Results of Surface Soil Sampling

New Bedford High School

New Bedford
Massachusetts

Prepared for **City of New Bedford**
Department of Public Schools

Prepared by **VHB/Vanasse Hangen Brustlin, Inc.**
Watertown, Massachusetts

August 23, 2001

Introduction

As part of the alternatives evaluation study for construction of the new Keith Middle School, subsurface investigations were conducted during the Summer and fall of 2000 at McCoy Field. Such investigations identified the presence of various contaminants of concern, including polychlorinated biphenyls (PCBs), heavy metals and certain semi-volatile organic compounds (SVOCs). Subsequent research into the history of McCoy Field yielded the fact that much of the material underlying the current soccer fields originated from the location of New Bedford High School, located on the east side of Hathaway Boulevard. Historic dumping and burning activities were reportedly performed in that area, prior to construction of New Bedford High School circa 1970.

Due to the potential for residual soil contamination at and in the immediate vicinity of the school grounds, the City of New Bedford School Committee authorized VHB to collect and analyze surface soil samples across the High School grounds. The objective of the sampling and analyses was to determine if residual soil contamination, if any, posed an unacceptable level of risk to site employees and/or students, as defined in the Massachusetts Contingency Plan.

The purpose of this document is to report the results of the surface soil investigation.

Background Information

McCoy Field is located on the west side of Hathaway Boulevard, across from New Bedford High School, in an area otherwise bounded by Durfee Street, Summit Street and Nemasket Street. It is currently used as for soccer fields, and is covered with grass turf in good condition. The fields were constructed in the 1970s by filling a low area with material which reportedly included construction demolition debris and ash from the adjacent High School construction site, plus waste materials from other City locations.

As part of the assessment of the subject site, certain subsurface soil samples collected by Miller Engineering for geotechnical evaluation were selected and submitted to an analytical laboratory for specific chemical analyses. Results of the initial analyses revealed the presence of PAHs, lead, barium and pesticides above applicable Reportable Concentrations (RCs), as defined in the Massachusetts Contingency Plan (MCP). Based on those results, a second round of analyses was performed in which the same samples were analyzed for PCBs. The results revealed the presence of PCBs in fill material beneath the field surface at concentrations which exceeded the RC of 2 mg/kg for several samples. Based on the PCB analytical results, soil samples were collected from the surface of McCoy Field for PCB analyses, specifically to determine whether an Imminent Hazard condition existed. None of the six surface soil samples contained significant concentrations of PCBs. However, a surface sample

collected west of the soccer fields, near the toe of the slope in a heavily vegetated area, contained PCBs at a concentration of 18.4 mg/kg. Based upon that result, an imminent hazard, as defined in the MCP, was determined to exist, and appropriate response actions were implemented.

In a third round of sampling, samples from the following media were analyzed for PCBs, metals, and SVOCs:

- Playing surface
- Surface soils adjacent to the playing field
- Surface water in the area adjacent to the playing field
- Sediment in the surface water bodies in the area adjacent to the playing field.

Sample analysis revealed no concentrations in playing field surface samples above the Method 1 S-1 level of 2 mg/kg. Two constituents (PCBs and lead) in individual playing field samples collected at depth during geotechnical sampling exceeded their respective Method 1 S-1 standard; however, the average concentrations of all of the contaminants of concern are well below their respective Method 1 S-1 standards and/or their respective background levels for urban areas.

The City of New Bedford is in the process of implementing appropriate response actions at McCoy Field. After evaluating the results of the investigations described above, in conjunction with the construction history of McCoy Field and the High School, the School Committee agreed that it would be prudent to investigate the land upon which the High School is constructed.

Sampling Methodology

On July 23, 2001 VHB performed soil sampling of the New Bedford High School grounds to determine if residual concentrations of PCBs, heavy metals, exists from historic disposal and burning operations at the site. Fifteen (15) surface soil sample locations were selected (see Figure 1) on the grounds of the High School property. Sampling locations were selected by dividing the site into areas based on site history and current use, and characterized with regard to level of risk. Sampling locations in each area were selected randomly, with more locations designated in areas considered to have a higher potential for exposure to site employees and students. Samples were collected at depths of 0-6" and/or 12-24" using a stainless steel hand auger. At each sampling location, the top inch of grass/topsoil was removed and soil was collected at the selected depth interval using a hand auger.

The soil was observed to be consistent in color and texture throughout the site and across the soil column from ground surface to 24" below ground surface. Soil color was light brown and included medium to fine sand, with traces of gravel and pebbles. No fill material or ash was visible in any of the samples. VHB noted no

overt evidence of contamination in any soil samples collected on the High School property.

Upon collection of each soil sample, the hand auger was properly cleaned and rinsed before proceeding to the next soil sample location. A total of 22 soil samples were collected from fifteen locations and they were placed on ice in a cooler for subsequent analyses by New England Testing Laboratory, Inc. of North Providence, Rhode Island. The samples were analyzed for PCBs, RCRA 8 Metals, SVOCs, and/or EPH.

The sample locations are shown on Figure 1.

Significant Results

The results of soil sampling are summarized in Tables 1 and 2.

As shown in Table 1, all metals except lead were reported at concentrations below their respective Reportable Concentrations (RC) and Method 1 risk based standards. Three of soil samples exhibited lead concentrations above the Method 1 S-1 standard of 300 mg/kg, but they are still consistent with urban background levels. The average lead concentration detected in all soil samples is approximately 168 mg/kg.

In three samples (SS-1, 6-12"; SS-3 at 12"-24" and SS-13 at 12"-24"), various polynuclear aromatic hydrocarbons (PAHs) were noted at concentrations above the RC and applicable Method 1 standard. However, most soil samples were observed to contain ash (exempt from notification) and the concentrations are all well below what would be considered background levels for urban settings.

Only one sample (SS-14) had a PCB concentration above the Method 1 S-1 standard (6.89 versus 2.0 mg/kg); however, the average PCB concentration of all samples collected on the High School grounds is on the order of 0.2 mg/kg, well below the Method 1 S-1 standard of 2 mg/kg. Sample SS-14 was collected at a depth of 12 to 24 inches from a lawn area near the access to Hathaway Boulevard and a parking lot.

Discussion of Results

Polynuclear Aromatic Hydrocarbons

Polynuclear aromatic hydrocarbons (PAHs) are typically byproducts of the combustion of petroleum, wood and coal. When present as a constituent of coal or wood ash, they are regulated differently than when present as a constituent of

petroleum released to the environment. The MCP specifies that " ... *releases of oil and/or hazardous material related to coal, coal ash, or wood ash, excluding wood ash resulting from the combustion of lumber or wood products that have been treated with chemical preservatives [are exempt from notification requirements].* There is no evidence of a petroleum release in the vicinity of samples SS-1, SS-3 or SS-13, and the area is known to have wood and coal ash. It is reasonable to conclude that PAHs present in these locations are attributable to ash and are, therefore, exempt from MCP notification requirements. From a risk perspective, the detected levels do not pose an unacceptable level of risk to human health or the environment.

Polychlorinated Biphenyls

The MCP requires that polychlorinated biphenyl (PCB) concentrations greater than 2 mg/kg be reported to the Department of Environmental Protection. Submission of notification initiates requirements for the implementation of response actions that must result in the achievement of a Condition of No Significant Risk. The means of achieving a Condition of No Significant Risk are left to the discretion of the Responsible Party, but must be conducted in accordance with the guidelines established in the MCP.

The presence of PCBs on the High School grounds is not reportable to the DEP, since their presence is directly related to the presence of PCBs at the documented release at McCoy Field.

Recommendations

The proximity of the release to McCoy Field and the fact that McCoy Field was constructed of material excavated from the High School site strongly suggests that the contamination at SS-14 is a part of contamination detected at McCoy Field. It is recommended, therefore, that the release be addressed in conjunction with the documented release at McCoy Field (DEP Release Tracking # 4-15685).

No further action is necessary at this time.

Figures

MAP & LEGEND

- LIMIT OF WORK (UNLESS OTHERWISE NOTED)
- PROPERTY LINE & LIMIT OF WORK
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- SURFACE WATER FLOW LINE
- PROPOSED CHAIN LINK FENCE
- CENTER LINE
- PROPOSED DRAIN INLET, CATCH BASIN & MANHOLE
- CONCRETE CURB
- BITUMINOUS CONCRETE PAVING
- CONCRETE PAVING
- EXPANSION JOINTS
- RIP RAP PAVING
- BRICK PAVING
- CONC. RETAINING WALL (TOP OF WALL ELEV.)

NOTES:

1. PROPOSED SPOT ELEVATIONS TAKEN FROM TOPOGRAPHIC PLAN BY: HOWARD T. ENGINEERING CORP., NEW BEDFORD, MASS. DATED: 10-27-71.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.
3. ELEVATIONS SHOWN ON DRAWINGS ARE APPROXIMATE. CONTRACTOR SHALL MATCH ALL RIMS TO MATCH PROPOSED SLOPES AND GRADES.
4. ALL DISTURBED AND DISTURBED AREAS NOT OTHERWISE SPECIFIED SHALL BE SEEDED.
5. THE EXACT LAYOUT AND GRADING IN THIS AREA SHALL BE DETERMINED ON THE GROUND BY THE ARCHITECT.
6. SEE SITE PREPARATION PLAN FOR LOCATION & DEPTH OF UNSUITABLE MATERIAL REMOVAL CONTRACT.

Liberty Street

Durfee Street

Hathaway Boulevard

Parker Street

SS-1 SS-2 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8 SS-9 SS-10 SS-11 SS-12 SS-13 SS-14 SS-15

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SITE PLAN

NEW BEDFORD HIGH

OWEN F. HACKETT, JR. ASSOCIATES

Tables

Table 1
New Bedford High School
Surface Soil Analytical Results
PCBs and RCRA 8 Metals

Sample Identification	SS-1 (0-6")	SS-1 (6-12")	SS-2 (0-6")	SS-3 (0-6")	SS-3 (12-24")	SS-4 (0-6")	SS-5 (0-6")	SS-6 (0-6")	SS-7 (0-6")	SS-8 (0-6")	SS-9 (0-6")	SS-10 (0-6")	SS-10 (6-12")	SS-11 (0-6")	RC		Method 1	
Sample Depth Interval	(0-6")	(6-12")	(0-6")	(0-6")	(12-24")	(0-6")	(0-6")	(0-6")	(0-6")	(0-6")	(0-6")	(0-6")	(6-12")	(0-6")	S-1	S-2	S-1	
Sample Date	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01			GW-1	GW-3
PCBs, ppm																		
PCB 1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.111	0.116	ND	2	2	2	100
PCB 1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2	2	100
Metals, ppm																		
As	2.26	2.31	2.53	1.77	1.52	2.01	1.18	1.61	2.37	3.48	2.06	1.61	2.29	1.85	30	30	30	30
Ba	28	55	29	16	11	22	10	12	27	66	18	19	23	227	1000	2500	1000	1000
Cd	ND	0.45	ND	ND	ND	ND	ND	ND	ND	0.41	ND	ND	0.42	ND	30	80	30	30
Cr	7.5	12	7.03	5.11	3.74	6.39	2.92	4.59	5.09	6.45	5.03	4.13	5.28	9.76	1000	2500	1000	1000
Pb	81	92	47	17	8.89	25	11	18	65	162	27	43	ND	16	300	600	300	300
Hg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4	ND	0.09	0.19	ND	20	60	20	20
Se	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	400	2500	400	400
Ag	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	200	100	100

All data is in mg/kg

Table 1 (continued)

Sample Identification	SS-12 (0-6")	SS-12 (12-24")	SS-13 (0-6")	SS-13 (6-12")	SS-13 (12-24")	SS-14 (0-6")	SS-14 (12-24")	SS-15 (0-6")	RC		Method 1	
Sample Depth Interval	(0-6")	(12-24")	(0-6")	(6-12")	(12-24")	(0-6")	(12-24")	(0-6")	S-1	S-2	S-1	
Sample Date	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01	7/23/01			GW-2	GW-3
PCBs, ppm												
PCB 1254	ND	0.497	0.221	ND	0.66	1.42	6.89	ND	2	2	2	100
PCB 1260	ND	ND	ND	1.34	ND	1.34	ND	ND	2	2	2	100
Total PCBs	0	0.497	0.221	1.34	0.657	**2.76**	**6.89**	0	2	2	2	100
Metals, ppm												
As	2.2	3.89	2.92	6.47	8.89	3.48	5.47	1.63	30	30	30	30
Ba	25	119	65	348	255	372	532	89	1000	2500	1000	1000
Cd	ND	0.81	0.59	1.6	1.38	0.78	0.63	ND	30	80	30	30
Cr	5.52	96	8.7	16	18.00	32	109	35	1000	2500	1000	1000
Pb	26	87	154	**1010**	**777**	223	**371**	51	**300**	**600**	**300**	**300**
Hg	ND	0.17	0.15	0.57	0.24	0.13	0.65	0.17	20	60	20	20
Se	ND	ND	ND	ND	ND	ND	1.38	ND	400	2500	400	400
Ag	ND	ND	ND	ND	ND	ND	ND	ND	100	200	100	100

All data is in mg/kg

Table 2
New Bedford High School
Surface Soil Analytical Results
EPH and SVOCs

Sample Identification	SS-1 (6-12")	SS-3 (12-24")	SS-13 (12-24")	RC		Method 1		
Sample Depth Interval	(6-12")	(12-24")	(12-24")	S-1	S-2	S-1		UCL
Sample Date	7/23/01	7/23/01	7/23/01			GW-2	GW-3	
EPH (ppm)								
Naphthalene	<0.5	<10	<0.5	4	1,000	100	100	10,000
2-Methylnaphthalene	<0.5	<0.5	<0.5	4	1,000	500	500	10,000
Phenanthrene	2.4	<0.5	3.4	100	1,000	100	100	10,000
Acenaphthylene	<0.5	<0.5	<0.5	20	2,500	1,000	1,000	10,000
Acenaphthene	<0.5	<0.5	<0.5	400	2,000	1,000	1,000	10,000
Fluorene	<0.5	<0.5	<0.5	100	100	1,000	100	10,000
Anthracene	0.7	<0.5	1	1,000	1,000	1,000	1,000	10,000
Fluoranthene	2.4	<0.5	5.4	1,000	1,000	1,000	1,000	10,000
Pyrene	2.2	<0.5	5.1	700	2,000	700	700	10,000
Benzo(a)Anthracene	**1**	<0.5	**1.8**	**0.7**	**1**	**0.7**	**0.7**	100
Chrysene	1.1	<0.5	2	7	10	7	7	400
Benzo(b)fluoranthene	**0.8**	<0.5	**1.6**	**0.7**	**1.0**	**0.7**	**0.7**	100
Benzo(k)fluoranthene	0.7	<0.5	0.9	7	10	7	7	400
Benzo(a) Pyrene	**1.2**	<0.5	**2**	**0.7**	**0.7**	**0.7**	**0.7**	100
Indeno(1,2,3-cd)pyrene	<0.5	<0.5	<0.5	0.7	0.7	0.7	0.7	100
Dibenzo(a,h)Anthracene	**1.2**	**1.2**	**1.2**	**0.7**	**1.0**	**0.7**	**0.7**	100
Benzo(g,h,I)perylene	1.4	1.4	1.3	1,000	2,500	1,000	1,000	20,000
C9-C18 Aliphatic Hydrocarbons	<10	<10	<10	2,500	5,000	2,500	2,500	20,000
C19-C36 Aliphatic Hydrocarbons	10	76	59	200	2,000	800	800	10,000
C11-C22 Aromatic Hydrocarbons	12	<10	31	1,000	2,500	1,000	1,000	10,000
SVOCs								
Phenanthrene	0.64	0.12	*1.00*	100	100	1000	100	10,000
Anthracene	0.14	*0.0255*	*1.95*	1000	1000	na	na	10,000
Di-n-butylphthalate	0.36	0.35	*0.80*	50	500	na	na	nl
Flouranthene	0.44	0.13	*6.00*	1000	1000	1000	1000	10,000
Pyrene	2.70	0.2	*4.20*	700	2000	na	na	10,000
Benzo(a)Anthracene	0.48	**0.073**	*2.60*	0.7	1	0.7	0.7	100
Chrysene	0.43	0.054	*1.95*	7	10	7	7	400
bis(2-Ethylhexyl)phthalate	0.28	*0.055*	*0.80*	100	300	200	200	10,000
Benzo(b)fluoranthene	0.42	0.058	**2.35**	**0.7**	**1**	**0.7**	**0.7**	100
Benzo(k)fluoranthene	0.17	*0.0255*	*0.70*	7	10	7	7	400
Benzo(a) Pyrene	0.44	*0.0255*	**1.65**	**0.7**	**0.7**	**0.7**	**0.7**	100
Indeno(1,2,3-cd)pyrene	0.67	*0.0255*	**1.15**	**0.7**	**1**	**0.7**	**0.7**	100
Benzo(g,h,I)perylene	0.86	*0.0255*	*0.85*	1000	2500	1000	1000	10,000

All data is in mg/kg
Data in italics was reported by the laboratory as ND and is recorded at half the detection limit.

REPORT OF ANALYTICAL RESULTS

NETLAB Case Number L0724-13

Prepared for:

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Report Date: July 31, 2001

Reviewed by:

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STATEMENTS/CERTIFICATIONS REQUIRED BY THE NATIONAL ENVIRONMENTAL LABORATORY APPROVAL CONFERENCE (NELAC)

New England Testing Laboratory is certified under the National Environmental Laboratory Approval Program (NELAP). This certification requires the following statements and certifications be included in our report.

This report shall not be reproduced, except in full, without written approval of the laboratory.

New England Testing certifies that the test results contained within this report meet all NELAC requirements except as detailed in the Case Narrative section of this report.

SAMPLES SUBMITTED and REQUEST FOR ANALYSIS:

The samples listed in Table I were submitted to New England Testing Laboratory on July 24, 2001. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. The case number for this sample submission is L0724-13.

Custody records are included in this report.

Site: New Bedford High School

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
SS1 0-6"	7/23/01	Soil	Table II
SS1 6-12"	7/23/01	Soil	Table II, III, IV
SS2 0-6"	7/23/01	Soil	Table II
SS3 0-6"	7/23/01	Soil	Table II
SS-3 12-24"	7/23/01	Soil	Table II, III, IV
SS-4 0-6"	7/23/01	Soil	Table II
SS-5 0-6"	7/23/01	Soil	Table II
SS-6 0-6"	7/23/01	Soil	Table II
SS-7 0-6"	7/23/01	Soil	Table II
SS-8 0-6"	7/23/01	Soil	Table II
SS-9 0-6"	7/23/01	Soil	Table II
SS-10 0-6"	7/23/01	Soil	Table II
SS-10 6-12"	7/23/01	Soil	Table II
SS-11 0-6"	7/23/01	Soil	Table II
SS-12 0-6"	7/23/01	Soil	Table II
SS-12 12-24"	7/23/01	Soil	Table II
SS-13 0-6"	7/23/01	Soil	Table II
SS-13 6-12"	7/23/01	Soil	Table II
SS-13 12-24"	7/23/01	Soil	Table II, III, IV
SS-14 0-6"	7/23/01	Soil	Table II
SS-14 12-24'	7/23/01	Soil	Table II
SS-15 0-6"	7/23/01	Soil	Table II

TABLE II, Analysis and Methods

ANALYSIS	PREPARATION METHOD	DETERMINATIVE METHOD
PCBs	3541	8082
Total Metals		
Arsenic	3050B	6010B
Barium	3050B	6010B
Cadmium	3050B	6010B
Chromium	3050B	6010B
Lead	3050B	6010B
Mercury	NA	7471A
Selenium	3050B	6010B
Silver	3050B	6010B

TABLE III, Analysis and Methods

ANALYSIS	PREPARATION METHOD	DETERMINATIVE METHOD
Semivolatiles	3541	8270C

TABLE IV, Analysis and Methods

ANALYSIS	PREPARATION METHOD	DETERMINATIVE METHOD
EPH	NA	*

These methods are documented in:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, USEPA/OSW.

* Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP.

CASE NARRATIVE

All samples were found to be properly preserved/cooled upon receipt. All analyses were performed within EPA designated holding-times. Procedure/calibration checks required by the designated protocols were within control limits.

Sample Results

Sample ID **SS1 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.26	0.33	7/27/2001
Total Barium	28	0.33	7/27/2001
Total Cadmium	N.D.	0.33	7/27/2001
Total Chromium	7.5	0.33	7/27/2001
Total Lead	81	0.33	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.66	7/27/2001
Total Silver	N.D.	0.33	7/27/2001

Sample ID **SS1 6-12"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.31	0.35	7/27/2001
Total Barium	55	0.35	7/27/2001
Total Cadmium	0.45	0.35	7/27/2001
Total Chromium	12	0.35	7/27/2001
Total Lead	92	0.35	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

Sample ID **SS2 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.53	0.38	7/27/2001
Total Barium	29	0.38	7/27/2001
Total Cadmium	N.D.	0.38	7/27/2001
Total Chromium	7.03	0.38	7/27/2001
Total Lead	47	0.38	7/27/2001
Total Mercury	N.D.	0.08	7/27/2001
Total Selenium	N.D.	0.77	7/27/2001
Total Silver	N.D.	0.38	7/27/2001

Sample ID **SS3 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.77	0.35	7/27/2001
Total Barium	16	0.35	7/27/2001
Total Cadmium	N.D.	0.35	7/27/2001
Total Chromium	5.11	0.35	7/27/2001
Total Lead	17	0.35	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.71	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

*Dry Weight Basis

Sample ID **SS3 12-24"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.52	0.32	7/27/2001
Total Barium	11	0.32	7/27/2001
Total Cadmium	N.D.	0.32	7/27/2001
Total Chromium	3.74	0.32	7/27/2001
Total Lead	8.89	0.32	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.64	7/27/2001
Total Silver	N.D.	0.32	7/27/2001

Sample ID **SS4 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.01	0.36	7/27/2001
Total Barium	22	0.36	7/27/2001
Total Cadmium	N.D.	0.36	7/27/2001
Total Chromium	6.39	0.36	7/27/2001
Total Lead	25	0.36	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.72	7/27/2001
Total Silver	N.D.	0.36	7/27/2001

Sample ID **SS5 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.18	0.35	7/27/2001
Total Barium	10	0.35	7/27/2001
Total Cadmium	N.D.	0.35	7/27/2001
Total Chromium	2.92	0.35	7/27/2001
Total Lead	11	0.35	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

Sample ID **SS6 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.61	0.35	7/27/2001
Total Barium	12	0.35	7/27/2001
Total Cadmium	N.D.	0.35	7/27/2001
Total Chromium	4.59	0.35	7/27/2001
Total Lead	18	0.35	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

*Dry Weight Basis

Sample ID **SS7 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.37	0.38	7/27/2001
Total Barium	27	0.38	7/27/2001
Total Cadmium	N.D.	0.38	7/27/2001
Total Chromium	5.09	0.38	7/27/2001
Total Lead	65	0.38	7/27/2001
Total Mercury	N.D.	0.08	7/27/2001
Total Selenium	N.D.	0.77	7/27/2001
Total Silver	N.D.	0.38	7/27/2001

Sample ID **SS8 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	3.48	0.37	7/27/2001
Total Barium	66	0.37	7/27/2001
Total Cadmium	0.41	0.37	7/27/2001
Total Chromium	6.45	0.37	7/27/2001
Total Lead	162	0.37	7/27/2001
Total Mercury	0.4	0.07	7/27/2001
Total Selenium	N.D.	0.74	7/27/2001
Total Silver	N.D.	0.37	7/27/2001

Sample ID **SS9 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.06	0.40	7/27/2001
Total Barium	18	0.40	7/27/2001
Total Cadmium	N.D.	0.40	7/27/2001
Total Chromium	5.03	0.40	7/27/2001
Total Lead	27	0.40	7/27/2001
Total Mercury	N.D.	0.08	7/27/2001
Total Selenium	N.D.	0.79	7/27/2001
Total Silver	N.D.	0.40	7/27/2001

Sample ID **SS10 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.61	0.35	7/27/2001
Total Barium	19	0.35	7/27/2001
Total Cadmium	N.D.	0.35	7/27/2001
Total Chromium	4.13	0.35	7/27/2001
Total Lead	43	0.35	7/27/2001
Total Mercury	0.09	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

*Dry Weight Basis

Sample ID **SS10 6-12"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.29	0.35	7/27/2001
Total Barium	23	0.35	7/27/2001
Total Cadmium	0.42	0.35	7/27/2001
Total Chromium	5.28	0.35	7/27/2001
Total Lead	N.D.	0.35	7/27/2001
Total Mercury	0.19	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

Sample ID **SS11 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.85	0.33	7/27/2001
Total Barium	27	0.33	7/27/2001
Total Cadmium	N.D.	0.33	7/27/2001
Total Chromium	9.76	0.33	7/27/2001
Total Lead	16	0.33	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.66	7/27/2001
Total Silver	N.D.	0.33	7/27/2001

Sample ID **SS12 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.20	0.37	7/27/2001
Total Barium	25	0.37	7/27/2001
Total Cadmium	N.D.	0.37	7/27/2001
Total Chromium	5.52	0.37	7/27/2001
Total Lead	26	0.37	7/27/2001
Total Mercury	N.D.	0.07	7/27/2001
Total Selenium	N.D.	0.73	7/27/2001
Total Silver	N.D.	0.37	7/27/2001

Sample ID **SS14 12-24"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	3.89	0.34	7/27/2001
Total Barium	119	0.34	7/27/2001
Total Cadmium	0.81	0.34	7/27/2001
Total Chromium	96	0.34	7/27/2001
Total Lead	87	0.34	7/27/2001
Total Mercury	0.17	0.07	7/27/2001
Total Selenium	N.D.	0.68	7/27/2001
Total Silver	N.D.	0.34	7/27/2001

*Dry Weight Basis

Sample ID **SS13 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	2.92	0.35	7/27/2001
Total Barium	65	0.35	7/27/2001
Total Cadmium	0.59	0.35	7/27/2001
Total Chromium	8.70	0.35	7/27/2001
Total Lead	154	0.35	7/27/2001
Total Mercury	0.15	0.07	7/27/2001
Total Selenium	N.D.	0.70	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

Sample ID **SS13 6-12"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	6.47	0.34	7/27/2001
Total Barium	348	0.34	7/27/2001
Total Cadmium	1.60	0.34	7/27/2001
Total Chromium	16	0.34	7/27/2001
Total Lead	1010	0.34	7/27/2001
Total Mercury	0.57	0.07	7/27/2001
Total Selenium	N.D.	0.68	7/27/2001
Total Silver	N.D.	0.34	7/27/2001

Sample ID **SS13 12-24"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	8.89	0.35	7/27/2001
Total Barium	255	0.35	7/27/2001
Total Cadmium	1.38	0.35	7/27/2001
Total Chromium	18	0.35	7/27/2001
Total Lead	777	0.35	7/27/2001
Total Mercury	0.24	0.07	7/27/2001
Total Selenium	N.D.	0.71	7/27/2001
Total Silver	N.D.	0.35	7/27/2001

Sample ID **SS14 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	3.48	0.34	7/27/2001
Total Barium	372	0.34	7/27/2001
Total Cadmium	0.78	0.34	7/27/2001
Total Chromium	32	0.34	7/27/2001
Total Lead	223	0.34	7/27/2001
Total Mercury	0.13	0.07	7/27/2001
Total Selenium	N.D.	0.68	7/27/2001
Total Silver	N.D.	0.34	7/27/2001

*Dry Weight Basis

Sample ID **SS14 12-24"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	5.49	0.34	7/27/2001
Total Barium	532	0.34	7/27/2001
Total Cadmium	0.63	0.34	7/27/2001
Total Chromium	109	0.34	7/27/2001
Total Lead	371	0.34	7/27/2001
Total Mercury	0.65	0.07	7/27/2001
Total Selenium	1.38	0.69	7/27/2001
Total Silver	N.D.	0.34	7/27/2001

Sample ID **SS15 0-6"**

Parameter	Result mg/Kg*	Reporting Limit*	Date Analyzed
Total Arsenic	1.63	0.34	7/27/2001
Total Barium	89	0.34	7/27/2001
Total Cadmium	N.D.	0.34	7/27/2001
Total Chromium	35	0.34	7/27/2001
Total Lead	51	0.34	7/27/2001
Total Mercury	0.17	0.13	7/31/2001
Total Selenium	N.D.	0.68	7/27/2001
Total Silver	N.D.	0.34	7/27/2001

*Dry Weight Basis

Sample: SS1 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	73	40-150
DCBP	53	40-150

Sample: SS1 6-12"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	80	40-150
DCBP	55	40-150

Sample: SS2 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	73	40-150
DCBP	50	40-150

*Dry Weight Basis

Sample: SS3 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	115	40-150
DCBP	75	40-150

Sample: SS3 12-24"
Subject: PCBs **Date Extracted:** Date Analyzed:
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	63	40-150
DCBP	45	40-150

Sample: SS4 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	83	40-150
DCBP	58	40-150

*Dry Weight Basis

Sample: SS5 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	85	40-150
DCBP	55	40-150

Sample: SS6 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	80	40-150
DCBP	55	40-150

Sample: SS7 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	75	40-150
DCBP	55	40-150

*Dry Weight Basis

Sample: SS8 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	73	40-150
DCBP	45	40-150

Sample: SS9 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	75	40-150
DCBP	55	40-150

Sample: SS10 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	111	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	78	40-150
DCBP	63	40-150

*Dry Weight Basis

Sample: SS10 6-12"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	116	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	70	40-150
DCBP	48	40-150

Sample: SS11 0-6"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	68	40-150
DCBP	48	40-150

Sample: SS12 0-6"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	68	40-150
DCBP	48	40-150

*Dry Weight Basis

Sample: SS12 12-24"
Subject: PCBs Date Extracted: 7/26/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	497	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	63	40-150
DCBP	48	40-150

Sample: SS13 0-6"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	221	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	70	40-150
DCBP	50	40-150

Sample: SS13 6-12"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	200
PCB-1221	ND	400
PCB-1232	ND	200
PCB-1242	ND	200
PCB-1248	ND	200
PCB-1254	ND	200
PCB-1260	1340	200
Surrogates:		
Compound	% Recovery	Limits
TCMX	58	40-150
DCBP	100	40-150

*Dry Weight Basis

Sample: SS13 12-24"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	657	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	70	40-150
DCBP	68	40-150

Sample: SS14 0-6"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	200
PCB-1221	ND	400
PCB-1232	ND	200
PCB-1242	ND	200
PCB-1248	ND	200
PCB-1254	1420	200
PCB-1260	1340	200
Surrogates:		
Compound	% Recovery	Limits
TCMX	80	40-150
DCBP	73	40-150

Sample: SS14 12-24"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	Concentration	Reporting Limit
	ug/Kg (ppb)	
PCB-1016	ND	1000
PCB-1221	ND	2000
PCB-1232	ND	1000
PCB-1242	ND	1000
PCB-1248	ND	1000
PCB-1254	6890	1000
PCB-1260	ND	1000
Surrogates:		
Compound	% Recovery	Limits
TCMX	58	40-150
DCBP	55	40-150

*Dry Weight Basis

Sample: SS15 0-6"
Subject: PCBs Date Extracted: 7/25/01 Date Analyzed: 7/27/01
Method 8082

Compound	**Concentration**	**Reporting Limit**
	ug/Kg (ppb)	
PCB-1016	ND	100
PCB-1221	ND	200
PCB-1232	ND	100
PCB-1242	ND	100
PCB-1248	ND	100
PCB-1254	ND	100
PCB-1260	ND	100
Surrogates:		
Compound	% Recovery	Limits
TCMX	75	40-150
DCBP	48	40-150

*Dry Weight Basis

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-1 6-12"

Sample wt/vol: 20.341 (g/ml) G Lab File ID: Z3013.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.74 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
62-75-9	n-Nitrosodimethylamine	160	U
110-86-1	Pyridine	110	U
108-95-2	Phenol	110	U
62-53-3	Aniline	110	U
111-44-4	bis(2-Chloroethyl)ether	53	U
95-57-8	2-Chlorophenol	110	U
541-73-1	1,3-Dichlorobenzene	53	U
106-46-7	1,4-Dichlorobenzene	53	U
95-50-1	1,2-Dichlorobenzene	53	U
95-48-7	2-Methylphenol	53	U
108-60-1	bis(2-chloroisopropyl)ether	53	U
106-44-5	4-Methylphenol	53	U
621-64-7	n-Nitroso-di-n-propylamine	53	U
67-72-1	Hexachloroethane	53	U
98-95-3	Nitrobenzene	53	U
78-59-1	Isophorone	53	U
88-75-5	2-Nitrophenol	270	U
105-67-9	2,4-Dimethylphenol	530	U
65-85-0	Benzoic acid	800	U
111-91-1	bis(2-Chloroethoxy)methane	53	U
120-83-2	2,4-Dichlorophenol	110	U
120-82-1	1,2,4-Trichlorobenzene	53	U
91-20-3	Naphthalene	53	U
106-47-8	4-Chloroaniline	53	U
87-68-3	Hexachlorobutadiene	53	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	53	U
77-47-4	Hexachlorocyclopentadiene	53	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	110	U
91-58-7	2-Chloronaphthalene	53	U
88-74-4	2-Nitroaniline	53	U
131-11-3	Dimethyl phthalate	53	U

U=not defected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-1 6-12"

Sample wt/vol: 20.341 (g/ml) G Lab File ID: Z3013.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.74 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
208-96-8	Acenaphthylene	53	U
606-20-2	2,6-Dinitrotoluene	53	U
99-09-2	3-Nitroaniline	53	U
83-32-9	Acenaphthene	53	U
51-28-5	2,4-Dinitrophenol	270	U
100-02-7	4-Nitrophenol	270	U
132-64-9	Dibenzofuran	53	U
121-14-2	2,4-Dinitrotoluene	53	U
84-66-2	Diethyl phthalate	53	U
86-73-7	Fluorene	53	U
7005-72-3	4-Chlorophenyl phenyl ether	53	U
100-01-6	4-Nitroaniline	53	U
534-52-1	4,6-Dinitro-2-methylphenol	270	U
86-30-6	n-Nitrosodiphenylamine	53	U
101-55-3	4-Bromophenyl phenyl ether	53	U
118-74-1	Hexachlorobenzene	53	U
87-86-5	Pentachlorophenol	270	U
85-01-8	Phenanthrene	640	
120-12-7	Anthracene	140	
84-74-2	Di-n-butylphthalate	360	
206-44-0	Fluoranthene	440	
92-87-5	Benzidine	3200	U
129-00-0	Pyrene	2700	
85-68-7	Butyl benzyl phthalate	53	U
91-94-1	3,3'-Dichlorobenzidine	53	U
56-55-3	Benzo(a)anthracene	480	
218-01-9	Chrysene	430	
117-81-7	bis(2-Ethylhexyl)phthalate	280	
117-84-0	Di-n-octyl phthalate	160	U
205-99-2	Benzo(b)fluoranthene	420	
207-08-9	Benzo(k)fluoranthene	170	
50-32-8	Benzo(a)pyrene	440	
193-39-5	Indeno(1,2,3-cd)pyrene	670	

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-1 6-12"

Sample wt/vol: 20.341 (g/ml) G Lab File ID: Z3013.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.74 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
53-70-3	Dibenz(a,h)anthracene	53	U
191-24-2	Benzo(g,h,i)perylene	860	

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-3 12-24"

Sample wt/vol: 20.366 (g/ml) G Lab File ID: Z3010.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 2.81 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
62-75-9	n-Nitrosodimethylamine	150	U
110-86-1	Pyridine	100	U
108-95-2	Phenol	100	U
62-53-3	Aniline	100	U
111-44-4	bis(2-Chloroethyl)ether	51	U
95-57-8	2-Chlorophenol	100	U
541-73-1	1,3-Dichlorobenzene	51	U
106-46-7	1,4-Dichlorobenzene	51	U
95-50-1	1,2-Dichlorobenzene	51	U
95-48-7	2-Methylphenol	51	U
108-60-1	bis(2-chloroisopropyl)ether	51	U
106-44-5	4-Methylphenol	51	U
621-64-7	n-Nitroso-di-n-propylamine	51	U
67-72-1	Hexachloroethane	51	U
98-95-3	Nitrobenzene	51	U
78-59-1	Isophorone	51	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	510	U
65-85-0	Benzoic acid	760	U
111-91-1	bis(2-Chloroethoxy)methane	51	U
120-83-2	2,4-Dichlorophenol	100	U
120-82-1	1,2,4-Trichlorobenzene	51	U
91-20-3	Naphthalene	51	U
106-47-8	4-Chloroaniline	51	U
87-68-3	Hexachlorobutadiene	51	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	51	U
77-47-4	Hexachlorocyclopentadiene	51	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	51	U
88-74-4	2-Nitroaniline	51	U
131-11-3	Dimethyl phthalate	51	U

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-3 12-24"

Sample wt/vol: 20.366 (g/ml) G Lab File ID: Z3010.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 2.81 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
208-96-8	Acenaphthylene	51	U
606-20-2	2,6-Dinitrotoluene	51	U
99-09-2	3-Nitroaniline	51	U
83-32-9	Acenaphthene	51	U
51-28-5	2,4-Dinitrophenol	250	U
100-02-7	4-Nitrophenol	250	U
132-64-9	Dibenzofuran	51	U
121-14-2	2,4-Dinitrotoluene	51	U
84-66-2	Diethyl phthalate	51	U
86-73-7	Fluorene	51	U
7005-72-3	4-Chlorophenyl phenyl ether	51	U
100-01-6	4-Nitroaniline	51	U
534-52-1	4,6-Dinitro-2-methylphenol	250	U
86-30-6	n-Nitrosodiphenylamine	51	U
101-55-3	4-Bromophenyl phenyl ether	51	U
118-74-1	Hexachlorobenzene	51	U
87-86-5	Pentachlorophenol	250	U
85-01-8	Phenanthrene	120	
120-12-7	Anthracene	51	U
84-74-2	Di-n-butylphthalate	350	
206-44-0	Fluoranthene	130	
92-87-5	Benzidine	3000	U
129-00-0	Pyrene	200	
85-68-7	Butyl benzyl phthalate	51	U
91-94-1	3,3'-Dichlorobenzidine	51	U
56-55-3	Benzo(a)anthracene	73	
218-01-9	Chrysene	54	
117-81-7	bis(2-Ethylhexyl)phthalate	110	J
117-84-0	Di-n-octyl phthalate	150	U
205-99-2	Benzo(b)fluoranthene	58	
207-08-9	Benzo(k)fluoranthene	51	U
50-32-8	Benzo(a)pyrene	51	U
193-39-5	Indeno(1,2,3-cd)pyrene	51	U

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-3 12-24"

Sample wt/vol: 20.366 (g/ml) G Lab File ID: Z3010.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 2.81 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
53-70-3	Dibenz(a,h)anthracene	51	U
191-24-2	Benzo(g,h,i)perylene	51	U

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-13 12-24"

Sample wt/vol: 20.233 (g/ml) G Lab File ID: Z3103.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.32 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
62-75-9	n-Nitrosodimethylamine	1600	U
110-86-1	Pyridine	1100	U
108-95-2	Phenol	1100	U
62-53-3	Aniline	1100	U
111-44-4	bis(2-Chloroethyl)ether	530	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	530	U
106-46-7	1,4-Dichlorobenzene	530	U
95-50-1	1,2-Dichlorobenzene	530	U
95-48-7	2-Methylphenol	530	U
108-60-1	bis(2-chloroisopropyl)ether	530	U
106-44-5	4-Methylphenol	530	U
621-64-7	n-Nitroso-di-n-propylamine	530	U
67-72-1	Hexachloroethane	530	U
98-95-3	Nitrobenzene	530	U
78-59-1	Isophorone	530	U
88-75-5	2-Nitrophenol	2700	U
105-67-9	2,4-Dimethylphenol	5300	U
65-85-0	Benzoic acid	8000	U
111-91-1	bis(2-Chloroethoxy)methane	530	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	530	U
91-20-3	Naphthalene	590	D
106-47-8	4-Chloroaniline	530	U
87-68-3	Hexachlorobutadiene	530	U
59-50-7	4-Chloro-3-methylphenol	2700	U
91-57-6	2-Methylnaphthalene	530	U
77-47-4	Hexachlorocyclopentadiene	530	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	530	U
88-74-4	2-Nitroaniline	530	U
131-11-3	Dimethyl phthalate	530	U

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-13 12-24"

Sample wt/vol: 20.233 (g/ml) G Lab File ID: Z3103.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.32 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
208-96-8	Acenaphthylene	530	U
606-20-2	2,6-Dinitrotoluene	530	U
99-09-2	3-Nitroaniline	530	U
83-32-9	Acenaphthene	1700	D
51-28-5	2,4-Dinitrophenol	2700	U
100-02-7	4-Nitrophenol	2700	U
132-64-9	Dibenzofuran	1000	D
121-14-2	2,4-Dinitrotoluene	530	U
84-66-2	Diethyl phthalate	530	U
86-73-7	Fluorene	1600	D
7005-72-3	4-Chlorophenyl phenyl ether	530	U
100-01-6	4-Nitroaniline	530	U
534-52-1	4,6-Dinitro-2-methylphenol	2700	U
86-30-6	n-Nitrosodiphenylamine	530	U
101-55-3	4-Bromophenyl phenyl ether	530	U
118-74-1	Hexachlorobenzene	530	U
87-86-5	Pentachlorophenol	2700	U
85-01-8	Phenanthrene	12000	D
120-12-7	Anthracene	3900	D
84-74-2	Di-n-butylphthalate	1600	U
206-44-0	Fluoranthene	12000	D
92-87-5	Benzidine	32000	U
129-00-0	Pyrene	8400	D
85-68-7	Butyl benzyl phthalate	530	U
91-94-1	3,3'-Dichlorobenzidine	530	U
56-55-3	Benzo(a)anthracene	5200	D
218-01-9	Chrysene	3900	D
117-81-7	bis(2-Ethylhexyl)phthalate	1600	U
117-84-0	Di-n-octyl phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	4700	D
207-08-9	Benzo(k)fluoranthene	1400	D
50-32-8	Benzo(a)pyrene	3300	D
193-39-5	Indeno(1,2,3-cd)pyrene	2300	D

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: RI010 Case No.: L0724-13 SDG No.: New Bedford HS

Matrix: (soil/water/air) SOIL Lab Sample ID: SS-13 12-24"

Sample wt/vol: 20.233 (g/ml) G Lab File ID: Z3103.D

Level: (low/med) LOW Date Sampled: 07/23/01

% Moisture: 7.32 decanted:(Y/N) N Date Extracted: 07/27/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/01

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L,ug/Kg or ug/tube) UG/KG	Q
53-70-3	Dibenz(a,h)anthracene	530	U
191-24-2	Benzo(g,h,i)perylene	1700	D

U=not detected, D=diluted, E=over range (another data sheet is included), J=below limt

2D

WATER/SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab RI010 Case No.: L0724-13 SDG No.: VHB

Level:(low/med) LOW

	Sample ID	S1	S2	S3	S4	S5	S6	Qualifier
1	SS-1 6-12"	64	62	44	74	60	109	
2	SS-3 12-24"	67	71	73	79	71	94	
3	SS-13 12-24"	78	85	80	85	78	64	

		QC Limits
S1	2-Fluorophenol	(21-110)
S2	Phenol-d6	(10-120)
S3	Nitrobenzene-d5	(35-114)
S4	2-Fluorobiphenyl	(35-116)
S5	2,4,6-Tribromophenol	(10-123)
S6	Terphenyl-d14	(33-141)

New England Testing Laboratory, Inc.

APPENDIX 3: REQUIRED EPH DATA REPORTING FORMAT/INFORMATION

SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:
Containers	X Satisfactory Broken Leaking:
Aqueous Preservatives	X N/A pH<2 pH>2 Comment:
Temperature	X Received on Ice Received at 4 ° C Other:
Extraction Method	Water: Soil: Soxhlet

EPH ANALYTICAL RESULTS

Method for Ranges: MADEP EPH 98-1				Client ID	SS1 6-12"
Method for Target Analytes:				Lab ID	L0724-13
EPH Surrogate Standards				Date Collected	7/23/01
Aliphatic: Chlorooctadecane				Date Received	7/24/01
Aromatic: o-Terphenyl				Date Extracted	7/26/01
EPH Fractionation Surrogates				Date Analyzed	7/27/01
2-Fluorobiphenyl				Dilution Factor	1X
2-Bromonaphthalene				% Moisture (soil)	8
RANGE/TARGET ANALYTE		**RL**	**Units**		
Unadjusted C11-C22 Aromatics[1]		10	mg/Kg		28
Diesel PAH Analytes	Naphthalene	0.5	mg/Kg		<0.5
	2-Methylnaphthalene	0.5	mg/Kg		<0.5
	Phenanthrene	0.5	mg/Kg		2.4
	Acenaphthylene	0.5	mg/Kg		<0.5
Other Target PAH Analytes	Acenaphthene	0.5	mg/Kg		<0.5
	Fluorene	0.5	mg/Kg		<0.5
	Anthracene	0.5	mg/Kg		0.7
	Fluoranthene	0.5	mg/Kg		2.4
	Pyrene	0.5	mg/Kg		2.2
	Benzo(a)anthracene	0.5	mg/Kg		1.0
	Chrysene	0.5	mg/Kg		1.1
	Benzo(b)fluoranthene	0.5	mg/Kg		0.8
	Benzo(k)fluoranthene	0.5	mg/Kg		0.7
	Benzo(a)pyrene	0.5	mg/Kg		1.2
	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg		<0.5
	Dibenzo(a,h)anthracene	0.5	mg/Kg		1.2
	Benzo(g,h,i)perylene	0.5	mg/Kg		1.4
C9-C18 Aliphatic Hydrocarbons[1]		10	mg/Kg		<10
C19-C36 Aliphatic Hydrocarbons[1]		10	mg/Kg		10
C11-C22 Aromatic Hydrocarbons[1,2]		10	mg/Kg		12
Aliphatic Surrogate % Recovery					84
Aromatic Surrogate % Recovery					57
Sample Surrogate Acceptance Range					40-140%
Fractionation Surrogate % Recovery					83
Fractionation Surrogate % Recovery					54
Fractionation Surrogate 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

CERTIFICATION

Were all QA/QC procedures REQUIRED by the EPH Method followed? X Yes __ No-Details Attached
Were all performance/acceptance standards for the required QA/QC procedures achieved? X Yes __ No-Details Attached
Were any significant modifications made to the EPH method, as specified in Section 11.3? X No __ Yes-Details Attached

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.

SIGNATURE: Mark H. Bishop ls POSITION: Laboratory Director

PRINTED NAME: Mark H. Bishop DATE: 7-31-01

APPENDIX 3: REQUIRED EPH DATA REPORTING FORMAT/INFORMATION

SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:
Containers	X Satisfactory Broken Leaking:
Aqueous Preservatives	X N/A pH<2 pH>2 Comment:
Temperature	X Received on Ice Received at 4 ° C Other:
Extraction Method	Water: Soil: Soxhlet

EPH ANALYTICAL RESULTS

Method for Ranges: MADEP EPH 98-1			Client ID	SS3 12-24"
Method for Target Analytes:			Lab ID	L0724-13
EPH Surrogate Standards			Date Collected	7/23/01
Aliphatic: Chlorooctadecane			Date Received	7/24/01
Aromatic: o-Terphenyl			Date Extracted	7/26/01
EPH Fractionation Surrogates			Date Analyzed	7/27/01
2-Fluorobiphenyl			Dilution Factor	1X
2-Bromonaphthalene			% Moisture (soil)	3
RANGE/TARGET ANALYTE		**RL**	**Units**	
Unadjusted C11-C22 Aromatics[1]		10	mg/Kg	<10
Diesel PAH Analytes	Naphthalene	0.5	mg/Kg	<0.5
	2-Methylnaphthalene	0.5	mg/Kg	<0.5
	Phenanthrene	0.5	mg/Kg	<0.5
	Acenaphthylene	0.5	mg/Kg	<0.5
Other Target PAH Analytes	Acenaphthene	0.5	mg/Kg	<0.5
	Fluorene	0.5	mg/Kg	<0.5
	Anthracene	0.5	mg/Kg	<0.5
	Fluoranthene	0.5	mg/Kg	<0.5
	Pyrene	0.5	mg/Kg	<0.5
	Benzo(a)anthracene	0.5	mg/Kg	<0.5
	Chrysene	0.5	mg/Kg	<0.5
	Benzo(b)fluoranthene	0.5	mg/Kg	<0.5
	Benzo(k)fluoranthene	0.5	mg/Kg	<0.5
	Benzo(a)pyrene	0.5	mg/Kg	<0.5
	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	<0.5
	Dibenzo(a,h)anthracene	0.5	mg/Kg	1.2
	Benzo(g,h,i)perylene	0.5	mg/Kg	1.3
C9-C18 Aliphatic Hydrocarbons[1]		10	mg/Kg	<10
C19-C36 Aliphatic Hydrocarbons[1]		10	mg/Kg	76
C11-C22 Aromatic Hydrocarbons[1,2]		10	mg/Kg	<10
Aliphatic Surrogate % Recovery				82
Aromatic Surrogate % Recovery				70
Sample Surrogate Acceptance Range				40-140%
Fractionation Surrogate % Recovery				102
Fractionation Surrogate % Recovery				68
Fractionation Surrogate 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

CERTIFICATION

Were all QA/QC procedures REQUIRED by the EPH Method followed? X Yes __ No-Details Attached
Were all performance/acceptance standards for the required QA/QC procedures achieved? X Yes __ No-Details Attached
Were any significant modifications made to the EPH method, as specified in Section 11.3? X No __ Yes-Details Attached

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.

SIGNATURE: Mark H. Bishop POSITION: Laboratory Director

PRINTED NAME: Mark H. Bishop DATE: 7-31-01

APPENDIX 3: REQUIRED EPH DATA REPORTING FORMAT/INFORMATION

SAMPLE INFORMATION

Matrix	Aqueous X Soil Sediment Other:
Containers	X Satisfactory Broken Leaking:
Aqueous Preservatives	X N/A pH<2 pH>2 Comment:
Temperature	X Received on Ice Received at 4 ° C Other:
Extraction Method	Water: Soil: Soxhlet

EPH ANALYTICAL RESULTS

Method for Ranges: MADEP EPH 98-1			Client ID	SS13 12-24"
Method for Target Analytes:			Lab ID	L0724-13
EPH Surrogate Standards			Date Collected	7/23/01
Aliphatic: Chlorooctadecane			Date Received	7/24/01
Aromatic: o-Terphenyl			Date Extracted	7/26/01
EPH Fractionation Surrogates			Date Analyzed	7/27/01
2-Fluorobiphenyl			Dilution Factor	1X
2-Bromonaphthalene			% Moisture (soil)	7
RANGE/TARGET ANALYTE		**RL**	**Units**	
Unadjusted C11-C22 Aromatics[1]		10	mg/Kg	58
Diesel PAH Analytes	Naphthalene	0.5	mg/Kg	<0.5
	2-Methylnaphthalene	0.5	mg/Kg	<0.5
	Phenanthrene	0.5	mg/Kg	3.4
	Acenaphthylene	0.5	mg/Kg	<0.5
Other Target PAH Analytes	Acenaphthene	0.5	mg/Kg	<0.5
	Fluorene	0.5	mg/Kg	<0.5
	Anthracene	0.5	mg/Kg	1.0
	Fluoranthene	0.5	mg/Kg	5.4
	Pyrene	0.5	mg/Kg	5.1
	Benzo(a)anthracene	0.5	mg/Kg	1.8
	Chrysene	0.5	mg/Kg	2.0
	Benzo(b)fluoranthene	0.5	mg/Kg	1.6
	Benzo(k)fluoranthene	0.5	mg/Kg	0.9
	Benzo(a)pyrene	0.5	mg/Kg	2.0
	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	<0.5
	Dibenzo(a,h)anthracene	0.5	mg/Kg	1.2
	Benzo(g,h,i)perylene	0.5	mg/Kg	1.3
C9-C18 Aliphatic Hydrocarbons[1]		10	mg/Kg	<10
C19-C36 Aliphatic Hydrocarbons[1]		10	mg/Kg	59
C11-C22 Aromatic Hydrocarbons[1,2]		10	mg/Kg	31
Aliphatic Surrogate % Recovery				82
Aromatic Surrogate % Recovery				62
Sample Surrogate Acceptance Range				40-140%
Fractionation Surrogate % Recovery				97
Fractionation Surrogate % Recovery				66
Fractionation Surrogate 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

CERTIFICATION

Were all QA/QC procedures REQUIRED by the EPH Method followed? X Yes _ No-Details Attached
Were all performance/acceptance standards for the required QA/QC procedures achieved? X Yes _ No-Details Attached
Were any significant modifications made to the EPH method, as specified in Section 11.3? X No _ Yes-Details Attached

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.

SIGNATURE: Mark H. Bishop POSITION: Laboratory Director

PRINTED NAME: Mark H. Bishop DATE: 7-31-01

Custody Records

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

L0724-13

CHAIN OF CUSTODY RECORD

PROJ. NO.: D7375 | PROJECT NAME: New Bedford High School
CLIENT: VHB Watertown

	SAMPLE I.D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TESTS: PCB	RCRA 8	SVOC	TPH			REMARKS
SS1	0-6"	7/23		Y			1	X	X					
SS1	6-12"			Y			1	X	X	X	X			
SS2	0-6"			Y			1	X	X					
SS-3	0-6"			Y			1	X	X					
SS-3	12-24			Y			1	X	X	X	X			
SS-4	0-6"			Y			1	X	X					
SS-5	0-6"			Y			1	X	X					
SS-6	0-6"			Y			1	X	X					
SS-7	0-6"			Y			1	X	X					
SS-8	0-6"			Y			1	X	X					
SS-9	0-6"			Y			1	X	X					
SS-10	0-6"			Y			1	X	X					
SS-10	6-12"			Y			1	X	X					
SS-11	0-6			Y			1	X	X					
SS-12	0-6			Y			1	X	X					

Relinquished by: (Signature)	Date/Time 7/24/11:30	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time 7/24/01 1558	Remarks: ~~STANDARD~~ 5 DAY TAT!

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

L0724-13

CHAIN OF CUSTODY RECORD

PROJ. NO. 07375 | PROJECT NAME: New Bedford High School
CLIENT: VHB - Watertown

	SAMPLE I.D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TESTS: PCB	RCRA 8	SVOC	EPH			REMARKS
SS-12	12-24"	7/23		X			1	X	X					
SS-13	0-6"			X			1	X	X					
SS-13	6-12"			X			1	X	X					
SS-13	12-24"			X			1	X	X	X	X			
SS-14	0-6"			X			1	X	X					
SS-14	12-24			X			1	X	X					
SS-15	0-6"	↓		X			1	X	X					

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	7/24 11:50	[signature]			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
		[signature]			
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
		[signature]	7/24/01 1558	~~Standard~~ 5 DAY TAT	