.80	80.48
MW-26	86.47	86.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	7.05	79.05	1/20/2011	5.67	80.43
MW-27	84.66	84.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	3.66	80.78	1/20/2011	2.20	82.24
MW-27D	84.66	84.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	2.06	82.34
MW-27R	84.68	84.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	2.02	82.27
MW-28 [4]	84.70	84.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	3.75	80.81	1/20/2011	2.24	82.32
MW-29 [4]	84.71	84.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	9/7/2010	3.43	81.11	1/20/2011	2.72	81.82
MW-30	89.62	89.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	7.91	81.37
MW-31 [4]	84.70	84.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	2.30	82.25
MW-32 [4]	84.67	84.52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	2.29	82.23
MW-33 [5]	84.73	84.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1/20/2011	2.32	82.27
MW-HH-13	88.17	87.85	2/18/2010	4.35	83.50	4/7/2010	3.52	84.33	5/17/2010	4.48	83.37	9/7/2010	6.16	81.69	1/20/2011	4.61	83.24
MW-HRC-33	86.26	86.09	2/17/2010	3.88	82.21	4/7/2010	2.65	83.44	5/17/2010	4.41	81.68	9/7/2010	4.71	81.38	1/20/2011	3.78	82.31

NOTES:

(1) - Survey of top of PVC riser.

(2) - Measure from top of PVC riser.

(3) - Approximate riser elevation (no survey data available) measured to be 0.22-feet below floor elevation.

(4) - 1-inch diameter monitoring well.

(5) - Approximate floor elevation based on nearby floor elevations and approximate riser elevation measured to be 0.14-feet below floor elevation (no survey data available for 1-inch diameter well).

NM - Not measured.

NA - Not available.

Table 9
Groundwater Elevations
New Bedford High School
New Bedford, Massachusetts

Well Location	Ground/Floor Elevation	Reference Elevation [1]	June 2011			February 2012		
			Gauging Date	Depth to Water [2]	Groundwater Elevation	Gauging Date	Depth to Water [2]	Groundwater Elevation
MW-4 [4]	84.68	84.53	6/24/2011	2.23	82.30	2/27/2012	2.25	82.28
MW-5 [4]	84.71	84.55	6/24/2011	2.11	82.44	2/27/2012	2.10	82.45
MW-5D	84.26	83.98	6/24/2011	1.51	82.47	2/27/2012	1.50	82.48
MW-6 [3]	84.74	84.52	6/24/2011	1.75	82.77	2/27/2012	1.69	82.83
MW-7	91.38	91.10	6/24/2011	9.02	82.08	2/27/2012	9.03	82.07
MW-7D	91.30	90.85	6/24/2011	9.03	81.82	2/27/2012	9.20	81.65
MW-8A [4]	89.57	89.35	6/24/2011	4.44	84.91	2/27/2012	4.31	85.04
MW-8B [4]	89.59	89.50	6/24/2011	NA	NA	2/27/2012	NM	NM
MW-11	83.97	83.86	6/24/2011	1.42	82.44	2/27/2012	1.56	82.30
MW-12	89.70	89.37	Abandoned During RAM Rmplimentation			Abandoned During RAM Rmplimentation		
MW-13	84.23	83.86	6/24/2011	1.11	82.75	2/27/2012	1.02	82.84
MW-14	84.02	83.64	6/24/2011	0.91	82.73	2/27/2012	0.82	82.82
MW-15	89.46	89.23	6/24/2011	6.11	83.12	2/27/2012	6.19	83.04
MW-16	84.12	83.85	6/24/2011	1.06	82.79	2/27/2012	1.00	82.85
MW-17	89.88	89.66	6/24/2011	6.96	82.70	2/27/2012	7.02	82.64
MW-18	84.28	84.09	6/24/2011	1.50	82.59	2/27/2012	1.60	82.49
MW-19	88.76	88.58	6/24/2011	6.41	82.17	2/27/2012	6.55	82.03
MW-20	95.78	95.40	6/24/2011	13.49	81.91	2/27/2012	13.60	81.80
MW-21	92.56	92.22	6/24/2011	9.90	82.32	2/27/2012	9.95	82.27
MW-22	90.85	90.46	6/24/2011	8.19	82.27	2/27/2012	8.24	82.22
MW-23	89.42	89.12	6/24/2011	7.24	81.88	2/27/2012	7.35	81.77
MW-24	89.21	88.75	6/24/2011	7.76	80.99	2/27/2012	8.02	80.73
MW-25	87.53	87.28	6/24/2011	6.75	80.53	2/27/2012	7.11	80.17
MW-26	86.47	86.10	6/24/2011	5.69	80.41	2/27/2012	6.05	80.05
MW-27	84.66	84.44	Abandoned			Abandoned		
MW-27D	84.66	84.40	6/24/2011	2.76	81.64	2/27/2012	1.85	82.55
MW-27R	84.68	84.29	6/24/2011	1.70	82.59	2/27/2012	1.66	82.63
MW-28 [4]	84.70	84.56	6/24/2011	2.17	82.39	2/27/2012	2.00	82.56
MW-29 [4]	84.71	84.54	6/24/2011	2.47	82.07	2/27/2012	3.45	81.09
MW-30	89.62	89.28	6/24/2011	7.57	81.71	2/27/2012	7.95	81.33
MW-31 [4]	84.70	84.55	6/24/2011	1.97	82.58	2/27/2012	1.95	82.60
MW-32 [4]	84.67	84.52	6/24/2011	1.95	82.57	2/27/2012	1.91	82.61
MW-33 [5]	84.73	84.59	6/24/2011	1.97	82.62	2/27/2012	1.95	82.64
MW-HH-13	88.17	87.85	Abandoned During RAM Rmplimentation			Abandoned During RAM Rmplimentation		
MW-HRC-33	86.26	86.09	6/24/2011	3.85	82.24	Abandoned During RAM Rmplimentation		

NOTES:

(1) - Survey of top of PVC riser.

(2) - Measure from top of PVC riser.

(3) - Approximate riser elevation (no survey data available) measured to be 0.22-feet below floor elevation.

(4) - 1-inch diameter monitoring well.

(5) - Approximate floor elevation based on nearby floor elevations and approximate riser elevation measured to be 0.14-feet below floor elevation (no survey data available for 1-inch diameter well).

NM - Not measured.

NA - Not available.

Table 10
Summary of Analytical Results for Mechanical Room Investigation Soil Samples
(April 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte			Sample Location:	**B-E-1**		**B-N-1**		**B-NE-1**			**B-NW-1**			
				Sample ID:	B-E-1	B-E-1	B-N-1	B-N-1	B-NE-1	B-NE-1	B-NE-1	B-NW-1	B-NW-1	B-NW-1	B-NW-1
				Sample Depth (ft.)*:	6-8/8	10-12	6-8/7	8-10	6-8	8-10	10-12/11	6-6.5	6.5-8	8-10	10-11.5/11
				Sample Date:	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012
		S-1/GW-2	S-1/GW-3	UCLs											
VOCs															
(mg/kg)	Methylene chloride	20	200	10000	0.0078 U	NA	0.85 U	NA	NA	NA	0.0079 U	NA	NA	NA	0.97 U
	1,1-Dichloroethane	5	500	10,000	0.0012 U	NA	0.13 U	NA	NA	NA	0.0012 U	NA	NA	NA	0.14 U
	Chloroform	0.3	400	8,000	0.0012 U	NA	0.13 U	NA	NA	NA	0.0012 U	NA	NA	NA	0.14 U
	Carbon tetrachloride	5	10	4,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,2-Dichloropropane	0.1	10	6,000	0.0027 U	NA	0.3 U	NA	NA	NA	0.0028 U	NA	NA	NA	0.34 U
	Dibromochloromethane	0.03	20	5,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,1,2-Trichloroethane	2	4	2,000	0.0012 U	NA	0.13 U	NA	NA	NA	0.0012 U	NA	NA	NA	0.14 U
	Tetrachloroethene	10	30	10,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Chlorobenzene	3	100	10,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Trichlorofluoromethane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,2-Dichloroethane	0.1	10	6,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,1,1-Trichloroethane	500	500	10,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Bromodichloromethane	0.1	20	5,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	trans-1,3-Dichloropropene	0.4(2)	9(2)	4,000(2)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	cis-1,3-Dichloropropene	0.4(2)	9(2)	4,000(2)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,1-Dichloropropene	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Bromoform	1	200	10,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,1,2,2-Tetrachloroethane	0.02	0.8	400	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Benzene	30	30	9,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Toluene	500	500	10,000	0.0012 U	NA	0.13 U	NA	NA	NA	0.0012 U	NA	NA	NA	0.14 U
	Ethylbenzene	500	500	10,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	**1.1**
	Chloromethane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Bromomethane	0.5	30	10,000	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	Vinyl chloride	0.6	0.6	300	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	**0.6**
	Chloroethane	NS	NS	NS	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	1,1-Dichloroethene	40	500	10,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	trans-1,2-Dichloroethene	1	500	10,000	0.0012 U	NA	0.13 U	NA	NA	NA	0.0012 U	NA	NA	NA	**1.6**
	Trichloroethene	2	90	10,000	**0.001**	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,2-Dichlorobenzene	30	300	10,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,3-Dichlorobenzene	40	100	5,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	**1.4**
	1,4-Dichlorobenzene	4	50	10,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	**4.4**
	Methyl tert butyl ether	100	100	5,000	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	p/m-Xylene	300	500	10,000	0.0016 U	NA	**0.18**	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	o-Xylene	300	500	10,000	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	cis-1,2-Dichloroethene	0.4	100	5,000	**0.0021**	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	**3.6**
	Dibromomethane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,2,3-Trichloropropane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Styrene	4	30	10,000	0.0016 U	NA	0.17 U	NA	NA	NA	0.0016 U	NA	NA	NA	0.19 U
	Dichlorodifluoromethane	NS	NS	NS	0.0078 U	NA	0.85 U	NA	NA	NA	0.0079 U	NA	NA	NA	0.97 U
	Acetone	50	400	10,000	0.028 U	NA	3 U	NA	NA	NA	0.028 U	NA	NA	NA	3.5 U
	Carbon disulfide	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	2-Butanone	50	400	10,000	0.0078 U	NA	0.85 U	NA	NA	NA	0.0079 U	NA	NA	NA	0.97 U
	4-Methyl-2-pentanone	50	400	10,000	0.0078 U	NA	0.85 U	NA	NA	NA	0.0079 U	NA	NA	NA	0.97 U
	2-Hexanone	NS	NS	NS	0.0078 U	NA	0.85 U	NA	NA	NA	0.0079 U	NA	NA	NA	0.97 U
	Bromochloromethane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Tetrahydrofuran	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	2,2-Dichloropropane	NS	NS	NS	0.0039 U	NA	0.42 U	NA	NA	NA	0.0039 U	NA	NA	NA	0.48 U
	1,2-Dibromoethane	0.1	0.7	300	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,3-Dichloropropane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,1,1,2-Tetrachloroethane	0.1	7	3,000	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Bromobenzene	NS	NS	NS	0.0039 U	NA	0.42 U	NA	NA	NA	0.0039 U	NA	NA	NA	0.48 U

Table 10
Summary of Analytical Results for Mechanical Room Investigation Soil Samples
(April 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte			Sample Location:	**B-E-1**		**B-N-1**		**B-NE-1**			**B-NW-1**			
				Sample ID:	B-E-1	B-E-1	B-N-1	B-N-1	B-NE-1	B-NE-1	B-NE-1	B-NW-1	B-NW-1	B-NW-1	B-NW-1
				Sample Depth (ft.)*:	6-8/8	10-12	6-8/7	8-10	6-8	8-10	10-12/11	6-6.5	6.5-8	8-10	10-11.5/11
				Sample Date:	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012
		S-1/GW-2	S-1/GW-3	UCLs											
	n-Butylbenzene	100(1)	100(1)	5,000(1)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	sec-Butylbenzene	100(1)	100(1)	5,000(1)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	tert-Butylbenzene	100(1)	100(1)	5,000(1)	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	o-Chlorotoluene	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	p-Chlorotoluene	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,2-Dibromo-3-chloropropane	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Hexachlorobutadiene	6	6	1,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Isopropylbenzene	100(1)	100(1)	5,000(1)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	p-Isopropyltoluene	100(1)	100(1)	5,000(1)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	Naphthalene	40	500	10,000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	n-Propylbenzene	100(1)	100(1)	5,000(1)	0.00078 U	NA	0.085 U	NA	NA	NA	0.00079 U	NA	NA	NA	0.097 U
	1,2,3-Trichlorobenzene	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,2,4-Trichlorobenzene	70	500	9000	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	**4.2**
	1,3,5-Trimethylbenzene	100(1)	100(1)	5,000(1)	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,2,4-Trimethylbenzene	100(1)	100(1)	5,000(1)	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Ethyl ether	NS	NS	NS	0.0039 U	NA	0.42 U	NA	NA	NA	0.0039 U	NA	NA	NA	0.48 U
	Isopropyl Ether	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Ethyl-Tert-Butyl-Ether	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	Tertiary-Amyl Methyl Ether	NS	NS	NS	0.0031 U	NA	0.34 U	NA	NA	NA	0.0032 U	NA	NA	NA	0.39 U
	1,4-Dioxane	6	70	5000	0.031 U	NA	8.5 U	NA	NA	NA	0.032 U	NA	NA	NA	9.7 U
PCBs															
(mg/kg)	Aroclor 1016	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1221	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1232	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1242	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1248	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1254	2	2	100	**2.98**	**29.5**	**692**	**58.7**	**0.215**	**0.0402**	**0.0460**	**0.429**	**563**	**540**	**556**
	Aroclor 1260	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1262	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Aroclor 1268	2	2	100	0.192 U	3.66 U	58.4 U	3.51 U	0.0383 U	0.0378 U	0.0367 U	0.0598 U	45.0 U	37.3 U	46.5 U
	Total PCBs	2	2	100	**2.98**	**29.5**	**692**	**58.7**	**0.215**	**0.0402**	**0.0460**	**0.429**	**563**	**540**	**556**
Total Petroleum Hydrocarbons															
(mg/kg)	TPH	1,000	1,000	10,000	38.0 U	NA	**370**	NA	NA	NA	37.6 U	NA	NA	NA	**510**
Total Organic Carbon															
(%)	Total Organic Carbon (Rep1)	N/A	N/A	N/A	**0.066**	NA	**1.17**	NA	NA	NA	NA	NA	**0.102**	NA	NA
	Total Organic Carbon (Rep2)	N/A	N/A	N/A	**0.065**	NA	**1.42**	NA	NA	NA	NA	NA	**0.099**	NA	NA

Notes:

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

E - Value exceeds calibration range.

NA - Sample not analyzed for the listed analyte.

N/A - not applicable.

NS - No MassDEP standards exist for this analyte.

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 UCLs.

VOCs - Volatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

UCLs - Upper concentration limits.

(1) - MassDEP Method 1 standards for C9-C10 aromatics used.

(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

* - Sample depth for Other/VOC analysis; otherwise the sample depth applies to all listed analyses.

Table 10
Summary of Analytical Results for Mechanical Room Investigation Soil Samples
(April 2012)
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte			Sample Location:	**B-SE-1**		**B-SSE-1**			**MIP-B-S-3**			**MIP-B-W-1**	
				Sample ID:	B-SE-1	B-SE-1	B-SSE-1	B-SSE-1	B-SSE-X	MIP-B-S-3	MIP-B-S-3	MIP-B-S-3	MIP-B-W-1	MIP-B-W-1
				Sample Depth (ft.)*:	6-8	8-10	6-8/6.5	8-10/9	8-10	6-8/7	8-10	10-12	6-8/7	10-12
				Sample Date:	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/20/2012	4/20/2012	4/20/2012	4/20/2012	4/20/2012
		S-1/GW-2	S-1/GW-3	UCLs					Field Dup					
VOCs														
(mg/kg)	Methylene chloride	20	200	10000	NA	NA	0.0072 U	0.98 U	NA	0.0077 U	NA	NA	0.0071 U	NA
	1,1-Dichloroethane	5	500	10,000	NA	NA	0.0011 U	0.15 U	NA	0.0012 U	NA	NA	0.0011 U	NA
	Chloroform	0.3	400	8,000	NA	NA	0.0011 U	0.15 U	NA	0.0012 U	NA	NA	0.0011 U	NA
	Carbon tetrachloride	5	10	4,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	1,2-Dichloropropane	0.1	10	6,000	NA	NA	0.0025 U	0.34 U	NA	0.0027 U	NA	NA	0.0025 U	NA
	Dibromochloromethane	0.03	20	5,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	1,1,2-Trichloroethane	2	4	2,000	NA	NA	0.0011 U	0.15 U	NA	0.0012 U	NA	NA	0.0011 U	NA
	Tetrachloroethene	10	30	10,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Chlorobenzene	3	100	10,000	NA	NA	**0.002**	0.098 U	NA	0.00077 U	NA	NA	**0.004**	NA
	Trichlorofluoromethane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,2-Dichloroethane	0.1	10	6,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	1,1,1-Trichloroethane	500	500	10,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Bromodichloromethane	0.1	20	5,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	trans-1,3-Dichloropropene	0.4[(2)]	9[(2)]	4,000[(2)]	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	cis-1,3-Dichloropropene	0.4[(2)]	9[(2)]	4,000[(2)]	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	1,1-Dichloropropene	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Bromoform	1	200	10,000	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,1,2,2-Tetrachloroethane	0.02	0.8	400	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Benzene	30	30	9,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Toluene	500	500	10,000	NA	NA	0.0011 U	0.15 U	NA	0.0012 U	NA	NA	0.0011 U	NA
	Ethylbenzene	500	500	10,000	NA	NA	**0.008**	**0.42**	NA	0.00077 U	NA	NA	**0.0022**	NA
	Chloromethane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Bromomethane	0.5	30	10,000	NA	NA	0.0014 U	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	Vinyl chloride	0.6	0.6	300	NA	NA	**0.18**	0.20 U	NA	**0.0042**	NA	NA	**0.002**	NA
	Chloroethane	NS	NS	NS	NA	NA	0.0014 U	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	1,1-Dichloroethene	40	500	10,000	NA	NA	**0.0094**	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	trans-1,2-Dichloroethene	1	500	10,000	NA	NA	**0.13**	0.15 U	NA	**0.0019**	NA	NA	0.0011 U	NA
	Trichloroethene	2	90	10,000	NA	NA	**0.28**	0.098 U	NA	**0.0098**	NA	NA	0.00071 U	NA
	1,2-Dichlorobenzene	30	300	10,000	NA	NA	**0.011**	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,3-Dichlorobenzene	40	100	5,000	NA	NA	**0.029**	**1.2**	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,4-Dichlorobenzene	4	50	10,000	NA	NA	**0.06**	**0.71**	NA	0.0031 U	NA	NA	**0.014**	NA
	Methyl tert butyl ether	100	100	5,000	NA	NA	0.0014 U	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	p/m-Xylene	300	500	10,000	NA	NA	**0.0017**	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	o-Xylene	300	500	10,000	NA	NA	0.0014 U	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	cis-1,2-Dichloroethene	0.4	100	5,000	NA	NA	**0.69**	**0.1**	NA	**0.027**	NA	NA	0.00071 U	NA
	Dibromomethane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,2,3-Trichloropropane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Styrene	4	30	10,000	NA	NA	0.0014 U	0.20 U	NA	0.0015 U	NA	NA	0.0014 U	NA
	Dichlorodifluoromethane	NS	NS	NS	NA	NA	0.0072 U	0.98 U	NA	0.0077 U	NA	NA	0.0071 U	NA
	Acetone	50	400	10,000	NA	NA	**0.05**	3.5 U	NA	0.028 U	NA	NA	0.026 U	NA
	Carbon disulfide	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	2-Butanone	50	400	10,000	NA	NA	**0.012**	0.98 U	NA	0.0077 U	NA	NA	0.0071 U	NA
	4-Methyl-2-pentanone	50	400	10,000	NA	NA	0.0072 U	0.98 U	NA	0.0077 U	NA	NA	0.0071 U	NA
	2-Hexanone	NS	NS	NS	NA	NA	0.0072 U	0.98 U	NA	0.0077 U	NA	NA	0.0071 U	NA
	Bromochloromethane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Tetrahydrofuran	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	2,2-Dichloropropane	NS	NS	NS	NA	NA	0.0036 U	0.49 U	NA	0.0038 U	NA	NA	0.0035 U	NA
	1,2-Dibromoethane	0.1	0.7	300	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,3-Dichloropropane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,1,1,2-Tetrachloroethane	0.1	7	3,000	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Bromobenzene	NS	NS	NS	NA	NA	0.0036 U	0.49 U	NA	0.0038 U	NA	NA	0.0035 U	NA

Table 10
Summary of Analytical Results for Mechanical Room Investigation Soil Samples
(April 2012)
New Bedford High School
New Bedford, Massachusetts

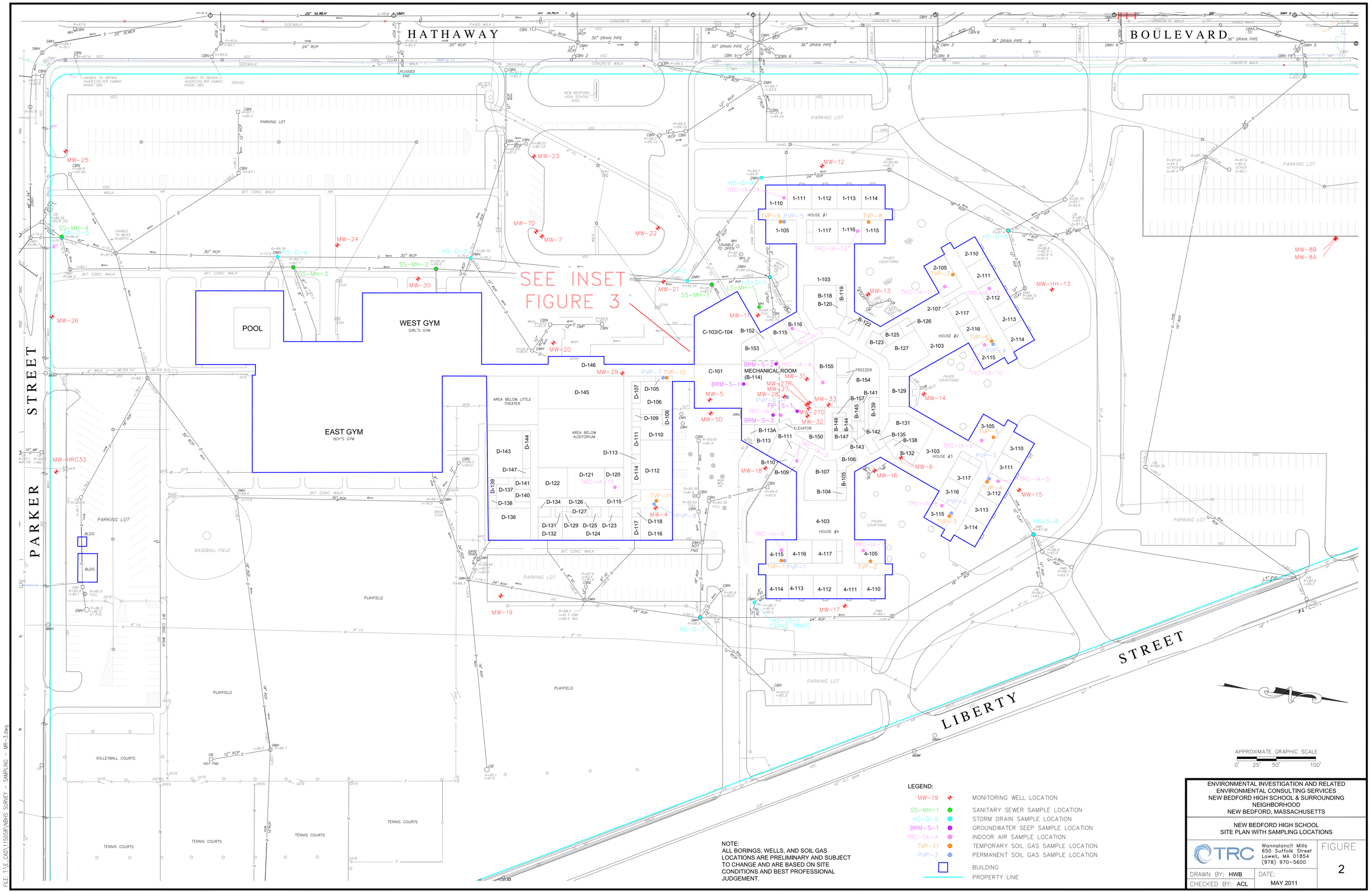
Analysis	Analyte			Sample Location:	**B-SE-1**		**B-SSE-1**			**MIP-B-S-3**			**MIP-B-W-1**	
				Sample ID:	B-SE-1	B-SE-1	B-SSE-1	B-SSE-1	B-SSE-X	MIP-B-S-3	MIP-B-S-3	MIP-B-S-3	MIP-B-W-1	MIP-B-W-1
				Sample Depth (ft.)*:	6-8	8-10	6-8/6.5	8-10/9	8-10	6-8/7	8-10	10-12	6-8/7	10-12
				Sample Date:	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/18/2012	4/20/2012	4/20/2012	4/20/2012	4/20/2012	4/20/2012
		S-1/GW-2	S-1/GW-3	UCLs					Field Dup					
	n-Butylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	sec-Butylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	tert-Butylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	o-Chlorotoluene	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	p-Chlorotoluene	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,2-Dibromo-3-chloropropane	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Hexachlorobutadiene	6	6	1,000	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Isopropylbenzene	100(1)	100(1)	5,000(1)	NA	NA	**0.00076**	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	p-Isopropyltoluene	100(1)	100(1)	5,000(1)	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	Naphthalene	40	500	10,000	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	n-Propylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.00072 U	0.098 U	NA	0.00077 U	NA	NA	0.00071 U	NA
	1,2,3-Trichlorobenzene	NS	NS	NS	NA	NA	**0.04**	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,2,4-Trichlorobenzene	70	500	9000	NA	NA	**0.25 E**	**12**	NA	0.0031 U	NA	NA	**0.012**	NA
	1,3,5-Trimethylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	5,000(1)	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Ethyl ether	NS	NS	NS	NA	NA	0.0036 U	0.49 U	NA	0.0038 U	NA	NA	0.0035 U	NA
	Isopropyl Ether	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Ethyl-Tert-Butyl-Ether	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	Tertiary-Amyl Methyl Ether	NS	NS	NS	NA	NA	0.0029 U	0.39 U	NA	0.0031 U	NA	NA	0.0028 U	NA
	1,4-Dioxane	6	70	5000	NA	NA	0.029 U	9.8 U	NA	0.031 U	NA	NA	0.028 U	NA
PCBs														
(mg/kg)	Aroclor 1016	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1221	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1232	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1242	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1248	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1254	2	2	100	**0.273**	**0.390**	0.0379 U	0.0365 U	**0.0905**	**0.0594**	**0.0785**	0.0358 U	**319**	**77.1**
	Aroclor 1260	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1262	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Aroclor 1268	2	2	100	0.0383 U	0.0398 U	0.0379 U	0.0365 U	0.0362 U	0.0353 U	0.0345 U	0.0358 U	35.9 U	7.92 U
	Total PCBs	2	2	100	**0.273**	**0.390**	0.0379 U	0.0365 U	**0.0905**	**0.0594**	**0.0785**	0.0358 U	**319**	**77.1**
Total Petroleum Hydrocarbons														
(mg/kg)	TPH	1,000	1,000	10,000	NA	40.6 U	NA	37.3 U	37.9 U	35.8 U	NA	36.8 U	**482**	NA
Total Organic Carbon														
(%)	Total Organic Carbon (Rep1)	N/A	N/A	N/A	NA	NA	NA	**0.038**	NA	NA	NA	NA	NA	NA
	Total Organic Carbon (Rep2)	N/A	N/A	N/A	NA	NA	NA	**0.039**	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
E - Value exceeds calibration range.
NA - Sample not analyzed for the listed analyte.
N/A - not applicable.
NS - No MassDEP standards exist for this analyte.
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 UCLs.
VOCs - Volatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
UCLs - Upper concentration limits.
(1) - MassDEP Method 1 standards for C9-C10 aromatics used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.
* - Sample depth for Other/VOC analysis; otherwise the sample depth applies to all listed analyses.

FIGURES

FIGURE 1

SITE AERIAL PHOTOGRAPH
New Bedford High School
NEW BEDFORD, MASSACHUSETTS



NOTE:
ALL BORINGS, WELLS, AND SOIL GAS LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE AND ARE BASED ON SITE CONDITIONS AND BEST PROFESSIONAL JUDGEMENT.

LEGEND:

MW-19	MONITORING WELL LOCATION
SS-MH-1	SANITARY SEWER SAMPLE LOCATION
HS-D-2	STORM DRAIN SAMPLE LOCATION
BRM-S-1	GROUNDWATER SEEP SAMPLE LOCATION
TRC-IA-4	INDOOR AIR SAMPLE LOCATION
TVP-11	TEMPORARY SOIL GAS SAMPLE LOCATION
PVP-3	PERMANENT SOIL GAS SAMPLE LOCATION
	BUILDING
	PROPERTY LINE

ENVIRONMENTAL INVESTIGATION AND RELATED ENVIRONMENTAL CONSULTING SERVICES
NEW BEDFORD HIGH SCHOOL & SURROUNDING NEIGHBORHOOD
NEW BEDFORD, MASSACHUSETTS

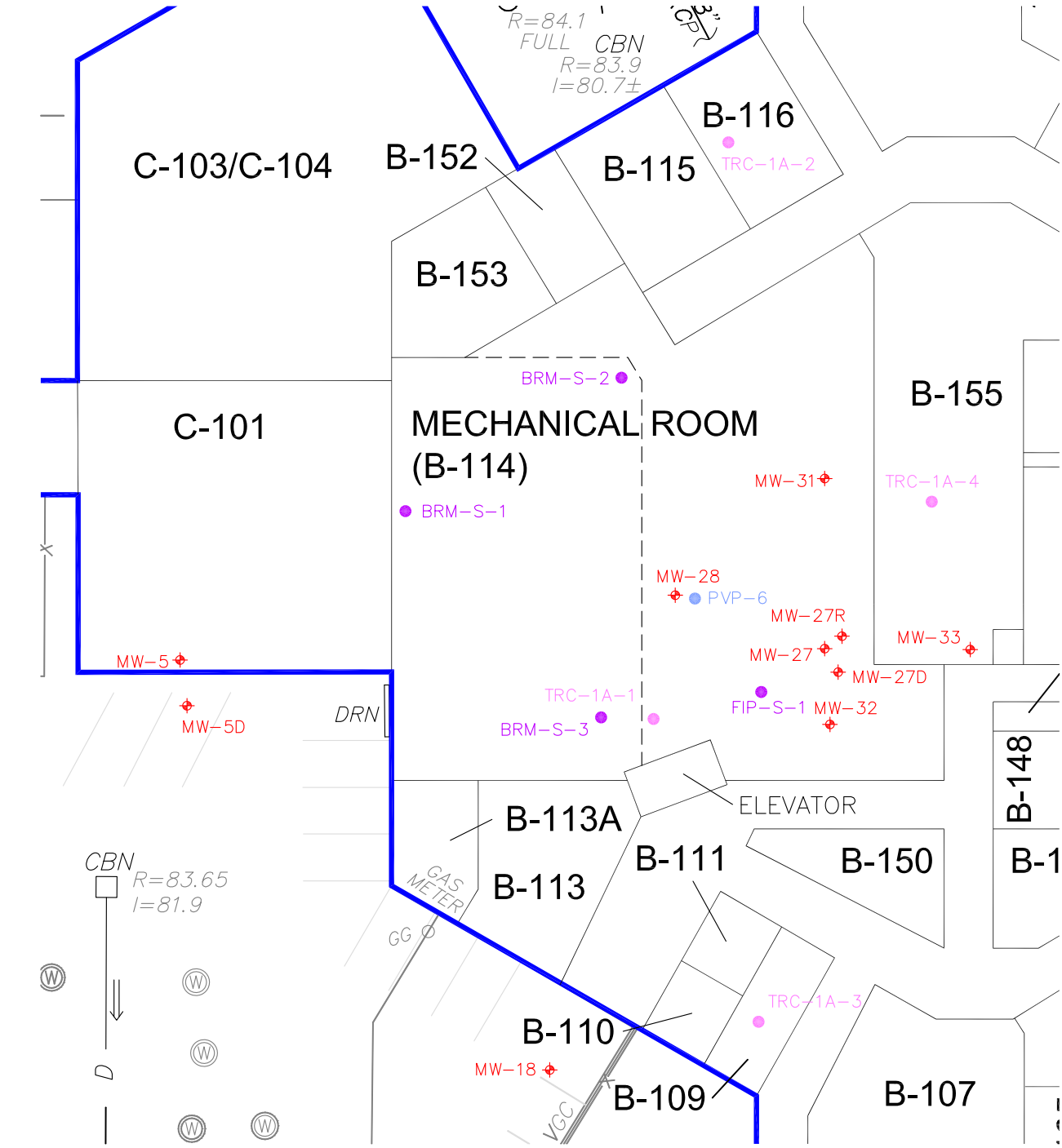
NEW BEDFORD HIGH SCHOOL
SITE PLAN WITH SAMPLING LOCATIONS

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

FIGURE 2

DRAWN BY: HWB
DATE: MAY 2011
CHECKED BY: ACL

FILE: T:\E_CAD\115058\NBHS SURVEY - SAMPLING - MR-3.dwg



LEGEND:

MW-19	MONITORING WELL LOCATION
HS-D-2	STORM DRAIN SAMPLE LOCATION
BRM-S-1	GROUNDWATER SEEP SAMPLE LOCATION
TRC-1A-4	INDOOR AIR SAMPLE LOCATION
PVP-3	PERMANENT SOIL GAS SAMPLE LOCATION
	BUILDING

APPROXIMATE GRAPHIC SCALE

0' 30' 60'

ENVIRONMENTAL INVESTIGATION AND RELATED
ENVIRONMENTAL CONSULTING SERVICES
NEW BEDFORD HIGH SCHOOL & SURROUNDING
NEIGHBORHOOD
NEW BEDFORD, MASSACHUSETTS

NEW BEDFORD HIGH SCHOOL

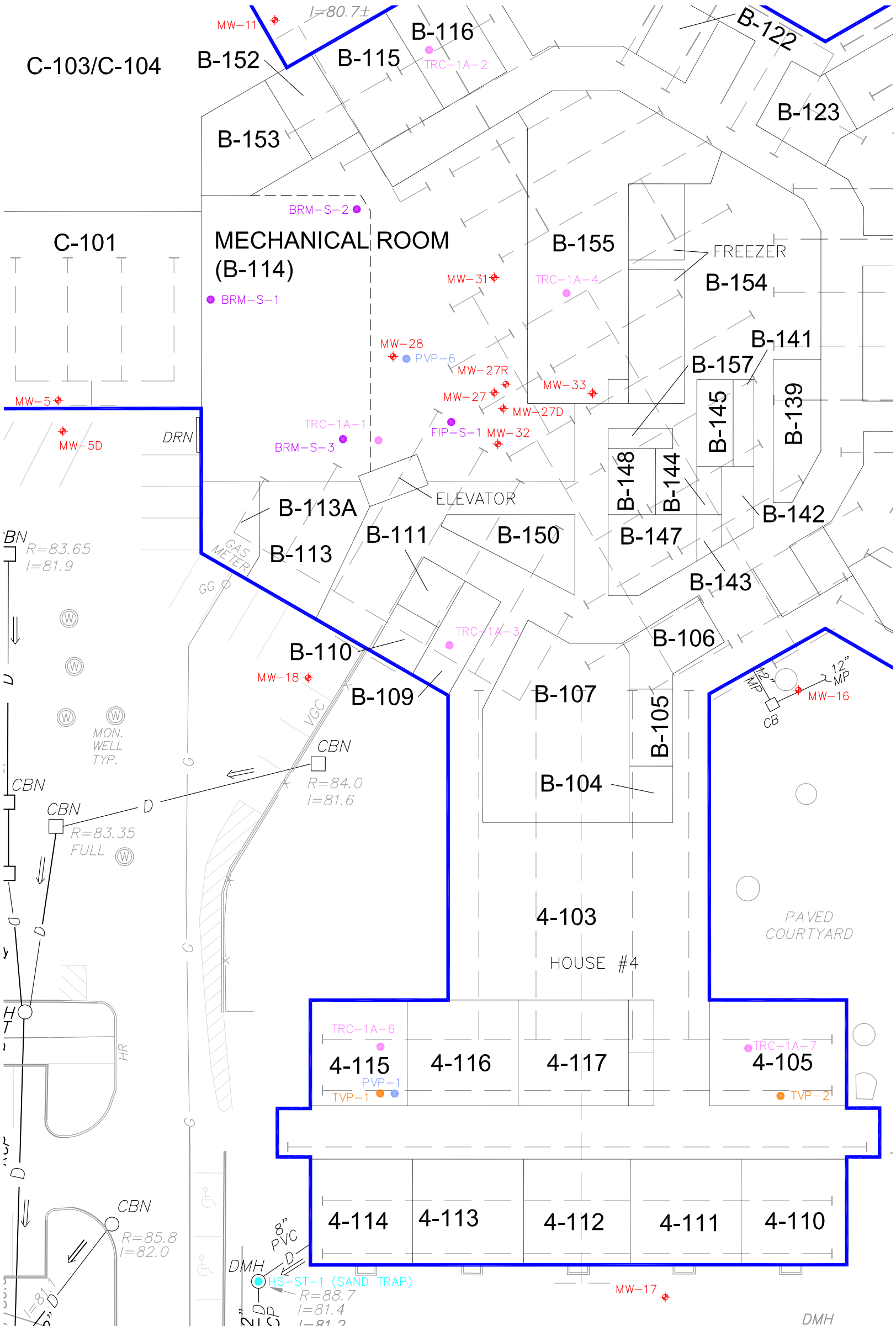
DETAIL OF SITE PLAN IN VICINITY OF MECHANICAL ROOM

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

FIGURE 3

DRAWN BY: HWB
CHECKED BY: ACL
DATE: MAY 2011

FILE: T:\E_CAD\115058\NBHS SURVEY - SAMPLING - MR-3.dwg



LEGEND:

MW-19	MONITORING WELL LOCATION (SELECT INTERIOR LOCATIONS APPROXIMATE)
HS-D-2	STORM DRAIN SAMPLE LOCATION
BRM-S-1	GROUNDWATER SEEP SAMPLE LOCATION
TRC-1A-4	INDOOR AIR SAMPLE LOCATION
PVP-3	PERMANENT SOIL GAS SAMPLE LOCATION
	BUILDING
4-114	INTERIOR ROOM AND DESIGNATION
	APPROXIMATE UNDERDRAIN

NOTE:
UNDERDRAIN INFORMATION FROM "SITE UTILITIES PLAN, NEW BEDFORD HIGH SCHOOL" BY OWEN F. HACKETT, JR. ASSOCIATES ARCHITECTS.

APPROXIMATE GRAPHIC SCALE
0' 30' 60'

ENVIRONMENTAL INVESTIGATION AND RELATED ENVIRONMENTAL CONSULTING SERVICES
NEW BEDFORD HIGH SCHOOL & SURROUNDING NEIGHBORHOOD
NEW BEDFORD, MASSACHUSETTS

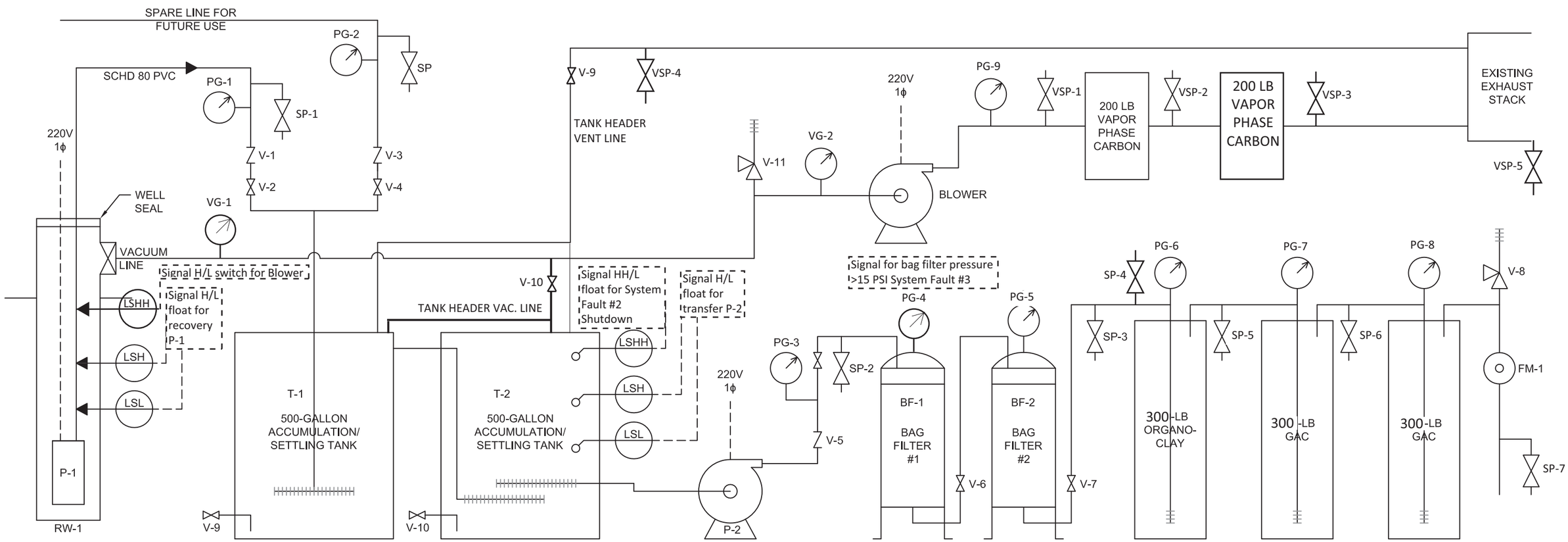
NEW BEDFORD HIGH SCHOOL - DETAIL OF SITE PLAN
WITH APPROXIMATE UNDERDRAIN SYSTEM

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

DRAWN BY: HWB
CHECKED BY: ACL
DATE: NOV 2011

FIGURE 4

FILE: T:\E_CAD\115058\NBHS SURVEY - SAMPLING - MR-3.dwg



LEGEND:

LSL	LOW LEVEL SWITCH	SP	SAMPLE PORT	P-1	PUMP
LSH	HIGH LEVEL SWITCH		BALL VALVE	GAC	GRANULAR ACTIVATED CARBON
LSHH	HIGH HIGH LEVEL SWITCH		CHECK VALVE	220V 1ϕ	220 VOLTS, SINGLE PHASE
	PRESSURE GAUGE		VACUUM RELIEF		
FM-1	FLOW METER		DISTRIBUTOR		

Signal for flooding pit System Fault #4

NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS

PROCESS AND INSTRUMENTATION DIAGRAM

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

DRAWN BY: HWB
CHECKED BY: ACL
DATE: APRIL 2012

FIGURE 5

FILE: T:\E_CAD\115058\PROCESS DIA NBHS.dwg

LEGEND:

82.5	GROUNDWATER CONTOUR, DASHED WHERE INFERRED
MW-15 (83.04)	MONITORING WELL (GROUNDWATER ELEVATION FEBRUARY 27, 2012)
MW-22 (81.09)*	(ANOMALOUS WATER LEVEL ELEVATION NOT USED IN CONTOURING)
MW-8B (NM)	(NO MEASUREMENT COLLECTED)
	PROPERTY LINE

NOTES:

1. ALL MONITORING WELL LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE AND ARE BASED ON SITE CONDITIONS AND BEST PROFESSIONAL JUDGEMENT.

2. DEEP MONITORING WELLS (MW-5D, MW-7D, AND MW-27D) GROUNDWATER ELEVATION NOT USED IN CONTOURING. LISTED FOR REFERENCE PURPOSES ONLY.

3. MONITORING WELLS MW-12, MW-HH-13 AND MW-HRC-33 (NOT SHOWN) ABANDONED DURING RAM IMPLEMENTATION IN 2011.

ENVIRONMENTAL INVESTIGATION AND RELATED
ENVIRONMENTAL CONSULTING SERVICES
NEW BEDFORD HIGH SCHOOL & SURROUNDING NEIGHBORHOOD
NEW BEDFORD, MASSACHUSETTS

ESTIMATED GROUNDWATER CONTOUR MAP

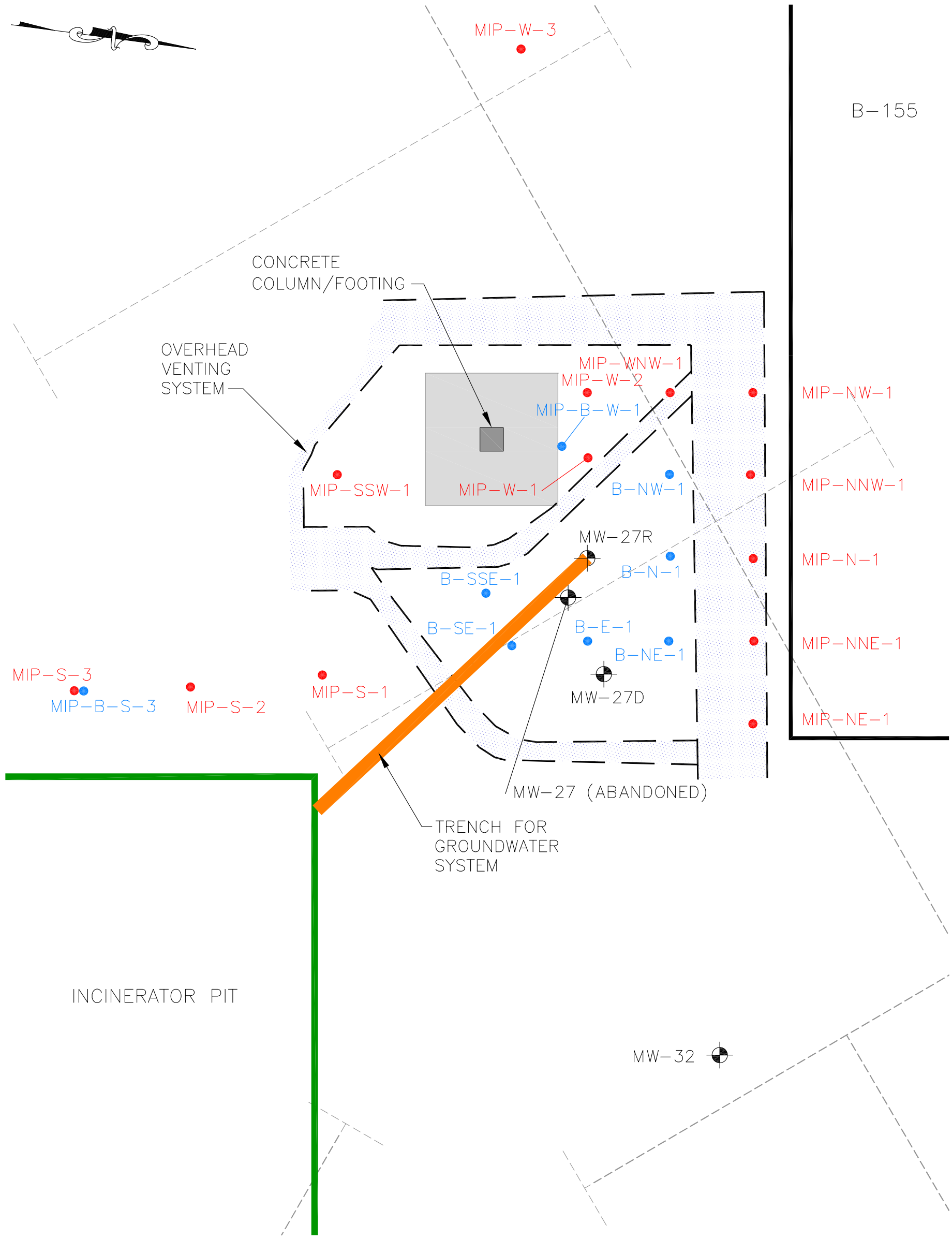
(FEBRUARY 27, 2012)

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

FIGURE 6

DRAWN BY: HWB
CHECKED BY: JBS
DATE: MARCH 2012

FILE: T:\E_CAD\115058\PROJECT GW MW 2-27-2012.dwg



LEGEND:
(LOCATIONS APPROXIMATE)

- MONITORING WELL LOCATION
- MIPS (MEMBRANE INTERFACE PROBE SYSTEM) BORING LOCATION
- MACRO-CORE BORING LOCATION
- UNDERDRAIN LOCATION
- OVERHEAD DUCT WORK/ VENTING SYSTEM
- B-155 INTERIOR ROOM AND DESIGNATION

NOTE:
UNDERDRAIN INFORMATION FROM "SITE UTILITIES PLAN, NEW BEDFORD HIGH SCHOOL" BY OWEN F. HACKETT, JR. ASSOCIATES ARCHITECTS.

APPROXIMATE GRAPHIC SCALE
0' 3' 6'

NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS

MECHANICAL ROOM
BORING LOCATIONS AND AREA PLAN

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

DRAWN BY: HWB
CHECKED BY: MAO
DATE: MAY 2012

FIGURE 7

FILE: T:\E_CAD\115058\NBHS MIPS DRILLING PLAN.dwg

APPENDIX A

NOTIFICATION LETTERS & ADJUSTED MANIFESTS

WASTE MANAGEMENT

RECEIVED
DEC 22 2011
BY

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
(716) 286-1550
(716) 286-0211 Fax

December 13, 2011

Ms. Deborah L. Aldrich, P.E. Chief, Manifest Section
New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
625 Broadway – 9th Floor
Albany, NY 12233-7520

RE: Discrepancy Notification

Dear Ms. Aldrich:

Pursuant to 6NYCRR 373-2.5(b)(1)(v), CWM Chemical Services, L.L.C. is submitting notification of a manifest(s) discrepancy. A copy of the referenced manifest(s) is attached.

Generator & Address: City of New Bedford, 133 Williams Street, Rm 304, New Bedford, MA 02740

Manifest Number(s): 005002214FLE

Discrepancy: Line 1- One drum of three required off-site landfill disposal. The drum was moved to new manifest line 4 to reflect the proper waste, handling and management method codes.
Line 3 - Change B007 to B002 and add F002. Please see the manifest for additional information.

Should you require additional information, please contact me at (716) 286-0269

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Sincerely,
CWM CHEMICAL SERVICES, L.L.C.

Kevin M. Sheehan
Records Coordinator

cc: file DOR 08/30/11 8164699511-21
Generator
Generator State
Transporter
EMD file / Billing

(2)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP 5 0 8 9 9 7 4 5 1 1
2. Page 1 of 1
3. Emergency Response Phone: 800 966 9282
4. Manifest Tracking Number: 005002214 FLE

5. Generator's Name and Mailing Address
City Of New Bedford
133 Williams Street Room 304
New Bedford, MA 02740
Generator's Phone: 508-961-4576 Cheryl Henlin

Generator's Site Address (if different than mailing address)
City of New Bedford - 230 Hathaway
230 Hathaway Boulevard
New Bedford, MA 02740

6. Transporter 1 Company Name: Triumvirate Environmental, Inc.
U.S. EPA ID Number: MAD985286988

7. Transporter 2 Company Name: FRANK'S VACUUM TANK SERVICE
U.S. EPA ID Number: NYD982792814

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

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3082, Hazardous waste, liquid, n.o.s. 9, III (RQ: Polychlorinated Biphenyls, Trichloroethylene)	0 0 3	D M	0450	K	~~MA02~~	~~B007~~ ~~F002~~	-11
X	2. NA3082, Hazardous waste, liquid, n.o.s. 9, III (RQ: Polychlorinated Biphenyls, Trichloroethylene)	0 0 2	T P	0500	K	~~MA02~~	~~B007~~ ~~F002~~	-12
X	3. NA3077, Hazardous waste, solid, n.o.s. 9, III (RQ: Polychlorinated Biphenyls)	0 0 1	D M	0200	K	~~MA02~~	~~B007~~	-13
	4. NA 3077, Hazardous Waste Solid, nos, 9, III (F002) RQ. PCBs	001	DM	150	K	B007	F002	-21

14. Special Handling Instructions and Additional Information
NY302880 8164695
1- (3 x 55) PCB Contaminated Water : Out of Service 8/19/2011 Unique ID# 716488192011-1c through 716488192011-3c 2-
(2 x Tote) PCB Contaminated Water : Out of Service 8/19/2011 Unique ID# 716488192011-1b through 716488192011-2b NY302880
(1 x 55) NY302895 Out of Service 8/19/2011 Unique ID# 716488192011-1a 4- NY302896 drums

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/Offeror's Printed/Typed Name: Cheryl Henlin
Signature: Cheryl Henlin
Month 08 Day 19 Year 11

16. International Shipments ☐ Import to U.S. ☐ 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: Mark Eppley
Signature:
Month 8 Day 19 Year 11
Transporter 2 Printed/Typed Name: DALE DOMENECK
Signature:
Month 8 Day 29 Year 11

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☒ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Line 1 and 2 - item 13 change B007 to B002. Line 3 item 13 add F002. 9/9/11 HMB.
Line 1 - one drum requires offsite macroencapsulation. move to Line 4 as shown above, Line 1 = 2 DM 300K
Manifest Reference Number:
18b. Alternate Facility (or Generator) Line 3 Change B007 to B002 + add F002. 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. H135 2. H135 3. ~~H141~~ H135 4. H141

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: Richard L. Bent
Signature:
Month 08 Day 30 Year 11

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

WASTE MANAGEMENT

RECEIVED
MAY 08 2012
BY:

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
(716) 286-1550
(716) 286-0211 Fax

Date: 5/2/12

Ms. Deborah L. Aldrich, P.E, Chief Hazardous Waste
Manifest and Reporting Section
New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials
625 Broadway – 9th Floor
Albany, NY 12233-7250

RE: Manifest Correction Notification

Dear Ms. Aldrich:

Please find the attached photocopy of a manifest needing a Management Method and/or NY State handling code correction.

Manifest Number 005002169 FLE, **page** 1, **line** 1.

The NY State handling code in **Item 13** should be: B.

The Management Method Code in **Item 19** should be: H141.

Should you require additional information, please contact me at (716)286-0269.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Very truly yours,
CWM CHEMICAL SERVICES, L.L.C.

Kevin M. Sheehan
Records Coordinator

Int. KS

cc: file DOR 8/30/11 816 46 995-17
Generator
~~Generator State~~
~~Transporter~~
EMD File
Billing

From everyday collection to environmental protection, Think Green® Think Waste Management.

Printed on 100% post-consumer recycled paper.

(5)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

XXXXX

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAP 5 0 8 9 9 7 4 5 1 1
2. Page 1 of 1
3. Emergency Response Phone: 800 966 9282
4. Manifest Tracking Number: 005002169 FLE

5. Generator's Name and Mailing Address
City Of New Bedford
133 William Street Room 304
New Bedford, MA 02740
Generator's Phone: 508-961-4576 Cheryl Henlin

Generator's Site Address (if different than mailing address)
City of New Bedford - 230 Hathaway
230 Hathaway Boulevard
New Bedford, MA 02740

6. Transporter 1 Company Name: Triumvirate Environmental, Inc.
U.S. EPA ID Number: MAD985286988

7. Transporter 2 Company Name: FRANK'S VACUUM TRK SERVICE
U.S. EPA ID Number: NYD982792814

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

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
						MA02	B007	F002
X	NA3082, Hazardous waste, liquid, n.o.s. 9, III (RQ: Polychlorinated Biphenyls, Trichloroethylene)	0 0 2	D M	00300	K		X	B
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1 - (2 x 55) PCB Contaminated Water : Out of Service Date: 8/19/2011 Unique ID#: T741291234567 6-1, 2- T741291234567 6-2 3-
4 - NY302880
8164699F

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/Offeror's Printed/Typed Name: Cheryl Henlin
Signature: Cheryl Henlin
Month 8 Day 16 Year 11

16. International Shipments ☐ Import to U.S. ☐ 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: MARK EPPLY
Signature:
Month 8 Day 16 Year 11
Transporter 2 Printed/Typed Name: DAVE DOMENICI
Signature:
Month 8 Day 19 Year 11

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H132 H141 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: Richard LA BEND
Signature:
Month 08 Day 30 Year 11

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

vactor truck - hose disposal

WASTE MANAGEMENT

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
(716) 286-1550
(716) 286-0211 Fax

May 10, 2012

Ms. Deborah L. Aldrich, P.E. Chief, Manifest Section
New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
625 Broadway – 9th Floor
Albany, NY 12233-7520

RE: Discrepancy Notification

Dear Ms. Aldrich:

Pursuant to 6NYCRR 373-2.5(b)(1)(v), CWM Chemical Services, L.L.C. is submitting notification of a manifest(s) discrepancy. A copy of the referenced manifest(s) is attached.

Generator & Address: City of New Bedford, 133 Williams St., New Bedford, MA 02740

Manifest Number(s): 005002215FLE

Discrepancy: Line 1 - Item 13 - add waste code F002 and NY handling code B. Please see the manifest for additional information.

Should you require additional information, please contact me at (716) 286-0269

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,
CWM CHEMICAL SERVICES, L.L.C.

Kevin M. Sheehan
Records / Reporting Supervisor

RECEIVED
MAY 15 2012
BY:

cc: file DOR 8/30/11 81646995-16
Generator
Generator State
Transporter
EMD file / Billing

(4)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

XXXXX
Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP 5 0 8 9 9 7 4 5 1 1
2. Page 1 of: 1
3. Emergency Response Phone: 800 966 9282
4. Manifest Tracking Number: 005002215 FLE

5. Generator's Name and Mailing Address
City Of New Bedford
133 Williams Street Room 304
New Bedford, MA 02740
Generator's Phone: 508-961-4576 Cheryl Henlin

Generator's Site Address (if different than mailing address)
City of New Bedford - 230 Hathaway
230 Hathaway Boulevard
New Bedford, MA 02740

6. Transporter 1 Company Name
Triumvirate Environmental, Inc.
U.S. EPA ID Number: MAD 9 8 5 2 8 6 9 8 8

7. Transporter 2 Company Name
FRANK'S VACUUM TANK SERVICE
U.S. EPA ID Number: NYD 982792814

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: N Y D 0 4 9 8 3 6 6 7 9

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	NA3077, Hazardous waste, solid, n.o.s. 9, III (RQ: Polychlorinated Biphenyls)	001	CF	00075	K	MA02	B007	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1- (1 x Cubic Yard Box) NY302896 : Out of Service Date: 8/23/2011 Unique ID# 716488242011 2- 3-
4-
81646995

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/Offeror's Printed/Typed Name: Cheryl Henlin
Signature: Cheryl Henlin
Month Day Year: 08 24 11

16. International Shipments ☐ Import to U.S. ☐ 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: Mark Epply
Signature:
Month Day Year: 8 24 11
Transporter 2 Printed/Typed Name: DAVE DOMENICI
Signature:
Month Day Year: 8 29 11

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☒ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Line 1, item 13 - add F002 & NY code 'B'. Initialed
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. H141 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: Richard La Brenk
Signature:
Month Day Year: 08 30 11

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX C

COPY OF INDUSTRIAL DISCHARGE PERMIT

Department of Public Infrastructure

Ronald H. Labelle
Commissioner

Water
Wastewater
Highways
Engineering
Cemeteries

CITY OF NEW BEDFORD
Jonathan F. Mitchell, Mayor

March 29, 2012

Re: Industrial Discharge Permit # S - 123

Dear Mr. Sullivan,

Enclosed please find Industrial Discharge permit number S- 123

It is strongly suggested that you read through your permit to familiarize yourself with applicable City discharge regulations especially self-monitoring requirements.

In accordance with Federal Regulations and City protocol, a permit processing fee of two hundred fifty dollars ($250.00) is required. A bill will be sent to your office in this amount.

Should you have any questions please contact our office at 508-979-1556.

Sincerely,

Commissioner
Department of Public Infrastructure

Enclosures

PERMIT #S - 123

In accordance with the provisions of the City of New Bedford Code of Ordinances, Chapter 16 Article II

FACILITY NAME: **TRC AT NEW BEDFORD HIGH SCHOOL**

MAILING ADDRESS: **WANNALANCIT MILLS**
650 SUFFOLK ST.
LOWELL, MA 01854

PREMISE ADDRESS: **230 HATHAWAY BLVD.**
NEW BEDFORD, MA 02740

CONTACT PERSON(S): **DAVID SULLIVAN**

PHONE NO: **978.970.5600**

is hereby authorized to discharge industrial wastewater from the above identified facility into the City of New Bedford Sewer System in agreement with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its' obligation to comply with any or all applicable pretreatment regulations, standards or requirements under local, state, and federal laws, including any such regulations, standards, requirements or laws that may become effective during the term of this permit.

Non-compliance with any term or condition of this permit shall constitute a violation of the City of New Bedford's Sewer Use Ordinance. All issues of non-compliance will be handled as written in the City's Enforcement Response Procedures Document. **This permit is a one year permit and is effective on APRIL 1, 2012 and expires midnight on APRIL1, 2013.**

If the permittee desires to continue to discharge after the expiration or revocation of this permit, an application must be filed for a renewal permit in accordance with the regulations of the Sewer Use Ordinance, a minimum of 60 days prior to the expiration date.

CITY OF NEW BEDFORD
DEPARTMENT OF PUBLIC INFRASTRUCTURE
INDUSTRIAL DISCHARGE PERMIT

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CITY OF NEW BEDFORD
DEPARTMENT OF PUBLIC INFRASTRUCTURE
INDUSTRIAL DISCHARGE PERMIT

ARTICLE I **DEFINITIONS**

Unless the context clearly indicates otherwise, the meaning of terms or abbreviations used in this discharge permit shall be as defined in the City's Sewer Use Ordinance (Chapter 16, Article II).

ARTICLE II **GENERAL CONDITIONS/PROHIBITIONS**

a. All discharges authorized herein shall be consistent with the City of New Bedford's Sewer Use Ordinance, and with the terms and conditions of this permit. If there is a conflict between the ordinance and this permit, then the terms of this permit shall govern. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of penalties equaling, $1000 per violation per day up to a maximum of $5000 per violation per day, as provided for in the City of New Bedford's Sewer Use Ordinance. Modifications, additions, and/or expansions that increase or decrease the quality and/or quantity of wastewater discharged to the Facilities must be reported to the Commissioner of the Department of Public Infrastructure (in this text, defined as, this person or his/her duly authorized agent(s)), City of New Bedford, in writing, and this permit may then be modified or reissued to reflect such changes. No change in the permittee's discharge may be made unless reported to and approved by the Commissioner. In no case shall new connections, increased flows, or significant changes in effluent quantity and/or quality be permitted if such will cause violation of the effluent limitation specified herein, unless permitted by the Commissioner.

Neither this permit nor any or all of the allowable discharge of flows and pollutant loadings provided for by the permit are transferable or assignable in part or whole to any other company, facility or process without the written consent of the Commissioner of Public Infrastructure.

b. After notice and opportunity for a hearing as provided for by the City of New Bedford's Sewer Use Ordinance, this permit may be modified, suspended, or revoked in whole or in part during its term for causes including the following:

1. Violation of any term or condition of this permit;
2. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts;
3. A change in conditions or the existence of a condition which requires either a temporary or permanent reduction or elimination of the authorized discharge;
4. Promulgation of a more stringent pretreatment standard by State or Federal agencies having jurisdiction over receiving waters. Permits modified under this section may include implementation schedules, self-monitoring requirements, revised effluent limitations and other provisions necessary to assure compliance;
5. A change in the facility's process or wastestream characteristics; or
6. A change in the Code of Ordinances, City of New Bedford, Chapter 16, Article II.

c. The permittee shall allow the Commissioner of the Department of Public Infrastructure and/or other duly authorized personnel upon the presentation of proper credentials:

1. To enter upon permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit during business hours;
2. To have access to and copy any records required to be kept under the terms and conditions of this permit;
3. To inspect any monitoring equipment or monitoring method required in this permit;
4. To sample at any intake, wastewater facility, or outfall; or
5. To enter upon a permittee's premise where an effluent source is located, during business and non-business hours, when a condition of emergency exists or is suspected to exist due to a process upset or discharge which may cause harm to the City's waste-water treatment facilities or process, or to the health or welfare of the community.

d. All pretreatment facilities shall be operated in a manner consistent with the Sewer Use Ordinance and applicable Federal, State or local regulations and guidelines. The permittee shall at all times maintain in good working order and operate as efficiently as possible all facilities or systems of control installed or utilized to achieve compliance with the terms and conditions of this permit.

e. The provisions of this permit are severable, and the invalidity of any condition or subdivision thereof shall not make void any other condition or subdivision thereof.

f. Non-Compliance and or Slug Discharges. In the event the permittee is unable to comply with any of the conditions of this permit due to an emergency situation resulting from a breakdown of pretreatment facilities, process upset condition, or occurrence of a spill, the permittee shall take the following steps:

1. Regardless of the scope or threat posed by the situation, if the Emergency occurs during the time period from 6:00 a.m. to 9:00 p.m., the permittee shall immediately notify the ranking employee on duty at the City's Wastewater Treatment Plant (508-991-6164), and the Wastewater Division Office (508 979-1556).
2. If the emergency is MAJOR in scope or if it poses IMMINENT threat or harm to the City's Wastewater Facilities and/or appurtenances, the environment, or the health and welfare of the community, the permittee shall immediately notify the above regard-less of the time of occurrence.
3. If the emergency is MINOR in scope AND poses no threat or harm AND occurs during the time period from 9:00 p.m. to 6:00 a.m., the permittee shall immediately notify the wastewater treatment plant. He shall then notify the Wastewater Division as soon as practicable after the start of the City's regular business hours. In addition, the permittee shall provide the Commissioner of the Department of Public Infrastructure with the following information in writing within five (5) days after commencement of such occurrence:

i Description of the discharge and the cause of non-compliance;

ii Anticipated time the condition of non-compliance is expected to continue, or if such conditions have been corrected, the duration of the period of non-compliance;

iii Steps taken by the permittee to reduce and eliminate the non-complying discharge; and

iv Steps to be taken by the permittee to prevent reoccurrence of the condition of non-compliance.

g. Revisions - The Commissioner of the Department of Public Infrastructure reserves the right to make appropriate revisions to this permit to establish effluent limitations, schedule of compliance, or other provisions which may be authorized under Federal, State or City acts to bring all such discharges into compliance with these acts.

h. The permittee shall not discharge wastewater containing any of the following substances:

1. Fats, wax, grease or oils of petroleum origin, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between 32 degrees F (0 degrees C) and 140 degrees F (60 degrees C);

2. Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the sewer system or to the operation of the sewer system. Prohibited materials include, but are not limited to: gasoline, kerosene, benzene, naphtha, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, sulfides, fuel oil or other flammable or explosive liquids, solids or gases.

3. Any effluent having a temperature higher than 104 degrees F (40 degrees C);

4. Any ashes, hair, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch, manure, fish gurry, or any other solids not capable of passing through ½" mesh or solid or viscous substances capable of causing obstructions or other interferences with proper operation of the sewer system;

5. Any pollutant, including oxygen demanding pollutants (i.e. BOD) at flow rate and /or concentration which will cause the pollutant to pass through to the receiving waters or interfere with the City of New Bedford's treatment works.

6. Any waste having a pH lower than 5.5 or higher than 11.0, or having any other corrosive property capable of causing damage or hazards to structures, equipment, or personnel of the sewer system.

7. Any toxic or poisonous substance in sufficient quantity to injure or interfere with any wastewater treatment process or to constitute hazards to humans or animals or

to create any hazard in waters which receive treated effluent from the sewer treatment plant.

8. Any substance which may effect the City's wastewater treatment facility's effluent and cause violation of the NPDES permit requirements or the receiving waters' quality standards.

9. Any substance which would cause the City's wastewater treatment facility to be in noncompliance with sludge use, recycle or disposal criteria pursuant to guidelines or regulations developed under Section 405 of the Federal Act, the Clean Air Act, the Resource Conservation and Recovery Act Subtitle C, the Toxic Substance Control Act, the Marine Protection Research Sanctuary Act, the Safe Drinking Water Act Subtitle C, or other State Law or Regulation for sludge management or disposal.

ARTICLE III **SPECIAL CONDITIONS/PROHIBITIONS**

Upon connection to the City's Wastewater Facilities, the permittee is authorized to discharge wastewater whose effluent characteristics shall not exceed the values listed in the City's Sewer Use Ordinance, or as further specified herein:

TABLE I

ALLOWABLE EFFLUENT LIMITATIONS

The permittee is authorized to discharge wastewater to the City's Facilities which are in conformance with prohibitions and limitations of the Sewer Use Ordinance of the City. Thereafter, such discharges shall comply with the prohibitions and limitations of the Sewer Use Ordinance and the following:

POLLUTANT	DAILY MAX*$_1$	MONTHLY AVERAGE*$_1$
CADMIUM	0.40 MG/L	0.40 MG/L
CHROMIUM	7.00 MG/L	7.00 MG/L
COPPER	2.30 MG/L	2.30 MG/L
LEAD	0.69 MG/L	0.69 MG/L
NICKEL	2.00 MG/L	2.00 MG/L
SILVER	1.20 MG/L	1.20 MG/L
ZINC	4.20 MG/L	4.20 MG/L
CYANIDE	1.90 MG/L	1.90 MG/L
TTO*$_2$	----------	----------
OIL & GREASE	100.0 MG/L	100.0 MG/L
TSS*$_3$	----------	----------
pH	5.5 – 11.0 S.U.	5.5 – 11.0 S.U.
BOD*$_3$	----------	----------
PCBs	5 UG/L	----------

*

Note: (1) Values are currently under review, in accordance with EPA regulations, and are subject to change. The City will notify all permitted facilities of any revision(s).

(2) TTO is defined as Total Toxic Organics and consists of the following EPA analytical procedures:

Method 608 - Pesticides & PCB's
Method 624 - Volatile Organics
Method 625 - Semi-volatile Organics

(3) BOD and TSS surcharges will be as follows:

50 lbs - 150 lbs = $0.05/lb/day
151 lbs - 250 lbs = $0.07/lb/day
251 lbs and above = $0.10/lb/day

ARTICLE IV. **REPORTING AND MONITORING**

A. The permittee shall determine the wastewater flow using the main water meter to determine discharge flow. All monitoring devices and sampling stations must be approved by the Commissioner of Public Infrastructure. The permittee shall maintain records of all information resulting from any monitoring activities herein for a minimum of three (3) years. The permittee shall accept the reasonable estimates of quantities of wastewater flow as established by the Commissioner of Public Infrastructure during all periods in which the meters fail to measure the wastewater quantity correctly.

B. The permittee shall calibrate and perform maintenance procedures on all monitoring instruments and pretreatment equipment (if applicable) at regular intervals to ensure accuracy of measurements and reliability of equipment.

C. The permittee shall provide the above records and shall demonstrate the accuracy of the monitoring devices upon request of the Commissioner of Public Infrastructure.

D. The permittee shall analyze any samples as may be required by the monitoring schedule specified herein or by the Commissioner of Public Infrastructure to ensure effluent quality control.

E. If the permittee monitors any wastewater characteristics more frequently than is required by this permit, in accordance with approved methods (40 CFR Part 136), he/she must also forward the results of such monitoring.

F. The sampling, preservation, handling and analytical methods used must conform to methods specified in the "Code of Federal Regulations", 40 CFR Part 136.

G. All discharge limitations as provided for in Article III are conditional, and may be revised by the Commissioner of Public Infrastructure if the Commissioner determines that the limitations are not sufficient enough to protect the City's Wastewater Treatment and conveyance facilities and or that the limitations are not sufficient enough to prevent the introduction of pollutants to the City's facilities which may pass through the treatment works or may otherwise be incompatible with or prove detrimental to the operation and maintenance of said facilities. The permittee shall be responsible upon notification to reduce or eliminate as required and within the schedule established by the Commissioner of Public Infrastructure the discharge of the specified pollutant. The permittee shall be responsible for all costs incurred as a result of complying with these requirements.

H. In accordance with title 40 of the Code of Federal Regulations Part 403 Section 403.14, information and data provided by the permittee which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment or other information shall be governed by procedures specified in 40 CFR Part 2.

I. Self-Monitoring Requirements set forth under 40 CFR 403.12 and the following, shall be complied with by the permittee:

1. Samples are to be collected from the sample ports of the groundwater treatment system – located in the incinerator pit within the Mechanical Room.

2 . Quarterly *Self-Monitoring Reports are due to the City by the thirtieth day of the following month.* All reports required by this permit shall be submitted to:

Department of Public Infrastructure
1105 Shawmut Ave.
New Bedford, MA 02746
ATTN: IPP

3. Certification Statements verifying proper sampling techniques, chain of custody sheets, and a record of the flow (in gallons per day) during the monitoring period, **must accompany** each submitted self-monitoring report.

4. Should the results of the permittee's wastewater analysis indicate that a violation of this permit has occurred, the permittee must:

(a) Inform the City of New Bedford of the violation within 24 hrs; and

(b) Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within thirty days of the first violation. This sampling is in addition to and not in place of, self-monitoring requirements as written in this permit.

ARTICLE V. **MONITORING REQUIREMENTS**

From the period beginning on the effective date of this permit, the permittee shall monitor its' discharge from the location listed below and in Article IV(I(1)) of this document for the following parameters, at the indicated frequency

.

Table II
MONITORING REQUIREMENTS

PROCESS DESCRIPTION: CONTAMINATED GROUNDWATER REMEDIATION

SAMPLING DISCHARGE LOCATION: THE DISCHARGE LOCATION IN THE PIT

CATEGORIZATION: NON-CATEGORICAL INDUSTRIAL USER

PARAMETER (units)	MONITORING FREQUENCY/ SAMPLE TYPE	
BOD	once per quarter	composite[1]
TSS	once per quarter	composite[1]
Oil & Grease	once per quarter	grab[2]
pH	once per quarter	grab[2]
PCB	once per quarter	composite[1]
Volatile Organics (EPA 624)	once per quarter	composite[1] and grab[2]

Note:

(1) Composite samples may be either flow or time proportioned. Flow proportioned samples are to be based on hourly discharge rates while time proportioned samples are to be collected using equal aliquots from each time interval. In either case, at the minimum, a sample from every hour of operation must be collected for representation.

(2) Grab samples are individual samples collected over a period of time not to exceed 15 minutes.

APPENDIX D

HYDRAULIC CONTROL SYSTEM OPERATION & MAINTENANCE LOGS

Date: 3/19-20/12
Initials: JCF

Treatment System Operation & Maintenance

New Bedford High School - Release Tracking Number 4-22409
230 Hathaway Boulevard, New Bedford, Massachusetts

							Time
System Run Time	20	(hours)		Flow Meter	357316	(Gal.)	11:20
Startup since 3/19/12 @ 15:00				(FM - 1)	1501	Gal. since system startup	
					1.25	~ average GPM rate treated	
Discharge Pressure	12.5	(in. of water)		Temperature	71	(°F)	
(PG - 9)				(T - 1)			

	AQUEOUS	Valve Position (% open)	Pressure PSI	Reduced Effluent flow rate @ 13:05
Influent Line	PG-1	10-15%	34.5	NC
Not in Use	PG-2	N/A	N/A	N/A
Pre bag filter	PG-3	20%	34.5	35
Bag Filter 1	PG-4	100%	9.25	8
Bag Filter 2	PG-5	100%	5	4
Clay bed	PG-6		4	3
GAC Bed 1	PG-7		3	2.5
GAC Bed 2	PG-8		3	2
Influent Valve	V-2	~15%	N/A	
Effluent Valve	V-5	~20%	N/A	
Effluent totalizer	FM-1	357742	@ 16:00	
		Turbidity NTU	Headspace PPMv	
Influent	SP-1	13.8	310	Aq. Samp 1
Pre-bag filter	SP-2	23.3-23.9	545	
Post bag filter	SP-3	N/A	N/A	Aq. Samp 2
Pre Clay bed	SP-4	14-15.3	533	
Pre GAC Bed 1	SP-5	7.72-10.68	27-358	
Pre GAC Bed 2	SP-6	1.31-4.12	0	
Effluent	SP-7	0.9	0	Aq. Samp 3
Effluent Pumping Rate	Timed FM-1	6gpm	reduced to	4 gpm

Technician: J. Fiero

Date: 3/20/2012

	VAPOR/AIR	Vac. or Pressure (" of water)	Vapor Concentration (ppm v)
- Pre vapor GAC	VSP-1	-	Bkg (0.1)
-Intra GAC beds	VSP-2	-	0
- Post GAC beds	VSP-3	-	0
-Tank header	VSP-4	-0.015 - -0.02	2.5-5
Stack base	VSP-5	-0.02 - -0.06	0
Inlet VAC	VG-1	-6	
Blower VAC	VG-2	-16	
Outlet Discharge Pressure	PG-9	12.5	

Check Air Filter:	Yes	Condition:	Ok no filter element
Check Holding Tanks:	Yes	Condition:	Both tanks turbid - Odor and light sheen in Tank 1 - odor & discontinious sheen in Tank 2
Check Fault Controls:	Yes	Condition:	OK - but phone line install not complete - sensaphone fault zones 3 & 4 pending

Comments: Bag filter #1 to be changed out once pressure > 10 psi.

785 gal. treated during ramp up + op.= 2712

Startup @ 355815	1927	Gal. treated	
Effluent Totalizer :	357742	16:00	
Aqueous Samples		@ Time	
Samp 1: 15:20	VOCs & PCBs	Influent	
Samp 2: 15:45	PCBs	Post Bag Filter	
Samp 3: 15:50	PCBs	Effluent	

Vapor Samples

None - PID screening only

Pre/Post Startup	Time	Well	DTW	~TD	Vac.	Headspace
	3/20/2012	MW-27R	2.25 / 3.45-7.55	~12'	-5.5 - -6	300-500 PPMv
	3/20/2012	MW-27D	2.17 / 2.28	~17'	N/A	0.8 (at riser)
	3/20/2012	MW-33	2.05 / 2.12	~9'	0	0.1 (at riser)
	3/20/2012	MW-32	2.05 / 2.2	~9'	-0.003	4.6 (at riser)
	3/20/2012	MW-28	2.21 / 2.29	~12'	-0.01	5.3 (at riser)
	3/20/2012	PVP-6	N/A	N/A	-0.03 -0.04	2.6 (soil vap.)
		MW-5	NR	~12'	0	NR
		MW-5D	NR	~19'	N/A	NR
	3/20/2012	MW-31	2.13 / 2.185	~9'	-0.002	0.7 (at riser)

3/19/2012	Time	Temp.	Sp. Cond	DO	pH	ORP
SP-1	17:05	21.36	357	0.5	6.04	-48.2
SP-2	15:55	21.89	311	9.82	6.22	94
SP-3 or SP-4						
SP-7	16:45	24.58	590	0.5	8.37	111

Date: 3/27/12
Initials: JCF

Treatment System Operation & Maintenance

New Bedford High School - Release Tracking Number 4-22409
230 Hathaway Boulevard, New Bedford, Massachusetts

							Time
System Run Time	190	(hours)		Flow Meter	367740	(Gal.)	13:00
Startup	since 3/19/12 @ 15:00			(FM - 1)	11925	Gal. since system startup	
					1.05	~ average GPM rate treated	
Discharge Pressure (PG - 9)	13	(in. of water)		Temperature (T - 1)	70	(°F)	

	AQUEOUS	Valve Position (% open)	Pressure PSI
Influent Line	PG-1	10-15%	34-35
Not in Use	PG-2	N/A	N/A
Pre bag filter	PG-3	20%	35
Bag Filter 1	PG-4	100%	8
Bag Filter 2	PG-5	100%	5
Clay bed	PG-6		4
GAC Bed 1	PG-7		3
GAC Bed 2	PG-8		2
Influent Valve	V-2	~15%	N/A
Effluent Valve	V-5	~20%	N/A
Effluent totalizer	FM-1		
		Turbidity NTU	Headspace PPMv
Influent	SP-1	11.56	1453
Pre-bag filter	SP-2	16	996
Post bag filter	SP-3	N/A	N/A
Pre Clay bed	SP-4	11.57	1041
Pre GAC Bed 1	SP-5	NR	NR
Pre GAC Bed 2	SP-6	NR	NR
Effluent	SP-7	0.29	0-0.1
Effluent Pumping Rate	Timed FM-1	4gpm	

			Technician
Date	3/27/2012		J. Fiero

		VAPOR/AIR	Vac. or Pressure (" of water)	Vapor Concentration (ppm v)
Vap. Samp1	- Pre vapor GAC	VSP-1	-	0
Vap. Samp2	-Intra GAC beds	VSP-2	-	0
Vap. Samp3	- Post GAC beds	VSP-3	-	0
Vap. Samp4	-Tank header	VSP-4	-0.02 - -0.04	25.8
	Stack base	VSP-5	-0.02 - -0.06	0
	Inlet VAC	VG-1	-5.5	
Aq. Samp 1	Blower VAC	VG-2	-15	
Aq. Samp 2	Outlet Pressure	PG-9	13	
Aq. Samp 3				
Aq. Samp 4				
Aq. Samp 5				

Check Air Filter:	Yes	Condition:	Ok no filter element
Check Holding Tanks:	Yes	Condition:	Both tanks turbid - thin biofilm/product emulsion in Tank 1 - no sheen in Tank 2
Check Fault Controls:	Yes	Condition:	OK - but phone line install not finished - to be completed by the next O&M event

Comments: Bag filter #1 to be changed out once pressure > 10 psi.

785 gal. treated during ramp up + op.=		12766	Date	Well	DTW	~TD	Vac.	Headspace
Startup @ 355815	11981	Gal. treated	3/27/2012	MW-27R	4.4	~12'	-5 - -5.5	1453
Effluent Totalizer :	367796	16:00	3/27/2012	MW-27D	2.41	~17'	N/A	0
Aqueous Samples		@ Time		MW-33	NR	~9'		
Samp 1: 14:00	VOCs & PCBs	Influent	3/27/2012	MW-32	2.35	~9'	0	14
Samp 2: 15:45	PCBs	Pre-bag filter	3/27/2012	MW-28	2.43	~12'	-0.02	41
Samp 3: 15:50	PCBs	Pre GAC Bed 1	3/27/2012	PVP-6	N/A	N/A	-0.05	N/A
Samp 4: 15:55	VOCs	Pre GAC Bed 2	3/27/2012	MW-5	2.46	~12'	0	0
Samp 5: 16:00	PCBs & VOCs	Effluent		MW-5D	NR	~19'	N/A	
Vapor Samples			2/27/2012	MW-31	2.35	~9'	0- -0.002	0
Samp 1: 11:35 / 15:55	VOCs & PCBs		Time	Temp.	Sp. Cond	DO	pH	ORP
Samp 2: 11:37	VOCs TO-15	SP-1	13:00	22.61	352	0.6	6.2	27.8
Samp 3: 11:41 / 15:50	VOCs & PCBs	SP-2	13:35	23.27	345	3-4.0	6.13	140
Samp 4: 11:42	VOCs TO-15	SP-3 or SP-4	16:00	22.98	346	2.32	6.49	217
		SP-7	15:55	22.93	577	0.06	7.65	210

Date: 4/3/12
Initials: JCF

Treatment System Operation & Maintenance

New Bedford High School - Release Tracking Number 4-22409
230 Hathaway Boulevard, New Bedford, Massachusetts

							Time
System Run Time	337	(hours)		Flow Meter	372066	(Gal.)	15:00
	Startup since 3/19/12 @	15:00		(FM - 1)	16251	Gal. since system startup	
					0.80	~ average GPM rate treated	
Discharge Pressure	13	(in. of water)		Temperature	74	(°F)	
(PG - 9)				(T - 1)			

	AQUEOUS	Valve Position (% open)	Pressure PSI
Influent Line	PG-1	10-15%	33.5-34
Not in Use	PG-2	N/A	N/A
Pre bag filter	PG-3	20%	34
Bag Filter 1	PG-4	100%	7.5
Bag Filter 2	PG-5	100%	4
Clay bed	PG-6		2
GAC Bed 1	PG-7		1
GAC Bed 2	PG-8		1
Influent Valve	V-2	~15%	N/A
Effluent Valve	V-5	~20%	N/A
Effluent totalizer	FM-1	372177	@ 16:00
		Turbidity NTU	Headspace PPMv
Influent	SP-1	16.3-21	709-835
Pre-bag filter	SP-2	32	665
Post bag filter	SP-3	28.5	525
Pre Clay bed	SP-4	8.68	672
Pre GAC Bed 1	SP-5	NR	NR
Pre GAC Bed 2	SP-6	3.44	0
Effluent	SP-7	0.9	0
Effluent Pumping Rate	Timed FM-1	4gpm	

Technician

Date	4/3/2012	J. Fiero

		VAPOR/AIR	Vac. or Pressure (" of water)	Vapor Concentration (ppm v)
Vap. Samp. 1	- Pre vapor GAC	VSP-1	-	0
	-Intra GAC beds	VSP-2	-	0
	- Post GAC beds	VSP-3	-	0
	-Tank header	VSP-4	-0.02 - -0.04	4.6
	Stack base	VSP-5	-0.02 - -0.06	0
	Inlet VAC	VG-1	-5.5	
Aq. Samp 1	Blower VAC	VG-2	-15	
	Outlet Discharge Pressure	PG-9	13	
Aq. Samp 2				
Aq. Samp 3				
Aq. Samp 4				

Check Air Filter:	Yes	Condition:	Ok no filter element
Check Holding Tanks:	Yes	Condition:	Both tanks turbid - Tank 1 gravity feed BLOCKED by iron percipitate and silt cleaned feed line to Tank 2- no sheen in
Check Fault Controls:	Yes	Condition:	OK - phone line works and final fault control connections pending - Blower down buss fuse 10A-15A upgraded

Comments: Bag filter #1 changed out on March 30, 2012 - Blower down for 24-48 hours between 3/31 and 4/2 Buss Fuse changed

785 gal. treated during ramp up + op.=		17147	Date	Well	DTW	~TD	Vac.	Headspace
Startup @ 355815		16362 Gal. treated		MW-27R	NR	~12'		
Effluent Totalizer :		372177 16:00		MW-27D	NR	~17'		
Aqueous Samples		4/3/2012 @ Time		MW-33	NR	~9'		
Samp 1: 14:55	VOCs & PCBs	Influent		MW-32	NR	~9'		
Samp 2: 15:20	PCBs	Post Clay		MW-28	NR	~12'		
Samp 3: 15:30	VOCs	Intra Carbon		PVP-6	NR	N/A		
Samp 4: 15:35	VOCs & PCBs	Effluent		MW-5	NR	~12'		
				MW-5D	NR	~19'		
Vapor Samples		4/4/2012		MW-31	NR	~9'		
Samp 1: 10:32 / 14:40	VOCs & PCBs	Outlet	Time	Temp.	Sp. Cond	DO	pH	ORP
	TO-15/TO-10A	SP-1	14:28	23.37	358	0.35	6.18	1.7
		SP-2	15:30	25.38	354	0.32	6.37	86
		SP-3 or SP-4						
		SP-7	15:55	22.93	478	2.35	7.63	82

Date: 4/10/12
Initials: JCF

Treatment System Operation & Maintenance

New Bedford High School - Release Tracking Number 4-22409
230 Hathaway Boulevard, New Bedford, Massachusetts

								Time
System Run Time	575	(hours)		Flow Meter	377450	(Gal.)		12:30
	Startup since 3/19/12 @ 15:00			(FM - 1)	21635	Gal. since system startup		
					0.63	~ average GPM rate treated		
Discharge Pressure	13	(in. of water)		Temperature	77	(°F)		
(PG - 9)				(T - 1)				

	AQUEOUS	Valve Position (% open)	Pressure PSI	Bag Filter #1 Changed Out				Technician
Influent Line	PG-1	10-15%	34	NC	Date	4/10/2012		J. Fiero
Not in Use	PG-2	N/A	N/A	N/A				
Pre bag filter	PG-3	20%	34.5	34				
Bag Filter 1	PG-4	100%	10	6		VAPOR/AIR	Vac. or Pressure (" of water)	Vapor Concentration (ppm v)
Bag Filter 2	PG-5	100%	4.5	5				
Clay bed	PG-6		3.5	4				
GAC Bed 1	PG-7		1.5-2	2	- Pre vapor GAC	VSP-1	-	0
GAC Bed 2	PG-8		1	1	-Intra GAC beds	VSP-2	-	0
Influent Valve	V-2	~15%	N/A	Vap. Samp. 1	- Post GAC beds	VSP-3	-	0
Effluent Valve	V-5	~20%	N/A		-Tank header	VSP-4	-0.05 - -0.06	6.8-7.2
Effluent totalizer	FM-1	377617			Stack base	VSP-5	-0.02 - -0.06	0
		Turbidity NTU	Headspace PPMv		Inlet VAC	VG-1	-5.25	
Influent	SP-1	40-57.7	686	Aq. Samp 1	Blower VAC	VG-2	-14	
Pre-bag filter	SP-2	27	344		Outlet Discharge Pressure	PG-9	13	
Post bag filter	SP-3							
Pre Clay bed	SP-4	13.3	829					
Pre GAC Bed 1	SP-5	2.6	708	Aq. Samp 2				
Pre GAC Bed 2	SP-6			Aq. Samp 3				
Effluent	SP-7	0	0	Aq. Samp 4				
Effluent Pumping Rate	Timed FM-1	3.5gpm	Bag filter CO	4 gpm				

Check Air Filter:	Yes	Condition:	Ok - no filter element
Check Holding Tanks:	Yes	Condition:	4/5/12 Tanks placed under vac. - Note drop in inlet pressure. Tanks 1 & 2 mod. turbidity & odor - no sheen
Check Fault Controls:	Yes	Condition:	OK - all fault control ok - Zone 2 relay problem fixed by GTS on 4/5/12

Comments:

785 gal. treated during ramp up + op.= 22587
Startup @ 355815 21802 Gal. treated
Effluent Totalizer : 377617 18:00

Aqueous Samples 4/10/2012 @ Time

Samp 1: 14:00	VOCs & PCBs	Influent
Samp 2: 14:20	PCBs	Post Clay
Samp 3: 14:40	VOCs	Intra Carbon
Samp 4: 15:00	VOCs & PCBs	Effluent

Vapor Samples

None - PID screening only

Date	Well	DTW	~TD	Vac.	Headspace
4/10/2012	MW-27R	7.1+	~12'	-5	~700
4/10/2012	MW-27D	2.68 / 2.4 (PVC)	~17'	N/A	0.3
4/11/2012	MW-33	2.25 (PVC)	~9'	NR	2.2
4/10/2012	MW-32	2.64 / 2.47 (PVC)	~9'	-0.215 -0.225	4.1
4/10/2012	MW-28	2.7 / 2.64 (PVC)	~12'	-0.005 -0.01	13.9
4/10/2012	PVP-6	N/A	N/A	-0.015 -0.03	N/A
4/10/2012	MW-5	2.82 / 2.59 (PVC)	~12'	0	0.1
4/10/2012	MW-5D	2.08 (PVC)	~19'	N/A	0.3
4/10/2012	MW-31	2.62/2.52(PVC)	~9'	0 -0.006	0.2

	Time	Temp.	Sp. Cond	DO	pH	ORP
SP-1	13:55	24.16	366	0.16	6.31	59.6
SP-2	14:20	23.4	349	0.5-1.71	6.28	44.5-65
SP-3 or SP-4	14:30	24.04	334	0.93	6.26	80.6
SP-7	14:40	24.33	477	2.6	7.1	104

Date: 4/17/12
Initials: JP / JCF

Treatment System Operation & Maintenance

New Bedford High School - Release Tracking Number 4-22409
230 Hathaway Boulevard, New Bedford, Massachusetts

							Time
System Run Time	711	(hours)		Flow Meter	380105	(Gal.)	9:00
	Startup since 3/19/12 @ 15:00			(FM - 1)	24290	Gal. since system startup	
					0.57	~ average GPM rate treated	
Discharge Pressure	13	(in. of water)		Temperature	77	(°F)	
(PG - 9)				(T - 1)			

	AQUEOUS	Valve Position (% open)	Pressure PSI	Bag Filter #1 & #2 Changed-Out				Technician
Influent Line	PG-1	10-15%	33.5-34	NC	Date	4/17/2012		J. Patinskas
Not in Use	PG-2	N/A	N/A	N/A				
Pre bag filter	PG-3	20%	34.5	33				
Bag Filter 1	PG-4	100%	8.75	5		VAPOR/AIR	Vac. or Pressure (" of water)	Vapor Concentration (ppm v)
Bag Filter 2	PG-5	100%	5	5				
Clay bed	PG-6		4	4				
GAC Bed 1	PG-7		1	1	VS-1 Inlet	VSP-1	-	0
GAC Bed 2	PG-8		1	1	-Intra GAC beds	VSP-2	-	0
Influent Valve	V-2	~15%	N/A		VS-2 Outlet	VSP-3	-	0
Effluent Valve	V-5	~20%	N/A		-Tank header	VSP-4	-0.05 - -0.06	4
Effluent totalizer	FM-1	380321	@ 16:00		Stack base	VSP-5	-0.02 - -0.06	0
		Turbidity NTU	Headspace PPMv		Inlet VAC	VG-1	-5.25	
Influent	SP-1	4.4-54.4	427	Aq. Samp 1	Blower VAC	VG-2	-15	
Pre-bag filter	SP-2	14.3	317		Outlet Discharge Pressure	PG-9	13	
Post bag filter	SP-3							
Pre Clay bed	SP-4	10.98	150					
Pre GAC Bed 1	SP-5	1.2	22.4	Aq. Samp 2				
Pre GAC Bed 2	SP-6	0.51	0	Aq. Samp 3				
Effluent	SP-7	0.71	0	Aq. Samp 4				
Effluent Pumping Rate	Timed FM-1	3.8gpm	Bag filter CO	4.2 gpm				

Check Air Filter:	Yes	Condition:	Ok - no filter element
Check Holding Tanks:	Yes	Condition:	Tank 1 broken sheen / strong odor & high turbidity Tank 2 mod. turbidity & odor - no sheen
Check Fault Controls:	Yes	Condition:	OK

Comments: Chaned bag filters #1 and #2 Air/vapor flow measured at stack outlet @ 5,600-5,650 ft/min

785 gal. treated during ramp up + op.=		25291	Date	Well	DTW	~TD	Vac.	Headspace
Startup @ 355815	24506	Gal. treated	4/17/2012	MW-27R	7'+	~12'	-5	~450
Effluent Totalizer :	380321	16:00	4/17/2012	MW-27D	2.84	~17'	N/A	0
Aqueous Samples	4/17/2012	@ Time	4/17/2012	MW-33	2.69	~9'	-0.04	0
Samp 1: 13:00	VOCs & PCBs	Influent	4/17/2012	MW-32	2.74	~9'	-0.31 -0.315	18.8
Samp 2: 13:20	PCBs	Post Clay	4/17/2012	MW-28	2.84	~12'	-0.006 -0.01	19.4
Samp 3: 13:40	VOCs	Intra Carbon	4/17/2012	PVP-6	N/A	N/A	-0.033 -0.038	N/A
Samp 4: 16:00	VOCs & PCBs	Effluent	4/17/2012	MW-5	2.82	~12'	0	0-0.4
				MW-5D	NR	~19'		
Vapor Samples	Inlet		4/17/2012	MW-31	2.76	~9'	-0.006 -0.011	0
Samp 2: 8:30 / 14:25	VOCs by TO-15 & PCBs by TO-10A		Time	Temp.	Sp. Cond	DO	pH	ORP
Samp 2: 8:35 / 14:30	VOCs & PCBs	SP-1	10:55	27.15	380	1.49	6.37	17.5
	Outlet	SP-2	10:45	26.23	359	0.15	6.5	144
		SP-3 or SP-4						
		SP-7	11:15	26.77	497	1.02	7.59	-8

APPENDIX E

GROUNDWATER MONITORING SAMPLING LOGS

TRC

Low-flow Groundwater Sampling Data Record

Project: New Bedford/115058 **Project No.:**

Date/Time: 2/27/12 1720 **Sheet** 1 **of** 1

Well Identification: MW-5

TRC Personnel: KJ

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) flush ft.

Riser Stick-up (from ground) ✓ ft.

WELL DIAMETER 1 inch — 2 inch / 4 inch / 6 inch

WELL MATERIAL X PVC / SS

Well Depth 12 ft. — X top of riser / top of casing — measured / X historical

Water Depth 2.10 ft. **LNAPL/DNAPL Depth** = ✓ **Thickness** = ✓

LOW FLOW DATA

Depth of pump intake: 7.5'

Static water level after pump put into well (49) ~~2.20~~ 2.15

Initial purge Rate/ Water Level (100-400 ml/min): 35

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 35

PID SCREENING MEAS.

Background	0.0
Well Mouth	0.0

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1725	1730	1735	1740	1745	1750	1755	1800	1805	1810
Temp. (C)	Filling YSI Adjusting Flow			20.67	20.78	20.86	20.97	20.98	21.02	21.05
Conduct. (µmhos/cm)				0.360	0.360	0.359	0.358	0.356	0.354	0.352
DO (mg/l)				3.21	3.11	3.00	2.95	2.85	2.72	2.60
pH (Std. Units)				6.37	6.37	6.38	6.38	6.38	6.39	6.39
Eh (millivolts)				-45	-49	-51	-52	-55	-58	-60
Turb. (NTU)				24.5	24.9	22.3	21.3	17.5	13.2	10.28
Flow (ml/min)	35	35	35	35	35	35	35	35	35	35
Depth To Water (ft)	2.15	2.20	2.23	2.25	2.25	2.25	2.25	2.25	2.25	2.25

Time	1815	1820	1825	1830	1835	1840				
Temp. (C)	21.05	21.05	21.08	21.10	21.15	Sampling				
Conduct. (µmhos/cm)	0.351	0349	0.349	0.349	0.348					
DO (mg/l)	2.52	2.42	2.30	2.27	2.23					
pH (Std. Units)	6.39	6.39	6.39	6.39	6.39					
Eh (millivolts)	-62	-63	-65	-66	-68					
Turb. (NTU)	9.93	8.83	6.81	6.07	5.15					
Flow (ml/min)	35	35	35	35	35					
Depth To Water (ft)	2.25	2.25	2.25	2.25	2.25					

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	■	■
Other:		

Description of Sampling Equipment and Flow Rate: YSI 600, MP 10 controller, Nitrogen gas, LaMotte 2020e, Solinst 100 T.P.

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOC	N	HCl	2 x 40 mL VOA	1840	MW-5	—
PCB	N	—	2 x 1-L Amb	1840	MW-5	—

Signed: Kevin Jordan

Rev: 1 Feb 2007

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TRC

Groundwater Low-Flow Sampling Data Record

Project:	Project No.:	Date/Time:	Sheet 1 of 1
	115058	2.27.12	

TRC Personnel: JR

Well Identification: MW-5D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	✓	
Concrete Collar Intact	✓	
PVC Stick-up Intact	✓	
Well Cap Present	✓	
Security Lock Present		✓

PID SCREENING (ppmV)

Background	0.0	
Well Mouth	0.0	(if required)

Protective Casing Stick-up (from ground) flush ft.

Riser Stick-up (from ground) ✓ ft.

WELL DIAMETER ☒ 2 inch ☐ 4 inch ☐ 6 inch ☐ ____

WELL MATERIAL ☒ PVC ☐ SS ☐ ____

Well Depth 18.94 ft.

Water Depth 1.5 ft.

Reference Point: ☐ historical ☑ measured: ☑ top of riser ☐ top of casing ☐ ____ ☐ notch ☐ north side ☐ high pt ☐ pen mark

Depth of pump intake 10.5 ft.

Height of Water Column ____ ft. x ☐ .16 gal/ft (2 in.) ☐ .65 gal/ft (4 in.) ☐ 1.5 gal/ft (6 in.) ☐ ____ gal/ft (__ in.)

Volume of Water in Well = ____ gallon(s)

[Vol. = r^2 h(0.163)] ____ Total gallons purged

FIELD WATER QUALITY MEASUREMENTS Depth to NAPL ____ Thickness of NAPL ____

Time	1705	1710	1715	1720	1725	1730	1735	1740	1745	1750
Temp. (C)	Begin	13.27	13.55	13.74	13.88	13.98	13.98	14.11	14.17	14.20
Conduct. (µmhos/cm))	Purging	.267	.266	.264	.263	.263	.262	.262	.261	.261
DO (mg/l)	YSI	1.65	1.45	1.26	1.17	1.17	.98	.94	.88	.88
pH (Std. Units)	on	6.05	5.96	5.91	5.89	5.89	5.85	5.85	5.84	5.84
Eh (millivolts)	MW-5D	205.5	197.0	180	161.1	148.4	140.0	136.7	136.5	136.5
Turb. (NTU)		8.52	5.71	4.56	4.50	3.92	3.72	3.41	2.58	2.42
Flow (ml/min)		180	180	180	180	"	"	"	"	"
Depth To Water (ft)		1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.1

Time	1755	1800	1805							
Temp. (C)	14.22	14.21	Begin							
Conduct. (µmhos/cm)	.261	.261	Sampling							
DO (mg/l)	.87	.87								
pH (Std. Units)	5.84	5.84	MW-5D							
Eh (millivolts)	135.5	135.6								
Turb. (NTU)	3.1	2.4								
Flow (ml/min)	180	"								
Depth To Water (ft)	1.1	1.1								

Pump Type	Purge	Sample
Peristaltic Pump	☐	☐
Submersible Pump	☐	☐
Bladder Pump	☑	☐
Other: ____	☐	☐

Description of Sampling Equipment (Model and S/N): YSI 600, MP10 controller, Nitrogen gas, Lamotte 2020e turbidity Meter, Sonlinst IP100

Analytical Parameter	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
PCB	N	N	2x 1L	1805	MW-5D
VOC	N	HCL	2x VOA	1805	MW-5D

Signed: [signature]

Rev: 1 Nov. 2005

TRC

Low-flow Groundwater Sampling Data Record

Project:	Project No.:	Date/Time:	Sheet 1 of 1
115058		2-27-12 1020	

Well Identification: MW-27D

TRC Personnel: JR

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	✓	
Concrete Collar Intact	✓	
PVC Stick-up Intact	✓	
Well Cap Present	✓	
Security Lock Present		✓

Protective Casing Stick-up (from ground): flush ft.

Riser Stick-up (from ground): ✓ ft.

Well Depth: ~~10.94~~ 16.5 ft. ✓ top of riser ✓ measured

top of casing ~~historical~~ JR

Water Depth: 2.15 ft. LNAPL/DNAPL Depth = Thickness =

WELL DIAMETER ✓ 2 inch 4 inch 6 inch

WELL MATERIAL ☒ PVC ☐ SS ☐

PID SCREENING MEAS.

Background	0.0
Well Mouth	0.0

LOW FLOW DATA

Depth of pump intake: 13.0

Static water level after pump put into well: 1.85

Initial purge Rate/ Water Level (100-400 ml/min): 350

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 350

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1940	1945	1950	1955	2000	2005	2010	2015	2020	2025
Temp. (C)	Begin	20.05	20.03	20.00	19.99	19.93	19.97	19.96	19.96	19.96
Conduct. (µmhos/cm)	Purging	.334	.334	.334	.334	.333	.333	.331	.330	.331
DO (mg/l)	YSI	.67	.63	.59	.58	.59	.59	.60	.62	.61
pH (Std. Units)	at	5.85	5.85	5.81	5.82	5.83	5.80	5.79	5.79	5.79
Eh (millivolts)	MW-	130	121.5	114.7	112.1	108.2	106.7	106.1	106.0	106.2
Turb. (NTU)	27D	1.93	1.81	1.80	1.73	1.51	1.20	1.19	1.10	1.00
Flow (ml/min)		350	"	"	"	"	"	"	"	"
Depth To Water (ft)		1.85	1.86	1.86	1.85	1.86	1.86	1.86	1.87	1.86
Time	2030									
Temp. (C)	Sampling									
Conduct. (µmhos/cm)	at									
DO (mg/l)										
pH (Std. Units)	MW-27D									
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	✓	
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 600, MP10 controller, Nitrogen gas, Lamotte 2020e

Sonlinet 100' ID

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
PCB	N	NO	2x 1L	2030	MW-27D	—
VOC	N	HCL	2x VOA	2030	MW-27D	—
DUP-1 (VOC)	N	HCL	2x VOA	2030	DUP-1	—

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Signed: [signature]

Rev: 1 Feb 2007

TRC

Low-flow Groundwater Sampling Data Record

Project: PSWS NBHS | Project No.: 115058 | Date/Time: 2/27/12 18:10 | Sheet 1 of 1

Well Identification: MW-27R

TRC Personnel: J. FIERO

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	✓	
Concrete Collar Intact	✓	
PVC Stick-up Intact		
Well Cap Present		
Security Lock Present		

Protective Casing Stick-up _____ ft. (from ground)

Riser Stick-up _____ ft. (from ground)

WELL DIAMETER: ☐ 2 inch ✓ 4 inch ☐ 6 inch

WELL MATERIAL: ✓ PVC ☐ SS ☐ ___

Well Depth 10.6 ft. ☒ top of riser ☐ top of casing ☐ _____ ☒ measured ☐ historical

Water Depth 2.1 ft.

LNAPL/DNAPL Depth = _____

Thickness =

LOW FLOW DATA

Depth of pump intake: 6.3

Static water level after pump put into well 2.1

Initial purge Rate/ Water Level (100-400 ml/min): 250

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 250

PID SCREENING MEAS.

Background	
Well Mouth	40

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	18:40	18:45	18:50	18:55	19:00	19:05	19:10	19:15	19:20	
Temp. (C)	21.68	21.66	21.66	21.64	21.62	21.60	21.58	21.54	21.51	
Conduct. (µmhos/cm)	372	374	376	377	377	380	384	386	388	
DO (mg/l)	1.89	1.55	1.37	1.48	1.21	0.95	0.94	0.99	1.01	
pH (Std. Units)	6.33	6.34	6.34	6.34	6.35	6.35	6.35	6.36	6.36	
Eh (millivolts)	-30	-34	-35	-40	-45	-50	-55	-59	-56	
Turb. (NTU)	23	19	18	17.8	17.8	17.6	12.4	12.5	12.1	
Flow (ml/min)		250 →								
Depth To Water (ft)	2.1	2.12	2.12 →							
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump	☐	☐
Submersible Pump	☐	☐
Bladder Pump	☒	☐
Other: _____	☐	☐

Description of Sampling Equipment and Flow Rate: YSI 600, MP10 Controller, Nitrogen gas, LaMotte 2020c, Sanborst 100' IP

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #	
VOC + MSMSD	N	HCl	4 VOA	19:30	MW-27R		MSMSD
PCB	N	–	2 1L A	19:30	MW-27R		
PCB DUP	N	–	2 1L A	20:30	MW-27R		MW-D

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Signed: J.F

Rev: 1 Feb 2007

TRC

Low-flow Groundwater Sampling Data Record

Project: PSWS NBHS | Project No.: 115058 | Date/Time: 17:00 2/27/12 | Sheet 1 of 1

Well Identification: MW-28

TRC Personnel: J. Ficro

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	✓	
Concrete Collar Intact	✓	
PVC Stick-up Intact		
Well Cap Present		
Security Lock Present		

Protective Casing Stick-up (from ground) _____ ft.

Riser Stick-up (from ground) _____ ft.

Well Depth 8.1 ft. ✓ top of riser ☐ top of casing ☐ _____ ☐ measured ☐ historical

Water Depth 2.0 ft. LNAPL/DNAPL Depth = _____ Thickness =

WELL DIAMETER ☐ 2 inch ☐ 4 inch ☐ 6 inch ☐ 1"

WELL MATERIAL ✓ PVC ☐ SS ☐ —

LOW FLOW DATA

Depth of pump intake: 6'

Static water level after pump put into well 2.0

Initial purge Rate/ Water Level (100-400 ml/min): 35 ml/min

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 35

PID SCREENING MEAS.

Background	
Well Mouth	25

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	17:35	17:40	17:45	17:50	17:55	18:00	18:05	18:10	18:15	18:20
Temp. (C)	20.81	20.89	20.98	21.05	21.21	21.23	21.32	21.4	21.43	21.44
Conduct. (µmhos/cm)	341	340	338	337	336	336	336	335	335	335
DO (mg/l)	2.0	1.95	1.92	1.79	1.68	1.70	1.60	1.53	1.48	1.46
pH (Std. Units)	6.16	6.15	6.15	6.14	6.14	6.13	6.13	6.13	6.13	6.13
Eh (millivolts)	40.6	41.2	41.0	39.8	38	38	35	33	30	28.5
Turb. (NTU)	29	17.8	16.2	15.3	13.5	13.0	13.2	13.4	13.2	13.2
Flow (ml/min)	35 →									
Depth To Water (ft)	2.0	2.01	2.02	2.03	2.05	2.05	2.05	2.05		
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump	☐	☐
Submersible Pump	☐	☐
Bladder Pump	✓	✓
Other: _____	☐	☐

Description of Sampling Equipment and Flow Rate: YSI 600, MP 10 Controller, Nitrogen gas, LaMotte 2020, Sonlyst 100 IP

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl	2 VOA	18:30	MW-28	
PCBs	N	NONE	2 1-l	18:30	MW-28	

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Signed: JCF

Rev: 1 Feb 2007

TRC

Low-flow Groundwater Sampling Data Record

Project: New Bedford/115058	Project No.:	Date/Time: 2/27/12 2000	Sheet 1 of ___

Well Identification: MW-32

TRC Personnel: K. Jordan

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

PID SCREENING MEAS.

Background	
Well Mouth	

Protective Casing Stick-up (from ground): flush ft.

Riser Stick-up (from ground): ✓ ft.

WELL DIAMETER (1 inch) — 2 inch / 4 inch / 6 inch

WELL MATERIAL — PVC [X] SS [ ]

Well Depth: 8.26 ft. — [X] top of riser / [ ] top of casing — [ ] measured / [X] historical

Water Depth: 1.92 ft.

LNAPL/DNAPL Depth = ✓

Thickness = ✓

LOW FLOW DATA

Depth of pump intake: 6.00'

Static water level after pump put into well: 1.95'

Initial purge Rate/ Water Level (100-400 ml/min): 200

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 200

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	2005	2010	2015	2020	2025	2030	2035			
Temp. (C)	22.16	22.23	22.26	22.26	22.28	22.29				
Conduct. (µmhos/cm)	0.435	0.443	0.449	0.450	0.450	0.451	sample/WQ			
DO (mg/l)	3.24	3.37	3.94	4.04	4.08	4.10				
pH (Std. Units)	6.78	6.82	6.84	6.84	6.85	6.85				
Eh (millivolts)	0	-9	-17	-17	-16	-21				
Turb. (NTU)	30.3	6.22	3.24	1.67	1.47	1.22				
Flow (ml/min)	200	200	200	200	200	200				
Depth To Water (ft)	1.97	2.00	2.01	2.02	2.02	2.03				
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump	[ ]	[ ]
Submersible Pump	[ ]	[ ]
Bladder Pump	[X]	[X]
Other: ___	[ ]	[ ]

Description of Sampling Equipment and Flow Rate:

YSI 600, MP10 Controller, Nitrogen gas, LaMotte 2020e, Solinst 100' IP (key)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOC	N	HCl	2x40 ml VOA	MW-32	2035	—
PCB	N	—	2x1-L Amb	MW-32	2035	—

Signed: Kevin Jordan

Rev: 1 Feb 2007

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Field Instrument Calibration Log

Date: 2.27.12 Site Name: NBIIS

Water Quality Instrument Type / ID: LaMotte 2020e Turbidity Mtr, YSI 600,

Turbidity Instrument Type / ID: MP10 compressed,

Date of Last Temperature Probe Check:

Dissolved Oxygen (DO)

Time	Barometric Pressure (mm Hg)	Temperature (° Celsius)	100% Saturation Calibration (On Instrument)	Actual 100% Saturation Calibration (Refer to Attachment A)	Oxygen Solubility at Indicated Pressure (mg/L) (On Instrument)	Actual Oxygen Solubility at Indicated Pressure (mg/L) (Refer to Attachment B)	Zero DO Check (mg/L)	Comments	Initials
1435	760		100.0		10.31		0.14		JL
..	760	13.58	100.0		10.4		0.22		JL
..	760	19.4	100.0		9.20		0.23		JL

pH

Time	Solution Temperature (° Celsius)	pH 7	pH 4	pH 10	pH 7 Check	Comments	Initials
1458	19.91	7.00	4.00	10.00	7.03		JL
1451	15.95	7.00	4.00	10.00	7.04		JL
1447	17.68	7.00	4.00	10.00	7.03		JL

Specific Conductance

Time	Specific Conductance Reading (umhos/cm3)	Comments	Initials
1525	1.413		JL
1515	1.413		JL
1508	1.413		JL

Oxidation Reduction Potential (ORP)

Time	Solution Temperature (° Celsius)	ORP Reading (mV) (Refer to Attachment C)	Actual ORP Reading (mV) (On Instrument)	Comments	Initials
1530	18.97	240.1	240.1		JL
1522	19.02	240.1	240.1		JL
1515	18.51	239.5	239.5		JL

Turbidity

Time	Zero Standard	Standard #1 (10__ NTUs)	Standard #1 (1__ NTUs)	Comments	Initials
1535	0.0	10.01	1.0		JL
1540	0.0	10.0	1.0		JL
1545	0.1	9.9	1.0		JL

Calibration Fluid ID / Expiration Date:

Zero DO: 201023821

Specific Conductance: 91157 9/2012

pH 4: 1/2013 2102011

ph 7: 8/2013 2109104

pH 10: 2/2013 2108606

ORP: 3354 6/2016

Zero Turbidity: 0

Turbidity Std. # 1: 10.0

Turbidity Std. #2: 1.0

Signed

L2008-213

TRC	Project: NBHS New Bedford, MA	Project No.: 115058	Date/Time: 4/10/12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel / Jeff Robinson			

Well Identification: MW-5

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER: [X] 1 inch [ ] 2 inch [ ] 4 inch [ ]

WELL MATERIAL: [X] PVC [ ] SS [ ] ___

Well Depth 12.00 ft. [X] top of riser [ ] top of casing [ ] ___ [ ] measured [X] historical 10' screen

Water Depth 2.59 ft.

LNAPL/DNAPL Depth = NA/NM

Thickness = NA NM

LOW FLOW DATA

Depth of pump intake: ~7'

Static water level after pump put into well

Initial purge Rate/ Water Level (100-400 ml/min): 30 ml/min

Adjusted purge Rates/time/WL(record changes) None

Flow rate at time of sampling: 30 ml/min

PID SCREENING MEAS.

Well Mouth	
Headspace	0.1

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1645	1705	1715	1725	1735	1745	1755			
Temp. (C)	21.22	20.87	20.79	20.78	20.96	21.06	21.04			
Conduct. (µmhos/cm)	0.442	0.427	0.429	0.429	0.427	0.427	0.428			
DO (mg/l)	1.52	0.50	0.41	0.37	0.30	0.27	0.27			
pH (Std. Units)	6.42	6.40	6.39	6.39	6.39	6.40	6.40			
Eh (millivolts)	-82.6	-78.4	-77.5	-75.6	-75.0	-75.6	-75.4			
Turb. (NTU)	154	52.8	24.4	12.2	9.08	7.86	7.01			
Flow (ml/min)	30	30	30	30	30	30	30			
Depth To Water (ft)	2.72	2.78	2.79	2.79	2.79	2.79	2.79			
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	X
Other: ___		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1755	MW-5	
PCBs	N	Ice	1x1L	1755	MW-5	

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Signed: Emilie Wachtel

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No. 115058	Date/Time: 4/20 /12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel (Jeff Robinson)			

Well Identification: MW-5D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER: [ ] 1 inch [X] 2 inch [ ] 4 inch

WELL MATERIAL: [X] PVC [ ] SS [ ] ___

Well Depth 18.94 ft. [X] top of riser [ ] top of casing [ ] ___ [ ] measured [X] historical

5' screen

Water Depth 2.08 ft. LNAPL/DNAPL Depth = NA/NM Thickness =

LOW FLOW DATA

Depth of pump intake: 16.5'

Static water level after pump put into well 2.1

Initial purge Rate/ Water Level (100-400 ml/min): 325

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 325

PID SCREENING MEAS.

Well Mouth	
Headspace	0.3

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1627	1633	1640	1645	1650	1655	1700	1705	1710	1715
Temp. (C)	Begin	15.43	15.37	15.37	15.37	15.41	15.42	15.44	15.44	15.46
Conduct. (µmhos/cm)	Purging	.224	.213	.211	.210	.209	.207	.207	.207	.207
DO (mg/l)		1.37	.99	.93	.87	.85	.81	.76	.72	.70
pH (Std. Units)	YSI	6.04	5.18	5.60	5.69	5.62	5.72	5.85	5.83	5.86
Eh (millivolts)		196.8	211.1	179.5	160.6	154.6	132.2	124	119.4	114.1
Turb. (NTU)		16	14	14	14	14	14	14	14	10
Flow (ml/min)		~~2.08~~	325	325	325	325	325	325	325	325
Depth To Water (ft)		2.08	2.1	2.1	2.08	2.08	2.09	2.08	2.07	2.06
Time	1720	1725	1730	1735						
Temp. (C)	15.45	15.48	15.48	Sampling @ MW-5D						
Conduct. (µmhos/cm)	.207	.206	.206							
DO (mg/l)	.70	.69	.69							
pH (Std. Units)	5.88	5.89	5.89							
Eh (millivolts)	109.1	107.1	107.2							
Turb. (NTU)	4.9	4.7	4.3							
Flow (ml/min)	325	325	325							
Depth To Water (ft)	2.08	2.08	2.08							

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	X
Other:_____		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1735	MW-5D	
PCBs	N	Ice	1x1 L	1735	MW-5D	
MS						

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Signed: [signature]

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No.: 115058	Date/Time: 4/10/12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel (Jeff Robinson)			

Well Identification: MW-18

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER: [ ] 1 inch [X] 2 inch [ ] 4 inch

WELL MATERIAL: [X] PVC [ ] SS [ ] ___

Well Depth 10.64 ft. [X] top of riser [ ] top of casing [ ] measured [X] historical 10' screen

Water Depth 2.01 ft. LNAPL/DNAPL Depth = NA/NM Thickness =

LOW FLOW DATA

Depth of pump intake: 6.75

Static water level after pump put into well 2.1

Initial purge Rate/ Water Level (100-400 ml/min): 150

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 150

PID SCREENING MEAS.

Well Mouth	
Headspace	7.1

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1827	1835	1840	1845	1850	1855	1900	1905	1910	1915
Temp. (C)	Begin	13.35	13.35	13.39	13.48	13.51	13.59	13.60	13.62	13.61
Conduct. (µmhos/cm)	Purging	.411	.411	.404	.401	.402	.400	.398	.400	.401
DO (mg/l)		.50	.22	.17	.15	.15	.16	.17	.18	.18
pH (Std. Units)	VST	5.93	6.17	6.56	6.92	6.96	6.99	6.99	7.02	7.03
Eh (millivolts)		22.1	23.1	8.8	-3.8	-5.0	-7.0	-6.2	-6.2	-6.1
Turb. (NTU)		18	17	17	17	16	10	4.1	4.0	4.1
Flow (ml/min)		150	150	150	150	150	150	150	150	150
Depth To Water (ft)		2.19	2.19	2.19	2.19	2.18	2.19	2.19	2.19	2.19

Time	1920	1925								
Temp. (C)	13.61	Sampling								
Conduct. (µmhos/cm)	.401	@								
DO (mg/l)	.17	MW-18								
pH (Std. Units)	7.01									
Eh (millivolts)	-6.0									
Turb. (NTU)	3.98									
Flow (ml/min)	150									
Depth To Water (ft)	2.19									

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	X
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1925	MW-18	
PCBs	N	Ice	1x1L	1925	MW-18	

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Signed: [signature]

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No. 115058	Date/Time: 4/11/12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel / Jeff Robinson			

Well Identification: MW-27D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground): NA ft.

Riser Stick-up (from ground): NA ft.

WELL DIAMETER: 1 inch / ✓ 2 inch / 4 inch

WELL MATERIAL: X PVC / SS / ___

Well Depth 16.50 ft. X top of riser / top of casing / measured / X historical — 5' screen

Water Depth 2.47 ft.

LNAPL/DNAPL Depth = NA/NM

Thickness =

LOW FLOW DATA

Depth of pump intake: 14'

Static water level after pump put into well

Initial purge Rate/ Water Level (100-400 ml/min): 130 ml/min

Adjusted purge Rates/time/WL(record changes): None

Flow rate at time of sampling: 130 ml/min

PID SCREENING MEAS.

Well Mouth	
Headspace	0.3

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1820	1830	1840	1850	1905	1910	1915	1920		
Temp. (C)	19.43	19.56	19.52	19.50	19.49	19.47	19.47	19.48		
Conduct. (µmhos/cm)	0.284	0.282	.252	.251	0.251	0.251	0.251	0.251		
DO (mg/l)	3.49	1.75	1.31	1.22	1.16	1.18	1.12	1.12		
pH (Std. Units)	5.80	5.70	5.7	5.7	5.71	5.71	5.71	5.71		
Eh (millivolts)	80.9	98.4	112.5	116.8	120.8	122.0	123.6	124.2		
Turb. (NTU)	4.4	3.2	3.1	2.8	1.6	0.8	0.90	0.85		
Flow (ml/min)	130	130	130	130	130	130	130	130		
Depth To Water (ft)	2.47	2.47	2.47	2.48	2.48	2.48	2.48	2.48		
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	✓	
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1920	MW-27D	
PCBs	N	Ice	1x1L	1920	MW-27D	
DUP VOCs	N	HCl+Ice	2x40mL	↓	Dup-1	
PCBs	N	Ice	1x1L	↓	Dup-1	

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Signed: Emilie Wachtel

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No.: 115058	Date/Time: 4/11/12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel / Jeff Robinson			

Well Identification: MW-28

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground): NA ft.

Riser Stick-up (from ground): NA ft.

WELL DIAMETER: [X] 1 inch [ ] 2 inch [ ] 4 inch [ ]

WELL MATERIAL: [X] PVC [ ] SS [ ]

Well Depth: 8.00 ft. [X] top of riser [ ] top of casing [ ] [ ] measured [X] historical — 10' screen

Water Depth: 2.61 ft.

LNAPL/DNAPL Depth = NA/NM

Thickness =

LOW FLOW DATA

Depth of pump intake: ~5.5'

Static water level after pump put into well

Initial purge Rate/ Water Level (100-400 ml/min): 30ml/min

Adjusted purge Rates/time/WL(record changes): none

Flow rate at time of sampling: 30ml/min

PID SCREENING MEAS.

Well Mouth	
Headspace	13.9

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1535	1545	1555	1605	1615	1625	1635	1645	1655	1705
Temp. (C)	22.35	22.29	22.29	22.28	22.27	22.23	22.19	22.07	21.85	21.78
Conduct. (µmhos/cm)	0.338	0.343	.321	.321	.321	.321	0.323	0.323	0.322	0.322
DO (mg/l)	7.63	0.93	.62	.57	.44	.39	0.43	0.41	0.32	0.32
pH (Std. Units)	6.08	6.10	6.06	6.05	6.04	6.03	6.03	6.03	6.02	6.02
Eh (millivolts)	-4.6	-16.4	-10.6	-9.0	-5.4	-2.1	0.1	0.8	3.2	4.1
Turb. (NTU)	45	33	32	27	22	19	15	12	11	10.8
Flow (ml/min)	30	30	30	30	30	30	30	30	30	30
Depth To Water (ft)	2.66	2.66	2.68	2.68	2.68	2.69	2.69	2.69	2.68	2.68

Time	1715
Temp. (C)	21.74
Conduct. (µmhos/cm)	0.322
DO (mg/l)	0.31
pH (Std. Units)	6.02
Eh (millivolts)	4.7
Turb. (NTU)	10
Flow (ml/min)	30
Depth To Water (ft)	2.68

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	X
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1715	MW-28	
PCBs	N	Ice	1x1L	1715	MW-28	

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Signed: Emilie Wachtel

Rev: 1 Feb 2007

TRC

Low-flow Groundwater Sampling Data Record

Project: NBHS New Bedford, MA	Project No.: 115058	Date/Time: 4/10/12	Sheet 1 of 1

TRC Personnel: Emilie Wachtel / Jeff Robinson

Well Identification: MW-29

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

PID SCREENING MEAS.

Well Mouth	
Headspace	0.1

Protective Casing Stick-up (from ground): NA ft.

Riser Stick-up (from ground): NA ft.

WELL DIAMETER: [X] 1 inch [ ] 2 inch [ ] 4 inch [ ]

WELL MATERIAL: [X] PVC [ ] SS [ ]

Well Depth 11.53 ft. [X] top of riser [ ] top of casing [ ] [ ] measured [X] historical 10' Screen

Water Depth 2.82 ft. LNAPL/DNAPL Depth = NA/NM Thickness =

LOW FLOW DATA

Depth of pump intake: ~6.5'

Static water level after pump put into well

Initial purge Rate/ Water Level (100-400 ml/min): 30mL/min

Adjusted purge Rates/time/WL(record changes): None

Flow rate at time of sampling: 30mL/min

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1905	1915	1925	1935	1945	1955	2005			
Temp. (C)	21.37	21.49	21.78	21.84	21.83	21.85	21.87			
Conduct. (µmhos/cm)	0.356	0.685	0.691	0.696	0.696	0.694	0.692			
DO (mg/l)	7.83	3.07	2.67	2.48	2.46	2.40	2.39			
pH (Std. Units)	6.60	6.62	6.59	6.56	6.55	6.55	6.54			
Eh (millivolts)	-5.0	-2.6	0.8	1.3	2.4	3.3	3.9			
Turb. (NTU)	34.8	27.9	21.8	13.8	8.56	7.52	8.75			
Flow (ml/min)	30	30	30	30	30	30	30			
Depth To Water (ft)	2.85	2.85	2.85	2.85	2.85	2.85	2.85			
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	X
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	2010	MW-29	
PCBs	N	Ice	1x Liter	2010	MW-29	

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Signed: Emilie Wachtel

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No.: 115058	Date/Time: 4/10/12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel / Jeff Robinson			

Well Identification: MW-31

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER: [X] 1 inch [ ] 2 inch [ ] 4 inch [ ]

WELL MATERIAL: [X] PVC [ ] SS [ ]

Well Depth 9 ft. [X] top of riser [ ] top of casing [ ] [ ] measured [X] historical 7' screen

Water Depth 2.55 ft. LNAPL/DNAPL Depth = NA/NM Thickness =

LOW FLOW DATA

Depth of pump intake: 5

Static water level after pump put into well 2.55

Initial purge Rate/ Water Level (100-400 ml/min): 35

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 35

PID SCREENING MEAS.

Well Mouth	
Headspace	0.2

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1955	2005	2010	2015	2020	2025	2035	2045	2055	2105
Temp. (C)	Begin	21.47	21.47	21.67	21.76	21.87	21.98	22.00	22.05	22.03
Conduct. (µmhos/cm)	Purging	.372	.453	.468	.470	.473	.475	.477	.477	.477
DO (mg/l)	YSI	7.43	5.00	2.8	2.74	2.53	2.30	1.97	1.67	1.68
pH (Std. Units)		7.17	7.08	7.00	6.87	6.76	6.64	6.55	6.52	6.52
Eh (millivolts)		1.8	6.8	22.2	24.9	32.8	51.3	70.9	74.6	76.2
Turb. (NTU)		36	24	20	15	9	6	4.8	4.6	4.1
Flow (ml/min)		35	35	35	35	35	35	35	35	35
Depth To Water (ft)		2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.51
Time	2110									
Temp. (C)	Sampling									
Conduct. (µmhos/cm)	at									
DO (mg/l)										
pH (Std. Units)	MW-31									
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	2110	MW-31	
PCBs	N	Ice	1x1 L	2110	MW-31	

Signed: [signature]

TRC	Project: NBHS New Bedford, MA	Project No. 115058	Date/Time: 4/ 11 /12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	TRC Personnel: Emilie Wachtel / Jeff Robinson			

Well Identification: MW-32

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER [X] 1 inch [ ] 2 inch [ ] 4 inch

WELL MATERIAL [X] PVC [ ] SS [ ]

Well Depth 8.30 ft. [X] top of riser [ ] top of casing [ ] [ ] measured [X] historical 7' Screen

Water Depth 2.58 ft. LNAPL/DNAPL Depth = NA/NM Thickness =

LOW FLOW DATA

Depth of pump intake: 5.3

Static water level after pump put into well 2.56

Initial purge Rate/ Water Level (100-400 ml/min): 25ml

Adjusted purge Rates/time/WL(record changes) 1930 adjusted to 30ml/min

Flow rate at time of sampling: 30

PID SCREENING MEAS.

Well Mouth	
Headspace	4.1

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1815	1900	1910	1920	1930	1940	1950	2000	2010	2015
Temp. (C)	Begin	22.29	22.28	22.26	22.21	22.14	22.13	22.13	22.13	22.14
Conduct. (µmhos/cm)		.400	.400	.400	.398	.393	.391	.389	.390	.389
DO (mg/l)	Purging	3.42	2.37	2.41	2.00	1.70	1.60	1.44	1.43	1.45
pH (Std. Units)	YSI	6.76	6.75	6.74	6.73	6.71	6.70	6.70	6.70	6.69
Eh (millivolts)		153.3	143.3	127.0	100.0	3.2	2.9	-3.2	-3.8	-4.0
Turb. (NTU)		26	17	8.0	4.5	3.6	3.2	3.1	3.05	2.81
Flow (ml/min)		25mL	25	25	25	30	30	30	30	30
Depth To Water (ft)		2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Time	2020									
Temp. (C)	Sampling									
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)	MW-32									
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump		
Submersible Pump		
Bladder Pump	X	
Other:		

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	2020	MW-32	
PCBs	N	Ice	1x1L	2020	MW-32	

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Signed: [signature]

Rev: 1 Feb 2007

TRC	Project: NBHS New Bedford, MA	Project No. 115058	Date/Time: 4/ 11 /12	Sheet 1 of 1
Low-flow Groundwater Sampling Data Record	**TRC Personnel:** Emilie Wachtel (Jeff Robinson)			

Well Identification: MW-33

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from ground) NA ft.

Riser Stick-up (from ground) NA ft.

WELL DIAMETER [X] 1 inch [ ] 2 inch [ ] 4 inch [ ]

WELL MATERIAL [X] PVC [ ] SS [ ]

Well Depth 9.00 ft. [X] top of riser [ ] top of casing [ ] [ ] measured [X] historical 7' screen

Water Depth 2.52 ft. **LNAPL/DNAPL Depth =** NA/NM 3 ft from bottom **Thickness =**

LOW FLOW DATA

Depth of pump intake: 6

Static water level after pump put into well 2.50

Initial purge Rate/ Water Level (100-400 ml/min): 25

Adjusted purge Rates/time/WL(record changes)

Flow rate at time of sampling: 25

PID SCREENING MEAS.

Well Mouth	
Headspace	2.2

FIELD WATER QUALITY MEASUREMENTS (record at 3-5 minute intervals)

Time	1530	1600	1610	1620	1630	1640	1650	1655		
Temp. (C)	Begin	20.79	20.84	20.89	20.92	20.95	20.96	Sampling		
Conduct. (µmhos/cm)	Purging	.332	.332	.331	.330	.328	.326	@		
DO (mg/l)	YSI	3.13	2.90	2.89	2.86	2.81	2.80			
pH (Std. Units)	@	6.39	6.39	6.38	6.37	6.36	6.36	MW-33		
Eh (millivolts)		184.4	196.5	196.7	199.7	198.3	197.9			
Turb. (NTU)	MW-33	22.4	15.0	4.6	3.7	3.6	3.7			
Flow (ml/min)		25	25	25	25	25	25			
Depth To Water (ft)		2.5	2.5	2.5	2.5	2.5	2.5			
Time										
Temp. (C)										
Conduct. (µmhos/cm)										
DO (mg/l)										
pH (Std. Units)										
Eh (millivolts)										
Turb. (NTU)										
Flow (ml/min)										
Depth To Water (ft)										

Pump Type	Purge	Sample
Peristaltic Pump	[ ]	[ ]
Submersible Pump	[ ]	[ ]
Bladder Pump	[X]	[ ]
Other:	[ ]	[ ]

Description of Sampling Equipment and Flow Rate:

YSI 556 with 650 MDS display, LaMotte 2020, Solinist Interface Probe, QED Micropurge MP15 Controller and compressed gas, Bladder pump (.75 size), MiniRae PID, dedicated poly (air line) and teflon-lined (water line) tubing

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
VOCs	N	HCl & Ice	2x40mL	1655	MW-33	
PCBs	N	Ice	1x1Liter	1655	MW-33	

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Signed: [signature]

Rev: 1 Feb 2007

TRC Field Instrument Calibration Log

Date: 4-10-12 Site Name: NBHS ERA

Water Quality Instrument Type / ID: YSI 556 w/ 650 MDS Display (See IDs below)

Turbidity Instrument Type / ID: LaMotte 2020 (see IDs below)

Date of Last Temperature Probe Check:

Dissolved Oxygen (DO)

Time	Barometric Pressure (mm Hg)	Temperature (°Celsius)	100% Saturation Calibration (On Instrument)	Actual 100% Saturation Calibration (Refer to Attachment A)	Oxygen Solubility at Indicated Pressure (mg/L) (On Instrument)	Actual Oxygen Solubility at Indicated Pressure (mg/L) (Refer to Attachment B)	Zero DO Check (mg/L)	Comments	Initials
1315	752	18.38	99.1	~99	9.33	~9.30	0.5	—	JR
1315	752	18.99	99.0	~99	9.09	~9.18	0.1	—	JR
1315	752	17.76	99.0	~99	9.57	~9.30	0.2	—	JR

pH

Time	Solution Temperature (°Celsius)	pH 7	pH 4	pH 10	pH 7 Check	Comments	Initials
1330	14.4	7.0	4.0	9.99	7.0	—	JR
1335	14.93	7.0	4.0	10.0	7.0	—	JR
1340	14.54	7.0	4.0	10.0	7.0	—	JR

Specific Conductance

Time	Specific Conductance Reading (umhos/cm3)	Comments	Initials
1352	1.412	—	JR
1358	1.413	—	JR
1342	1.413	—	JR

Oxidation Reduction Potential (ORP)

Time	Solution Temperature (°Celsius)	ORP Reading (mV) (Refer to Attachment C)	Actual ORP Reading (mV) (On Instrument)	Comments	Initials
1347	16.35	~242	240	—	JR
1351	17.66	~240.1	240	—	JR
1358	17.95	~240.1	240	—	JR

Turbidity

Time	Zero Standard	Standard #1 (1 NTUs)	Standard #2 (10 NTUs)	Comments	Initials
1400	0	.99	9.98	—	JR
1405	0.2	1.1	10.1	—	JR

Calibration Fluid ID / Expiration Date:

Zero DO: Lot # 20102582 1

Specific Conductance: Lot # 9187 exp 9-20-12

pH 4: Lot # 2102011 exp Jan 2013

pH 7: Lot # 2109101-1 exp 08/2013

pH 10: Lot # 2108566 exp 02-2013

ORP: Lot # 3834 exp 12/2016

Zero Turbidity:

Turbidity Std. # 1:

Turbidity Std. # 2:

Signed

Field Instrument Calibration Log

TRC

Date: 4/11/2012

Site Name: NBHS

Water Quality Instrument Type / ID: YSI 556 w/ 650 MDS Display (see IDs below from Pine)

Turbidity Instrument Type / ID: LaMotte 2020 (see IDs below from Pine)

Date of Last Temperature Probe Check:

Dissolved Oxygen (DO)

Time	Barometric Pressure (mm Hg)	Temperature (° Celsius)	100% Saturation Calibration (On Instrument)	Actual 100% Saturation Calibration (Refer to Attachment A)	Oxygen Solubility at Indicated Pressure (mg/L) (On Instrument)	Actual Oxygen Solubility at Indicated Pressure (mg/L) (Refer to Attachment B)	Zero DO Check (mg/L)	Comments	Initials
1420	752	15.61	98.9	~99	9.84	~9.92	0.09	—	EW
1425	752	14.35	99.0	~99	10.15	~9.92	0.07	—	EW

pH

	Time	Solution Temperature (° Celsius)	pH 7	pH 4	pH 10	pH 7 Check	Comments	Initials
6716	1355	14.83	7.00	4.00	10.00	7.05	—	EW
13073 ~~RHH01457~~	1358	15.39	7.00	4.00	10.00	7.04	—	EW

Specific Conductance

Time	Specific Conductance Reading (umhos/cm3)	Comments	Initials
1355	1.413	—	EW
1400	1.413	—	EW

Oxidation Reduction Potential (ORP)

Time	Solution Temperature (° Celsius)	ORP Reading (mV) (Refer to Attachment C)	Actual ORP Reading (mV) (On Instrument)	Comments	Initials
1423	15.25	240.0	~244	—	EW
1425	15.37	240.0	~244	—	EW

Turbidity

	Time	Zero Standard	Standard #1 (1 NTUs)	Standard #1 (10 NTUs)	Comments	Initials
~~AT~~ 5502	1430	not provided	1.08	10.00	—	EW
6477	1435	not provided	1.03	10.04	—	EW

Calibration Solution	Lot Number	Expiration Date
Zero DO	201023821	not dated
Specific Conductance (1.413 uS/cm)	9187	9-20-12
pH 4	2102011	Jan-2013
pH 7	2109104	08-2013
pH 10	21085766	02-2013
ORP (240 mV)	3834	12-2016
Turbidity Standard #1 (1 ntu)	not provided	not provided
Turbidity Standard #2 (10 ntu)	not provided	not provided

Signed Emily Ewart

L2008-213

APPENDIX F

AIR DISPERSION MODEL

New Bedford High School
Vinyl Chloride Air Dispersion Modeling

Table 1 Air Modeling Input Values		
INPUT VALUES		
	ug/m^3	g/s
Emission Rate 1 (Vinyl Chloride)	3.53	1.83E-07
Emission Rate 2 (Vinyl Chloride)	6.39	3.31E-07
Emission Rate 1 (Benzene)	0.205	1.10E-08
Flow Rate	110 ACFM	.0519142 m^3/s
	1.8333 ft^3/s	
Stack Exit Temperature	80˚ F	300 Kelvin
	Meters	Feet
Building Height	9.906	32.5
Stack Height	12.6492	41.5
Stack Diameter	0.6096	2
Playground Distance from Stack	14.478	47.5
Parking Lot Distance from Stack	17.9832	59
Receptor Height	1.524	5

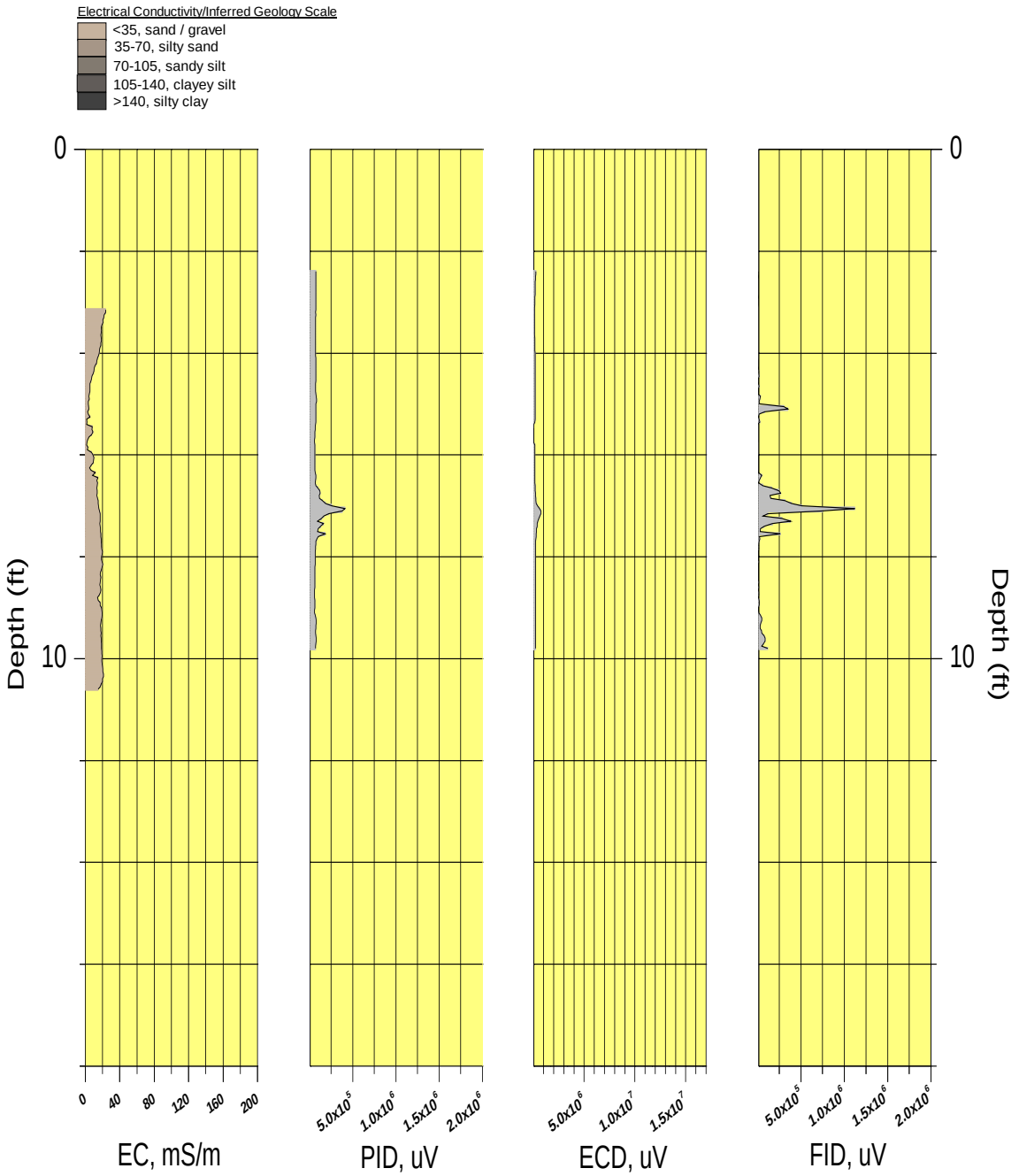
Table 2 Air Modeling Results				
Vinyl Chloride	**Modeled Annual Concentration**	**Modeled Annual Concentration with 10% Dilution**	**MassDEP AAL**	**Model Used**
3.53 ug/m^3	ug/m^3	ug/m^3	ug/m^3	
Intake	1.357E-03	1.357E-04	0.38	ASHRAE analysis
Playground	1.180E-04	1.180E-05	0.38	AERSCREEN
Parking Lot	1.210E-04	1.210E-05	0.38	AERSCREEN
6.39 ug/m^3	ug/m^3	ug/m^3	ug/m^3	
Intake	2.457E-03	2.457E-04	0.38	ASHRAE analysis
Playground	2.133E-04	2.133E-05	0.38	AERSCREEN
Parking Lot	2.188E-04	2.188E-05	0.38	AERSCREEN
Benzene				
0.205 ug/m^3	ug/m^3	ug/m^3	ug/m^3	
Intake	7.883E-05	7.883E-06	0.12	ASHRAE analysis
Playground	7.090E-06	7.090E-07	0.12	AERSCREEN
Parking Lot	7.270E-06	7.270E-07	0.12	AERSCREEN

Figure 1 - 3D GIS drawing of the New Bedford High School viewed in Google Earth

- *Stack-1* – Post-treatment subslab vapor emissions point.
- *Intake Vent* – Approximate NBHS building intake vent location (C-Block)
- *Playground* – Approximate Little Whaler's playground location
- *Parking Lot* – Approximate faculty parking lot / shipping & receiving location

APPENDIX G

MECHANICAL ROOM MIPS FIELD DATA AND SOIL BORING LOGS



MIP-W3
ARS / New Bedford, MA
Date Logged : 04/20/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-W3.opj
Date: 04/20/2012 WAN

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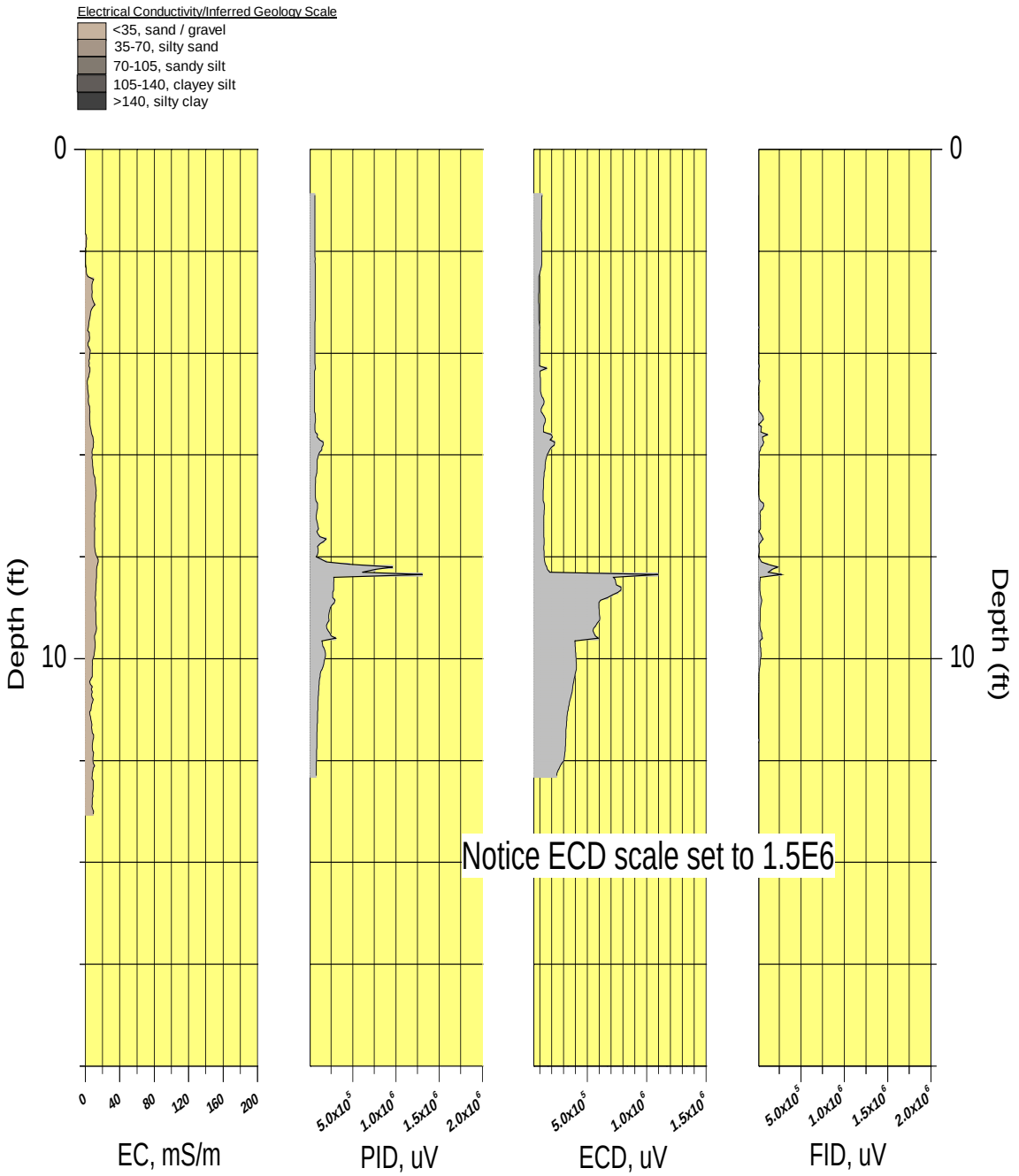
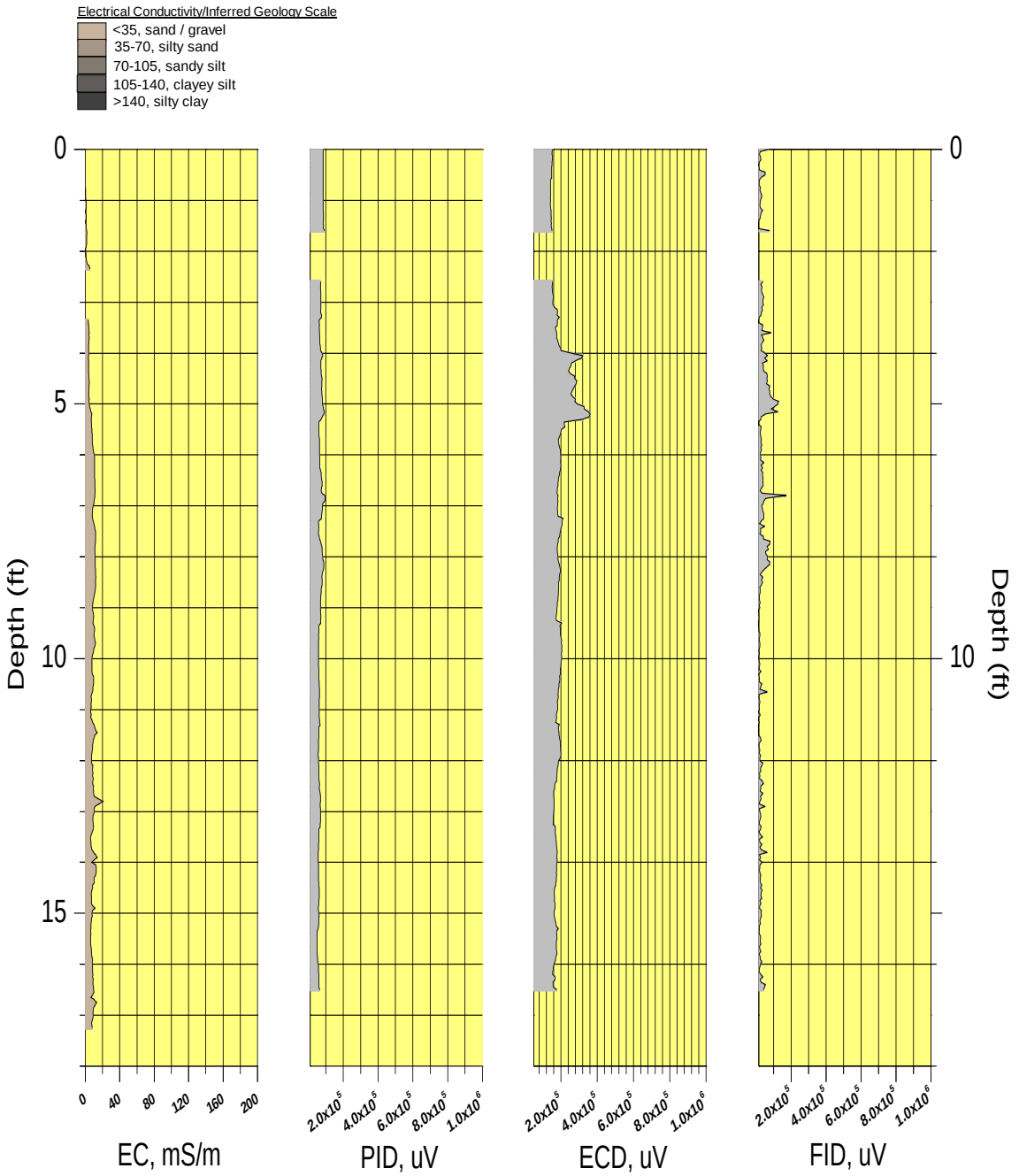


MIP-W2
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-W2.opj
Date: 04/19/2012 WAN

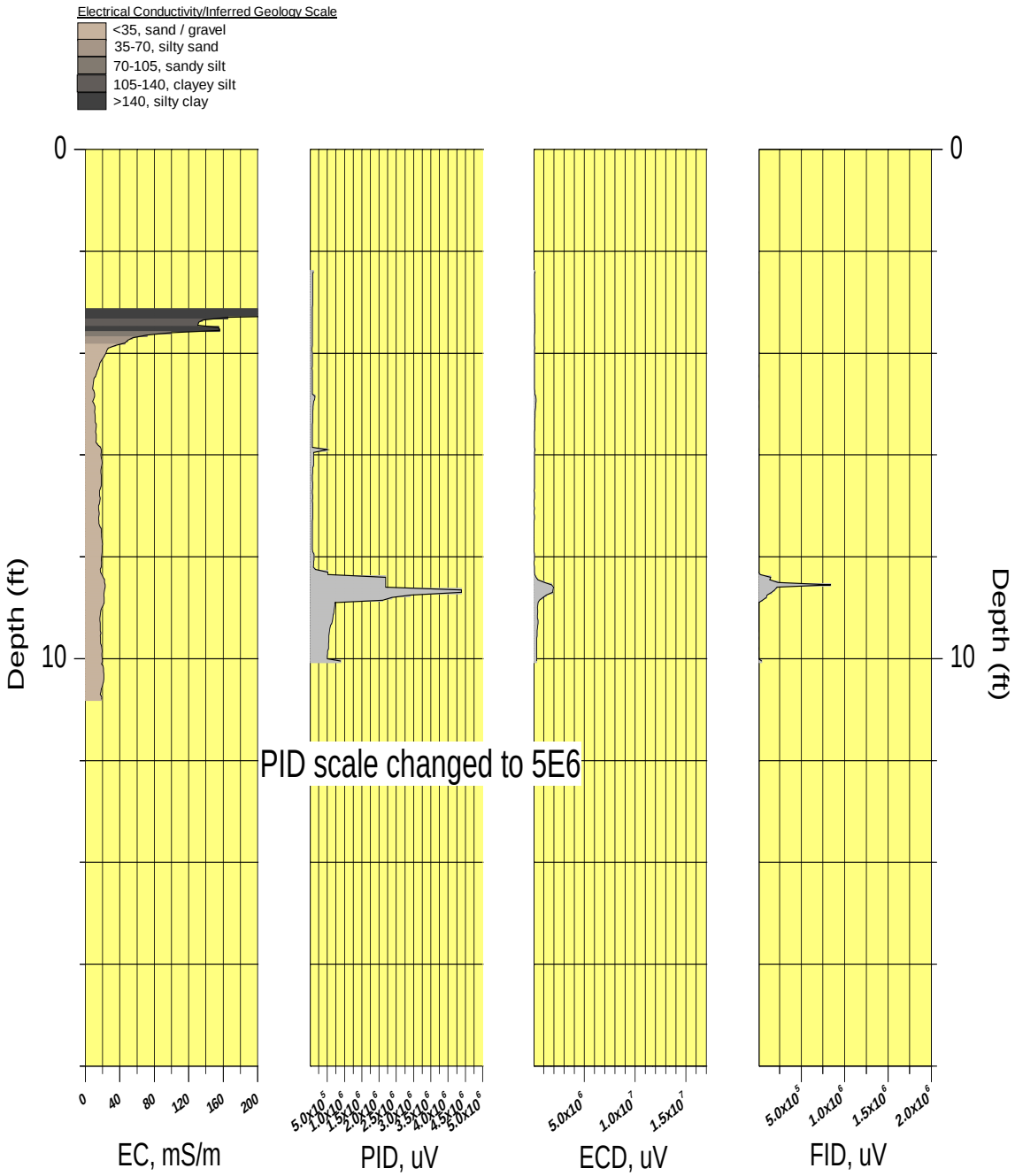
STONE ENVIRONMENTAL INC



MIP-W1
ARS / New Bedford, MA
Date Logged : 04/18/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-W1.opj
Date: 04/18/2012 WAN/MJM

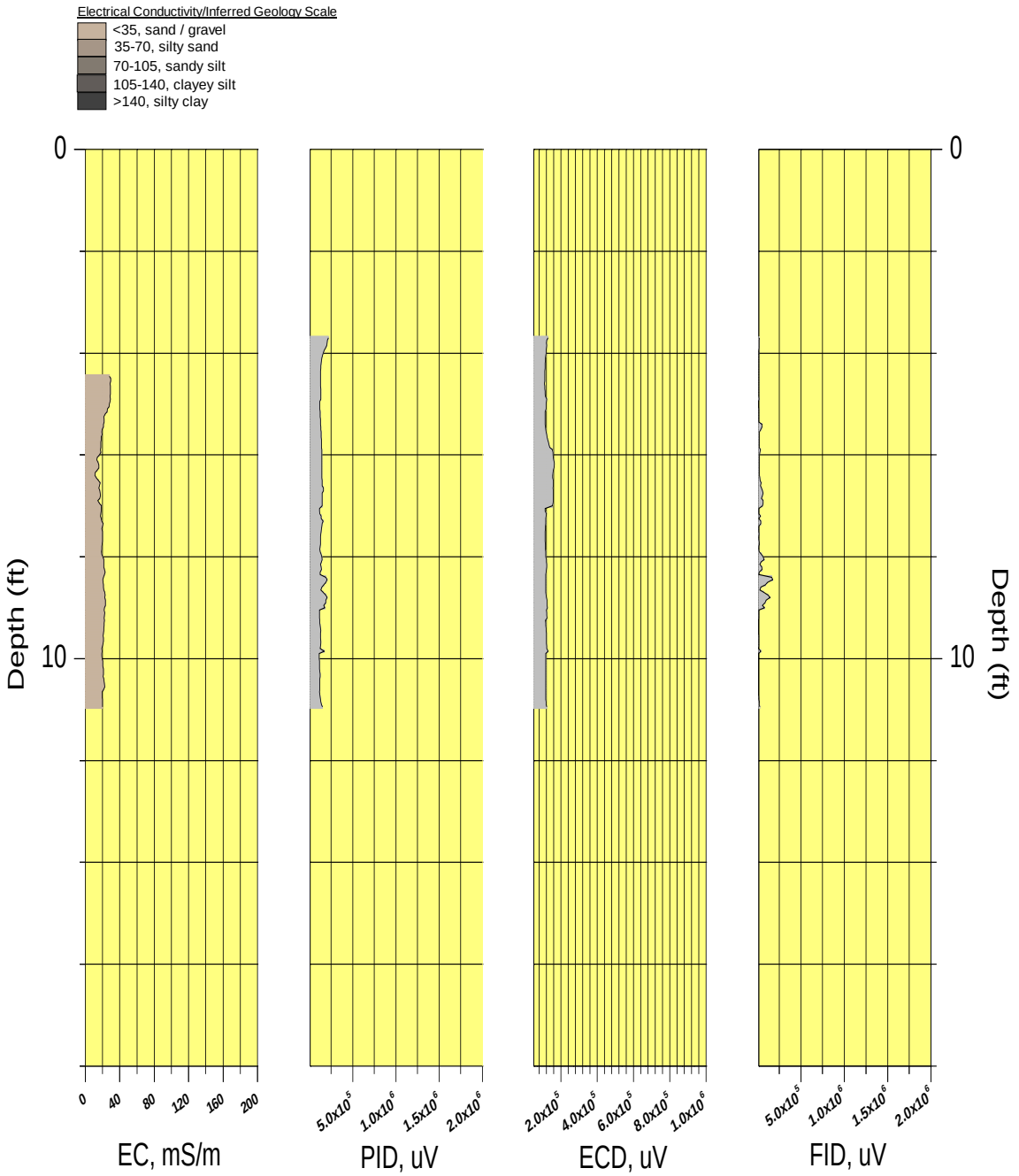
STONE ENVIRONMENTAL INC



MIP-SSW1
ARS / New Bedford, MA
Date Logged : 04/20/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-SSW1.opj
Date: 04/20/2012 WAN

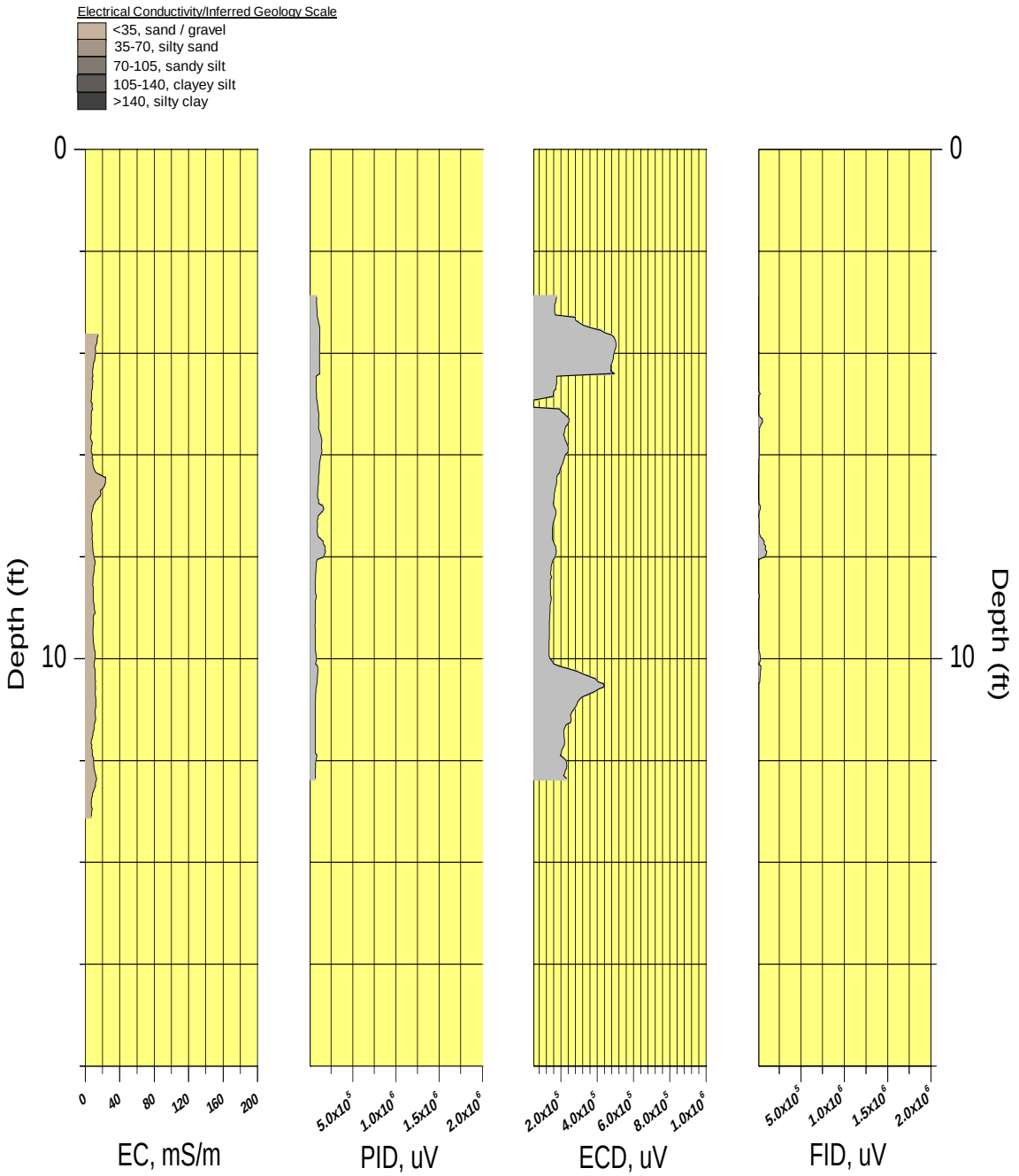
STONE ENVIRONMENTAL INC



MIP-S3
ARS / New Bedford, MA
Date Logged : 04/20/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\Blank.opj
Date: 04/20/2012 WAN

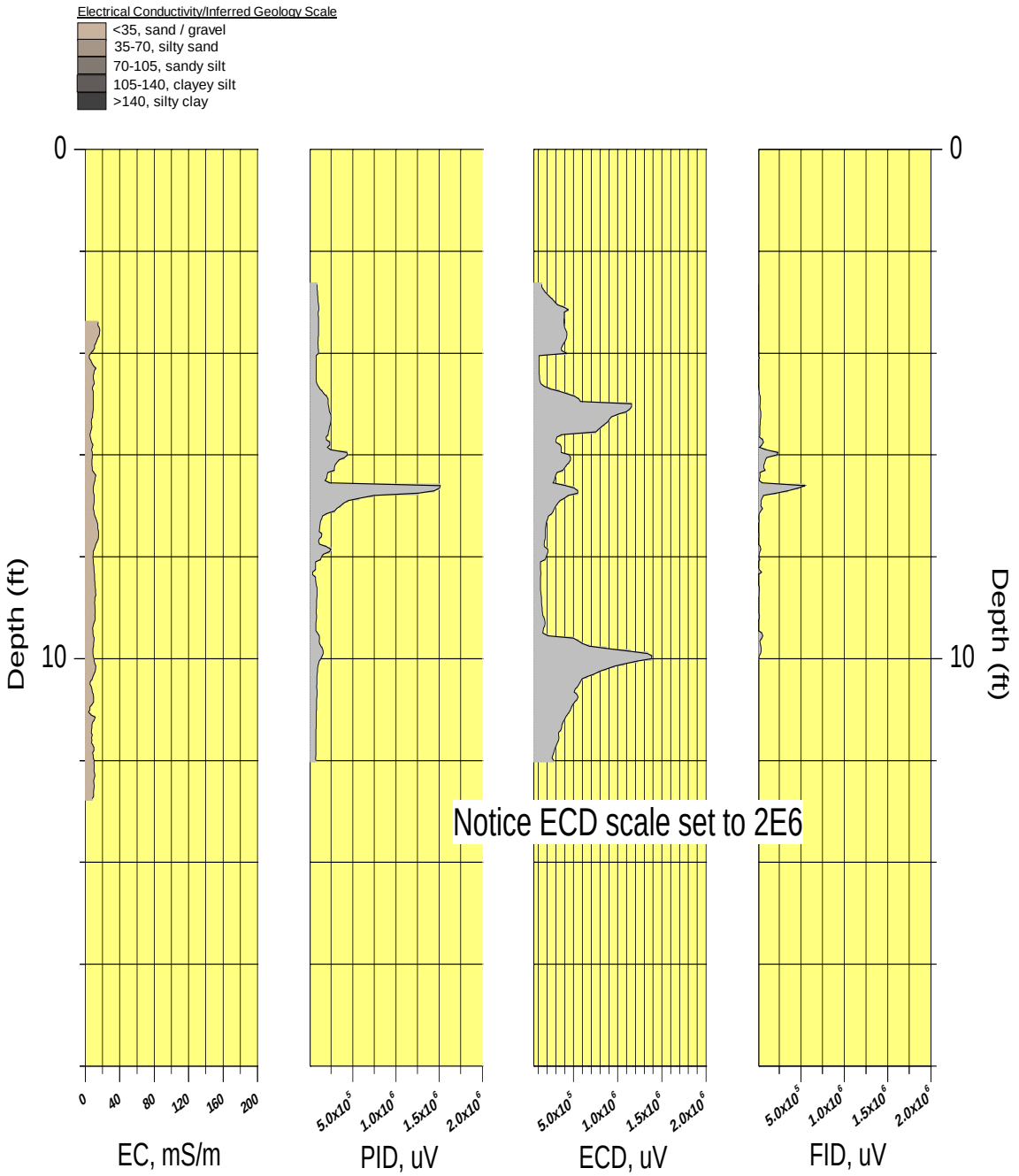
STONE ENVIRONMENTAL INC



MIP-S2
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-S2.opj
Date: 04/19/2012 WAN

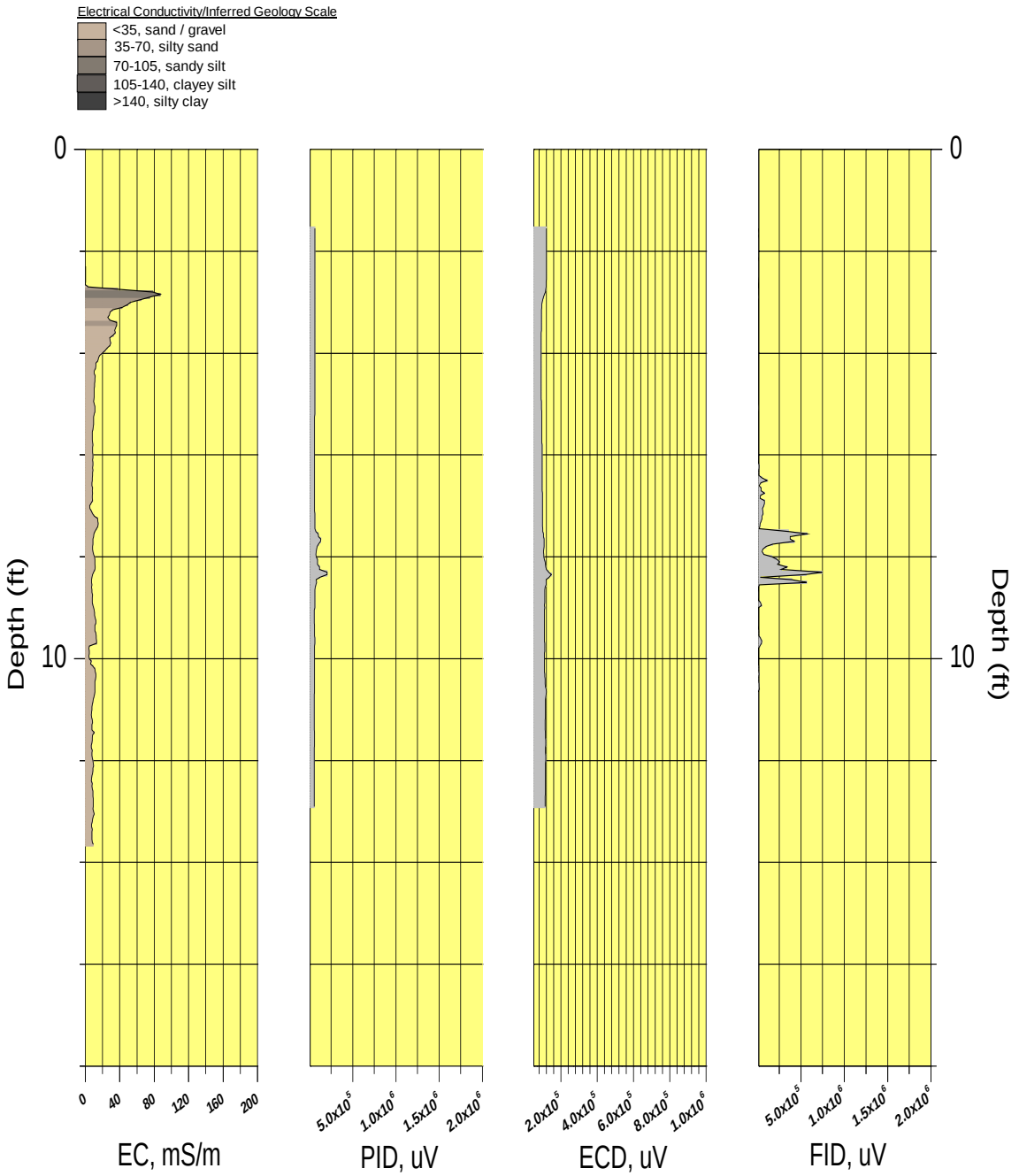
STONE ENVIRONMENTAL INC



MIP-S1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-S1.opj
Date: 04/19/2012 WAN

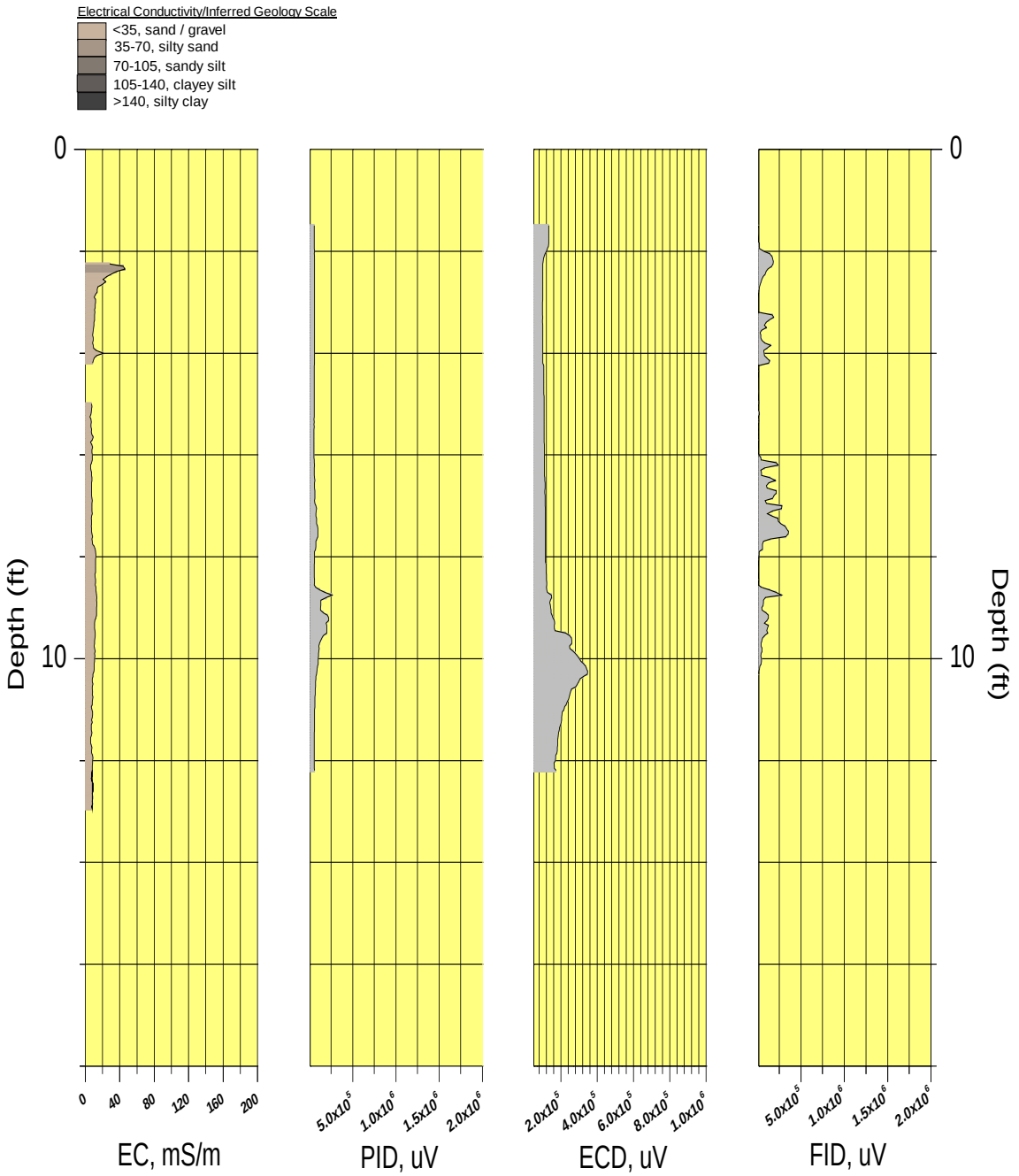
STONE ENVIRONMENTAL INC



MIP-NW1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-NW1.opj
Date: 04/19/2012 WAN

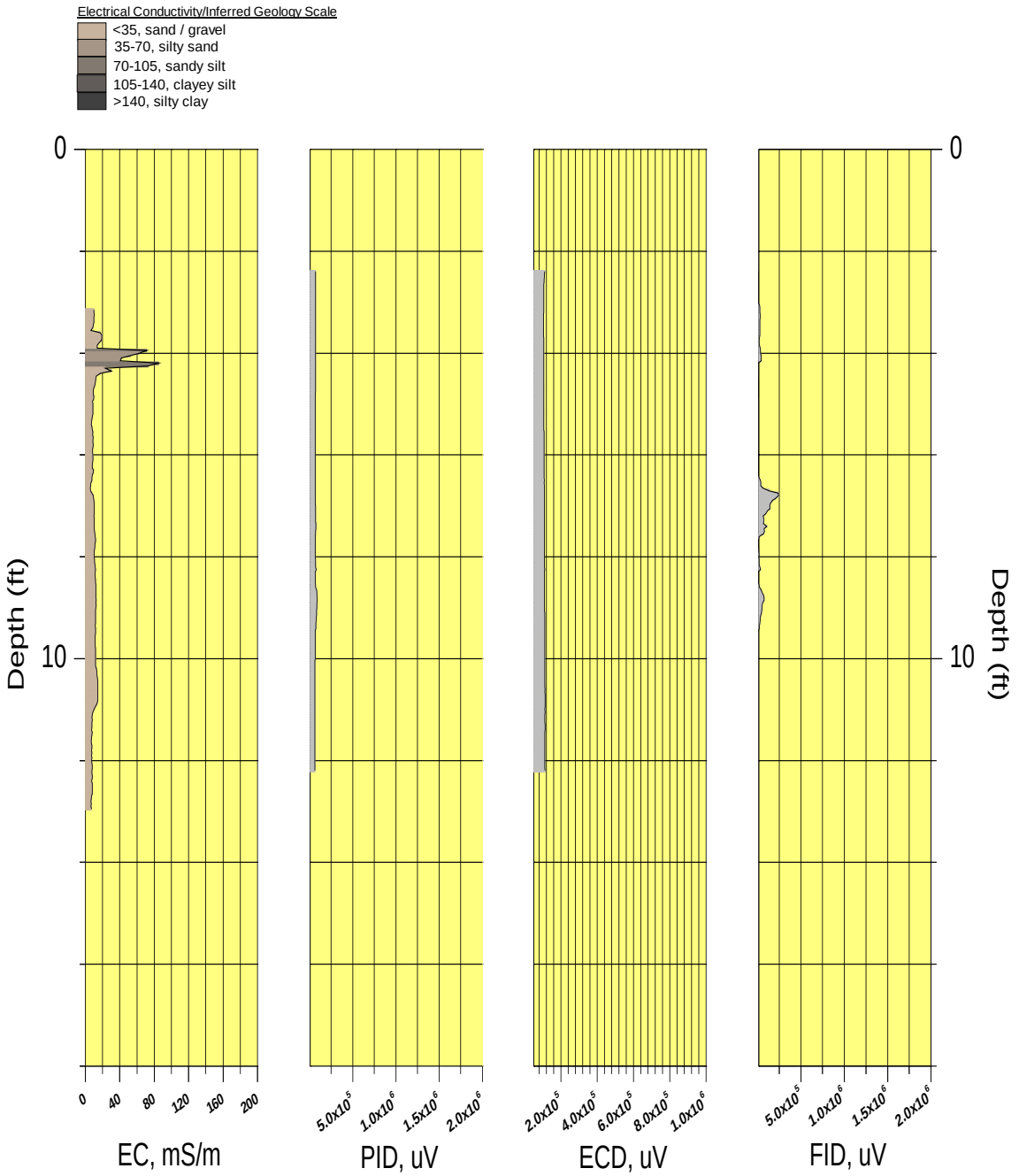
STONE ENVIRONMENTAL INC



MIP-NNW1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-NNW1.opj
Date: 04/19/2012 MJM/WAN

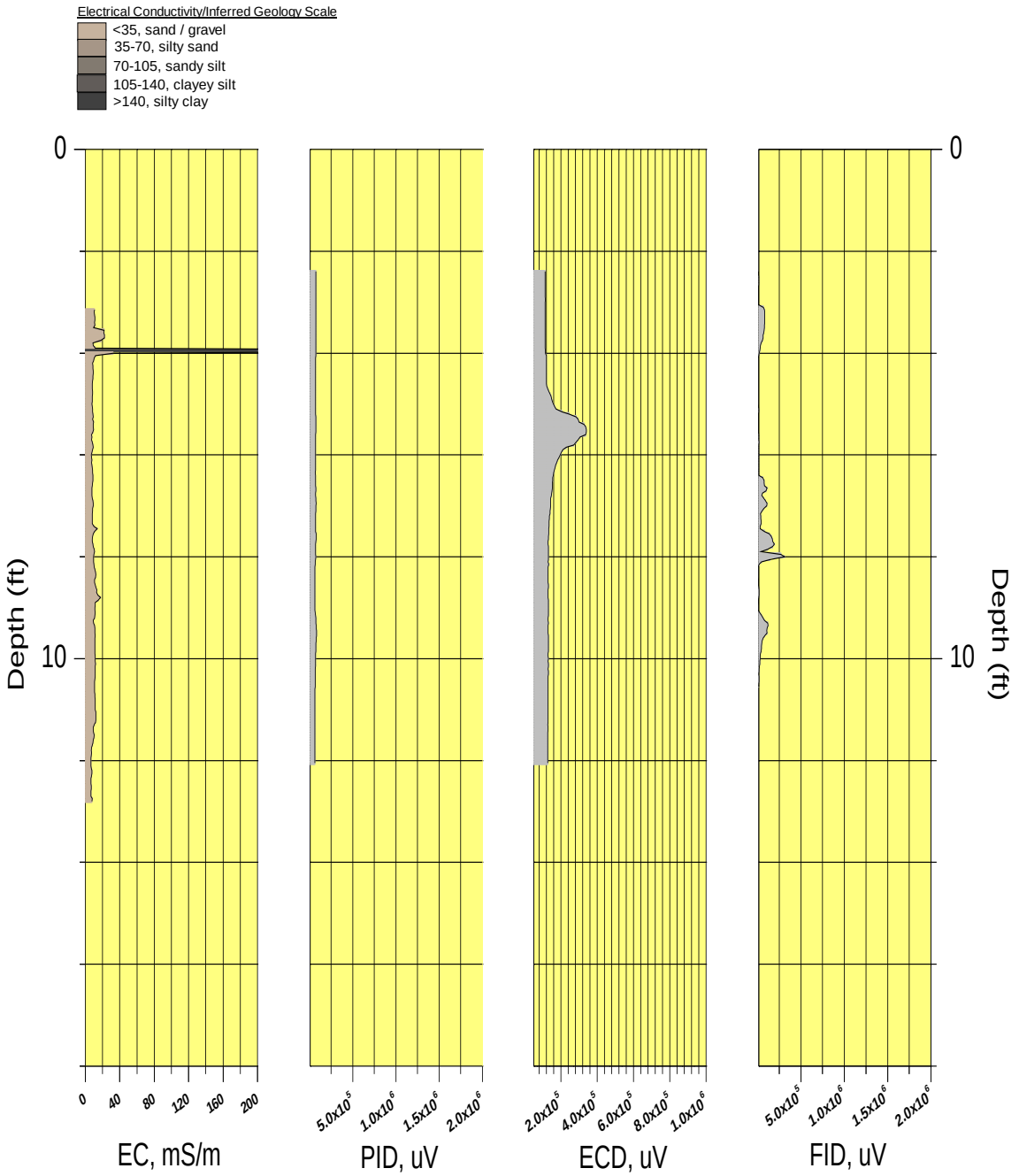
STONE ENVIRONMENTAL INC



MIP-NNE1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\mip-nne1.opj
Date: 04/19/2012 WAN

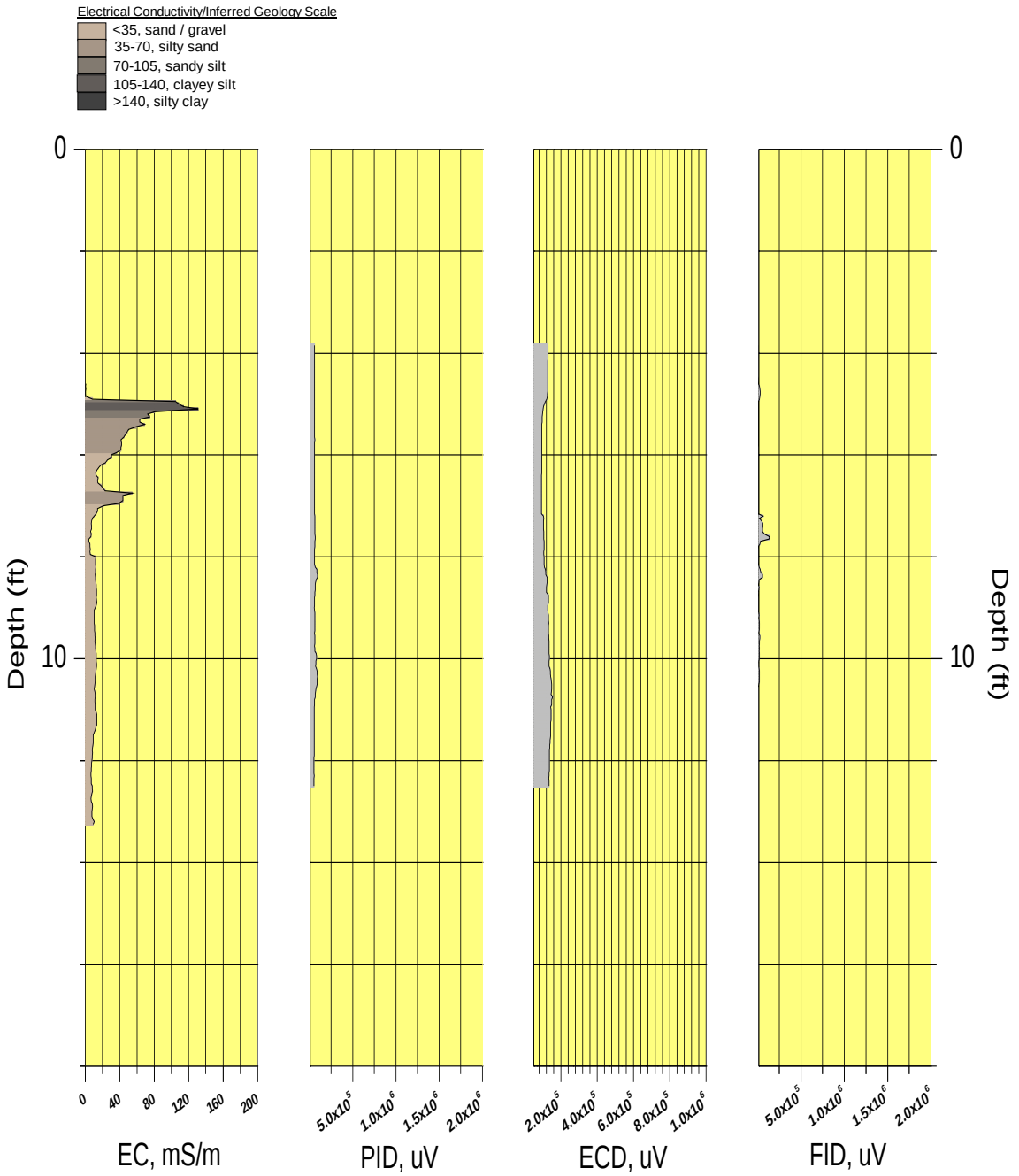
STONE ENVIRONMENTAL INC



MIP-NE1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-NE1.opj
Date: 04/19/2012 WAN

STONE ENVIRONMENTAL INC



MIP-N1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
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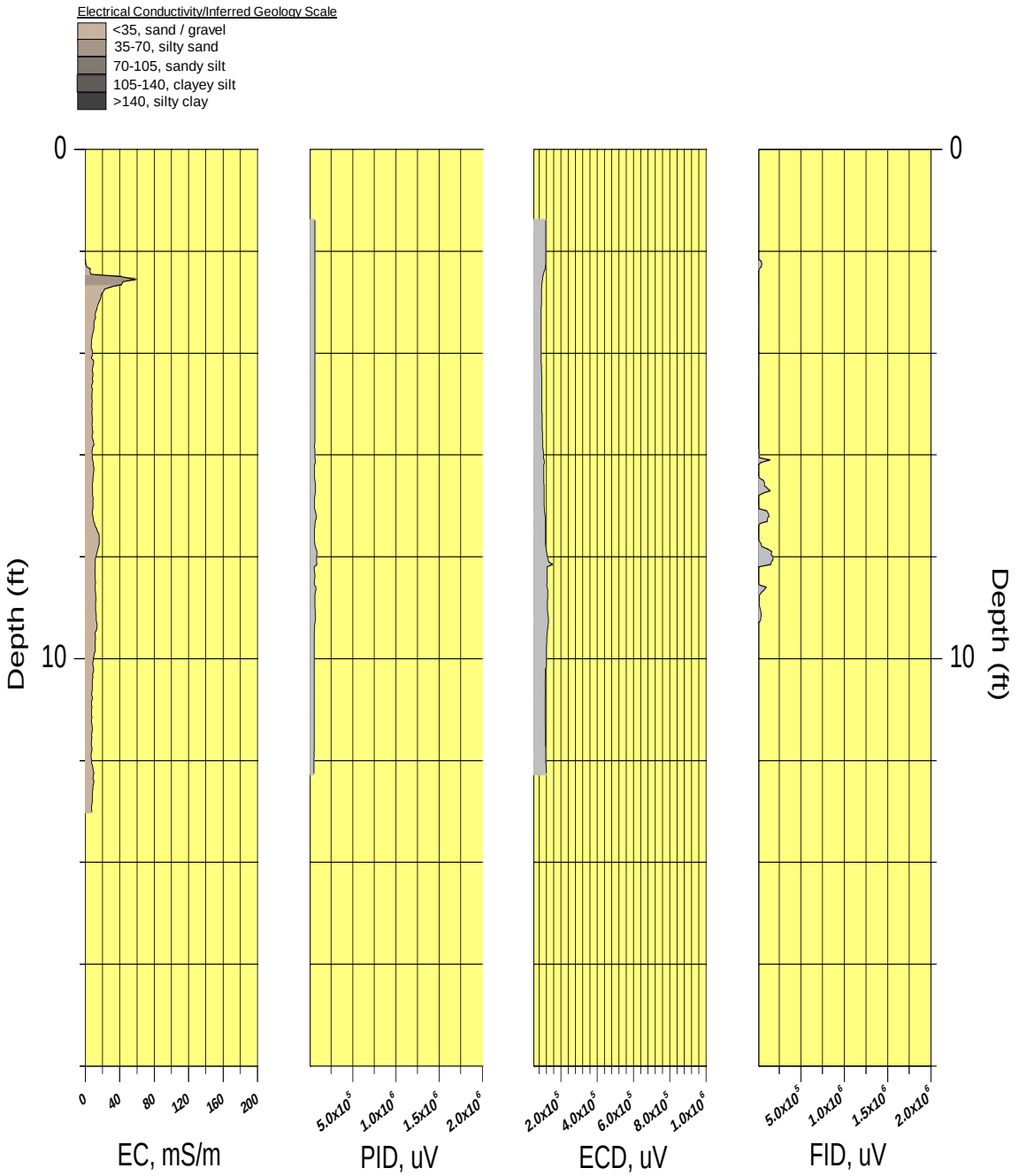
Date: 04/19/2012 MJM/WAN

STONE ENVIRONMENTAL INC



MIP-WNW1
ARS / New Bedford, MA
Date Logged : 04/19/2012

Source: Stone - Membrane Interface Probe Data
Path: C:\Documents and Settings\rasc\Desktop\MIP 2012\New Bedford, MA\Origin\MIP-WNW1.opj
Date: 04/19/2012 WAN

STONE ENVIRONMENTAL INC

650 Suffolk Street
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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-E-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 2.5' East of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/4	S-1		4" Brown medium to coarse SAND and GRAVEL, wet at 2.5'.	0.2		
2								
3								
4	NA	48/30	S-2		12" Brown medium to coarse SAND and GRAVEL, wet; grading to the material below.			
5						0.7	B-E-1 (4-6) 1430	
					1" Brown PEAT, slight odor, wet.			
6					17" Grey fine SAND, slight odor, wet.			No Monitoring Well Installed
7						77	B-E-1 (6-8) 1440	
8	NA	48/35	S-3		30" Grey very dense fine SAND, some silt, trace gravel, wet.			
9						0.7	B-E-1 (8-10) 1450	
10								
11						9.5	B-E-1 (10-12) 1500	
					5" Tan very dense SILT, wet, probably top of till.			
12					End of Boring - Terminated at 12 feet			

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Fax: 978-453-1995

BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-N-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 2.5' North of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/14	S-1		14" Dark brown fine to coarse SAND, some gravel, wet at 2.5'.	0.7		
2								
3								
4	NA	48/30	S-2		15" Dark brown fine to coarse SAND, some gravel, wet.	3.5		
5								
6					15" Grey to brown fine SAND and SILT, some odor and staining increasing with depth, some to trace peat at 7.5-8', crushed stone at 8'.			No Monitoring Well Installed
7						480	B-N-1 (6-8) 1230	
8	NA	48/48	S-3		24" Dark brown fine to coarse SAND, some gravel and cobbles, odor and slight product sheen, wet.			
9						125	B-N-1 (8-10) 1235	
10					24" Grey fine SAND and SILT, wet.			
11						75		
12					End of Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-NE-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 3.5' Northeast of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/0	S-1		No Recovery			
2								
3								
4	NA	48/48	S-2		30" Brown medium to coarse SAND and GRAVEL, wet.	0.7		
5								
6								No Monitoring Well Installed
					18" Grey fine SAND, wet.			
7						0.2	B-NE-1 (6-8) 1318	
8	NA	48/20	S-3		20" Grey fine SAND, wet.			
9						0.2	B-NE-1 (8-10) 1323	
10								
11						1.2	B-NE-1 (10-12) 1335	
12					End of Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-NW-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 3.5' Northwest of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/14	S-1		14" Brown medium to coarse SAND, some gravel, wet at 2.5'.	0.0		
2								
3								
4	NA	48/48	S-2		24" Brown medium to coarse SAND and GRAVEL, wet.	0.7		
5								
6					10" Dark brown PEAT, some odor, wet.		B-NW-1 (6-6.5) 1245	No Monitoring Well Installed
7					14" Grey fine to medium SAND, some odor, wet.	312	B-NW-1 (6.5-8) 1246	
8	NA	48/42	S-3		36" Grey fine to medium SAND with odor and a sheen, wet.			
9						55	B-NW-1 (8-10) 1252	
10								
11						377	B-NW-1 (10-11.5) 1310	
					6" Tan dense SILT, CLAY, very dense TILL, wet.			
12						20		
					End of Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-SE-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 3.5' Southeast of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/12	S-1		12" Brown medium to coarse SAND, some gravel, wet at 2.5'.	0.7		
2								
3								
4	NA	48/18	S-2		18" Brown medium to coarse SAND, some gravel, wet.	2.8		
5								
6								No Monitoring Well Installed
7							B-SE-1 (6-8) 1520	
8	NA	48/48	S-3		32" Brown medium to coarse SAND, some gravel, wet.	2.8		
9							B-SE-1 (8-10) 1540	
10								
11					16" Grey fine SAND, wet.	0.2		
12					End of Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER B-SSE-1
TRC GEOLOGIST E. Wachtel
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/18/12
LOCATION Approximatey 3.5' South Southeast of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/4	S-1		4" Brown medium to coarse SAND, trace gravel, wet at 2.5'.	2.8		
2								
3								
4	NA	48/42	S-2		12" Brown medium to coarse SAND and GRAVEL, wet.	65		
5					30" Grey fine SAND, wet.			
6								No Monitoring Well Installed
7	NA					62	B-SSE-1 (6-8) 1640	
8	NA	48/43	S-3		10" Grey interbedded fine SILTY SAND and fine to coarse SAND and GRAVEL.	250		
9	NA				30" Grey fine SAND grading to olive fine SAND, wet.		B-SSE-1 (8-10) 1650	
10	NA					28		
11								
12					3" Brown medium to coarse SAND, wet.			
					End fo Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER MIP-B-S-3
TRC GEOLOGIST J. Fiero
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/20/12
LOCATION Approximatey 13.5' South Southeast of B-SE-1
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push/MIP
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/0	S-1		No Recovery	0.2		
2								
3								
4	NA	48/42	S-2		42" Brown fine to coarse SAND and GRAVEL, wet.	16		
5								
6								No Monitoring Well Installed
7						22	MIP-B-S-3 (6-8) 0920	
8	NA		S-3		Grey to brown fine to coarse SAND and GRAVEL, wet.			
9						3.6	MIP-B-S-3 (8-10) 0930	
10					Grey fine SAND, some silt, wet.			
11					Grey SILT, little to trace fine sand, wet.	18.3	MIP-B-S-3 (10-12) 0940	
12					End of Boring - Terminated at 12 feet			

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BORING/WELL CONSTRUCTION LOG

CLIENT/PROJECT NUMBER 115058/New Bedford High School
BORING/WELL NUMBER MIP-B-W-1
TRC GEOLOGIST J. Fiero
DRILLING CONTRACTOR/FOREMAN ARS Technologies/Jeff
DATE DRILLED 4/20/12
LOCATION Approximatey 4' West Southwest of MW-27R
SAMPLING METHOD 48" Macrocore
DRILLING METHOD Direct Push/MIP
NOTES

SCREEN TYPE/SLOT NA
FILTER PACK TYPE NA
SEAL TYPE NA
DEPTH TO WATER (Approximate Feet) 2.5
TOTAL DEPTH (Feet) 12
GROUND ELEVATION (Feet)
REFERENCE ELEVATION (Feet)

DEPTH (ft. BGL)	BLOW COUNTS	PEN/REC (INCHES)	CORE #	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	Field Testing (ppm)	SAMPLE ID/ TIME	WELL DIAGRAM
					CONCRETE.			
					GRAVEL.			
1	NA	36/24	S-1		Brown fine to coarse SAND and GRAVEL, wet at 2.5'.	0.0		
2								
3								
4	NA	48/42	S-2		Brown fine to coarse SAND, some gravel, wet.			
5						2.7		
6					Grey fine SAND, some odor/staining, wet.			No Monitoring Well Installed
7					Grey fine SANDY SILT. some odor/staining, wet.	125	MIP-B-W-1 (6-8) 1030	
8	NA	48/42	S-3		Grey SILT, wet.			
9					Grey fine SILTY SAND, wet.	1	MIP-B-W-1 (8-10) 1040	
10					Grey to brown fine (running) SAND, slight odor, wet.			
11						6	MIP-B-W-1 (10-12) 1050	
12					End of Boring - Terminated at 12 feet			