

**RELEASE ABATEMENT MEASURE  
PLAN MODIFICATION AND 120-DAY STATUS REPORT**

**51 COMMERCIAL STREET  
MALDEN, MASSACHUSETTS**

**RELEASE TRACKING NUMBER 3-0362**  
December 2007

*Prepared For:*

**nationalgrid**

National Grid  
25 Research Drive  
Westborough, MA 01582

*Prepared By:*



Innovative Engineering Solutions, Inc.  
25 Spring Street  
Walpole, Massachusetts 02081  
(508) 668-0033

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Walpole, Massachusetts 02081

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Michael Lotti, L.S.P.  
Project Manager and LSP of Record  
License Number 4208

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Joseph E. Higgins, P.E., L.S.P.  
Project Reviewer

**Release Abatement Measure Plan Modification and 120-Day Status Report**  
**51 Commercial Street**  
**Malden, Massachusetts 02148**  
**DEP Release Tracking Number: 3-0362**

This Release Abatement Measure (RAM) Plan Modification and 120-Day Status Report has been prepared by Innovative Engineering Solutions, Inc. (IESI) on behalf of National Grid in accordance with the requirements of the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000). This RAM is being conducted in accordance with the RAM Plan that was submitted to the Massachusetts Department of Environmental Protection (DEP) on August 9, 2007. The RAM is being conducted at the 51 Commercial Street and 100 Commercial Street portions of the former Malden manufactured gas plant (MGP) site (the "Site") located near the intersection of Commercial and Charles Streets in Malden, Massachusetts (hereinafter referred to as the RAM Areas). The DEP assigned Release Tracking Number (RTN) 3-0362 to the Malden MGP Site. Figure 1 depicts the site locus and Figure 2 depicts the location of the RAM Areas in relation to the disposal site boundary of the former MGP.

The objectives of this RAM are to accomplish the following:

1. Install, start up, and conduct operation, maintenance, and monitoring (OMM) activities for a non-aqueous phase liquid (NAPL) recovery system at 51 Commercial Street.
2. Manage remediation waste generated during floor and foundation removal from the prior structure at 51 Commercial Street, construction of the new building foundation and Engineered Barrier under the foundation at 51 Commercial Street, and construction and operation of the NAPL recovery systems.
3. Install an Engineered Barrier beneath the proposed building at 51 Commercial Street.
4. Restore, restart, and conduct OMM activities on an existing NAPL recovery system at 100 Commercial Street.

This report includes the first RAM Status Report that describes activities conducted between August 9, 2007 and December 1, 2007. As such, the content of this report has been structured to address the specific information requirements set forth in 310 CMR 40.0445 (2)(a) through (e). This report also includes modifications to the original RAM Plan to account for new site information obtained since the RAM Plan was submitted in August 2007. The RAM Status Report and RAM Plan Modification are presented below. The original RAM Transmittal Form (BWSC-106) accompanies this RAM Plan Modification and Status Report; a copy of the RAM Transmittal Form is included in Appendix A.

## **RAM Status Report**

### **310 CMR 40.0445 (2)(a)      The status of response operations:**

During this reporting period, the activities on site have been limited to recovery well installation and site construction at the 51 Commercial Street portion of the RAM Areas. The 100 Commercial Street NAPL recovery system has not been activated.

On August 29 and 30, 2007, seven NAPL extraction wells (EW-1 through EW-7) were installed at the 51 Commercial Street property. IESI subcontracted the drilling to Geosearch, Inc. of Fitchburg, Massachusetts. Each recovery well was installed to the top of the peat layer using hollow stem augers. The well completion depth (i.e., the depth to the top of the peat layer) was selected based upon the results of the previous investigations conducted on-site. When the bore hole for each extraction well was within 2 feet of the anticipated depth of the peat layer, spilt spoon soil samples were collected to confirm the depth of the peat. When the peat was encountered, the boring was augered 6-inches into the peat layer and the well was set. The well depths range from 10 feet to 16 feet below grade. The locations of the seven recovery wells (identified as EW-1 through EW-7) are shown on Figure 3. Each recovery well is constructed of 4-inch diameter polyvinyl chloride (PVC) pipe with 10 feet of 0.020-inch

machine slotted well screen and solid riser pipe to the surface. The wells have a sand filter pack, surface seal and a well plug. Well construction diagrams are included as Appendix B.

Site construction activities commenced at 51 Commercial Street on October 31, 2007 with the removal of the floor and foundation of the demolished building. As reported in the RAM Plan, the building formerly located at 51 Commercial Street was previously demolished. The concrete from the floor and the grade beams were removed and broken up on site. The concrete was transported off site to a state licensed Asphalt, Brick and Concrete recycling facility. IESI personnel were on-site to observe the construction activities and implement the air monitoring plan presented in the RAM Plan and in accordance with the Site Specific Health and Safety Plan. The air monitoring data are discussed in later sections of this report.

Following removal of the foundation, excavation activities were conducted to facilitate the installation of concrete vaults around each recovery well, the subsurface utilities for the building to be constructed, and the subsurface piping for the NAPL recovery system. IESI was on-site to observe the excavation activities and conduct the air monitoring activities. Appendix C present the field notes for the site construction activities. In addition to the field notes, photographs of the site activities are also presented in Appendix C.

Excess soil that was generated from the excavations was stockpiled on-site on and covered with polyethylene sheeting. By November 21, 2007, all seven well vaults, all subsurface piping for the NAPL recovery system, and the majority of the utilities for the building to be constructed were installed. The site work contractor demobilized from the site until the next phase of construction is scheduled to begin. According to the building construction contractor, the next phase of construction (pile driving for the building foundation) is scheduled for the week of December 10, 2007.

### **310 CMR 40.0445 (2)(b)      Any significant new site information or data:**

Significant new site information and data included the results of air monitoring and the discovery of an unknown underground storage tank (UST) during the construction activities. Additional details about this significant new site information and data is presented below.

#### *Air Monitoring*

Monitoring conducted during this reporting period consisted of implementation of the air monitoring program detailed in the RAM and Health and Safety Plans. During subsurface excavation and/or disturbance, ambient air quality was monitored continuously at two locations (i.e., stations) for particulates (i.e., dust) and VOCs using stationary meters mounted inside contained housings on tripods. Each station contained meters for measurements of particulates and VOCs and data loggers that provided a continuous electronic record of the measurements. The particulate concentrations were monitored using a particulate meter (e.g., TS DustTrak Aerosol Monitor) that is capable of measuring particulate matter less than or equal to 10 micrometers in size (PM<sub>10</sub>). VOCs were monitored using a photoionization detector (PID). The meters were set to record the average concentration over a 5 minute interval. The site specific health and safety plan developed by IESI included the following site specific action levels and corrective measures for dust and VOC:

- 100 ug/m<sup>3</sup> PM<sub>10</sub> as measured over a 15-minute average: dust control required
- 150 ug/m<sup>3</sup> PM<sub>10</sub> as measured over a 15-minute average: stop work, evaluate field conditions
- 4 ppm VOC as measured over a 15-minute average: stop work, continue monitoring, if levels go down, identify source of vapors and abate if feasible (e.g., foam, mist, cover work area)
- 25 ppm VOC as measured over a 15-minute average: stop work and control vapors. Resume only when work area is less than 4 ppm and source of vapors identified and control measures in place.

The Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for PM<sub>10</sub> of 150 ug/m<sup>3</sup> over a 24 hour averaging period. Our site specific PM<sub>10</sub> action levels are based on a shorter averaging period (i.e., 15 minutes) to conservatively account for the potential for dust to contain site contaminants and to be protective of off-site receptors. Also, our site-specific VOC action levels are lower than the Permissible Exposure Limits (PELs) and Short-Term Exposure Limits (STELs) established by the United States Department of Labor Occupational Safety & Health Administration (OSHA) in order provide a conservative level of protection for workers and off-site receptors.

Each day the prevailing wind direction was estimated and one monitoring station (identified as the “Upwind” station) was located at the upwind perimeter of the property and was used to monitor background concentrations of dust and VOC entering the work area. A second monitoring station (identified as the “Downwind” station) was established at the downwind perimeter of the work along the property edge. A hand held PID and dust meter were also used at the work area to monitor the breathing zone and ambient air in the work zone. In addition, during every hour of intrusive subsurface work, soil loading, or stockpiling, IESI personnel recorded the average hand-held meter response for both VOC and dust along the perimeter of the property.

The data recorded on the data loggers and collected during the perimeter monitoring are summarized in Appendix E. The data collected during the work area hand-held monitoring was not recorded. The field technicians were instructed to only record action level exceedences for VOC and dust. During this reporting period, there were no action level exceedences for VOC or dust as measured by the hand-held meters at the work area. When dust was observed, typically during removal or break up of concrete, IESI instructed the contractor to apply water as a dust suppressant.

As shown in the data in Appendix E, the 15-minute average action levels for dust was exceeded on two occasions at one of the perimeter stations, on November 2 and on November 6, 2007. On November 2, the PM<sub>10</sub> measurement was 417 ug/m<sup>3</sup>. On this date, the contractor was removing the old foundation, excavating soil and breaking up large pieces of concrete. It is important to note that the dust meter was collecting PM<sub>10</sub> measurements in 5-minute intervals, as opposed to the 15-minute averaging period that the site-specific action level is based on or the 24 hour averaging period that the EPA National Ambient Air Quality Standards are based on. When averaged over 15 minute intervals, the PM<sub>10</sub> concentration was 143 ug/m<sup>3</sup>. As indicated above, dust suppression is the required corrective action when the 100 ug/m<sup>3</sup> action level is exceeded. As such, water was applied as a dust control method. .

November 6, 2007 was a rainy day and the meters should not have been set up as the moist air interferes with the dust meter operation. Because of the rain, work activities were limited and the rain would have suppressed any dust generated. We consider the readings on November 6 to be anomalous and not representative of actual conditions on that day.

Given the low PM<sub>10</sub> concentrations that were recorded during the construction activities and the immediate employment of dust suppression techniques whenever dust was observed, it is not likely that off-site receptors were exposed to any excessive levels of dust from the construction activities.

#### *Underground Storage Tank Removal*

During construction, a UST was found immediately east of the former building. The single wall steel UST had an estimated volume of 1,000 gallons and was found to contain water. There were no records of the UST on file with the City of Malden Fire Department, Building Department, or Assessor's Office. None of the maps or records reviewed by IESI shows the UST or its use. A sample of the water was collected on November 13, 2007 and was submitted to Phoenix under chain of custody for analysis of volatile organic compounds (VOC) via EPA Method 8260, volatile petroleum hydrocarbons (VPH) via DEP Methods, extractable petroleum hydrocarbons (EPH) via DEP Methods, RCRA 8 Metals, and polychlorinated biphenyls (PCBs). The laboratory analytical data reports are

attached as Appendix D. The only detected compounds were barium (0.021 milligrams per liter, mg/l), lead (0.005 mg/l), benzo(a)anthracene (0.06 micrograms per liter, ug/l), benzo(b)flouranthene (0.1 ug/l), and chloroform (2.4 ug/l).

On December 1, 2007, the UST was removed. Prior to removal, a permit for removal of the UST was obtained from the City of Malden Fire Department. Based upon the analytical results of the water sample collected from the UST, the water did not contain concentrations of oil or hazardous material greater than the release notification thresholds established by 310 CMR 40.0300 and 40.1600. The MCP, specifically 310 CMR 40.0045(6), allows for the discharge of water on site as long as the discharge is made within the disposal site boundary and is not in area that the groundwater concentrations of oil and hazardous material are less than the water being discharged. As such, based upon a review of the water analytical data and the site conditions, the water in the UST was discharged to a small excavation located on the northeast corner of the property. The empty UST was inspected upon removal, observed to be structurally sound, and contained no solids or any other debris. The atmosphere of the interior of the removed UST was monitored in the field for oxygen content and lower explosive limit. The results indicated that the oxygen content was 21% and the LEL was 0%. The UST was transported to J. G. Grant of Readville, Massachusetts for recycling.

**310 CMR 40.0445 (2)(c)      Details of and/or plans for the management of Remediation Waste, Remedial Wastewater, and/or Remedial Additives:**

As indicated in the RAM Plan, we anticipated that up to 1,500 cubic yards of soil would be excavated for the RAM, and that this material would be managed in accordance with the provisions of 310 CMR 40.0030.

As part of the management of remediation waste, soil samples were collected from the site on October 4, November 11, and November 16, 2007 for waste characterization. A total of 12 composite soil samples were collected from various areas on site (as shown on Figure 4) where soil excavation was planned and the excavated soil would likely be transported off-site. Each sample was collected in laboratory provided glassware and submitted under chain of custody to Phoenix Environmental Laboratories, Inc. of Manchester Connecticut (Phoenix) for analysis of total petroleum hydrocarbons (TPH) via EPA Method 8100, VOC via EPA Method 8260, semi-volatile organic compounds (SVOCs) via EPA Method 8270, PCBs, RCRA-8 metals, pH, cyanide reactivity, sulfide reactivity, percent solids and ignitability (flashpoint). Samples with lead results greater than 100 milligrams per kilogram (mg/kg) were also analyzed for lead by the toxicity characteristic leaching procedure (TCLP). The parameters for and frequency of analysis were performed in accordance with acceptance criteria for treatment of the soil at the thermal treatment facility owned and operated by Environmental Soil Management, Inc of New Hampshire (ESMI) in Loudon, New Hampshire. The results of the analyses conducted for waste characterization indicated that the soils were suitable for recycling by thermal desorption. The laboratory analytical data reports are attached as Appendix D.

Between October 31, 2007 and November 21, 2007, 899.71 tons (roughly 530 cubic yards) of soil have been transported under a Bill of Lading to ESMI for recycling by thermal desorption. Additional remediation waste (i.e., soil) will be generated as the construction project progresses. The RAM Plan Transmittal Form indicated that 600 cubic yards of soil would be transported off site for recycling, 400 cubic yards would be re-used on site, and 400 cubic yards would be disposed in a landfill. As a modification to the RAM Plan, we anticipate that most of the remaining material to be excavated will be transported off-site for recycling. As discussed above, the results of the analyses conducted for waste characterization indicated that the soils to be excavated will be suitable for recycling by thermal desorption at ESMI. We have updated Section D of the RAM Transmittal Form to reflect this modification.

**310 CMR 40.0445 (2)(d)**

**Any other information that the Department during its review and evaluation of a Status Report determines to be necessary to complete said Status Report, in view of site specific circumstances and conditions; and:**

The DEP has not required additional information, and the DEP did not impose any conditions on the right to conduct the RAM.

**RAM Plan Modification**

The RAM Plan included information for the installation of a cap beneath the new building, and indicated that additional details regarding the components of the cap would be provided to the DEP once the foundation design for the new building was completed. These additional details are presented below, and are considered to be a modification to the previously submitted RAM Plan and supplement the information presented in the original RAM Plan. There are no changes to the intent or goals of the RAM.

Note that, in the RAM Plan, the cap was referred to an “engineered barrier”. It is National Grid’s intent to have the cap installed in such a manner that it would meet the requirements of an engineered barrier. This cap will not formally be considered an “engineered barrier” at this time; however, in the event that in the future the proposed remedial response actions at the property achieve a permanent solution (with the exception of addressing soils containing oil or hazardous materials at concentrations exceeding Upper Concentration Limits, UCLs) it may be desired to have the cap designed as an “engineered barrier” installed in accordance with 310 CMR 40.0996 (4). As detailed in the focused feasibility evaluation in the RAM Plan, the only feasible remedial alternative that could achieve a permanent solution (once NAPL recovery is complete) is isolation of the soils exceeding UCLs using an engineered barrier. As such, and in conjunction with site redevelopment, National Grid has opted to construct a cap as part of the building foundation construction activities in order to isolate soils exceeding UCLs under the new building footprint. This cap has been designed to meet the requirements of an engineered barrier in the event that recovery of NAPL is successful and a permanent solution is achieved.

***Foundation Details***

The site designers and geotechnical engineers for the new building have designed a foundation system that consists of 54 wooden piles (8-inch diameter, driven 27 feet into the subsurface) supporting concrete pile caps, which will support concrete grade beams, which will support the floor of the building (an 8-inch thick reinforced concrete structural slab). A mud mat will be installed within the proposed building footprint below the pile caps. Figure 3 presents the current site plan with the planned building; Figure 5 provides the layout of the foundation and Figure 6 provides the details of the foundation.

Once the piles are installed, the building footprint and five feet beyond the building footprint will be excavated to a depth of about 7 feet below the finished floor elevation of the building (or about elevation 14 feet). This excavation activity will result in the removal of about 1,200 tons (roughly 800 cubic yards) of soil (which, combined with the 530 cubic yards of soil removed to date, is consistent with the excavated soil volume of less than 1,500 yards that was presented in the RAM Plan). As indicated above, we intend to transport this excavated soil to ESMI of New Hampshire for recycling by thermal desorption. Given the space constraints on the property, we also intend to load this excavated soil directly into trucks for transportation to ESMI’s facility. All soil shipping, handling and off-site disposal will be conducted in accordance with the relevant provisions of the Massachusetts Contingency Plan (MCP), associated regulatory guidance, and the soil management procedures detailed in the RAM Plan.

At the depth of 7 feet below the finished floor elevation, a gas vent layer will be installed. Specifically, the bottom of the excavation will be covered with an 8-ounce non-woven geotextile. A 4-inch layer of peastone will be placed on top of the geotextile. Three lengths of 2-inch diameter perforated PVC pipe will be placed roughly 20 feet apart in the peastone in an approximate east-west orientation, plumbed together and extended to the proposed equipment

enclosure in the southwest corner of the site and capped. A four-inch layer of concrete (i.e., commonly referred to as a “mud mat”) will then be poured on top of the peastone. This layer will provide a stable work surface and eliminate any exposure to the contaminated soil present at depth. Figure 7 provides additional detail of the components of the engineered barrier that will be constructed as the foundation is built. The cross sections were taken from Figure 6 and amended to include the additional engineered barrier components.

A second gas venting layer will be installed as a conservative measure after construction of the concrete pile caps and the concrete grade beams (which divide the building footprint into three areas). As each area is back filled, the second gas vent layer will be installed and consist of a 6-inch layer of ¾-inch crushed stone with 4-inch perforated PVC pipe embedded in the crushed stone layer. One length of 4-inch diameter perforated PVC pipe will be placed in each of the three areas of the foundation system in an approximate east-west orientation. The three pipes will be plumbed together outside of the foundation and extended to the proposed equipment enclosure and capped. A layer of 8-ounce non-woven geotextile will be placed on top of the crushed stone. A 20 millimeter (mil) thick linear low density polyethylene (LLDPE) liner will then be installed on top of the geotextile.

#### *Engineered Barrier*

As indicated above, the foundation has been designed to satisfy the requirements of an engineered barrier. As discussed in the RAM Plan, the draft DEP document entitled “Guidance on the Use, Design, Construction, and Monitoring of Engineered Barriers - Public Comment Draft” (EB Guidance) contains the following components for an engineered barrier: Separation Layer, Defining Layer, Drainage Layer; Flexible Membrane Liner (FML)/Low Hydraulic Conductivity Layer; and Gas Vent Layer. We believe the foundation design contains all the necessary components for an engineered barrier. Specifically, the 8 inch thick reinforced concrete structural slab (the floor of the building) meets the requirements for the Separation Layer. As indicated in the RAM Plan, caution tape will be placed beneath the concrete slab to act as a Defining Layer. Also as indicated in the RAM Plan, the roof drainage system will act as the Drainage Layer. The LLDPE and the mud mat meet the requirements for the FML/Low Hydraulic Conductivity Layer. Finally, two separate gas venting layers are proposed and meet the requirements for a Gas Vent Layer.

Section 6.5.1 of the EB Guidance discusses new buildings as they relate to engineered barrier installation and states the following:

*It is the Department’s position that a new building may be placed over an engineered barrier and/or may be considered part of an engineered barrier ONLY under the following conditions:*

- *a geotechnical evaluation is conducted and documented in the Remedial Action Plan which demonstrates that placement of the building and foundation elements in the manner proposed will not compromise the integrity or adversely impact the long-term functionality of the engineered barrier; and*
- *utilities and other subsurface conduits and structures servicing the building are not placed within or beneath the engineered barrier, as further detailed in Section 6.5.3; and*
- *a gas-venting layer is incorporated into the engineered barrier, except as provided in Section 6.4.3*

The foundation design accounts for the geotechnical properties of the underlying materials (fill overlying peat and silty fine sand) and has been designed in such a manner so as to not compromise the integrity or adversely impact the long term functionality of the cap or the proposed building.

The building will be serviced by the following underground utilities: electric, telephone, cable, water and sanitary sewer. The intent of the EB Guidance requirement above for underground utilities is to protect workers during unscheduled or emergency maintenance activities. Given the construction of the floor slab and the intended use of

the building as a bank branch office, it is unlikely there will be any unplanned excavation activities beneath the building footprint that would result in exposure to residual contamination. Nonetheless, in order to address this requirement, National Grid has elected to excavate all soil within the building footprint to a depth of 7 feet below the finished floor elevation and replacing it with clean imported fill (in addition to the gas vent layers and foundation components); this approach will provide a clean corridor beneath the building footprint for any underground utilities.

Finally, as indicated above, 2 separate gas venting layers have been incorporated in the foundation design, thereby satisfying the requirement of this last bullet.

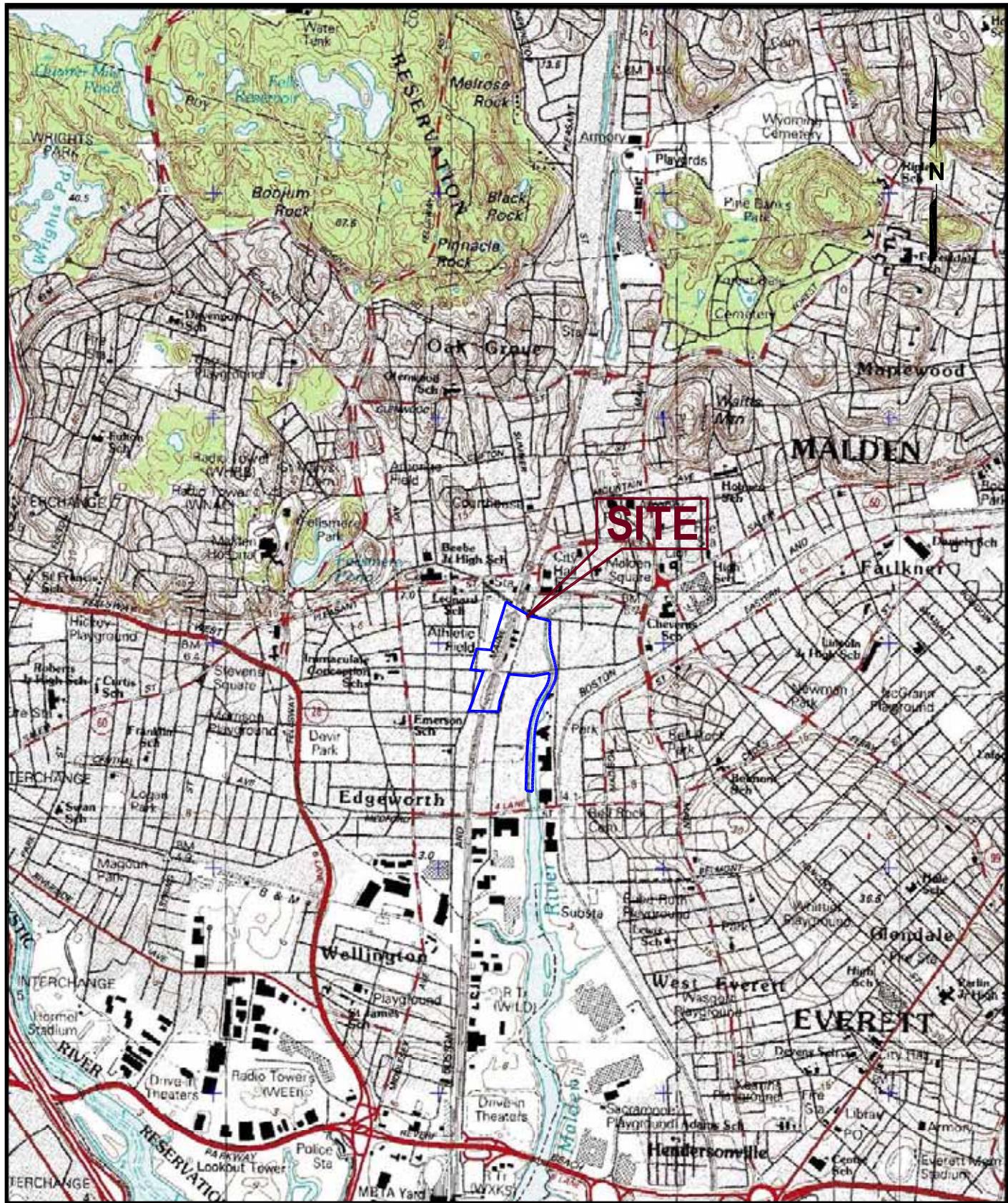
**310 CMR 40.0445 (2)(e)      An LSP Opinion as to whether the Release Abatement Measure is being conducted in conformance with the RAM Plan and any conditions of approval established by the Department.**

Having reviewed the requirements of the RAM Plan and the response actions completed to date, we are of the opinion that the RAM is being conducted in accordance with the RAM Plan.

If you require additional information or have any questions regarding this status report, please contact Michael S. Lotti, LSP of IESI at (508) 668-0033 (x 231).

## **FIGURES**

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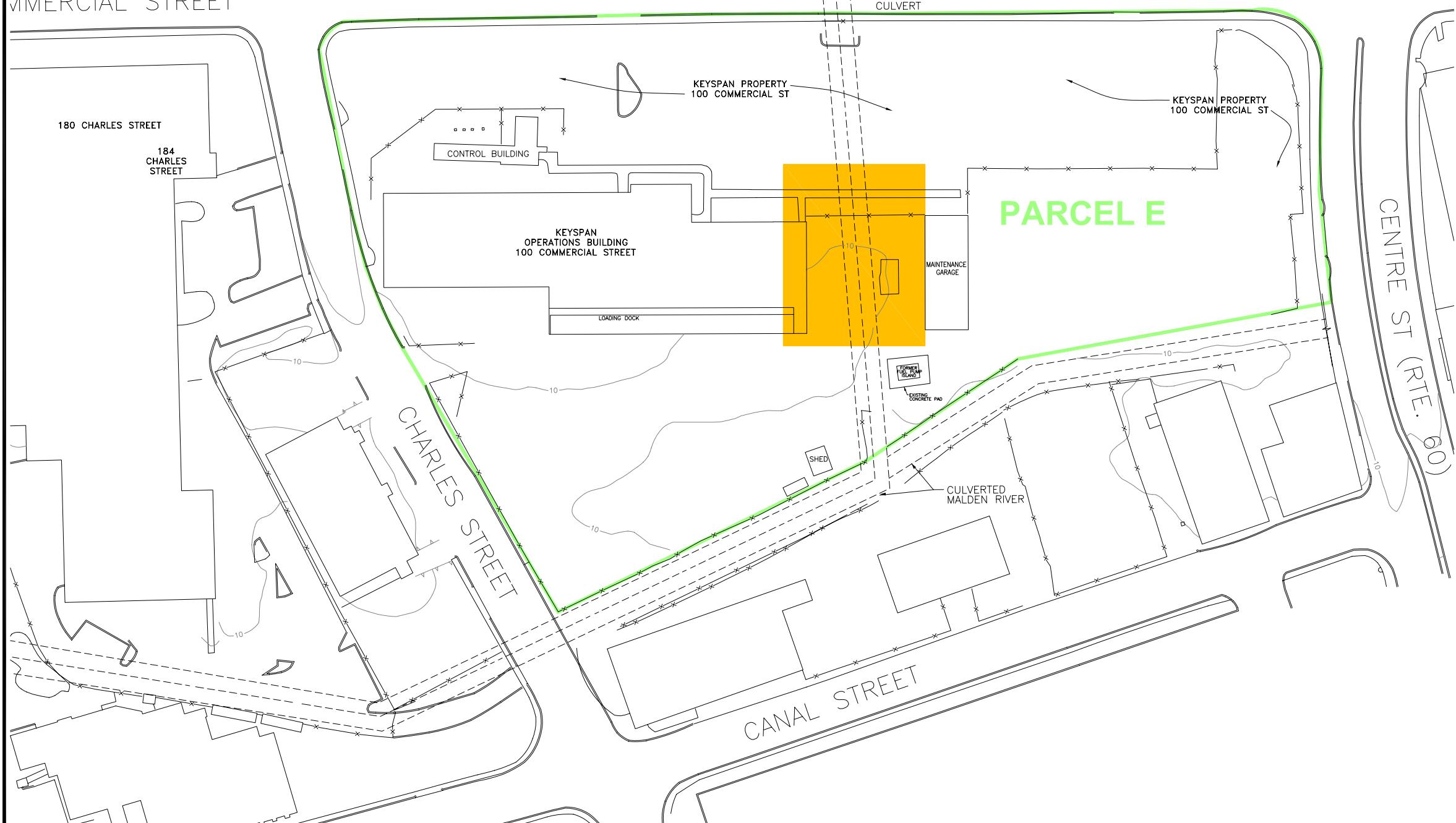
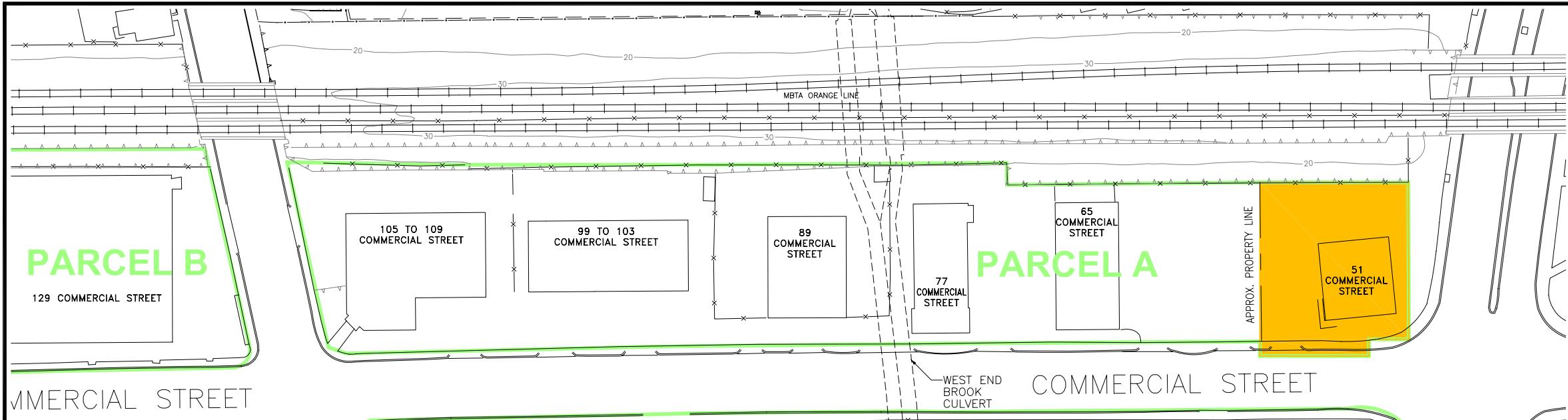


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0 2000  
SCALE IN FEET  
1:24000

SITE LAT/LONG: 42°25'30"N 71°04'30"W  
UTM: 329,298E 4,699,051N ZONE 19  
USGS Topographic Map:  
Boston North, Massachusetts 1991

FIGURE 1  
**SITE LOCATION MAP**  
Former Malden MGP Site  
Malden, Massachusetts



THIS PLAN BASED ON THE SITE PLAN DATED DECEMBER 2001  
BY HALEY & ALDRICH, INC.

HALEY & ALDRICH, INC. NOTES:

1. BASE PLAN ADAPTED FROM "TOPOGRAPHIC WORKSHEET OF THE MANUFACTURED GAS PLANT, MALDEN, MA" FOR MASSACHUSETTS ELECTRIC COMPANY, WESTBOROUGH, MA, BY EASTERN TOPOGRAPHICS, WOLFBOROUGH, NH, SHEETS 1 AND 2, AT A SCALE OF 1 IN. EQUALS 40 FT., JUNE 1995, AND CITY OF MALDEN ASSESSOR'S PLAN SHEET NO. 53, BY FAY, SPOFFORD & THORNDIKE, INC., BOSTON, MA, AT A SCALE OF 1 IN. EQUALS 40 FT., UPDATED JUNE 1976 AND REVISED 30 JULY 1979.
2. LOCATION OF TEST BORINGS AND TEST PITS WERE DETERMINED BY HALEY & ALDRICH, INC.



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TITLE

**RAM AREAS**

SITE

FORMER MALDEN MGP SITE

CLIENT

NATIONAL GRID

DRAWN

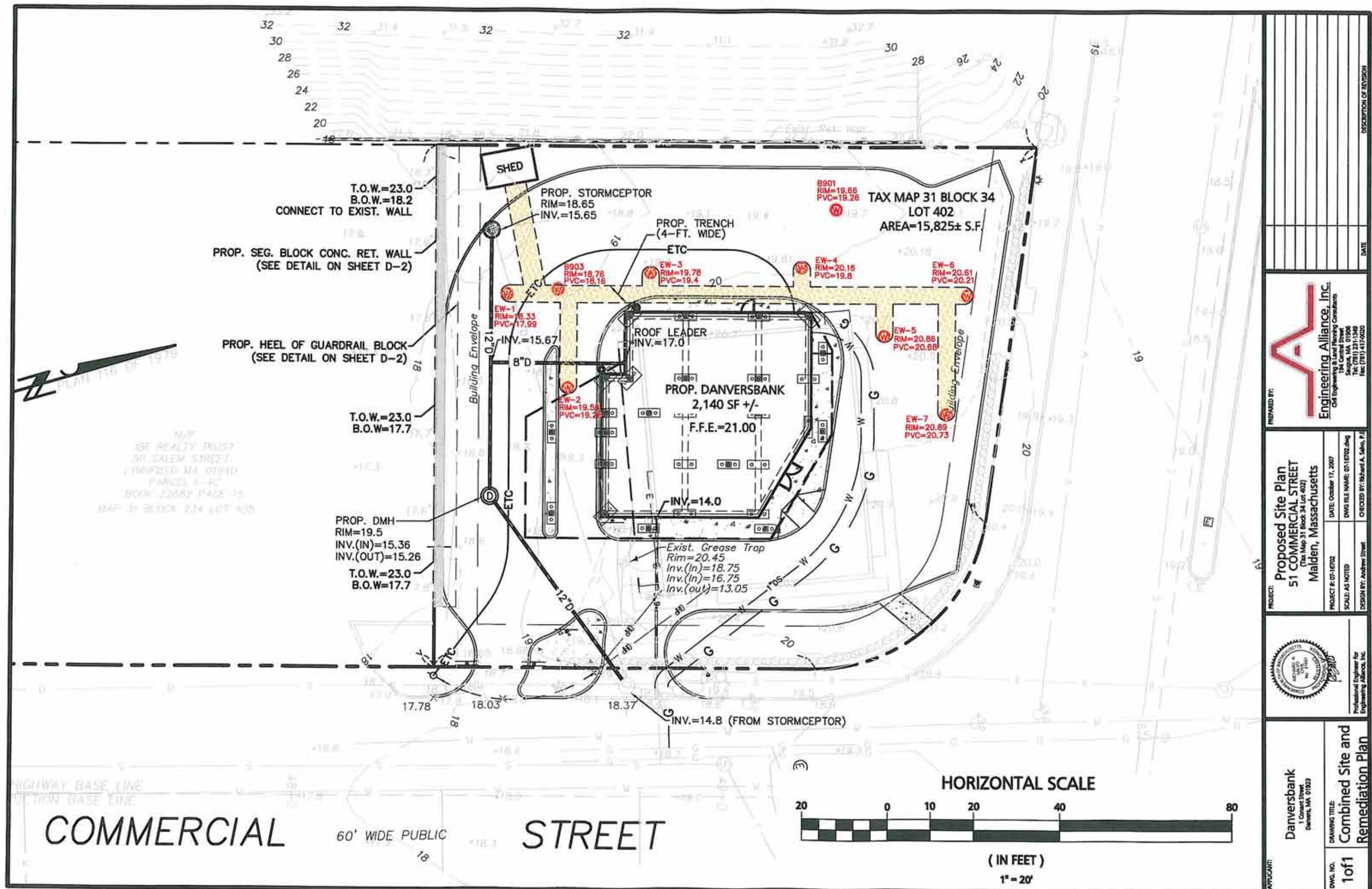
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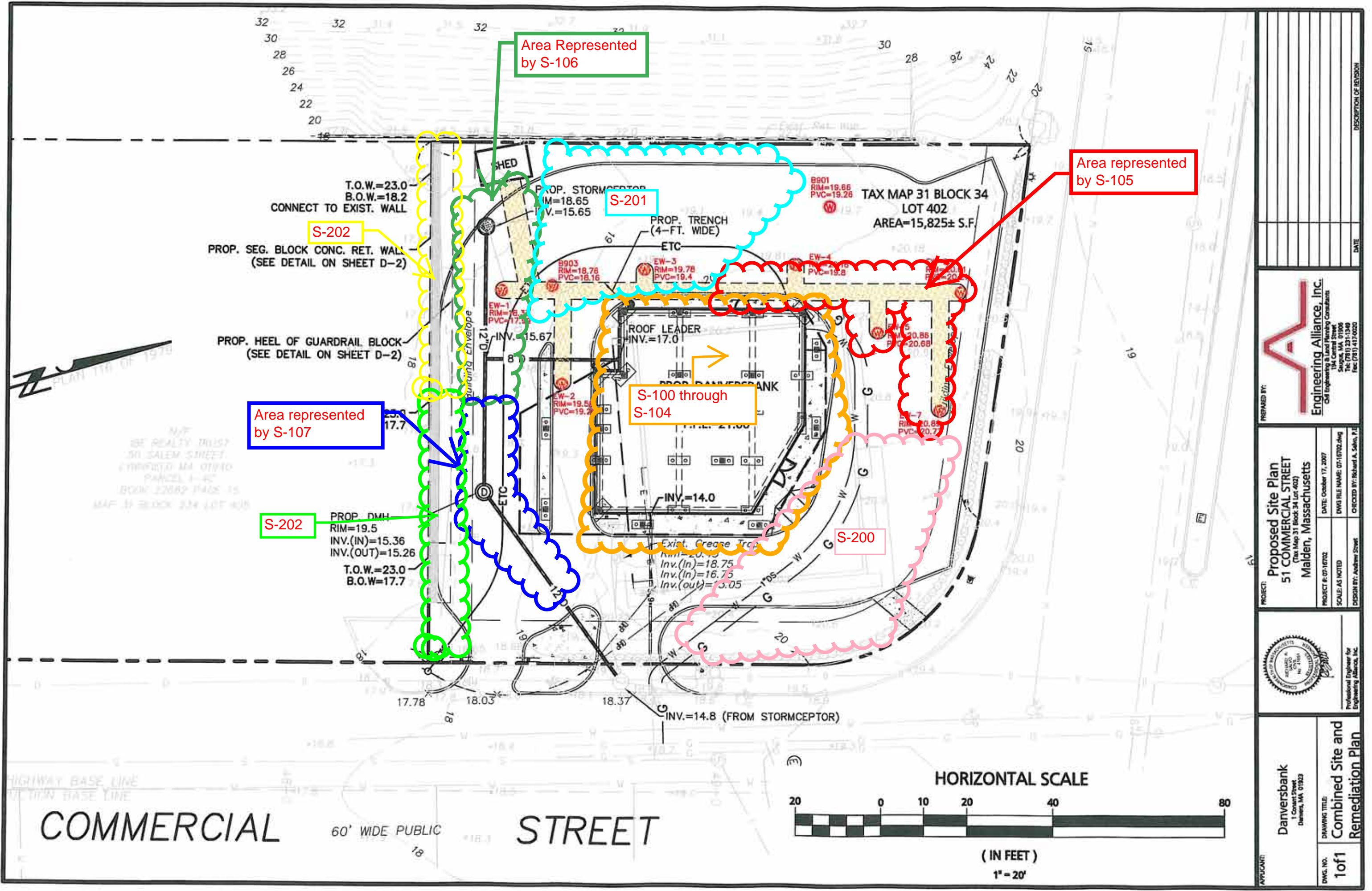
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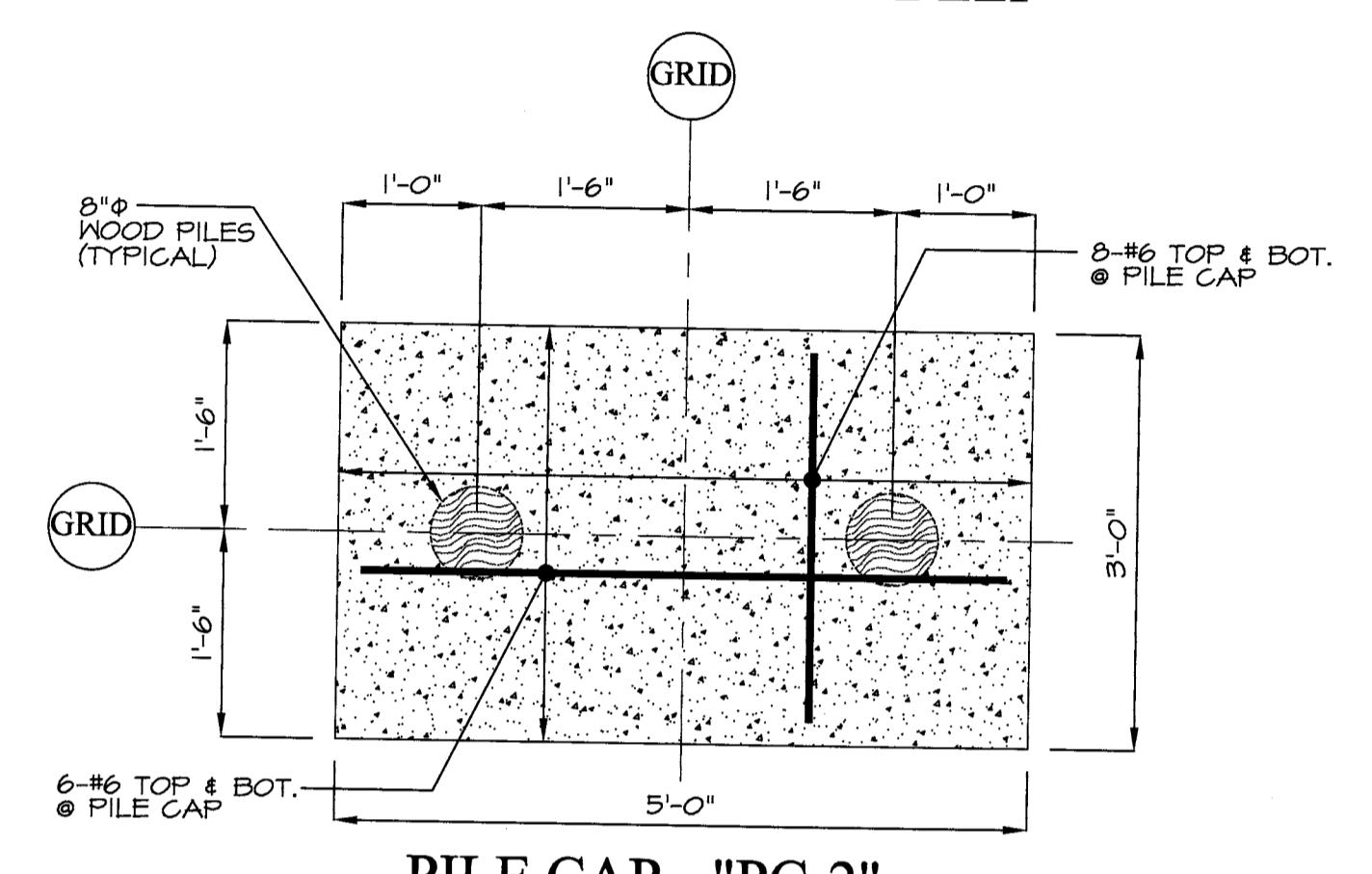
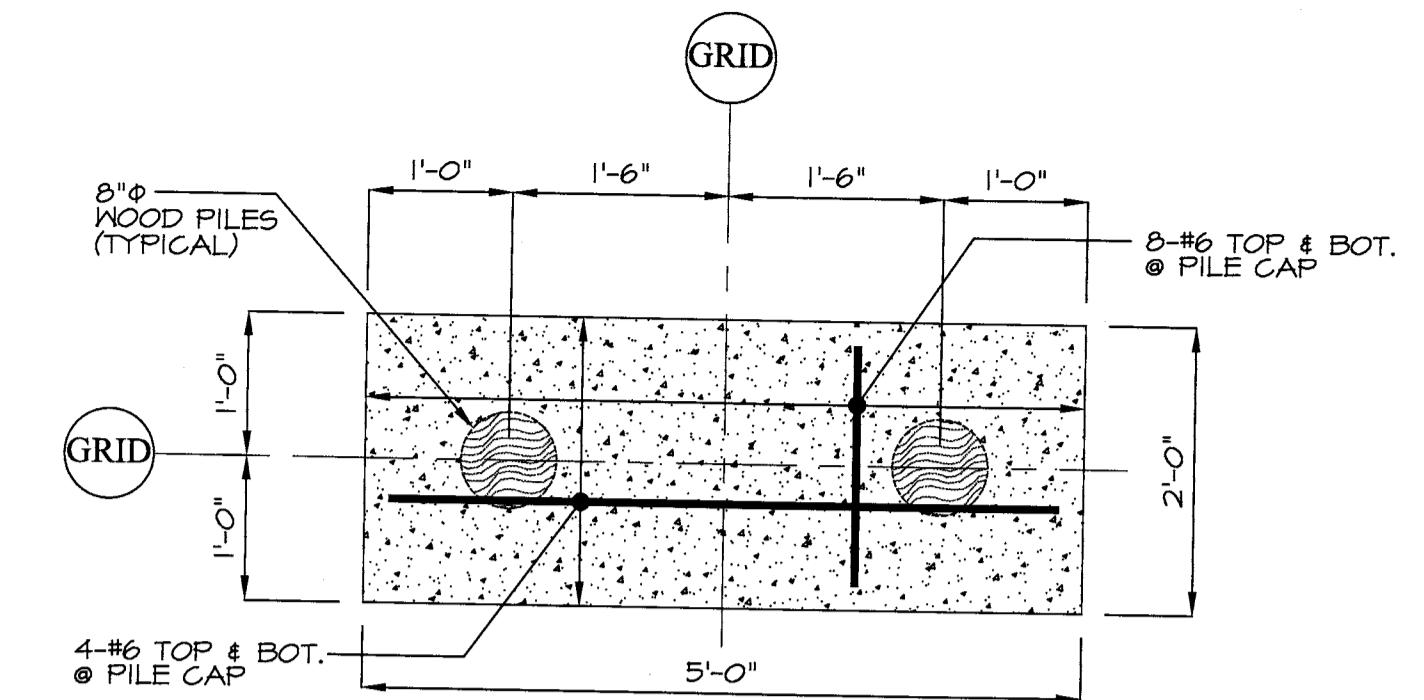
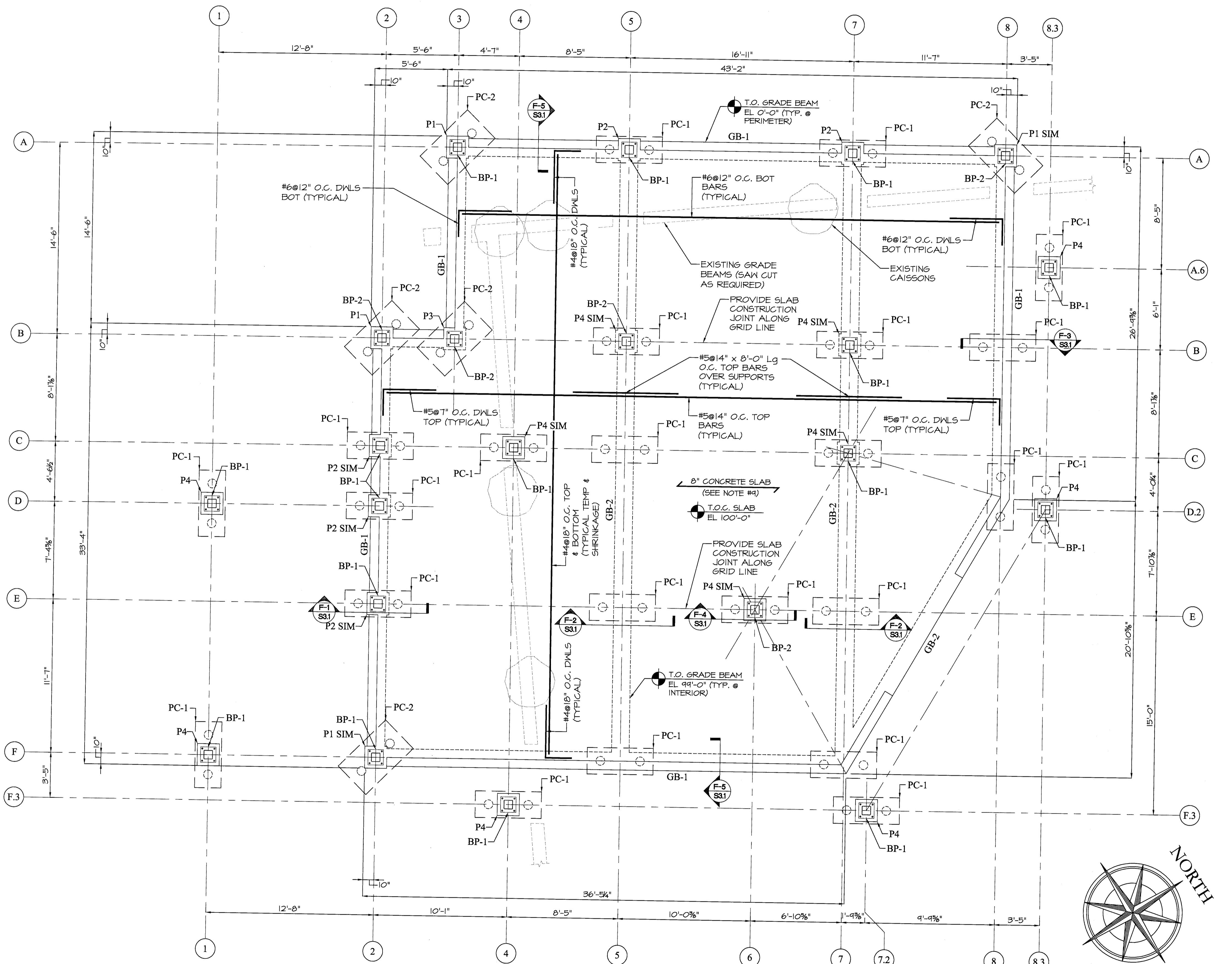
FILENAME  
NG MALDEN RAM AREAS

DATE  
12/27/07

FIGURE  
**2**







COLUMN SCHEDULE			
MARK	SIZE	LONGITUDINAL REINFORCEMENT	TIES
GB-1	16"-0" x 36'-0" *	(4) #4 T & B #3 @ 16" O.C.	
GB-2	16"-0" x 36'-0" *	(4) #5 T & B #3 @ 16" O.C.	

\* CHANGE DEPTH AS REQUIRED FOR FROST PROTECTION AT PERIMETER GRADE BEAMS.

- FOUNDATION NOTES:**
- 1.) SEE SHEET S1.1 & S1.2 FOR GENERAL NOTES, TYPICAL DETAILS, AND MATERIAL SPECIFICATIONS.
  - 2.) "GB-O" DENOTES GRADE BEAM. SEE SCHEDULE THIS SHEET.
  - 5.) "BP-O" DENOTES BASE PLATE. SEE SHEET S3.1 FOR BASE PLATE DETAILS.
  - 6.) "PO" DENOTES CONCRETE PIER. SEE SHEET S3.1 FOR PIER DETAILS.
  - 7.) "PC-O" DENOTES CONCRETE PILE CAP. SEE DETAIL THIS SHEET.
  - 8.) ALL DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION WALL AND PIER OR TO CENTERLINE OF COLUMNS. ALL DIMENSIONS SHOWN BASED ON DRAWINGS A1.1, A1.2, AND A1.3 PROVIDED BY ROYAL DESIGN.
  - 9.) SLAB IS 8" THICK STRUCTURAL SLAB WITH TOP & BOT. REINFORCEMENT AS SHOWN. F'c = 3000 PSI.
  - 10.) BOTTOM OF ALL EXTERIOR PILE CAPS SHALL BE A MINIMUM OF 4'-0" BELOW LOWEST POINT OF GRADE.
  - 11.) UNDERGROUND CONDUITS AND PIPES SHALL BE SECURELY FASTENED TO STRUCTURAL SLAB AND GRADE BEAMS. (VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION)
  - 12.) ALL GRADE BEAM REINFORCEMENT TO BE CONTINUOUS THROUGH CONCRETE PIERS.
  - 13.) PROVIDE SAW CUT CONTROL JOINTS ALONG GRID LINES AND/OR AT A MAXIMUM SPACING OF 15'-0". (SEE TYPICAL DETAIL ON SHEET S1.2)
  - 14.) PROVIDE SLAB ISOLATION JOINTS AT ALL STEEL COLUMN LOCATIONS PER TYPICAL DETAIL ON SHEET S1.2.

## ROYAL DESIGN

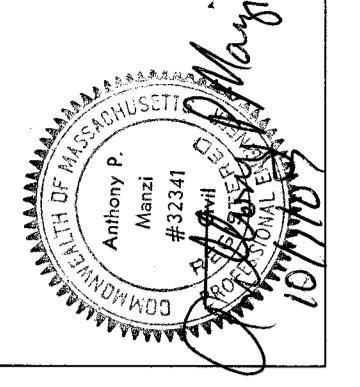
Architect/Interior Design/Planning/Marketing/Construction Management  
208 Market Street, Portsmouth, NH 03801  
t. (603) 926-4533 f. (603) 926-5907  
www.royaldesign.net

## DANVERS BANK

51 Commercial Street  
Malden, Massachusetts  
Foundation Plan

EEL Project No.: 07-112	
File:	
Drawn By:	RHG
Checked By:	APM
Scale:	AS NOTED
Date:	DATE
#	Date
1	9/13/07
2	10/10/07
Description	
Progress Set	
Construction Set	

S2.1



**ROYALDESIGN**

Architecture | Interior Design | Planning | Merchandising | Construction Management

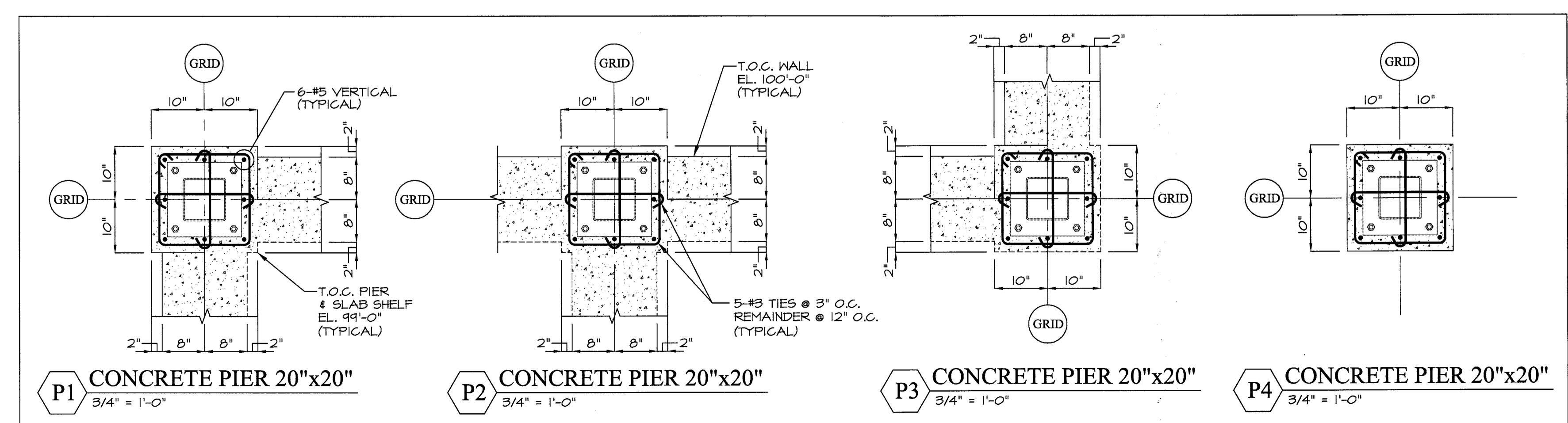
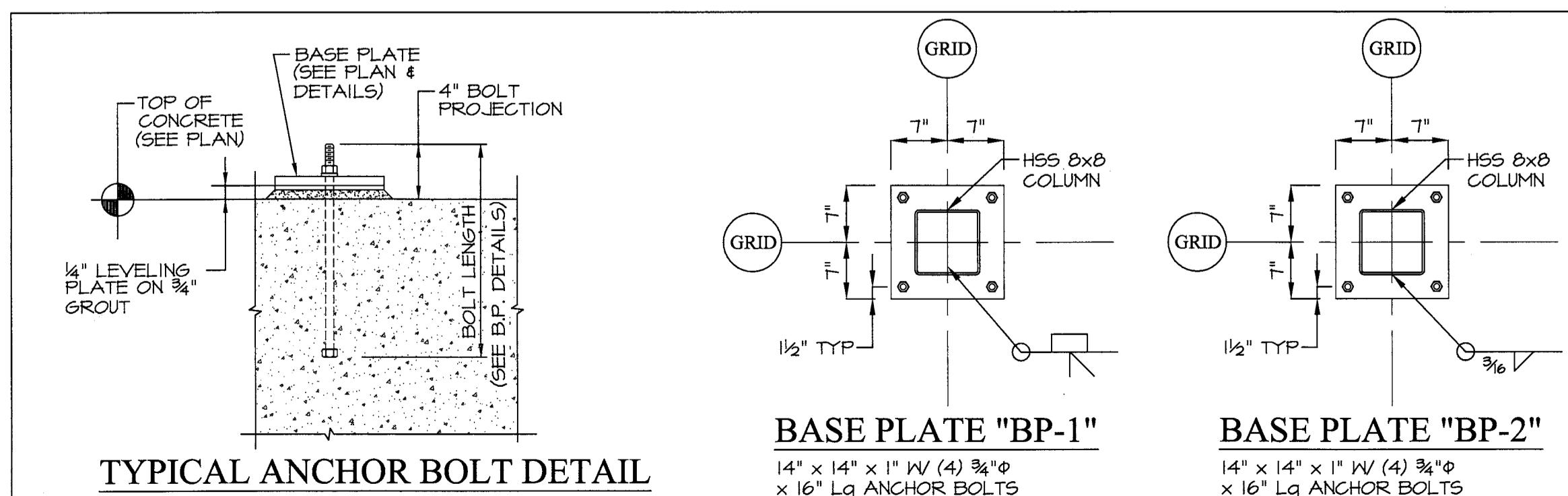
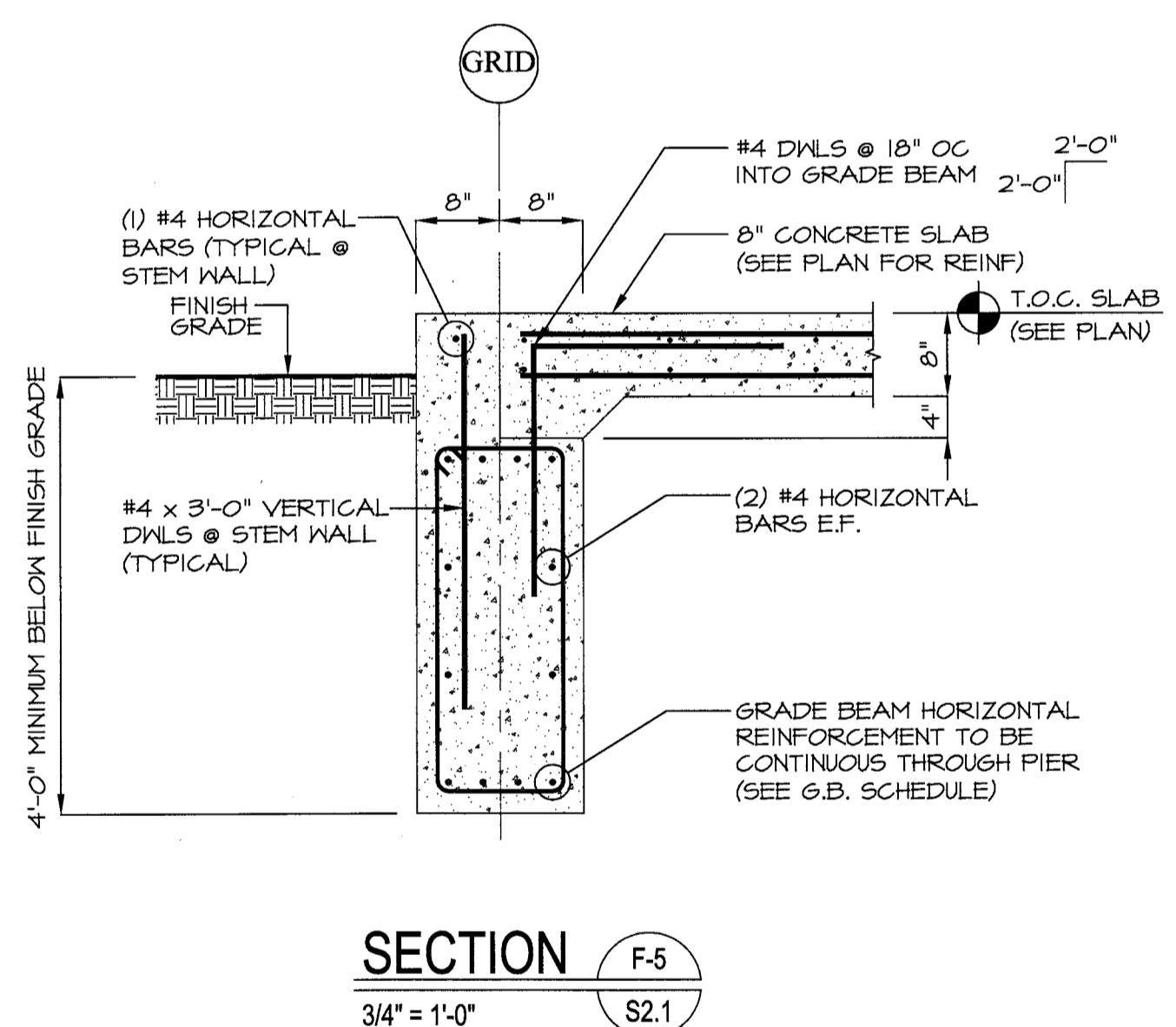
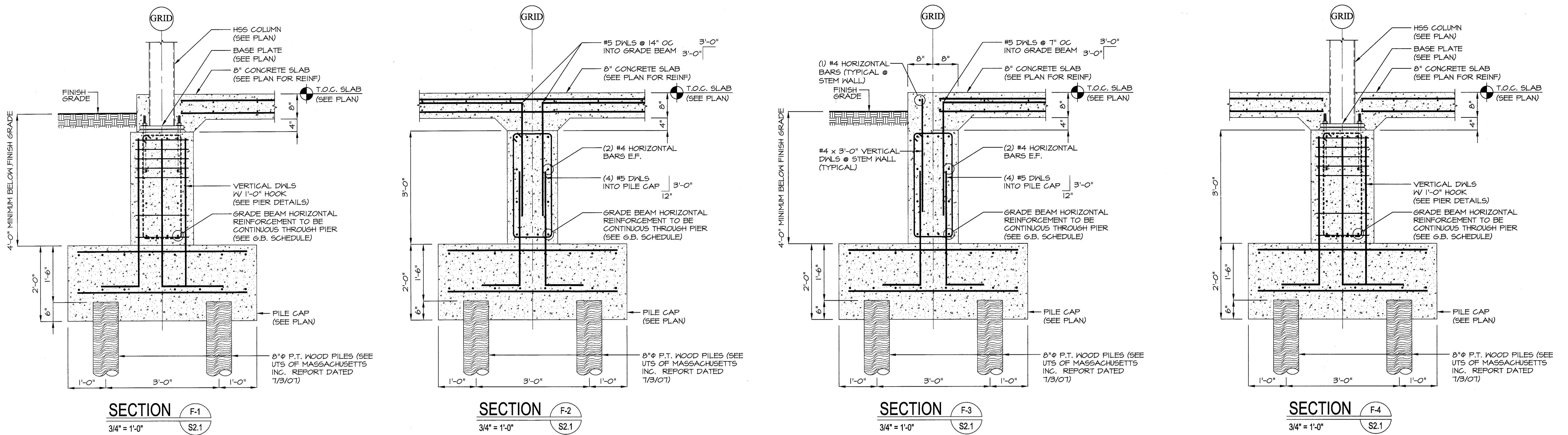
**3 Market Street, Portsmouth, NH 03801**  
**(603) 926-4533 f: (603) 926-5907**  
**[www.royaldesign.net](http://www.royaldesign.net)**

**EMANUEL**  
**ENGINEERING, INC.**  
CIVIL AND STRUCTURAL CONSULTANTS  
118 PORTSMOUTH AVE.  
STRATHAM, NH 03885  
(P) 603.772.4400

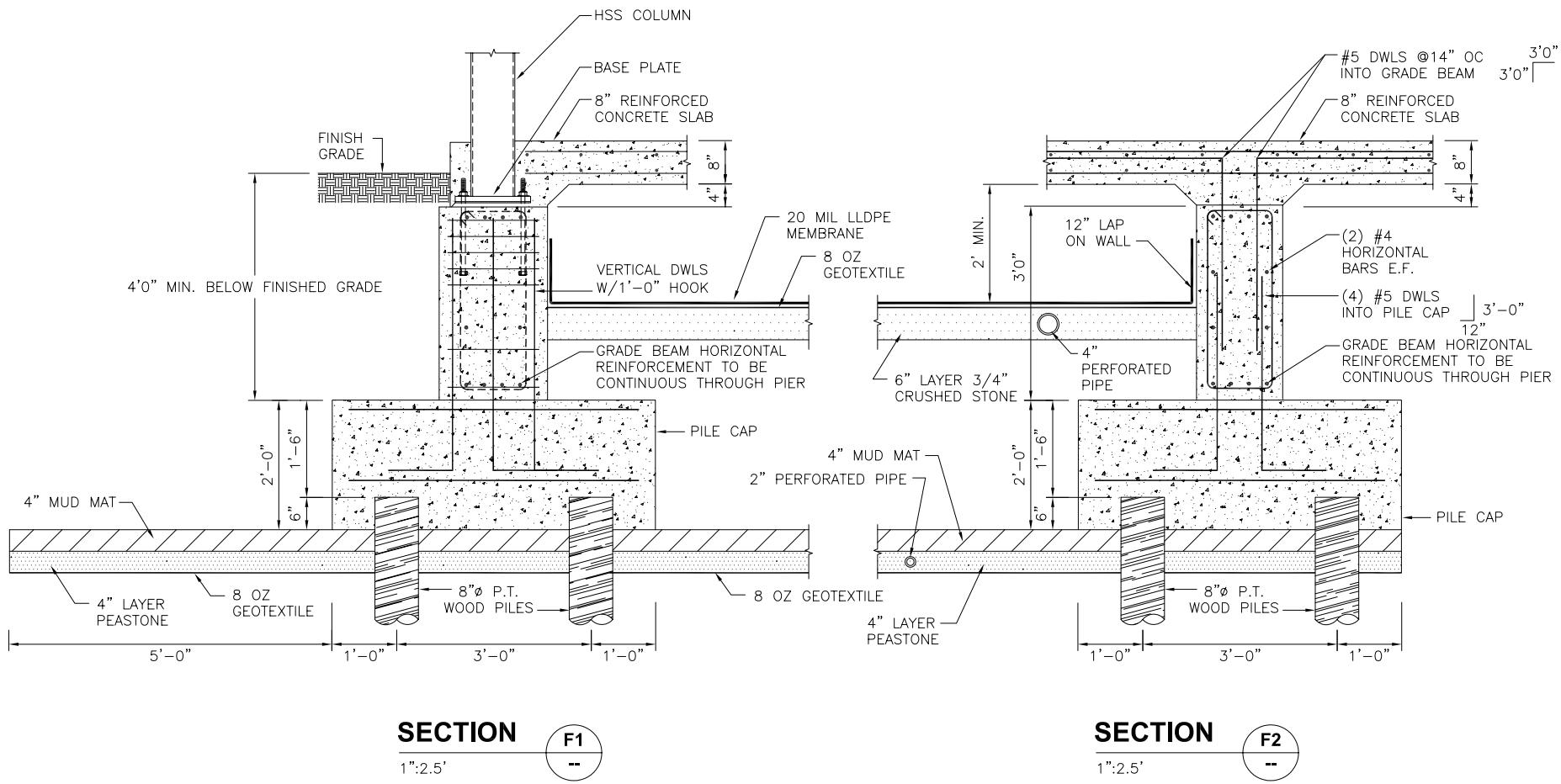
**DANVERS BANK**  
51 Commercial Street  
Malden Massachusetts

51 Commercial Street  
Malden, Massachusetts

Foundation Sections & Details



Project No. : 07-112	
:	
Drawn By:	RHG
Checked By:	APM
Date:	AS NOTED
Revised:	DATE
Date	Description
9/13/07	Progress Set
10/1/07	Construction Set



NOTES:  
 1] SOURCE: "DANVERS BANK, 51 COMMERCIAL STREET, MALDEN,  
 MASSACHUSETTS, FOUNDATION SECTIONS & DETAILS" SHEET  
 PREPARED BY ROYAL DESIGN, PORTSMOUTH, NH, 10/1/07.

<b>iesi</b> Innovative Engineering Solutions, Inc. 25 SPRING STREET WALPOLE, MASSACHUSETTS 02081 (508) 668-0033			
TITLE <b>CONSTRUCTION SECTIONS</b>			
PROJECT <b>SITE INVESTIGATION</b>			
SITE <b>51 COMMERCIAL STREET, MALDEN, MASSACHUSETTS</b>			
CLIENT <b>NATIONAL GRID</b>			
DRAWN DMR	CHECKED ML	FILENAME CONSTR SECTIONS	DATE 10/23/07
FIGURE <b>1</b>			

## **APPENDIX A**

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### **COPY OF RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM (BWSC-106)**

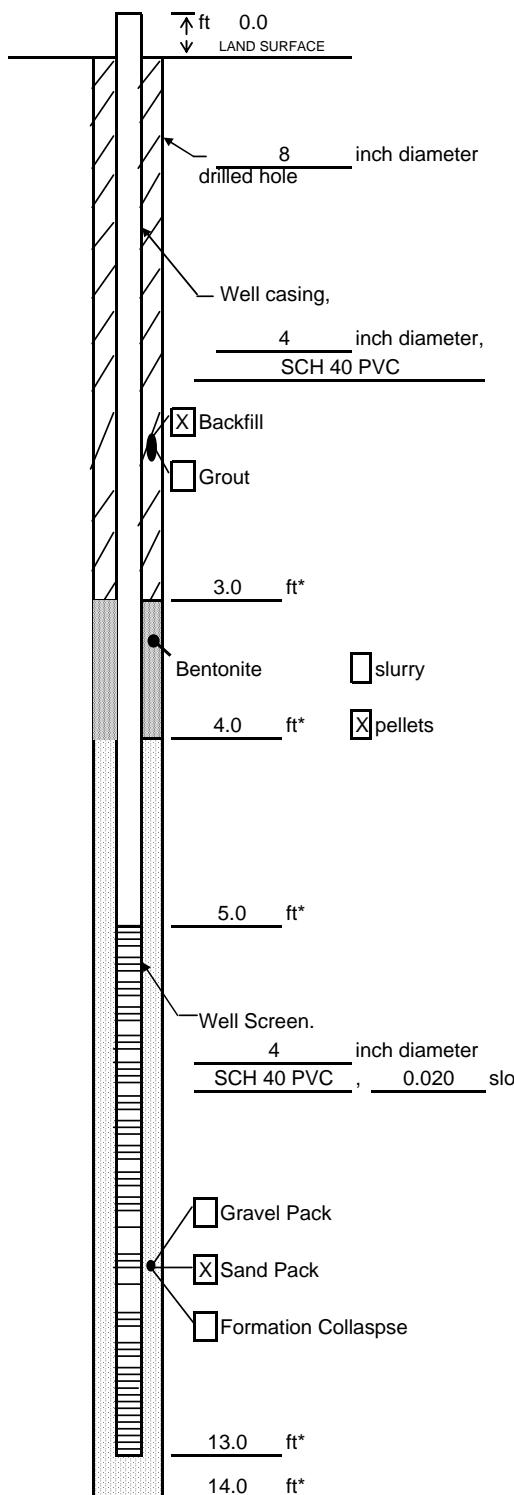
Not included on EDEP Submittal

## **APPENDIX B**

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**WELL CONSTRUCTION DIAGRAMS: EW-1 THROUGH EW-7**

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-1

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

feet  Surveyed  
 Estimated

Installation Date(s) 30-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

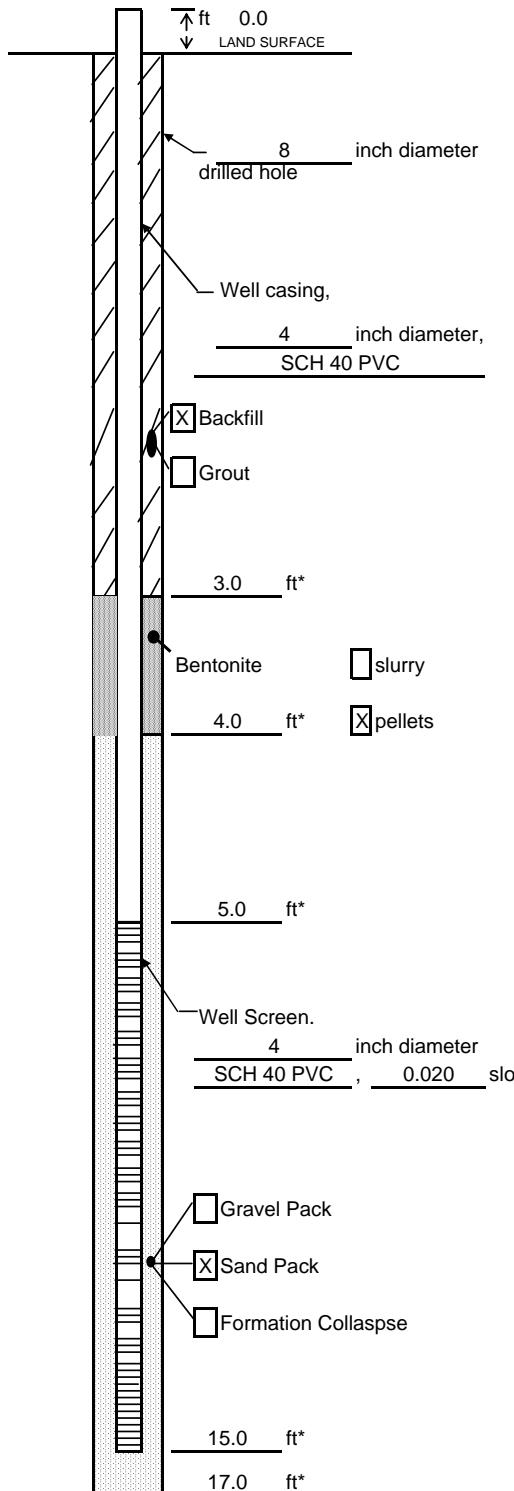
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-2

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

feet  Surveyed  
 Estimated

Installation Date(s) 30-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

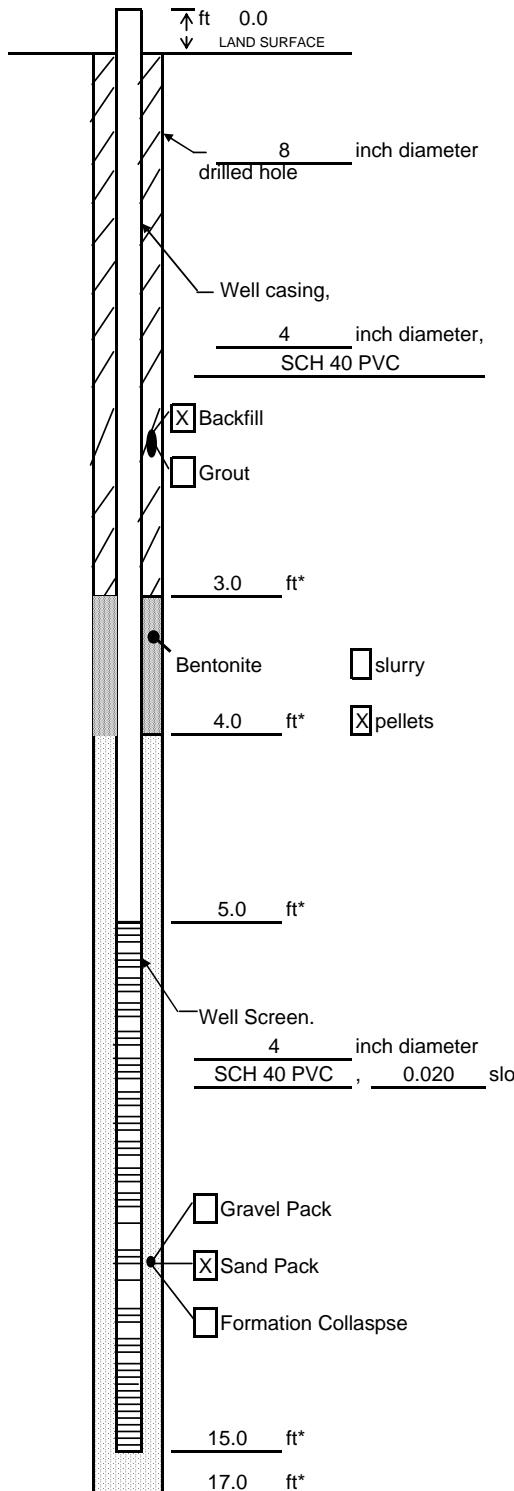
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-3

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

feet  Surveyed  
 Estimated

Installation Date(s) 30-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

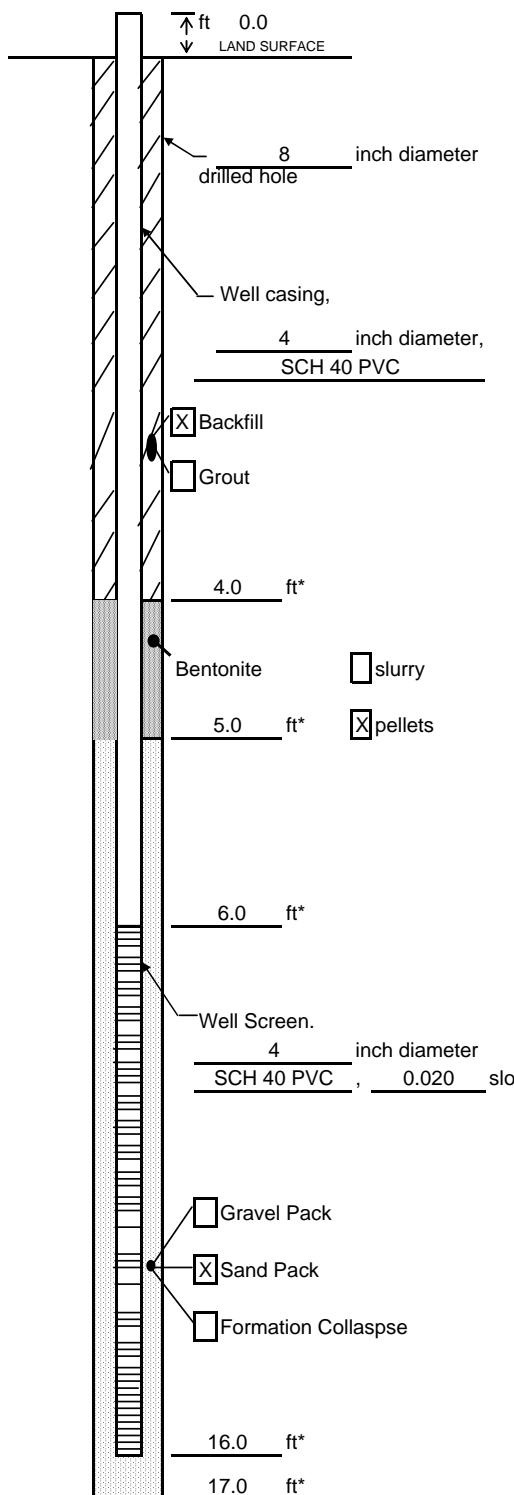
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-4

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

\_\_\_\_\_ feet  Surveyed  
 Estimated

Installation Date(s) 29-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm      Date \_\_\_\_\_

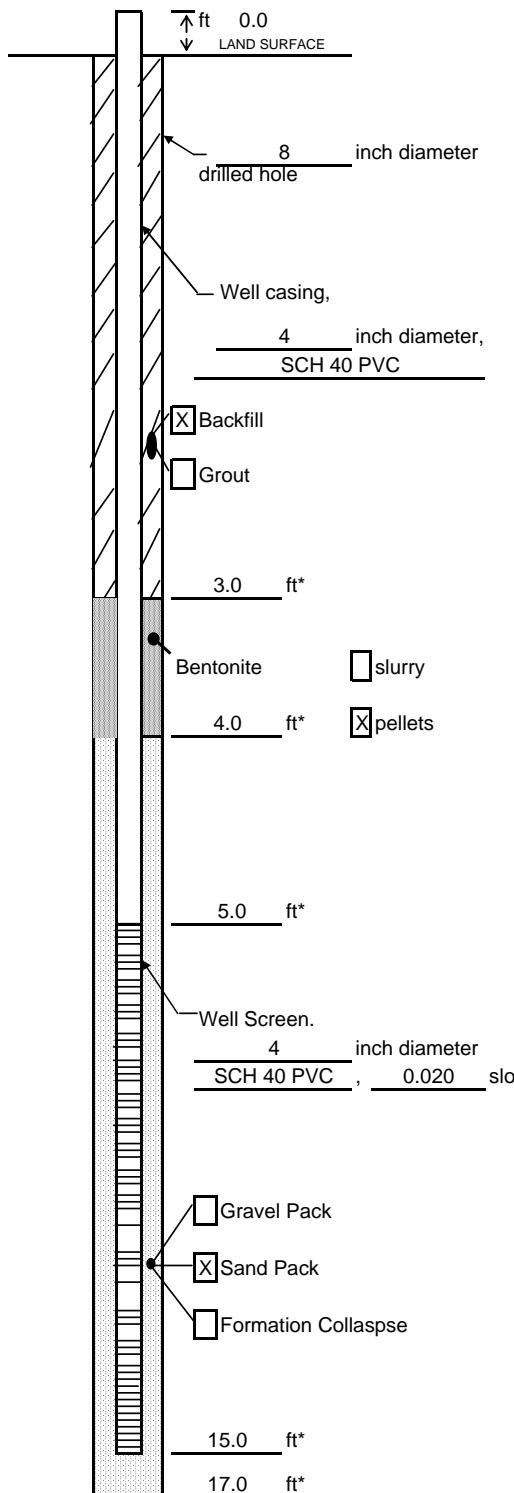
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-5

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

feet  Surveyed  
 Estimated

Installation Date(s) 29-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

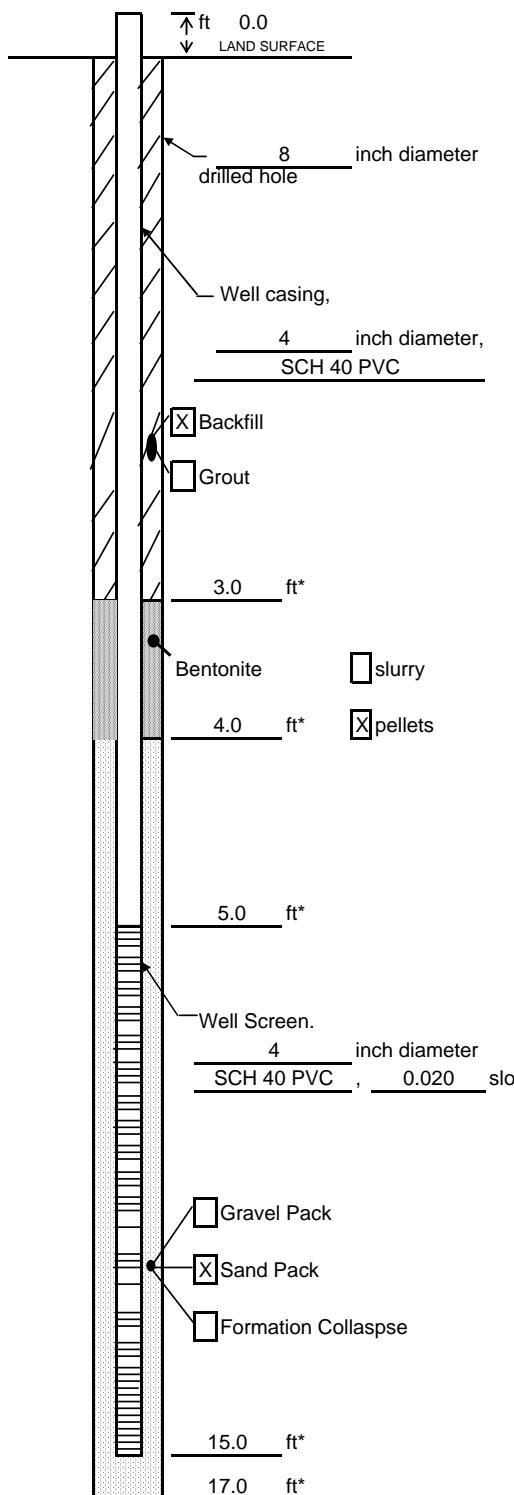
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-6

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

feet  Surveyed

Estimated

Installation Date(s) 29-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

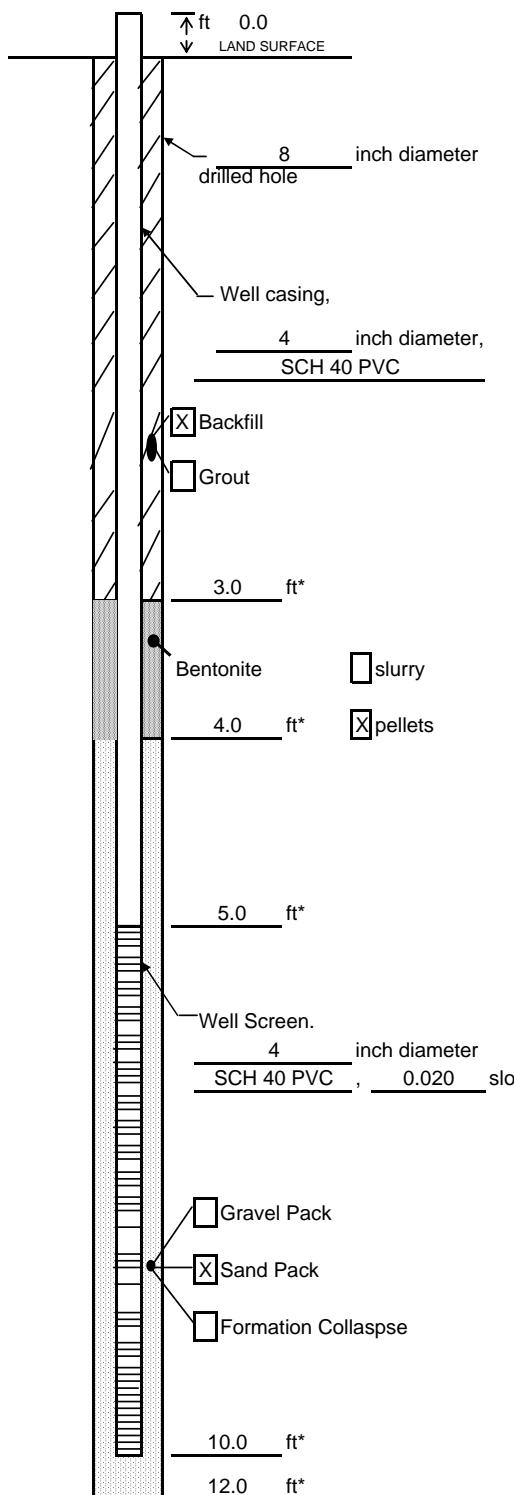
Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## Well Construction Log



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project National Grid - Malden T2 Well EW-7

Town/City Malden

County \_\_\_\_\_ State MA

Permit No. \_\_\_\_\_

Land-Surface Elevation and Datum:

\_\_\_\_\_ feet  Surveyed  
 Estimated

Installation Date(s) 29-Aug-07

Drilling Method Hollow Stem Auger

Drilling Contractor Geosearch, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development \_\_\_\_\_ gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Recovery well

Remarks

Prepared by Garth Hirsch

## **APPENDIX C**

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### **CONSTRUCTION FIELD NOTES AND PHOTODOCUMENTATION**

## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 1 of 17  
**IESI Proj. No.** NG/Malden

---

**12/1/07 Saturday**

Author: D. Jones (DJ)

0600 IESI and TFORD on-site. Cold, windy, ptly sunny 20-30 deg.

0630 - Tailgate Safety Meeting Topic: UST removal, explosive atmospheres

0650 - Dig pit for water form UST on NW corner of site

0710 – UST pumped dry

0730 – UST removed form ground-Pictures taken-Insulation being removed

0735 – Interior of tank 21% Oxygen, 0% LEL, 0.0 ppm on PID

0830 – T Ford running electrical conduit (2-inch t) to NAPL shed

0815 – T Ford filling near retaining wall on S side of site

0930 – T Ford continues with general cleanup of site, removed shrubs from landscape area and hauled off-site. Cut down MW so pile drivers won't destroy. Grading area of UST.

### Perimeter Monitoring

Time	VOCs (ppm)	DUST (mg/m <sup>3</sup> )
0700	0.0	0.0
0800	0.0	0.004
0900	0.0	0.001
1000	0.0	0.003
1025	0.0	0.0



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 2 of 17  
**IESI Proj. No.** NG/Malden

---

**11/21/07 Wednesday**

Author: M. Cunningham (MC)

0700 IESI and TFORD on-site. Fog/misty 40-45. Set up perimeter stations.

0800 Loading trucks with soil for ESMI and also trucks with asphalt. In addition, setting retaining wall blocks. Misty/foggy weather controlling any dust generated from soil loading. Hand held PID and Dust readings below action levels during loading.

0930 Deputy Fire Chief Jack Colangeli on-site to inspect UST. Chief Colangeli indicates a permit is required to remove UST and he would like to see Laboratory data obtained on water inside UST. Hand held PID and Dust readings below action levels.

1000 Perimeter dust stations operating but not logging, shut down and restart, stations now logging. Hand held PID and Dust readings below action levels.

1030 All intrusive work completed for the day. Continue to set retaining wall blocks. Break down equipment and review schedule with TFORD.

1230 IESI off-site.

Perimeter Monitoring

Time	VOCs (ppm)	DUST (mg/m3)
0730	0.0	0.003
0830	0.0	0.010
0930	0.0	0.024
1030	0.0	0.038



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 3 of 17  
**IESI Proj. No.** NG/Malden

---

**11/20/07 Tuesday**

Author: M. Cunningham (MC)

0700 - IES on-site (Mike Cunningham). Light mist/rain 40s. Perimeter stations calibrated and set up.

Tailgate Safety Meeting Topic: Working with heavy blocks/equipment watch your hands.

0730 – T Ford continues prep work on retaining wall (setting dense grade mat'l, compacting grading)  
No intrusive site work.

0930 - Concrete arrives for pour of shed pad. An additional 50' of electrical conduit is covered in concrete.

1000 - First truckload of retaining wall block arrives. Ford unloads and begins setting in place.

1100 - No intrusive work or dirty soil movement as of yet. MC conducts perimeter monitoring anyway and finds VOC's to be 0.0 ppm and dust twa 0.004 mg/m3.

1230 - Second truck of wall block arrives. T Ford unloads and sets.

1500 - T Ford completes setting of block and finishes day filling and compacting 50' of electrical trench.  
Perimeter station taken down and site secured.

1600 - All off-site



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 4 of 17  
**IESI Proj. No.** NG/Malden

---

**11/19/07 Monday**

Author: M. Cunningham (MC)

0700 - IES on-site (Mike Cunningham and Darren Rolls).

Tailgate Safety Meeting Topic: Working with Hand tools.

T Ford completes prep for shed pad concrete pour. Scheduled for tomorrow

0800 - IESI continues manifold construction and HDPE welding.

0800 - T Ford begins saw cut and excavation of Midas property line in preparation for block retaining wall. Old fence removed and temporary fence installed. PID and Dust readings below action levels.

0900: Garth Hirsch (IESI) on site for air monitoring while MC and DR complete manifold.

11:00 – 11:30 Tina Gross, H&A on-site. T Ford continues with retaining wall excavation/prep. PID and Dust readings below action levels.

14:30 T Ford completes excavation prep for block wall. Begin prep for continuation of excavation trench tomorrow.

1530 – Begin site clean up, prepare to secure site for night.

16:30 IESI and T Ford off-site

Time	VOCs ppm	Dust mg/mg3
08:30	0	0.018
09:30	0	0.040
10:30	0	0.090
11:30	0	0.003
12:30	0	0.022
13:30	0	0.014
14:30	0	0.008



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 5 of 17  
**IESI Proj. No.** NG/Malden

---

**11/16/07 Friday**

Author: D. Rolls

0700 - IESI on site. Heavy rain upon arrival, did not setup stations, (T Ford on-site). Trucks arriving for soil load out to ESMI.

Tailgate Safety Meeting Topic: Visibility on site in equipment/trucks, watch for visitors and workers.

0800 – IESI working on pipe manifold/rack.

0900 – IESI working on electrical conduits in pipe rack in area of shed

1000 – Trucks continue to load, rain continues

1100 – Rain begins to slow, stations will not be set today b/c of lack of intrusive site activities, handheld perimeter and work area monitoring will continue. Only machine work is backfilling trenches with clean material near shed area.

1200 –Continue work in shed area, backfilling/grading

1400 – G Hirsch IESI on site, collecting additional samples for soil disposal. T Ford backfilling shed area excavations and compacting soil

1445 - Future sub slab vent lines (4-inch and 3-inch) plumbed to rack. G Hirsch off-site, TFord and IESI begin securing site for weekend.

1530 – IESI off site

Perimeter Monitoring (not conducted during AM heavy rain)

Time	VOCs ppm	Dust mg/mg3
1130	0.0	0.029
1230	0.0	0.015
1330	0.0	0.019
1430	0.0	0.028

Note that due to weather and lack of intrusive activities, perimeter stations were not set up today.



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 6 of 17  
**IESI Proj. No.** NG/Malden

---

**11/15/07 Thursday**

Author: D. Rolls

0645 - IESI on site setup stations, (T Ford on-site) Set up perimeter stations calibrate equipment.

Tailgate Safety Meeting Topic: Safety issues related to cutting and gluing piping. Wear gloves, etc.

0730 – IESI working on bringing electrical conduit to shed area

1000 – 4-inch conduit for each HDPE cluster (4 -3/4-inch lines from each well) set in place for shed floor

1100 – Run piping for sub slab vent layers (3 and 4 inch) Continue piping work in shed area. PID and Dust readings below action levels. T Ford back filling and compacting trenches

1200 – IESI continues with piping work for piping manifold and prep for shed floor.

1330 – T Ford done with excavation work /site soil handling for the day. IESI needs supplies from Independent Pipe. Rain picked up to steady rain vs. the off and on showers since late morning. IESI breaks down perimeter monitoring

1400 – IESI off-site. T Ford remains to wait for delivery of backfill material and to secure site.

Perimeter Monitoring (not conducted during AM heavy rain)

Time	VOCs ppm	Dust mg/mg3
------	----------	-------------

0830	0.0	0.026
0930	0.0	0.019
1030	0.0	0.048
1130	0.0	0.032
1230	0.0	0.022
1330	0.0	0.052



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 7 of 17  
**IESI Proj. No.** NG/Malden

---

**11/14/07 Wednesday**

Author: D. Rolls

0650 - IESI on site setup stations, (T Ford on-site) Set up perimeter stations calibrate equipment.

Tailgate Safety Meeting Topic: Site housekeeping watch for re-bar and pick up what you can

0730 – Begin trenching for electrical service from planned location of new pole to building and shed

0800 – Trenching near EW-2 for bank service. PID and Dust readings below action levels

1000 – Continue Electrical trench. PID and Dust readings below action levels. IESI working piping and shed area

1045 – Continue piping work in shed area. PID and Dust readings below action levels

1200 – IESI continues with stur/support work for piping manifold.

1300 – Continue trenching for Electrical line and installing conduit. Jack E. On site

1400 –Work on layout of shed and piping entry to shed floor. M. Leone of NGrid on site

1500 – Backfilling water line trench w/ sand.

1530 – Concrete truck on site, T Ford using flowable fill over newly installed electrical lines

1600 – IESI and TFORD off-site

Perimeter Monitoring (not conducted during AM heavy rain)

Time	VOCs ppm	Dust mg/mg3
------	----------	-------------

0830	0.0	0.004
0930	0.0	0.012
1030	0.0	0.026
1130	0.0	0.019
1230	0.0	0.023
1330	0.0	0.059
1430	0.0	0.079
1530	0.0	0.021



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 8 of 17  
**IESI Proj. No.** NG/Malden

---

**11/13/07 Tuesday**

Author: D. Rolls

0700 - IESI on site setup stations rain, heavy at times, (T Ford on-site) Set up perimeter stations calibrate equipment.

Tailgate Safety Meeting Topic: Soil load out again today, watch for trucks

0730 – Begin loading trucks (3 trucks planned 2 trips each).

0815 – Garth Hirsch on site to sample water in UST near Commercial Street. IESI continues with piping and manifold/strut work

1100 – Trucks return for 2<sup>nd</sup> soil load.

1200 – Continue piping work in shed area

1230 – T Ford working on Water Line Trench. PID and Dust readings below action levels

1300 – Continue trenching for water line (rain ended).

1500 –Completed connection of Water line to main

1530 – Backfilling water line w/ sand, begin securing site.

1600 – IESI and TFORD off-site

Perimeter Monitoring (not conducted during AM heavy rain)

Time	VOCs ppm	Dust mg/mg3
------	----------	-------------

1130	0.0	0.026
1230	0.0	0.018
1330	0.0	0.020
1430	0.0	0.017
1530	0.0	0.025



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 9 of 17  
**IESI Proj. No.** NG/Malden

---

**11/12/07 Monday**

Author: D. Rolls

0650 - IESI on site setup stations, (T Ford on-site) Set up perimeter stations calibrate equipment.

Tailgate Safety Meeting Topic: UST excavation, caution with unknown contents

0730 – Trenching to EW-1 near Stromceptor. PID and Dust readings below action levels.  
Drain line connected to existing stub from street.

1100 – EW-1 Vault/trenching complete.

Uncover tank near Commercial Street. Appears to be 500 to 1000 gallon UST covered with insulation (foam). Removed top (bolted down). Appears to be filled with water. No odors or sheen, no PID readings. Cover replaced. Samples to be collected tomorrow to determine if off-site disposal is necessary.

1245 – IESI constructing strut rack for piping.

1400 – T Ford working shed area

1430 – Continue piping work in shed area.

1500 –Begin securing site.

1530 - IESI and T Ford off site

Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0730	0.0	0.017
0830	0.0	0.036
0930	0.0	0.057
1030	0.0	0.062
1130	0.0	0.026
1230	0.0	0.052



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 10 of 17  
**IESI Proj. No.** NG/Malden

---

**11/09/07 Friday**

Author: D. Rolls

0630 - IESI on site setup stations, (T Ford on-site) Trucks for ESMI shipment of soil on site.

Tailgate Safety Meeting Topic: Truck traffic, watch for backing trucks, busy day on site planned

0700 - Police detail on site, begin loading trucks

0715 - Monitor near trucks while loading (0.6 ppm/0.083 mg/m<sup>3</sup>).PID and Dust readings below action levels

0830 - Tina from H&A on site. Begin excavation of utility trench near Commercial street.

1000 - Continue to load trucks. 3 trucks making 2 runs each today

1100 - Cut and prep lines form EW-1 vault . Vault will be installed Monday.

1115 - Drain line excavation toward street continues. PID and Dust readings below action levels

1200 – First 20' piece of drain line installed. From DMH towards Street. PID and Dust readings below action levels

1330 – Backfilling over 1-inch conduit between EW-3 and EW-4. Compacting soil with vibratory plate compactor.

1415 – Backfilling form EW-4 to EW-7

1500 – Concrete truck onsite. Flowable fill poured over drain line installed around EW-1. Begin securing site.

1530 - IESI and T Ford off site

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0700	0.3	0.043
0800	0.2	0.022
0900	0.1	0.034
1000	0.1	0.037
1100	0.3	0.043
1200	0	0.042

## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 11 of 17  
**IESI Proj. No.** NG/Malden

---

**11/08/07 Thursday**

Author: D. Rolls

0730 IESI on site setup stations, (T Ford on-site at 0700).

Tailgate Safety Meeting Topic: Slip trips and falls, site housekeeping (site looks good, just a reminder)

0800 Begin installing piping from trench open from EW-7 to EW-3

0830 Excavating near EW-3 – PID and Dust readings below action levels

1000 Continue removing soil from EW-3 to shed area. Soil headspace 0.9 ppm PID and Dust readings below action levels

1030 Excavating around EW-1. Very little noticeable odor in this area. PID and Dust below action Levels.

1200 Coiled HDPE homeruns rolled to shed area from EW-3 through EW-7.

1300 Begin backfilling trenches from EW-3 back to EW-7. PID and Dust readings below action levels

1330 Installing electrical conduit to EW-3 through EW-7

1400 Mount strut in EW-2 vault, begin running HDPE  
(Back hoe parked near downwind PID)

1500 Completed electrical lines and 3-inch spare lines up to EW-2. Begin backfill and compaction

1530 Begin securing site.

1600 IESI and T Ford off site

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0830	0	0.009
0930	0.1	0.063
1030	0	0.010
1130	0	0.012
1230	0	0.014
1330	0.1	0.034
1430	0	0.022
1530	0	0.015



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 12 of 17  
**IESI Proj. No.** NG/Malden

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**11/07/07 Wednesday**

Author: D. Rolls

0700 IESI on site setup stations, T Ford on-site.

Tailgate Safety Meeting Topic: Excavation safety, shoring and sloping rules must be followed

0745 T Ford breaking up concrete rubble pile on site. PID and Dust readings below action levels

0800 T Ford Surveying property

0900 Begin excavation of trenches around EW-4. PID and Dust readings below action levels

0930 EW.-4 vault installed. Running lines and strut in EW-7

1015 Monitored excavation area (trenches for NAPL system) PID and Dust below action Levels. Used Draeger tubes for Cyanide and Benzene – both non-detect.

1125 Trenching to EW-3. Slight bluish discoloration noted in soil being excavated. Soil headspace is 10 ppm. PID and Dust readings below action levels

1150 Ended trench by EW-3, sand vein noted at 2 feet below grade, very bony

1200 Running HDPE lines form EW-6

1345 Begin installing vault at EW-3. Soil headspace for soil within trench was 0 ppm. Coal tar odor noted.

1400 Soil excavation and movement on site is done for day. Continue with setting HDPE pipe in trenches and securing in vaults.

1500 Perimeter stations shut down, Begin securing site

1530 – T Ford and IESI Offsite after stockpiles and site secured

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
------	----------	-------------

0830	0	0.007
0930	0	0.010
1030	0	0.006
1130	0	0.005
1230	0	0.006
1330	0	0.013



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 13 of 17  
**IESI Proj. No.** NG/Malden

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**11/06/07 Tuesday**

Author: D. Rolls

0700 IESI on site setup stations, calibrate meters T. Ford on-site.

Tailgate Safety Meeting Topic: Slips and trips with rainy weather

0745 T Ford hammering concrete on EW-5, Light rain falling

0900 Heavy Rain, stop perimeter monitoring (moisture affects readings)

1000 Continue with EW-5 concrete hammering and excavation

1045 EW-5 Manway installation begins

1120 EW-5 vault backfilled

1130 Begin moving pavement and soil for trenches to EW-5,6,7 vaults

1200 Installing struts for vault piping mounting in EW-7

1300 T Ford stops work for day, Heavy rain continues

1400 IESI stops work for day, heavy rain making site work difficult.

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
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0830	0.0	0.043
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## DAILY FIELD LOG

Project : Malden MGP – Construction  
Client : National Grid  
Contractor: T. Ford

Activity: Demo/system install  
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IESI Proj. No. NG/Malden

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**11/05/07 Monday**

Author: D. Rolls

0700 IESI on site setup stations T. Ford on-site.

Tailgate Safety Meeting Topic: Leave Excavation safety, shoring and sloping rules must be followed

0730 Trench boxes for Stormceptor install on site

0800 Excavate for Stormceptor

0830 Catch basin removed, strong odor near excavations, headspace of soil 450+ ppm

0930 Stormceptor installed, soil displaced stockpiled in former building footprint.

0950 Checked Station near pile, reading of 4.2 (instantaneous) on PID, instructed T Ford to cover pile, PID readings went down.

1030 Check downwind station, OK, slight odor from pile, PID readings less than Action level. Perimeter checks all below action levels. Continue setting Stormceptor. Flowable fill used around Stormceptor

1100 Hammering concrete at EW-5

1245 – Excavate for DMH, soil has strong odor, PID headspace 500+ in soil. PID and Dust below action levels.

1330 Strong odor on site, cover piles to reduce, seems to dissipate quickly. Perimeter of site OK

1445 – DMH set, start excavating for D-lines

1500 Continue w/ D-line install, PID and Dust readings below action levels

1600 – Offsite after stockpiles and site secured

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0830	1.2	0.053
0930	0.5	0.033
1030	0.6	0.034
1130	0.5	0.044
1230	0.8	0.052
1330	1.0	0.030
1430	1.0	0.018



## DAILY FIELD LOG

Project : Malden MGP – Construction  
Client : National Grid  
Contractor: T. Ford

Activity: Demo/system install  
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**11/02/07 Friday**

Author: G. Hirsch/M Lotti

0730 IESI on site. T. Ford already on-site. Prepare site and equipment to install well head vaults.

Tailgate Safety Meeting Topic: Leave site “head first” in vehicles, do not back on to Commercial Street.

0815 Start setting vault on EW-7

0915 Tina Gross of H&A on Site

0945 Tina Gross off site

1100 Trenching from EW-7 to EW-6. Large concrete chunks removed. Breathing zone PID and Dust is 0.0 ppm. Vault set on EW-6

1300 M. Lotti on Site

1330 G Hirsch off-site. Excavate for EW-5 Vault. Large concrete foundations in way. EW-05 was somehow drilled through 2-3 feet of reinforced concrete and set! Attempts made to break concrete w/ excavator bucket teeth, sporadic concrete dust generated, dissipated quickly, not prolonged.

1400 Continue on EW-5 excavation concrete very hard, will need Hammer. D Rolls on site

1415 Stop on EW-5 until hammer brought to site, move to EW-6 back fill, and finish setting vault.

1430-1530 Prep site for rain forecast for weekend, secure and stockpiles, cover vaults, etc.

1545 M Lotti and D Rolls offsite

Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0830	0.0	0.041
0930	0.0	0.022
1030	0.0	0.000
1130	0.0	0.008
1230	0.0	0.010
1330	0.0	0.006
1430	0.0	0.076
1530	0.0	0.020



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
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**IESI Proj. No.** NG/Malden

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**11/01/07 Thursday**

Author: G. Hirsch

0730 IESI on site. T. Ford already on-site. Prepare site and equipment to demolish final foundation wall.

Tailgate Safety Meeting Topic: Communication around excavation. Let excavator operator know where you are at all times. Stressed importance of wearing reflective vest.

0900 Excavated soil from base of foundation wall contain soil headspace of 10 ppm. Breathing zone is 0.0 ppm. Clean fill applied after excavation filled in. Dust below action levels.

0900 Observed dust near excavation. T. Ford applies water to excavation equipment, concrete, and soil.

1000 Removing rebar from concrete. Foundation walls all excavated.

1100 Begin prepping vaults for installation .

1205 Check on upwind dusttraker. Unit indicated battery drain and memory lost. Loose connection to battery detected. Reprogram tracker and make connection more secure. Starts operating properly. Perimeter and excavation monitoring indicate dust below action levels.

1335 Start excavating area around EW-7 for vault. Square concrete obstruction observed in half of excavation at 3.5 feet below grade. Attached to another concrete section by rebar at base. Pull concrete out of excavation. Also wood observed and excavated out excavation at 4.7 feet below grade. PID readings 0.0 ppm and dust below action levels. No odors or staining observed in material. Put fabric and dense material in excavation.

1530 Secure excavation. T. Ford and IESI off-site.

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0830	0.0	0.026
0930	0.0	0.041
1030	0.0	0.014
1130	0.0	0.028
1230	0.0	0.053
1330	0.0	0.018
1430	0.0	0.076
1530	0.0	0.064



## DAILY FIELD LOG

**Project :** Malden MGP – Construction  
**Client :** National Grid  
**Contractor:** T. Ford

**Activity:** Demo/system install  
**Page:** 17 of 17  
**IESI Proj. No.** NG/Malden

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**10/31/07 Wednesday**

Author: G. Hirsch

0730 IESI on site. T. Ford already on-site. Go over scope of project and Health and Safety.

Reviewed Cashin's Health and Safety Plan. Everyone introduced themselves to facilitate good communication. Went over VOC and Dust action levels and what corrective action was required if exceeded. Explained purpose of air monitoring. Reviewed scope and schedule.

Tailgate Safety Meeting Topic: Reviewed requirement of safety glasses, hard hats, reflective vests, and steel toe boots.

Use caution with vehicles and walking site since it is a small site with little space.

0830 Begin to demolish concrete foundation walls.

0900 Observed dust near excavation. T. Ford applies water to excavation equipment, concrete, and soil.

1000 Foundation walls are clean and no obvious contamination is observed. No odor from excavation. No PID readings around excavation and dust readings below action levels.

1500 Several loads of fill delivered during the day. Also several loads of concrete removed from site. Approximately ¾ of foundation walls were removed today. No contamination observed on the foundation walls. Excavated areas were filled in.

1550 IESI and T. Ford off-site.

### Visitors

0700 – 1030 Jack Enos of T. Ford

1030 – 1230 Mike Lotti IESI

1330 – 1430 Tina Gross, H&A

### Perimeter Monitoring

Time	VOCs ppm	Dust mg/mg3
0900	0.0	0.061
1000	0.0	0.059
1100	0.0	0.112
1200	0.0	0.017
1300	0.0	0.125
1400	0.0	0.034
1500	0.0	0.134





12/1/07 – UST Removal (yellow material is foam insulation on tank)



12/1/07 – Removed UST and foam insulation removal



12/1/07 – Excavation following UST Removal



12/1/07 – Removed UST in background and graded UST area in foreground



11/12/07 – Vault on top of tank



11/12/07 Uncovering tank (yellow-white material is foam insulation on tank)



11/12/07 Top of tank. There are 10 copper insulated lines that came from the top of the tank and headed towards the building.



11/12/07 Tank uncovered- Roughly 750 to 1000 gallons with insulation



11/12/07 Another view of top of tank, fittings for 10 pipes can be seen on either side of manway.



11/13/07 View of pipes headed to shed area



11/13/07 – Water line Excavation



11/15/07 Water line trench backfilled



11/15/07 piping manifold/support nearly complete



11/15/07 Electrical conduit and Sub Slab vent piping in home run to shed



11/5/07 – Installing Stormceptor



11/5/07 Breaking up concrete around EW-5



11/6/07 Drain line from Stormceptor to DMH



11/6/07 Excavation near EW-6



11/7/07 Excavating DNAPL system trench



11/7/07 Setting EW-3 Vault



11/8/07 HDPE runs in trench to shed. EW-3 in foreground.



11/8/07 EW-7 spare conduit and HDPE lines



11/8/07 Southwest corner of site (future shed location)



11/8/07 Backfilling trench (note sand bedding for HDPE, then spare conduit.)



11/8/07 EW-5, EW-6, EW-7 backfilled.



11/8/07 Stockpiled soil



11/8/07 EW-5, EW-6, EW-7 backfilled, setting electrical conduit to each vault.

## **APPENDIX D**

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**SOIL ANALYTICAL DATA – DISPOSAL PRECHARACTERIZATION SAMPLES AND  
WATER ANALYTICAL DATA – UST WATER**



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 27, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: LP  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/16/07 13:30  
11/19/07 11:20

SDG I.D.: GAJ75498

Phoenix I.D.: AJ75498

## Laboratory Data

Client ID: NG MALDEN T5 S-200

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.446	0.446	mg/Kg	11/20/07		EK	SW6010
Arsenic	5.69	0.891	mg/Kg	11/20/07		EK	SW6010
Barium	156	0.446	mg/Kg	11/20/07		EK	SW6010
Cadmium	< 0.446	0.446	mg/Kg	11/20/07		EK	SW6010
Chromium	12.1	0.446	mg/Kg	11/20/07		EK	SW6010
Mercury	3.42	0.63	mg/kg	11/20/07		RS	SW-7471
Lead	4610	44.6	mg/Kg	11/20/07		EK	SW6010
Selenium	< 2.23	2.23	mg/Kg	11/20/07		EK	SW6010
TCLP Lead	0.049	0.015	mg/L	11/21/07		TH	SW1311/6010
Percent Solid	79		%	11/19/07		XU/TJB	E160.3
Flash Point	> 200	200	degree F	11/19/07		TJB	SW846 - 1010
Ignitability	Passed	140	deg F	11/19/07		TJB	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	11/20/07		R/G	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/19/07		R/G	SW846-7.3
Reactivity	Negative			11/19/07		R/G	SW 846-7.3
Mercury Digestion	Completed			11/20/07		D	SW7471
Soil Extraction for PCB	Completed			11/19/07		P/E	SW3545
Soil Ext. for Semi-Vol	Completed			11/19/07		P/E	SW3545
TCLP Extraction for Metals	Completed			11/20/07		D	EPA 1311
Total Metals Digest	Completed			11/19/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/21/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/19/07		UP/E	3545/3550
Field Extraction	Completed			11/16/07		IES	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	500	ug/Kg	11/20/07	MH	SW 8082
PCB-1221	ND	500	ug/Kg	11/20/07	MH	SW 8082
PCB-1232	ND	500	ug/Kg	11/20/07	MH	SW 8082

Client ID: NG MALDEN T5 S-200

Phoenix I.D.: AJ75498

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1242	ND	500	ug/Kg	11/20/07		MH	SW 8082
PCB-1248	ND	500	ug/Kg	11/20/07		MH	SW 8082
PCB-1254	ND	500	ug/Kg	11/20/07		MH	SW 8082
PCB-1260	ND	500	ug/Kg	11/20/07		MH	SW 8082
PCB-1262	ND	500	ug/Kg	11/20/07		MH	SW 8082
PCB-1268	ND	500	ug/Kg	11/20/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	76		%	11/20/07		MH	SW 8082
% TCMX (Surrogate Rec)	79		%	11/20/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil #6	**	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Unidentified	4200	50	mg/kg	11/20/07	JRB	8100Mod	1
<u>QA/QC Surrogates</u>							
% n-Pentacosane	Interference		%	11/20/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,1-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,4-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2,2-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Hexanone	ND	830	ug/Kg	11/19/07	R/J	SW8260
2-Isopropyltoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Methyl-2-pentanone	ND	830	ug/Kg	11/19/07	R/J	SW8260

Client ID: NG MALDEN T5 S-200

Phoenix I.D.: AJ75498

Parameter	Result	RL	Units	Date	Time	By	Reference
Acetone	ND	3300	ug/Kg	11/19/07		R/J	SW8260
Acrylonitrile	ND	330	ug/Kg	11/19/07		R/J	SW8260
Benzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromoform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromodichloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon Disulfide	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon tetrachloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chlorobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromoethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dichlorodifluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Ethylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Hexachlorobutadiene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Isopropylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
m&p-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methyl Ethyl Ketone	ND	2000	ug/Kg	11/19/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methylene chloride	ND	330	ug/Kg	11/19/07		R/J	SW8260
n-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
n-Propylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Naphthalene	ND	170	ug/Kg	11/19/07		R/J	SW8260
o-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
p-Isopropyltoluene	ND	170	ug/Kg	11/19/07		R/J	SW8260
sec-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Styrene	ND	170	ug/Kg	11/19/07		R/J	SW8260
tert-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrachloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	330	ug/Kg	11/19/07		R/J	SW8260
Toluene	ND	500	ug/Kg	11/19/07		R/J	SW8260
Total Xylenes	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	330	ug/Kg	11/19/07		R/J	SW8260
Trichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorofluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorotrifluoroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Vinyl chloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
<u>QA/QC Surrogates</u>							

Client ID: NG MALDEN T5 S-200

Phoenix I.D.: AJ75498

Parameter	Result	RL	Units	Date	Time	By	Reference
% 1,2-dichlorobenzene-d4	97		%	11/19/07		R/J	SW8260
% Bromofluorobenzene	95		%	11/19/07		R/J	SW8260
% Dibromofluoromethane	101		%	11/19/07		R/J	SW8260
% Toluene-d8	96		%	11/19/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
1,2-Dichlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
1,3-Dichlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
1,4-Dichlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
2,4-Dichlorophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
2,4-Dimethylphenol	2000	830	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrophenol	ND	1300	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrotoluene	ND	830	ug/Kg	11/20/07		HM	SW 8270
2,6-Dinitrotoluene	ND	830	ug/Kg	11/20/07		HM	SW 8270
2-Chloronaphthalene	ND	830	ug/Kg	11/20/07		HM	SW 8270
2-Chlorophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
2-Methylnaphthalene	19000	4100	ug/Kg	11/20/07		HM	SW 8270
2-Methylphenol (o-cresol)	1700	830	ug/Kg	11/20/07		HM	SW 8270
2-Nitroaniline	ND	1300	ug/Kg	11/20/07		HM	SW 8270
2-Nitrophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	2100	830	ug/Kg	11/20/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	1000	ug/Kg	11/20/07		HM	SW 8270
3-Nitroaniline	ND	1300	ug/Kg	11/20/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	2400	ug/Kg	11/20/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	830	ug/Kg	11/20/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	1000	ug/Kg	11/20/07		HM	SW 8270
4-Chloroaniline	ND	1000	ug/Kg	11/20/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	830	ug/Kg	11/20/07		HM	SW 8270
4-Nitroaniline	ND	1300	ug/Kg	11/20/07		HM	SW 8270
4-Nitrophenol	ND	2400	ug/Kg	11/20/07		HM	SW 8270
Acenaphthene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Acenaphthylene	2500	830	ug/Kg	11/20/07		HM	SW 8270
Acetophenone	1600	830	ug/Kg	11/20/07		HM	SW 8270
Aniline	ND	2400	ug/Kg	11/20/07		HM	SW 8270
Anthracene	2200	830	ug/Kg	11/20/07		HM	SW 8270
Azobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Benz(a)anthracene	6600	830	ug/Kg	11/20/07		HM	SW 8270
Benzidine	ND	830	ug/Kg	11/20/07		HM	SW 8270
Benzo(a)pyrene	6500	830	ug/Kg	11/20/07		HM	SW 8270
Benzo(b)fluoranthene	11000	830	ug/Kg	11/20/07		HM	SW 8270
Benzo(ghi)perylene	2900	830	ug/Kg	11/20/07		HM	SW 8270
Benzo(k)fluoranthene	3700	830	ug/Kg	11/20/07		HM	SW 8270
Benzoic acid	ND	2400	ug/Kg	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-200

Phoenix I.D.: AJ75498

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzyl butyl phthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	830	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	830	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	830	ug/Kg	11/20/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Carbazole	ND	2400	ug/Kg	11/20/07		HM	SW 8270
Chrysene	8100	830	ug/Kg	11/20/07		HM	SW 8270
Di-n-butylphthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Di-n-octylphthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Dibenz(a,h)anthracene	1000	830	ug/Kg	11/20/07		HM	SW 8270
Dibenzofuran	4100	830	ug/Kg	11/20/07		HM	SW 8270
Diethyl phthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Dimethylphthalate	ND	830	ug/Kg	11/20/07		HM	SW 8270
Fluoranthene	15000	4100	ug/Kg	11/20/07		HM	SW 8270
Fluorene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobutadiene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Hexachloroethane	ND	830	ug/Kg	11/20/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	3100	830	ug/Kg	11/20/07		HM	SW 8270
Isophorone	ND	830	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	830	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodimethylamine	ND	830	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	830	ug/Kg	11/20/07		HM	SW 8270
Naphthalene	37000	4100	ug/Kg	11/20/07		HM	SW 8270
Nitrobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Pentachloronitrobenzene	ND	830	ug/Kg	11/20/07		HM	SW 8270
Pentachlorophenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
Phenanthrene	14000	4100	ug/Kg	11/20/07		HM	SW 8270
Phenol	ND	830	ug/Kg	11/20/07		HM	SW 8270
Pyrene	17000	4100	ug/Kg	11/20/07		HM	SW 8270
Pyridine	ND	830	ug/Kg	11/20/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	69		%	11/20/07		HM	SW 8270
% 2-Fluorobiphenyl	56		%	11/20/07		HM	SW 8270
% 2-Fluorophenol	63		%	11/20/07		HM	SW 8270
% Nitrobenzene-d5	64		%	11/20/07		HM	SW 8270
% Phenol-d5	64		%	11/20/07		HM	SW 8270
% Terphenyl-d14	62		%	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-200

Phoenix I.D.: AJ75498

Parameter	Result	RL	Units	Date	Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

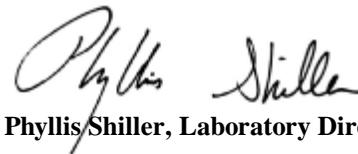
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles fuel oil #6.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 27, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 27, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: LP  
Received by: LP  
Analyzed by: see "By" below

Date 11/16/07 Time 13:35

Date 11/19/07 Time 11:20

SDG I.D.: GAJ75498

Phoenix I.D.: AJ75499

## Laboratory Data

Client ID: NG MALDEN T5 S-201

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.359	0.359	mg/Kg	11/20/07		EK	SW6010
Arsenic	5.7	0.717	mg/Kg	11/20/07		EK	SW6010
Barium	52.7	0.359	mg/Kg	11/20/07		EK	SW6010
Cadmium	< 0.359	0.359	mg/Kg	11/20/07		EK	SW6010
Chromium	13.1	0.359	mg/Kg	11/20/07		EK	SW6010
Mercury	0.86	0.60	mg/kg	11/20/07		RS	SW-7471
Lead	220	3.59	mg/Kg	11/20/07		EK	SW6010
Selenium	< 1.79	1.79	mg/Kg	11/20/07		EK	SW6010
TCLP Lead	1.27	0.015	mg/L	11/21/07		TH	SW1311/6010
Percent Solid	84		%	11/19/07		XU/TJB	E160.3
Flash Point	> 200	200	degree F	11/19/07		TJB	SW846 - 1010
Ignitability	Passed	140	deg F	11/19/07		TJB	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	11/20/07		R/G	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/19/07		R/G	SW846-7.3
Reactivity	Negative			11/19/07		R/G	SW 846-7.3
Mercury Digestion	Completed			11/20/07		D	SW7471
Soil Extraction for PCB	Completed			11/19/07		P/E	SW3545
Soil Ext. for Semi- Vol	Completed			11/19/07		P/E	SW3545
TCLP Extraction for Metals	Completed			11/20/07		D	EPA 1311
Total Metals Digest	Completed			11/19/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/21/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/19/07		UP/E	3545/3550
Field Extraction	Completed			11/16/07		IES	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	470	ug/Kg	11/20/07	MH	SW 8082
PCB-1221	ND	470	ug/Kg	11/20/07	MH	SW 8082
PCB-1232	ND	470	ug/Kg	11/20/07	MH	SW 8082

Client ID: NG MALDEN T5 S-201

Phoenix I.D.: AJ75499

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1242	ND	470	ug/Kg	11/20/07		MH	SW 8082
PCB-1248	ND	470	ug/Kg	11/20/07		MH	SW 8082
PCB-1254	ND	470	ug/Kg	11/20/07		MH	SW 8082
PCB-1260	ND	470	ug/Kg	11/20/07		MH	SW 8082
PCB-1262	ND	470	ug/Kg	11/20/07		MH	SW 8082
PCB-1268	ND	470	ug/Kg	11/20/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	86		%	11/20/07		MH	SW 8082
% TCMX (Surrogate Rec)	93		%	11/20/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil #6	**	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Unidentified	690	50	mg/kg	11/20/07	JRB	8100Mod	1
<u>QA/QC Surrogates</u>							
% n-Pentacosane	Interference		%	11/20/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,1-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,4-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2,2-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Hexanone	ND	830	ug/Kg	11/19/07	R/J	SW8260
2-Isopropyltoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Methyl-2-pentanone	ND	830	ug/Kg	11/19/07	R/J	SW8260

Client ID: NG MALDEN T5 S-201

Phoenix I.D.: AJ75499

Parameter	Result	RL	Units	Date	Time	By	Reference
Acetone	ND	3300	ug/Kg	11/19/07		R/J	SW8260
Acrylonitrile	ND	330	ug/Kg	11/19/07		R/J	SW8260
Benzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromoform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromodichloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon Disulfide	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon tetrachloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chlorobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromoethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dichlorodifluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Ethylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Hexachlorobutadiene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Isopropylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
m&p-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methyl Ethyl Ketone	ND	2000	ug/Kg	11/19/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methylene chloride	ND	330	ug/Kg	11/19/07		R/J	SW8260
n-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
n-Propylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Naphthalene	ND	170	ug/Kg	11/19/07		R/J	SW8260
o-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
p-Isopropyltoluene	ND	170	ug/Kg	11/19/07		R/J	SW8260
sec-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Styrene	ND	170	ug/Kg	11/19/07		R/J	SW8260
tert-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrachloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	330	ug/Kg	11/19/07		R/J	SW8260
Toluene	ND	500	ug/Kg	11/19/07		R/J	SW8260
Total Xylenes	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	330	ug/Kg	11/19/07		R/J	SW8260
Trichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorofluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorotrifluoroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Vinyl chloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
<u>QA/QC Surrogates</u>							

Client ID: NG MALDEN T5 S-201

Phoenix I.D.: AJ75499

Parameter	Result	RL	Units	Date	Time	By	Reference
% 1,2-dichlorobenzene-d4	95		%	11/19/07		R/J	SW8260
% Bromofluorobenzene	96		%	11/19/07		R/J	SW8260
% Dibromofluoromethane	91		%	11/19/07		R/J	SW8260
% Toluene-d8	94		%	11/19/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
1,2-Dichlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
1,3-Dichlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
1,4-Dichlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,4-Dichlorophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,4-Dimethylphenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrotoluene	ND	770	ug/Kg	11/20/07		HM	SW 8270
2,6-Dinitrotoluene	ND	770	ug/Kg	11/20/07		HM	SW 8270
2-Chloronaphthalene	ND	770	ug/Kg	11/20/07		HM	SW 8270
2-Chlorophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
2-Methylnaphthalene	ND	770	ug/Kg	11/20/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	770	ug/Kg	11/20/07		HM	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2-Nitrophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	770	ug/Kg	11/20/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	930	ug/Kg	11/20/07		HM	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	770	ug/Kg	11/20/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	930	ug/Kg	11/20/07		HM	SW 8270
4-Chloroaniline	ND	930	ug/Kg	11/20/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	770	ug/Kg	11/20/07		HM	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Acenaphthene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Acenaphthylene	1600	770	ug/Kg	11/20/07		HM	SW 8270
Acetophenone	ND	770	ug/Kg	11/20/07		HM	SW 8270
Aniline	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Anthracene	1400	770	ug/Kg	11/20/07		HM	SW 8270
Azobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Benz(a)anthracene	8000	770	ug/Kg	11/20/07		HM	SW 8270
Benzidine	ND	770	ug/Kg	11/20/07		HM	SW 8270
Benzo(a)pyrene	6600	770	ug/Kg	11/20/07		HM	SW 8270
Benzo(b)fluoranthene	9800	770	ug/Kg	11/20/07		HM	SW 8270
Benzo(ghi)perylene	2300	770	ug/Kg	11/20/07		HM	SW 8270
Benzo(k)fluoranthene	2900	770	ug/Kg	11/20/07		HM	SW 8270
Benzoic acid	ND	2200	ug/Kg	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-201

Phoenix I.D.: AJ75499

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzyl butyl phthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	770	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	770	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	770	ug/Kg	11/20/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Carbazole	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Chrysene	8600	770	ug/Kg	11/20/07		HM	SW 8270
Di-n-butylphthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Di-n-octylphthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Dibenz(a,h)anthracene	780	770	ug/Kg	11/20/07		HM	SW 8270
Dibenzofuran	ND	770	ug/Kg	11/20/07		HM	SW 8270
Diethyl phthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Dimethylphthalate	ND	770	ug/Kg	11/20/07		HM	SW 8270
Fluoranthene	13000	3800	ug/Kg	11/20/07		HM	SW 8270
Fluorene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobutadiene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Hexachloroethane	ND	770	ug/Kg	11/20/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	2300	770	ug/Kg	11/20/07		HM	SW 8270
Isophorone	ND	770	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	770	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodimethylamine	ND	770	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	770	ug/Kg	11/20/07		HM	SW 8270
Naphthalene	1100	770	ug/Kg	11/20/07		HM	SW 8270
Nitrobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Pentachloronitrobenzene	ND	770	ug/Kg	11/20/07		HM	SW 8270
Pentachlorophenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
Phenanthrene	6600	770	ug/Kg	11/20/07		HM	SW 8270
Phenol	ND	770	ug/Kg	11/20/07		HM	SW 8270
Pyrene	16000	3800	ug/Kg	11/20/07		HM	SW 8270
Pyridine	ND	770	ug/Kg	11/20/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	84		%	11/20/07		HM	SW 8270
% 2-Fluorobiphenyl	71		%	11/20/07		HM	SW 8270
% 2-Fluorophenol	77		%	11/20/07		HM	SW 8270
% Nitrobenzene-d5	80		%	11/20/07		HM	SW 8270
% Phenol-d5	80		%	11/20/07		HM	SW 8270
% Terphenyl-d14	83		%	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-201

Phoenix I.D.: AJ75499

Parameter	Result	RL	Units	Date	Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

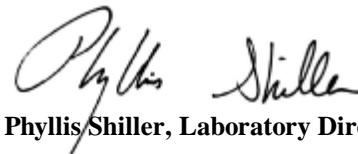
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles motor oil.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 27, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 27, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: LP  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/16/07

13:40

11/19/07

11:20

SDG I.D.: GAJ75498

Phoenix I.D.: AJ75500

## Laboratory Data

Client ID: NG MALDEN T5 S-202

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.373	0.373	mg/Kg	11/20/07		EK	SW6010
Arsenic	8.25	0.746	mg/Kg	11/20/07		EK	SW6010
Barium	94.6	0.373	mg/Kg	11/20/07		EK	SW6010
Cadmium	0.484	0.373	mg/Kg	11/20/07		EK	SW6010
Chromium	12.8	0.373	mg/Kg	11/20/07		EK	SW6010
Mercury	1.12	0.57	mg/kg	11/20/07		RS	SW-7471
Lead	344	3.73	mg/Kg	11/20/07		EK	SW6010
Selenium	< 1.87	1.87	mg/Kg	11/20/07		EK	SW6010
TCLP Lead	0.698	0.015	mg/L	11/21/07		TH	SW1311/6010
Percent Solid	87		%	11/19/07		XU/TJB	E160.3
Flash Point	> 200	200	degree F	11/19/07		TJB	SW846 - 1010
Ignitability	Passed	140	deg F	11/19/07		TJB	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	11/20/07		R/G	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/19/07		R/G	SW846-7.3
Reactivity	Negative			11/19/07		R/G	SW 846-7.3
Mercury Digestion	Completed			11/20/07		D	SW7471
Soil Extraction for PCB	Completed			11/19/07		P/E	SW3545
Soil Ext. for Semi-Vol	Completed			11/19/07		P/E	SW3545
TCLP Extraction for Metals	Completed			11/20/07		D	EPA 1311
Total Metals Digest	Completed			11/19/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/21/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/19/07		UP/E	3545/3550
Field Extraction	Completed			11/16/07		IES	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	460	ug/Kg	11/20/07	MH	SW 8082
PCB-1221	ND	460	ug/Kg	11/20/07	MH	SW 8082
PCB-1232	ND	460	ug/Kg	11/20/07	MH	SW 8082

Client ID: NG MALDEN T5 S-202

Phoenix I.D.: AJ75500

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1242	ND	460	ug/Kg	11/20/07		MH	SW 8082
PCB-1248	ND	460	ug/Kg	11/20/07		MH	SW 8082
PCB-1254	ND	460	ug/Kg	11/20/07		MH	SW 8082
PCB-1260	ND	460	ug/Kg	11/20/07		MH	SW 8082
PCB-1262	ND	460	ug/Kg	11/20/07		MH	SW 8082
PCB-1268	ND	460	ug/Kg	11/20/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	78		%	11/20/07		MH	SW 8082
% TCMX (Surrogate Rec)	83		%	11/20/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Motor Oil	**	50	mg/kg	11/20/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Unidentified	640	50	mg/kg	11/20/07	JRB	8100Mod	1
<u>QA/QC Surrogates</u>							
% n-Pentacosane	Interference		%	11/20/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,1-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,4-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2,2-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Hexanone	ND	830	ug/Kg	11/19/07	R/J	SW8260
2-Isopropyltoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Methyl-2-pentanone	ND	830	ug/Kg	11/19/07	R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Acetone	ND	3300	ug/Kg	11/19/07		R/J	SW8260
Acrylonitrile	ND	330	ug/Kg	11/19/07		R/J	SW8260
Benzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromoform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromodichloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon Disulfide	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon tetrachloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chlorobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromoethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dichlorodifluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Ethylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Hexachlorobutadiene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Isopropylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
m&p-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methyl Ethyl Ketone	ND	2000	ug/Kg	11/19/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methylene chloride	ND	330	ug/Kg	11/19/07		R/J	SW8260
n-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
n-Propylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Naphthalene	ND	170	ug/Kg	11/19/07		R/J	SW8260
o-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
p-Isopropyltoluene	ND	170	ug/Kg	11/19/07		R/J	SW8260
sec-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Styrene	ND	170	ug/Kg	11/19/07		R/J	SW8260
tert-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrachloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	330	ug/Kg	11/19/07		R/J	SW8260
Toluene	ND	500	ug/Kg	11/19/07		R/J	SW8260
Total Xylenes	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	330	ug/Kg	11/19/07		R/J	SW8260
Trichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorofluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorotrifluoroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Vinyl chloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
<u>QA/QC Surrogates</u>							

Client ID: NG MALDEN T5 S-202

Phoenix I.D.: AJ75500

Parameter	Result	RL	Units	Date	Time	By	Reference
% 1,2-dichlorobenzene-d4	95		%	11/19/07		R/J	SW8260
% Bromofluorobenzene	91		%	11/19/07		R/J	SW8260
% Dibromofluoromethane	92		%	11/19/07		R/J	SW8260
% Toluene-d8	94		%	11/19/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
1,2-Dichlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
1,3-Dichlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
1,4-Dichlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,4-Dichlorophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,4-Dimethylphenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrotoluene	ND	750	ug/Kg	11/20/07		HM	SW 8270
2,6-Dinitrotoluene	ND	750	ug/Kg	11/20/07		HM	SW 8270
2-Chloronaphthalene	ND	750	ug/Kg	11/20/07		HM	SW 8270
2-Chlorophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
2-Methylnaphthalene	1500	750	ug/Kg	11/20/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	750	ug/Kg	11/20/07		HM	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2-Nitrophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	750	ug/Kg	11/20/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	910	ug/Kg	11/20/07		HM	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	750	ug/Kg	11/20/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	910	ug/Kg	11/20/07		HM	SW 8270
4-Chloroaniline	ND	910	ug/Kg	11/20/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	750	ug/Kg	11/20/07		HM	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Acenaphthene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Acenaphthylene	1700	750	ug/Kg	11/20/07		HM	SW 8270
Acetophenone	ND	750	ug/Kg	11/20/07		HM	SW 8270
Aniline	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Anthracene	2900	750	ug/Kg	11/20/07		HM	SW 8270
Azobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Benz(a)anthracene	7300	750	ug/Kg	11/20/07		HM	SW 8270
Benzidine	ND	750	ug/Kg	11/20/07		HM	SW 8270
Benzo(a)pyrene	8300	750	ug/Kg	11/20/07		HM	SW 8270
Benzo(b)fluoranthene	7200	4800	ug/Kg	11/20/07		HM	SW 8270
Benzo(ghi)perylene	2700	750	ug/Kg	11/20/07		HM	SW 8270
Benzo(k)fluoranthene	4000	750	ug/Kg	11/20/07		HM	SW 8270
Benzoic acid	ND	2200	ug/Kg	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-202

Phoenix I.D.: AJ75500

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzyl butyl phthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	750	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	750	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	750	ug/Kg	11/20/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Carbazole	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Chrysene	7300	750	ug/Kg	11/20/07		HM	SW 8270
Di-n-butylphthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Di-n-octylphthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Dibenz(a,h)anthracene	850	750	ug/Kg	11/20/07		HM	SW 8270
Dibenzofuran	ND	750	ug/Kg	11/20/07		HM	SW 8270
Diethyl phthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Dimethylphthalate	ND	750	ug/Kg	11/20/07		HM	SW 8270
Fluoranthene	13000	3800	ug/Kg	11/20/07		HM	SW 8270
Fluorene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobutadiene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Hexachloroethane	ND	750	ug/Kg	11/20/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	2800	750	ug/Kg	11/20/07		HM	SW 8270
Isophorone	ND	750	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	750	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodimethylamine	ND	750	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	750	ug/Kg	11/20/07		HM	SW 8270
Naphthalene	3100	750	ug/Kg	11/20/07		HM	SW 8270
Nitrobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Pentachloronitrobenzene	ND	750	ug/Kg	11/20/07		HM	SW 8270
Pentachlorophenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
Phenanthrene	10000	750	ug/Kg	11/20/07		HM	SW 8270
Phenol	ND	750	ug/Kg	11/20/07		HM	SW 8270
Pyrene	13000	3800	ug/Kg	11/20/07		HM	SW 8270
Pyridine	ND	750	ug/Kg	11/20/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	72		%	11/20/07		HM	SW 8270
% 2-Fluorobiphenyl	61		%	11/20/07		HM	SW 8270
% 2-Fluorophenol	63		%	11/20/07		HM	SW 8270
% Nitrobenzene-d5	69		%	11/20/07		HM	SW 8270
% Phenol-d5	69		%	11/20/07		HM	SW 8270
% Terphenyl-d14	73		%	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-202

Phoenix I.D.: AJ75500

Parameter	Result	RL	Units	Date	Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

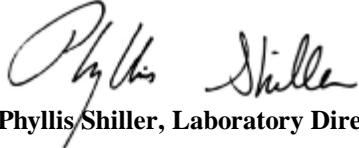
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles motor oil.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 27, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 27, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: LP  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/16/07

13:45

11/19/07

11:20

SDG I.D.: GAJ75498

Phoenix I.D.: AJ75501

## Laboratory Data

Client ID: NG MALDEN T5 S-203

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.356	0.356	mg/Kg	11/20/07		EK	SW6010
Arsenic	6.41	0.711	mg/Kg	11/20/07		EK	SW6010
Barium	56.2	0.356	mg/Kg	11/20/07		EK	SW6010
Cadmium	< 0.356	0.356	mg/Kg	11/20/07		EK	SW6010
Chromium	16.5	0.356	mg/Kg	11/20/07		EK	SW6010
Mercury	0.38	0.11	mg/kg	11/20/07		RS	SW-7471
Lead	115	0.356	mg/Kg	11/20/07		EK	SW6010
Selenium	< 1.78	1.78	mg/Kg	11/20/07		EK	SW6010
TCLP Lead	0.617	0.015	mg/L	11/21/07		TH	SW1311/6010
Percent Solid	89		%	11/19/07		xu/TJB	E160.3
Flash Point	> 200	200	degree F	11/19/07		TJB	SW846 - 1010
Ignitability	Passed	140	deg F	11/19/07		TJB	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	11/20/07		R/G	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/19/07		R/G	SW846-7.3
Reactivity	Negative			11/19/07		R/G	SW 846-7.3
Mercury Digestion	Completed			11/20/07		D	SW7471
Soil Extraction for PCB	Completed			11/19/07		P/E	SW3545
Soil Ext. for Semi-Vol	Completed			11/19/07		P/E	SW3545
TCLP Extraction for Metals	Completed			11/20/07		D	EPA 1311
Total Metals Digest	Completed			11/19/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/21/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/19/07		UP/E	3545/3550
Field Extraction	Completed			11/16/07		IES	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	450	ug/Kg	11/20/07	MH	SW 8082
PCB-1221	ND	450	ug/Kg	11/20/07	MH	SW 8082
PCB-1232	ND	450	ug/Kg	11/20/07	MH	SW 8082

Client ID: NG MALDEN T5 S-203

Phoenix I.D.: AJ75501

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1242	ND	450	ug/Kg	11/20/07		MH	SW 8082
PCB-1248	ND	450	ug/Kg	11/20/07		MH	SW 8082
PCB-1254	ND	450	ug/Kg	11/20/07		MH	SW 8082
PCB-1260	ND	450	ug/Kg	11/20/07		MH	SW 8082
PCB-1262	ND	450	ug/Kg	11/20/07		MH	SW 8082
PCB-1268	ND	450	ug/Kg	11/20/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	74		%	11/20/07		MH	SW 8082
% TCMX (Surrogate Rec)	80		%	11/20/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil #6	**	50	mg/kg	11/20/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	ND	50	mg/kg	11/20/07	JRB	8100Mod	1
Unidentified	3100	50	mg/kg	11/20/07	JRB	8100Mod	1
<u>QA/QC Surrogates</u>							
% n-Pentacosane	Interference		%	11/20/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,1-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1,2-Trichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloroethene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,1-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,3-Trichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2,4-Trimethylbenzene	380	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloroethane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,2-Dichloropropene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,3-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
1,4-Dichlorobenzene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2,2-Dichloropropane	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
2-Hexanone	ND	830	ug/Kg	11/19/07	R/J	SW8260
2-Isopropyltoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Chlorotoluene	ND	170	ug/Kg	11/19/07	R/J	SW8260
4-Methyl-2-pentanone	ND	830	ug/Kg	11/19/07	R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Acetone	ND	3300	ug/Kg	11/19/07		R/J	SW8260
Acrylonitrile	ND	330	ug/Kg	11/19/07		R/J	SW8260
Benzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromoform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Bromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon Disulfide	ND	170	ug/Kg	11/19/07		R/J	SW8260
Carbon tetrachloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chlorobenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloroform	ND	170	ug/Kg	11/19/07		R/J	SW8260
Chloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromochloromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromoethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dibromomethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Dichlorodifluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Ethylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Hexachlorobutadiene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Isopropylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
m&p-Xylene	200	170	ug/Kg	11/19/07		R/J	SW8260
Methyl Ethyl Ketone	ND	2000	ug/Kg	11/19/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	170	ug/Kg	11/19/07		R/J	SW8260
Methylene chloride	ND	330	ug/Kg	11/19/07		R/J	SW8260
n-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
n-Propylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Naphthalene	7500	680	ug/Kg	11/19/07		R/J	SW8260
o-Xylene	ND	170	ug/Kg	11/19/07		R/J	SW8260
p-Isopropyltoluene	ND	170	ug/Kg	11/19/07		R/J	SW8260
sec-Butylbenzene	280	170	ug/Kg	11/19/07		R/J	SW8260
Styrene	ND	170	ug/Kg	11/19/07		R/J	SW8260
tert-Butylbenzene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrachloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	330	ug/Kg	11/19/07		R/J	SW8260
Toluene	ND	500	ug/Kg	11/19/07		R/J	SW8260
Total Xylenes	200	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	170	ug/Kg	11/19/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	330	ug/Kg	11/19/07		R/J	SW8260
Trichloroethene	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorofluoromethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Trichlorotrifluoroethane	ND	170	ug/Kg	11/19/07		R/J	SW8260
Vinyl chloride	ND	170	ug/Kg	11/19/07		R/J	SW8260
<u>QA/QC Surrogates</u>							

Client ID: NG MALDEN T5 S-203

Phoenix I.D.: AJ75501

Parameter	Result	RL	Units	Date	Time	By	Reference
% 1,2-dichlorobenzene-d4	96		%	11/19/07		R/J	SW8260
% Bromofluorobenzene	92		%	11/19/07		R/J	SW8260
% Dibromofluoromethane	97		%	11/19/07		R/J	SW8260
% Toluene-d8	96		%	11/19/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
1,2-Dichlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
1,3-Dichlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
1,4-Dichlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,4-Dichlorophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,4-Dimethylphenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2,4-Dinitrotoluene	ND	740	ug/Kg	11/20/07		HM	SW 8270
2,6-Dinitrotoluene	ND	740	ug/Kg	11/20/07		HM	SW 8270
2-Chloronaphthalene	ND	740	ug/Kg	11/20/07		HM	SW 8270
2-Chlorophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
2-Methylnaphthalene	9700	3700	ug/Kg	11/20/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	740	ug/Kg	11/20/07		HM	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
2-Nitrophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	11/20/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	890	ug/Kg	11/20/07		HM	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	740	ug/Kg	11/20/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	890	ug/Kg	11/20/07		HM	SW 8270
4-Chloroaniline	ND	890	ug/Kg	11/20/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	740	ug/Kg	11/20/07		HM	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	11/20/07		HM	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Acenaphthene	3600	740	ug/Kg	11/20/07		HM	SW 8270
Acenaphthylene	2400	740	ug/Kg	11/20/07		HM	SW 8270
Acetophenone	ND	740	ug/Kg	11/20/07		HM	SW 8270
Aniline	ND	2200	ug/Kg	11/20/07		HM	SW 8270
Anthracene	7900	740	ug/Kg	11/20/07		HM	SW 8270
Azobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Benz(a)anthracene	11000	740	ug/Kg	11/20/07		HM	SW 8270
Benzidine	ND	740	ug/Kg	11/20/07		HM	SW 8270
Benzo(a)pyrene	11000	740	ug/Kg	11/20/07		HM	SW 8270
Benzo(b)fluoranthene	8800	3700	ug/Kg	11/20/07		HM	SW 8270
Benzo(ghi)perylene	2700	740	ug/Kg	11/20/07		HM	SW 8270
Benzo(k)fluoranthene	4000	3700	ug/Kg	11/20/07		HM	SW 8270
Benzoic acid	ND	2200	ug/Kg	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-203

Phoenix I.D.: AJ75501

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzyl butyl phthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	740	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	740	ug/Kg	11/20/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	740	ug/Kg	11/20/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Carbazole	2400	2200	ug/Kg	11/20/07		HM	SW 8270
Chrysene	10000	740	ug/Kg	11/20/07		HM	SW 8270
Di-n-butylphthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Di-n-octylphthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Dibenz(a,h)anthracene	890	740	ug/Kg	11/20/07		HM	SW 8270
Dibenzofuran	5600	740	ug/Kg	11/20/07		HM	SW 8270
Diethyl phthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Dimethylphthalate	ND	740	ug/Kg	11/20/07		HM	SW 8270
Fluoranthene	30000	3700	ug/Kg	11/20/07		HM	SW 8270
Fluorene	5400	740	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Hexachlorobutadiene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Hexachloroethane	ND	740	ug/Kg	11/20/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	2900	740	ug/Kg	11/20/07		HM	SW 8270
Isophorone	ND	740	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	740	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodimethylamine	ND	740	ug/Kg	11/20/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	740	ug/Kg	11/20/07		HM	SW 8270
Naphthalene	15000	3700	ug/Kg	11/20/07		HM	SW 8270
Nitrobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Pentachloronitrobenzene	ND	740	ug/Kg	11/20/07		HM	SW 8270
Pentachlorophenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
Phenanthrene	32000	3700	ug/Kg	11/20/07		HM	SW 8270
Phenol	ND	740	ug/Kg	11/20/07		HM	SW 8270
Pyrene	24000	3700	ug/Kg	11/20/07		HM	SW 8270
Pyridine	ND	740	ug/Kg	11/20/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	70		%	11/20/07		HM	SW 8270
% 2-Fluorobiphenyl	54		%	11/20/07		HM	SW 8270
% 2-Fluorophenol	61		%	11/20/07		HM	SW 8270
% Nitrobenzene-d5	62		%	11/20/07		HM	SW 8270
% Phenol-d5	62		%	11/20/07		HM	SW 8270
% Terphenyl-d14	61		%	11/20/07		HM	SW 8270

Client ID: NG MALDEN T5 S-203

Phoenix I.D.: AJ75501

Parameter	Result	RL	Units	Date	Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

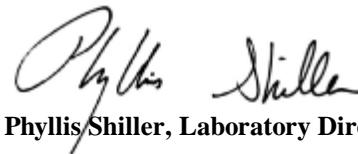
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles fuel oil #6.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 27, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

November 27, 2007

### QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 88482, Sample No: AJ71237 (AJ75500, AJ75501)								
<u>ICP Metals - Soil</u>								
Aluminum	1.04	BDL	---	---	NC	NC	NC	NC
Antimony	BDL	NC	101	100	1.0	60.8	62.1	2.1
Arsenic	BDL	NC	97.0	96.3	0.7	70.9	72.0	1.5
Barium	BDL	5.10	100	99.5	0.5	69.4	70.8	2.0
Beryllium	BDL	NC	102	103	1.0	69.4	70.5	1.6
Boron	BDL	1.10	99.2	99.7	0.5	72.0	73.4	1.9
Cadmium	BDL	NC	102	102	0.0	66.5	67.9	2.1
Calcium	2.33	19.1	---	---	NC	NC	NC	NC
Chromium	BDL	2.40	102	103	1.0	68.6	70.5	2.7
Cobalt	BDL	2.00	103	102	1.0	67.9	69.8	2.8
Copper	0.5	13.3	104	105	1.0	78.8	81.9	3.9
Iron	1.80	3.10	---	---	NC	NC	NC	NC
Lead	BDL	12.8	102	102	0.0	68.5	68.7	0.3
Magnesium	BDL	6.30	115	113	1.8	NC	NC	NC
Manganese	0.5	1.90	103	103	0.0	58.0	55.2	4.9
Molybdenum	BDL	NC	104	104	0.0	69.4	70.9	2.1
Nickel	BDL	BDL	102	102	0.0	66.6	68.9	3.4
Phosphorus	BDL	1.10	99.1	101	1.9	58.3	59.5	2.0
Potassium	1.11	3.00	111	119	7.0	NC	NC	NC
Selenium	BDL	NC	92.5	91.7	0.9	68.4	70.0	2.3
Silver	BDL	NC	99.6	100	0.4	103	105	1.9
Sodium	BDL	1.20	114	111	2.7	110	113	2.7
Thallium	BDL	NC	100	101	1.0	65.9	68.0	3.1
Tin	BDL	NC	90.0	92.5	2.7	59.2	60.4	2.0
Vanadium	BDL	4.60	103	102	1.0	70.5	74.1	5.0
Zinc	BDL	3.50	100	100	0.0	98.9	74.1	28.7

**Comment:**

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

QA/QC Batch 88477, Sample No: AJ75263 (AJ75498, AJ75499)

ICP Metals - Soil

Aluminum	BDL	24.5	---	---	NC	NC	NC	NC
Antimony	BDL	NC	92.4	99.8	7.7	82.1	76.6	6.9
Arsenic	BDL	NC	87.5	96.9	10.2	83.2	80.4	3.4
Barium	BDL	41.5	97.0	99.9	2.9	86.6	96.8	11.1
Beryllium	BDL	NC	96.0	105	9.0	88.1	84.8	3.8
Boron	BDL	NC	93.4	98.7	5.5	84.6	82.5	2.5

## QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Cadmium	BDL	NC	95.3	103	7.8	87.1	82.5	5.4
Calcium	BDL	44.8	---	---	NC	NC	NC	NC
Chromium	BDL	7.90	97.1	104	6.9	86.5	85.9	0.7
Cobalt	BDL	67.5	95.8	105	9.2	85.4	82.0	4.1
Copper	BDL	3.50	98.3	105	6.6	81.5	92.6	12.8
Iron	0.6	44.8	---	---	NC	NC	NC	NC
Lead	BDL	36.4	94.3	103	8.8	83.9	87.8	4.5
Magnesium	BDL	12.7	---	118	NC	NC	NC	NC
Manganese	BDL	16.5	99.9	103	3.1	63.6	86.1	30.1
Molybdenum	BDL	NC	97.3	106	8.6	88.5	84.8	4.3
Nickel	BDL	33.7	96.2	103	6.8	84.2	83.1	1.3
Phosphorus	1.12	2.80	92.6	98.6	6.3	78.1	84.4	7.8
Potassium	BDL	34.9	105	105	0.0	NC	NC	NC
Selenium	BDL	NC	82.8	91.4	9.9	80.5	77.3	4.1
Silver	BDL	NC	95.6	99.1	3.6	86.9	84.4	2.9
Sodium	BDL	38.7	111	113	1.8	90.7	NC	NC
Thallium	BDL	NC	93.9	101	7.3	84.9	81.0	4.7
Tin	BDL	NC	86.2	91.5	6.0	76.5	71.2	7.2
Vanadium	BDL	2.30	98.5	105	6.4	87.1	85.9	1.4
Zinc	BDL	2.60	92.8	100	7.5	84.2	88.6	5.1

QA/QC Batch 88621, Sample No: AJ75520 (AJ75498, AJ75499, AJ75500, AJ75501)

Mercury	BDL	NC	90.4	90.7	0.3	108	100	7.7
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QA/QC Batch 88720, Sample No: AJ75981 (AJ75498, AJ75499, AJ75500, AJ75501)

### ICP Metals - Aqueous Extraction

Arsenic	BDL	BDL	118	121	2.5	116	122	5.0
Barium	BDL	2.10	101	101	0.0	99.5	109	9.1
Cadmium	BDL	NC	101	102	1.0	94.5	101	6.6
Chromium	BDL	NC	100	103	3.0	97.9	104	6.0
Copper	BDL	NC	109	112	2.7	109	118	7.9
Lead	BDL	NC	94.9	95.4	0.5	91.3	97.0	6.1
Nickel	0.03	3.50	98.6	99.7	1.1	91.2	96.4	5.5
Selenium	0.03	NC	131	134	2.3	125	132	5.4
Silver	BDL	NC	115	116	0.9	115	122	5.9
Zinc	BDL	2.00	106	107	0.9	104	113	8.3

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

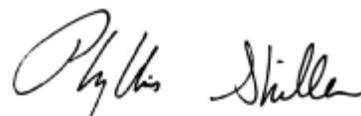
LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director  
November 27, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

November 27, 2007

### QA/QC Data

SDG I.D.: GAJ75498

Parameter	Dup Blank	LCS RPD	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RD
QA/QC Batch 88617, Sample No: AJ75341 (AJ75498, AJ75499, AJ75500, AJ75501)							
Cyanide Amenable		NC	94.4				
QA/QC Batch 88564, Sample No: AJ75499 (AJ75498, AJ75499, AJ75500, AJ75501)							
Flash Point		NC	Passed				
QA/QC Batch 88609, Sample No: AJ75499 (AJ75498, AJ75499, AJ75500, AJ75501)							
Reactivity Sulfide	BDL	NC					

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Phyllis Shiller, Laboratory Director

November 27, 2007



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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

November 27, 2007

### QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	MS RPD
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QA/QC Batch 88486, Sample No: AJ75456 (AJ75498, AJ75499, AJ75500, AJ75501)

#### TPH by GC (Extractable Products)

Aviation Fuel/Kerosene	ND						
Fuel Oil #2/ Diesel Fuel	ND	66	74	11.4	72	87	18.9
Fuel Oil #4	ND						
Fuel Oil #6	ND						
Motor Oil	ND						
Other Oil (Cutting & Lubricating)	ND						
Unidentified	ND						

QA/QC Batch 88547, Sample No: AJ75507 (AJ75498, AJ75499, AJ75500, AJ75501)

#### Polychlorinated Biphenyls

PCB-1016	ND	83	63	27.4	*	*	NC
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	79	65	19.4	*	*	NC
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	116	58	47	21.0	NR	NR	NC
% TCMX (Surrogate Rec)	119	61	49	21.8	NR	NR	NC

#### Comment:

\* The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample.  
LCS/LCSD recoveries were within QA/QC limits.

QA/QC Batch 88571, Sample No: AJ75520 (AJ75498, AJ75499, AJ75500, AJ75501)

#### Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	66	69	4.4	75	70	6.9
1,2,4-Trichlorobenzene	ND	62	67	7.8	73	69	5.6
1,2-Dichlorobenzene	ND	53	56	5.5	65	61	6.3
1,3-Dichlorobenzene	ND	53	55	3.7	66	61	7.9
1,4-Dichlorobenzene	ND	54	57	5.4	68	64	6.1
2,4,5-Trichlorophenol	ND	68	70	2.9	72	69	4.3
2,4,6-Trichlorophenol	ND	66	68	3.0	67	63	6.2
2,4-Dichlorophenol	ND	64	68	6.1	71	67	5.8
2,4-Dimethylphenol	ND	46	49	6.3	55	48	13.6
2,4-Dinitrophenol	ND	<30	<30	NC	N/A	N/A	NC
2,4-Dinitrotoluene	ND	68	72	5.7	70	69	1.4

## QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
2,6-Dinitrotoluene	ND	68	73	7.1	72	72	0.0
2-Chloronaphthalene	ND	66	70	5.9	72	69	4.3
2-Chlorophenol	ND	56	60	6.9	70	65	7.4
2-Methylnaphthalene	ND	67	70	4.4	75	72	4.1
2-Methylphenol (o-cresol)	ND	54	58	7.1	65	60	8.0
2-Nitroaniline	ND	72	66	8.7	84	87	3.5
2-Nitrophenol	ND	57	59	3.4	77	77	0.0
3&4-Methylphenol (m&p-cresol)	ND	61	64	4.8	65	61	6.3
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC
3-Nitroaniline	ND	68	69	1.5	57	55	3.6
4,6-Dinitro-2-methylphenol	ND	58	34	52.2	N/A	N/A	NC
4-Bromophenyl phenyl ether	ND	73	75	2.7	73	68	7.1
4-Chloro-3-methylphenol	ND	66	68	3.0	77	72	6.7
4-Chloroaniline	ND	55	59	7.0	49	47	4.2
4-Chlorophenyl phenyl ether	ND	72	75	4.1	78	75	3.9
4-Nitroaniline	ND	65	68	4.5	70	67	4.4
4-Nitrophenol	ND	58	56	3.5	63	62	1.6
Acenaphthene	ND	62	64	3.2	67	64	4.6
Acenaphthylene	ND	64	67	4.6	69	67	2.9
Acetophenone	ND	57	61	6.8	72	68	5.7
Aniline	ND	N/A	N/A	NC	N/A	N/A	NC
Anthracene	ND	69	72	4.3	76	74	2.7
Azobenzene	ND	60	63	4.9	76	74	2.7
Benz(a)anthracene	ND	70	75	6.9	84	80	4.9
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC
Benzo(a)pyrene	ND	71	75	5.5	85	84	1.2
Benzo(b)fluoranthene	ND	70	75	6.9	107	107	0.0
Benzo(ghi)perylene	ND	83	90	8.1	43	41	4.8
Benzo(k)fluoranthene	ND	70	76	8.2	103	103	0.0
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC
Benzyl butyl phthalate	ND	69	75	8.3	91	86	5.6
Bis(2-chloroethoxy)methane	ND	59	63	6.6	69	66	4.4
Bis(2-chloroethyl)ether	ND	55	58	5.3	71	67	5.8
Bis(2-chloroisopropyl)ether	ND	50	54	7.7	65	63	3.1
Bis(2-ethylhexyl)phthalate	ND	69	76	9.7	95	114	18.2
Carbazole	ND	74	72	2.7	96	91	5.3
Chrysene	ND	72	77	6.7	81	77	5.1
Di-n-butylphthalate	ND	71	75	5.5	80	78	2.5
Di-n-octylphthalate	ND	70	76	8.2	87	84	3.5
Dibenz(a,h)anthracene	ND	89	96	7.6	51	49	4.0
Dibenzofuran	ND	67	69	2.9	73	70	4.2
Diethyl phthalate	ND	70	73	4.2	82	79	3.7
Dimethylphthalate	ND	69	72	4.3	76	74	2.7
Fluoranthene	ND	75	79	5.2	79	75	5.2
Fluorene	ND	67	71	5.8	76	73	4.0
Hexachlorobenzene	ND	68	73	7.1	83	80	3.7
Hexachlorobutadiene	ND	65	70	7.4	82	75	8.9
Hexachlorocyclopentadiene	ND	56	62	10.2	N/A	N/A	NC
Hexachloroethane	ND	53	56	5.5	50	47	6.2

## QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Indeno(1,2,3-cd)pyrene	ND	86	93	7.8	49	47	4.2
Isophorone	ND	65	70	7.4	80	77	3.8
N-Nitrosodi-n-propylamine	ND	59	63	6.6	77	75	2.6
N-Nitrosodimethylamine	ND	52	55	5.6	64	61	4.8
N-Nitrosodiphenylamine	ND	75	79	5.2	86	83	3.6
Naphthalene	ND	57	62	8.4	69	65	6.0
Nitrobenzene	ND	56	60	6.9	77	74	4.0
Pentachloronitrobenzene	ND	69	73	5.6	74	71	4.1
Pentachlorophenol	ND	70	56	22.2	54	52	3.8
Phenanthrene	ND	69	71	2.9	77	73	5.3
Phenol	ND	58	62	6.7	70	65	7.4
Pyrene	ND	72	76	5.4	73	70	4.2
Pyridine	ND	50	53	5.8	54	50	7.7
% 2,4,6-Tribromophenol	74	81	78	3.8	66	60	9.5
% 2-Fluorobiphenyl	62	62	63	1.6	65	62	4.7
% 2-Fluorophenol	63	53	54	1.9	66	60	9.5
% Nitrobenzene-d5	63	55	57	3.6	71	70	1.4
% Phenol-d5	65	59	59	0.0	70	65	7.4
% Terphenyl-d14	79	77	75	2.6	69	64	7.5

QA/QC Batch 88655, Sample No: AJ75520 (AJ75498, AJ75499, AJ75500, AJ75501)

### Volatiles

1,1,1,2-Tetrachloroethane	ND	107	106	0.9	96	92	4.3
1,1,1-Trichloroethane	ND	109	106	2.8	85	101	17.2
1,1,2,2-Tetrachloroethane	ND	109	101	7.6	116	109	6.2
1,1,2-Trichloroethane	ND	109	107	1.9	107	106	0.9
1,1-Dichloroethane	ND	120	112	6.9	93	113	19.4
1,1-Dichloroethene	ND	112	110	1.8	84	111	27.7
1,1-Dichloropropene	ND	109	107	1.9	80	97	19.2
1,2,3-Trichlorobenzene	ND	102	103	1.0	45	40	11.8
1,2,3-Trichloropropane	ND	108	101	6.7	112	100	11.3
1,2,4-Trichlorobenzene	ND	109	103	5.7	46	42	9.1
1,2,4-Trimethylbenzene	ND	110	110	0.0	53	57	7.3
1,2-Dibromo-3-chloropropane	ND	118	105	11.7	95	81	15.9
1,2-Dichlorobenzene	ND	110	106	3.7	70	68	2.9
1,2-Dichloroethane	ND	110	104	5.6	98	104	5.9
1,2-Dichloropropane	ND	113	114	0.9	95	105	10.0
1,3,5-Trimethylbenzene	ND	107	110	2.8	60	63	4.9
1,3-Dichlorobenzene	ND	108	107	0.9	69	69	0.0
1,3-Dichloropropane	ND	114	110	3.6	117	109	7.1
1,4-Dichlorobenzene	ND	118	117	0.9	58	70	18.8
2,2-Dichloropropane	ND	116	107	8.1	86	101	16.0
2-Chlorotoluene	ND	108	112	3.6	69	73	5.6
2-Hexanone	ND	>130	>130	NC	94	73	25.1
2-Isopropyltoluene	ND	113	113	0.0	47	51	8.2
4-Chlorotoluene	ND	112	115	2.6	64	74	14.5
4-Methyl-2-pentanone	ND	114	104	9.2	114	90	23.5
Acetone	ND	>130	>130	NC	145	105	32.0
Acrolein	ND	103	128	21.6	40	52	26.1

## QA/QC Data

SDG I.D.: GAJ75498

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Acrylonitrile	ND	123	112	9.4	135	116	15.1
Benzene	ND	113	113	0.0	87	105	18.8
Bromobenzene	ND	111	109	1.8	81	87	7.1
Bromochloromethane	ND	115	111	3.5	110	115	4.4
Bromodichloromethane	ND	111	112	0.9	95	105	10.0
Bromoform	ND	106	104	1.9	102	97	5.0
Bromomethane	ND	>130	98	NC	99	98	1.0
Carbon Disulfide	ND	120	114	5.1	76	101	28.2
Carbon tetrachloride	ND	101	103	2.0	72	88	20.0
Chlorobenzene	ND	115	117	1.7	92	96	4.3
Chloroethane	ND	<70	127	NC	76	121	45.7
Chloroform	ND	117	109	7.1	99	109	9.6
Chloromethane	ND	123	122	0.8	64	110	52.9
cis-1,2-Dichloroethene	ND	119	111	7.0	94	114	19.2
cis-1,3-Dichloropropene	ND	115	110	4.4	90	107	17.3
Dibromochloromethane	ND	115	108	6.3	105	99	5.9
Dibromoethane	ND	114	109	4.5	107	108	0.9
Dibromomethane	ND	109	109	0.0	105	110	4.7
Dichlorodifluoromethane	ND	>130	>130	NC	38	104	93.0
Ethylbenzene	ND	114	115	0.9	86	87	1.2
Hexachlorobutadiene	ND	118	119	0.8	29	29	0.0
Isopropylbenzene	ND	117	120	2.5	61	72	16.5
m&p-Xylene	ND	115	116	0.9	75	81	7.7
Methyl ethyl ketone	ND	>130	126	NC	7.3	19	89.0
Methyl t-butyl ether (MTBE)	ND	104	107	2.8	107	109	1.9
Methylene chloride	ND	115	110	4.4	93	118	23.7
n-Butylbenzene	ND	116	112	3.5	34	37	8.5
n-Propylbenzene	ND	108	113	4.5	57	61	6.8
Naphthalene	ND	106	86	20.8	57	39	37.5
o-Xylene	ND	108	111	2.7	86	85	1.2
p-Isopropyltoluene	ND	113	113	0.0	47	51	8.2
sec-Butylbenzene	ND	103	104	1.0	43	48	11.0
Styrene	ND	112	112	0.0	86	86	0.0
tert-Butylbenzene	ND	110	111	0.9	54	59	8.8
Tetrachloroethene	ND	109	112	2.7	79	83	4.9
Tetrahydrofuran (THF)	ND	109	87	22.4	122	111	9.4
Toluene	ND	>130	>130	NC	97	111	13.5
trans-1,2-Dichloroethene	ND	118	110	7.0	87	115	27.7
trans-1,3-Dichloropropene	ND	116	110	5.3	101	106	4.8
trans-1,4-dichloro-2-butene	ND	122	104	15.9	87	98	11.9
Trichloroethene	ND	109	110	0.9	82	100	19.8
Trichlorofluoromethane	ND	112	101	10.3	74	107	36.5
Trichlorotrifluoroethane	ND	123	128	4.0	77	98	24.0
Vinyl chloride	ND	>130	127	NC	65	114	54.7
% 1,2-dichlorobenzene-d4	100	99	97	2.0	95	100	5.1
% Bromofluorobenzene	91	103	103	0.0	104	104	0.0
% Dibromofluoromethane	103	103	91	12.4	116	103	11.9
% Toluene-d8	96	100	102	2.0	97	102	5.0

---

3 = This parameter is outside laboratory ms/msd specified limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

November 27, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. Project #:

Project Location: NG MALDEN T5

MADEP RTN1:

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

AJ75498, AJ75499, AJ75500, AJ75501

Sample Matrices:  Groundwater  Soil/Sediment  Drinking Water  Other:

MCP SW-846 Methods Used	<input checked="" type="checkbox"/> 8260B	<input type="checkbox"/> 8151A	<input type="checkbox"/> 8330	<input checked="" type="checkbox"/> 6010B	<input checked="" type="checkbox"/> 7470A/1A
	<input checked="" type="checkbox"/> 8270C	<input type="checkbox"/> 8081A	<input type="checkbox"/> VPH	<input type="checkbox"/> 6020	<input type="checkbox"/> 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	<input checked="" type="checkbox"/> 8082	<input type="checkbox"/> 8021B	<input type="checkbox"/> EPH	<input type="checkbox"/> 7000S3	<input type="checkbox"/> 7196A

1 List Release Tracking Number (RTN), if known

2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method

3 S - SW-846 Methods 7000 Series List individual method and analyte

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

All negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized

Signature:

Date: Tuesday, November 27, 2007

Printed Name: Kathleen Cressia

Position: QA/QC Officer

Printed Name: Phyllis Shiller

Position: Laboratory Director



**Environmental Laboratories, Inc.**  
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## MCP Certification Report

November 27, 2007

SDG I.D.: GAJ75498

### Mercury Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Merlin 11/20/07-1 (AJ75498, AJ75499, AJ75500, AJ75501)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

**Printed Name** Rick Schweitzer

**Position:** Chemist

**Date:** 11/20/2007

All LCS recoveries were within 80 - 120 with the following exceptions: None.

All LCSD recoveries were within 80 - 120 with the following exceptions: None.

All MS recoveries were within 80 - 120 with the following exceptions: None.

All MSD recoveries were within 80 - 120 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Icp7 11/19/07-1 (AJ75498, AJ75499)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

**Printed Name** Emily Kolominskaya

**Position:** Chemist

**Date:** 11/19/2007

**Instrument:** Icp7 11/20/07-1 (AJ75498, AJ75499, AJ75500, AJ75501)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.



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## MCP Certification Report

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SDG I.D.: GAJ75498

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Tina Hall  
Position: Chemist  
Date: 11/20/2007

Instrument: Icp7 11/21/07-1 (AJ66467, AJ75498, AJ75499, AJ75500, AJ75501)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya  
Position: Chemist  
Date: 11/21/2007

QC Comments: QC Batch 88482 11/16/07 (AJ75500, AJ75501)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

All LCS recoveries were within 75 - 125 with the following exceptions: Selenium

All LCSD recoveries were within 75 - 125 with the following exceptions: Selenium

All MS recoveries were within 75 - 125 with the following exceptions: Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Lead, Manganese, Molybdenum, Nickel, Phosphorus, Selenium, Thallium, Tin, Vanadium

All MSD recoveries were within 75 - 125 with the following exceptions: Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Lead, Manganese, Molybdenum, Nickel, Phosphorus, Selenium, Thallium, Tin, Vanadium, Zinc

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### PCB Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Au-ecd8 11/20/07-1 (AJ75498, AJ75499, AJ75500, AJ75501)

8082 Narration:

The initial calibration RSD for the compound list was less than 20%.

Some of the continuing calibration standards were above acceptable criteria, however, the continuing calibration standards that bracketed samples with detected PCB's were within criteria. No sample bias is suspected.



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## MCP Certification Report

November 27, 2007

SDG I.D.: GAJ75498

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Printed Name    Michael Hahn  
Position:       Chemist  
Date:            11/20/2007

**QC Comments:**    QC Batch 88547 11/19/07 (AJ75498, AJ75499, AJ75500, AJ75501)

The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample. LCS/LCSD recoveries were within QA/QC limits.

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

**SVOA Narration**

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:**    Chem04 11/20/07-1 (AJ75498, AJ75499, AJ75500, AJ75501)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

**Initial Calibration (Chem06/82701110):**

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: None

**Continuing Calibration:**

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: 4-Chloroaniline, 3-Nitroaniline, 2-Nitroaniline, Carbazole

Printed Name    Harry Mullin  
Position:       Chemist  
Date:            11/20/2007



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## MCP Certification Report

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All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Chem03 11/19/07-1 (AJ75498, AJ75499, AJ75500, AJ75501)

Initial Calibration Verification (chem03/111507):

All SPCCs, CCCs and >80% of target compounds met criteria.

The following compounds had %RSDs >30%: None

Continuing Calibration Verification:

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.

The following compounds had % Deviations >30%: Dichlorodifluoromethane, Chloromethane, Chloroethane, Acrolein, Carbon Tetrachloride

Reporting limits are elevated for toluene due to laboratory contamination.

**Printed Name** Johanna Harrington

**Position:** Chemist

**Date:** 11/19/2007



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## MCP Certification Report

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All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone, Acetone, Bromomethane, Chloroethane, Dichlorodifluoromethane, Methyl ethyl ketone, Toluene, Vinyl chloride

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone, Acetone, Dichlorodifluoromethane, Toluene

All MS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Chlorotoluene, 2-Isopropyltoluene, 4-Chlorotoluene, Acetone, Acrolein, Acrylonitrile, Chloromethane, Dichlorodifluoromethane, Hexachlorobutadiene, Isopropylbenzene, Methyl ethyl ketone, n-Butylbenzene, n-Propylbenzene, Naphthalene, p-Isopropyltoluene, sec-Butylbenzene, tert-Butylbenzene, Vinyl chloride

All MSD recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dichlorobenzene, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 2-Isopropyltoluene, Acrolein, Hexachlorobutadiene, Methyl ethyl ketone, n-Butylbenzene, n-Propylbenzene, Naphthalene, p-Isopropyltoluene, sec-Butylbenzene, tert-Butylbenzene

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SDG Comments

#### 8260 Volatile Organics:

The following compounds from the MCP 8260 analyte list were not performed: TAME, diethyl ether, diisopropyl ether, 1,4 dioxane, and ETBE. The client supplied high level vials only, not all MCP reporting standards are met.





## Environmental Laboratories, Inc.

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# Analysis Report

November 12, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: PG  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/05/07 13:45  
11/06/07 9:37

SDG I.D.: GAJ67896

Phoenix I.D.: AJ67896

## Laboratory Data

Client ID: NG MALDEN S-105

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.323	0.323	mg/Kg	11/07/07		EK	SW6010
Arsenic	9.05	0.646	mg/Kg	11/07/07		EK	SW6010
Barium	57.8	0.323	mg/Kg	11/07/07		EK	SW6010
Cadmium	< 0.323	0.323	mg/Kg	11/07/07		EK	SW6010
Chromium	17.2	0.323	mg/Kg	11/07/07		EK	SW6010
Mercury	0.49	0.10	mg/kg	11/07/07		RS	SW-7471
Lead	142	0.323	mg/Kg	11/07/07		EK	SW6010
Selenium	< 1.62	1.62	mg/Kg	11/07/07		EK	SW6010
TCLP Lead	0.132	0.015	mg/L	11/09/07		EK	SW1311/6010
Percent Solid	91		%	11/06/07		UP/TJB	E160.3
Flash Point	> 200	200	degree F	11/06/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	11/06/07		CD	SW846 - 1010
Reactivity Cyanide	< 1.0	1.0	mg/Kg	11/06/07		R/G/E	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/06/07		R/G	SW846-7.3
Reactivity	Negative			11/07/07		EG	SW 846-7.3
Total Cyanide	92	5.5	mg/Kg	11/06/07		R/G/E	SW9010/9014
Mercury Digestion	Completed			11/07/07		D	SW7471
Soil Extraction for PCB	Completed			11/06/07		/E/M	SW3545
Soil Ext. for Semi- Vol	Completed			11/06/07		UJP/E/M	SW3545
TCLP Extraction for Metals	Completed			11/08/07		D	EPA 1311
Total Metals Digest	Completed			11/06/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/09/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/06/07		UPJ/E/M	3545/3550
Field Extraction	Completed			11/05/07		PG	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	430	ug/Kg	11/07/07	MH	SW 8082
PCB-1221	ND	430	ug/Kg	11/07/07	MH	SW 8082

Client ID: NG MALDEN S-105

Phoenix I.D.: AJ67896

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1232	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1242	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1248	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1254	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1260	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1262	ND	430	ug/Kg	11/07/07		MH	SW 8082
PCB-1268	ND	430	ug/Kg	11/07/07		MH	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	53		%	11/07/07		MH	SW 8082
% TCMX (Surrogate Rec)	59		%	11/07/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	11/07/07	JRB	8100Mod	1
Unidentified	1300	50	mg/kg	11/07/07	JRB	8100Mod	1
<b><u>QA/QC Surrogates</u></b>							
% n-Pentacosane	Interference		%	11/07/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1,1-Trichloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1,2-Trichloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1-Dichloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1-Dichloroethene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,1-Dichloropropene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2,3-Trichloropropane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2,4-Trimethylbenzene	300	190	ug/Kg	11/06/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2-Dichlorobenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2-Dichloroethane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,2-Dichloropropane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,3-Dichlorobenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,3-Dichloropropane	ND	190	ug/Kg	11/06/07	R/J	SW8260
1,4-Dichlorobenzene	ND	190	ug/Kg	11/06/07	R/J	SW8260
2,2-Dichloropropane	ND	190	ug/Kg	11/06/07	R/J	SW8260
2-Chlorotoluene	ND	190	ug/Kg	11/06/07	R/J	SW8260
2-Hexanone	ND	950	ug/Kg	11/06/07	R/J	SW8260
2-Isopropyltoluene	ND	190	ug/Kg	11/06/07	R/J	SW8260
4-Chlorotoluene	ND	190	ug/Kg	11/06/07	R/J	SW8260

Client ID: NG MALDEN S-105

Phoenix I.D.: AJ67896

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	950	ug/Kg	11/06/07		R/J	SW8260
Acetone	ND	3800	ug/Kg	11/06/07		R/J	SW8260
Acrylonitrile	ND	380	ug/Kg	11/06/07		R/J	SW8260
Benzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Bromobenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Bromochloromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Bromodichloromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Bromoform	ND	190	ug/Kg	11/06/07		R/J	SW8260
Bromomethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Carbon Disulfide	ND	190	ug/Kg	11/06/07		R/J	SW8260
Carbon tetrachloride	ND	190	ug/Kg	11/06/07		R/J	SW8260
Chlorobenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Chloroethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Chloroform	ND	190	ug/Kg	11/06/07		R/J	SW8260
Chloromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	190	ug/Kg	11/06/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Dibromochloromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Dibromoethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Dibromomethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Dichlorodifluoromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Ethylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Hexachlorobutadiene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Isopropylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
m&p-Xylene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Methyl Ethyl Ketone	ND	2300	ug/Kg	11/06/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	190	ug/Kg	11/06/07		R/J	SW8260
Methylene chloride	ND	380	ug/Kg	11/06/07		R/J	SW8260
n-Butylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
n-Propylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Naphthalene	6500	3800	ug/Kg	11/06/07		R/J	SW8260
o-Xylene	ND	190	ug/Kg	11/06/07		R/J	SW8260
p-Isopropyltoluene	ND	190	ug/Kg	11/06/07		R/J	SW8260
sec-Butylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Styrene	ND	190	ug/Kg	11/06/07		R/J	SW8260
tert-Butylbenzene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Tetrachloroethene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	380	ug/Kg	11/06/07		R/J	SW8260
Toluene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Total Xylenes	ND	190	ug/Kg	11/06/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	190	ug/Kg	11/06/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	190	ug/Kg	11/06/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	380	ug/Kg	11/06/07		R/J	SW8260
Trichloroethene	ND	190	ug/Kg	11/06/07		R/J	SW8260
Trichlorofluoromethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Trichlorotrifluoroethane	ND	190	ug/Kg	11/06/07		R/J	SW8260
Vinyl chloride	ND	190	ug/Kg	11/06/07		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	104		%	11/06/07		R/J	SW8260
% Bromofluorobenzene	93		%	11/06/07		R/J	SW8260
% Dibromofluoromethane	79		%	11/06/07		R/J	SW8260
% Toluene-d8	102		%	11/06/07		R/J	SW8260
<b><u>Semivolatiles</u></b>							
1,2,4,5-Tetrachlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
1,2-Dichlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
1,3-Dichlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
1,4-Dichlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,4-Dichlorophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,4-Dimethylphenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrophenol	ND	1100	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrotoluene	ND	720	ug/Kg	11/07/07		HM	SW 8270
2,6-Dinitrotoluene	ND	720	ug/Kg	11/07/07		HM	SW 8270
2-Chloronaphthalene	ND	720	ug/Kg	11/07/07		HM	SW 8270
2-Chlorophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
2-Methylnaphthalene	7000	720	ug/Kg	11/07/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	720	ug/Kg	11/07/07		HM	SW 8270
2-Nitroaniline	ND	1100	ug/Kg	11/07/07		HM	SW 8270
2-Nitrophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	720	ug/Kg	11/07/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	860	ug/Kg	11/07/07		HM	SW 8270
3-Nitroaniline	ND	1100	ug/Kg	11/07/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	11/07/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	720	ug/Kg	11/07/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	860	ug/Kg	11/07/07		HM	SW 8270
4-Chloroaniline	ND	860	ug/Kg	11/07/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	720	ug/Kg	11/07/07		HM	SW 8270
4-Nitroaniline	ND	1100	ug/Kg	11/07/07		HM	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	11/07/07		HM	SW 8270
Acenaphthene	1500	720	ug/Kg	11/07/07		HM	SW 8270
Acenaphthylene	3400	720	ug/Kg	11/07/07		HM	SW 8270
Acetophenone	ND	720	ug/Kg	11/07/07		HM	SW 8270
Aniline	ND	2100	ug/Kg	11/07/07		HM	SW 8270
Anthracene	4000	720	ug/Kg	11/07/07		HM	SW 8270
Azobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Benz(a)anthracene	10000	720	ug/Kg	11/07/07		HM	SW 8270
Benzidine	ND	720	ug/Kg	11/07/07		HM	SW 8270
Benzo(a)pyrene	12000	7200	ug/Kg	11/07/07		HM	SW 8270
Benzo(b)fluoranthene	15000	7200	ug/Kg	11/07/07		HM	SW 8270
Benzo(ghi)perylene	3300	720	ug/Kg	11/07/07		HM	SW 8270
Benzo(k)fluoranthene	6100	720	ug/Kg	11/07/07		HM	SW 8270

Client ID: NG MALDEN S-105

Phoenix I.D.: AJ67896

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzoic acid	ND	2100	ug/Kg	11/07/07		HM	SW 8270
Benzyl butyl phthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	720	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	720	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	720	ug/Kg	11/07/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Carbazole	ND	2100	ug/Kg	11/07/07		HM	SW 8270
Chrysene	10000	720	ug/Kg	11/07/07		HM	SW 8270
Di-n-butylphthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Di-n-octylphthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Dibenz(a,h)anthracene	1200	720	ug/Kg	11/07/07		HM	SW 8270
Dibenzofuran	2100	720	ug/Kg	11/07/07		HM	SW 8270
Diethyl phthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Dimethylphthalate	ND	720	ug/Kg	11/07/07		HM	SW 8270
Fluoranthene	21000	7200	ug/Kg	11/07/07		HM	SW 8270
Fluorene	1900	720	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobutadiene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Hexachloroethane	ND	720	ug/Kg	11/07/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	3700	720	ug/Kg	11/07/07		HM	SW 8270
Isophorone	ND	720	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	720	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodimethylamine	ND	720	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	720	ug/Kg	11/07/07		HM	SW 8270
Naphthalene	7700	720	ug/Kg	11/07/07		HM	SW 8270
Nitrobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Pentachloronitrobenzene	ND	720	ug/Kg	11/07/07		HM	SW 8270
Pentachlorophenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
Phenanthrene	16000	7200	ug/Kg	11/07/07		HM	SW 8270
Phenol	ND	720	ug/Kg	11/07/07		HM	SW 8270
Pyrene	20000	7200	ug/Kg	11/07/07		HM	SW 8270
Pyridine	ND	720	ug/Kg	11/07/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	65		%	11/07/07		HM	SW 8270
% 2-Fluorobiphenyl	52		%	11/07/07		HM	SW 8270
% 2-Fluorophenol	51		%	11/07/07		HM	SW 8270
% Nitrobenzene-d5	50		%	11/07/07		HM	SW 8270
% Phenol-d5	53		%	11/07/07		HM	SW 8270
% Terphenyl-d14	48		%	11/07/07		HM	SW 8270

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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

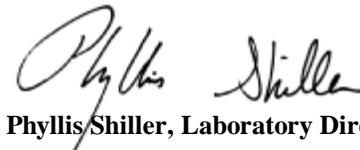
**Comments:**

\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.  
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director  
November 12, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 12, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: PG  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/05/07

13:45

11/06/07

9:37

SDG I.D.: GAJ67896

Phoenix I.D.: AJ67897

## Laboratory Data

Client ID: NG MALDEN S-106

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	3.02	0.373	mg/Kg	11/07/07		EK	SW6010
Arsenic	3.57	0.746	mg/Kg	11/07/07		EK	SW6010
Barium	39.4	0.373	mg/Kg	11/07/07		EK	SW6010
Cadmium	2.99	0.373	mg/Kg	11/07/07		EK	SW6010
Chromium	11.8	0.373	mg/Kg	11/07/07		EK	SW6010
Mercury	0.17	0.12	mg/kg	11/07/07		RS	SW-7471
Lead	77.6	0.373	mg/Kg	11/07/07		EK	SW6010
Selenium	< 1.87	1.87	mg/Kg	11/07/07		EK	SW6010
Percent Solid	87		%	11/06/07		up/TJB	E160.3
Flash Point	>200	200	degree F	11/06/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	11/06/07		CD	SW846 - 1010
Reactivity Cyanide	< 1.0	1.0	mg/Kg	11/06/07		R/G/E	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/06/07		R/G	SW846-7.3
Reactivity	Negative			11/07/07		EG	SW 846-7.3
Total Cyanide	43	0.57	mg/Kg	11/06/07		R/G/E	SW9010/9014
Mercury Digestion	Completed			11/07/07		D	SW7471
Soil Extraction for PCB	Completed			11/06/07		/E/M	SW3545
Soil Ext. for Semi- Vol	Completed			11/06/07		UJP/E/M	SW3545
Total Metals Digest	Completed			11/06/07		AG	SW846 - 3050
Extraction of TPH SM	Completed			11/06/07		UPJ/E/M	3545/3550
Field Extraction	Completed			11/05/07		PG	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	450	ug/Kg	11/07/07	MH	SW 8082
PCB-1221	ND	450	ug/Kg	11/07/07	MH	SW 8082
PCB-1232	ND	450	ug/Kg	11/07/07	MH	SW 8082
PCB-1242	ND	450	ug/Kg	11/07/07	MH	SW 8082
PCB-1248	ND	450	ug/Kg	11/07/07	MH	SW 8082

Client ID: NG MALDEN S-106

Phoenix I.D.: AJ67897

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1254	ND	450	ug/Kg	11/07/07		MH	SW 8082
PCB-1260	ND	450	ug/Kg	11/07/07		MH	SW 8082
PCB-1262	ND	450	ug/Kg	11/07/07		MH	SW 8082
PCB-1268	ND	450	ug/Kg	11/07/07		MH	SW 8082
<u>QA/QC Surrogates</u>							
% DCBP (Surrogate Rec)	66		%	11/07/07		MH	SW 8082
% TCMX (Surrogate Rec)	81		%	11/07/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/07/07		JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	11/07/07		JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/07/07		JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/07/07		JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/07/07		JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	11/07/07		JRB	8100Mod	1
Unidentified	2200	50	mg/kg	11/07/07		JRB	8100Mod	1
<u>QA/QC Surrogates</u>								
% n-Pentacosane	Interference		%	11/07/07		JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1,1-Trichloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1,2-Trichloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1-Dichloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1-Dichloroethene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,1-Dichloropropene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2,3-Trichlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2,3-Trichloropropane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2,4-Trichlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2,4-Trimethylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2-Dichlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2-Dichloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,2-Dichloropropane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,3,5-Trimethylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,3-Dichlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,3-Dichloropropane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
1,4-Dichlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
2,2-Dichloropropane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
2-Chlorotoluene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
2-Hexanone	ND	140000	ug/Kg	11/06/07		R/J	SW8260
2-Isopropyltoluene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
4-Chlorotoluene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
4-Methyl-2-pentanone	ND	140000	ug/Kg	11/06/07		R/J	SW8260
Acetone	ND	560000	ug/Kg	11/06/07		R/J	SW8260
Acrylonitrile	ND	56000	ug/Kg	11/06/07		R/J	SW8260

Client ID: NG MALDEN S-106

Phoenix I.D.: AJ67897

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Bromobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Bromochloromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Bromodichloromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Bromoform	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Bromomethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Carbon Disulfide	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Carbon tetrachloride	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Chlorobenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Chloroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Chloroform	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Chloromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Dibromochloromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Dibromoethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Dibromomethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Dichlorodifluoromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Ethylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Hexachlorobutadiene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Isopropylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
m&p-Xylene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Methyl Ethyl Ketone	ND	330000	ug/Kg	11/06/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Methylene chloride	ND	56000	ug/Kg	11/06/07		R/J	SW8260
n-Butylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
n-Propylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Naphthalene	670000	28000	ug/Kg	11/06/07		R/J	SW8260
o-Xylene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
p-Isopropyltoluene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
sec-Butylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Styrene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
tert-Butylbenzene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Tetrachloroethene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	56000	ug/Kg	11/06/07		R/J	SW8260
Toluene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Total Xylenes	ND	28000	ug/Kg	11/06/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	56000	ug/Kg	11/06/07		R/J	SW8260
Trichloroethene	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Trichlorofluoromethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Trichlorotrifluoroethane	ND	28000	ug/Kg	11/06/07		R/J	SW8260
Vinyl chloride	ND	28000	ug/Kg	11/06/07		R/J	SW8260
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	104		%	11/06/07		R/J	SW8260
% Bromofluorobenzene	91		%	11/06/07		R/J	SW8260

Client ID: NG MALDEN S-106

Phoenix I.D.: AJ67897

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	101		%	11/06/07		R/J	SW8260
% Toluene-d8	99		%	11/06/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
1,2-Dichlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
1,3-Dichlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
1,4-Dichlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,4-Dichlorophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,4-Dimethylphenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrophenol	ND	12000	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrotoluene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2,6-Dinitrotoluene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2-Chloronaphthalene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2-Chlorophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2-Methylnaphthalene	140000	77000	ug/Kg	11/07/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	7700	ug/Kg	11/07/07		HM	SW 8270
2-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
2-Nitrophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	7700	ug/Kg	11/07/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	9200	ug/Kg	11/07/07		HM	SW 8270
3-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	22000	ug/Kg	11/07/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	7700	ug/Kg	11/07/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	9200	ug/Kg	11/07/07		HM	SW 8270
4-Chloroaniline	ND	9200	ug/Kg	11/07/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	7700	ug/Kg	11/07/07		HM	SW 8270
4-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
4-Nitrophenol	ND	22000	ug/Kg	11/07/07		HM	SW 8270
Acenaphthene	33000	7700	ug/Kg	11/07/07		HM	SW 8270
Acenaphthylene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Acetophenone	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Aniline	ND	22000	ug/Kg	11/07/07		HM	SW 8270
Anthracene	15000	7700	ug/Kg	11/07/07		HM	SW 8270
Azobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Benz(a)anthracene	8500	7700	ug/Kg	11/07/07		HM	SW 8270
Benzidine	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Benzo(a)pyrene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Benzo(b)fluoranthene	9400	7700	ug/Kg	11/07/07		HM	SW 8270
Benzo(ghi)perylene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Benzo(k)fluoranthene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Benzoic acid	ND	22000	ug/Kg	11/07/07		HM	SW 8270
Benzyl butyl phthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	7700	ug/Kg	11/07/07		HM	SW 8270

Client ID: NG MALDEN S-106

Phoenix I.D.: AJ67897

Parameter	Result	RL	Units	Date	Time	By	Reference
Bis(2-chloroethyl)ether	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Carbazole	ND	22000	ug/Kg	11/07/07		HM	SW 8270
Chrysene	8100	7700	ug/Kg	11/07/07		HM	SW 8270
Di-n-butylphthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Di-n-octylphthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Dibenzofuran	21000	7700	ug/Kg	11/07/07		HM	SW 8270
Diethyl phthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Dimethylphthalate	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Fluoranthene	21000	7700	ug/Kg	11/07/07		HM	SW 8270
Fluorene	28000	7700	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobutadiene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Hexachloroethane	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Isophorone	ND	7700	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	7700	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodimethylamine	ND	7700	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Naphthalene	780000	77000	ug/Kg	11/07/07		HM	SW 8270
Nitrobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Pentachloronitrobenzene	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Pentachlorophenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Phenanthrene	55000	7700	ug/Kg	11/07/07		HM	SW 8270
Phenol	ND	7700	ug/Kg	11/07/07		HM	SW 8270
Pyrene	17000	7700	ug/Kg	11/07/07		HM	SW 8270
Pyridine	ND	7700	ug/Kg	11/07/07		HM	SW 8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	*Diluted Out		%	11/07/07		HM	SW 8270
% 2-Fluorobiphenyl	*Diluted Out		%	11/07/07		HM	SW 8270
% 2-Fluorophenol	*Diluted Out		%	11/07/07		HM	SW 8270
% Nitrobenzene-d5	*Diluted Out		%	11/07/07		HM	SW 8270
% Phenol-d5	*Diluted Out		%	11/07/07		HM	SW 8270
% Terphenyl-d14	*Diluted Out		%	11/07/07		HM	SW 8270

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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

\* Due to matrix interference in the sample an elevated MDL was reported.

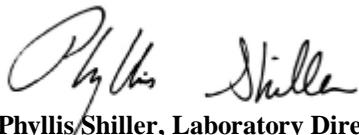
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director  
November 12, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

November 12, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solutions  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

### Custody Information

Collected by: PG  
Received by: LP  
Analyzed by: see "By" below

Date

Time

11/05/07 13:45  
11/06/07 9:37

SDG I.D.: GAJ67896

Phoenix I.D.: AJ67898

## Laboratory Data

Client ID: NG MALDEN S-107

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	11/07/07		EK	SW6010
Arsenic	4.04	0.661	mg/Kg	11/07/07		EK	SW6010
Barium	37.6	0.33	mg/Kg	11/07/07		EK	SW6010
Cadmium	< 0.33	0.33	mg/Kg	11/07/07		EK	SW6010
Chromium	10.1	0.33	mg/Kg	11/07/07		EK	SW6010
Mercury	0.35	0.11	mg/kg	11/07/07		RS	SW-7471
Lead	127	0.33	mg/Kg	11/07/07		EK	SW6010
Selenium	< 1.65	1.65	mg/Kg	11/07/07		EK	SW6010
TCLP Lead	0.634	0.015	mg/L	11/09/07		EK	SW1311/6010
Percent Solid	89		%	11/06/07		UP/TJB	E160.3
Flash Point	> 200	200	degree F	11/07/07		TJB	SW846 - 1010
Ignitability	Passed	140	deg F	11/07/07		TJB	SW846 - 1010
Reactivity Cyanide	< 1.0	1.0	mg/Kg	11/06/07		R/G/E	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	11/06/07		R/G	SW846-7.3
Reactivity	Negative			11/07/07		EG	SW 846-7.3
Total Cyanide	110	5.6	mg/Kg	11/06/07		R/G/E	SW9010/9014
Mercury Digestion	Completed			11/07/07		D	SW7471
Soil Extraction for PCB	Completed			11/06/07		/E/M	SW3545
Soil Ext. for Semi- Vol	Completed			11/06/07		UJP/E/M	SW3545
TCLP Extraction for Metals	Completed			11/08/07		D	EPA 1311
Total Metals Digest	Completed			11/06/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			11/09/07		D	SW846 - 3005
Extraction of TPH SM	Completed			11/06/07		UPJ/E/M	3545/3550
Field Extraction	Completed			11/05/07		PG	SW5035

### Polychlorinated Biphenyls

PCB-1016	ND	440	ug/Kg	11/07/07	MH	SW 8082
PCB-1221	ND	440	ug/Kg	11/07/07	MH	SW 8082

Client ID: NG MALDEN S-107

Phoenix I.D.: AJ67898

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1232	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1242	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1248	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1254	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1260	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1262	ND	440	ug/Kg	11/07/07		MH	SW 8082
PCB-1268	ND	440	ug/Kg	11/07/07		MH	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	92		%	11/07/07		MH	SW 8082
% TCMX (Surrogate Rec)	77		%	11/07/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	11/07/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	11/07/07	JRB	8100Mod	1
Unidentified	2800	50	mg/kg	11/07/07	JRB	8100Mod	1
<b><u>QA/QC Surrogates</u></b>							
% n-Pentacosane	Interference		%	11/07/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1,1-Trichloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1,2,2-Tetrachloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1,2-Trichloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1-Dichloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1-Dichloroethene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,1-Dichloropropene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2,3-Trichlorobenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2,3-Trichloropropane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2,4-Trichlorobenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2,4-Trimethylbenzene	35000	14000	ug/Kg	11/06/07	JH	SW8260
1,2-Dibromo-3-chloropropane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2-Dichlorobenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2-Dichloroethane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,2-Dichloropropane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,3,5-Trimethylbenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,3-Dichlorobenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,3-Dichloropropane	ND	14000	ug/Kg	11/06/07	JH	SW8260
1,4-Dichlorobenzene	ND	14000	ug/Kg	11/06/07	JH	SW8260
2,2-Dichloropropane	ND	14000	ug/Kg	11/06/07	JH	SW8260
2-Chlorotoluene	ND	14000	ug/Kg	11/06/07	JH	SW8260
2-Hexanone	ND	68000	ug/Kg	11/06/07	JH	SW8260
2-Isopropyltoluene	ND	14000	ug/Kg	11/06/07	JH	SW8260
4-Chlorotoluene	ND	14000	ug/Kg	11/06/07	JH	SW8260

Client ID: NG MALDEN S-107

Phoenix I.D.: AJ67898

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	68000	ug/Kg	11/06/07		JH	SW8260
Acetone	ND	270000	ug/Kg	11/06/07		JH	SW8260
Acrylonitrile	ND	27000	ug/Kg	11/06/07		JH	SW8260
Benzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Bromobenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Bromochloromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Bromodichloromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Bromoform	ND	14000	ug/Kg	11/06/07		JH	SW8260
Bromomethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Carbon Disulfide	ND	14000	ug/Kg	11/06/07		JH	SW8260
Carbon tetrachloride	ND	14000	ug/Kg	11/06/07		JH	SW8260
Chlorobenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Chloroethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Chloroform	ND	14000	ug/Kg	11/06/07		JH	SW8260
Chloromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
cis-1,2-Dichloroethene	ND	14000	ug/Kg	11/06/07		JH	SW8260
cis-1,3-Dichloropropene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Dibromochloromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Dibromoethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Dibromomethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Dichlorodifluoromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Ethylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Hexachlorobutadiene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Isopropylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
m&p-Xylene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Methyl Ethyl Ketone	ND	160000	ug/Kg	11/06/07		JH	SW8260
Methyl t-butyl ether (MTBE)	ND	14000	ug/Kg	11/06/07		JH	SW8260
Methylene chloride	ND	27000	ug/Kg	11/06/07		JH	SW8260
n-Butylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
n-Propylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Naphthalene	350000	14000	ug/Kg	11/06/07		JH	SW8260
o-Xylene	ND	14000	ug/Kg	11/06/07		JH	SW8260
p-Isopropyltoluene	ND	14000	ug/Kg	11/06/07		JH	SW8260
sec-Butylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Styrene	ND	14000	ug/Kg	11/06/07		JH	SW8260
tert-Butylbenzene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Tetrachloroethene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Tetrahydrofuran (THF)	ND	27000	ug/Kg	11/06/07		JH	SW8260
Toluene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Total Xylenes	ND	14000	ug/Kg	11/06/07		JH	SW8260
trans-1,2-Dichloroethene	ND	14000	ug/Kg	11/06/07		JH	SW8260
trans-1,3-Dichloropropene	ND	14000	ug/Kg	11/06/07		JH	SW8260
trans-1,4-dichloro-2-butene	ND	27000	ug/Kg	11/06/07		JH	SW8260
Trichloroethene	ND	14000	ug/Kg	11/06/07		JH	SW8260
Trichlorofluoromethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Trichlorotrifluoroethane	ND	14000	ug/Kg	11/06/07		JH	SW8260
Vinyl chloride	ND	14000	ug/Kg	11/06/07		JH	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	100		%	11/06/07		JH	SW8260
% Bromofluorobenzene	92		%	11/06/07		JH	SW8260
% Dibromofluoromethane	101		%	11/06/07		JH	SW8260
% Toluene-d8	100		%	11/06/07		JH	SW8260
<b><u>Semivolatiles</u></b>							
1,2,4,5-Tetrachlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
1,2-Dichlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
1,3-Dichlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
1,4-Dichlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,4-Dichlorophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,4-Dimethylphenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrophenol	ND	12000	ug/Kg	11/07/07		HM	SW 8270
2,4-Dinitrotoluene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2,6-Dinitrotoluene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2-Chloronaphthalene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2-Chlorophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2-Methylnaphthalene	590000	74000	ug/Kg	11/07/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	7400	ug/Kg	11/07/07		HM	SW 8270
2-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
2-Nitrophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	7400	ug/Kg	11/07/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	8800	ug/Kg	11/07/07		HM	SW 8270
3-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	21000	ug/Kg	11/07/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	7400	ug/Kg	11/07/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	8800	ug/Kg	11/07/07		HM	SW 8270
4-Chloroaniline	ND	8800	ug/Kg	11/07/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	7400	ug/Kg	11/07/07		HM	SW 8270
4-Nitroaniline	ND	12000	ug/Kg	11/07/07		HM	SW 8270
4-Nitrophenol	ND	21000	ug/Kg	11/07/07		HM	SW 8270
Acenaphthene	78000	7400	ug/Kg	11/07/07		HM	SW 8270
Acenaphthylene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Acetophenone	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Aniline	ND	21000	ug/Kg	11/07/07		HM	SW 8270
Anthracene	26000	7400	ug/Kg	11/07/07		HM	SW 8270
Azobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Benz(a)anthracene	28000	7400	ug/Kg	11/07/07		HM	SW 8270
Benzidine	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Benzo(a)pyrene	22000	7400	ug/Kg	11/07/07		HM	SW 8270
Benzo(b)fluoranthene	29000	7400	ug/Kg	11/07/07		HM	SW 8270
Benzo(ghi)perylene	8700	7400	ug/Kg	11/07/07		HM	SW 8270
Benzo(k)fluoranthene	11000	7400	ug/Kg	11/07/07		HM	SW 8270

Client ID: NG MALDEN S-107

Phoenix I.D.: AJ67898

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzoic acid	ND	21000	ug/Kg	11/07/07		HM	SW 8270
Benzyl butyl phthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Carbazole	ND	21000	ug/Kg	11/07/07		HM	SW 8270
Chrysene	28000	7400	ug/Kg	11/07/07		HM	SW 8270
Di-n-butylphthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Di-n-octylphthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Dibenzofuran	75000	7400	ug/Kg	11/07/07		HM	SW 8270
Diethyl phthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Dimethylphthalate	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Fluoranthene	68000	7400	ug/Kg	11/07/07		HM	SW 8270
Fluorene	37000	7400	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Hexachlorobutadiene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Hexachloroethane	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	8900	7400	ug/Kg	11/07/07		HM	SW 8270
Isophorone	ND	7400	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	7400	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodimethylamine	ND	7400	ug/Kg	11/07/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Naphthalene	330000	74000	ug/Kg	11/07/07		HM	SW 8270
Nitrobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Pentachloronitrobenzene	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Pentachlorophenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Phenanthrene	130000	74000	ug/Kg	11/07/07		HM	SW 8270
Phenol	ND	7400	ug/Kg	11/07/07		HM	SW 8270
Pyrene	84000	7400	ug/Kg	11/07/07		HM	SW 8270
Pyridine	ND	7400	ug/Kg	11/07/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	*Diluted Out		%	11/07/07		HM	SW 8270
% 2-Fluorobiphenyl	*Diluted Out		%	11/07/07		HM	SW 8270
% 2-Fluorophenol	*Diluted Out		%	11/07/07		HM	SW 8270
% Nitrobenzene-d5	*Diluted Out		%	11/07/07		HM	SW 8270
% Phenol-d5	*Diluted Out		%	11/07/07		HM	SW 8270
% Terphenyl-d14	*Diluted Out		%	11/07/07		HM	SW 8270

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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

\* Due to matrix interference in the sample an elevated MDL was reported.

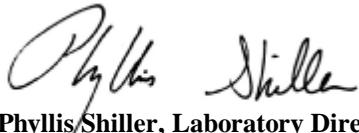
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide and Reactive Sulfide.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director  
November 12, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

November 12, 2007

### QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 87876, Sample No: AJ66280 (AJ67896, AJ67898)								
<u>ICP Metals - Aqueous Extraction</u>								
Arsenic	BDL	NC	106	109	2.8	106	104	1.9
Barium	BDL	BDL	96.8	98.0	1.2	97.2	97.0	0.2
Cadmium	BDL	NC	87.6	89.2	1.8	86.4	87.1	0.8
Chromium	BDL	NC	94.8	96.5	1.8	94.5	93.1	1.5
Copper	BDL	1.20	110	112	1.8	125	125	0.0
Lead	BDL	NC	88.8	90.3	1.7	89.8	88.9	1.0
Nickel	BDL	BDL	88.2	90.2	2.2	88.6	87.5	1.2
Selenium	0.02	NC	115	118	2.6	113	112	0.9
Silver	BDL	NC	110	112	1.8	109	107	1.9
Zinc	BDL	BDL	98.1	99.8	1.7	98.2	96.7	1.5
QA/QC Batch 87790, Sample No: AJ67546 (AJ67896, AJ67897, AJ67898)								
Mercury	BDL	NC	103	97.3	5.7	108	97.6	10.1
QA/QC Batch 87646, Sample No: AJ67603 (AJ67898)								
<u>ICP Metals - Soil</u>								
Aluminum	BDL	4.00	---	---	NC	NC	NC	NC
Antimony	BDL	NC	99.2	100	0.8	46.3	44.4	4.2
Arsenic	BDL	NC	98.3	99.3	1.0	70.1	69.7	0.6
Barium	BDL	5.30	105	104	1.0	60.7	61.9	2.0
Beryllium	BDL	NC	102	105	2.9	67.3	65.0	3.5
Boron	BDL	NC	99.8	102	2.2	68.5	67.7	1.2
Cadmium	BDL	NC	99.3	101	1.7	62.9	62.1	1.3
Calcium	BDL	9.30	---	---	NC	NC	NC	NC
Chromium	BDL	5.20	103	103	0.0	65.8	64.2	2.5
Cobalt	BDL	6.00	102	105	2.9	64.4	64.1	0.5
Copper	BDL	10.3	105	107	1.9	78.4	78.8	0.5
Iron	BDL	3.80	---	---	NC	NC	NC	NC
Lead	BDL	NC	101	102	1.0	64.6	63.6	1.6
Magnesium	BDL	6.30	116	116	0.0	NC	NC	NC
Manganese	BDL	5.00	106	107	0.9	65.2	64.1	1.7
Molybdenum	BDL	NC	103	105	1.9	65.8	64.3	2.3
Nickel	BDL	8.30	103	104	1.0	63.4	62.9	0.8
Phosphorus	2.01	5.90	99.6	103	3.4	64.4	67.2	4.3
Potassium	BDL	1.80	110	113	2.7	49.9	47.3	5.3
Selenium	BDL	NC	88.1	88.9	0.9	63.7	62.9	1.3
Silver	BDL	NC	100	102	2.0	93.3	94.9	1.7
Sodium	BDL	11.6	103	104	1.0	NC	NC	NC

## QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
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Thallium	BDL	NC	99.2	100	0.8	62.0	61.5	0.8
Tin	BDL	NC	99.3	99.9	0.6	63.3	62.1	1.9
Vanadium	BDL	3.70	105	106	0.9	66.9	67.3	0.6
Zinc	BDL	7.60	98.4	99.8	1.4	68.1	70.9	4.0

Comment:

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

QA/QC Batch 87645, Sample No: AJ67634 (AJ67896, AJ67897)

### ICP Metals - Soil

Aluminum	BDL	NC	---	---	NC	NC	NC	NC
Antimony	BDL	NC	97.2	101	3.8	73.6	71.5	2.9
Arsenic	BDL	NC	96.5	99.1	2.7	79.7	78.1	2.0
Barium	BDL	NC	102	105	2.9	105	78.0	29.5
Beryllium	BDL	NC	102	107	4.8	84.1	81.2	3.5
Boron	BDL	NC	97.9	103	5.1	82.6	81.9	0.9
Cadmium	BDL	NC	98.6	106	7.2	81.3	78.2	3.9
Calcium	1.68	NC	---	---	NC	NC	NC	NC
Chromium	BDL	NC	100	107	6.8	78.1	76.1	2.6
Cobalt	BDL	32.1	100	107	6.8	82.1	79.4	3.3
Copper	BDL	NC	102	105	2.9	92.7	78.0	17.2
Iron	BDL	NC	---	---	NC	NC	NC	NC
Lead	BDL	NC	98.8	105	6.1	81.4	62.5	26.3
Magnesium	BDL	4.60	113	113	0.0	NC	NC	NC
Manganese	BDL	NC	103	110	6.6	NC	NC	NC
Molybdenum	BDL	NC	100	107	6.8	82.7	80.5	2.7
Nickel	BDL	5.40	101	107	5.8	82.4	81.0	1.7
Phosphorus	1.32	13.1	97.9	101	3.1	74.4	73.2	1.6
Potassium	BDL	33.3	104	94.2	9.9	NC	NC	NC
Selenium	BDL	NC	86.2	88.3	2.4	71.4	72.0	0.8
Silver	BDL	NC	97.4	103	5.6	83.9	82.4	1.8
Sodium	BDL	NC	96.3	85.0	12.5	NC	NC	NC
Thallium	BDL	NC	96.5	102	5.5	79.1	77.5	2.0
Tin	BDL	NC	95.5	98.6	3.2	78.0	70.0	10.8
Vanadium	BDL	NC	103	107	3.8	73.6	71.6	2.8
Zinc	BDL	NC	96.0	102	6.1	55.2	NC	NC

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director  
November 12, 2007



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

November 12, 2007

### QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	Dup	LCS	LCSD	LCS	MS	MS Dup	
		RPD	%	%	RPD	Rec %	Rec %	RPD
QA/QC Batch 87802, Sample No: AJ67503 (AJ67898)								
Flash Point		NC	79					
QA/QC Batch 87815, Sample No: AJ67889 (AJ67896, AJ67897, AJ67898)								
Total Cyanide	BDL	NC	100.2			86.5		
QA/QC Batch 87807, Sample No: AJ67896 (AJ67896, AJ67897, AJ67898)								
Reactivity Cyanide	BDL	NC	93.3					
QA/QC Batch 87787, Sample No: AJ67896 (AJ67896, AJ67897, AJ67898)								
Reactivity Sulfide	BDL	NC						
QA/QC Batch 87783, Sample No: AJ67897 (AJ67896, AJ67897)								
Flash Point		NC	Passed					

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

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MS Dup - Matrix Spike Duplicate

NC - No Criteria

Phyllis Shiller, Laboratory Director

November 12, 2007



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# QA/QC Report

November 12, 2007

### QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 87638, Sample No: AJ67603 (AJ67896, AJ67897, AJ67898)							
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	87	95	8.8	102	89	13.6
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	77	87	12.2	106	93	13.1
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	78	93	105	12.1	101	92	9.3
% TCMX (Surrogate Rec)	100	91	102	11.4	104	93	11.2
QA/QC Batch 87640, Sample No: AJ67603 (AJ67896, AJ67897, AJ67898)							
<u>Semivolatiles</u>							
1,2,4,5-Tetrachlorobenzene	ND	68	63	7.6	77	78	1.3
1,2,4-Trichlorobenzene	ND	67	67	0.0	78	78	0.0
1,2-Dichlorobenzene	ND	65	64	1.6	71	66	7.3
1,3-Dichlorobenzene	ND	62	63	1.6	70	64	9.0
1,4-Dichlorobenzene	ND	63	62	1.6	68	63	7.6
2,4,5-Trichlorophenol	ND	83	78	6.2	N/A	N/A	NC
2,4,6-Trichlorophenol	ND	80	74	7.8	N/A	N/A	NC
2,4-Dichlorophenol	ND	70	73	4.2	N/A	N/A	NC
2,4-Dimethylphenol	ND	53	54	1.9	43	<30	NC
2,4-Dinitrophenol	ND	<30	<30	NC	N/A	N/A	NC
2,4-Dinitrotoluene	ND	85	82	3.6	95	87	8.8
2,6-Dinitrotoluene	ND	87	78	10.9	95	83	13.5
2-Chloronaphthalene	ND	80	74	7.8	92	83	10.3
2-Chlorophenol	ND	65	67	3.0	N/A	N/A	NC
2-Methylnaphthalene	ND	68	74	8.5	80	83	3.7
2-Methylphenol (o-cresol)	ND	67	65	3.0	40	N/A	NC
2-Nitroaniline	ND	95	82	14.7	>130	127	NC
2-Nitrophenol	ND	69	68	1.5	N/A	N/A	NC
3&4-Methylphenol (m&p-cresol)	ND	72	68	5.7	<30	N/A	NC
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC
3-Nitroaniline	ND	129	128	0.8	>130	>130	NC
4,6-Dinitro-2-methylphenol	ND	56	57	1.8	N/A	N/A	NC
4-Bromophenyl phenyl ether	ND	84	81	3.6	91	83	9.2
4-Chloro-3-methylphenol	ND	74	75	1.3	N/A	N/A	NC

## QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
4-Chloroaniline	ND	101	96	5.1	112	108	3.6
4-Chlorophenyl phenyl ether	ND	84	74	12.7	88	85	3.5
4-Nitroaniline	ND	84	78	7.4	98	88	10.8
4-Nitrophenol	ND	91	81	11.6	<30	<30	NC
Acenaphthene	ND	76	74	2.7	88	81	8.3
Acenaphthylene	ND	76	72	5.4	88	80	9.5
Acetophenone	ND	69	67	2.9	76	66	14.1
Aniline	ND	N/A	N/A	NC	N/A	N/A	NC
Anthracene	ND	78	85	8.6	88	80	9.5
Azobenzene	ND	81	77	5.1	92	84	9.1
Benz(a)anthracene	ND	81	81	0.0	94	88	6.6
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC
Benzo(a)pyrene	ND	78	81	3.8	92	85	7.9
Benzo(b)fluoranthene	ND	78	82	5.0	90	85	5.7
Benzo(ghi)perylene	ND	82	79	3.7	89	82	8.2
Benzo(k)fluoranthene	ND	84	80	4.9	92	86	6.7
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC
Benzyl butyl phthalate	ND	89	87	2.3	97	95	2.1
Bis(2-chloroethoxy)methane	ND	62	60	3.3	72	69	4.3
Bis(2-chloroethyl)ether	ND	68	70	2.9	81	72	11.8
Bis(2-chloroisopropyl)ether	ND	65	66	1.5	75	67	11.3
Bis(2-ethylhexyl)phthalate	ND	87	89	2.3	>130	>130	NC
Carbazole	ND	80	90	11.8	115	103	11.0
Chrysene	ND	83	80	3.7	95	89	6.5
Di-n-butylphthalate	ND	80	87	8.4	88	84	4.7
Di-n-octylphthalate	ND	87	88	1.1	100	100	0.0
Dibenz(a,h)anthracene	ND	80	82	2.5	90	84	6.9
Dibenzofuran	ND	79	75	5.2	90	84	6.9
Diethyl phthalate	ND	90	83	8.1	93	89	4.4
Dimethylphthalate	ND	88	81	8.3	90	92	2.2
Fluoranthene	ND	80	89	10.7	97	92	5.3
Fluorene	ND	81	74	9.0	90	84	6.9
Hexachlorobenzene	ND	78	88	12.0	91	83	9.2
Hexachlorobutadiene	ND	73	78	6.6	84	82	2.4
Hexachlorocyclopentadiene	ND	62	58	6.7	46	54	16.0
Hexachloroethane	ND	67	65	3.0	74	67	9.9
Indeno(1,2,3-cd)pyrene	ND	81	81	0.0	90	85	5.7
Isophorone	ND	80	79	1.3	87	83	4.7
N-Nitrosodi-n-propylamine	ND	77	77	0.0	83	75	10.1
N-Nitrosodimethylamine	ND	64	68	6.1	71	56	23.6
N-Nitrosodiphenylamine	ND	92	91	1.1	106	93	13.1
Naphthalene	ND	68	67	1.5	77	74	4.0
Nitrobenzene	ND	72	70	2.8	82	70	15.8
Pentachloronitrobenzene	ND	79	83	4.9	88	83	5.8
Pentachlorophenol	ND	68	68	0.0	N/A	N/A	NC
Phenanthrene	ND	73	81	10.4	89	84	5.8
Phenol	ND	72	71	1.4	<30	<30	NC
Pyrene	ND	78	86	9.8	89	86	3.4
Pyridine	ND	55	55	0.0	58	51	12.8

## QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
% 2,4,6-Tribromophenol	83	83	92	10.3	*NR	*NR	NC
% 2-Fluorobiphenyl	63	71	68	4.3	80	71	11.9
% 2-Fluorophenol	61	63	64	1.6			
% Nitrobenzene-d5	62	70	66	5.9	71	69	2.9
% Phenol-d5	64	70	68	2.9			
% Terphenyl-d14	78	75	79	5.2	85	79	7.3
QA/QC Batch 87810, Sample No: AJ67926 (aj67896, aj67897, aj67898)							
<b>Volatiles</b>							
1,1,1,2-Tetrachloroethane	ND	95	102	7.1	87	96	9.8
1,1,1-Trichloroethane	ND	88	92	4.4	85	90	5.7
1,1,2,2-Tetrachloroethane	ND	93	96	3.2	83	89	7.0
1,1,2-Trichloroethane	ND	93	96	3.2	87	91	4.5
1,1-Dichloroethane	ND	91	94	3.2	87	91	4.5
1,1-Dichloroethene	ND	85	88	3.5	85	90	5.7
1,1-Dichloropropene	ND	92	98	6.3	91	99	8.4
1,2,3-Trichlorobenzene	ND	109	119	8.8	79	93	16.3
1,2,3-Trichloropropane	ND	104	108	3.8	82	86	4.8
1,2,4-Trichlorobenzene	ND	109	121	10.4	85	93	9.0
1,2,4-Trimethylbenzene	ND	99	108	8.7	90	99	9.5
1,2-Dibromo-3-chloropropane	ND	109	103	5.7	76	83	8.8
1,2-Dichlorobenzene	ND	96	104	8.0	84	91	8.0
1,2-Dichloroethane	ND	90	93	3.3	83	88	5.8
1,2-Dichloropropane	ND	92	99	7.3	87	98	11.9
1,3,5-Trimethylbenzene	ND	98	107	8.8	90	99	9.5
1,3-Dichlorobenzene	ND	102	108	5.7	86	94	8.9
1,3-Dichloropropane	ND	95	102	7.1	89	96	7.6
1,4-Dichlorobenzene	ND	101	110	8.5	88	92	4.4
2,2-Dichloropropane	ND	92	94	2.2	85	90	5.7
2-Chlorotoluene	ND	100	108	7.7	88	98	10.8
2-Hexanone	ND	>130	>130	NC	117	116	0.9
2-Isopropyltoluene	ND	100	111	10.4	89	100	11.6
4-Chlorotoluene	ND	98	110	11.5	88	95	7.7
4-Methyl-2-pentanone	ND	108	105	2.8	87	92	5.6
Acetone	ND	111	109	1.8	84	84	0.0
Acrolein	ND	102	103	1.0	86	90	4.5
Acrylonitrile	ND	106	102	3.8	90	91	1.1
Benzene	ND	96	101	5.1	89	97	8.6
Bromobenzene	ND	95	104	9.0	87	94	7.7
Bromochloromethane	ND	95	97	2.1	88	96	8.7
Bromodichloromethane	ND	93	95	2.1	84	91	8.0
Bromoform	ND	99	105	5.9	87	91	4.5
Bromomethane	ND	74	73	1.4	62	85	31.3
Carbon Disulfide	ND	95	99	4.1	85	91	6.8
Carbon tetrachloride	ND	88	92	4.4	81	89	9.4
Chlorobenzene	ND	96	106	9.9	90	96	6.5
Chloroethane	ND	94	101	7.2	84	94	11.2
Chloroform	ND	93	96	3.2	87	91	4.5
Chloromethane	ND	101	115	13.0	84	88	4.7

## QA/QC Data

SDG I.D.: GAJ67896

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
cis-1,2-Dichloroethene	ND	95	100	5.1	91	96	5.3
cis-1,3-Dichloropropene	ND	95	99	4.1	89	96	7.6
Dibromochloromethane	ND	97	102	5.0	86	95	9.9
Dibromoethane	ND	94	96	2.1	86	92	6.7
Dibromomethane	ND	91	92	1.1	83	88	5.8
Dichlorodifluoromethane	ND	125	>130	NC	72	74	2.7
Ethylbenzene	ND	95	107	11.9	91	99	8.4
Hexachlorobutadiene	ND	91	102	11.4	77	87	12.2
Isopropylbenzene	ND	107	118	9.8	94	105	11.1
m&p-Xylene	ND	98	109	10.6	92	104	12.2
Methyl ethyl ketone	ND	123	116	5.9	85	83	2.4
Methyl t-butyl ether (MTBE)	ND	88	79	10.8	63	79	22.5
Methylene chloride	ND	76	80	5.1	86	88	2.3
n-Butylbenzene	ND	101	111	9.4	86	98	13.0
n-Propylbenzene	ND	101	109	7.6	91	103	12.4
Naphthalene	ND	102	106	3.8	75	85	12.5
o-Xylene	ND	96	107	10.8	92	103	11.3
p-Isopropyltoluene	ND	104	114	9.2	91	101	10.4
sec-Butylbenzene	ND	90	100	10.5	88	99	11.8
Styrene	ND	100	108	7.7	94	102	8.2
tert-Butylbenzene	ND	98	108	9.7	91	100	9.4
Tetrachloroethene	ND	94	105	11.1	88	101	13.8
Tetrahydrofuran (THF)	ND	112	110	1.8	96	94	2.1
Toluene	ND	94	97	3.1	87	96	9.8
trans-1,2-Dichloroethene	ND	88	90	2.2	84	89	5.8
trans-1,3-Dichloropropene	ND	98	99	1.0	86	92	6.7
trans-1,4-dichloro-2-butene	ND	114	116	1.7	90	95	5.4
Trichloroethene	ND	92	98	6.3	89	98	9.6
Trichlorofluoromethane	ND	83	85	2.4	79	84	6.1
Trichlorotrifluoroethane	ND	92	98	6.3	83	91	9.2
Vinyl chloride	ND	94	103	9.1	84	90	6.9
% 1,2-dichlorobenzene-d4	105	98	100	2.0	98	98	0.0
% Bromofluorobenzene	92	99	101	2.0	99	102	3.0
% Dibromofluoromethane	107	97	91	6.4	104	99	4.9
% Toluene-d8	96	101	98	3.0	98	99	1.0

QA/QC Batch 87719, Sample No: AJ68237 (AJ67896, AJ67897, AJ67898)

## TPH by GC (Extractable Products)

Aviation Fuel/Kerosene	ND						
Fuel Oil #2/ Diesel Fuel	ND	71	84	16.8	85	82	3.6
Fuel Oil #4	ND						
Fuel Oil #6	ND						
Motor Oil	ND						
Other Oil (Cutting & Lubricating)	ND						
Unidentified	ND						

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If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

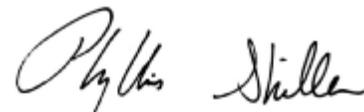
LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

November 12, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. Project #:

Project Location: NG MALDEN MADEP RTN1:

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

AJ67896, AJ67897, AJ67898

Sample Matrices:	<input type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Soil/Sediment	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Other:	
MCP SW-846 Methods Used	<input checked="" type="checkbox"/> 8260B	<input type="checkbox"/> 8151A	<input type="checkbox"/> 8330	<input checked="" type="checkbox"/> 6010B	<input checked="" type="checkbox"/> 7470A/1A
	<input checked="" type="checkbox"/> 8270C	<input type="checkbox"/> 8081A	<input type="checkbox"/> VPH	<input type="checkbox"/> 6020	<input type="checkbox"/> 9014M2
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	<input checked="" type="checkbox"/> 8062	<input type="checkbox"/> 8021B	<input type="checkbox"/> EPH	<input type="checkbox"/> 7000S3	<input type="checkbox"/> 7196A
1 List Release Tracking Number (RTN), if known 2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Metho 3 S - SW-846 Methods 7000 Series List individual method and analyte					

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

- |   |   |   |
|---|---|---|
| A | Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| B | Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| C | Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| D | VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)  | <input type="checkbox"/> Yes <input type="checkbox"/> No            |

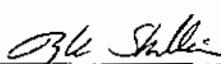
A response to questions E and F below is required for "Presumptive Certainty" status

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

All negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized

Signature: 

Date: Monday, November 12, 2007

Printed Name: Kathleen Cressia

Position: QA/QC Officer

Printed Name: Phyllis Shiller

Position: Laboratory Director



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823



## MCP Certification Report

November 12, 2007

SDG I.D.: GAJ67896

---

### ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Icp7 11/08/07-1 (AJ67896, AJ67898)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

**Printed Name** Emily Kolominskaya

**Position:** Chemist

**Date:** 11/8/2007

**QC Comments:** QC Batch 87646 11/05/07 (AJ67898)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### PCB Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Au-ecl1 11/07/07-1 (AJ67896, AJ67897, AJ67898)

8082 Narration:

The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

**Printed Name** Michael Hahn

**Position:** Chemist

**Date:** 11/7/2007



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## MCP Certification Report

November 12, 2007

SDG I.D.: GAJ67896

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SVOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Chem04 11/07/07-1 (AJ67896, AJ67897, AJ67898)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem04/82701102):

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: 3-nitroaniline, 2-nitroaniline

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: 4-Chloroaniline, 2,4-Dinitrophenol, Carbazole

Printed Name Keith Aloisa  
Position: Chemist  
Date: 11/7/2007

**Instrument:** Chem09 11/07/07-1 (AJ67897)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/82701106):

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: 3-nitroaniline

Continuing Calibration:

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: 4-Nitrophenol

Printed Name Harry Mullin  
Position: Chemist  
Date: 11/7/2007



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## MCP Certification Report

November 12, 2007

SDG I.D.: GAJ67896

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Chem01 11/06/07-1 (AJ67896, AJ67897, AJ67898)

Initial Calibration Verification (CHEM01/RCP\_110507):

All SPCCs, CCCs and >80% of target compounds met criteria.

The following compounds had %RSDs >30%: None

Continuing Calibration Verification:

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.

The following compounds had % Deviations >30%: Bromomethane, Tetrahydrofuran (THF)

**Printed Name:** Johanna Harrington

**Position:** Chemist

**Date:** 11/6/2007

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: None.

All MSD recoveries were within 70 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SDG Comments

8260 Volatile Organics:

The following compounds from the MCP 8260 analyte list were not performed: TAME, diethyl ether, diisopropyl ether, 1,4 dioxane, and ETBE. The client supplied high level vials only, not all MCP reporting standards are met.



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## MCP Certification Report

November 12, 2007

SDG I.D.: GAJ67896

# PHOENIX

*Environmental Laboratories, Inc.*

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Email: service@phoenixlabs.com Fax (860) 645-0823

## CHAIN OF CUSTODY RECORD

Customer: Industrial Engineering Solutions

Address: 25 Spring St.

Walpole, MA 02081

Client Services (860) 645-8726

Project: AGM Maelor

Report to: M. Lotti, Phoenixonline.com

Invoice to: Vicki Peary

Temp Pg of

Data Delivery:

Fax #: 508-668-2033

Email: M.Lotti@phoenixonline.com

Project P.O.: AGM Maelor T-7

Phone #: 508-668-2033

Fax #:

PL H2SO4 125ml 150ml 1100ml

PL NaOH 250ml 150ml 1100ml

PL HNO3 250ml 150ml 1100ml

PL HCl 250ml 150ml 1100ml

GL Ammonium Hydroxide 100ml 125ml 150ml 1100ml

GL VODA Vial 145ml 1AS15 1HCl 162

GL Soil container (S) 15ml 15ml 15ml 15ml

Analysis Request

Date: 11/5/07

Sample Matrix: WW=water; S=soil/solid; O=other; A=air

Matrix Code: DW=drinking water; GW=groundwater; SL=sludge

Customer Sample Identification

Comments, Special Requirements or Regulations:

Project Manager Mike Lotti

Analyst John Feltz

Church

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Comments, Special Requirements or Regulations:

Project Manager Mike Lotti

Analyst John Feltz

Church

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Wednesday, October 31, 2007

Attn: Mr. Mike Lotti  
Innovative Engineering Solution  
25 Spring St  
Walpole, MA 02081

Client ID: NG MALDEN T5  
Sample ID#s: AJ58572 - AJ58576

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

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody as received by the laboratory.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller  
Laboratory Director

CT Lab Registration #PH-0618  
MA Lab Registration #MA-CT-007  
NY Lab Registration #11301  
RI Lab Registration #63  
NH Lab Registration #213693-A,B  
ME Lab Registration #CT-007  
NJ Lab Registration #CT-003  
PA Lab Registration #68-03530



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 845-1102 Fax (860) 845-0823



## Analysis Report

November 01, 2007

FOR: Attn: Mr. Mike Lotti  
 Innovative Engineering Solution  
 25 Spring St  
 Walpole, MA 02081

### Sample Information

Matrix: SOIL  
 Location Code: IES  
 Rush Request: RUSH#  
 P.O.#: NGMALDEN

### Custody Information

Collected by:  
 Received by: LP  
 Analyzed by: see "By" below

Date

Time

10/04/07 13:50  
 10/05/07 9:40

SDG I.D.: GAJ58572

Phoenix I.D.: AJ58572

## Laboratory Data

Client ID: NG MALDEN T5 5-100

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.377	0.377	mg/Kg	10/12/07		A/E	SW6010
Arsenic	6.73	0.753	mg/Kg	10/12/07		A/E	SW6010
Barium	91.3	0.377	mg/Kg	10/12/07		A/E	SW6010
Cadmium	< 0.377	0.377	mg/Kg	10/12/07		A/E	SW6010
Chromium	13	0.377	mg/Kg	10/12/07		A/E	SW6010
Mercury	0.77	0.60	mg/kg	10/12/07		RS	SW-7471
Lead	285	3.77	mg/Kg	10/13/07		EKT	SW6010
Selenium	< 1.88	1.88	mg/Kg	10/12/07		A/E	SW6010
TCLP Lead	0.141	0.015	mg/L	10/18/07		EK	SW1311/8010
Percent Solid	84		%	10/11/07		s/TJ	E160.3
Flash Point	>200	200	degree F	10/11/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	10/11/07		CD	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	10/12/07		GD	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	10/11/07		GD	SW846-7.3
Reactivity	Negative			10/11/07		GD	SW 846-7.3
Total Cyanide	600	30	mg/Kg	10/17/07		E/G	SW9010/9014
Mercury Digestion	Completed			10/12/07		D	SW7471
Soil Extraction for PCB	Completed			10/11/07		SP/E	SW3545
Soil Ext. for Semi- Vol	Completed			10/11/07		SP/E	SW3545
TCLP Extraction for Metals	Completed			10/17/07		D	EPA 1311
Total Metals Digest	Completed			10/11/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			10/18/07		D	SW846 - 3005
Extraction of TPH SM	Completed			10/11/07		SP/E	3545/3550
Field Extraction	Completed			10/04/07		IES	SW5085
Physiologically Available Cyanide	35	6.4	mg/kg	10/17/07		***	MADEP
<b>Polychlorinated Biphenyls</b>							
PCB-1016	ND	490	ug/Kg	10/15/07		KCA	SW 8082

Client ID: NG MALDEN T5 5-100

Phoenix I.D.: AJ58572

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1221	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1232	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1242	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1248	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1254	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1260	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1262	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1268	ND	490	ug/Kg	10/15/07		KCA	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	64		%	10/15/07		KCA	SW 8082
% TCMX (Surrogate Rec)	55		%	10/15/07		KCA	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	10/12/07	JRB	8100Mod	1
Unidentified	3200	50	mg/kg	10/12/07	JRB	8100Mod	1

**QA/QC Surrogates**

% n-Pentacosane	Interference		%	10/12/07	JRB	8100Mod	1
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**Volatiles**

1,1,1,2-Tetrachloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1,1-Triehloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1,2,2-Tetrachloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1,2-Trichloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1-Dichloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1-Dichloroethene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,1-Dichloropropene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2,3-Triehlorobenzene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2,3-Trichloropropane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2,4-Trichlorobenzene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2,4-Trimethylbenzene	18000	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2-Dibromo-3-chloropropane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2-Dichlorobenzene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2-Dichloroethane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,2-Dichloropropane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,3,5-Trimethylbenzene	6500	4700	ug/Kg	10/11/07	R/J	SW8260	
1,3-Dichlorobenzene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,3-Dichloropropane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
1,4-Dichlorobenzene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
2,2-Dichloropropane	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
2-Chlorotoluene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	
2-Hexanone	ND	24000	ug/Kg	10/11/07	R/J	SW8260	
2-Isopropyltoluene	ND	4700	ug/Kg	10/11/07	R/J	SW8260	

Client ID: NG MALDEN T5 5-100

Phoenix I.D.: AJ58572

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Chlorotoluene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
4-Methyl-2-pentanone	ND	24000	ug/Kg	10/11/07		R/J	SW8260
Acetone	ND	94000	ug/Kg	10/11/07		R/J	SW8260
Acrylonitrile	ND	9400	ug/Kg	10/11/07		R/J	SW8260
Benzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Bromobenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Bromoform	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Bromomethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Carbon Disulfide	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Carhon tetrachloride	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Chlorobenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Chloroethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Chloroform	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Chloromethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
cis-1,2-Diehloroethene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
eis-1,3-Dichloropropene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Dibromochloromethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Dibromoethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Dibromomethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Dichlorodifluoromethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Ethylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Hexachlorohutadiene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Isopropylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
m&p-Xylene	8000	4700	ug/Kg	10/11/07		R/J	SW8260
Methyl Ethyl Ketone	ND	57000	ug/Kg	10/11/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Methylene chloride	ND	9400	ug/Kg	10/11/07		R/J	SW8260
n-Butylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
n-Propylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Naphthalene	280000	24000	ug/Kg	10/11/07		R/J	SW8260
o-Xylene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
p-Isopropyltoluene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
sec-Butylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Styrene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
tert-Butylbenzene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Tetrachloroethene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	9400	ug/Kg	10/11/07		R/J	SW8260
Toluene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Total Xylenes	8000	4700	ug/Kg	10/11/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	9400	ug/Kg	10/11/07		R/J	SW8260
Trichloroethene	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Trichlorofluoromethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260
Trichlorotrifluoroethane	ND	4700	ug/Kg	10/11/07		R/J	SW8260

Client ID: NG MALDEN T5 5-100

Phoenix I.D.: AJ58572

Parameter	Result	RL	Units	Date	Time	By	Reference
Vinyl chloride	ND	4700	ug/Kg	10/11/07		R/J	SW8260
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	94		%	10/11/07		R/J	SW8260
% Bromofluorobenzene	103		%	10/11/07		R/J	SW8260
% Dibromofluoromethane	100		%	10/11/07		R/J	SW8260
% Toluene-d8	98		%	10/11/07		R/J	SW8260
<u>Semivolatiles</u>							
1,2,4,5-Tetraehlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,2-Diehlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,3-Dichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,4-Dichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4,6-Triehlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dichlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dimethylphenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrophenol	ND	3100	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrotoluene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,6-Dinitrotoluene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Chloronaphthalene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Chlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Methylnaphthalene	54000	19000	ug/Kg	10/12/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
2-Nitrophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	2100	1900	ug/Kg	10/12/07		HM	SW 8270
3,3'-Dichlorohenzidine	ND	2300	ug/Kg	10/12/07		HM	SW 8270
3-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	5600	ug/Kg	10/12/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chloroaniline	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
4-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
4-Nitrophenol	ND	5600	ug/Kg	10/12/07		HM	SW 8270
Acenaphthene	14000	1900	ug/Kg	10/12/07		HM	SW 8270
Acenaphthylene	9600	1900	ug/Kg	10/12/07		HM	SW 8270
Acetophenone	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Aniline	ND	5600	ug/Kg	10/12/07		HM	SW 8270
Anthracene	32000	1900	ug/Kg	10/12/07		HM	SW 8270
Azohenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Benz(a)anthracene	42000	19000	ug/Kg	10/12/07		HM	SW 8270
Benzidine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Benzo(a)pyrene	25000	19000	ug/Kg	10/12/07		HM	SW 8270
Benzo(b)fluoranthene	60000	19000	ug/Kg	10/12/07		HM	SW 8270
Benzo(ghi)perylene	13000	1900	ug/Kg	10/12/07		HM	SW 8270

Client ID: NG MALDEN T5 5-100

Phoenix I.D.: AJ58572

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(k)fluoranthene	27000	19000	ug/Kg	10/12/07		HM	SW 8270
Benzoic acid	ND	5600	ug/Kg	10/12/07		HM	SW 8270
Benzyl butyl phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-cthylhexyl)phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Carbazole	17000	5600	ug/Kg	10/12/07		HM	SW 8270
Chrysene	42000	19000	ug/Kg	10/12/07		HM	SW 8270
Di-n-hutylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Di-n-octylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Dibenz(a,h)anthracene	4300	1900	ug/Kg	10/12/07		HM	SW 8270
Dibenzofuran	17000	1900	ug/Kg	10/12/07		HM	SW 8270
Diethyl phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Dimethylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Fluoranthene	67000	19000	ug/Kg	10/12/07		HM	SW 8270
Fluorene	12000	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorohutadiene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachloroethane	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	15000	1900	ug/Kg	10/12/07		HM	SW 8270
Isophorone	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitroso-di-n-propylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodimethylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Naphthalene	82000	19000	ug/Kg	10/12/07		HM	SW 8270
Nitrobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pentachloronitrobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pentachlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Phenanthrene	71000	19000	ug/Kg	10/12/07		HM	SW 8270
Phenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pyrene	56000	19000	ug/Kg	10/12/07		HM	SW 8270
Pyridine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorophenol	Diluted Out		%	10/12/07		HM	SW 8270
% Nitrobenzene-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Phenol-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Terphenyl-d14	Diluted Out		%	10/12/07		HM	SW 8270

I = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

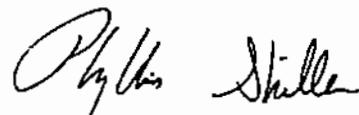
\* Due to matrix interference in the sample an elevated MDL was reported.

\*\* Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

\*\*\* Physiologically Available Cyanide analyzed by MA certified lab #M-MA086.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director

November 01, 2007



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 645-1102 Fax (860) 645-0823



# Analysis Report

November 01, 2007

**FOR:** Attn: Mr. Mike Lotti  
 Innovative Engineering Solution  
 25 Spring St  
 Walpole, MA 02081

**Sample Information**

**Matrix:** SOIL  
**Location Code:** IES  
**Rush Request:** RUSH#  
**P.O.#:** NGMALDEN

**Custody Information**

**Collected by:**  
**Received by:** LP  
**Analyzed by:** see "By" below

**Date**

**Time**

10/04/07 14:15  
 10/05/07 9:40

SDG I.D.: GAJ58572

Phoenix I.D.: AJ58573

## Laboratory Data

Client ID: NG MALDEN T5 5-101

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.364	0.364	mg/Kg	10/12/07		A/E	SW6010
Arsenic	12.7	0.727	mg/Kg	10/12/07		A/E	SW6010
Barium	74.8	0.364	mg/Kg	10/12/07		A/E	SW6010
Cadmium	< 0.364	0.364	mg/Kg	10/12/07		A/E	SW6010
Chromium	12.3	0.364	mg/Kg	10/12/07		A/E	SW6010
Mercury	0.62	0.23	mg/kg	10/12/07		RS	SW-7471
Lead	138	0.364	mg/Kg	10/12/07		A/E	SW6010
Selenium	< 1.82	1.82	mg/Kg	10/12/07		A/E	SW6010
TCLP Lead	0.398	0.015	mg/L	10/18/07		EK	SW1311/6010
Percent Solid	87		%	10/11/07		S/TJ	E160.3
Flash Point	>200	200	degree F	10/11/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	10/11/07		CD	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	10/12/07		GD	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	10/11/07		GD	SW846-7.3
Reactivity	Negative			10/11/07		GD	SW 846-7.3
Total Cyanide	650	38	mg/Kg	10/17/07		E/G	SW9010/9014
Mercury Digestion	Completed			10/12/07		D	SW7471
Soil Extraction for PCB	Completed			10/11/07		SP/E	SW3545
Soil Ext. for Semi- Vol	Completed			10/11/07		SP/E	SW3545
TCLP Extraction for Metals	Completed			10/17/07		D	EPA 1311
Total Metals Digest	Completed			10/11/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			10/18/07		D	SW846 - 3005
Extraction of TPH SM	Completed			10/11/07		SP/E	3545/3550
Field Extraction	Completed			10/04/07		IES	SW5035
Physiologically Available Cyanide	16	1.2	mg/kg	10/17/07		***	MADEP
<b>Polychlorinated Biphenyls</b>							
PCB-1016	ND	470	ug/Kg	10/15/07		KCA	SW 8082

Client ID: NG MALDEN T5 5-101

Phoenix I.D.: AJ58573

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1221	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1232	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1242	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1248	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1254	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1260	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1262	ND	470	ug/Kg	10/15/07		KCA	SW 8082
PCB-1268	ND	470	ug/Kg	10/15/07		KCA	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	71		%	10/15/07		KCA	SW 8082
% TCMX (Surrogate Rec)	49		%	10/15/07		KCA	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	10/12/07	JRB	8100Mod	1
Unidentified	5100	50	mg/kg	10/12/07	JRB	8100Mod	1

**QA/QC Surrogates**

% n-Pentacosane	Interferencee		%	10/12/07	JRB	8100Mod	1
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**Volatiles**

1,1,1,2-Tetrachloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1,1-Trichloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1,2-Trichloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloroethene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloropropene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2,3-Trichloropropane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2,4-Trimethylbenzene	100000	5800	ug/Kg	10/11/07	R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichlorobenzene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichloroethane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichloropropane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,3,5-Trimethylbenzene	34000	5800	ug/Kg	10/11/07	R/J	SW8260
1,3-Dichlorobenzene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,3-Dichloropropane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
1,4-Dichlorobenzene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
2,2-Dichloropropane	ND	5800	ug/Kg	10/11/07	R/J	SW8260
2-Chlorotoluene	ND	5800	ug/Kg	10/11/07	R/J	SW8260
2-Hexanone	ND	29000	ug/Kg	10/11/07	R/J	SW8260
2-Isopropyltoluene	ND	5800	ug/Kg	10/11/07	R/J	SW8260

Client ID: NG MALDEN T5 5-101

Phoenix I.D.: AJ58573

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Chlorotoluene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
4-Methyl-2-pentanone	ND	29000	ug/Kg	10/11/07		R/J	SW8260
Acetone	ND	120000	ug/Kg	10/11/07		R/J	SW8280
Acrylonitrile	ND	12000	ug/Kg	10/11/07		R/J	SW8260
Benzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Bromobenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8280
Bromoform	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Bromomethane	ND	5800	ug/Kg	10/11/07		R/J	SW8280
Carbon Disulfide	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Carbon tetrachloride	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Chlorobenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Chloroethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Chloroform	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Chloromethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Dibromochloromethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Dibromoethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Dibromomethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Dichlorodifluoromethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Ethylbenzene	8100	5800	ug/Kg	10/11/07		R/J	SW8260
Hexachlorobutadiene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Isopropylbenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
m&p-Xylene	39000	5800	ug/Kg	10/11/07		R/J	SW8260
Methyl Ethyl Ketone	ND	69000	ug/Kg	10/11/07		R/J	SW8280
Methyl t-butyl ether (MTBE)	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Methylene chloride	ND	12000	ug/Kg	10/11/07		R/J	SW8260
n-Butylbenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8280
n-Propylbenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Naphthalene	2100000	58000	ug/Kg	10/11/07		R/J	SW8260
o-Xylene	21000	5800	ug/Kg	10/11/07		R/J	SW8260
p-Isopropyltoluene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
sec-Butylbenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Styrene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
tert-Butylbenzene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Tetrachloroethene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	12000	ug/Kg	10/11/07		R/J	SW8260
Toluene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Total Xylenes	60000	5800	ug/Kg	10/11/07		R/J	SW6260
trans-1,2-Dichloroethene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	5800	ug/Kg	10/11/07		R/J	SW8280
trans-1,4-dichloro-2-butene	ND	12000	ug/Kg	10/11/07		R/J	SW8260
Trichloroethene	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Trichlorofluoromethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260
Trichlorotrifluoroethane	ND	5800	ug/Kg	10/11/07		R/J	SW8260

Client ID: NG MALDEN T5 5-101

Phoenix I.D.: AJ58573

Parameter	Result	RL	Units	Date	Time	By	Reference
Vinyl chloride	ND	5800	ug/Kg	10/11/07		R/J	SW8260
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	95		%	10/11/07		R/J	SW8260
% Bromofluorobenzene	102		%	10/11/07		R/J	SW8260
% Dibromofluoromethane	103		%	10/11/07		R/J	SW8260
% Toluene-d8	97		%	10/11/07		R/J	SW8260
<b><u>Semivolatiles</u></b>							
1,2,4,5-Tetrachlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,2-Dichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,3-Dichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
1,4-Dichlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dichlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dimethylphenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrophenol	ND	3000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrotoluene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Chloronaphthalene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Chlorophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Methylnaphthalene	150000	3800	ug/Kg	10/12/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	1900	ug/Kg	10/12/07		HM	SW 8270
2-Nitroaniline	ND	3000	ug/Kg	10/12/07		HM	SW 8270
2-Nitrophenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	1900	ug/Kg	10/12/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	2300	ug/Kg	10/12/07		HM	SW 8270
3-Nitroaniline	ND	3000	ug/Kg	10/12/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	5500	ug/Kg	10/12/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chloroaniline	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
4-Nitroaniline	ND	3000	ug/Kg	10/12/07		HM	SW 8270
4-Nitrophenol	ND	5500	ug/Kg	10/12/07		HM	SW 8270
Acenaphthene	33000	1900	ug/Kg	10/12/07		HM	SW 8270
Acenaphthylene	6800	1900	ug/Kg	10/12/07		HM	SW 8270
Acetophenone	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Aniline	ND	5500	ug/Kg	10/12/07		HM	SW 8270
Anthracene	32000	1900	ug/Kg	10/12/07		HM	SW 8270
Azobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Benz(a)anthracene	40000	38000	ug/Kg	10/12/07		HM	SW 8270
Benzidine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Benzo(a)pyrene	34000	1900	ug/Kg	10/12/07		HM	SW 8270
Benzo(b)fluoranthene	39000	38000	ug/Kg	10/12/07		HM	SW 8270
Benzo(ghi)perylene	6900	1900	ug/Kg	10/12/07		HM	SW 8270

Client ID: NG MALDEN T5 5-101

Phoenix I.D.: AJ58573

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(k)fluoranthene	20000	1900	ug/Kg	10/12/07		HM	SW 8270
Benzoic acid	ND	5500	ug/Kg	10/12/07		HM	SW 8270
Benzyl butyl phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Carbazole	22000	5500	ug/Kg	10/12/07		HM	SW 8270
Chrysene	35000	1900	ug/Kg	10/12/07		HM	SW 8270
Di-n-butylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Di-n-octylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Dibenz(a,h)anthracene	2300	1900	ug/Kg	10/12/07		HM	SW 8270
Dibenzofuran	41000	38000	ug/Kg	10/12/07		HM	SW 8270
Dietbyl phthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Dimethylphthalate	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Fluoranthene	110000	38000	ug/Kg	10/12/07		HM	SW 8270
Fluorene	31000	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobutadiene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Hexachloroethane	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	8300	1900	ug/Kg	10/12/07		HM	SW 8270
Isophorone	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodimethylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Naphthalene	320000	3800	ug/Kg	10/12/07		HM	SW 8270
Nitrobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pentachloronitrobenzene	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pentachlorobenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Phenanthrene	190000	38000	ug/Kg	10/12/07		HM	SW 8270
Phenol	ND	1900	ug/Kg	10/12/07		HM	SW 8270
Pyrene	75000	38000	ug/Kg	10/12/07		HM	SW 8270
Pyridine	ND	1900	ug/Kg	10/12/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Trihomophenol	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorohiphenyl	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorophenol	Diluted Out		%	10/12/07		HM	SW 8270
% Nitrobenzene-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Phenol-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Terphenyl-d14	Diluted Out		%	10/12/07		HM	SW 8270

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I = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

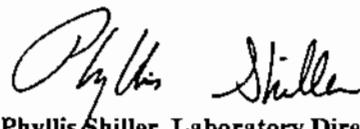
\* Due to matrix interference in the sample an elevated MDL was reported.

\*\* Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

\*\*\* Physiologically Available Cyanide analyzed by MA certified lab #M-MA086.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 01, 2007



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

November 01, 2007

**FOR:** Attn: Mr. Mike Lotti  
 Innovative Engineering Solution  
 25 Spring St  
 Walpole, MA 02081

### Sample Information

**Matrix:** SOIL  
**Location Code:** IES  
**Rush Request:** RUSH24HR  
**P.O.#:** NGMALDENT5

### Custody Information

**Collected by:** LP  
**Received by:** LP  
**Analyzed by:** see "By" below

**Date**

**Time**

10/04/07 14:30  
 10/05/07 9:40

SDG I.D.: GAJ58572

Phoenix I.D.: AJ58574

## Laboratory Data

Client ID: NG MALDEN T5 5-102 5-7

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.497	0.497	mg/Kg	10/06/07		EK	SW6010
Arsenic	18.9	0.994	mg/Kg	10/06/07		EK	SW6010
Barium	48.4	0.497	mg/Kg	10/06/07		EK	SW6010
Cadmium	< 0.497	0.497	mg/Kg	10/06/07		EK	SW6010
Chromium	19.8	0.497	mg/Kg	10/06/07		EK	SW6010
Mercury	0.36	0.15	mg/kg	10/08/07		RS	SW-7471
Lead	62.6	0.497	mg/Kg	10/06/07		EK	SW6010
Selenium	< 2.48	2.48	mg/Kg	10/06/07		EK	SW6010
Percent Solid	68		%	10/05/07		P	E160.3
Flash Point	>200	200	degree F	10/05/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	10/05/07		CD	SW846 - 1010
Reactivity Cyanide	< 1.0	1.0	mg/Kg	10/05/07		S/G	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	10/05/07		S/G	SW846-7.3
Reactivity	Negative			10/06/07		GD	SW 846-7.3
Total Cyanide	48000	740	mg/Kg	10/05/07		GD	SW9010/9014
Mercury Digestion	Completed			10/08/07		E	SW7471
Soil Extraction for PCB	Completed			10/05/07		CJ/D	SW3545
Soil Ext. for Semi- Vol	Completed			10/05/07		/D	SW3545
Total Metals Digest	Completed			10/05/07		AG	SW846 - 3050
Extraction of TPH SM	Completed			10/05/07		P/D	3545/3550
Field Extraction	Completed			10/04/07		IES	SW5035
Physiologically Available Cyanide	38	6.9	mg/kg	10/11/07		*	MADEP

### Polychlorinated Biphenyls

PCB-1016	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1221	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1232	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1242	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082

Client ID: NG MALDEN T5 5-102 5-7

Phoenix I.D.: AJ58574

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1248	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1254	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1260	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1262	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
PCB-1268	ND	*	4000	ug/Kg	10/08/07	MH	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	Diluted Out		%	10/08/07		MH	SW 8082
% TCMX (Surrogate Rec)	Diluted Out		%	10/08/07		MH	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	10/07/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	10/07/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	10/07/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	10/07/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	10/07/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	10/07/07	JRB	8100Mod	1
Unidentified	33000	50	mg/kg	10/07/07	JRB	8100Mod	1
<b><u>QA/QC Surrogates</u></b>							
% n-Pentacosane	Interference		%	10/07/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1,1-Trichloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1,2,2-Tetrachloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1,2-Trichloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1-Dichloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1-Dichloroethene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,1-Dichloropropene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2,3-Trichlorobenzene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2,3-Trichloropropane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2,4-Trichlorobenzene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2,4-Trimethylbenzene	360000	25000	ug/Kg	10/05/07	R/J	SW8260	
1,2-Dibromo-3-chloropropane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2-Dichlorobenzene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2-Dichloroethane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,2-Dichloropropane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,3,5-Trimethylbenzene	88000	3000	ug/Kg	10/05/07	R/J	SW8260	
1,3-Dichlorobenzene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,3-Dichloropropane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
1,4-Dichlorobenzene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
2,2-Dichloropropane	ND	300	ug/Kg	10/05/07	R/J	SW8260	
2-Chlorotoluene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
2-Hexanone	ND	1500	ug/Kg	10/05/07	R/J	SW8260	
2-Isopropyltoluene	10000	300	ug/Kg	10/05/07	R/J	SW8260	
4-Chlorotoluene	ND	300	ug/Kg	10/05/07	R/J	SW8260	
4-Methyl-2-pentanone	ND	1500	ug/Kg	10/05/07	R/J	SW8260	
Acetone	ND	6000	ug/Kg	10/05/07	R/J	SW8260	

Client ID: NG MALDEN T5 5-102 5-7'

Phoenix I.D.: AJ58574

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	600	ug/Kg	10/05/07		R/J	SW8260
Benzene	1500	300	ug/Kg	10/05/07		R/J	SW8260
Bromobenzene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Bromoehloromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Bromodichloromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Bromoform	ND	300	ug/Kg	10/05/07		R/J	SW8260
Bromomethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Carbon Disulfide	ND	300	ug/Kg	10/05/07		R/J	SW8260
Carbon tetrachloride	ND	300	ug/Kg	10/05/07		R/J	SW8260
Chlorobenzene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Chloroethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Chloroform	ND	300	ug/Kg	10/05/07		R/J	SW8260
Chloromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	300	ug/Kg	10/05/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Dibromochloromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Dibromoethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Dibromomethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Dichlorodifluoromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Ethylbenzene	36000	3000	ug/Kg	10/05/07		R/J	SW8260
Hexachlorobutadiene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Isopropylbenzene	12000	300	ug/Kg	10/05/07		R/J	SW8260
m&p-Xylene	150000	3000	ug/Kg	10/05/07		R/J	SW8260
Methyl Ethyl Ketone	ND	3600	ug/Kg	10/05/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	300	ug/Kg	10/05/07		R/J	SW8260
Methylene chloride	ND	600	ug/Kg	10/05/07		R/J	SW8260
n-Butylbenzene	13000	300	ug/Kg	10/05/07		R/J	SW8260
n-Propylbenzene	14000	300	ug/Kg	10/05/07		R/J	SW8260
Naphthalene	23000000	2500000	ug/Kg	10/05/07		R/J	SW8260
o-Xylene	68000	3000	ug/Kg	10/05/07		R/J	SW8260
p-Isopropyltoluene	17000	300	ug/Kg	10/05/07		R/J	SW8260
sec-Butylbenzene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Styrene	ND	300	ug/Kg	10/05/07		R/J	SW8260
tert-Butylbenzene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Tetrachloroethene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	600	ug/Kg	10/05/07		R/J	SW8260
Toluene	17000	300	ug/Kg	10/05/07		R/J	SW8260
Total Xylenes	210000	300	ug/Kg	10/05/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	300	ug/Kg	10/05/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	300	ug/Kg	10/05/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	600	ug/Kg	10/05/07		R/J	SW8260
Trichloroethene	ND	300	ug/Kg	10/05/07		R/J	SW8260
Trichlorofluoromethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Trichlorotrifluoroethane	ND	300	ug/Kg	10/05/07		R/J	SW8260
Vinyl chloride	ND	300	ug/Kg	10/05/07		R/J	SW8260
<b>QA/QC Surrogates</b>							
% 1,2-dichlorobenzene-d4	80		%	10/05/07		R/J	SW8260

Client ID: NG MALDEN T5 5-102 5-7'

Phoenix I.D.: AJ58574

Parameter	Result	RL	Units	Date	Time	By	Reference
% Bromofluorobenzene	106		%	10/05/07		R/J	SW8260
% Dibromofluoromethane	98		%	10/05/07		R/J	SW8260
% Toluene-d8	104		%	10/05/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
1,2-Dichlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
1,3-Dichlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
1,4-Dichlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,4-Dichlorophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,4-Dimethylphenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,4-Dinitrophenol	ND	190000	ug/Kg	10/08/07		HM	SW 8270
2,4-Dinitrotoluene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2,6-Dinitrotoluene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2-Chloronaphthalene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2-Chlorophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2-Methylnaphthalene	3700000	480000	ug/Kg	10/08/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	120000	ug/Kg	10/08/07		HM	SW 8270
2-Nitroaniline	ND	190000	ug/Kg	10/08/07		HM	SW 8270
2-Nitrophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	120000	ug/Kg	10/08/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	140000	ug/Kg	10/08/07		HM	SW 8270
3-Nitroaniline	ND	190000	ug/Kg	10/08/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	350000	ug/Kg	10/08/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	120000	ug/Kg	10/08/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	140000	ug/Kg	10/08/07		HM	SW 8270
4-Chloroaniline	ND	140000	ug/Kg	10/08/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	120000	ug/Kg	10/08/07		HM	SW 8270
4-Nitroaniline	ND	190000	ug/Kg	10/08/07		HM	SW 8270
4-Nitrophcnol	ND	350000	ug/Kg	10/08/07		HM	SW 8270
Acenaphthene	360000	120000	ug/Kg	10/08/07		HM	SW 8270
Acenaphthylene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Acetophenone	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Aniline	ND	350000	ug/Kg	10/08/07		HM	SW 8270
Anthracene	220000	120000	ug/Kg	10/08/07		HM	SW 8270
Azobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benz(a)anthracene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzidine	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzo(a)pyrene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzo(b)fluoranthcne	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzo(ghi)perylene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzo(k)fluoranthenc	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Benzoic acid	ND	350000	ug/Kg	10/08/07		HM	SW 8270
Benzyl butyl pbthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270

Client ID: NG MALDEN T5 5-102 5-7

Phoenix I.D.: AJ58574

Parameter	Result	RL	Units	Date	Time	By	Reference
Bis(2-chloroethoxy)methane	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Carbazole	ND	350000	ug/Kg	10/08/07		HM	SW 8270
Chrysene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Di-n-butylphthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Di-n-octylphthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Dibenzofuran	760000	120000	ug/Kg	10/08/07		HM	SW 8270
Diethyl phthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Dimethylphthalate	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Fluoranthene	500000	120000	ug/Kg	10/08/07		HM	SW 8270
Fluorene	120000	120000	ug/Kg	10/08/07		HM	SW 8270
Hexachlorobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Hexachlorobutadiene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Hexachloroethane	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Isophorone	ND	120000	ug/Kg	10/08/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	120000	ug/Kg	10/08/07		HM	SW 8270
N-Nitrosodimethylamine	ND	120000	ug/Kg	10/08/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Naphthalene	5200000	480000	ug/Kg	10/08/07		HM	SW 8270
Nitrobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Pentachloronitrobenzene	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Pentachlorophenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Phenanthrene	2200000	480000	ug/Kg	10/08/07		HM	SW 8270
Phenol	ND	120000	ug/Kg	10/08/07		HM	SW 8270
Pyrene	320000	120000	ug/Kg	10/08/07		HM	SW 8270
Pyridine	ND	120000	ug/Kg	10/08/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	*Diluted Out		%	10/08/07		HM	SW 8270
% 2-Fluorobiphenyl	*Diluted Out		%	10/08/07		HM	SW 8270
% 2-Fluorophenol	*Diluted Out		%	10/08/07		HM	SW 8270
% Nitrobenzene-d5	*Diluted Out		%	10/08/07		HM	SW 8270
% Phenol-d5	*Diluted Out		%	10/08/07		HM	SW 8270
% Terphenyl-d14	*Diluted Out		%	10/08/07		HM	SW 8270

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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

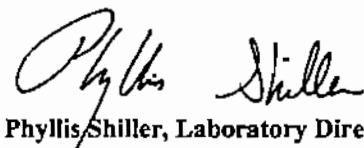
• Due to matrix interference from non target compounds in the sample an elevated MDL was reported.

\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C28 range. The sample was quantitated against a C9-C36 standard.

• Physiologically Available Cyanide analyzed by MA certified lab #M-MA086.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 01, 2007



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

November 01, 2007

FOR: Attn: Mr. Mike Lotti  
 Innovative Engineering Solution  
 25 Spring St  
 Walpole, MA 02081

### Sample Information

Matrix: SOIL  
 Location Code: IES  
 Rush Request: RUSH#  
 P.O.#: NGMALDEN

### Custody Information

Collected by:  
 Received by: LP  
 Analyzed by: see "By" below

Date 10/04/07 Time 14:45

Date 10/05/07 Time 9:40

SDG I.D.: GAJ58572

Phoenix I.D.: AJ58575

## Laboratory Data

Client ID: NG MALDEN T5 5-103

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.377	0.377	mg/Kg	10/12/07		A/E	SW6010
Arsenic	7.18	0.754	mg/Kg	10/12/07		A/E	SW6010
Barium	110	0.377	mg/Kg	10/12/07		A/E	SW6010
Cadmium	< 0.377	0.377	mg/Kg	10/12/07		A/E	SW6010
Chromium	17.8	0.377	mg/Kg	10/12/07		A/E	SW6010
Mercury	0.42	0.24	mg/kg	10/12/07		RS	SW-7471
Lead	389	3.77	mg/Kg	10/13/07		EKT	SW6010
Selenium	< 1.89	1.89	mg/Kg	10/12/07		A/E	SW6010
TCLP Lead	0.237	0.015	mg/L	10/18/07		EK	SW1311/6010
Percent Solid	85		%	10/11/07		S/TJ	E160.3
Flash Point	>200	200	degree F	10/11/07		CD	SW846 - 1010
Ignitability	Passed	140	deg F	10/11/07		CD	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	10/12/07		GD	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	10/11/07		GD	SW846-7.3
Reactivity	Negative			10/11/07		GD	SW 846-7.3
Total Cyanide	370	29	mg/Kg	10/17/07		E/G	SW9010/6014
Mercury Digestion	Completed			10/12/07		D	SW7471
Soil Extraction for PCB	Completed			10/11/07		SP/E	SW3545
Soil Ext. for Semi- Vol	Completed			10/11/07		SP/E	SW3545
TCLP Extraction for Metals	Completed			10/17/07		D	EPA 1311
Total Metals Digest	Completed			10/11/07		AG	SW846 - 3050
TCLP Metals Digestion	Completed			10/18/07		D	SW846 - 3005
Extraction of TPH SM	Completed			10/11/07		SP/E	3545/3550
Field Extraction	Completed			10/04/07		IES	SW5035
Physiologically Available Cyanide	14	1.2	mg/kg	10/17/07		***	MADEP
<b><u>Polychlorinated Biphenyls</u></b>							
PCB-1016	ND	480	ug/Kg	10/15/07		KCA	SW 8082

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1221	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1232	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1242	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1248	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1254	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1260	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1262	ND	480	ug/Kg	10/15/07		KCA	SW 8082
PCB-1268	ND	480	ug/Kg	10/15/07		KCA	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	76		%	10/15/07		KCA	SW 8082
% TCMX (Surrogate Rec)	59		%	10/15/07		KCA	SW 8082
<b><u>TPH by GC (Extractable Products)</u></b>							
Fuel Oil #4	ND	50	mg/kg	10/12/07		JRB	8100Mod
Fuel Oil #6	ND	50	mg/kg	10/12/07		JRB	8100Mod
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	10/12/07		JRB	8100Mod
Kerosene	ND	50	mg/kg	10/12/07		JRB	8100Mod
Motor Oil	ND	50	mg/kg	10/12/07		JRB	8100Mod
Other Oil (Cutting & Lubricating)	**	50	mg/kg	10/12/07		JRB	8100Mod
Unidentified	3300	50	mg/kg	10/12/07		JRB	8100Mod
<b><u>QA/QC Surrogates</u></b>							
% n-Pentacosane	Interference		%	10/12/07		JRB	8100Mod
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1,1-Trichloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1,2-Trichloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1-Dichloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1-Dichloroethene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,1-Dichloropropene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2,3-Trichloropropane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2,4-Trimethylbenzene	6900	5600	ug/Kg	10/11/07		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2-Dichlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2-Dichloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,2-Dichloropropane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,3-Dichlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,3-Dichloropropane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
1,4-Dichlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
2,2-Dichloropropane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
2-Chlorotoluene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
2-Hexanone	ND	28000	ug/Kg	10/11/07		R/J	SW8260
2-Isopropyltoluene	ND	5600	ug/Kg	10/11/07		R/J	SW8260

Client ID: NG MALDEN T5 5-103

Phoenix I.D.: AJ58575

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Chlorotoluene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
4-Methyl-2-pentanone	ND	28000	ug/Kg	10/11/07		R/J	SW8260
Acetone	ND	110000	ug/Kg	10/11/07		R/J	SW8260
Acrylonitrile	ND	11000	ug/Kg	10/11/07		R/J	SW8260
Benzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Bromobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Bromoform	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Bromomethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Carbon Disulfide	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Carbon tetrachloride	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Chlorobenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Chloroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Chloroform	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Chloromethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
eis-1,2-Diehloroethene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
eis-1,3-Dichloropropene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Dibromoehloromethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Dibromoethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Dibromomethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Diehlorodifluoromethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Ethylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Hexaehlorobutadiene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Isopropylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
m&p-Xylene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Methyl Ethyl Ketone	ND	67000	ug/Kg	10/11/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Methylene chloride	ND	11000	ug/Kg	10/11/07		R/J	SW8260
n-Butylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
n-Propylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Naphthalene	260000	14000	ug/Kg	10/11/07		R/J	SW8260
o-Xylene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
p-Isopropyltoluene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
sec-Butylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Styrene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
tert-Butylbenzene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Tetrachloroethene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	11000	ug/Kg	10/11/07		R/J	SW8260
Toluene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Total Xylenes	ND	5600	ug/Kg	10/11/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
trans-1,3-Diehloropropene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11000	ug/Kg	10/11/07		R/J	SW8260
Trichloroethene	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Trichlorofluoromethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260
Triehlorotrifluoroethane	ND	5600	ug/Kg	10/11/07		R/J	SW8260

Client ID: NG MALDEN T5 5-103

Phoenix I.D.: AJ58575

Parameter	Result	RL	Units	Date	Time	By	Reference
Vinyl chloride	ND	5600	ug/Kg	10/11/07		R/J	SW8260
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	91		%	10/11/07		R/J	SW8260
% Bromofluorobenzene	101		%	10/11/07		R/J	SW8260
% Dibromofluoromethane	98		%	10/11/07		R/J	SW8260
% Toluene-d8	99		%	10/11/07		R/J	SW8260
<b><u>Semivolatiles</u></b>							
1,2,4,5-Tetrachlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,2-Dichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,3-Dichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,4-Dichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4,5-Trichlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dichlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dimethylphenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrophenol	ND	3100	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrotoluene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,6-Dinitrotoluene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Chloronaphthalene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Chlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Methylnaphthalene	140000	40000	ug/Kg	10/12/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
2-Nitrophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	2000	ug/Kg	10/12/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	2300	ug/Kg	10/12/07		HM	SW 8270
3-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	5700	ug/Kg	10/12/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chloroaniline	ND	2300	ug/Kg	10/12/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
4-Nitroaniline	ND	3100	ug/Kg	10/12/07		HM	SW 8270
4-Nitropbenol	ND	5700	ug/Kg	10/12/07		HM	SW 8270
Acenaphthene	29000	2000	ug/Kg	10/12/07		HM	SW 8270
Acenaphthylene	6100	2000	ug/Kg	10/12/07		HM	SW 8270
Acetophenone	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Aniline	ND	5700	ug/Kg	10/12/07		HM	SW 8270
Anthracene	24000	2000	ug/Kg	10/12/07		HM	SW 8270
Azobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Benz(a)anthracene	41000	40000	ug/Kg	10/12/07		HM	SW 8270
Benzidine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(a)pyrene	44000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(b)fluoranthene	34000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(ghi)perylene	11000	2000	ug/Kg	10/12/07		HM	SW 8270

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(k)fluoranthene	29000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzoic acid	ND	5700	ug/Kg	10/12/07		HM	SW 8270
Benzyl butyl phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethoxy)methane	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Carbazole	26000	5700	ug/Kg	10/12/07		HM	SW 8270
Chrysene	34000	2000	ug/Kg	10/12/07		HM	SW 8270
Di-n-butylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Di-n-octylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Dihenz(a,h)anthracene	3300	2000	ug/Kg	10/12/07		HM	SW 8270
Dibenzofuran	29000	2000	ug/Kg	10/12/07		HM	SW 8270
Diethyl phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Dimethylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Fluoranthene	110000	40000	ug/Kg	10/12/07		HM	SW 8270
Fluorene	32000	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobutadiene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachlorocyclopentadiene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachloroethane	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	12000	2000	ug/Kg	10/12/07		HM	SW 8270
Isophorone	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodimethylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Naphthalene	180000	40000	ug/Kg	10/12/07		HM	SW 8270
Nitrobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pentachloronitrobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pentachlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Phenanthrene	190000	40000	ug/Kg	10/12/07		HM	SW 8270
Phenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pyrene	79000	40000	ug/Kg	10/12/07		HM	SW 8270
Pyridine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorophenol	Diluted Out		%	10/12/07		HM	SW 8270
% Nitrobenzene-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Phenol-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Terphenyl-d14	Diluted Out		%	10/12/07		HM	SW 8270

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I = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

**Comments:**

\* Due to matrix interference in the sample an elevated MDL was reported.

\*\* Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

\*\*\* Physiologically Available Cyanide analyzed by MA certified lab #M-MA086.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller, Laboratory Director

November 01, 2007



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

November 01, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solution  
25 Spring St  
Walpole, MA 02081

### Sample Information

Matrix: SOIL  
Location Code: IES  
Rush Request:  
P.O.#: NGMALDENT5

### Custody Information

Collected by:  
Received by: LP  
Analyzed by: see "By" below

Date 10/04/07 Time 15:00

Date 10/05/07 Time 9:40

SDG I.D.: GAJ58572

Phoenix I.D.: AJ58576

### Laboratory Data

Client ID: NG MALDEN T5 5-104

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.424	0.424	mg/Kg	10/12/07		A/E	SW6010
Arsenic	6.75	0.848	mg/Kg	10/12/07		A/E	SW6010
Barium	76.5	0.424	mg/Kg	10/12/07		A/E	SW6010
Cadmium	2.45	0.424	mg/Kg	10/12/07		A/E	SW6010
Chromium	16.5	0.424	mg/Kg	10/12/07		A/E	SW6010
Mercury	0.58	0.24	mg/kg	10/12/07		RS	SW-7471
Lead	325	4.24	mg/Kg	10/13/07		EKT	SW6010
Selenium	< 2.12	2.12	mg/Kg	10/12/07		A/E	SW6010
Percent Solid	83		%	10/11/07		S/TJ	E160.3
Flash Point	Passed	200	degree F	10/12/07		AAS	SW846 - 1010
Ignitability	>200	140	deg F	10/12/07		AAS	SW846 - 1010
Reactivity Cyanide	< 1	1	mg/Kg	10/12/07		GD	SW 846-7.3
Reactivity Sulfide	< 20	20	mg/Kg	10/11/07		GD	SW846-7.3
Reactivity	Negative			10/11/07		GD	SW 846-7.3
Total Cyanide	770	47	mg/Kg	10/17/07		E/G	SW9010/9014
Mercury Digestion	Completed			10/12/07		D	SW7471
Soil Extraction for PCB	Completed			10/11/07		SP/E	SW3545
Soil Ext. for Semi- Vol	Completed			10/11/07		SP/E	SW3545
Total Metals Digest	Completed			10/11/07		AG	SW846 - 3050
Extraction of TPH SM	Completed			10/11/07		SP/E	3545/3550
Field Extraction	Completed			10/04/07		IES	SW6035
Physiologically Available Cyanide	21	1.2	mg/kg	10/17/07		***	MADEP
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1221	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1232	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1242	ND	490	ug/Kg	10/15/07		KCA	SW 8082

Client ID: NG MALDEN T5 5-104

Phoenix I.D.: AJ58576

Parameter	Result	RL	Units	Date	Time	By	Reference
PCB-1248	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1254	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1260	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1262	ND	490	ug/Kg	10/15/07		KCA	SW 8082
PCB-1268	ND	490	ug/Kg	10/15/07		KCA	SW 8082
<b><u>QA/QC Surrogates</u></b>							
% DCBP (Surrogate Rec)	66		%	10/15/07		KCA	SW 8082
% TCMX (Surrogate Rec)	52		%	10/15/07		KCA	SW 8082

**TPH by GC (Extractable Products)**

Fuel Oil #4	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil #6	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Fuel Oil#2 / Diesel Fuel	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Kerosene	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Motor Oil	ND	50	mg/kg	10/12/07	JRB	8100Mod	1
Other Oil (Cutting & Lubricating)	**	50	mg/kg	10/12/07	JRB	8100Mod	1
Unidentified	3700	50	mg/kg	10/12/07	JRB	8100Mod	1
<b><u>QA/QC Surrogates</u></b>							
% n-Pentacosane	Interference		%	10/12/07	JRB	8100Mod	1

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1,1-Trichloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1,2-Trichloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloroethene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,1-Dichloropropene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2,3-Trichlorobenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2,3-Trichloropropane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2,4-Trichlorobenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2,4-Trimethylbenzene	5300	4400	ug/Kg	10/11/07	R/J	SW8260
1,2-Dihromo-3-chloropropane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichlorobenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichloroethane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,2-Dichloropropane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,3,5-Trimethylbenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,3-Dichlorobenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,3-Dichloropropane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
1,4-Dichlorobenzene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
2,2-Dichloropropane	ND	4400	ug/Kg	10/11/07	R/J	SW8260
2-Chlorotoluene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
2-Hexanone	ND	22000	ug/Kg	10/11/07	R/J	SW8260
2-Isopropyltoluene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
4-Chlorotoluene	ND	4400	ug/Kg	10/11/07	R/J	SW8260
4-Methyl-2-pentanone	ND	22000	ug/Kg	10/11/07	R/J	SW8260
Acetone	ND	87000	ug/Kg	10/11/07	R/J	SW8260

Client ID: NG MALDEN T5 5-104

Phoenix I.D.: AJ58576

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	8700	ug/Kg	10/11/07		R/J	SW8260
Benzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Bromobenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Bromochloromethane	ND	4400	ug/Kg	10/11/07		R/J	SW8280
Bromodichloromethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Bromoform	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Bromometbane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Carbon Disulfide	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Carbon tetrachloride	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Chlorobenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Chloroethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Chloroform	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Chlorometbane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Dibromochloromethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Dibromoethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Dibromomethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Dichlorodifluoromethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Ethylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Hexachlorobutadiene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Isopropylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
m&p-Xylene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Methyl Ethyl Ketone	ND	52000	ug/Kg	10/11/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Methylene chloride	ND	8700	ug/Kg	10/11/07		R/J	SW8260
n-Butylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
n-Propylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Naphthalene	250000	8800	ug/Kg	10/11/07		R/J	SW8260
o-Xylene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
p-Isopropyltoluene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
sec-Butylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Styrene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
tert-Butylbenzene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Tetrachloroetbene	ND	4400	ug/Kg	10/11/07		R/J	SW8280
Tetrahydrofuran (THF)	ND	8700	ug/Kg	10/11/07		R/J	SW8260
Toluene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Total Xylenes	ND	4400	ug/Kg	10/11/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	8700	ug/Kg	10/11/07		R/J	SW8260
Trichloroethene	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Trichlorofluoromethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Trichlorotrifluoroethane	ND	4400	ug/Kg	10/11/07		R/J	SW8260
Vinyl chloride	ND	4400	ug/Kg	10/11/07		R/J	SW8260
<b>QA/QC Surrogates</b>							
% 1,2-dichlorobenzene-d4	95		%	10/11/07		R/J	SW8260

Client ID: NG MALDEN T5 5-104

Phoenix I.D.: AJ58576

Parameter	Result	RL	Units	Date	Time	By	Reference
% Bromofluorobenzene	101		%	10/11/07		R/J	SW8260
% Dibromofluoromethane	99		%	10/11/07		R/J	SW8260
% Toluene-d8	99		%	10/11/07		R/J	SW8260
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,2,4-Trichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,2-Dichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,3-Diehlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
1,4-Dichlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4,5-Triehlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4,6-Trichlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dichlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dimethylphenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrophenol	ND	3200	ug/Kg	10/12/07		HM	SW 8270
2,4-Dinitrotoluene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Chloronaphthalene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Chlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Methylnaphthalene	68000	40000	ug/Kg	10/12/07		HM	SW 8270
2-Methylphenol (o-cresol)	ND	2000	ug/Kg	10/12/07		HM	SW 8270
2-Nitroaniline	ND	3200	ug/Kg	10/12/07		HM	SW 8270
2-Nitrophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	2000	ug/Kg	10/12/07		HM	SW 8270
3,3'-Dichlorobenzidine	ND	2400	ug/Kg	10/12/07		HM	SW 8270
3-Nitroaniline	ND	3200	ug/Kg	10/12/07		HM	SW 8270
4,6-Dinitro-2-methylphenol	ND	5800	ug/Kg	10/12/07		HM	SW 8270
4-Bromophenyl phenyl ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
4-Chloro-3-methylphenol	ND	2400	ug/Kg	10/12/07		HM	SW 8270
4-Chloroaniline	ND	2400	ug/Kg	10/12/07		HM	SW 8270
4-Chlorophenyl phenyl ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
4-Nitroaniline	ND	3200	ug/Kg	10/12/07		HM	SW 8270
4-Nitrophenol	ND	5800	ug/Kg	10/12/07		HM	SW 8270
Acenaphthene	11000	2000	ug/Kg	10/12/07		HM	SW 8270
Acenaphthylene	3500	2000	ug/Kg	10/12/07		HM	SW 8270
Acetophenone	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Aniline	ND	5800	ug/Kg	10/12/07		HM	SW 8270
Anthracene	12000	2000	ug/Kg	10/12/07		HM	SW 8270
Azobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Benz(a)anthracene	19000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzidine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(a)pyrene	14000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(b)fluoranthene	25000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(ghi)perylene	5600	2000	ug/Kg	10/12/07		HM	SW 8270
Benzo(k)fluoranthene	11000	2000	ug/Kg	10/12/07		HM	SW 8270
Benzoic acid	ND	5800	ug/Kg	10/12/07		HM	SW 8270
Benzyl butyl phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270

Client ID: NG MALDEN T5 5-104

Phoenix I.D.: AJ58576

Parameter	Result	RL	Units	Date	Time	By	Reference
Bis(2-chloroethoxy)methane	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroethyl)ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-chloroisopropyl)ether	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Carbazole	ND	5800	ug/Kg	10/12/07		HM	SW 8270
Chrysene	19000	2000	ug/Kg	10/12/07		HM	SW 8270
Di-n-butylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Di-n-octylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Dibenz(a,h)anthracene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Dibenzofuran	16000	2000	ug/Kg	10/12/07		HM	SW 8270
Diethyl phthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Dimethylphthalate	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Fluoranthene	40000	40000	ug/Kg	10/12/07		HM	SW 8270
Fluorene	8200	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachlorobutadiene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachloroencyclopentadiene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Hexachloroethane	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Indeno(1,2,3-cd)pyrene	5700	2000	ug/Kg	10/12/07		HM	SW 8270
Isophorone	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodi-n-propylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodimethylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
N-Nitrosodiphenylamine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Naphthalene	140000	40000	ug/Kg	10/12/07		HM	SW 8270
Nitrobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pentachloronitrobenzene	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pentachlorophenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Phenanthrene	70000	40000	ug/Kg	10/12/07		HM	SW 8270
Phenol	ND	2000	ug/Kg	10/12/07		HM	SW 8270
Pyrene	33000	2000	ug/Kg	10/12/07		HM	SW 8270
Pyridine	ND	2000	ug/Kg	10/12/07		HM	SW 8270
<b><u>QA/QC Surrogates</u></b>							
% 2,4,6-Tribromophenol	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	10/12/07		HM	SW 8270
% 2-Fluorophenol	Diluted Out		%	10/12/07		HM	SW 8270
% Nitrobenzene-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Phenol-d5	Diluted Out		%	10/12/07		HM	SW 8270
% Terphenyl-d14	Diluted Out		%	10/12/07		HM	SW 8270

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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

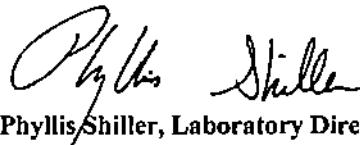
**Comments:**

\* Due to matrix interference in the sample an elevated MDL was reported.  
\*\*Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,  
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

\*\*\* Physiologically Available Cyanide analyzed by MA certified lab #M-MA086.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit



Phyllis Shiller  
Phyllis Shiller, Laboratory Director  
November 01, 2007



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 645-1102 Fax (860) 645-0823



## QA/QC Report

November 01, 2007

### QA/QC Data

SDG I.D.: GAJ58572

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
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QA/QC Batch 86308, Sample No: AJ58349 (AJ58572, AJ58573, AJ58575)

#### ICP Metals - Aqueous Extraction

Arsenic	0.01	NC	113	114	0.9	116	116	0.0
Barium	BDL	2.60	105	104	1.0	108	106	1.9
Cadmium	BDL	NC	94.4	94.9	0.5	95.7	94.9	0.8
Chromium	BDL	NC	99.3	99.2	0.1	99.9	101	1.1
Copper	BDL	NC	111	111	0.0	114	116	1.7
Lead	BDL	2.90	95.3	95.7	0.4	97.5	96.3	1.2
Nickel	BDL	NC	94.5	93.1	1.5	95.4	94.6	0.8
Selenium	0.02	NC	124	126	1.6	126	126	0.0
Silver	BDL	NC	112	113	0.9	117	117	0.0
Zinc	0.03	2.20	104	103	1.0	106	106	0.0

QA/QC Batch 85404, Sample No: AJ58520 (AJ58574)

#### ICP Metals - Soil

Aluminum	BDL	5.60	---	---	NC	NC	NC	NC
Antimony	BDL	NC	93.6	94.6	1.1	68.9	69.7	1.2
Arsenic	BDL	NC	94.3	88.4	6.5	71.8	72.1	0.4
Barium	BDL	10.9	97.5	96.5	1.0	81.2	106	26.5
Beryllium	BDL	NC	98.6	98.9	0.3	78.0	79.0	1.3
Boron	BDL	NC	96.1	96.7	0.6	79.5	81.7	2.7
Cadmium	BDL	NC	94.3	95.6	1.4	74.4	75.5	1.5
Calcium	BDL	4.60	---	---	NC	NC	NC	NC
Chromium	BDL	13.8	98.1	99.6	1.5	79.8	81.5	2.1
Cobalt	BDL	7.50	96.6	97.6	1.0	77.4	77.7	0.4
Copper	BDL	NC	100	101	1.0	85.0	83.9	1.3
Iron	BDL	14.8	---	---	NC	NC	NC	NC
Lead	BDL	26.4	91.6	92.6	1.1	71.2	85.6	18.4
Magnesium	BDL	12.7	116	---	NC	NC	NC	NC
Manganese	BDL	25.4	99.1	101	1.9	97.8	91.6	6.5
Molybdenum	BDL	NC	99.9	99.0	0.9	77.5	78.7	1.5
Nickel	BDL	12.6	97.4	97.9	0.5	78.1	78.6	0.6
Phosphorus	2.07	14.1	100	89.3	11.3	64.0	61.6	3.8
Potassium	BDL	2.70	103	101	2.0	NC	128	NC
Selenium	BDL	NC	84.2	82.8	1.7	67.6	68.1	0.7
Silver	BDL	NC	94.0	96.2	2.3	82.1	82.6	0.6
Sodium	BDL	14.7	104	105	1.0	87.6	76.1	14.1
Thallium	BDL	NC	97.8	97.5	0.3	77.7	78.5	1.0
Tin	BDL	NC	113	---	NC	48.3	48.1	0.4
Vanadium	BDL	5.00	96.9	98.3	1.4	84.0	80.6	4.1

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	MS Dup RPD
Zinc	BDL	BDL	92.9	93.8	1.0	74.3	73.7	0.8
<b>Comment:</b>								
Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.								
QA/QC Batch 85564, Sample No: AJ58857 (AJ58574)	BDL	NC	103	95.4	7.7	104	98.7	5.2
QA/QC Batch 85801, Sample No: AJ59702 (AJ58572, AJ58573, AJ58575, AJ58576)								
<b>ICP Metals - Soil</b>								
Aluminum	BDL	NC	---	---	NC	NC	NC	NC
Antimony	BDL	NC	95.8	96.7	0.9	72.3	43.4	50.0
Arsenic	BDL	NC	93.6	94.7	1.2	73.8	46.0	46.4
Barium	BDL	NC	96.2	96.7	0.5	68.6	33.4	69.0
Beryllium	BDL	NC	101	104	2.9	77.8	43.2	57.2
Boron	BDL	NC	97.2	98.5	1.3	76.8	49.5	43.2
Cadmium	BDL	NC	99.2	102	2.8	79.1	55.8	34.5
Calcium	BDL	NC	---	---	NC	42.7	NC	NC
Chromium	BDL	NC	99.8	103	3.2	73.2	37.5	64.5
Cobalt	BDL	NC	99.3	102	2.7	74.8	41.6	57.0
Copper	BDL	NC	99.7	102	2.3			
Iron	BDL	NC	---	---	NC	NC	NC	NC
Lead	BDL	NC	96.5	98.7	2.3	75.5	48.9	42.8
Magnesium	BDL	NC	111	118	4.4	NC	NC	NC
Manganese	BDL	NC	102	104	1.9	57.3	NC	NC
Molybdenum	BDL	NC	102	103	1.0	78.8	51.2	42.5
Nickel	BDL	NC	99.5	102	2.5	73.4	38.6	62.1
Phosphorus	BDL	NC	96.5	98.4	1.9	54.6	NC	NC
Potassium	BDL	NC	97.8	98.2	0.4	37.0	NC	NC
Selenium	BDL	NC	84.4	85.7	1.5	67.0	44.5	40.4
Silver	BDL	NC	96.1	97.1	1.0	79.6	62.2	24.5
Sodium	BDL	NC	105	108	2.8	NC	49.2	NC
Thallium	BDL	NC	94.1	96.0	2.0	75.8	54.4	32.9
Tin	BDL	NC	94.6	97.8	3.3	75.1	45.6	48.9
Vanadium	BDL	NC	99.4	101	1.6	73.7	39.2	61.1
Zinc	BDL	NC	95.2	97.7	2.6	NC	NC	NC
<b>Comment:</b>								
Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.								
QA/QC Batch 85972, Sample No: AJ60230 (AJ58572, AJ58573, AJ58575, AJ58576)	BDL	NC	93.2	90.2	3.3	97.5	99.2	1.7
Mercury								

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

November 01, 2007



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## QA/QC Report

November 01, 2007

### QA/QC Data

SDG I.D.: GAJ58572

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	SDG I.D.: RPD
QA/QC Batch 85554, Sample No: AJ56535 (AJ58574)								
SPLP Cyanide	BDL	NC	91.4				93.0	
QA/QC Batch 85542, Sample No: AJ57727 (AJ58574)								
Flash Point		NC	Passed					
QA/QC Batch 85557, Sample No: AJ57727 (AJ58574)								
Reactivity Cyanide	BDL	NC	100.0					
QA/QC Batch 85551, Sample No: AJ57727 (AJ58574)								
Reactivity Sulfide	BDL	NC						
QA/QC Batch 85968, Sample No: AJ58572 (AJ58572, AJ58573, AJ58575, AJ58576)								
Reactivity Sulfide	BDL	NC						
QA/QC Batch 86290, Sample No: AJ61017 (AJ58572, AJ58573, AJ58575, AJ58576)								
Total Cyanide	BDL	2.2	90.9				< 75	

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Phyllis Shiller, Laboratory Director  
November 01, 2007



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## QA/QC Report

November 01, 2007

### QA/QC Data

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 85293, Sample No: AJ57867 (AJ58574)							
<b>TPH by GC (Extractable Products)</b>							
Aviation Fuel/Kerosene	ND						
Fuel Oil #2/ Diesel Fuel	ND	54	89	49.0	69	73	5.6
Fuel Oil #4	ND						
Fuel Oil #6	ND						
Motor Oil	ND						
Other Oil (Cutting & Lubricating)	ND						
Unidentified	ND						
QA/QC Batch 85377, Sample No: AJ57869 (AJ58574)							
<b>Polychlorinated Biphenyls</b>							
PCB-1016	ND	66	75	12.8	77	88	13.3
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	94	94	0.0	100	114	13.1
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	70	69	67	2.9	71	78	9.4
% TCMX (Surrogate Rec)	70	71	68	4.3	67	77	13.9
QA/QC Batch 85400, Sample No: AJ58521 (AJ58574)							
<b>Semivolatiles</b>							
1,2,4,5-Tetrachlorobenzene	ND	77	78	1.3	76	84	10.0
1,2,4-Trichlorobenzene	ND	72	72	0.0	70	79	12.1
1,2-Dichlorobenzene	ND	63	64	1.6	61	72	16.5
1,3-Dichlorobenzene	ND	58	59	1.7	55	71	25.4
1,4-Dichlorobenzene	ND	60	61	1.7	57	66	14.6
2,4,5-Trichlorophenol	ND	76	80	5.1	83	87	4.7
2,4,6-Trichlorophenol	ND	73	76	4.0	80	81	1.2
2,4-Dichlorophenol	ND	74	76	2.7	78	83	6.2
2,4-Dimethylphenol	ND	49	50	2.0	53	55	3.7
2,4-Dinitrophenol	ND	N/A	N/A	NC	35	33	5.9
2,4-Dinitrotoluene	ND	79	82	3.7	78	77	1.3
2,6-Dinitrotoluene	ND	77	81	5.1	78	78	0.0
2-Chloronaphthalene	ND	74	76	2.7	73	80	9.2
2-Chlorophenol	ND	60	61	1.7	61	67	9.4
2-Methylnaphthalene	ND	73	74	1.4	73	79	7.9

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
2-Methylphenol (o-cresol)	ND	65	67	3.0	69	79	13.5
2-Nitroaniline	ND	127	>130	NC	122	>130	NC
2-Nitrophenol	ND	59	64	8.1	66	71	7.3
3&4-Methylphenol (m&p-cresol)	ND	67	66	1.5	70	75	6.9
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC
3-Nitroaniline	ND	>130	>130	NC	>130	>130	NC
4,6-Dinitro-2-methylphenol	ND	<30	<30	NC	60	60	0.0
4-Bromophenyl phenyl ether	ND	84	90	6.9	92	95	3.2
4-Chloro-3-methylphenol	ND	76	78	2.6	81	83	2.4
4-Chloroaniline	ND	>130	>130	NC	>130	>130	NC
4-Chlorophenyl phenyl ether	ND	84	86	2.4	86	90	4.5
4-Nitroaniline	ND	79	79	0.0	79	78	1.3
4-Nitrophenol	ND	65	68	4.5	74	69	7.0
Acenaphthene	ND	63	65	3.1	69	72	4.3
Acenaphthylene	ND	74	74	0.0	74	78	5.3
Acetophenone	ND	64	66	3.1	64	69	7.5
Aniline	ND	N/A	N/A	NC	N/A	N/A	NC
Anthracene	ND	77	83	7.5	82	84	2.4
Azobenzene	ND	71	74	4.1	73	73	0.0
Benz(a)anthracene	ND	76	82	7.6	79	81	2.5
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC
Benzo(a)pyrene	ND	76	83	8.8	79	80	1.3
Benzo(b)fluoranthene	ND	75	85	12.5	79	83	4.9
Benzo(ghi)perylene	ND	74	83	11.5	75	78	3.9
Benzo(k)fluoranthene	ND	77	82	6.3	81	82	1.2
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC
Benzyl butyl phthalate	ND	76	83	8.8	81	83	2.4
Bis(2-chloroethoxy)methane	ND	57	58	1.7	56	59	5.2
Bis(2-chloroethyl)ether	ND	61	62	1.6	60	66	9.5
Bis(2-chloroisopropyl)ether	ND	90	92	2.2	90	101	11.5
Bis(2-ethylhexyl)phthalate	ND	77	86	11.0	86	86	0.0
Carbazole	ND	112	118	5.2	107	124	14.7
Chrysene	ND	79	85	7.3	81	83	2.4
Di-n-butylphthalate	ND	76	82	7.6	82	82	0.0
Di-n-octylphthalate	ND	92	103	11.3	101	100	1.0
Dibenz(a,h)anthracene	ND	79	91	14.1	82	85	3.6
Dibenzofuran	ND	75	75	0.0	75	78	3.9
Diethyl phthalate	ND	83	86	3.6	85	84	1.2
Dimethylphthalate	ND	84	85	1.2	85	86	1.2
Fluoranthene	ND	78	84	7.4	83	82	1.2
Fluorene	ND	78	80	2.5	80	82	2.5
Hexachlorobenzene	ND	71	76	6.8	76	78	2.6
Hexachlorobutadiene	ND	76	77	1.3	74	85	13.8
Hexachlorocyclopentadiene	ND	57	61	6.8	43	41	4.8
Hexachloroethane	ND	58	60	3.4	57	64	11.6
Indeno(1,2,3-cd)pyrene	ND	76	86	12.3	78	81	3.8
Isophorone	ND	77	78	1.3	75	81	7.7
N-Nitrosodi-n-propylamine	ND	65	68	4.5	66	73	10.1
N-Nitrosodimethylamine	ND	46	45	2.2	47	50	6.2

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
N-Nitrosodiphenylamine	ND	119	124	4.1	119	122	2.5
Naphthalene	ND	69	71	2.9	67	77	13.9
Nitrobenzene	ND	62	64	3.2	62	68	9.2
Pentachloronitrobenzene	ND	74	82	10.3	84	85	1.2
Pentachlorophenol	ND	44	62	34.0	89	89	0.0
Phenanthrene	ND	77	84	8.7	83	87	4.7
Phenol	ND	63	65	3.1	66	74	11.4
Pyrene	ND	73	79	7.9	78	77	1.3
Pyridine	ND	35	33	5.9	40	44	9.5
% 2,4,6-Trihomophenol	107	96	107	10.8	108	110	1.8
% 2-Fluorohiphenyl	78	70	72	2.8	67	73	8.6
% 2-Fluorophenol	70	56	57	1.8	57	66	14.6
% Nitrobenzene-d5	77	62	64	3.2	60	65	8.0
% Phenol-d5	79	64	66	3.1	67	75	11.3
% Terphenyl-d14	83	76	82	7.6	77	76	1.3

QA/QC Batch 85796, Sample No: AJ59706 (AJ58572, AJ58573, AJ58575, AJ58576)

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	92	85	7.9	67	80	17.7
1,2,4-Trichlorobenzene	ND	88	80	9.5	68	77	12.4
1,2-Dichlorobenzene	ND	81	74	9.0	63	77	20.0
1,3-Dichlorobenzene	ND	80	74	7.8	61	75	20.6
1,4-Dichlorobenzene	ND	77	70	9.5	58	75	25.6
2,4,5-Trichlorophenol	ND	102	91	11.4	67	86	24.8
2,4,6-Trichlorophenol	ND	99	85	15.2	75	88	16.0
2,4-Dichlorophenol	ND	90	87	3.4	74	86	15.0
2,4-Dimethylphenol	ND	62	59	5.0	59	68	14.2
2,4-Dinitrophenol	ND	<30	<30	NC	32	33	3.1
2,4-Dinitrotoluene	ND	95	88	7.7	68	84	21.1
2,6-Dinitrotoluene	ND	97	87	10.9	71	84	16.8
2-Chloronaphthalene	ND	95	83	13.5	67	82	20.1
2-Chlorophenol	ND	83	77	7.5	67	75	11.3
2-Methylnaphthalene	ND	90	83	8.1	70	84	18.2
2-Methylphenol (o-cresol)	ND	86	79	8.5	98	118	18.5
2-Nitroaniline	ND	100	80	22.2	94	119	23.5
2-Nitrophenol	ND	88	82	7.1	68	83	19.9
3&4-Methylphenol (m&p-cresol)	ND	89	82	8.2	68	85	22.2
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC
3-Nitroaniline	ND	127	111	13.4	102	116	12.8
4,6-Dinitro-2-methylphenol	ND	86	72	17.7	67	77	13.9
4-Bromophenyl phenyl ether	ND	98	88	10.8	71	85	17.9
4-Chloro-3-methylphenol	ND	100	91	9.4	76	87	13.5
4-Chloroaniline	ND	99	95	4.1	68	92	30.0
4-Chlorophenyl phenyl ether	ND	97	88	9.7	69	83	18.4
4-Nitroaniline	ND	92	85	7.9	71	83	15.6
4-Nitrophenol	ND	99	88	11.8	64	83	25.9
Acenaphthene	ND	92	82	11.5	70	83	17.0
Acenaphthylene	ND	89	79	11.9	66	80	19.2
Acetophenone	ND	82	78	5.0	64	77	18.4

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Aniline	ND	N/A	N/A	NC	N/A	N/A	NC
Anthracene	ND	95	88	7.7	75	86	13.7
Azobenzene	ND	91	83	9.2	66	79	17.9
Benz(a)anthracene	ND	92	93	1.1	80	97	19.2
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC
Benzo(a)pyrene	ND	95	93	2.1	79	99	22.5
Benzo(b)fluoranthene	ND	99	96	3.1	85	101	17.2
Benzo(ghi)perylene	ND	96	98	2.1	84	99	16.4
Benzo(k)fluoranthene	ND	95	94	1.1	78	96	20.7
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC
Benzyl butyl phthalate	ND	99	98	1.0	80	92	14.0
Bis(2-chloroethoxy)methane	ND	73	69	5.6	57	64	11.6
Bis(2-chloroethyl)ether	ND	81	73	10.4	67	77	13.9
Bis(2-chloroisopropyl)ether	ND	79	72	9.3	62	73	16.3
Bis(2-ethylhexyl)phthalate	ND	99	100	1.0	80	95	17.1
Carbazole	ND	85	80	6.1	90	110	20.0
Chrysene	ND	94	93	1.1	80	95	17.1
Di-n-butylphthalate	ND	96	93	3.2	72	87	18.9
Di-n-octylphthalate	ND	105	105	0.0	84	98	15.4
Dibenz(a,h)anthracene	ND	99	95	4.1	74	93	22.8
Dihenzofuran	ND	95	84	12.3	66	83	22.8
Diethyl phthalate	ND	98	92	6.3	74	87	16.1
Dimethylphthalate	ND	99	91	8.4	70	85	19.4
Fluoranthene	ND	105	97	7.9	86	98	13.0
Fluorene	ND	93	86	7.8	70	82	15.8
Hexachlorobenzene	ND	96	89	7.6	70	89	23.9
Hexachlorobutadiene	ND	90	83	8.1	72	84	15.4
Hexachlorocyclopentadiene	ND	84	72	15.4	46	47	2.2
Hexachloroethane	ND	80	71	11.9	59	74	22.6
Indeno(1,2,3-cd)pyrene	ND	98	97	1.0	83	97	15.6
Isophorone	ND	92	87	5.6	69	83	18.4
N-Nitrosodi-n-propylamine	ND	78	72	8.0	58	70	18.8
N-Nitrosodimethylamine	ND	78	73	6.6	57	70	20.5
N-Nitrosodiphenylamine	ND	107	98	8.8	80	95	17.1
Naphthalene	ND	85	80	6.1	65	78	18.2
Nitrobenzene	ND	81	78	3.8	62	77	21.6
Pentachloronitrobenzene	ND	101	90	11.5	77	90	15.6
Pentachlorophenol	ND	99	82	18.8	77	96	22.0
Phenanthrene	ND	92	88	4.4	72	86	17.7
Phenol	ND	87	79	9.6	68	82	18.7
Pyrene	ND	101	89	12.6	85	99	15.2
Pyridine	ND	75	70	6.9	50	65	26.1
% 2,4,6-Trihomophenol	105	94	94	0.0	69	89	25.3
% 2-Fluorobiphenyl	88	78	73	6.6	58	73	22.9
% 2-Fluorophenol	92	80	72	10.5	59	72	19.8
% Nitrobenzene-d5	92	79	72	9.3	59	70	17.1
% Phenol-d5	96	86	77	11.0	62	77	21.6
% Terphenyl-d14	95	88	83	5.8	65	77	16.9

QA/QC Batch 85811, Sample No: AJ60243 (AJ58572, AJ58573, AJ58575, AJ58576)

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
<b><u>TPH by GC (Extractable Products)</u></b>							
Aviation Fuel/Kerosene	ND						
Fuel Oil #2/ Diesel Fuel	ND	93	86	7.8	90	79	13.0
Fuel Oil #4	ND						
Fuel Oil #6	ND						
Motor Oil	ND						
Other Oil (Cutting & Lubricating)	ND						
Unidentified	ND						
QA/QC Batch 85900, Sample No: AJ60542 (AJ58572, AJ58573, AJ58575, AJ58576)							
<b><u>Polychlorinated Biphenyls</u></b>							
PCB-1016	ND	97	92	5.3	37	78	71.3
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	86	61	34.0	78	98	22.7
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	30	76	70	8.2	66	70	5.9
% TCMX (Surrogate Rec)	32	78	64	19.7	48	60	22.2
QA/QC Batch 86153, Sample No: AJ60624 (aj58572, aj58573, aj58575, aj58576)							
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	106	110	3.7	93	106	13.1
1,1,1-Trichloroethane	ND	107	108	0.9	83	111	28.9
1,1,2,2-Tetrachloroethane	ND	116	113	2.6	114	115	0.9
1,1,2-Trichloroethane	ND	111	115	3.5	102	115	12.0
1,1-Dichloroethane	ND	112	115	2.6	88	114	25.7
1,1-Dichloroethene	ND	127	126	0.8	91	114	22.4
1,1-Dichloropropene	ND	99	108	8.7	81	105	25.8
1,2,3-Trichlorobenzene	ND	118	118	0.0	100	114	13.1
1,2,3-Trichloropropane	ND	>130	126	NC	127	124	2.4
1,2,4-Trichlorobenzene	ND	109	113	3.6	96	107	10.8
1,2,4-Trimethylbenzene	ND	107	111	3.7	93	106	13.1
1,2-Dibromo-3-chloropropane	ND	123	119	3.3	126	119	5.7
1,2-Dichlorobenzene	ND	107	110	2.8	95	103	8.1
1,2-Dichloroethane	ND	112	116	3.5	100	114	13.1
1,2-Dichloropropane	ND	110	115	4.4	91	111	19.8
1,3,5-Trimethylbenzene	ND	103	109	5.7	91	100	9.4
1,3-Dichlorobenzene	ND	112	115	2.6	94	103	9.1
1,3-Dichloropropane	ND	113	115	1.8	105	116	10.0
1,4-Dichlorobenzene	ND	112	118	5.2	89	109	20.2
2,2-Dichloropropane	ND	105	107	1.9	81	108	28.6
2-Chlorotoluene	ND	108	114	5.4	95	107	11.9
2-Hexanone	ND	>130	>130	NC	126	>130	NC
2-Isopropyltoluene	ND	106	111	4.6	91	103	12.4
4-Chlorotoluene	ND	111	116	4.4	98	105	6.9

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
4-Methyl-2-pentanone	ND	116	121	4.2	116	126	8.3
Acetone	ND	>130	>130	NC	119	121	1.7
Acrolein	ND	122	>130	NC	>130	111	NC
Acrylonitrile	ND	121	118	2.5	119	122	2.5
Benzene	ND	107	116	8.1	86	108	22.7
Bromobenzene	ND	114	118	3.4	99	107	7.8
Bromoform	ND	114	113	0.9	99	117	16.7
Bromodichloromethane	ND	111	112	0.9	92	111	18.7
Bromoform	ND	102	105	2.9	91	104	13.3
Bromomethane	ND	127	117	8.2	84	>130	NC
Carbon Disulfide	ND	>130	>130	NC	89	113	23.8
Carhon tetrachloride	ND	98	105	6.9	76	103	30.2
Chlorobenzene	ND	109	117	7.1	92	106	14.1
Chloroethane	ND	>130	>130	NC	82	95	14.7
Chloroform	ND	114	114	0.0	89	113	23.8
Chloromethane	ND	>130	>130	NC	73	105	36.0
cis-1,2-Dichloroethene	ND	115	119	3.4	91	116	24.2
cis-1,3-Dichloropropene	ND	110	112	1.8	90	115	24.4
Dibromochloromethane	ND	111	111	0.0	91	109	18.0
Dibromoethane	ND	114	116	1.7	99	118	17.5
Dihromomethane	ND	112	116	3.5	102	114	11.1
Dichlorodifluoromethane	ND	>130	>130	NC	76	106	33.0
Ethylbenzene	ND	107	117	8.9	90	104	14.4
Hexachlorobutadiene	ND	97	103	6.0	81	87	7.1
Isopropylbenzene	ND	114	125	9.2	90	107	17.3
m&p-Xylene	ND	107	114	6.3	83	103	21.5
Methyl ethyl ketone	ND	>130	>130	NC	>130	>130	NC
Methyl t-butyl ether (MTBE)	ND	>130	>130	NC	103	115	11.0
Methylene chloride	ND	119	122	2.5	88	101	13.8
n-Butylbenzene	ND	115	117	1.7	94	109	14.8
n-Propylbenzene	ND	108	115	6.3	94	104	10.1
Naphthalene	ND	112	107	4.6	100	127	23.8
o-Xylene	ND	106	113	6.4	86	107	21.8
p-Isopropyltoluene	ND	112	114	1.8	90	103	13.5
sec-Butylbenzene	ND	100	104	3.9	91	102	11.4
Styrene	ND	106	112	5.5	87	107	20.6
tert-Butylbenzene	ND	106	114	7.3	90	103	13.5
Tetrachloroethene	ND	105	115	9.1	88	104	16.7
Tetrahydrofuran (THF)	ND	116	114	1.7	106	116	9.0
Toluene	ND	102	117	13.7	85	104	20.1
trans-1,2-Dichloroethene	ND	>130	130	NC	93	115	21.2
trans-1,3-Dichloropropene	ND	111	110	0.9	90	113	22.7
trans-1,4-dichloro-2-butene	ND	124	105	16.6	95	125	27.3
Trichloroethene	ND	108	111	2.7	84	111	27.7
Trichlorofluoromethane	ND	>130	>130	NC	97	123	23.6
Trichlorotrifluoroethane	ND	128	127	0.8	82	95	14.7
Vinyl chloride	ND	>130	>130	NC	85	111	26.5
% 1,2-dichlorobenzene-d4	94	99	95	4.1	102	99	3.0
% Bromofluorobenzene	95	99	100	1.0	100	104	3.9

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
% Dibromofluoromethane	98	105	97	7.9	100	103	3.0
% Toluene-d8	102	96	103	7.0	102	100	2.0
QA/QC Batch 86157, Sample No: AJ60772 (aj58572, aj58573, aj58575)							
<b>Volatiles</b>							
1,1,1,2-Tetrachloroetthane	ND	98	106	7.8	103	100	3.0
1,1,1-Trichloroethane	ND	109	110	0.9	108	107	0.9
1,1,2,2-Tetrachloroethane	ND	107	110	2.8	120	109	9.6
1,1,2-Trichloroethane	ND	107	110	2.8	117	111	5.3
1,1-Dichloroetthane	ND	112	111	0.9	116	113	2.6
1,1-Dichloroethene	ND	113	110	2.7	<70	108	NC
1,1-Dichloropropene	ND	97	103	6.0	114	102	11.1
1,2,3-Trichlorobenzene	ND	110	119	7.9	107	103	3.8
1,2,3-Trichloropropane	ND	111	125	11.9	128	103	21.6
1,2,4-Trichlorobenzene	ND	102	110	7.5	97	94	3.1
1,2,4-Trimethylbenzene	ND	106	112	5.5	111	103	7.5
1,2-Dibromo-3-chloropropane	ND	115	126	9.1	102	104	1.9
1,2-Dichlorobenzene	ND	103	107	3.8	111	100	10.4
1,2-Dichloroethane	ND	112	117	4.4	121	114	6.0
1,2-Dichloropropane	ND	109	114	4.5	116	107	8.1
1,3,5-Trimethylbenzene	ND	104	110	5.6	109	98	10.6
1,3-Dichlorobenzene	ND	106	113	6.4	111	100	10.4
1,3-Dichloropropane	ND	111	109	1.8	115	114	0.9
1,4-Dichlorobenzene	ND	109	114	4.5	112	106	5.5
2,2-Dichloropropane	ND	103	105	1.9	97	97	0.0
2-Chlorotoluene	ND	107	114	6.3	116	103	11.9
2-Hexanone	ND	115	116	0.9	110	98	11.5
2-Isopropyltoluene	ND	105	112	6.5	109	103	5.7
4-Chlorotoluene	ND	108	118	8.8	110	103	6.6
4-Methyl-2-pentanone	ND	106	111	4.6	122	110	10.3
Acetone	ND	113	107	5.5	71	77	8.1
Acrolein	ND	116	>130	NC	81	80	1.2
Acrylonitrile	ND	110	114	3.6	119	116	2.6
Benzene	ND	107	112	4.6	117	107	8.9
Bromobenzene	ND	109	116	6.2	118	107	9.8
Bromochloromethane	ND	112	112	0.0	117	114	2.6
Bromodichloromethane	ND	106	112	5.5	106	103	2.9
Bromoform	ND	88	94	6.6	86	86	0.0
Bromomethane	ND	126	88	35.5	88	<70	NC
Carbon Disulfide	ND	118	117	0.9	<70	103	NC
Carbon tetrachloride	ND	92	102	10.3	98	94	4.2
Chlorobenzene	ND	106	115	8.1	116	104	10.9
Chloroethane	ND	113	>130	NC	116	<70	NC
Chloroform	ND	114	112	1.8	114	110	3.6
Chloromethane	ND	118	117	0.9	109	105	3.7
cis-1,2-Dichloroethene	ND	113	115	1.8	120	114	5.1
cis-1,3-Dichloropropene	ND	108	109	0.9	107	106	0.9
Dibromochloromethane	ND	102	108	6.6	96	98	2.1
Dibromoethane	ND	112	115	2.6	117	114	2.6

**QA/QC Data**

SDG I.D.: GAJ58572

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Dibromomethane	ND	109	116	6.2	119	116	2.6
Dichlorodifluoromethane	ND	>130	130	NC	97	97	0.0
Ethylbenzene	ND	104	113	8.3	112	101	10.3
Hexachlororutadiene	ND	90	102	12.5	93	90	3.3
Isopropylbenzene	ND	116	124	6.7	115	104	10.0
m&p-Xylene	ND	105	109	3.7	106	103	2.9
Methyl ethyl ketone	ND	127	118	7.3	97	98	1.0
Methyl t-butyl ether (MTBE)	ND	114	121	6.0	>130	121	NC
Methylene chloride	ND	107	108	0.9	113	109	3.6
n-Butylbenzene	ND	112	118	5.2	106	102	3.8
n-Propylbenzene	ND	107	113	5.5	111	100	10.4
Naphthalene	ND	>130	116	NC	108	113	4.5
o-Xylene	ND	104	110	5.6	112	103	8.4
p-Isopropyltoluene	ND	110	116	5.3	105	100	4.9
sec-Butylbenzene	ND	97	104	7.0	108	100	7.7
Styrene	ND	102	108	5.7	110	103	6.6
tert-Butylbenzene	ND	106	115	8.1	113	103	9.3
Tetrachloroethene	ND	104	110	5.6	111	105	5.6
Tetrahydrofuran (THF)	ND	106	99	6.8	111	108	2.7
Toluene	ND	106	113	6.4	118	104	12.6
trans-1,2-Dichloroethene	ND	119	117	1.7	128	123	4.0
trans-1,3-Dichloropropene	ND	104	103	1.0	101	103	2.0
trans-1,4-dichloro-2-butene	ND	108	95	12.8	85	94	10.1
Trichloroethene	ND	102	108	5.7	112	109	2.7
Trichlorofluoromethane	ND	129	121	6.4	107	<70	NC
Trichlorotrifluoroethane	ND	117	113	3.5	<70	102	NC
Vinyl chloride	ND	123	120	2.5	113	99	13.2
% 1,2-dichlorobenzene-d4	97	99	99	0.0	100	100	0.0
% Bromofluorobenzene	96	99	101	2.0	100	103	3.0
% Dibromofluoromethane	107	104	99	4.9	95	103	8.1
% Toluene-d8	97	99	103	4.0	104	100	3.9

1 = This parameter exceeds laboratory blank specified limits.

2 = This parameter exceeds laboratory lcs/lcqd specified limits.

3 = This parameter exceeds laboratory ms/msd specified limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

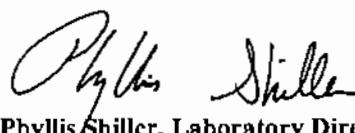
LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

November 01, 2007



**Environmental Laboratories, Inc.**  
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## QA/QC Laboratory Control Specifications Report

November 01, 2007

### QA/QC Specfications

SDG I.D.: GAJ58572

Parameter	LCS Lower Spec	LCS Lower Warn	LCS Upper Warn	LCS Upper Spec	MS Lower Spec	MS Lower Warn	MS Upper Warn	MS Upper Spec
	39	53	112	127	39	53	112	127
% DCBP (Surrogate Rec)	46	58	107	119	46	58	107	119
% TCMX (Surrogate Rec)	64	76	127	140	42	59	129	147
PCB-1016	63	76	130	144	54	71	139	157
PCB-1260								

**Title: MADEP MCP Response Action Analytical Report Certification Form**

**Laboratory Name:** Phoenix Environmental Laboratories, Inc.    **Project #:**

**Project Location:** NG MALDEN T5    **MADEP RTN1:**

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

AJ58572, AJ58573, AJ58574, AJ58575, AJ58576

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

<b>MCP SW-846 Methods Used</b>	<input checked="" type="checkbox"/> 8260B	<input type="checkbox"/> 8151A	<input type="checkbox"/> 8330	<input checked="" type="checkbox"/> 6010B	<input checked="" type="checkbox"/> 7470A/1A
	<input checked="" type="checkbox"/> 8270C	<input type="checkbox"/> 6081A	<input type="checkbox"/> VPH	<input type="checkbox"/> 6020	<input checked="" type="checkbox"/> 9014M2
<b>As specified in MADEP Compendium of Analytical Methods. (check all that apply)</b>	<input checked="" type="checkbox"/> 8082	<input type="checkbox"/> 8021B	<input type="checkbox"/> EPH	<input type="checkbox"/> 7000S3	<input type="checkbox"/> 7196A

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

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

All negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized

Signature: 

Date: Wednesday, October 31, 2007

Printed Name: Kathleen Cressia

Position: QA/QC Officer

Printed Name: Phyllis Shiller

Position: Laboratory Director



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## MCP Certification Report

November 01, 2007

SDG I.D.: GAJ58572

### Cyanide Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Lachat 10/06/07-1 (AJ58574, AJ58574)

The samples were distilled in accordance with the method.

The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequency of one per ten samples.

The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

Printed Name Greg Danielewski

Position: Chemist

Date: 10/6/2007

Instrument: Lachat 10/16/07-1 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575,  
AJ58576, AJ58576, AJ59633, AJ59634)

The samples were distilled in accordance with the method.

The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequency of one per ten samples.

The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

Printed Name Greg Danielewski

Position: Chemist

Date: 10/16/2007

All LCS recoveries were within 85 - 115 with the following exceptions: None.

All LCSD recoveries were within 85 - 115 with the following exceptions: None.

All MS recoveries were within 85 - 115 with the following exceptions: Total Cyanide

All MSD recoveries were within 85 - 115 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



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## MCP Certification Report

November 01, 2007

SDG I.D.: GAJ58572

### Mercury Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Merlin 10/08/07-1 (AJ58574, AJ58574)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer

Position: Chemist

Date: 10/8/2007

Instrument: Merlin 10/12/07-1 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575, AJ58576, AJ58576)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer

Position: Chemist

Date: 10/12/2007

All LCS recoveries were within 80 - 120 with the following exceptions: None.

All LCSD recoveries were within 80 - 120 with the following exceptions: None.

All MS recoveries were within 80 - 120 with the following exceptions: None.

All MSD recoveries were within 80 - 120 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.



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## MCP Certification Report

November 01, 2007

SDG I.D.: GAJ58572

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Instrument: Icp7 10/05/07-1 (AJ58574, AJ58574)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya

Position: Chemist

Date: 10/5/2007

Instrument: Icp7 10/11/07-1 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575, AJ58576, AJ58576, AJ59633)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya

Position: Chemist

Date: 10/11/2007

Instrument: Icp7 10/12/07-1 (AJ58572, AJ58572, AJ58575, AJ58575, AJ58576, AJ58576)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya

Position: Chemist

Date: 10/12/2007

Instrument: Icp7 10/18/07-1 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Emily Kolominskaya

Position: Chemist

Date: 10/18/2007



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## MCP Certification Report

November 01, 2007

SDG I.D.: GAJ58572

**QC Comments:** QC Batch 85404 10/04/07 (AJ58574, AJ58574)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

**QC Comments:** QC Batch 85801 10/10/07 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575, AJ58576, AJ58576)

Some compounds had spike recoveries outside of 75-125%. A matrix bias is suspected because the LCS and LCSD were within control. No further action was required.

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: Selenium

All MS recoveries were within 75 - 125 with the following exceptions: Antimony, Arsenic, Barium, Cadmium, Calcium, Chromium, Cobalt, Lead, Manganese, Nickel, Phosphorus, Potassium, Selenium, Tin, Vanadium, Zinc

All MSD recoveries were within 75 - 125 with the following exceptions: Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

We attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### PCB Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Au-ecd8 10/08/07-1 (AJ58574, AJ58574)

8082 Narration:

The initial calibration RSD for the compound list was less than 20%.

The continuing calibration standards were within acceptance criteria.

**Printed Name** Michael Hshn

**Position:** Chemist

**Date:** 10/8/2007



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## MCP Certification Report

November 01, 2007

SDG I.D.: GAJ58572

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All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SVOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Chem04 10/08/07-1 (AJ58574, AJ58574)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem04/82701003):

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: 3-nitroaniline, 4-chloroaniline

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: benzyl alcohol, 4-chloroaniline,  
3 nitroaniline, 2-Nitroaniline

Printed Name Harry Mullin

Position: Chemist

Date: 10/8/2007

Instrument: Chem07 10/12/07-1 (AJ58572, AJ58572, AJ58573, AJ58573, AJ58575, AJ58575,  
AJ58576, AJ58576)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/82701009):

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %RSDs >30%: 4 chloroaniline, 3 nitroaniline,  
4 nitrophenol,

Continuing Calibration:

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: 2,4-Dimethylphenol,  
Benzoic Acid,  
4-Chloroaniline, 3-Nitroaniline, 4-Nitrophenol, 2-Nitroaniline, Carbazole

# PHOENIX



*Environmental Laboratories, Inc.*

Customer: Innovative Engineering Solutions

Address: 25 Spring Street  
Walpole, MA 02081

Sampler's

Signature: John M. M.

Client Sample • Information • Identification

Date 10/4/07

Matrix Code:  
DW=drinking water  
GW=groundwater

WW=wastewater  
SL=sludge  
A=air  
S=solid/solid  
O=other

Project: NG Malden T5

Report to: Mike Lat,  
Accounts Payable

Invoice to: Accounts Payable

Analysis Request

Project P.O.: NG Malden T5

Phone #: 508-668-0033

Fax #: 508-668-5175

## CHAIN OF CUSTODY RECORD

Temp: \_\_\_\_\_ / Pg 1 of 1

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Email: service@phoenixlabs.com Fax: (860) 845-0823

Data Delivery:  
 Fax #:

Email: L.philbrick@resonline.com

Client Services (860) 645-8726

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Turnaround:	CTRI	MA	Data Format
5-100	Soil	10/4/07 1300	10/4/07	1415	<input checked="" type="checkbox"/>	RCP Cert.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Excel
5-101	Soil	10/4/07 1430	10/4/07	1445	<input checked="" type="checkbox"/>	GW Project.	<input type="checkbox"/>	<input type="checkbox"/> ASP-A
5-102	Soil	10/4/07 1430	10/4/07	1445	<input checked="" type="checkbox"/>	GA Mobility	<input type="checkbox"/>	<input type="checkbox"/> NJ Reduced Deliv.
5-103	Soil	10/4/07 1445	10/4/07	1445	<input checked="" type="checkbox"/>	GW Mobility	<input type="checkbox"/>	<input type="checkbox"/> Phoenix Std Report
5-104	Soil	10/4/07 1500	10/4/07	1445	<input checked="" type="checkbox"/>	SW Project.	<input type="checkbox"/>	<input type="checkbox"/> Other
					<input type="checkbox"/>	Other	<input type="checkbox"/>	
					<input type="checkbox"/>	Res. Vol.	<input type="checkbox"/>	
					<input type="checkbox"/>	Ind. Vol.	<input type="checkbox"/>	
					<input type="checkbox"/>	Other	<input type="checkbox"/>	
					<input type="checkbox"/>	S-1	<input type="checkbox"/>	
					<input type="checkbox"/>	S-2	<input type="checkbox"/>	
					<input type="checkbox"/>	S-3	<input type="checkbox"/>	
					<input type="checkbox"/>	MWRA eSMART	<input type="checkbox"/>	
					<input type="checkbox"/>	Other	<input type="checkbox"/>	

Comments, Special Requirements or Regulations:

Analysis for S-102 5'-'1, 1 day TAT

HOLD others A \* pending toxicity TAT

State where samples were collected: Subsurface

Data Package  
 ASP-A  
 NJ Reduced Deliv.  
 Phoenix Std Report  
 Other



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

# Draft Progress Report

November 15, 2007

FOR: Attn: Mr. Mike Lotti  
Innovative Engineering Solution  
25 Spring St  
Walpole, MA 02081

## Sample Information

Matrix: WATER  
Location Code: IES  
Rush Request: RUSH24HR  
P.O. #:

## Custody Information

Collected by:  
Received by: LP  
Analyzed by: see "By" below

## Date

11/13/07 0:00  
11/14/07 9:30

## Time

SDG I.D.: GAJ70639

Phoenix I.D.: AJ70639

## Laboratory Data

Client ID: NG MALDEN TASKS UST

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	11/15/07		EKT	6010/200.7
Arsenic	< 0.004	0.004	mg/L	11/15/07		EK	6010/200.7
Barium	0.021	0.002	mg/L	11/15/07		EKT	6010/200.7
Cadmium	< 0.001	0.001	mg/L	11/15/07		EKT	6010/200.7
Chromium	< 0.001	0.001	mg/L	11/15/07		EKT	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	11/15/07		RS	7470/E245.1
Lead (Furnace)	0.005	0.001	mg/L	11/15/07		RS	7421/S3113B
Selenium	< 0.01	0.01	mg/L	11/15/07		EKT	6010/200.7
Mercury Digestion	Completed			11/15/07		D	7471/245.1
EPH Extraction	Completed			11/14/07		C/K	3510
PCB Extraction	Completed			11/14/07		O	SW3510/3520
Semi-Volatile Extraction	Completed			11/14/07		O/K	SW3510/3520
Total Metals Digestion	Completed			11/14/07		AG	

## Polychlorinated Biphenyls

PCB-1016	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1221	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1232	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1242	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1248	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1254	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1260	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1262	ND	0.5	ug/L	11/15/07	MH	608/ 8082
PCB-1268	ND	0.5	ug/L	11/15/07	MH	608/ 8082

## QA/QC Surrogates

% DCBP (Surrogate Rec)	101	%	11/15/07	MH	608/ 8082
% TCMX (Surrogate Rec)	87	%	11/15/07	MH	608/ 8082

Client ID: NG MALDEN TASKS UST

Phoenix I.D.: AJ70639

Parameter	Result	RL	Units	Date	Time	By	Reference	
MA Petroleum Hydrocarbon (VPH)	Completed			11/15/07		HM	MADEP VPH04	1
<b>Semivolatiles by SIM</b>								
2-Methylnaphthalene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Acenaphthene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Acenaphthylene	ND	0.3	ug/L	11/15/07		HM	8270(SIM)	
Anthracene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Benz(a)anthracene	0.06	0.06	ug/L	11/15/07		HM	8270(SIM)	
Benzo(a)pyrene	ND	0.2	ug/L	11/15/07		HM	8270(SIM)	
Benzo(b)fluoranthene	0.1	0.08	ug/L	11/15/07		HM	8270(SIM)	
Benzo(ghi)perylene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Benzo(k)fluoranthene	ND	0.3	ug/L	11/15/07		HM	8270(SIM)	
Chrysene	ND	2	ug/L	11/15/07		HM	8270(SIM)	
Dibenz(a,h)anthracene	ND	0.5	ug/L	11/15/07		HM	8270(SIM)	
Fluoranthene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Fluorene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.5	ug/L	11/15/07		HM	8270(SIM)	
Naphthalene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
Phenanthrene	ND	0.3	ug/L	11/15/07		HM	8270(SIM)	
Pyrene	ND	10	ug/L	11/15/07		HM	8270(SIM)	
<b>QA/QC Surrogates</b>								
% 2-Fluorobiphenyl	90		%	11/15/07		HM	8270(SIM)	
% Nitrobenzene-d5	76		%	11/15/07		HM	8270(SIM)	
% Terphenyl-d14	99		%	11/15/07		HM	8270(SIM)	
<b>Volatile Water</b>								
1,1,1,2-Tetrachloroethane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,1,1-Trichloroethane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/14/07		R/J	SW8260	
1,1,2-Trichloroethane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,1-Dichloroethane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,1-Dichloroethene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,1-Dichloropropene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2,3-Trichlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2,3-Trichloropropane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2,4-Trichlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2,4-Trimethylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2-Dichlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2-Dichloroethane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,2-Dichloropropane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,3,5-Trimethylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,3-Dichlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
1,3-Dichloropropane	ND	1	ug/L	11/14/07		R/J	SW8260	
1,4-Dichlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260	
2,2-Dichloropropane	ND	1	ug/L	11/14/07		R/J	SW8260	
2-Chlorotoluene	ND	1	ug/L	11/14/07		R/J	SW8260	
2-Hexanone	ND	5	ug/L	11/14/07		R/J	SW8260	
2-Isopropyltoluene	ND	1	ug/L	11/14/07		R/J	SW8260	

Client ID: NG MALDEN TASKS UST

Phoenix I.D.: AJ70639

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Chlorotoluene	ND	1	ug/L	11/14/07		R/J	SW8260
4-Methyl-2-pentanone	ND	5	ug/L	11/14/07		R/J	SW8260
Acetone	ND	50	ug/L	11/14/07		R/J	SW8260
Acrylonitrile	ND	5	ug/L	11/14/07		R/J	SW8260
Benzene	ND	1	ug/L	11/14/07		R/J	SW8260
Bromobenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Bromochloromethane	ND	1	ug/L	11/14/07		R/J	SW8260
Bromodichloromethane	ND	0.5	ug/L	11/14/07		R/J	SW8260
Bromoform	ND	1	ug/L	11/14/07		R/J	SW8260
Bromomethane	ND	1	ug/L	11/14/07		R/J	SW8260
Carbon Disulfide	ND	5	ug/L	11/14/07		R/J	SW8260
Carbon tetrachloride	ND	1	ug/L	11/14/07		R/J	SW8260
Chlorobenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Chloroethane	ND	1	ug/L	11/14/07		R/J	SW8260
Chloroform	2.4	1	ug/L	11/14/07		R/J	SW8260
Chloromethane	ND	1	ug/L	11/14/07		R/J	SW8260
cis-1,2-Dichloroethene	ND	1	ug/L	11/14/07		R/J	SW8260
cis-1,3-Dichloropropene	ND	0.5	ug/L	11/14/07		R/J	SW8260
Dibromochloromethane	ND	0.5	ug/L	11/14/07		R/J	SW8260
Dibromomethane	ND	1	ug/L	11/14/07		R/J	SW8260
Dichlorodifluoromethane	ND	1	ug/L	11/14/07		R/J	SW8260
Ethylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Hexachlorobutadiene	ND	0.4	ug/L	11/14/07		R/J	SW8260
Isopropylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
m&p-Xylene	ND	1	ug/L	11/14/07		R/J	SW8260
Methyl ethyl ketone	ND	5	ug/L	11/14/07		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	1	ug/L	11/14/07		R/J	SW8260
Methylene chloride	ND	1.5	ug/L	11/14/07		R/J	SW8260
n-Butylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
n-Propylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Naphthalene	ND	1	ug/L	11/14/07		R/J	SW8260
o-Xylene	ND	1	ug/L	11/14/07		R/J	SW8260
p-Isopropyltoluene	ND	1	ug/L	11/14/07		R/J	SW8260
sec-Butylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Styrene	ND	1	ug/L	11/14/07		R/J	SW8260
tert-Butylbenzene	ND	1	ug/L	11/14/07		R/J	SW8260
Tetrachloroethene	ND	1	ug/L	11/14/07		R/J	SW8260
Tetrahydrofuran (THF)	ND	5	ug/L	11/14/07		R/J	SW8260
Toluene	ND	1	ug/L	11/14/07		R/J	SW8260
Total Xylenes	ND	0.5	ug/L	11/14/07		R/J	SW8260
trans-1,2-Dichloroethene	ND	1	ug/L	11/14/07		R/J	SW8260
trans-1,3-Dichloropropene	ND	0.5	ug/L	11/14/07		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	5	ug/L	11/14/07		R/J	SW8260
Trichloroethene	ND	1	ug/L	11/14/07		R/J	SW8260
Trichlorofluoromethane	ND	1	ug/L	11/14/07		R/J	SW8260
Trichlorotrifluoroethane	ND	1	ug/L	11/14/07		R/J	SW8260
Vinyl chloride	ND	1	ug/L	11/14/07		R/J	SW8260

Client ID: NG MALDEN TASKS UST

Phoenix I.D.: AJ70639

Parameter	Result	RL	Units	Date	Time	By	Reference
<b>QA/QC Surrogates</b>							
% 1,2-dichlorobenzene-d4	103		%	11/14/07		R/J	SW8260
% Bromofluorobenzene	94		%	11/14/07		R/J	SW8260
% Dibromofluoromethane	100		%	11/14/07		R/J	SW8260
% Toluene-d8	100		%	11/14/07		R/J	SW8260
MA Petroleum Hydrocarbon (EPH)	Completed			11/15/07		KCA	MADEP EPH-04 <sup>1</sup>

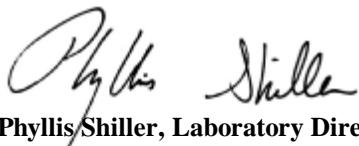
1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

### Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Limit RL=Reporting Limit

PLEASE NOTE: THIS PROGRESS REPORT IS CONSIDERED PRELIMINARY DATA. THE RESULTS ENTERED HAVE NOT BEEN EXAMINED BY OUR QA/QC DEPARTMENT.



Phyllis Shiller, Laboratory Director  
November 15, 2007

## DEP REQUIRED VPH DATA REPORTING FORMAT/INFORMATION

### SAMPLE INFORMATION

Matrix	<input checked="" type="checkbox"/> Aqueous	<input type="checkbox"/> Soil	<input type="checkbox"/> Sediment	<input type="checkbox"/> Other:
Containers	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Broken	<input type="checkbox"/> Leaking	
	Aqueous	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> pH<2	<input type="checkbox"/> pH>2
Sample Preservatives	Soil or Sediment	<input type="checkbox"/> N/A	Samples not preserved in Methanol or air tight container	mL MeOH/soil g
			Samples received in Methanol	covering soil      not covering soil
				1:1 +/- 25%
Temperature		<input type="checkbox"/> Received on Ice	<input type="checkbox"/> Received at 4 degrees C	<input checked="" type="checkbox"/> Other: See Chain of Custody
				Other:

### VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH 97-12	Client ID	UST				
Method for Target Analytes: MADEP-VPH-98-1	Lab ID	AJ70639				
VPH Surrogate	Date Collected	11/13/07				
PID: 2,5-Dibromotoluene	Date Received	11/14/07				
FID: 2,5-Dibromotoluene	Date Analyzed	11/15/07				
	Dilution Factor	1				
	% Moisture (soil)	---				
Range/Target Analyte	Eluting Range	RL	Units			
Unadjusted C5-C8 Aliphatics (*1)	N/A		ug/L	<100		
Unadjusted C9-C12 Aliphatics (*1)	N/A		ug/L	<100		
Benzene			ug/L	<5		
Ethyl Benzene			ug/L	<5		
MTBE			ug/L	<5		
Naphthalene			ug/L	<5		
Toluene			ug/L	<5		
m,p-Xylenes			ug/L	<10		
o-Xylene			ug/L	<5		
C5-C8 Aliphatic Hydrocarbons *1,2	N/A		ug/L	<100		
C9-C12 Aliphatic Hydrocarbons *1,3	N/A		ug/L	<100		
C9-C10 Aromatic Hydrocarbons *1	N/A		ug/L	<100		
PID % Surrogate Recovery			N/A	96		
FID % Surrogate Recovery			N/A	100		
Surrogate Acceptance Range			N/A	70%-130%		

\*1 Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.  
\*2 C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.  
\*3 C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range AND concentration of the C9-C10 Aromatic Hydrocarbons

### CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH method followed?  Yes  No

Were all performance/acceptance standards for the required QA/QC procedures achieved?  Yes  No

Were any significant modifications made to the VPH method, as specified in Section 11.3?  Yes  No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

*Harry L. Mullin*  
Signature: \_\_\_\_\_

Position: Chemist  
\_\_\_\_\_

Printed Name: Harry Mullin

Date: 11/15/2007

**DEP REQUIRED EPH DATA REPORTING FORMAT/INFORMATION**  
**SAMPLE INFORMATION**

Matrix	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:
Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking
Aqueous Preservatives	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> pH<2 <input type="checkbox"/> pH>2    Comment:
Temperature	Received on Ice    Received at 4 degrees C <input checked="" type="checkbox"/> Other: See COC
Extraction Method	Water: 3510                      Soil: 3545

**EPH ANALYTICAL RESULTS**

Method for Ranges: MADEP EPH 04	Client ID	UST					
Method for Target Analytes: MADEP-EPH-04	Lab ID	AJ70639					
EPH Surrogate Standards	Date Collected	11/13/07					
Aromatic: o-terphenyl	Date Received	11/14/07					
Aliphatic: 1-chlorooctadecane	Date Extracted:	11/14/07					
EPH Fractionation Surrogates	Date Analyzed	11/15/07					
Aromatic: 2-Fluorobiphenyl	Dilution Factor	1					
Aromatic: 2-Bromonaphthalene	% Moisture (soil)	N/A					
Range/Target Analyte		Units					
Total TPH (*1)		ug/L	<100				
<b>Diesel PAH Target Analytes</b>							
Naphthalene		ug/L					
2-Methyl Naphthalene		ug/L					
Phenanthrene		ug/L					
Acenaphthene		ug/L					
<b>Other PAH Target Analytes</b>							
Acenaphthylene		ug/L					
Anthracene		ug/L					
Benzo(a)anthracene		ug/L					
Benzo(a)pyrene		ug/L					
Benzo(b)fluoranthene		ug/L					
Benzo(k)fluoranthene		ug/L					
Chrysene		ug/L					
Dibenzo(a,h)anthracene		ug/L					
Fluoranthene		ug/L					
Fluorene		ug/L					
Indeno(1,2,3-cd)pyrene		ug/L					
Pyrene		ug/L					
C9-C18 Aliphatic Hydrocarbons *1		ug/L	<100				
C19-C36 Aliphatic Hydrocarbons *1		ug/L	<100				
C11-C22 Aromatic Hydrocarbons *1,2		ug/L	<100				
Aliphatic Surrogate % Recovery			61				
Aromatic Surrogate % Recovery			87				
Sample Surrogate Acceptance Range			40-140				
Fractionation Surrogate % Recovery			65				
Fractionation Surrogate % Recovery			71				
Fractionation Surr. Acceptance Range			40-140				

\*1 Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

\*2 C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes eluting in that range.



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823



## QA/QC Report

November 21, 2007

### QA/QC Data

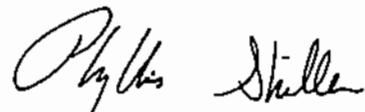
SDG I.D.: GAJ70639

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 88213, Sample No: AJ70386 (AJ70639)								
<b>ICP Metals - Aqueous</b>								
Aluminum	BDL	NC	99.3	100	0.7	102	101	1.0
Antimony	BDL	NC	101	100	1.0	101	101	0.0
Arsenic	BDL	NC	96.9	98.3	1.4	97.5	98.1	0.6
Barium	BDL	BDL	103	105	1.9	103	103	0.0
Beryllium	BDL	NC	102	103	1.0	103	102	1.0
Boron	BDL	NC	103	104	1.0	103	104	1.0
Cadmium	BDL	NC	101	102	1.0	100	101	1.0
Calcium	0.002	BDL	102	104	1.9	NC	NC	NC
Chromium	BDL	NC	100	101	1.0	101	100	1.0
Cobalt	BDL	NC	100	101	1.0	100	99.8	0.2
Copper	BDL	NC	102	102	0.0	103	102	1.0
Iron	BDL	1.00	98.3	100	1.7	97.4	96.6	0.8
Lead	BDL	NC	99.9	101	1.1	99.7	99.9	0.2
Magnesium	BDL	BDL	102	104	1.9	84.0	83.0	1.2
Manganese	BDL	BDL	102	103	1.0	102	102	0.0
Molybdenum	BDL	NC	101	102	1.0	102	101	1.0
Nickel	BDL	NC	101	101	0.0	100	99.9	0.1
Phosphorus	BDL	NC	93.5	95.0	1.6	97.1	97.0	0.1
Potassium	BDL	BDL	101	99.8	1.2	102	104	1.9
Selenium	BDL	NC	94.7	96.4	1.8	94.5	95.3	0.8
Silver	BDL	NC	101	102	1.0	102	102	0.0
Sodium	BDL	BDL	96.3	99.0	2.8	NC	NC	NC
Thallium	BDL	NC	98.9	99.5	0.6	98.9	98.9	0.0
Tin	BDL	NC	82.4	85.3	3.5	84.1	84.6	0.6
Vanadium	BDL	NC	100	102	2.0	101	101	0.0
Zinc	BDL	NC	98.2	98.8	0.6	98.4	98.2	0.2
QA/QC Batch 88214, Sample No: AJ70386 (AJ70639)								
Lead (Furnace)	BDL		111	108	2.7	108	107	0.9
QA/QC Batch 88337, Sample No: AJ70780 (AJ70639)								
Mercury	BDL		99.6	94.4	5.4	102	99.2	2.8

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If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference  
LCS - Laboratory Control Sample  
LCSD - Laboratory Control Sample Duplicate  
MS - Matrix Spike  
MS Dup - Matrix Spike Duplicate  
NC - No Criteria



Phyllis Shiller, Laboratory Director  
November 21, 2007



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
 Tel. (860) 645-1102 Fax (860) 645-0823



## QA/QC Report

November 21, 2007

### QA/QC Data

SDG I.D.: GAJ70639

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
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QA/QC Batch 86450, Sample No: AJ62087 (AJ70639)

#### MA-EPH

Acenaphthene	ND	59	61	3.3			
Anthracene	ND	70	74	5.6			
Chrysene	ND	57	73	24.6			
n-Eicosane (C20)	ND	72	68	5.7			
n-Nonadecane (C19)	ND	72	68	5.7			
n-Octacosane (C28)	ND	72	68	5.7			
n-Tetradecane (C14)	ND	55	49	11.5			
Naphthalene	ND	51	48	6.1			
Pyrene	ND	66	70	5.9			
%2-Bromonaphthalene (surrogate)	77	73	75	2.7			
%2-Fluorobiphenyl (surrogate)	79	74	77	4.0			
%o-COD (surrogate)	54	49	50	2.0			
%o-Terphenyl (surrogate)	66	58	61	5.0			

#### Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 88453, Sample No: AJ67910 (AJ70639)

#### MA-VPH

1,2,4-trimethylbenzene	ND	71	111	44.0	91	109	18.0
2-methylpentane	ND	74	104	33.7	96	111	14.5
Benzene	ND	73	104	35.0	85	102	18.2
Ethylbenzene	ND	79	114	36.3	98	115	16.0
Iso-octane	ND	76	106	33.0	94	109	14.8
m&p-xylene	ND	77	104	29.8	96	103	7.0
n-butylcyclohexane					88	91	3.4
n-nonane (C9)	ND	73	98	29.2	89	94	5.5
n-pentane (C5)	ND	85	122	35.7	99	114	14.1
naphthalene	ND	79	102	25.4	96	106	9.9
o-xylene	ND	74	102	31.8	88	105	17.6
tert-butylmethyl ether (MTBE)	ND	77	96	22.0	105	99	5.9
Toluene	ND	80	108	29.8	93	108	14.9
% 2,5-dibromotoluene	116	99	122	20.8	109	115	5.4

QA/QC Batch 88210, Sample No: AJ69595 (AJ70639)

#### Polychlorinated Biphenyls

PCB-1016	ND		103	94	9.1
PCB-1221	ND				
PCB-1232	ND				

QA/QC Data

SDG I.D.: GAJ70639

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Ree %	MS Dup Rec %	RPD
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND				102	83	20.5
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	124				130	97	29.1
% TCMX (Surrogate Rec)	110				117	115	1.7
Comment:							
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.							
QA/QC Batch 88365, Sample No: AJ69712 (AJ70639)							
<b>Volatiles Organics</b>							
1,1,1,2-Tetrachloroethane	ND	109	104	4.7	120	121	0.8
1,1,1-Triehloroethane	ND	105	103	1.9	126	125	0.8
1,1,2,2-Tetrachloroethane	ND	102	91	11.4	118	116	1.7
1,1,2-Trichloroethane	ND	96	89	7.6	117	120	2.5
1,1-Dichloroethane	ND	96	99	3.1	116	113	2.6
1,1-Dichloroethene	ND	86	83	3.6	126	128	1.6
1,1-Dichloropropene	ND	92	87	5.6	127	124	2.4
1,2,3-Trichlorobenzene	ND	97	82	16.8	111	116	4.4
1,2,3-Trichloropropene	ND	111	90	20.9	124	128	3.2
1,2,4-Trichlorobenzene	ND	101	87	14.9	121	125	3.3
1,2,4-Trimethylbenzene	ND	104	101	2.9	123	121	1.6
1,2-Dibromo-3-chloropropane	ND	112	88	24.0	111	129	15.0
1,2-Dichlorobenzene	ND	98	94	4.2	110	114	3.6
1,2-Dichloroethane	ND	110	107	2.8	123	125	1.6
1,2-Dichloropropane	ND	94	90	4.3	112	113	0.9
1,3,5-Trimethylbenzene	ND	106	104	1.9	125	121	3.3
1,3-Dichlorobenzene	ND	100	96	4.1	116	115	0.9
1,3-Dichloropropene	ND	106	97	8.9	117	118	0.9
1,4-Dichlorobenzene	ND	95	92	3.2	113	112	0.9
2,2-Dichloropropane	ND	78	<70	NC	127	120	5.7
2-Chlorotoluene	ND	100	98	2.0	118	116	1.7
2-Hexanone	ND	101	83	19.6	112	126	11.8
2-Isopropyltoluene	ND	103	101	2.0	121	117	3.4
4-Chlorotoluene	ND	104	100	3.9	117	117	0.0
4-Methyl-2-pentanone	ND	113	100	12.2	132	137	3.7
Acetone	ND	86	101	16.0	102	102	0.0
Acrolein	ND	108	97	10.7	103	112	8.4
Acrylonitrile	ND	93	88	5.5	102	107	4.8
Benzene	ND	97	94	3.1	116	117	0.9
Bromobenzene	ND	106	95	10.9	115	118	2.6
Bromochloromethane	ND	95	90	5.4	110	112	1.8
Bromodichloromethane	ND	107	105	1.9	123	127	3.2
Bromoform	ND	108	102	5.7	128	130	1.6
Bromomethane	ND	76	<70	NC	89	118	28.0
Carbon Disulfide	ND	84	83	1.2	115	116	0.9
Carbon tetrachloride	ND	107	108	0.9	136	133	2.2

**QA/QC Data**

SDG I.D.: GAJ70639

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Ree %	MS Dup Rec %	RPD
Chlorobenzene	ND	96	95	1.0	112	111	0.9
Chloroethane	ND	<70	82	NC	95	95	0.0
Chloroform	ND	105	102	2.9	117	117	0.0
Chloromethane	ND	<70	<70	NC	91	89	2.2
cis-1,2-Dichloroethene	ND	94	88	6.6	105	101	3.9
cis-1,3-Diehloropropene	ND	98	87	11.9	122	126	3.2
Dibromochloromethane	ND	114	105	8.2	121	128	5.6
Dibromoethane	ND	103	92	11.3	118	124	5.0
Dibromomethane	ND	103	95	8.1	118	120	1.7
Dichlorodifluoromethane	ND	<70	<70	NC	105	125	17.4
Ethylbenzene	ND	99	100	1.0	118	117	0.9
Hexachlorobutadiene	ND	96	89	7.6	119	122	2.5
Isopropylbenzene	ND	117	108	8.0	121	118	2.5
m&p-Xylene	ND	97	99	2.0	119	117	1.7
Methyl ethyl ketone	ND	83	81	2.4	93	108	14.9
Methyl 1-butyl ether (MTBE)	ND	116	108	7.1	126	128	1.6
Methylene chloride	ND	88	90	2.2	112	109	2.7
n-Butylbenzene	ND	102	99	3.0	126	122	3.2
n-Propylbenzene	ND	104	100	3.9	120	118	1.7
Naphthalene	ND	100	78	24.7	116	121	4.2
o-Xylene	ND	98	102	4.0	119	118	0.8
p-Isopropyltoluene	ND	107	104	2.8	127	123	3.2
sec-Butylbenzene	ND	97	94	3.1	124	122	1.6
Styrene	ND	98	99	1.0	116	118	1.7
tert-Butylbenzene	ND	107	102	4.8	126	123	2.4
Tetrachloroethene	ND	104	97	7.0	138	120	14.0
Tetrahydrofuran (THF)	ND	>130	>130	NC	48	134	94.5
Toluene	ND	93	95	2.1	116	119	2.6
trans-1,2-Dichloroethene	ND	93	91	2.2	120	117	2.5
trans-1,3-Dichloropropene	ND	102	93	9.2	128	131	2.3
trans-1,4-dichloro-2-butene	ND	111	90	20.9	124	128	3.2
Trichloroethene	ND	100	117	15.7	291	236	20.9
Trichlorofluoromethane	ND	94	94	0.0	136	127	6.8
Trichlorotrifluoroethane	ND	102	98	4.0	131	129	1.5
Vinyl chloride	ND	81	80	1.2	98	122	21.8
% 1,2-dichlorobenzene-d4	106	103	99	4.0	103	100	3.0
% Bromofluorobenzene	92	100	102	2.0	101	103	2.0
% Dibromofluoromethane	104	100	100	0.0	97	100	3.0
% Toluene-d8	98	98	98	0.0	100	101	1.0

QA/QC Batch 88206, Sample No: AJ69790 (AJ70639)

**Polynuclear Aromatic HC**

2-Methylnaphthalene	ND	84	91	8.0
Acenaphthene	ND	84	93	10.2
Acenaphthylene	ND	83	92	10.3
Anthracene	ND	94	98	4.2
Benz(a)anthracene	ND	96	99	3.1
Benzo(a)pyrene	ND	100	98	2.0
Benzo(b)fluoranthene	ND	103	105	1.9

QA/QC Data

SDG I.D.: GAJ70639

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Benzo(ghi)perylene	ND	78	88	12.0			
Benzo(k)fluoranthene	ND	101	98	3.0			
Chrysene	ND	99	100	1.0			
Dibenz(a,h)anthracene	ND	90	99	9.5			
Fluoranthene	ND	106	110	3.7			
Fluorene	ND	89	98	9.6			
Indeno(1,2,3-cd)pyrene	ND	86	94	8.9			
Naphthalene	ND	77	87	12.2			
Phenanthrene	ND	91	98	7.4			
Pyrene	ND	100	106	5.8			
% 2-Fluorobiphenyl	79	79	88	10.8			
% Nitrobenzene-d5	69	72	81	11.8			
% Terphenyl-d14	100	98	103	5.0			

**Comment:**

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

1 = This parameter is outside laboratory blank specified limits.

3 = This parameter is outside laboratory ms/msd specified limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

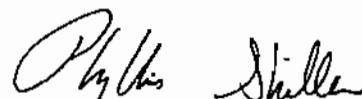
LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

November 21, 2007

Title: MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name: Phoenix Environmental Laboratories, Inc. Project #:

Project Location: NG MALDEN TASKS MADEP RTN1:

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

AJ70639

Sample Matrices:  Groundwater  Soil/Sediment  Drinking Water  Other:

MCP SW-846 Methods Used	<input type="checkbox"/> 8260B	<input type="checkbox"/> 8151A	<input type="checkbox"/> 8330	<input type="checkbox"/> 6010B	<input checked="" type="checkbox"/> 7470A/1A
	<input checked="" type="checkbox"/> 8270C	<input type="checkbox"/> 8081A	<input checked="" type="checkbox"/> VPH	<input type="checkbox"/> 6020	<input type="checkbox"/> 9014M2
	<input checked="" type="checkbox"/> 8082	<input type="checkbox"/> 8021B	<input checked="" type="checkbox"/> EPH	<input type="checkbox"/> 7000S3	<input type="checkbox"/> 7196A

As specified in MADEP Compendium of Analytical Methods. (check all that apply)

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

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

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

All negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Authorized

Signature: Kathleen Cressia

Printed Name: Kathleen Cressia

Printed Name: Phyllis Shiller

Date: Wednesday, November 21, 2007

Position: QA/QC Officer

Position: Laboratory Director



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## MCP Certification Report

November 21, 2007

SDG I.D.: GAJ70639

### Lead Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Zeeman 11/15/07-1 (AJ70639)

The initial calibration met all criteria including a standard run at the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spcetal interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

**Printed Name** Rick Schweitzer

**Position:** Chemist

**Date:** 11/15/2007

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### EPH Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**QC Comments:** QC Batch 86450 10/18/07 (AJ70639)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All MS recoveries were within 40 - 140 with the following exceptions: None.

All MSD recoveries were within 40 - 140 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



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## MCP Certification Report

November 21, 2007

SDG I.D.: GAJ70639

### Mercury Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Merlin 11/15/07-1 (AJ70639)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not. The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

**Printed Name** Rick Schweitzer

**Position:** Chemist

**Date:** 11/15/2007

All LCS recoveries were within 80 - 120 with the following exceptions: None.

All LCSD recoveries were within 80 - 120 with the following exceptions: None.

All MS recoveries were within 80 - 120 with the following exceptions: None.

All MSD recoveries were within 80 - 120 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### ICP Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Icp7 11/14/07-1 (AJ70639)

The initial calibration met criteria.

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

The continuing calibration blanks were less than the reporting level for the elements reported.

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

**Printed Name** Emily Kolominskaya

**Position:** Chemist

**Date:** 11/14/2007



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## MCP Certification Report

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SDG I.D.: GAJ70639

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### PAHSIM Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Chem04 11/15/07-1 (AJ70639)

The client requested PAH/basic neutral compounds only. Phoenix utilized a method that contained a shortened list of base neutral only compounds, SPCCs, CCCs and surrogates.

In order to achieve the requested detection levels, the samples were analyzed by selective ion monitoring (SIM) mode. The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration(Chem04/SIMBN\_11101):

All base neutral SPCCs, CCCs and >90% of target compounds met criteria. The following base neutral compounds had %RSDs >30%: none

Continuing Calibration:

All SPCCs, CCCs and >90% of target compounds met criteria. The following compounds had %Ds >20%: None

Printed Name Harry Mullin  
Position: Chemist  
Date: 11/15/2007

QC Comments: QC Batch 88206 11/13/07 (AJ70639)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

All LCS recoveries were within 20 - 130 with the following exceptions: None.

All LCSD recoveries were within 20 - 130 with the following exceptions: None.

All MS recoveries were within 20 - 130 with the following exceptions: None.

All MSD recoveries were within 20 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



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## MCP Certification Report

November 21, 2007

SDG I.D.: GAJ70639

### PCB Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument: Au-ecd4 11/15/07-1 (AJ70639)

8082 Narration:

The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

Some of the continuing calibration standards were above acceptable criteria, however, the continuing calibration standards that bracketed samples with detected PCB's were within criteria. No sample bias is suspected.

Printed Name Michael Hahn

Position: Chemist

Date: 11/15/2007

QC Comments: QC Batch 88210 11/13/07 (AJ70639)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SVOASIM Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

QC Comments: QC Batch 88206 11/13/07 (AJ70639)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.



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## MCP Certification Report

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SDG I.D.: GAJ70639

All LCS recoveries were within 20 - 130 with the following exceptions: None.

All LCSD recoveries were within 20 - 130 with the following exceptions: None.

All MS recoveries were within 20 - 130 with the following exceptions: None.

All MSD recoveries were within 20 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Chem08 11/14/07-i (AJ70639)

This instrument is set up with a dual auto sampler (labeled R and S)

R-Side

Initial Calibration (110707)

All SPCCs, CCCs and >80% of target compounds met criteria.

Continuing Calibration Verification:

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations >30%: Dichlorodifluoromethane, Tetrahydrofuran (THF), Bromoform, Naphthalene, 1,2,3-Trichlorobenzene

S-Side

Initial Calibration (110707)

All SPCCs, CCCs and >80% of target compounds met criteria.

Continuing Calibration Verification:

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations >30%: Tetrahydrofuran (THF), Bromoform

**Printed Name:** Johanna Harrington

**Position:** Chemist

**Date:** 11/14/2007



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## MCP Certification Report

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All LCS recoveries were within 70 - 130 with the following exceptions: Chloroethane, Chloromethane, Diechlorodifluoromethane, Tetrahydrofuran (THF)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane, Bromomethane, Chloromethane, Dichlorodifluoromethane, Tetrahydrofuran (THF)

All MS recoveries were within 70 - 130 with the following exceptions: 4-Methyl-2-pentanone, Carbon tetrachloride, Tetrachloroethene, Tetrahydrofuran (THF), Trichloroethylene, Trichlorofluoromethane, Trichlorotrifluoroethane

All MSD recoveries were within 70 - 130 with the following exceptions: 4-Methyl-2-pentanone, Carbon tetrachloride, Tetrahydrofuran (THF), trans-1,3-Dichloropropene, Trichloroethylene

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### VPH Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

**Instrument:** Pid-fid | 1/14/07-1 (AJ70639)

A five level calibration was performed. All RSDs were within limits.

The continuing calibration standards were within control limits.

**Printed Name:** Harry Mullin  
**Position:** Chemist  
**Date:** 11/14/2007

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: None.

All MSD recoveries were within 70 - 130 with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if 80% of LCS/LCSD compounds are within criteria.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

### SDG Comments

#### 8260 Volatile Organics:

The following compounds from the MCP 8260 analyte list were not performed: TAME, diethyl ether, diisopropyl ether, 1,4 dioxane, and ETBE.



## **APPENDIX E**

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**AIR MONITORING DATA - OCTOBER 31 THROUGH NOVEMBER 21, 2007**

AIR MONITORING SHEET							
Client: Massachusetts Electric Company							
Project: 51 Commercial Street							
31-Oct-07							
Weather: 55 degrees Sunny, clear							
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm							
Notes:							
LOCATION: UpWind		LOCATION: Down Wind			Handheld Perimeter Monitoring		
Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
		8:00	0				
		8:05	0				
		8:10	0				
		8:15	0				
		8:20	0.2				
		8:25	0.2				
		8:30	0.3				
		8:35	0.4				
		8:40	0.4				
		8:45	0.5				
		8:50	0.5				
		8:55	0.6				
		9:00	0.6			0	0.061
9:03	0.04	9:05	0.7	9:03	0.054		
9:08	0.054	9:10	0.8	9:08	0.049		
9:13	0.048	9:15	0.8	9:13	0.063		
9:18	0.053	9:20	0.8	9:18	0.05		
9:23	0.086	9:25	0.8	9:23	0.05		
9:28	0.063	9:30	0.9	9:28	0.05		
9:33	0.126	9:35	0.9	9:33	0.053		
9:38	0.074	9:40	0.9	9:38	0.054		
9:43	0.053	9:45	0.9	9:43	0.056		
9:48	0.051	9:50	0.9	9:48	0.075		
9:53	0.045	9:55	1	9:53	0.056		
9:58	0.064	10:00	1	9:58	0.056	0	0.059
10:03	0.047	10:05	1	10:03	0.058		
10:08	0.049	10:10	1	10:08	0.056		
10:13	0.056	10:15	1	10:13	0.063		
10:18	0.056	10:20	1	10:18	0.062		
10:23	0.093	10:25	0.9	10:23	0.048		
10:28	0.088	10:30	0.9	10:28	0.046		
10:33	0.073	10:35	1	10:33	0.043		
10:38	0.099	10:40	0.9	10:38	0.04		
10:43	0.083	10:45	0.9	10:43	0.038		
10:48	0.052	10:50	0.9	10:48	0.038		
10:53	0.055	10:55	0.9	10:53	0.038		
10:58	0.073	11:00	0.9	10:58	0.031	0	0.112
11:03	0.047	11:05	0.9	11:03	0.031	Applied Water- Dust level dropped	
11:08	0.053	11:10	0.9	11:08	0.031		
11:13	0.097	11:15	0.9	11:13	0.034		
11:18	0.137	11:20	0.8	11:18	0.033		
11:23	0.045	11:25	0.8	11:23	0.032		
11:28	0.042	11:30	0.8	11:28	0.035		
11:33	0.045	11:35	0.8	11:33	0.034		
11:38	0.065	11:40	0.8	11:38	0.035		
11:43	0.059	11:45	0.8	11:43	0.034		
11:48	0.058	11:50	0.8	11:48	0.035		
11:53	0.032	11:55	0.9	11:53	0.039		
11:58	0.028	12:00	0.9	11:58	0.033	0	0.017
12:03	0.028	12:05	0.9	12:03	0.032		
12:08	0.025	12:10	0.9	12:08	0.032		
12:13	0.027	12:15	0.9	12:13	0.033		
12:18	0.028	12:20	0.9	12:18	0.032		
12:23	0.024	12:25	0.9	12:23	0.031		
12:28	0.024	12:30	0.9	12:28	0.03		
12:33	0.026	12:35	0.9	12:33	0.032		

AIR MONITORING SHEET						
Client: Massachusetts Electric Company						
Project: 51 Commercial Street						
31-Oct-07						
Weather: 55 degrees Sunny, clear						
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm						
Notes:						
LOCATION: UpWind		LOCATION: Down Wind			Handheld Perimeter Monitoring	
Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)      Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)      Concentration (mg/m <sup>3</sup> )
12:38	0.071	12:40	0.8	12:38	0.031	
12:43	0.095	12:45	0.8	12:43	0.029	
12:48	0.093	12:50	0.8	12:48	0.028	
12:53	0.06	12:55	0.8	12:53	0.028	
12:58	0.092	13:00	0.8	12:58	0.03	0      0.125
13:03	0.069	13:05	0.8	13:03	0.03	Applied Water- Dust level dropped
13:08	0.048	13:10	0.8	13:08	0.029	
13:13	0.07	13:15	0.8	13:13	0.029	
13:18	0.043	13:20	0.9	13:18	0.026	
13:23	0.033	13:25	0.8	13:23	0.028	
13:28	0.026	13:30	0.8	13:28	0.027	
13:33	0.025	13:35	0.8	13:33	0.029	
13:38	0.033	13:40	0.8	13:38	0.027	
13:43	0.037	13:45	0.8	13:43	0.028	
13:48	0.047	13:50	0.8	13:48	0.027	
13:53	0.051	13:55	0.8	13:53	0.026	
13:58	0.098	14:00	0.8	13:58	0.027	0      0.034
14:03	0.06	14:05	0.8	14:03	0.026	
14:08	0.024	14:10	0.8	14:08	0.026	
14:13	0.029	14:15	0.8	14:13	0.024	
14:18	0.021	14:20	0.8	14:18	0.024	
14:23	0.019	14:25	0.8	14:23	0.028	
14:28	0.024	14:30	0.8	14:28	0.028	
14:33	0.022	14:35	0.8	14:33	0.029	
14:38	0.023	14:40	0.8	14:38	0.027	
14:43	0.058	14:45	0.8	14:43	0.024	
14:48	0.043	14:50	0.8	14:48	0.03	
14:53	0.031	14:55	0.8	14:53	0.027	
14:58	0.039	15:00	0.8	14:58	0.025	0      0.134
15:03	0.023	15:05	0.8	15:03	0.025	Applied Water- Dust level dropped
15:08	0.021	15:10	0.8	15:08	0.024	
15:13	0.043	15:15	0.8	15:13	0.025	
15:18	0.039	15:20	0.8	15:18	0.026	
15:23	0.026	15:25	0.7	15:23	0.028	
15:28	0.028			15:28	0.025	
15:33	0.021					

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
1-Nov-07									
Weather: 50-60 degrees Overcast									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind			LOCATION: Down Wind			Handheld Perimeter Monitoring			
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)		
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (mg/m <sup>3</sup> )	
				8:00	0	8:03	0.021		
				8:05	0	8:08	0.022		
				8:10	0	8:13	0.021		
				8:15	0	8:18	0.021		
				8:20	0	8:23	0.02		
				8:25	0	8:28	0.023		
				8:30	0	8:33	0.021	0 0.026	
				8:35	0	8:38	0.02		
				8:40	0	8:43	0.02		
				8:45	0	8:48	0.019		
				8:50	0	8:53	0.018		
				8:55	0	8:58	0.019		
				9:00	0	9:03	0.02		
				9:05	0	9:08	0.018		
				9:10	0	9:13	0.016		
				9:15	0	9:18	0.015		
				9:20	0	9:23	0.016		
				9:25	0	9:28	0.018		
				9:30	0	9:33	0.017	0 0.041	
				9:35	0	9:38	0.015		
				9:40	0	9:43	0.013		
				9:45	0	9:48	0.012		
				9:50	0	9:53	0.013		
				9:55	0	9:58	0.013		
				10:00	0	10:03	0.012		
				10:05	0	10:08	0.012		
				10:10	0	10:13	0.012		
				10:15	0	10:18	0.012		
				10:20	0	10:23	0.011		
				10:25	0	10:28	0.01		
				10:30	0	10:33	0.014	0 0.014	
				10:35	0	10:38	0.01		
				10:40	0	10:43	0.013		
				10:45	0	10:48	0.012		
				10:50	0	10:53	0.01		
				10:55	0	10:58	0.011		
				11:00	0	11:03	0.016		
				11:05	0	11:08	0.012		
				11:10	0	11:13	0.011		
				11:15	0	11:18	0.01		
Upwind PID arrives and is programmed and started				11:20	0	11:23	0.011		
				11:25	0	11:28	0.011		
Upwind PID Arrives			Battery cable loose, data lost on Upwind Dust unit. Reset and restarted	11:30	0	11:33	0.014	0 0.028	
				11:35	0	11:38	0.017		
				11:40	0	11:43	0.014		
				11:45	0	11:48	0.013		
				11:50	0	11:53	0.013		
				11:55	0	11:58	0.023		
				12:00	0	12:03	0.014		
				12:05	0	12:08	0.015		
				12:10	0	12:13	0.013		
				12:15	0	12:18	0.012		
				12:20	0	12:23	0.012		
				12:25	0	12:28	0.013		
				12:30	0	12:33	0.013	0 0.053	
				12:35	0	12:34	0.009		



AIR MONITORING SHEET								
Client: Massachusetts Electric Company								
Project: 51 Commercial Street								
1-Nov-07								
Weather: 50-60 degrees Overcast								
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm								
Notes:								
LOCATION: Up Wind			LOCATION: Down Wind			Handheld Perimeter Monitoring		
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)	
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (mg/m <sup>3</sup> )
12:40	0	12:39	0.008	12:35	0	12:38	0.011	
12:45	0	12:44	0.008	12:40	0	12:43	0.013	
12:50	0	12:49	0.008	12:45	0	12:48	0.012	
12:55	0	12:54	0.009	12:50	0	12:53	0.012	
13:00	0	12:59	0.008	12:55	0	12:58	0.013	
13:05	0	13:04	0.025	13:00	0	13:03	0.014	
13:10	0	13:09	0.008	13:05	0	13:08	0.014	
13:15	0	13:14	0.009	13:10	0	13:13	0.013	
13:20	0	13:19	0.016	13:15	0	13:18	0.014	
13:25	0	13:24	0.009	13:20	0	13:23	0.016	
13:30	0	13:29	0.015	13:25	0	13:28	0.015	
13:35	0	13:34	0.01	13:30	0	13:33	0.015	0 0.018
13:40	0	13:39	0.01	13:35	0	13:38	0.014	
13:45	0	13:44	0.01	13:40	0	13:43	0.014	
13:50	0	13:49	0.034	13:45	0	13:48	0.014	
13:55	0	13:54	0.02	13:50	0	13:53	0.014	
14:00	0	13:59	0.016	13:55	0	13:58	0.017	
14:05	0	14:04	0.03	14:00	0	14:03	0.015	
14:10	0	14:09	0.022	14:05	0	14:08	0.017	
14:15	0	14:14	0.014	14:10	0	14:13	0.017	
14:20	0	14:19	0.012	14:15	0	14:18	0.017	
14:25	0	14:24	0.014	14:20	0	14:23	0.016	
14:30	0	14:29	0.015	14:25	0	14:28	0.02	
14:35	0	14:34	0.016	14:30	0	14:33	0.02	0 0.076
14:40	0	14:39	0.017	14:35	0	14:38	0.024	
14:45	0	14:44	0.015	14:40	0	14:43	0.018	
14:50	0	14:49	0.019	14:45	0	14:48	0.018	
14:55	0	14:54	0.02	14:50	0	14:53	0.018	
15:00	0	14:59	0.018	14:55	0	14:58	0.018	
15:05	0	15:04	0.016	15:00	0	15:03	0.019	
15:10	0	15:09	0.016	15:05	0	15:08	0.022	
15:15	0	15:14	0.019	15:10	0	15:13	0.021	
		15:19	0.018	15:15	0	15:18	0.021	
				15:20	0	15:23	0.023	0 0.064

### AIR MONITORING SHEET

Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
2-Nov-07									
Weather: 50-60 degrees Sunny, then Overcast									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
7:49	0								
7:54	0								
7:59	0			7:59	0				
8:04	0	8:03	0.004	8:04	0	8:03	0.009		
8:09	0	8:08	0.003	8:09	0	8:08	0.007		
8:14	0	8:13	0.006	8:14	0	8:13	0.01		
8:19	0	8:18	0.003	8:19	0	8:18	0.007		
8:24	0	8:23	0.004	8:24	0	8:23	0.006		
8:29	0	8:28	0.006	8:29	0	8:28	0.007		
8:34	0	8:33	0.008	8:34	0	8:33	0.007	0	0.041
8:39	0	8:38	0.005	8:39	0	8:38	0.006		
8:44	0	8:43	0.005	8:44	0	8:43	0.005		
8:49	0	8:48	0.003	8:49	0	8:48	0.008		
8:54	0.1	8:53	0.009	8:54	0	8:53	0.01		
8:59	0.2	8:58	0.007	8:59	0	8:58	0.014		
9:04	0.1	9:03	0.002	9:04	0	9:03	0.005		
9:09	0.1	9:08	0.002	9:09	0.1	9:08	0.01		
9:14	0.1	9:13	0.002	9:14	0.1	9:13	0.01		
9:19	0.2	9:18	0.003	9:19	0.1	9:18	0.01		
9:24	0.2	9:23	0.002	9:24	0.1	9:23	0.007		
9:29	0.2	9:28	0.003	9:29	0.1	9:28	0.02	0	0.022
9:34	0.2	9:33	0.096	9:34	0.1	9:33	0.021		
9:39	0.3	9:38	0.004	9:39	0.1	9:38	0.013		
9:44	0.2	9:43	0.002	9:44	0.1	9:43	0.006		
9:49	0.2	9:48	0.002	9:49	0.2	9:48	0.005		
9:54	0.2	9:53	0.009	9:54	0.2	9:53	0.007		
9:59	0.2	9:58	0.002	9:59	0.2	9:58	0.006		
10:04	0.1	10:03	0.002	10:04	0.2	10:03	0.005		
10:09	0.2	10:08	0.004	10:09	0.2	10:08	0.006		
10:14	0.2	10:13	0.002	10:14	0.2	10:13	0.004		
10:19	0.2	10:18	0.002	10:19	0.2	10:18	0.004		
10:24	0.1	10:23	0.002	10:24	0.2	10:23	0.004		
10:29	0	10:28	0.002	10:29	0.2	10:28	0.004	0	0.000
10:34	0	10:33	0.002	10:34	0.2	10:33	0.004		
10:39	0	10:38	0.001	10:39	0.3	10:38	0.004		
10:44	0	10:43	0.001	10:44	0.2	10:43	0.004		
10:49	0	10:48	0.002	10:49	0.3	10:48	0.006		
10:54	0	10:53	0.005	10:54	0.3	10:53	0.005		
10:59	0	10:58	0.034	10:59	0.2	10:58	0.005		
11:04	0	11:03	0.082	11:04	0.2	11:03	0.006		
11:09	0	11:08	0.002	11:09	0.2	11:08	0.007		
11:14	0	11:13	0.037	11:14	0.2	11:13	0.005		
11:19	0	11:18	0.003	11:19	0.2	11:18	0.008		
11:24	0	11:23	0.006	11:24	0.2	11:23	0.007		
11:29	0	11:28	0.417	11:29	0.2	11:28	0.021	0	0.088
11:34	0	11:33	0.006	11:34	0.2	11:33	0.007		
11:39	0	11:38	0.007	11:39	0.2	11:38	0.006		
11:44	0	11:43	0.007	11:44	0.3	11:43	0.006		
11:49	0	11:48	0.006	11:49	0.2	11:48	0.006		
11:54	0	11:53	0.003	11:54	0.2	11:53	0.005		
11:59	0	11:58	0.003	11:59	0.2	11:58	0.005		
12:04	0	12:03	0.003	12:04	0.1	12:03	0.006		
12:09	0	12:08	0.002	12:09	0.2	12:08	0.005		
12:14	0	12:13	0.003	12:14	0.1	12:13	0.005		
12:19	0	12:18	0.002	12:19	0.2	12:18	0.013		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
2-Nov-07									
Weather: 50-60 degrees Sunny, then Overcast									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:24	0	12:23	0.003	12:24	0.2	12:23	0.006		
12:29	0	12:28	0.003	12:29	0.3	12:28	0.005		
12:34	0	12:33	0.002	12:34	0.3	12:33	0.007	0	0.010
12:39	0	12:38	0.003	12:39	0.3	12:38	0.009		
12:44	0	12:43	0.002	12:44	0.3	12:43	0.007		
12:49	0	12:48	0.005	12:49	0.3	12:48	0.007		
12:54	0	12:53	0.002	12:54	0.3	12:53	0.006		
12:59	0	12:58	0.003	12:59	0.2	12:58	0.006		
13:04	0	13:03	0.002	13:04	0.2	13:03	0.006		
13:09	0	13:08	0.003	13:09	0.2	13:08	0.016		
13:14	0	13:13	0.007	13:14	0.2	13:13	0.008		
13:19	0	13:18	0.1	13:19	0.2	13:18	0.011		
13:24	0	13:23	0.078	13:24	0.2	13:23	0.01		
13:29	0	13:28	0.096	13:29	0.2	13:28	0.007		
13:34	0	13:33	0.042	13:34	0.3	13:33	0.014	0	0.006
13:39	0	13:38	0.057	13:39	0.3	13:38	0.011		
13:44	0	13:43	0.131	13:44	0.3	13:43	0.008		
13:49	0	13:48	0.002	13:49	0.3	13:48	0.029		
13:54	0	13:53	0.009	13:54	0.3	13:53	0.014		
13:59	0	13:58	0.003	13:59	0.3	13:58	0.008		
14:04	0	14:03	0.104	14:04	0.3	14:03	0.008		
14:09	0	14:08	0.148	14:09	0.3	14:08	0.025		
14:14	0	14:13	0.002	14:14	0.3	14:13	0.028		
14:19	0	14:18	0.008	14:19	0.3	14:18	0.009		
14:24	0	14:23	0.012	14:24	0.3	14:23	0.014		
14:29	0	14:28	0.002	14:29	0.3	14:28	0.009		
14:34	0	14:33	0.006	14:34	0.3	14:33	0.013	0	0.020
14:39	0	14:38	0.003	14:39	0.3	14:38	0.008		
14:44	0	14:43	0.003	14:44	0.3	14:43	0.01		
14:49	0	14:48	0.003	14:49	0.3	14:48	0.009		
14:54	0	14:53	0.008	14:54	0.3	14:53	0.008		
14:59	0	14:58	0.012	14:59	0.1				
15:04	0	15:03	0.005	15:04	0				
		15:08	0.01						

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
5-Nov-07									
Weather: 50-60 degrees Sunny,									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
8:52	0.2	7:49	0.038	8:55	0	7:49	0.03	(Clock on MiniRae will be reset, Daylight Savings Time not accounted for in MinRae, meters started roughly same time as Dustrack meters)	
8:57	0.3	7:54	0.026	9:00	0	7:54	0.032		
9:02	0.5	7:59	0.03	9:05	0	7:59	0.036		
9:07	0.6	8:04	0.035	9:10	0	8:04	0.04		
9:12	0.7	8:09	0.029	9:15	0	8:09	0.035		
9:17	0.8	8:14	0.026	9:20	0.5	8:14	0.032		
9:22	1	8:19	0.029	9:25	0.7	8:19	0.036		
9:27	1.1	8:24	0.028	9:30	2.2	8:24	0.033		
9:32	1.1	8:29	0.026	9:35	2.2	8:29	0.035	1.2	0.053
9:37	1.2	8:34	0.024	9:40	1.8	8:34	0.032		
9:42	1.4	8:39	0.024	9:45	2.1	8:39	0.029		
9:47	1.3	8:44	0.027	9:50	2.2	8:44	0.03		
9:52	1.3	8:49	0.024	9:55	2.7	8:49	0.027		
9:57	1.8	8:54	0.022	10:00	2.6	8:54	0.028		
10:02	2.3	8:59	0.027	10:05	3.5	8:59	0.029		
10:07	2	9:04	0.026	10:10	2.7	9:04	0.031		
10:12	2.1	9:09	0.024	10:15	2.8	9:09	0.027		
10:17	1.7	9:14	0.022	10:20	2.8	9:14	0.03		
10:22	1.6	9:19	0.022	10:25	3.2	9:19	0.028		
10:27	1.4	9:24	0.02	10:30	3.4	9:24	0.027		
10:32	1.4	9:29	0.02	10:35	3.3	9:29	0.024	0.5	0.033
10:37	0.9	9:34	0.018	10:40	3.1	9:34	0.023		
10:42	1.2	9:39	0.016	10:45	3.1	9:39	0.023		
10:47	0.7	9:44	0.017	10:50	3.7	9:44	0.021		
10:52	0.4	9:49	0.014	10:55	3.3	9:49	0.02		
10:57	0.4	9:54	0.014	11:00	3.4	9:54	0.019		
11:02	0.3	9:59	0.011	11:05	3.3	9:59	0.016		
11:07	0.3	10:04	0.013	11:10	3.2	10:04	0.019		
11:12	0.2	10:09	0.009	11:15	2.5	10:09	0.013		
11:17	0	10:14	0.01	11:20	2.7	10:14	0.014		
11:22	0	10:19	0.009	11:25	3.2	10:19	0.013		
11:27	0	10:24	0.01	11:30	2.6	10:24	0.014		
11:32	0	10:29	0.012	11:35	2.1	10:29	0.014	0.6	0.044
11:37	0	10:34	0.013	11:40	2	10:34	0.018		
11:42	0	10:39	0.013	11:45	2.1	10:39	0.017		
11:47	0	10:44	0.013	11:50	1.9	10:44	0.017		
11:52	0	10:49	0.014	11:55	2.1	10:49	0.019		
11:57	0	10:54	0.013	12:00	2.2	10:54	0.019		
12:02	0	10:59	0.015	12:05	2.4	10:59	0.02		
12:07	0	11:04	0.015	12:10	2.2	11:04	0.023		
12:12	0	11:09	0.017	12:15	2.1	11:09	0.019		
12:17	0	11:14	0.018	12:20	1.9	11:14	0.02		
12:22	0	11:19	0.028	12:25	2.3	11:19	0.017		
12:27	0	11:24	0.014	12:30	2.8	11:24	0.02	0.5	0.044
12:32	0	11:29	0.012	12:35	2.7	11:29	0.027		
12:37	0	11:34	0.015	12:40	2.5	11:34	0.028		
12:42	0	11:39	0.018	12:45	2.9	11:39	0.023		
12:47	0	11:44	0.02	12:50	2.7	11:44	0.026		
12:52	0	11:49	0.019	12:55	2.6	11:49	0.026		
12:57	0	11:54	0.016	13:00	2.2	11:54	0.022		
13:02	0	11:59	0.016	13:05	1.9	11:59	0.021		
13:07	0	12:04	0.017	13:10	1.8	12:04	0.026		
13:12	0	12:09	0.016	13:15	1.9	12:09	0.022		
13:17	0	12:14	0.018	13:20	2.2	12:14	0.026		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
5-Nov-07									
Weather: 50-60 degrees Sunny,									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
13:22	0	12:19	0.019	13:25	2	12:19	0.025		
13:27	0	12:24	0.015	13:30	1.7	12:24	0.02	0.8	0.052
13:32	0	12:29	0.015	13:35	1.7	12:29	0.02		
13:37	0	12:34	0.015	13:40	1.8	12:34	0.02		
13:42	0	12:39	0.018	13:45	1.7	12:39	0.019		
13:47	0	12:44	0.013	13:50	1.8	12:44	0.018		
13:52	0	12:49	0.012	13:55	1.9	12:49	0.018		
13:57	0	12:54	0.011	14:00	1.9	12:54	0.016		
14:02	0	12:59	0.012	14:05	1.8	12:59	0.022		
14:07	0	13:04	0.014	14:10	1.9	13:04	0.017		
14:12	0	13:09	0.015	14:15	1.8	13:09	0.02		
14:17	0	13:14	0.011	14:20	1.8	13:14	0.025		
14:22	0	13:19	0.011	14:25	1.9	13:19	0.019		
14:27	0	13:24	0.01	14:30	1.6	13:24	0.016		
14:32	0	13:29	0.009	14:35	1.5	13:29	0.015	1	0.03
14:37	0	13:34	0.01	14:40	1.4	13:34	0.016		
14:42	0	13:39	0.01	14:45	1.4	13:39	0.016		
14:47	0	13:44	0.01	14:50	1.3	13:44	0.016		
14:52	0	13:49	0.01	14:55	1.6	13:49	0.017		
14:57	0	13:54	0.01	15:00	1.3	13:54	0.016		
15:02	0	13:59	0.011	15:05	1.3	13:59	0.017		
15:07	0	14:04	0.01	15:10	1.5	14:04	0.015		
15:12	0	14:09	0.013	15:15	1.3	14:09	0.021		
15:17	0	14:14	0.011	15:20	1.3	14:14	0.016		
15:22	0	14:19	0.009	15:25	1.4	14:19	0.014		
15:27	0	14:24	0.013	15:30	1.4	14:24	0.045		
15:32	0	14:29	0.01	15:35	1.3	14:29	0.016	1	0.018
15:37	0	14:34	0.01	15:40	1.3	14:34	0.015		
15:42	0	14:39	0.011	15:45	1.3	14:39	0.017		
15:47	0	14:44	0.011	15:50	1.5	14:44	0.021		
15:52	0	14:49	0.016	15:55	1.3	14:49	0.02		
15:57	0	14:54	0.01	16:00	1.5	14:54	0.015		
16:02	0	14:59	0.009	16:05	1.4	14:59	0.015		
		15:04	0.009			15:04	0.013		

AIR MONITORING SHEET								
Client: Massachusetts Electric Company								
Project: 51 Commercial Street								
6-Nov-07								
Weather: 50-60 degrees Rain, heavy at times								
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm								
Notes:								
LOCATION: Up Wind			LOCATION: Down Wind			Handheld Perimeter Monitoring		
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)	
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (mg/m <sup>3</sup> )
		7:49	0.043			7:49	0.104	MiniRae clock off by 1-hour due to DST
8:53	0	7:54	0.055	8:53	0	7:54	0.072	
8:58	0	7:59	0.035	8:58	0	7:59	0.077	
9:03	0	8:04	0.032	9:03	0	8:04	0.051	
9:08	0.1	8:09	0.031	9:08	0	8:09	0.054	
9:13	0.1	8:14	0.027	9:13	0.1	8:14	0.056	
9:18	0.1	8:19	0.027	9:18	0.1	8:19	0.05	
9:23	0.1	8:24	0.029	9:23	0.1	8:24	0.076	
9:28	0.1	8:29	0.03	9:28	0.1	8:29	0.053	
9:33	0.1	8:34	0.027	9:33	0.1	8:34	0.071	0 0.043
9:38	0.1	8:39	0.027	9:38	0.1	8:39	0.074	
9:43	0.1	8:44	0.026	9:43	0.1	8:44	0.058	
9:48	0.1	8:49	0.027	9:48	0.1	8:49	0.064	
9:53	0.1	8:54	0.028	9:53	0.1	8:54	0.542	
9:58	0.1	8:59	0.148	9:58	0.1	8:59	0.5	Heavy Rain Stop perimeter sampling
10:03	0.1	9:04	0.047	10:03	0.1	9:04	0.106	
10:08	0.1	9:09	0.028	10:08	0.1	9:09	0.29	
10:13	0.1	9:14	0.03	10:13	0.1	9:14	0.207	
10:18	0.1	9:19	0.029	10:18	0.1	9:19	0.053	
10:23	0.1	9:24	0.029	10:23	0.1	9:24	0.051	
10:28	0.1	9:29	0.031	10:28	0.1	9:29	0.054	
10:33	0.1	9:34	0.035	10:33	0.1	9:34	0.059	
10:38	0.1	9:39	0.029	10:38	0.1	9:39	0.049	
10:43	0.1	9:44	0.021	10:43	0.1	9:44	0.037	
10:48	0.2	9:49	0.023	10:48	0.1	9:49	0.051	
10:53	0.2	9:54	0.023	10:53	0.1	9:54	0.118	
10:58	0.3	9:59	0.032	10:58	0.1	9:59	0.203	
11:03	0.3	10:04	0.038	11:03	0.1	10:04	0.137	
11:08	0.3	10:09	0.031	11:08	0.1	10:09	0.096	
11:13	0.2	10:14	0.026	11:13	0.1	10:14	0.119	
11:18	0.2	10:19	0.018	11:18	0.1	10:19	0.07	
11:23	0.2	10:24	0.014	11:23	0.1	10:24	0.064	
11:28	0.2	10:29	0.018	11:28	0.1	10:29	0.046	
11:33	0.3	10:34	0.015	11:33	0.1	10:34	0.03	
11:38	0.3	10:39	0.016	11:38	0.1	10:39	0.033	
11:43	0.3	10:44	0.015	11:43	0.1	10:44	0.032	
11:48	0.4	10:49	0.016	11:48	0.1	10:49	0.033	
11:53	0.4	10:54	0.011	11:53	0.1	10:54	0.026	
11:58	0.3	10:59	0.011	11:58	0.1	10:59	0.021	
12:03	0.3	11:04	0.01	12:03	0.1	11:04	0.02	
12:08	0.3	11:09	0.015	12:08	0.1	11:09	0.02	
12:13	0.3	11:14	0.012	12:13	0.1	11:14	0.025	
12:18	0.3	11:19	0.011	12:18	0.2	11:19	0.024	
12:23	0.3	11:24	0.01	12:23	0.1	11:24	0.022	
12:28	0.3	11:29	0.01	12:28	0.1	11:29	0.037	
12:33	0.3	11:34	0.01	12:33	0.2	11:34	0.02	
12:38	0.3	11:39	0.01	12:38	0.2	11:39	0.024	
12:43	0.3	11:44	0.01	12:43	0.2	11:44	0.025	

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
6-Nov-07									
Weather: 50-60 degrees Rain, heavy at times									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:48	0.3	11:49	0.009	12:48	0.2	11:49	0.018		
12:53	0.3	11:54	0.009	12:53	0.2	11:54	0.036		
12:58	0.4	11:59	0.019	12:58	0.2	11:59	0.049		
13:03	0.4	12:04	0.009	13:03	0.2	12:04	0.051		
13:08	0.4	12:09	0.01	13:08	0.2	12:09	0.035		
13:13	0.4	12:14	0.011	13:13	0.2	12:14	0.022		
13:18	0.4	12:19	0.012	13:18	0.2	12:19	0.021		
13:23	0.4	12:24	0.013	13:23	0.2	12:24	0.021		
13:28	0.4	12:29	0.012	13:28	0.2	12:29	0.022		
13:33	0.4	12:34	0.012	13:33	0.2	12:34	0.022		
13:38	0.4	12:39	0.015	13:38	0.2	12:39	0.03		
13:43	0.4	12:44	0.011	13:43	0.2	12:44	0.02		
13:48	0.4	12:49	0.012	13:48	0.2	12:49	0.021		
13:53	0.5	12:54	0.012	13:53	0.2	12:54	0.02		
13:58	0.5	12:59	0.015	13:58	0.2	12:59	0.023		
14:03	0.5	13:04	0.015	14:03	0.2	13:04	0.021		
14:08	0.5	13:09	0.013	14:08	0.2	13:09	0.02		
14:13	0.5	13:14	0.015	14:13	0.2	13:14	0.02		
14:18	0.5	13:19	0.012	14:18	0.2	13:19	0.02		
		13:24	0.013						

### AIR MONITORING SHEET

Client: Massachusetts Electric Company

Project: 51 Commercial Street

7-Nov-07

Weather: 45-55, sunny/Partly cloudy breezy

Action Level: 0.10 mg/m<sup>3</sup> above Upwind; VOCs: 5 ppm

Notes:

LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
7:50	0	7:49	0.031	7:49	0	7:49	0.016		
7:55	0	7:54	0.037	7:54	0	7:54	0.017		
8:00	0	7:59	0.024	7:59	0	7:59	0.019		
8:05	0	8:04	0.024	8:04	0	8:04	0.021		
8:10	0	8:09	0.019	8:09	0	8:09	0.021		
8:15	0	8:14	0.017	8:14	0	8:14	0.016		
8:20	0	8:19	0.018	8:19	0	8:19	0.07		
8:25	0	8:24	0.016	8:24	0	8:24	0.03		
8:30	0	8:29	0.017	8:29	0	8:29	0.017	0	0.007
8:35	0	8:34	0.017	8:34	0	8:34	0.012		
8:40	0	8:39	0.017	8:39	0	8:39	0.011		
8:45	0	8:44	0.017	8:44	0	8:44	0.015		
8:50	0	8:49	0.016	8:49	0	8:49	0.017		
8:55	0	8:54	0.014	8:54	0	8:54	0.013		
9:00	0	8:59	0.011	8:59	0	8:59	0.007		
9:05	0	9:04	0.01	9:04	0	9:04	0.006		
9:10	0	9:09	0.01	9:09	0	9:09	0.005		
9:15	0	9:14	0.009	9:14	0	9:14	0.006		
9:20	0	9:19	0.008	9:19	0	9:19	0.003		
9:25	0	9:24	0.008	9:24	0	9:24	0.002		
9:30	0	9:29	0.009	9:29	0	9:29	0.003	0	0.01
9:35	0	9:34	0.007	9:34	0	9:34	0.003		
9:40	0	9:39	0.007	9:39	0	9:39	0.002		
9:45	0	9:44	0.007	9:44	0	9:44	0.002		
9:50	0	9:49	0.006	9:49	0	9:49	0.001		
9:55	0	9:54	0.007	9:54	0	9:54	0.001		
10:00	0	9:59	0.006	9:59	0	9:59	0		
10:05	0	10:04	0.007	10:04	0	10:04	0		
10:10	0	10:09	0.006	10:09	0	10:09	0.002		
10:15	0	10:14	0.007	10:14	0	10:14	0.021		
10:20	0	10:19	0.008	10:19	0	10:19	0.017		
10:25	0	10:24	0.006	10:24	0	10:24	0.013		
10:30	0	10:29	0.006	10:29	0	10:29	0.008	0	0.006
10:35	0	10:34	0.007	10:34	0	10:34	0.005		
10:40	0.1	10:39	0.008	10:39	0	10:39	0		
10:45	0.1	10:44	0.008	10:44	0	10:44	0.001		
10:50	0	10:49	0.007	10:49	0	10:49	0.001		
10:55	0	10:54	0.007	10:54	0	10:54	0		
11:00	0	10:59	0.009	10:59	0	10:59	0.006		
11:05	0	11:04	0.008	11:04	0	11:04	0.004		
11:10	0	11:09	0.016	11:09	0	11:09	0.001		
11:15	0	11:14	0.009	11:14	0	11:14	0.003		
11:20	0	11:19	0.008	11:19	0	11:19	0.002		
11:25	0	11:24	0.01	11:24	0	11:24	0.004		
11:30	0	11:29	0.008	11:29	0	11:29	0.006	0	0.005
11:35	0	11:34	0.008	11:34	0	11:34	0.003		
11:40	0	11:39	0.009	11:39	0	11:39	0.002		
11:45	0	11:44	0.009	11:44	0	11:44	0		
11:50	0	11:49	0.007	11:49	0	11:49	0.003		
11:55	0	11:54	0.008	11:54	0	11:54	0		
12:00	0	11:59	0.007	11:59	0	11:59	0		
12:05	0	12:04	0.008	12:04	0	12:04	0		
12:10	0	12:09	0.007	12:09	0	12:09	0		

**AIR MONITORING SHEET**

Client: Massachusetts Electric Company

Project: 51 Commercial Street

7-Nov-07

Weather: 45-55, sunny/Partly cloudy breezy

Action Level: 0.10 mg/m<sup>3</sup> above Upwind; VOCs: 5 ppm

Notes:

LOCATION: Up Wind			LOCATION: Down Wind			Handheld Perimeter Monitoring			
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:15	0	12:14	0.007	12:14	0	12:14	0		
12:20	0	12:19	0.009	12:19	0	12:19	0		
12:25	0	12:24	0.008	12:24	0	12:24	0		
12:30	0	12:29	0.007	12:29	0	12:29	0	0	0.006
12:35	0	12:34	0.008	12:34	0	12:34	0		
12:40	0	12:39	0.007	12:39	0	12:39	0		
12:45	0	12:44	0.008	12:44	0	12:44	0		
12:50	0	12:49	0.007	12:49	0	12:49	0		
12:55	0	12:54	0.007	12:54	0	12:54	0		
13:00	0	12:59	0.007	12:59	0	12:59	0		
13:05	0	13:04	0.007	13:04	0	13:04	0		
13:10	0	13:09	0.007	13:09	0	13:09	0		
13:15	0	13:14	0.009	13:14	0	13:14	0.001		
13:20	0	13:19	0.009	13:19	0	13:19	0		
13:25	0	13:24	0.008	13:24	0	13:24	0.001		
13:30	0	13:29	0.009	13:29	0	13:29	0.002	0	0.013
13:35	0	13:34	0.008	13:34	0	13:34	0.002		
13:40	0	13:39	0.007	13:39	0	13:39	0.001		
13:45	0	13:44	0.006	13:44	0	13:44	0.001		
13:50	0	13:49	0.006	13:49	0	13:49	0		
13:55	0	13:54	0.006	13:54	0	13:54	0		
14:00	0	13:59	0.006	13:59	0	13:59	0.003		
14:05	0	14:04	0.006	14:04	0	14:04	0.009		
14:10	0	14:09	0.006	14:09	0	14:09	0.007		
14:15	0	14:14	0.006	14:14	0	14:14	0.013		
14:20	0	14:19	0.004	14:19	0	14:19	0.012		
14:25	0	14:24	0.005	14:24	0	14:24	0.01		
14:30	0	14:29	0.005	14:29	0	14:29	0.003		
14:35	0	14:34	0.005	14:34	0	14:34	0.002		
14:40	0	14:39	0.005	14:39	0	14:39	0.001		
14:45	0	14:44	0.009	14:44	0	14:44	0.03		
14:50	0	14:49	0.037	14:49	0	14:49	0.005		
14:55	0	14:54	0.027	14:54	0	14:54	0.005		
		14:59	0.013			14:59	0.003		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
8-Nov-07									
Weather: 45-55, sunny/Partly cloudy breezy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
		8:03	0.005	8:05	0	8:03	0.013		
8:07	0.1	8:08	0.005	8:10	0	8:08	0.009		
8:12	0.2	8:13	0.005	8:15	0	8:13	0.008		
8:17	0.2	8:18	0.005	8:20	0	8:18	0.008		
8:22	0.3	8:23	0.004	8:25	0	8:23	0.009		
8:27	0.4	8:28	0.004	8:30	0	8:28	0.011	0	0.009
8:32	0.4	8:33	0.005	8:35	0	8:33	0.009		
8:37	0.4	8:38	0.004	8:40	0.1	8:38	0.008		
8:42	0.5	8:43	0.004	8:45	0.1	8:43	0.018		
8:47	0.5	8:48	0.004	8:50	0.1	8:48	0.019		
8:52	0.5	8:53	0.003	8:55	0.1	8:53	0.006		
8:57	0.5	8:58	0.002	9:00	0.2	8:58	0.005		
9:02	0.6	9:03	0.002	9:05	0.3	9:03	0.006		
9:07	0.6	9:08	0.002	9:10	0.3	9:08	0.006		
9:12	0.6	9:13	0.003	9:15	0.3	9:13	0.006		
9:17	0.6	9:18	0.002	9:20	0.3	9:18	0.005		
9:22	0.6	9:23	0.005	9:25	0.3	9:23	0.009		
9:27	0.5	9:28	0.002	9:30	0.4	9:28	0.008		
9:32	0.4	9:33	0.003	9:35	0.3	9:33	0.016	0.1	0.063
9:37	0.4	9:38	0.002	9:40	0.3	9:38	0.021		
9:42	0.4	9:43	0.002	9:45	0.4	9:43	0.007		
9:47	0.4	9:48	0.003	9:50	0.3	9:48	0.012		
9:52	0.4	9:53	0.003	9:55	0.3	9:53	0.007		
9:57	0.3	9:58	0.002	10:00	0.4	9:58	0.006		
10:02	0.3	10:03	0.003	10:05	0.4	10:03	0.010		
10:07	0.3	10:08	0.003	10:10	0.4	10:08	0.008		
10:12	0.2	10:13	0.002	10:15	0.4	10:13	0.006		
10:17	0.2	10:18	0.003	10:20	0.4	10:18	0.006		
10:22	0.2	10:23	0.002	10:25	0.4	10:23	0.007		
10:27	0.2	10:28	0.002	10:30	0.4	10:28	0.010		
10:32	0.2	10:33	0.002	10:35	0.4	10:33	0.026	0	0.01
10:37	0.1	10:38	0.004	10:40	0.4	10:38	0.017		
10:42	0.2	10:43	0.002	10:45	0.4	10:43	0.029		
10:47	0.1	10:48	0.009	10:50	0.4	10:48	0.008		
10:52	0	10:53	0.002	10:55	0.4	10:53	0.006		
10:57	0	10:58	0.003	11:00	0.4	10:58	0.008		
11:02	0	11:03	0.003	11:05	0.4	11:03	0.010		
11:07	0	11:08	0.003	11:10	0.4	11:08	0.006		
11:12	0.1	11:13	0.004	11:15	0.4	11:13	0.010		
11:17	0.1	11:18	0.002	11:20	0.4	11:18	0.015		
11:22	0	11:23	0.003	11:25	0.4	11:23	0.006		
11:27	0	11:28	0.003	11:30	0.4	11:28	0.006		
11:32	0	11:33	0.006	11:35	0.4	11:33	0.008	0	0.012
11:37	0	11:38	0.007	11:40	0.4	11:38	0.029		
11:42	0	11:43	0.003	11:45	0.4	11:43	0.016		
11:47	0	11:48	0.003	11:50	0.4	11:48	0.008		
11:52	0	11:53	0.003	11:55	0.4	11:53	0.007		
11:57	0	11:58	0.003	12:00	0.4	11:58	0.007		
12:02	0	12:03	0.003	12:05	0.4	12:03	0.007		
12:07	0	12:08	0.003	12:10	0.4	12:08	0.008		
12:12	0	12:13	0.004	12:15	0.3	12:13	0.007		
12:17	0	12:18	0.01	12:20	0.3	12:18	0.008		
12:22	0	12:23	0.003	12:25	0.3	12:23	0.007		
12:27	0	12:28	0.003	12:30	0.4	12:28	0.007		
12:32	0	12:33	0.004	12:35	0.4	12:33	0.008	0	0.014
12:37	0	12:38	0.003	12:40	0.4	12:38	0.007		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
8-Nov-07									
Weather: 45-55, sunny/Partly cloudy breezy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:42	0	12:43	0.004	12:45	0.4	12:43	0.007		
12:47	0	12:48	0.003	12:50	0.4	12:48	0.014		
12:52	0	12:53	0.004	12:55	0.4	12:53	0.013		
12:57	0	12:58	0.004	13:00	0.4	12:58	0.014		
13:02	0	13:03	0.004	13:05	0.4	13:03	0.016		
13:07	0	13:08	0.004	13:10	0.4	13:08	0.012		
13:12	0	13:13	0.003	13:15	0.4	13:13	0.009		
13:17	0	13:18	0.004	13:20	0.4	13:18	0.014		
13:22	0	13:23	0.004	13:25	0.4	13:23	0.013		
13:27	0.1	13:28	0.003	13:30	0.4	13:28	0.013		
13:32	0.1	13:33	0.004	13:35	0.4	13:33	0.014	0.1	0.034
13:37	0.1	13:38	0.003	13:40	0.4	13:38	0.014		
13:42	0.1	13:43	0.003	13:45	0.5	13:43	0.020		
13:47	0.1	13:48	0.003	13:50	0.5	13:48	0.013		
13:52	0.1	13:53	0.002	13:55	0.5	13:53	0.008		
13:57	0.1	13:58	0.003	14:00	0.5	13:58	0.013		
14:02	0.2	14:03	0.003	14:05	0.5	14:03	0.012		
14:07	0.2	14:08	0.003	14:10	0.5	14:08	0.009		
14:12	0.2	14:13	0.003	14:15	0.5	14:13	0.013		
14:17	0.2	14:18	0.003	14:20	0.5	14:18	0.009		
14:22	0.2	14:23	0.003	14:25	0.5	14:23	0.012		
14:27	0.3	14:28	0.006	14:30	0.5	14:28	0.016		
14:32	0.3	14:33	0.005	14:35	0.5	14:33	0.017	0	0.022
14:37	0.2	14:38	0.004	14:40	0.5	14:38	0.009		
14:42	0.3	14:43	0.002	14:45	0.5	14:43	0.023		
14:47	0.3	14:48	0.006	14:50	0.5	14:48	0.008		
14:52	0.3	14:53	0.002	14:55	0.5	14:53	0.007		
14:57	0.3	14:58	0.003	15:00	0.5	14:58	0.008		
15:02	0.3	15:03	0.003	15:05	0.5	15:03	0.008		
15:07	0.3	15:08	0.004	15:10	0.5	15:08	0.017		
15:12	0.3	15:13	0.006	15:15	0.5	15:13	0.015		
15:17	0.3	15:18	0.003	15:20	0.5	15:18	0.015		
15:22	0.4	15:23	0.003	15:25	0.4	15:23	0.011		
15:27	0.4	15:28	0.004	15:30	0.5	15:28	0.022		
15:32	0.4	15:33	0.007			15:33	0.013	0	0.015
		15:38	0.025			15:38	0.015		
		15:43	0.005			15:43	0.010		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
9-Nov-07									
Weather: 45-55, sunny/Partly cloudy breezy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind			LOCATION: Down Wind				Handheld Perimeter Monitoring		
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)	
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
7:05	0	7:03	0.098			7:03	0.025	0.3	0.043
7:10	0	7:08	0.017	7:07	0	7:08	0.026		
7:15	0	7:13	0.017	7:12	0	7:13	0.033		
7:20	0.1	7:18	0.018	7:17	0	7:18	0.038		
7:25	0.1	7:23	0.021	7:22	0	7:23	0.037		
7:30	0.2	7:28	0.020	7:27	0	7:28	0.048		
7:35	0.3	7:33	0.019	7:32	0	7:33	0.027		
7:40	0.4	7:38	0.019	7:37	0	7:38	0.032		
7:45	0.4	7:43	0.019	7:42	0	7:43	0.041		
7:50	0.4	7:48	0.020	7:47	0	7:48	0.041		
7:55	0.5	7:53	0.018	7:52	0	7:53	0.035		
8:00	0.5	7:58	0.017	7:57	0	7:58	0.046	0.2	0.022
8:05	0.5	8:03	0.016	8:02	0	8:03	0.043		
8:10	0.5	8:08	0.016	8:07	0	8:08	0.031		
8:15	0.5	8:13	0.016	8:12	0	8:13	0.030		
8:20	0.5	8:18	0.017	8:17	0	8:18	0.029		
8:25	0.5	8:23	0.016	8:22	0	8:23	0.025		
8:30	0.5	8:28	0.015	8:27	0	8:28	0.023		
8:35	0.5	8:33	0.015	8:32	0	8:33	0.022		
8:40	0.5	8:38	0.015	8:37	0	8:38	0.020		
8:45	0.5	8:43	0.015	8:42	0	8:43	0.021		
8:50	0.5	8:48	0.015	8:47	0	8:48	0.019		
8:55	0.5	8:53	0.014	8:52	0.1	8:53	0.019		
9:00	0.6	8:58	0.014	8:57	0.1	8:58	0.019	0.1	0.34
9:05	0.6	9:03	0.014	9:02	0.1	9:03	0.020		
9:10	0.6	9:08	0.014	9:07	0.2	9:08	0.020		
9:15	0.6	9:13	0.012	9:12	0.2	9:13	0.018		
9:20	0.6	9:18	0.013	9:17	0.2	9:18	0.018		
9:25	0.5	9:23	0.012	9:22	0.2	9:23	0.017		
9:30	0.5	9:28	0.012	9:27	0.2	9:28	0.017		
9:35	0.5	9:33	0.014	9:32	0.2	9:33	0.024		
9:40	0.4	9:38	0.014	9:37	0.2	9:38	0.020		
9:45	0.4	9:43	0.012	9:42	0.2	9:43	0.017		
9:50	0.4	9:48	0.013	9:47	0.2	9:48	0.019		
9:55	0.3	9:53	0.015	9:52	0.2	9:53	0.019		
10:00	0.3	9:58	0.012	9:57	0.2	9:58	0.018	0.1	0.037
10:05	0.3	10:03	0.012	10:02	0.2	10:03	0.024		
10:10	0.2	10:08	0.014	10:07	0.3	10:08	0.019		
10:15	0.3	10:13	0.013	10:12	0.3	10:13	0.029		
10:20	0.2	10:18	0.013	10:17	0.3	10:18	0.019		
10:25	0.2	10:23	0.012	10:22	0.3	10:23	0.019		
10:30	0.1	10:28	0.012	10:27	0.3	10:28	0.018		
10:35	0.1	10:33	0.013	10:32	0.3	10:33	0.019		
10:40	0.1	10:38	0.011	10:37	0.3	10:38	0.017		
10:45	0.1	10:43	0.010	10:42	0.3	10:43	0.015		
10:50	0.1	10:48	0.010	10:47	0.3	10:48	0.016		
10:55	0	10:53	0.009	10:52	0.2	10:53	0.014		
11:00	0	10:58	0.009	10:57	0.3	10:58	0.015	0.3	0.043
11:05	0	11:03	0.008	11:02	0.3	11:03	0.014		
11:10	0	11:08	0.009	11:07	0.2	11:08	0.022		
11:15	0	11:13	0.008	11:12	0.2	11:13	0.061		
11:20	0	11:18	0.010	11:17	0.3	11:18	0.016		
11:25	0	11:23	0.010	11:22	0.3	11:23	0.020		
11:30	0	11:28	0.009	11:27	0.2	11:28	0.015		
11:35	0	11:33	0.010	11:32	0.2	11:33	0.030		
11:40	0	11:38	0.010	11:37	0.3	11:38	0.016		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
9-Nov-07									
Weather: 45-55, sunny/Partly cloudy breezy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
11:45	0	11:43	0.009	11:42	0.3	11:43	0.015		
11:50	0	11:48	0.009	11:47	0.2	11:48	0.021		
11:55	0	11:53	0.010	11:52	0.2	11:53	0.014		
12:00	0	11:58	0.008	11:57	0.2	11:58	0.018	0.0	0.042
12:05	0	12:03	0.010	12:02	0.1	12:03	0.016		
12:10	0	12:08	0.011	12:07	0.2	12:08	0.015		
12:15	0	12:13	0.009	12:12	0.2	12:13	0.016		
12:20	0	12:18	0.008	12:17	0.2	12:18	0.019		
12:25	0	12:23	0.009	12:22	0.2	12:23	0.018		
12:30	0	12:28	0.011	12:27	0.2	12:28	0.018		
12:35	0	12:33	0.008	12:32	0.2	12:33	0.015		
12:40	0	12:38	0.009	12:37	0.2	12:38	0.016		
12:45	0	12:43	0.008	12:42	0.2	12:43	0.016		
12:50	0	12:48	0.008	12:47	0.2	12:48	0.015		
12:55	0	12:53	0.008	12:52	0.3	12:53	0.014		
13:00	0	12:58	0.008	12:57	0.3	12:58	0.015		
13:05	0	13:03	0.009	13:02	0.3	13:03	0.013		
13:10	0	13:08	0.007	13:07	0.2	13:08	0.013		
13:15	0	13:13	0.007	13:12	0.2	13:13	0.013		
13:20	0	13:18	0.007	13:17	0.2	13:18	0.014		
13:25	0	13:23	0.007	13:22	0.2	13:23	0.016		
13:30	0	13:28	0.007	13:27	0.2	13:28	0.020		
13:35	0	13:33	0.007	13:32	0.1	13:33	0.019		
13:40	0	13:38	0.007	13:37	0.2	13:38	0.012		
13:45	0	13:43	0.009	13:42	0.2	13:43	0.013		
13:50	0	13:48	0.006	13:47	0.2	13:48	0.011		
13:55	0	13:53	0.007	13:52	0.1	13:53	0.011		
14:00	0	13:58	0.007	13:57	0.1	13:58	0.012		
14:05	0	14:03	0.009	14:02	0.1	14:03	0.014		
14:10	0	14:08	0.010	14:07	0.1	14:08	0.015		
14:15	0	14:13	0.009	14:12	0.2	14:13	0.014		
14:20	0	14:18	0.008	14:17	0.2	14:18	0.014		
14:25	0	14:23	0.008	14:22	0.2	14:23	0.014		
14:30	0	14:28	0.006	14:27	0.2	14:28	0.013		
14:35	0	14:33	0.006	14:32	0.2	14:33	0.011		
		14:38	0.008	14:37	0.2	14:38	0.013		
		14:43	0.007	14:42	0.2	14:43	0.011		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
12-Nov-07									
Weather: 45-55, cloudy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
				7:11	0				
				7:16	0.3				
				7:21	0.4				
7:25	0.2			7:26	0.3				
7:30	0.4			7:31	0.3			0	0.0017
7:35	0.4			7:36	0.3				
7:40	0.5			7:41	0.2				
7:45	0.5			7:46	0.2				
7:50	0.5	7:49	0.011	7:51	0.3	7:49	0.02		
7:55	0.6	7:54	0.01	7:56	0.3	7:54	0.024		
8:00	0.7	7:59	0.009	8:01	0.4	7:59	0.017		
8:05	0.6	8:04	0.008	8:06	0.3	8:04	0.018		
8:10	0.6	8:09	0.009	8:11	0.3	8:09	0.013		
8:15	0.6	8:14	0.01	8:16	0.4	8:14	0.013		
8:20	0.7	8:19	0.008	8:21	0.4	8:19	0.012		
8:25	0.7	8:24	0.01	8:26	0.4	8:24	0.013		
8:30	0.7	8:29	0.011	8:31	0.4	8:29	0.015	0	0.036
8:35	0.7	8:34	0.009	8:36	0.4	8:34	0.014		
8:40	0.8	8:39	0.008	8:41	0.4	8:39	0.015		
8:45	0.8	8:44	0.008	8:46	0.4	8:44	0.022		
8:50	0.8	8:49	0.009	8:51	0.4	8:49	0.02		
8:55	0.8	8:54	0.008	8:56	0.4	8:54	0.012		
9:00	0.8	8:59	0.009	9:01	0.4	8:59	0.013		
9:05	0.8	9:04	0.01	9:06	0.4	9:04	0.051		
9:10	0.9	9:09	0.01	9:11	0.4	9:09	0.013		
9:15	0.8	9:14	0.01	9:16	0.4	9:14	0.014		
9:20	0.9	9:19	0.009	9:21	0.4	9:19	0.017		
9:25	0.9	9:24	0.009	9:26	0.4	9:24	0.019		
9:30	0.8	9:29	0.009	9:31	0.4	9:29	0.014	0	0.057
9:35	0.9	9:34	0.01	9:36	0.4	9:34	0.015		
9:40	0.8	9:39	0.011	9:41	0.4	9:39	0.015		
9:45	0.9	9:44	0.01	9:46	0.5	9:44	0.014		
9:50	0.9	9:49	0.01	9:51	0.4	9:49	0.014		
9:55	0.8	9:54	0.01	9:56	0.5	9:54	0.014		
10:00	0.8	9:59	0.011	10:01	0.4	9:59	0.022		
10:05	0.8	10:04	0.011	10:06	0.5	10:04	0.03		
10:10	0.8	10:09	0.009	10:11	0.5	10:09	0.03		
10:15	0.8	10:14	0.008	10:16	0.6	10:14	0.032		
10:20	0.8	10:19	0.009	10:21	0.8	10:19	0.029		
10:25	0.8	10:24	0.008	10:26	0.7	10:24	0.041		
10:30	0.8	10:29	0.009	10:31	0.8	10:29	0.056	0	0.062
10:35	0.8	10:34	0.01	10:36	0.6	10:34	0.054		
10:40	0.8	10:39	0.01	10:41	1	10:39	0.023		
10:45	1	10:44	0.011	10:46	0.8	10:44	0.054		
10:50	0.9	10:49	0.019	10:51	0.6	10:49	0.04		
10:55	0.8	10:54	0.01	10:56	0.5	10:54	0.018		
11:00	0.8	10:59	0.01	11:01	0.5	10:59	0.021		
11:05	0.7	11:04	0.01	11:06	0.5	11:04	0.017		
11:10	0.7	11:09	0.01	11:11	0.5	11:09	0.022		
11:15	0.8	11:14	0.009	11:16	0.5	11:14	0.017		
11:20	0.8	11:19	0.01	11:21	0.5	11:19	0.021		
11:25	0.8	11:24	0.01	11:26	0.5	11:24	0.021		
11:30	0.8	11:29	0.009	11:31	0.5	11:29	0.015	0	0.026
11:35	0.8	11:34	0.008	11:36	0.5	11:34	0.014		
11:40	0.7	11:39	0.008	11:41	0.5	11:39	0.014		
11:45	0.7	11:44	0.008	11:46	0.6	11:44	0.02		
11:50	0.7	11:49	0.01	11:51	0.5	11:49	0.018		
11:55	0.7	11:54	0.008	11:56	0.5	11:54	0.014		
12:00	0.6	11:59	0.007	12:01	0.5	11:59	0.013		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
12-Nov-07									
Weather: 45-55, cloudy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:05	0.6	12:04	0.007	12:06	0.5	12:04	0.012		
12:10	0.6	12:09	0.007	12:11	0.5	12:09	0.012		
12:15	0.5	12:14	0.006	12:16	0.5	12:14	0.011		
12:20	0.6	12:19	0.007	12:21	0.5	12:19	0.011		
12:25	0.5	12:24	0.006	12:26	0.5	12:24	0.012		
12:30	0.5	12:29	0.007	12:31	0.5	12:29	0.012	0	0.052
12:35	0.4	12:34	0.011	12:36	0.5	12:34	0.02		
12:40	0.5	12:39	0.012	12:41	0.5	12:39	0.03		
12:45	0.5	12:44	0.01	12:46	0.5	12:44	0.03		
12:50	0.5	12:49	0.008	12:51	0.5	12:49	0.015		
12:55	0.5	12:54	0.007	12:56	0.5	12:54	0.021		
13:00	0.5	12:59	0.005	13:01	0.5	12:59	0.016		
13:05	0.5	13:04	0.006	13:06	0.5	13:04	0.011		
13:10	0.5	13:09	0.006	13:11	0.5	13:09	0.044		
13:15	0.5	13:14	0.006	13:16	0.6	13:14	0.03		
13:20	0.5	13:19	0.007	13:21	0.5	13:19	0.013		
13:25	0.5	13:24	0.006	13:26	0.5	13:24	0.019		
13:30	0.5	13:29	0.009	13:31	0.5	13:29	0.012		
13:35	0.4	13:34	0.012	13:36	0.5	13:34	0.012		
13:40	0.5	13:39	0.011	13:41	0.5	13:39	0.064		
13:45	0.5	13:44	0.009	13:46	0.5	13:44	0.041		
13:50	0.5	13:49	0.008	13:51	0.5	13:49	0.017		
13:55	0.5	13:54	0.007	13:56	0.5	13:54	0.013		
14:00	0.4	13:59	0.008	14:01	0.5	13:59	0.02		
14:05	0.4	14:04	0.013	14:06	0.5	14:04	0.024		
14:10	0.4	14:09	0.014	14:11	0.5	14:09	0.019		
14:15	0.4	14:14	0.015	14:16	0.5	14:14	0.023		
14:20	0.4	14:19	0.012	14:21	0.5	14:19	0.039		
14:25	0.4	14:24	0.012	14:26	0.4	14:24	0.016		
14:30	0.4	14:29	0.013	14:31	0.4	14:29	0.017		
14:35	0.4	14:34	0.015	14:36	0.4	14:34	0.016		
14:40	0.4	14:39	0.012	14:41	0.4	14:39	0.016		
14:45	0.4	14:44	0.009	14:46	0.4	14:44	0.02		
14:50	0.4	14:49	0.009	14:51	0.4	14:49	0.013		
14:55	0.5	14:54	0.009	14:56	0.4	14:54	0.013		
15:00	0.4	14:59	0.013	15:01	0.4	14:59	0.014		
15:05	0.5	15:04	0.014	15:06	0.4	15:04	0.018		
15:10	0.6	15:09	0.009			15:09	0.013		
		15:14	0.01						

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
13-Nov-07									
Weather: Mornign rain (heavy at times), sunny afternoon 45-55, cloudy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)		
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
7:49	0	7:49	0.027	Downwind PID had lamp malfunction at 0830, data lost prior to 0830. Restarted and reset logging. Likely due to high moisture form heavy rain.		7:49	0.039		
7:54	0	7:54	0.028			7:54	0.037		
7:59	0	7:59	0.03			7:59	0.034		
8:04	0	8:04	0.027			8:04	0.048		
8:09	0	8:09	0.033			8:09	0.038		
8:14	0.1	8:14	0.027			8:14	0.034		
8:19	0.1	8:19	0.031			8:19	0.033		
8:24	0.2	8:24	0.028			8:24	0.029		
8:29	0.3	8:29	0.029	8:30	0	8:29	0.033		
8:34	0.3	8:34	0.024	8:35	0	8:34	0.029		
8:39	0.4	8:39	0.025	8:40	0	8:39	0.031		
8:44	0.4	8:44	0.025	8:45	0	8:44	0.029		
8:49	0.4	8:49	0.026	8:50	0	8:49	0.03		
8:54	0.4	8:54	0.023	8:55	0	8:54	0.035		
8:59	0.5	8:59	0.026	9:00	0	8:59	0.034		
9:04	0.5	9:04	0.026	9:05	0	9:04	0.044		
9:09	0.5	9:09	0.028	9:10	0	9:09	0.033		
9:14	0.5	9:14	0.026	9:15	0	9:14	0.032		
9:19	0.5	9:19	0.026	9:20	0	9:19	0.032		
9:24	0.6	9:24	0.026	9:25	0	9:24	0.032		
9:29	0.6	9:29	0.024	9:30	0	9:29	0.031		
9:34	0.6	9:34	0.028	9:35	0	9:34	0.032		
9:39	0.6	9:39	0.025	9:40	0	9:39	0.032		
9:44	0.6	9:44	0.022	9:45	0	9:44	0.03		
9:49	0.6	9:49	0.023	9:50	0	9:49	0.029		
9:54	0.6	9:54	0.02	9:55	0	9:54	0.026		
9:59	0.6	9:59	0.019	10:00	0	9:59	0.027		
10:04	0.6	10:04	0.019	10:05	0	10:04	0.028		
10:09	0.6	10:09	0.017	10:10	0	10:09	0.027		
10:14	0.6	10:14	0.016	10:15	0	10:14	0.024		
10:19	0.5	10:19	0.019	10:20	0	10:19	0.027		
10:24	0.5	10:24	0.016	10:25	0	10:24	0.026		
10:29	0.5	10:29	0.015	10:30	0	10:29	0.027		
10:34	0.6	10:34	0.015	10:35	0.1	10:34	0.026		
10:39	0.6	10:39	0.014	10:40	0.1	10:39	0.024		
10:44	0.5	10:44	0.015	10:45	0.1	10:44	0.029		
10:49	0.5	10:49	0.015	10:50	0.1	10:49	0.023		
10:54	0.5	10:54	0.015	10:55	0.1	10:54	0.024		
10:59	0.5	10:59	0.015	11:00	0.1	10:59	0.026		
11:04	0.5	11:04	0.014	11:05	0.1	11:04	0.024		
11:09	0.5	11:09	0.015	11:10	0.1	11:09	0.024		
11:14	0.5	11:14	0.014	11:15	0.1	11:14	0.028		
11:19	0.5	11:19	0.014	11:20	0.1	11:19	0.027		
11:24	0.5	11:24	0.014	11:25	0.1	11:24	0.033		
11:29	0.5	11:29	0.013	11:30	0.2	11:29	0.036	0	0.026
11:34	0.5	11:34	0.014	11:35	0.2	11:34	0.045		
11:39	0.5	11:39	0.011	11:40	0.2	11:39	0.038		
11:44	0.5	11:44	0.012	11:45	0.1	11:44	0.031		
11:49	0.6	11:49	0.013	11:50	0.1	11:49	0.037		
11:54	0.6	11:54	0.012	11:55	0.1	11:54	0.025		
11:59	0.5	11:59	0.012	12:00	0.1	11:59	0.019		
12:04	0.5	12:04	0.01	12:05	0.1	12:04	0.015		
12:09	0.6	12:09	0.012	12:10	0.1	12:09	0.015		
12:14	0.6	12:14	0.011	12:15	0.1	12:14	0.014		
12:19	0.6	12:19	0.01	12:20	0.1	12:19	0.014		
12:24	0.6	12:24	0.009	12:25	0.1	12:24	0.014		
12:29	0.5	12:29	0.009	12:30	0.1	12:29	0.014	0	0.018

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
13-Nov-07									
Weather: Mornign rain (heavy at times), sunny afternoon 45-55, cloudy									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)				
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:34	0.5	12:34	0.011	12:35	0.1	12:34	0.016		
12:39	0.4	12:39	0.01	12:40	0.1	12:39	0.014		
12:44	0.3	12:44	0.009	12:45	0.1	12:44	0.014		
12:49	0.3	12:49	0.01	12:50	0.1	12:49	0.014		
12:54	0.3	12:54	0.009	12:55	0.1	12:54	0.013		
12:59	0.4	12:59	0.009	13:00	0.1	12:59	0.014		
13:04	0.4	13:04	0.009	13:05	0.1	13:04	0.015		
13:09	0.4	13:09	0.009	13:10	0.1	13:09	0.017		
13:14	0.4	13:14	0.008	13:15	0.1	13:14	0.025		
13:19	0.4	13:19	0.009	13:20	0.1	13:19	0.025		
13:24	0.4	13:24	0.008	13:25	0.1	13:24	0.021		
13:29	0.4	13:29	0.009	13:30	0.1	13:29	0.021	0	0.02
13:34	0.3	13:34	0.008	13:35	0.1	13:34	0.028		
13:39	0.4	13:39	0.009	13:40	0.1	13:39	0.015		
13:44	0.3	13:44	0.008	13:45	0.1	13:44	0.014		
13:49	0.3	13:49	0.008	13:50	0.1	13:49	0.013		
13:54	0.3	13:54	0.008	13:55	0.1	13:54	0.013		
13:59	0.3	13:59	0.008	14:00	0.2	13:59	0.015		
14:04	0.3	14:04	0.008	14:05	0.2	14:04	0.013		
14:09	0.3	14:09	0.008	14:10	0.2	14:09	0.013		
14:14	0.3	14:14	0.011	14:15	0.2	14:14	0.017		
14:19	0.3	14:19	0.008	14:20	0.2	14:19	0.014		
14:24	0.3	14:24	0.007	14:25	0.2	14:24	0.013		
14:29	0.3	14:29	0.008	14:30	0.2	14:29	0.015	0	0.017
14:34	0.3	14:34	0.007	14:35	0.2	14:34	0.014		
14:39	0.3	14:39	0.007	14:40	0.2	14:39	0.013		
14:44	0.3	14:44	0.006	14:45	0.2	14:44	0.012		
14:49	0.3	14:49	0.007	14:50	0.2	14:49	0.013		
14:54	0.3	14:54	0.006	14:55	0.1	14:54	0.012		
14:59	0.3	14:59	0.006	15:00	0.1	14:59	0.012		
15:04	0.3	15:04	0.006	15:05	0.1	15:04	0.012		
15:09	0.3	15:09	0.007	15:10	0.1	15:09	0.013		
15:14	0.3	15:14	0.008	15:15	0.1	15:14	0.013		
15:19	0.3	15:19	0.006	15:20	0.1	15:19	0.011		
15:24	0.3	15:24	0.01	15:25	0.1	15:24	0.011		
15:29	0.3	15:29	0.008	15:30	0.1	15:29	0.015	0	0.025
15:34	0.3	15:34	0.007	15:35	0.1	15:34	0.013		
15:39	0.5	15:39	0.006	15:40	0.1	15:39	0.016		
		15:44	0.01			15:44	0.046		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
14-Nov-07									
Weather: Sunny/partly Cloudy 45-55									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)	Meter: Personal Data RAM (PDR1000AN)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
		7:49	0.02			7:49	0.028		
7:53	0	7:54	0.021	7:54	0	7:54	0.027		
7:58	0	7:59	0.019	7:59	0	7:59	0.03		
8:03	0	8:04	0.02	8:04	0	8:04	0.05		
8:08	0.1	8:09	0.02	8:09	0	8:09	0.03		
8:13	0.1	8:14	0.021	8:14	0	8:14	0.029		
8:18	0.1	8:19	0.02	8:19	0	8:19	0.042		
8:23	0.2	8:24	0.021	8:24	0	8:24	0.038		
8:28	0.3	8:29	0.022	8:29	0.1	8:29	0.04	0	0.004
8:33	0.3	8:34	0.022	8:34	0.1	8:34	0.037		
8:38	0.4	8:39	0.023	8:39	0.1	8:39	0.04		
8:43	0.4	8:44	0.023	8:44	0.2	8:44	0.044		
8:48	0.4	8:49	0.023	8:49	0.2	8:49	0.044		
8:53	0.5	8:54	0.021	8:54	0.2	8:54	0.04		
8:58	0.4	8:59	0.017	8:59	0.2	8:59	0.028		
9:03	0.4	9:04	0.016	9:04	0.3	9:04	0.025		
9:08	0.3	9:09	0.014	9:09	0.3	9:09	0.024		
9:13	0.3	9:14	0.013	9:14	0.3	9:14	0.024		
9:18	0.3	9:19	0.022	9:19	0.3	9:19	0.027		
9:23	0.3	9:24	0.022	9:24	0.3	9:24	0.027		
9:28	0.3	9:29	0.02	9:29	0.3	9:29	0.028	0	0.012
9:33	0.3	9:34	0.02	9:34	0.3	9:34	0.028		
9:38	0.3	9:39	0.018	9:39	0.3	9:39	0.025		
9:43	0.3	9:44	0.019	9:44	0.3	9:44	0.023		
9:48	0.3	9:49	0.014	9:49	0.3	9:49	0.023		
9:53	0.3	9:54	0.013	9:54	0.3	9:54	0.025		
9:58	0.3	9:59	0.013	9:59	0.3	9:59	0.026		
10:03	0.3	10:04	0.014	10:04	0.3	10:04	0.023		
10:08	0.2	10:09	0.016	10:09	0.3	10:09	0.022		
10:13	0.2	10:14	0.014	10:14	0.3	10:14	0.022		
10:18	0.2	10:19	0.015	10:19	0.3	10:19	0.019		
10:23	0.1	10:24	0.015	10:24	0.3	10:24	0.02		
10:28	0.1	10:29	0.016	10:29	0.3	10:29	0.021	0	0.026
10:33	0.1	10:34	0.014	10:34	0.3	10:34	0.02		
10:38	0	10:39	0.013	10:39	0.3	10:39	0.022		
10:43	0	10:44	0.012	10:44	0.3	10:44	0.019		
10:48	0	10:49	0.012	10:49	0.3	10:49	0.018		
10:53	0	10:54	0.012	10:54	0.3	10:54	0.018		
10:58	0	10:59	0.014	10:59	0.3	10:59	0.019		
11:03	0	11:04	0.013	11:04	0.3	11:04	0.02		
11:08	0	11:09	0.014	11:09	0.3	11:09	0.02		
11:13	0	11:14	0.014	11:14	0.3	11:14	0.022		
11:18	0	11:19	0.015	11:19	0.3	11:19	0.021		
11:23	0	11:24	0.014	11:24	0.3	11:24	0.021		
11:28	0	11:29	0.015	11:29	0.3	11:29	0.023	0	0.019
11:33	0	11:34	0.014	11:34	0.3	11:34	0.021		
11:38	0	11:39	0.014	11:39	0.3	11:39	0.02		
11:43	0	11:44	0.014	11:44	0.3	11:44	0.021		
11:48	0	11:49	0.015	11:49	0.3	11:49	0.024		
11:53	0	11:54	0.016	11:54	0.3	11:54	0.024		
11:58	0	11:59	0.015	11:59	0.3	11:59	0.022		
12:03	0	12:04	0.015	12:04	0.3	12:04	0.022		
12:08	0	12:09	0.015	12:09	0.3	12:09	0.022		
12:13	0	12:14	0.015	12:14	0.3	12:14	0.021		
12:18	0	12:19	0.016	12:19	0.3	12:19	0.023		
12:23	0	12:24	0.017	12:24	0.3	12:24	0.024		
12:28	0	12:29	0.017	12:29	0.3	12:29	0.024	0	0.023
12:33	0	12:34	0.017	12:34	0.3	12:34	0.024		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
14-Nov-07									
Weather: Sunny/partly Cloudy 45-55									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)	Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)	Meter: Personal Data RAM (PDR1000AN)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:38	0	12:39	0.017	12:39	0.3	12:39	0.025		
12:43	0	12:44	0.017	12:44	0.3	12:44	0.025		
12:48	0	12:49	0.017	12:49	0.3	12:49	0.026		
12:53	0	12:54	0.019	12:54	0.3	12:54	0.026		
12:58	0	12:59	0.02	12:59	0.3	12:59	0.027		
13:03	0	13:04	0.018	13:04	0.3	13:04	0.026		
13:08	0	13:09	0.017	13:09	0.3	13:09	0.028		
13:13	0	13:14	0.017	13:14	0.3	13:14	0.025		
13:18	0	13:19	0.017	13:19	0.3	13:19	0.026		
13:23	0	13:24	0.018	13:24	0.3	13:24	0.024		
13:28	0	13:29	0.018	13:29	0.3	13:29	0.024	0	0.059
13:33	0	13:34	0.017	13:34	0.3	13:34	0.026		
13:38	0	13:39	0.02	13:39	0.3	13:39	0.027		
13:43	0	13:44	0.018	13:44	0.3	13:44	0.028		
13:48	0	13:49	0.018	13:49	0.3	13:49	0.029		
13:53	0	13:54	0.018	13:54	0.3	13:54	0.027		
13:58	0	13:59	0.018	13:59	0.3	13:59	0.029		
14:03	0	14:04	0.017	14:04	0.3	14:04	0.03		
14:08	0	14:09	0.017	14:09	0.3	14:09	0.029		
14:13	0	14:14	0.018	14:14	0.3	14:14	0.029		
14:18	0	14:19	0.018	14:19	0.3	14:19	0.029		
14:23	0	14:24	0.016	14:24	0.3	14:24	0.026		
14:28	0	14:29	0.017	14:29	0.3	14:29	0.03	0	0.079
14:33	0	14:34	0.017	14:34	0.3	14:34	0.026		
14:38	0	14:39	0.023	14:39	0.3	14:39	0.027		
14:43	0	14:44	0.026	14:44	0.3	14:44	0.028		
14:48	0	14:49	0.025	14:49	0.3	14:49	0.027		
14:53	0	14:54	0.025	14:54	0.4	14:54	0.028		
14:58	0	14:59	0.024	14:59	0.3	14:59	0.034		
15:03	0	15:04	0.021	15:04	0.3	15:04	0.027		
15:08	0	15:09	0.022	15:09	0.3	15:09	0.028		
15:13	0	15:14	0.024	15:14	0.3	15:14	0.029		
15:18	0	15:19	0.022	15:19	0.3	15:19	0.029		
15:23	0	15:24	0.021	15:24	0.3	15:24	0.045		
				15:29	0.2	15:29	0.033	0	0.021
						15:34	0.042		

AIR MONITORING SHEET								
Client: Massachusetts Electric Company								
Project: 51 Commercial Street								
15-Nov-07								
Weather: Cloudy and 55 in AM, showers in late am, steady rain by pm 55								
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm								
Notes:								
LOCATION: Up Wind			LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)
		7:49	0.048			7:49	0.054	
		7:54	0.049			7:54	0.056	
		7:59	0.052			7:59	0.059	
		8:04	0.055			8:04	0.06	
8:08	0	8:09	0.05	8:07	0	8:09	0.058	
8:13	0	8:14	0.047	8:12	0	8:14	0.055	
8:18	0	8:19	0.045	8:17	0	8:19	0.055	
8:23	0	8:24	0.046	8:22	0	8:24	0.054	
8:28	0	8:29	0.049	8:27	0	8:29	0.056	0 0.026
8:33	0	8:34	0.044	8:32	0	8:34	0.053	
8:38	0	8:39	0.043	8:37	0	8:39	0.054	
8:43	0	8:44	0.044	8:42	0	8:44	0.056	
8:48	0	8:49	0.047	8:47	0	8:49	0.059	
8:53	0	8:54	0.053	8:52	0	8:54	0.054	
8:58	0	8:59	0.056	8:57	0	8:59	0.051	
9:03	0	9:04	0.055	9:02	0	9:04	0.057	
9:08	0	9:09	0.046	9:07	0	9:09	0.052	
9:13	0	9:14	0.047	9:12	0.1	9:14	0.052	
9:18	0	9:19	0.04	9:17	0	9:19	0.053	
9:23	0	9:24	0.047	9:22	0.1	9:24	0.055	
9:28	0	9:29	0.041	9:27	0.1	9:29	0.051	0 0.019
9:33	0	9:34	0.04	9:32	0.1	9:34	0.052	
9:38	0	9:39	0.039	9:37	0.1	9:39	0.053	
9:43	0	9:44	0.038	9:42	0.1	9:44	0.051	
9:48	0	9:49	0.038	9:47	0.1	9:49	0.05	
9:53	0	9:54	0.038	9:52	0.1	9:54	0.053	
9:58	0	9:59	0.039	9:57	0.1	9:59	0.052	
10:03	0	10:04	0.043	10:02	0.1	10:04	0.054	
10:08	0	10:09	0.04	10:07	0.1	10:09	0.056	
10:13	0	10:14	0.038	10:12	0.1	10:14	0.052	
10:18	0	10:19	0.039	10:17	0.1	10:19	0.052	
10:23	0	10:24	0.043	10:22	0.1	10:24	0.055	
10:28	0	10:29	0.045	10:27	0.1	10:29	0.056	0 0.048
10:33	0	10:34	0.042	10:32	0.1	10:34	0.055	
10:38	0	10:39	0.038	10:37	0.1	10:39	0.053	
10:43	0	10:44	0.039	10:42	0.2	10:44	0.059	
10:48	0	10:49	0.044	10:47	0.1	10:49	0.057	
10:53	0	10:54	0.045	10:52	0.1	10:54	0.055	
10:58	0	10:59	0.045	10:57	0.1	10:59	0.058	
11:03	0	11:04	0.045	11:02	0.1	11:04	0.059	
11:08	0	11:09	0.046	11:07	0.1	11:09	0.057	
11:13	0	11:14	0.052	11:12	0.1	11:14	0.066	
11:18	0	11:19	0.044	11:17	0.1	11:19	0.057	
11:23	0	11:24	0.044	11:22	0.1	11:24	0.059	
11:28	0	11:29	0.045	11:27	0.1	11:29	0.058	0 0.032
11:33	0	11:34	0.047	11:32	0.1	11:34	0.061	
11:38	0	11:39	0.05	11:37	0.1	11:39	0.063	



AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
15-Nov-07									
Weather: Cloudy and 55 in AM, showers in late am, steady rain by pm 55									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)	Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)	
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
11:43	0	11:44	0.053	11:42	0.1	11:44	0.063		
11:48	0	11:49	0.052	11:47	0.1	11:49	0.065		
11:53	0	11:54	0.05	11:52	0.1	11:54	0.063		
11:58	0	11:59	0.052	11:57	0.1	11:59	0.063		
12:03	0	12:04	0.053	12:02	0.1	12:04	0.066		
12:08	0	12:09	0.053	12:07	0.1	12:09	0.086		
12:13	0	12:14	0.054	12:12	0.1	12:14	0.084		
12:18	0	12:19	0.061	12:17	0.1	12:19	0.068		
12:23	0	12:24	0.054	12:22	0.1	12:24	0.068		
12:28	0	12:29	0.055	12:27	0.1	12:29	0.072	0	0.022
12:33	0	12:34	0.058	12:32	0.1	12:34	0.069		
12:38	0	12:39	0.059	12:37	0.1	12:39	0.067		
12:43	0.1	12:44	0.06	12:42	0.1	12:44	0.073		
12:48	0	12:49	0.099	12:47	0.1	12:49	0.069		
12:53	0	12:54	0.058	12:52	0.1	12:54	0.073		
12:58	0	12:59	0.061	12:57	0.1	12:59	0.072		
13:03	0	13:04	0.059	13:02	0.1	13:04	0.074		
13:08	0	13:09	0.058	13:07	0.1	13:09	0.075		
13:13	0	13:14	0.056	13:12	0.1	13:14	0.075		
13:18	0	13:19	0.056	13:17	0.1	13:19	0.073		
13:23	0	13:24	0.054	13:22	0.2	13:24	0.072		
13:28	0.1	13:29	0.057	13:27	0.2	13:29	0.077	0	0.052
13:33	0.1	13:34	0.058	13:32	0.2	13:34	0.076		

### AIR MONITORING SHEET

Client: Massachusetts Electric Company

Project: 51 Commercial Street

19-Nov-07

Weather: Cloudy cold 35 to 40, slight snow shower

Action Level: 0.10 mg/m<sup>3</sup> above Upwind; VOCs: 5 ppm

Notes:

LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
		7:49	0.001			7:49	0.006		
		7:54	0.003			7:54	0.006		
		7:59	0.002			7:59	0.006		
8:06	0.1	8:04	0.001	8:06	0	8:04	0.006		
8:11	0.2	8:09	0.002	8:11	0	8:09	0.006		
8:16	0.3	8:14	0.001	8:16	0	8:14	0.006		
8:21	0.4	8:19	0.002	8:21	0	8:19	0.006		
8:26	0.5	8:24	0.003	8:26	0	8:24	0.006		
8:31	0.6	8:29	0.002	8:31	0.1	8:29	0.006	0	0.018
8:36	0.7	8:34	0.001	8:36	0.1	8:34	0.005		
8:41	0.7	8:39	0.002	8:41	0.1	8:39	0.005		
8:46	0.7	8:44	0.001	8:46	0.1	8:44	0.006		
8:51	0.7	8:49	0.001	8:51	0.2	8:49	0.005		
8:56	0.7	8:54	0.002	8:56	0.2	8:54	0.005		
9:01	0.7	8:59	0.001	9:01	0.2	8:59	0.004		
9:06	0.7	9:04	0.001	9:06	0.2	9:04	0.005		
9:11	0.7	9:09	0.001	9:11	0.2	9:09	0.004		
9:16	0.8	9:14	0.001	9:16	0.2	9:14	0.004		
9:21	0.8	9:19	0.001	9:21	0.2	9:19	0.004		
9:26	0.8	9:24	0.001	9:26	0.3	9:24	0.005		
9:31	0.8	9:29	0	9:31	0.3	9:29	0.004	0	0.04
9:36	0.8	9:34	0.002	9:36	0.3	9:34	0.005		
9:41	0.8	9:39	0.001	9:41	0.3	9:39	0.005		
9:46	0.8	9:44	0	9:46	0.3	9:44	0.005		
9:51	0.9	9:49	0.001	9:51	0.3	9:49	0.004		
9:56	0.8	9:54	0.001	9:56	0.3	9:54	0.004		
10:01	0.9	9:59	0	10:01	0.3	9:59	0.004		
10:06	0.9	10:04	0.001	10:06	0.3	10:04	0.004		
10:11	0.9	10:09	0.001	10:11	0.3	10:09	0.004		
10:16	1	10:14	0.001	10:16	0.3	10:14	0.003		
10:21	1	10:19	0.003	10:21	0.3	10:19	0.004		
10:26	1	10:24	0.001	10:26	0.4	10:24	0.005		
10:31	1	10:29	0.002	10:31	0.4	10:29	0.007	0	0.09
10:36	1	10:34	0	10:36	0.4	10:34	0.005		
10:41	0.9	10:39	0.001	10:41	0.4	10:39	0.004		
10:46	1	10:44	0.001	10:46	0.4	10:44	0.004		
10:51	0.9	10:49	0	10:51	0.4	10:49	0.004		
10:56	0.9	10:54	0.001	10:56	0.4	10:54	0.005		
11:01	0.9	10:59	0	11:01	0.4	10:59	0.004		
11:06	0.9	11:04	0.003	11:06	0.4	11:04	0.006		
11:11	0.9	11:09	0	11:11	0.4	11:09	0.005		
11:16	0.9	11:14	0.001	11:16	0.4	11:14	0.004		
11:21	0.9	11:19	0.002	11:21	0.4	11:19	0.006		
11:26	0.9	11:24	0.001	11:26	0.4	11:24	0.005		
11:31	0.9	11:29	0	11:31	0.4	11:29	0.003		
11:36	0.9	11:34	0.001	11:36	0.4	11:34	0.004	0	0.003
11:41	0.9	11:39	0.001	11:41	0.4	11:39	0.003		
11:46	0.9	11:44	0.001	11:46	0.4	11:44	0.006		
11:51	0.9	11:49	0	11:51	0.4	11:49	0.006		
11:56	0.9	11:54	0.001	11:56	0.4	11:54	0.004		
12:01	0.9	11:59	0.001	12:01	0.4	11:59	0.006		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
19-Nov-07									
Weather: Cloudy cold 35 to 40, slight snow shower									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:06	0.8	12:04	0	12:06	0.4	12:04	0.004		
12:11	0.8	12:09	0	12:11	0.4	12:09	0.003		
12:16	0.8	12:14	0	12:16	0.4	12:14	0.004		
12:21	0.8	12:19	0	12:21	0.4	12:19	0.003		
12:26	0.8	12:24	0.001	12:26	0.5	12:24	0.004		
12:31	0.8	12:29	0.001	12:31	0.4	12:29	0.004	0	0.022
12:36	0.8	12:34	0.001	12:36	0.4	12:34	0.005		
12:41	0.8	12:39	0	12:41	0.4	12:39	0.008		
12:46	0.8	12:44	0.001	12:46	0.5	12:44	0.006		
12:51	0.8	12:49	0	12:51	0.5	12:49	0.003		
12:56	0.7	12:54	0.001	12:56	0.4	12:54	0.006		
13:01	0.7	12:59	0.001	13:01	0.4	12:59	0.005		
13:06	0.7	13:04	0	13:06	0.4	13:04	0.004		
13:11	0.8	13:09	0.001	13:11	0.5	13:09	0.004		
13:16	0.8	13:14	0.001	13:16	0.5	13:14	0.004		
13:21	0.8	13:19	0	13:21	0.5	13:19	0.004		
13:26	0.8	13:24	0.004	13:26	0.5	13:24	0.005		
13:31	0.8	13:29	0	13:31	0.5	13:29	0.004	0	0.014
13:36	0.8	13:34	0.002	13:36	0.5	13:34	0.003		
13:41	0.9	13:39	0	13:41	0.5	13:39	0.005		
		13:44	0.009	13:46	0.5	13:44	0.005		
		13:49	0	13:51	0.5	13:49	0.003		
		13:54	0	13:56	0.5	13:54	0.004		
		13:59	0.001	14:01	0.5	13:59	0.005		
		14:04	0.006	14:06	0.5	14:04	0.02		
		14:09	0	14:11	0.5	14:09	0.005		
		14:14	0	14:16	0.5	14:14	0.006		
		14:19	0.001			14:19	0.005		
		14:24	0.001					0	0.008

### AIR MONITORING SHEET

Client: Massachusetts Electric Company

Project: 51 Commercial Street

20-Nov-07

Weather: Cloudy cold 35 to 40

Action Level: 0.10 mg/m<sup>3</sup> above Upwind; VOCs: 5 ppm

Notes:

LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
		7:49	0.016			7:49	0.016		
		7:54	0.019	7:52	0.1	7:54	0.019	No intrusive site work today. Perimeter monitoring not conducted as a result.	
		7:59	0.018	7:57	0.1	7:59	0.018		
		8:04	0.017	8:02	0.2	8:04	0.017		
		8:09	0.018	8:07	0.2	8:09	0.018		
		8:14	0.026	8:12	0.3	8:14	0.026		
		8:19	0.023	8:17	0.3	8:19	0.023		
		8:24	0.022	8:22	0.3	8:24	0.022		
		8:29	0.021	8:27	0.4	8:29	0.021		
		8:34	0.023	8:32	0.4	8:34	0.023		
		8:39	0.025	8:37	0.4	8:39	0.025		
		8:44	0.02	8:42	0.4	8:44	0.02		
		8:49	0.019	8:47	0.4	8:49	0.019		
		8:54	0.019	8:52	0.5	8:54	0.019		
		8:59	0.019	8:57	0.5	8:59	0.019		
9:06	0	9:04	0.021	9:02	0.5	9:04	0.021		
9:11	0	9:09	0.025	9:07	0.4	9:09	0.025		
9:16	0.1	9:14	0.022	9:12	0.5	9:14	0.022		
9:21	0.1	9:19	0.019	9:17	0.5	9:19	0.019		
9:26	0.1	9:24	0.021	9:22	0.5	9:24	0.021		
9:31	0.2	9:29	0.02	9:27	0.5	9:29	0.02		
9:36	0.2	9:34	0.019			9:34	0.019		
9:41	0.3	9:39	0.02			9:39	0.02		
9:55	1	9:44	0.018			9:44	0.018		
10:00	0.3	9:49	0.021			9:49	0.021		
10:05	0.3	9:54	0.011			9:54	0.011		
10:10	0.2	9:59	0.01			9:59	0.01		
10:15	0.3	10:04	0.012			10:04	0.012		
10:20	0.3	10:09	0.012			10:09	0.012		
10:25	0.3	10:14	0.011			10:14	0.011		
10:30	0.3	10:19	0.013			10:19	0.013		
10:35	0.4	10:24	0.01			10:24	0.01		
10:40	0.4	10:29	0.008			10:29	0.008		
10:45	0.4	10:34	0.008			10:34	0.008		
10:50	0.4	10:39	0.008			10:39	0.008		
10:55	0.4	10:44	0.009			10:44	0.009		
11:00	0.4	10:49	0.009			10:49	0.009		
11:05	0.4	10:54	0.009			10:54	0.009		
11:10	0.5	10:59	0.011			10:59	0.011		
11:15	0.5	11:04	0.011			11:04	0.011	0	0.004
11:20	0.5	11:09	0.012			11:09	0.012		
11:25	0.5	11:14	0.012			11:14	0.012		
11:30	0.4	11:19	0.015			11:19	0.015		
11:35	0.4	11:24	0.012			11:24	0.012		
11:40	0.4	11:29	0.014			11:29	0.014		
11:45	0.4	11:34	0.017			11:34	0.017		
11:50	0.4	11:39	0.021			11:39	0.021		
11:55	0.4	11:44	0.019			11:44	0.019		
12:00	0.4	11:49	0.018			11:49	0.018		
12:05	0.3	11:54	0.021			11:54	0.021		
12:10	0.3	11:59	0.026			11:59	0.026		
12:15	0.3	12:04	0.02			12:04	0.02		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
20-Nov-07									
Weather: Cloudy cold 35 to 40									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
12:20	0.3	12:09	0.016			12:09	0.016		
12:25	0.2	12:14	0.014			12:14	0.014		
12:30	0.2	12:19	0.012			12:19	0.012		
12:35	0.2	12:24	0.012			12:24	0.012		
12:40	0.2	12:29	0.012			12:29	0.012		
12:45	0.2	12:34	0.013			12:34	0.013		
12:50	0.2	12:39	0.013			12:39	0.013		
12:55	0.2	12:44	0.013			12:44	0.013		
13:00	0.2	12:49	0.015			12:49	0.015		
13:05	0.2	12:54	0.018			12:54	0.018		
13:10	0.2	12:59	0.016			12:59	0.016		
13:15	0.2	13:04	0.014			13:04	0.014		
13:20	0.2	13:09	0.015			13:09	0.015		
13:25	0.2	13:14	0.015			13:14	0.015		
13:30	0.2	13:19	0.02			13:19	0.02		
13:35	0.3	13:24	0.013			13:24	0.013		
13:40	0.2	13:29	0.011			13:29	0.011		
13:45	0.2	13:34	0.013			13:34	0.013		
13:50	0.3	13:39	0.012			13:39	0.012		
13:55	0.3	13:44	0.015			13:44	0.015		
14:00	0.2	13:49	0.015			13:49	0.015		
14:05	0.2	13:54	0.013			13:54	0.013		
14:10	0.3	13:59	0.016			13:59	0.016		
14:15	0.2	14:04	0.013			14:04	0.013		
14:20	0.3	14:09	0.015			14:09	0.015		
14:25	0.3	14:14	0.013			14:14	0.013		
14:30	0.3	14:19	0.013			14:19	0.013		
14:35	0.2	14:24	0.012			14:24	0.012		
14:40	0.4	14:29	0.013			14:29	0.013		
		14:34	0.013			14:34	0.013		
		14:39	0.021			14:39	0.021		
		14:44	0.018			14:44	0.018		
		14:49	0.021			14:49	0.021		

AIR MONITORING SHEET									
Client: Massachusetts Electric Company									
Project: 51 Commercial Street									
21-Nov-07									
Weather: Cloudy cold 35 to 40, slight snow shower									
Action Level: 0.10 mg/m <sup>3</sup> above Upwind; VOCs: 5 ppm									
Notes:									
LOCATION: Up Wind				LOCATION: Down Wind				Handheld Perimeter Monitoring	
Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini-RAE 7600 (for volatiles)		Meter: TSI DustTRAK Aerosol (for dust)		Meter: Mini- RAE 7600 (for volatiles)	Meter: Personal Data RAM (PDR1000AN) (for dust)
Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Time	Concentration (ppm)	Time	Concentration (mg/m <sup>3</sup> )	Concentration (ppm)	Concentration (mg/m <sup>3</sup> )
7:50	0.4			7:47	0			0	0.003
7:55	0.7			7:52	0				
8:00	0.7			7:57	0				
8:05	0.4			8:02	0				
8:10	0.5			8:07	0				
8:15	0.5			8:12	0				
8:20	0.5			8:17	0				
8:25	0.2			8:22	0				
8:30	0.2			8:27	0			0	0.01
8:35	0.2			8:32	0				
8:40	0.1			8:37	0				
8:45	0.3			8:42	0				
8:50	0.3			8:47	0				
8:55	0.2			8:52	0				
9:00	0.3			8:57	0				
9:05	0.3			9:02	0				
9:10	0.3			9:07	0				
9:15	0.1			9:12	0				
9:20	0.2			9:17	0				
9:25	0.2			9:22	0				
9:30	0.2			9:27	0			0	0.024
9:35	0.3			9:32	0				
9:40	0.2			9:37	0				
9:45	0.1			9:42	0				
9:50	0			9:47	0				
9:55	0.1			9:52	0				
10:00	0.2			9:57	0				
10:05	0			10:02	0				
10:10	0			10:07	0				
10:15	0			10:12	0				
10:20	0	10:19	0.059	10:17	0	10:19	0.069		
10:25	0.1	10:24	0.055	10:22	0	10:24	0.069		
10:30	0.1	10:29	0.055	10:27	0	10:29	0.067	0	0.038
10:35	0.1	10:34	0.053	10:32	0	10:34	0.062		
10:40	0.1	10:39	0.052	10:37	0	10:39	0.063		
10:45	0.1	10:44	0.052	10:42	0	10:44	0.064		
10:50	0.1	10:49	0.052	10:47	0	10:49	0.063		
10:55	0.1	10:54	0.052	10:52	0	10:54	0.067		
11:00	0.1	10:59	0.054	10:57	0	10:59	0.066		
11:05	0.1	11:04	0.053	11:02	0	11:04	0.066		
11:10	0.1	11:09	0.054	11:07	0	11:09	0.071		
11:15	0.1	11:14	0.055	11:12	0	11:14	0.068		
11:20	0.1	11:19	0.055	11:17	0	11:19	0.083		
11:25	0.1	11:24	0.055	11:22	0	11:24	0.073		
11:30	0	11:29	0.054	11:27	0	11:29	0.069		
11:35	0	11:34	0.052	11:32	0	11:34	0.064		
11:40	0	11:39	0.052	11:37	0	11:39	0.066		
		11:44	0.051	11:42	0	11:44	0.068		
		11:49	0.05			11:49	0.06		
		11:54	0.05			11:54	0.061		