WOODS HOLE GROUP

US Army Corps of Engineers
New England District

FINAL

NORTH OF WOOD STREET POST-REMEDIATION MONITORING

APRIL 2010 MONITORING EVENT

NEW BEDFORD HARBOR SUPERFUND SITE, OU #1

Contract No. W912WJ-09-D-0001-0010

Prepared For:
United States Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742

Prepared By:
Woods Hole Group, Inc.
81 Technology Park Drive
East Falmouth, MA 02536

June 2010

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EXECUTIVE SUMMARY

Environmental sampling and analysis was performed for the area north of the Wood Street Bridge (NWS) in April 2010 in support of remedial dredging activities at the New Bedford Harbor Superfund Site. In 2002–2003, as part of a site remediation, approximately 15,000 cubic yards of contaminated material was removed from the NWS area. The primary contaminants of concern in the NWS area are polychlorinated biphenyls (PCBs). The NWS area was remediated using a dry excavation method to eliminate the potential for sediment resuspension and recontamination. Annual investigations have been conducted since 2004 to assess the effectiveness of prior remediation and potential recontamination of this area due to sediment transport from unremediated areas. Post-remediation sampling conducted in 2004 identified a shoreline area in Acushnet that should have been included in the 2002–2003 clean-up but was inadvertently neglected; this area was remediated in 2005.

Twenty-one stations in the NWS area were sampled in April 2010, including twelve river sediment locations and nine marsh soil locations along the eastern and western shores of the Acushnet River. These stations were sampled at the direction of the USACE and have been sampled throughout the eight year history of the post-remediation monitoring program. River sediments were generally comprised of a layer of fine black silt and organic detritus underlain by sand, clay or silt. River sediments located closer to the shore and farther upstream were comprised of brown organic sand and silt underlain by gravel and/or sand. Shoreline soils were generally comprised of brown organic silt and sand underlain by sand or gravel, silt and sand.

The April 2010 sampling event took place after the New Bedford region and Acushnet River watershed experienced a series of extreme precipitation events in late March 2010. The combination of these storms caused historic flooding and record stages in regional rivers. Although hydrological measurements were not collected, it is likely that the Acushnet River experienced similar conditions. Multiple fallen trees, branches, and other debris were observed in the river channel during the sediment sample collection.

In 2010, analysis of total PCB concentrations in river sediment samples ranged from 0.23 milligrams per kilograms (mg/kg) to 21.23 mg/kg dry weight. These values are significantly lower than the concentrations observed during previous years of monitoring. The highest concentrations of total PCB (>10 mg/kg) were measured in sediment at stations in close proximity to the Wood Street Bridge, and towards the center of the river channel just south of a Combined Sewer Overflow (CSO). Total PCB concentrations in shoreline soil samples were all below the applicable recreational cleanup criteria (25 mg/kg) at all shoreline locations in 2010.

Sediment data from the 2003–2010 monitoring period reveal that total PCB concentrations in river sediment at the NWS area are spatially and temporally variable. The heterogeneous distribution of the PCB concentrations reflects the differences in bulk sediment characteristics and the highly dynamic nature of the system. Total PCB concentrations in 2003 were among the lowest measured during the 2003–2010 monitoring period; these concentrations are comparable to those observed in 2010.

However, this has not been the historical trend since total PCB concentrations were observed to increase during the five years following the remediation of the NWS area in the winter of 2002-2003. Although no analysis has been performed to support this hypothesis, the decrease in concentration of PCBs in both river and shoreline sediment samples collected in April 2010 may be attributed to a natural "flushing" of the NWS area by the high flow conditions experienced in the Acushnet River during late March 2010.

The fluctuation of PCB measurements between the nine sampling events is thought to be caused by the result of natural tidal processes transporting contaminated sediment from the upper harbor source area, countered by high spring river flows flushing contaminants down stream. Although the resuspension and transport of sediments is natural and unavoidable (e.g., tide and storms), the resuspension of contaminated sediment due to the New Bedford Superfund Site remediation activities is controllable. To that end, remediation dredging is performed using methods of minimal disturbance (e.g., hydraulic dredging), and a water quality monitoring program is used to ensure that excessive resuspension of sediment during remediation activities does not occur, or is limited. Annual sediment monitoring will continue at the NWS area as needed to assess the potential for recontamination from the unremediated harbor areas via natural and anthropogenic processes.

1.0 INTRODUCTION

1.1 NEW BEDFORD HARBOR SUPERFUND SITE

The New Bedford Harbor Superfund Site, located in Bristol County, Massachusetts, extends from the shallow northern reaches of the Acushnet River estuary south through the commercial harbors of New Bedford and Fairhaven and into 17,000 adjacent acres of Buzzards Bay (Figure 1). The City of New Bedford, located along the western shore of the Site, is approximately 55 miles south of Boston. New Bedford is currently home port to a large offshore fishing fleet and is a densely populated manufacturing and commercial center. By comparison, the eastern shore of New Bedford Harbor is predominantly residential, light commercial or salt marsh.

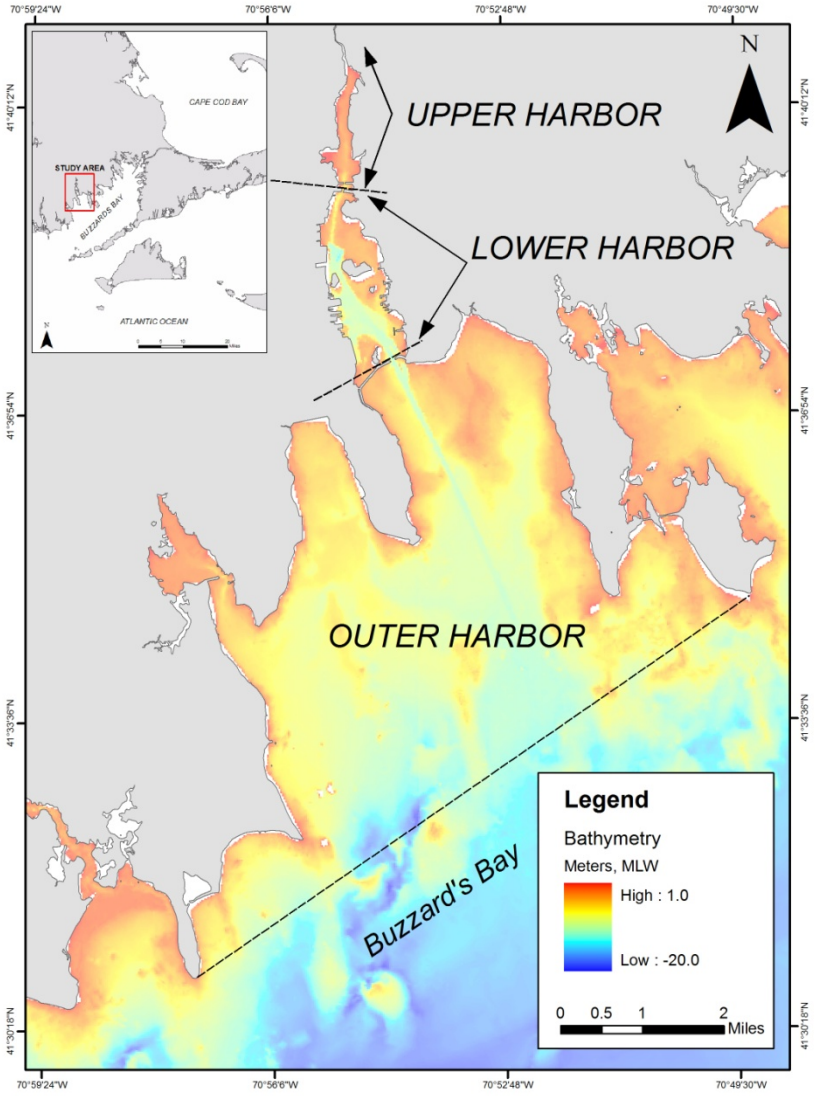

Figure 1. Basemap of New Bedford Harbor Superfund Site in Southeastern, MA

The Acushnet River's 16.5 square mile drainage basin discharges to New Bedford Harbor in the northern reaches of the Site, contributing relatively minor volumes of fresh water to the tidally influenced harbor (VHB, 1996). Numerous storm drains, combined sewer overflows (CSOs), industrial discharges, as well as smaller brooks and creeks also discharge directly to the Site. The upper and lower harbors are believed to be areas of net groundwater discharge. The estuary can be characterized as a shallow, well-mixed system.

Industrial and urban development surrounding the harbor has resulted in sediments becoming contaminated with high concentrations of many pollutants, notably polychlorinated biphenyls (PCBs) and heavy metals. Contaminant gradients within harbor sediments decrease from north to south. The source of the contamination has been attributed to two electrical capacitor manufacturing facilities that used PCBs between the 1940s and the 1970s. One facility, Aerovox Corporation, is located near the northern boundary of the Site, and the other, Cornell-Dubilier Electronics, Inc. is located just south of the New Bedford Harbor hurricane barrier. The two facilities are known to have discharged PCB-laden wastes either directly into the harbor or indirectly via discharges to the City's sewerage system.

Based on human health concerns and ecological risk assessments, the United States Environmental Protection Agency (USEPA) added New Bedford Harbor to the National Priorities List in 1983 as a designated Superfund Site. Through an Interagency Agreement between the USEPA and the United States Army Corps of Engineers, New England District (USACE NAE), the USACE is responsible for carrying out the design and implementation of remedial measures at the Site.

The Site has been divided into three geographic areas: the upper, lower and outer harbors, consistent with geographic features, basin morphology (Figure 1) and gradients of contamination. The Site is also defined by three state-sanctioned fishing closure areas extending approximately 6.8 miles north to south and encompassing approximately 18,000 acres in total. The upper harbor comprises approximately 187 acres, with current sediment PCB levels ranging from below detection to approximately 4,000 parts per million (ppm). Prior to the removal of the most contaminated hot spot sediments in 1994 and 1995, as part of EPA's first cleanup phase, sediment PCB levels were reported higher than 100,000 ppm in the upper harbor. The boundary between the upper and lower harbor is the Coggeshall Street Bridge; at this point the harbor is constricted to a width of approximately 100 feet. The lower harbor comprises approximately 750 acres, with current sediment PCB levels ranging from below detection to over 100 ppm. The boundary between the lower and outer harbor is the 150 foot wide opening of the New Bedford hurricane barrier. The hurricane barrier was constructed in the mid-1960s. Sediment PCB levels in the outer harbor are generally low, with only localized areas of PCBs in the 50 – 100 ppm range near the Cornell-Dubilier plant and the New Bedford sewage treatment plant's outfall pipes (the most contaminated sediments in the outer harbor were capped in 2005). The southern extent of the outer harbor is a line mapped from Rock Point (the southern tip of West Island in Fairhaven), southwesterly to Negro Ledge, and then southwesterly to Mishaum Point in Dartmouth (Figure 1).

The remediation of the Site involves the excavation and dredging of approximately 900,000 cubic yards of PCB-contaminated sediment. The majority of the contaminated material is being removed by a hydraulic dredge that pumps a spoils-slurry to the project's Sawyer Street facility where it is mechanically processed to remove all sand, gravel, and debris. The remaining silt and clay slurry is then pumped to the Area D Dewatering Facility located on Herman Melville Boulevard where it is mechanically dewatered and transported off-site for disposal.

1.2 NORTH OF WOOD STREET AREA

Located at the far northern end of the Upper Harbor is the North of Wood Street (NWS) area. This location was prioritized for restoration activities based on the high levels of PCB contamination (especially in intertidal and shoreline areas) and the proximity to shoreline residential and recreational land use areas. The NWS area includes in-river sediments and marsh soils on the eastern and western shores of the river. The NWS study area extends from approximately 250-ft south of the Wood Street bridge to approximately 0.25 miles north of the bridge.

Sediments and marsh soils at the NWS area previously had PCB concentrations as high as 46,000 mg/kg. The 1998 ROD clean-up criteria that apply to the NWS area are: 1 mg/kg for residential shoreline areas, 10 mg/kg for sub-tidal sediments and mudflats, 25 mg/kg for the top foot of recreational land use shoreline soils and 50 mg/kg for shoreline soils deeper than the top foot in residential and recreational land use areas.

In the winter of 2002-2003 approximately 15,000 cubic yards of material was removed from the NWS area. The site was remediated using temporary dams and pumps to divert river water around the site. This allowed excavation activities to be conducted on dry sediments and soils, thus eliminating the potential for sediment resuspension and recontamination. Clean fill was used to restore the river banks, but sub-tidal areas were left at the depth of excavation (i.e., not backfilled). Marsh and upland vegetation was planted above the low water line to stabilize and restore the shoreline. In August of 2004 post-remediation sampling revealed elevated PCB concentrations on the eastern shoreline of the NWS area, and in certain sub-tidal locations. Elevated concentrations were found above the high tide line suggesting that incomplete remediation was a more likely cause than recontamination from in-river sources. Additional remediation and restoration efforts were conducted in December 2005 to remove the remaining contamination. Samples collected before and after this effort showed an improvement in shoreline PCB concentrations (ENSR, 2006). Additional sampling was conducted in 2006, 2007, and 2008.

1.3 PROJECT OBJECTIVES AND SCOPE

Sampling occurs on an annual, or as needed basis as part of an environmental monitoring program coordinated with the New Bedford Harbor Superfund Site. The objective of the NWS monitoring program is to assess the potential recontamination of this previously remediated area due to sediment transport from unremediated areas or from areas undergoing active remedial dredging. Twenty-one (21) locations have historically been sampled in the NWS area, including 12 sediment stations in the river, 6 soil locations in

the remediated marsh area on the east side of the river south of River View Park, and 3 shoreline stations on the lumber yard site on the west side of the river (Figure 2). These 21 stations were sampled in April 2010 as part of the 2009 Environmental Monitoring, Sampling, and Analysis of the New Bedford Superfund Site performed by Woods Hole Group under contract to the USACE.

Figure 2. Basemap of the North of Wood Street Area and April 2010 sample locations

2.0 METHODS

Methods used to collect and analyze sediment samples are summarized below and described in detail in the project Field Sampling Plan (Woods Hole Group 2009A) and Quality Assurance Project Plan (Woods Hole Group 2009B). Twenty-one (21) locations were sampled in 2010, including 12 sediment stations in the river and 9 soil stations located at recreational land use shoreline soil areas along the east and west side of the river (Figure 2). To allow accurate comparisons over time, station locations were chosen based on locations sampled previously in 2006, 2007, and 2008.

2.1 SEDIMENT CORE COLLECTION

All locations for the collection of sediment cores were approved by the USACE and USEPA. Locations were provided in Massachusetts State Plane Mainland coordinates, and were converted into latitude and longitude using the program Corpscon 6. The WHG navigation system required all waypoints to be entered in geographic coordinates. Actual samples locations were recorded in geographic coordinates on the sediment sampling field logs and reentered into Corpscon 6 to convert the actual coordinates back into Massachusetts State Plane Mainland coordinates.

2.1.1 River Sediments

Sediment cores were collected with a push-core sampling device and a 2 5/8 inch inner diameter clear polycarbonate core barrel. A piston assembly inside the core barrel was used to create suction, thereby preventing excessive compaction during penetration and loss of sediment from the bottom of the barrel during recovery. In all cases, a one foot core was targeted.

The piston assembly was positioned just inside the leading end of the core liner and the piston line was held loosely on deck. The coring assembly was lowered into the water until the leading end of the core bore barrel was positioned at the sediment-water interface. At this point, the piston attachment line was then tied off securely on the deck, fixing the elevation of the piston assembly and creating a suction point at the sediment-water interface. During core barrel retrieval the piston line was held tight to maintain suction in the barrel and to overcome the suction holding the penetrated core barrel in place. Upon recovery of the core onto the survey vessel, the bottom end of the barrel was capped with a plastic end cap. After a gross decontamination of the coring device using site water, the core liner was removed from the socket, the piston was removed from the core liner, and the top of the core liner was fitted with a plastic end cap.

2.1.2 Shoreline Soils

Shoreline soil samples were collected in a 2 5/8 inch inner diameter clear polycarbonate core barrel inserted into a soil auger. When sampling with the soil auger, the auger head was pushed and rotated into the sediment until the depth of auger barrel was reached, approximately 6 inches. The collected sediment was removed from the auger by placing a core liner at the top of the auger barrel. The auger was then inverted, placing the sediment into the capped core liner. If necessary, a cleaned spoon was used to push the soil into the liner. This process was repeated until the required core depth was reached, at

least one foot. Both ends of the core barrel were capped and the core was stored vertically for transport to the lab trailer.

2.2 SEDIMENT CORE PROCESSING

Sample collection data, including collection date and time, station coordinates, and sample ID, were documented on Sediment Sampling Log forms (Appendix A). Acceptable cores were brought back to the field laboratory at the Sawyer Street facility for documentation, internal inspection, and subsampling. The internal inspection process included: 1) the splitting open of the core barrel, 2) archival photography, and 3) a geological description of the core, where the transitions between each type of sediment were recorded on a log sheet.

To begin internal inspection, each core barrel was placed into a clean 4 inch gutter and split by cutting along the entire length of the polycarbonate barrel with power shears. Cuts were made on opposite sides of the core barrel, 180 degrees apart. A clean piece of stainless steel wire (18 gauge) was used to slice through the middle of the barrel, using the two cuts in the barrel as guidelines. Care was used to prevent the wire from pulling obstructions (shells, rocks) down the core barrel and potentially mixing sediment layers. After splitting, the cores were rolled 90 degrees and separated. Following separation, the core was photographed (Appendix A). Each photograph contains the following elements in the frame:

- The sediment core;
- A tape measure or equivalent marked in decimal feet parallel to length of the core;
- A whiteboard or equivalent was placed next to the core with the following written information:
    - Sample ID – an alpha numeric code that identifies sample matrix, sampling year, station location, and depth interval sampled
    - Sample Date
    - Length of core

After photo documentation was complete, the core was geologically described by a trained sedimentologist (codes for types/colors). Textural descriptions were performed. Color descriptions followed the Munsell color classification. Material type, color, consistency, particle size, and odor, was documented on the Sediment Sampling Log forms (Appendix A). Each core was then subsampled for chemical analysis. Two 6-inch composite subsamples were taken from each core, homogenized, and placed into sample containers. The sample from the 0.0 – 0.5 foot interval was submitted for PCB analysis. The sample from the 0.5 – 1.0 foot interval was archived until further notice by the USACE. Samples were collected into pre-cleaned, 8-oz glass jars with Teflon lined lids. All samples were held on ice while in the field and then sent to Alpha Analytical Laboratories for PCB congener (NOAA 18) analysis or archiving.

2.3 POLYCHLORINATED BIPHENYL ANALYSES

The methods used by the laboratory have been summarized below and more detail can be found in detail in Alpha Analytical Laboratories SOP O-012 and the USEPA's SOP EIA-FLDPCB2 in the Quality Assurance Project Plan (Woods Hole Group 2009B).

Upon sample preparation an aliquot of a well mixed, homogeneous sediment sample is accurately measured for sample preparation. Generally, 5 grams of sediment is extracted from a 30 g field sample. The New Bedford Harbor QAPP requires 30 g of field sample sediment for extraction by Method 3540C Soxhlet Extraction, which is air dried to a minimum of >50% solids and generally >90% solids. The sample is spiked with surrogate compounds and then extracted using methylene chloride. The extract is dried and exchanged to hexane during sample concentration. After extraction, clean-up techniques are applied as necessary. The extract may be treated with Florisil (3620B) or GPC (3640A) for hydrocarbon and lipid removal, and copper (3660B) for sulfur removal. The extract is exchanged into hexane and concentrated to the appropriate volume, generally 10mL, and transferred for analysis. Prior to analysis, the extract is cleaned with sulfuric acid (3665A). Alternatively, this method can be employed for lower detection limits by decreasing the final volume to 1-5mL.

After clean-up and re-concentration, the extracts are analyzed on a gas chromatograph (GC) which is fitted with two capillary columns of differing polarities each employing separate detectors. This process follows a modified USEPA Method 8082 (WHG 2009B). The extracts of PCB Congeners are spiked with internal standards (IS) prior to analysis. The target analytes are resolved on each column and detected using an electron capture detector (ECD). Analytes are introduced into the GC/ECD by injecting a known volume of the calibration standards, quality control samples, and sample extracts into the GC which is temperature and flow programmed to separate the analytes. Identification of the target analytes is accomplished by confirming a target hit on two dissimilar columns using Retention Time (RT) and Pattern Recognition (PR). Concentrations are calculated from the ECD response using internal standard techniques. Sample results were reported in micrograms per kilogram (µg/kg) for the individual congeners.

For each batch of 20 or fewer samples, a laboratory method blank, LCS/LCSD, MS and MSD was processed and analyzed with the field samples.

PCB congener results are reported in mg/kg dry weight and to two significant figures in this report. Concentrations of total PCB were calculated using the congener results. Total PCB was calculated as the sum of the 18 NOAA congeners multiplied by the project-specific regression factor of 2.6. A value of zero (0) was used in the summation for non-detects.

2.4 QUALITY ASSURANCE/QUALITY CONTROL

2.4.1 Decontamination

All of the sampling equipment was decontaminated prior to use in the field and between stations to prevent cross-contamination. The decontamination procedure specified in

EPA Region II, CERCLA Quality Assurance Manual from October 1989, Revision 1 (WHG 2009B) was implemented prior to each station for sampling equipment that came into direct contact with the media to be sampled (e.g., PONAR grab sampler, stainless steel bowls, spoons, etc.). The EPA Region II procedures used for decontamination are summarized below (solvents used during decontamination activities were collected and stored for disposal at the laboratory):

1) Rinse with tap water or site water for gross decontamination
2) Clean with non-phosphate soap (Liquinox) and tap water
3) Rinse with Milli-Q or deionized water
4) Rinse with Acetone[a]
5) Let air-dry

[a] Used if oily contamination is apparent and only on metal/stainless steel surfaces.

2.4.2 Field-Based Quality Control Samples

One replicate or field duplicate sediment sample was collected during the April 2010 sampling event. The replicate sample was collected adjacent to the field sample collected at Station 033 (within ~4 feet). The purpose of this sample was to ensure that field procedures did not affect the quality of the data. Field duplicates samples are used to evaluate the sampling procedure and analytical precision. The sample was collected using the same techniques, and were handled, containerized, preserved, stored and transported in the same manner as field samples. An equipment blank sample was also collected. This sample was collected by pouring laboratory quality deionized water through the cleaned auger between two sample collections. Analyzing this sample verified that decontamination methods were adequate. All field-based QC samples were analyzed by the same laboratory.

2.4.3 Laboratory-Based Quality Control Samples

A routine suite of laboratory-based quality control (QC) samples were prepared with each set of field samples to evaluate data quality in terms of accuracy and precision. Quality control samples for PCB analysis included one procedural blank (also called a method blank or procedural method blank), one laboratory control sample (LCS), one matrix spike (MS) and one matrix spike duplicate (MSD) for each batch of 20 or fewer samples. In addition, a QA split sample was sent to ESS laboratory in Rhode Island for comparison to the AAL analyzed field sample at Station 039. The QA split sample from Station 039 was analyzed and reported in the same manner as all AAL analyzed samples. The QA split sample result from the ESS Laboratory was reported to the USACE Project Chemist, Mark Koenig.

3.0 RESULTS

Results from the 2009-2010 NWS sediment monitoring activities are described below. Complete field data collection and description logs, and digital photographs of the split cores are provided in Appendix A. Analytical reports from AAL are provided in Appendix B.

3.1 SEDIMENT AND SHORELINE SAMPLE COLLECTION

Twenty one (21) locations were sampled from the NWS area in April, 2010 (Figure 3). A total of 13 surface sediment samples (12 field samples + 1 field duplicate) were collected from the Acushnet River (Figure 3). A total of nine shoreline soil samples were also collected; six samples were collected from the eastern shoreline and three from the western shoreline (Figure 3). Sample collection data, including station ID, sample IDs, sample type, and station coordinates are summarized in Table 1. All samples were collected on April 6, 2010 and split open for internal description and subsampling on April 7, 2010.

No major issues were encountered during samples collection. Some difficulties arose sampling select in-river stations due to debris or rock (large gravel and cobbles) fouling sediment core penetration, therefore target locations had to be adjusted slightly in order to collect an acceptable core sample. Multiple fallen limbs and branches were observed in the river channel, likely a result of the storm events that affected the New Bedford area in the weeks before the NWS sampling effort. Many of the in-river push core samples contained a surface layer of fresh organic debris, mainly composed of leafy vegetation material, which may have been transported and deposited as a result of extreme precipitation events in March 2010.

3.2 PHYSICAL CHARACTERISTICS

River sediments and shoreline soils were visually characterized and physical characteristics, including material type, color, consistency, particle size, and odor, are documented on the Sediment Sampling Log forms provided in Appendix A. Digital photographs of the cores are also provided in Appendix A.

3.2.1 River Sediments

The physical characteristics of surface sediments collected at most river stations were similar, and were characterized by a thin layer of fine black silt with organic debris underlain by sand, clay or silt. The physical characteristics of sediment located closer to the shoreline and farther upstream were different compared to in-river sediment locations. For example, Stations 010 and 016, located at the northern boundary of the NWS area, were comprised of fine to coarse, grey-brown sand and gravel.

3.2.2 Shoreline Soils

Soils located along the western shore were generally comprised of firm brown organic material with sand and gravel. Soils located along the eastern shore were generally comprised of fine to coarse, brown organic silt and sand underlain by gravel, silt and sand. Shoreline soils at stations NWS-33, NWS-34, and NWS-37 had a more uniform composition within the top one foot.

Table 1. Summary of Samples Collected at NWS Area in April 2010

Station	Sample ID	Sample Type	Easting (NAD83 MA ft)	Northing (NAD83 MA ft)
C009-010	S-10A-C001-0-0.5	river sediment	2709125.372	815354.614
	S-10A-C001-0.5-0.9			
C009-016	S-10A-C002-0-0.5	river sediment	2708937.417	815401.429
	S-10A-C002-0.5-0.9			
C009-023	S-10A-C003-0-0.5	river sediment	2708816.017	815411.365
	S-10A-C003-0.5-1.0			
C009-028	S-10A-C004-0-0.5	river sediment	2708706.639	815403.006
	S-10A-C004-0.5-1.0			
C009-030E	S-10A-C005-0-0.5	shoreline soil	2708683.000	815498.784
	S-10A-C005-0.5-1.0			
C009-030W	S-10A-C006-0-0.5	shoreline soil	2708651.701	815362.403
	S-10A-C006-0.5-1.0			
C009-033	S-10A-C007-0-0.5	river sediment	2708615.604	815412.735
	S-10A-C007-0.5-1.0			
C009-033 REP	S-10A-C007-0-0.5REP	river sediment	2708615.636	815417.287
	S-10A-C007-0.5-1.0REP			
C009-038	S-10A-C008-0-0.5	river sediment	2708518.217	815381.528
	S-10A-C008-0.5-1.0			
C009-039	S-10A-C009-0-0.5	river sediment	2708512.331	815408.887
	S-10A-C009-0.5-1.0			
C009-040	S-10A-C010-0-0.5	river sediment	2708512.673	815458.970
	S-10A-C010-0.5-0.9			
C009-048	S-10A-C011-0-0.5	river sediment	2708390.900	815414.270
	S-10A-C011-0.5-1.0			
C009-049	S-10A-C012-0-0.5	river sediment	2708403.388	815464.270
	S-10A-C012-0.5-1.0			
C009-055	S-10A-C013-0-0.5	river sediment	2708263.707	815465.225
	S-10A-C013-0.5-1.0			
C009-062	S-10A-C014-0-0.5	river sediment	2708167.222	815566.056
	S-10A-C014-0.5-1.0			
09-NWS-33	S-10A-C015-0-0.5	shoreline soil	2709040.193	815332.431
	S-10A-C011-0.5-1.0			
09-NWS-34	S-10A-C016-0-0.5	shoreline soil	2708924.835	815337.772
	S-10A-C016-0.5-1.0			
09-NWS-35	S-10A-C017-0-0.5	shoreline soil	2708755.939	815507.391
	S-10A-C017-0.5-1.0			
09-NWS-36	S-10A-C018-0-0.5	shoreline soil	2708762.075	815516.455
	S-10A-C018-0.5-1.0			
09-NWS-37	S-10A-C019-0-0.5	shoreline soil	2708683.249	815535.207
	S-10A-C019-0.5-1.0			
09-NWS-38	S-10A-C020-0-0.5	shoreline soil	2708816.639	815502.423
	S-10A-C020-0.5-1.0			
09-NWS-39	S-10A-C021-0-0.5	shoreline soil	2708822.743	815506.934
	S-10A-C021-0.5-1.0			

3.3 POLYCHLORINATED BIPHENYLS

All NWS core samples were analyzed for the NOAA 18 PCB congeners. Determination of the total PCB congener concentration was calculated as the sum of the NOAA 18 congeners, multiplied by the site-specific regression factor of 2.6. A value of zero (0) was used in the case of non-detects. Total PCB concentrations are summarized in Table 2 and displayed in Figure 3. Complete laboratory analytical data are provided in Appendix B.

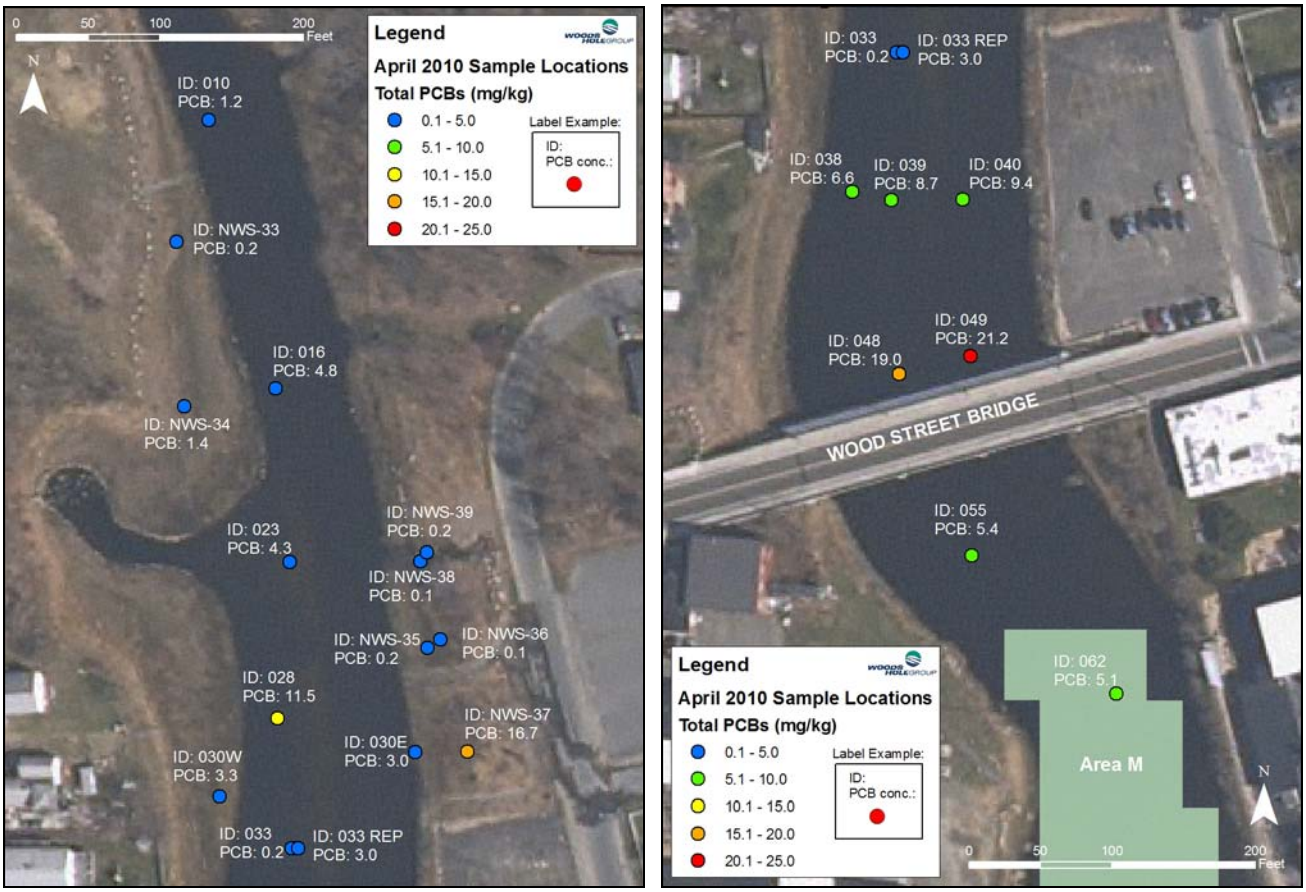

Figure 3. Total PCBs in Core Samples from NWS Area in April 2010 (left-hand image shows northern stations, right-hand, southern)

3.3.1 River Sediments

Total PCB concentrations in river sediment samples ranged from 0.23 mg/kg to 21.13 mg/kg. The highest concentrations of total PCBs (>10 mg/kg) were measured in surface sediment samples from Stations 048, 049 and 028, located towards the center of the river channel. Lower concentrations of total PCBs were measured in sediment samples collected closest to the shoreline and farthest upstream (Figure 3). Low concentrations of PCBs were also measured in sediment collected from the 2009 Dredge Area M, at station 062.

Table 2. Total PCBs in Core Samples from NWS Area in April 2010

River Sediment			Shoreline Soil		
Station ID	**Sample ID**	**Total PCBs (mg/kg)**	**Station ID**	**Sample ID**	**Total PCBs (mg/kg)**
C009-010	S-10A-C001-0-0.5	1.20	C009-030E	S-10A-C005-0-0.5	2.98
C009-016	S-10A-C002-0-0.5	4.80	C009-030W	S-10A-C006-0-0.5	3.30
C009-023	S-10A-C003-0-0.5	4.29	09-NWS-33	S-10A-C015-0-0.5	0.18
C009-028	S-10A-C004-0-0.5	11.52	09-NWS-34	S-10A-C016-0-0.5	1.36
C009-033	S-10A-C007-0-0.5	0.23	09-NWS-35	S-10A-C017-0-0.5	0.15
C009-033 REP	S-10A-C007-0-0.5REP	3.01	09-NWS-36	S-10A-C018-0-0.5	0.10
C009-038	S-10A-C008-0-0.5	6.64	09-NWS-37	S-10A-C019-0-0.5	16.72
C009-039	S-10A-C009-0-0.5	8.66	09-NWS-38	S-10A-C020-0-0.5	0.06
C009-040	S-10A-C0010-0-0.5	9.35	09-NWS-39	S-10A-C021-0-0.5	0.16
C009-048	S-10A-C011-0-0.5	18.97			
C009-049	S-10A-C012-0-0.5	21.23			
C009-055	S-10A-C013-0-0.5	5.43			
C009-062	S-10A-C014-0-0.5	5.11			

3.3.2 Shoreline Soils

Total PCB concentrations in the shoreline soils ranged from 0.06 mg/kg to 16.72 mg/kg. The highest concentration of total PCBs was measured in the soil from Station NWS-37, located on the eastern shore (Figure 3). This station also had higher than average concentrations of total PCBs in 2008 (4.5 mg/kg). The other shoreline samples contained less than 4 ppm total PCBs, and all shoreline soils were well within the 25 ppm PCB concentration limit for recreational areas.

3.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

3.4.1 Field Based Quality Control Samples

Quality assurance/quality control samples were collected in the field to ensure that field methods did not affect the quality of the data. The field replicate sample was analyzed to evaluate the sampling procedure and analytical precision. The replicate sample had a higher concentration of total PCBs than the field sample: 3.01 mg/kg in the replicate (033-REP) compared to 0.23 mg/kg in the field sample (033). This discrepancy is likely based on the spatial heterogeneity of the harbor sediments. The replicate core sample was collected approximately 10 feet from the field sample core. The equipment blank sample collected from the auger after decontamination between sample collections was analyzed containing 0.00 µg/L of the NOAA 18 PCB congeners.

3.4.2 Laboratory Based Quality Control Samples

Laboratory-based QC results are reported with the sample data in Appendix B of this report. Results from the analysis of laboratory-based QC samples for PCBs were evaluated against the project measurement quality objectives for accuracy and precision, as defined in the project QAPP (WHG 2009B). The evaluation is summarized in the QA/QC narrative of the AAL reports (Appendix B). Overall, results from the laboratory-

based QC samples for all tests parameters indicate that the laboratory methods were in control and the data is usable.

4.0 DISCUSSION

Several investigations have been conducted as part of the NWS monitoring program to characterize PCB contamination in the area since remediation activities were conducted in 2002-2003 (TTFW, 2004). A confirmatory sampling event was conducted by Tetra Tech FW, Inc. immediately following the remediation in February 2003. ENSR conducted four sampling events in the area to evaluate changes in river sediment PCB concentrations that may have occurred due to seasonal influence and/or dredging and other remediation activities. The ENSR sampling events occurred in August 2004, May 2005, September 2005, and January 2006. Additionally, Battelle conducted sampling events in November 2006, November/December 2007, and November/December 2008 to further assess potential recontamination of the NWS area. The NWS sample collection that occurred in April 2010 was the ninth event since remediation.

Long-term monitoring data indicate that total PCB concentrations are spatially and temporally variable in river sediments, whereas shoreline soil concentrations are not.

4.1 RIVER SEDIMENTS

Total PCB concentrations measured in river sediments at the NWS area between 2003 and 2010 are summarized in Table 3. Station-specific concentrations and system-wide averages of total PCBs between 2003 and 2010 (if applicable) are plotted in Figures 4 and 5, respectively. The system-wide average concentration was calculated as the average Total PCB concentration across all stations within a given sampling event. Sediment data from the 2003–2010 monitoring period show that total PCB concentrations in river sediment at the NWS area are spatially and temporally variable (Figures 4 and 5), which makes it difficult to discern clear trends in the data.

The lowest concentrations of total PCB in river sediment were measured in 2003, immediately following the remediation of the NWS area in the winter of 2002-2003. A post-remediation increase in total PCB concentrations was observed in 2004. Post-remediation levels in 2010 have decreased at most stations and are similar to the initial post-remediation analytical results from 2003. The increase between 2003 and 2007 was small (13-17 mg/kg) at some stations (C007-016, 023, 040, 049, 062) and larger (42-269 mg/kg) at other stations (C007-028, 033, 038, 039, 048, and 055). Post-remediation, the system-wide average concentrations of total PCBs in sediment at the NWS area have ranged between 3.7 mg/kg in 2003, to 63.9 mg/kg in 2007.

Table 3. Total PCBs in river sediments at NWS area

Station ID	Total PCBs (mg/kg)								
	Jan/Feb 2003	Aug 2004	May 2005	Sept 2005	Jan 2006	Nov 2006	Nov/Dec 2007	Nov/Dec 2008	Apr 2010
C009-010	6.1 (D)	20	-	81	0.99	2.4	4.5	2.3	1.20
C009-016	4.6 (D)	13	-	18	16	15	29/30	29	4.80
C009-023	8.3 (D)	22	3.8	2	6.6	8.5	23	44/51[b]	4.29
C009-028	0.49 (DU)	63	9.8	0.22	11	18	78	76	11.52
C009-030E	-	-	-	0.7	88	0.72	0.44	1.1	2.98
C009-030W	-	-	-	0.4	5.2	0.16	0.4	0.98	3.30
C009-033	0.39 (DU)	64	22	1.1	17	93	120	74	0.23/3.01[a]
C009-038	0.45 (DU)	36	-	4.7	8.6	1.8	68	33	6.64
C009-039	0.54 (DU)	64	4.6	-	-	13	270	140	8.66
C009-040	2.9 (D)	72	79	73	190	47	20	24	9.35
C009-048	0.43 (DU)	23	9	-	-	100	43	46	18.97
C009-049	12 (D)	160	36	5.9	3.9	12	25	23/26[b]	21.13
C009-055	0.42 (DU)	61	-	7	20	9.6	190	180/150[a]	5.43
C009-062	7.4 (D)	19	-	0.87	1.3	40	23	58	5.11

D: result from dilution analysis; U: non detects = detection limit reported (ENSR)
a – result for field replicate sample
b – total PCB result based on homologue analysis

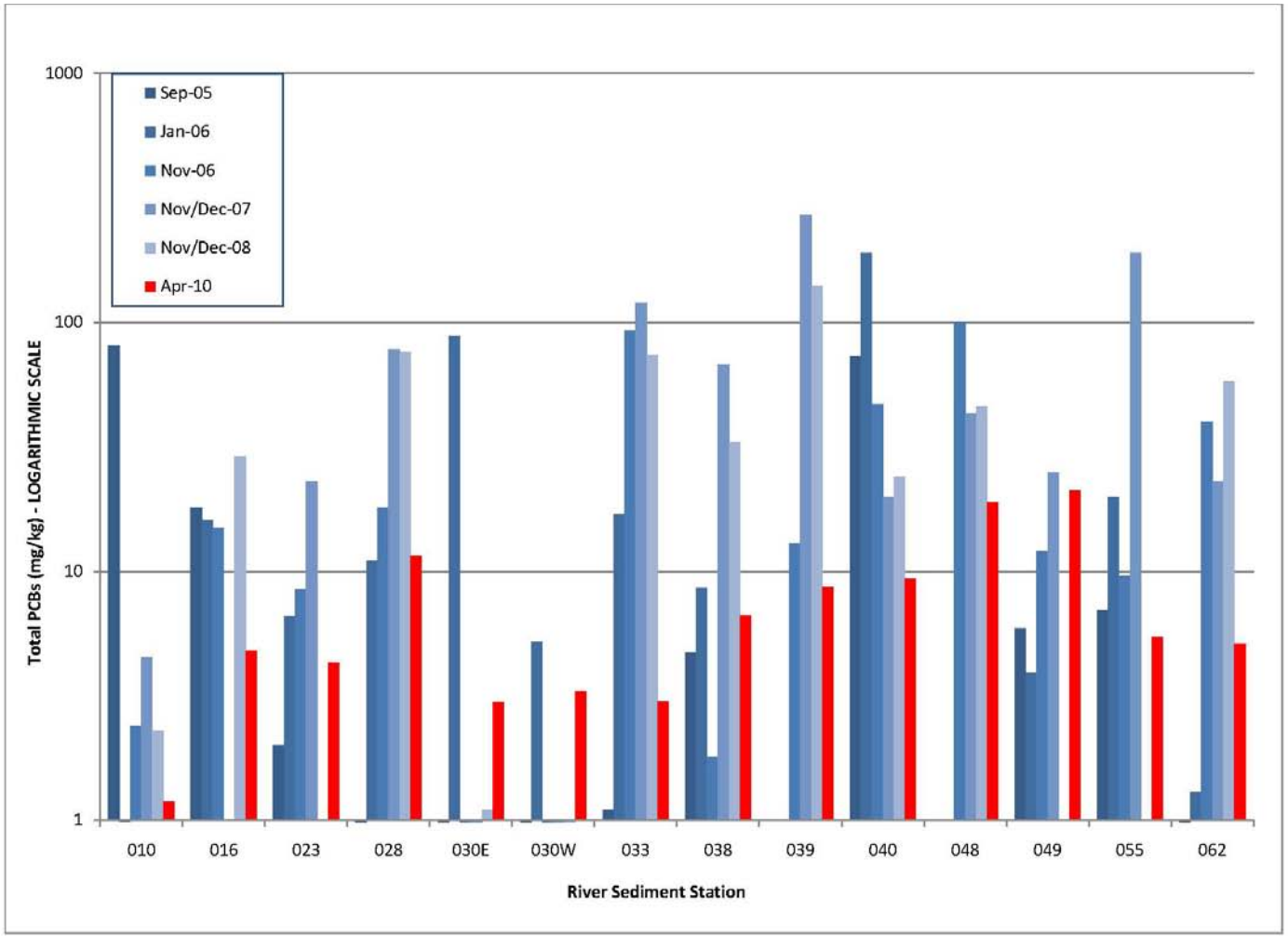

Figure 4. Station specific trends in total PCBs for river sediments in NWS area

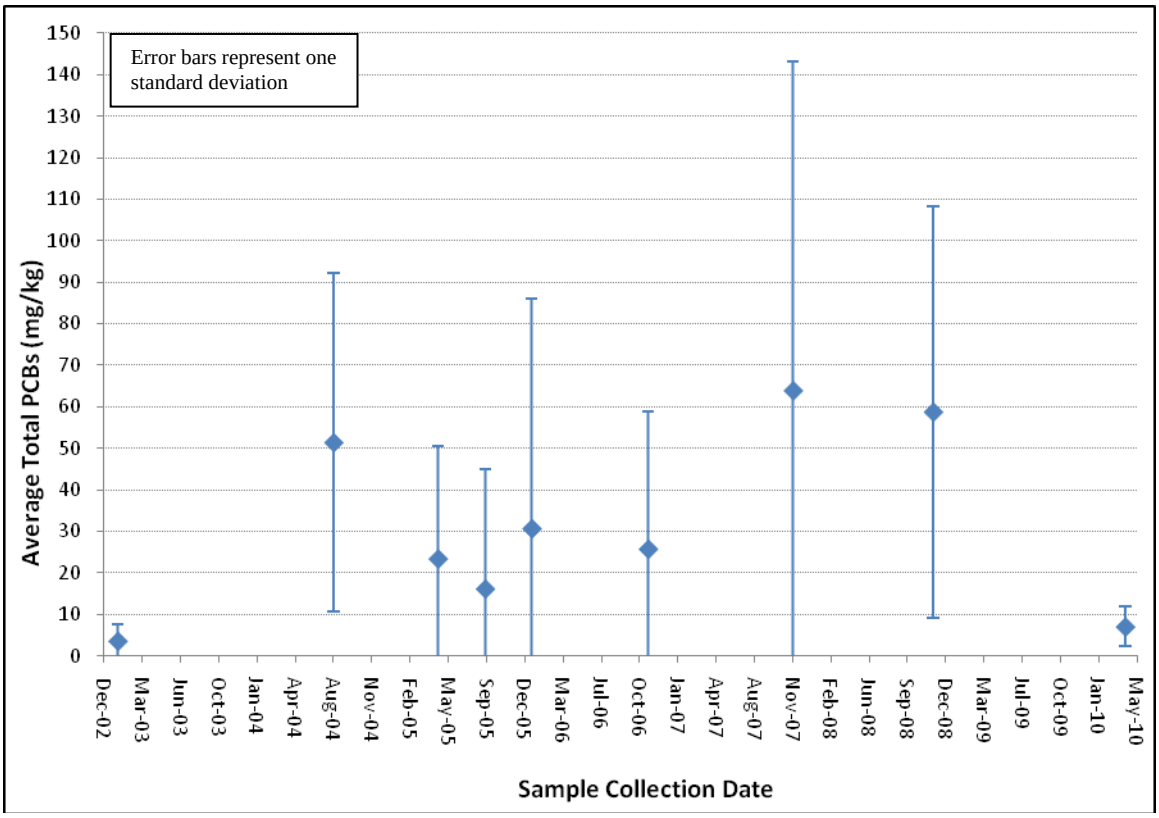

Figure 5. System-wide trends in the average Total PCB concentration for river stations in NWS area

The February 2003 confirmatory sampling dataset serves as the post-remediation baseline for PCB contamination levels in subsequent sampling events to be compared against. Statistical analysis of variance (ANOVA) indicates that post-remediation monitoring data from all sampling events, except September 2005 and April 2010, are significantly higher than the concentrations observed immediately following remediation in February 2003. The post-remediation increase could have resulted from contaminant transport from the upper harbor during dredging activities (or from transport during non-dredging times). However, remediation activities during the 2009 season were in closest proximity to the NWS area and the 2010 data indicate that Total PCB concentrations in river sediments decreased significantly from 2008. Although no analysis has been performed to support this hypothesis, the decrease in concentration of total PCBs in both river and shoreline sediment samples collected in April 2010 may be attributed to a natural "flushing" of the NWS area by the extremely high flow conditions experienced in the Acushnet River during late March 2010. The high flow conditions in the river were caused by extreme rainfall totals in the Acushnet River watershed over the course of 2–3 days. For example, the cumulative rainfall totals between 14:00 Sunday March 28, and 08:00 Wednesday March 31 (66 hours), were 5.27, 6.05, and 7.12 inches at New Bedford, Acushnet, and Taunton, respectively (NOAA, 2010). Despite the significant decrease in Total PCB concentration, a sediment trap study conducted during the 2009 dredge season indicated

that PCBs are actively transported and deposited in the NWS area during the active dredge season, and during periods of inactivity.

Independent of the processes controlling contaminant distribution, the 2010 dataset indicates that the NWS area presently contains Total PCB concentrations comparable to those observed following the remediation of the area in 2003.

4.2 SHORELINE SOILS

Total PCB concentrations in shoreline soils are summarized in Table 4 and plotted in Figure 6. Analytical results of PCB concentrations from post-remediation sampling conducted in 2006, 2007, 2008 and 2010 suggest that the remediation was effective, and has been maintained. Total PCB concentrations, at all sampling stations, have consistently measured below the 1998 ROD criteria of 25 mg/kg for recreational shoreline land use in the soil north of Wood Street.

Table 4. Total PCBs in Shoreline Soils at NWS Area

Station ID	Total PCBs (mg/kg)			
	Nov 2006	Nov 2007	Nov 2008	Apr 2010
Western Shoreline				
09-NWS-33	0.014	0.089	0.19	0.18
09-NWS-34	3.4	7.4	0.2	1.36
Eastern Shoreline				
09-NWS-35	0.27	0.19	0.67	0.15
09-NWS-36	0.14	0.31	0.18	0.10
09-NWS-37	0.35	4.5	0.13	16.72
09-NWS-38	0.15	0.26	0.076	0.06
09-NWS-39	0.082	0.035/0.06[a]	0.14	0.16

a – result for field replicate sample

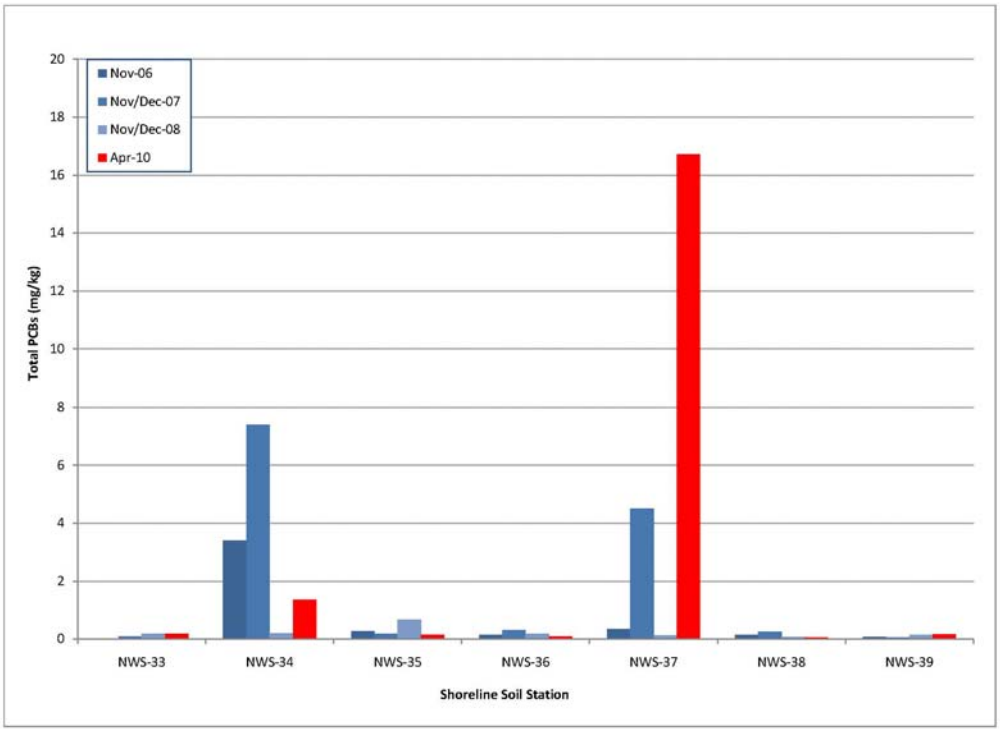

Figure 6. Station-Specific Trends in Total PCBs for Shoreline Soils in NWS Area

Substantive changes in shoreline PCB concentrations between 2006 and 2010 were not observed, except at station NWS-34, and at station NWS-37 where the concentration increased by an order of magnitude in 2010 compared to 2008 and 2006 results. The monitoring data indicate that concentrations of total PCBs in shoreline soils have been uniformly low both spatially and temporally, except at stations NWS-34 and NWS-37.

Annual sediment monitoring will continue at the NWS area as needed to assess the potential for recontamination from the unremediated harbor areas via anthropogenic disturbances and natural sediment transport processes.

5.0 REFERENCES

ENSR Corporation. 2006. 2005. Monitoring Summary Report; North of Wood Street Area Sampling. Prepared Under USACE Contract No. Dacw33-00-D-0003 Task 012. U.S. Army Corps of Engineers New England District Concord, Massachusetts. March.

NOAA. 2010. http://www.hpc.ncep.noaa.gov/discussions/nfdscc1.html. Storm Summary Message. The Hydrometeorological Prediction Center. Camp Springs, MD.

Tetra Tech FW, Inc. 2004. North of Wood Street Confirmatory Sampling Report, New Bedford Harbor Superfund Site. August.

Woods Hole Group. 2009A. Environmental Monitoring, Sampling and Analysis Water Quality Monitoring Field Sampling Plan. New Bedford Harbor Superfund Site, New Bedford, MA. Prepared under Contract W912WJ-09-D-0001 Task Order No 0010 for the U.S. Army Corps of Engineers New England District, Concord, MA.

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APPENDIX A. NORTH OF WOOD STREET CORE PHOTOGRAPHS AND FIELD LOGS

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APPENDIX B. ALPHA ANALYTICAL LABORATORIES REPORTS AND ANALYTICAL DATA

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APPENDIX A: NORTH OF WOOD STREET CORE PHOTOGRAPHS AND FIELD LOGS

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Project Name: New Bedford Harbor Environmental Monitoring | Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA | Vessel:
Client: USACE NAE | Chief Scientist:

Date: 4/6/10 | Station ID: 010 | All Measurements are ± 0.1 feet
Logged By: KM | Core Sample ID: KM S-10A-C0001 | Water Depth (A):
Collection Mechanism: PC PUSH CORE KM | Latitude: 41°40.827' | Length of Push Core Assembly (B):
Time on Station: 12:20 | Longitude: 70°55.036' | Water Surface to Top of Handle (C):
Time of Collection: 12:25 | GPS Accuracy: | Length of Core (from bottom) (D): 0.9 ft.
Time Depart Station: 12:50 | Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

Elevation (NGVD) (i.e. Bottom = H)	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0		coarse sand, w/gravel	(2.5Y 3/3) dark brown/ grey	loose	4cm	none	S-10A-C0001-0-0.5
0.6		coarse sand w/gravel	2.5Y 2.5/1 dark brown/black	loose	4cm	none	S-10A-C0001-0.5-0.9
0.9							

Comments: difficult to get a core sample, rocky bottom, collected to refusal

opened & sampled on 4/7/10

4/7/10
S-10A-C001
Station: 010
length: 0.9 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10
Logged By: DB
Collection Mechanism: ~~DB~~ PC
Time on Station: 12:53
Time of Collection: 12:57
Time Depart Station: 13:00

Station ID: Ø16
Core Sample ID: S-1ØA-CØØ2
Latitude: 41°40.796
Longitude: 70°55.026
GPS Accuracy:

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
Water Surface to Top of Handle (C):
Length of Core (from bottom) (D): Ø.9
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

Elevation ~~(NGVD)~~ (rel. Bottom = H)	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	well sorted medium sand		(2.5Y 3/3) dark brown	loose	medium	~~H_2S~~ when split	S-1ØA-CØØ2-0-0.5
0.3	clayey sand, medium grain well sorted		(2.5Y 3/1)	firm	1cm gravel	none	
0.55	clay w/ sand & gravel		(2.5y 2.5 3/1) black	firm	2cm gravel	H_2S when split	S-1ØA-CØØ2-0.5-0.9
0.9							

Comments: sampled to refusal: < 1 ft, rocky bottom

split open and sampled on 4/7/10

4/7/10
S-10A-C002
Station: 016
length: 0.9 ft.
NON-METALLIC

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10
Logged By: DB
Collection Mechanism: PC
Time on Station: 13:10
Time of Collection: 13:20
Time Depart Station: 13:22

Station ID: Ø23
Core Sample ID: KM & S-1ØA-CØØ3
Latitude: 41° 40.776'
Longitude: 70° 55.024'
GPS Accuracy:

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
~~Water Surface to Top of Handle (C)~~: length of core 1.Ø ft.
Length of Core (from bottom) (D):
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = 0)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Ø.Ø (organic detritus = leafy) grain	silty detritus, w/ medium poorly sorted sand w/ gravel		black (2.5Y 2.5/1)	loose	KM ~~medium~~ 1.5cm	none	S-1ØA-CØØ3-Ø-Ø.5
0.25	clay w/ minimal organic detritus		(2.5Y 3/2) dark brown/ grey	firm	very fine	KM ~~none~~ H_2S when sampled	S-1ØA-CØØ3-Ø.5-1.Ø
0.85	layer of woody material						
0.95							
1.Ø							

Comments

Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØØ3
Station: Ø23
length: 1.Ø ft.
NON-METALLIC

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10	Station ID: Ø28	All Measurements are ± 0.1 feet	
Logged By: KM	Core Sample ID: S-1ØA-CØØ4	Water Depth (A)	
Collection Mechanism: PC	Latitude: 41°40.758'	Length of Push Core Assembly (B)	
Time on Station: 13:25	Longitude: 70°55.026'	Water Surface to Top of Handle (C)	
Time of Collection: 13:30	GPS Accuracy:	Length of Core (from bottom) (D)	
Time Depart Station: 13:32		Tide Elevation (from tide board) (G)	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (C = Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Ø.Ø	organic detritus w/ fine sand, silt, clay		black 2.5Y 2.5/1	loose	fine		S-1ØA-CØØ4-Ø-Ø.5
Ø.2							
	clay		2.5Y 3/2	firm	very fine	H_2S	S-1ØA-CØØ4-Ø.5-1.Ø
1.2							
1.3	sand w/ clay & gravel				medium		

Comments: split open and sampled on 4/7/10

4/7/10
S-10A-C004
station: 028
length: 1.3 ft.

Project Name: New Bedford Harbor Environmental Monitoring | Project #: W912WJ-09-D-0001, Task Order No. 0010

Location: New Bedford, MA | Vessel:

Client: USACE NAE | Chief Scientist:

Date: 4/6/10 | Station ID: Ø3Ø-E | All Measurements are ± 0.1 feet

Logged By: KM | Core Sample ID: S-1ØA-CØØ5 | Water Depth (A):

Collection Mechanism: ag | Latitude: 41° 40.754' | Length of Push Core Assembly (B):

Time on Station: 10:06 | Longitude: 70° 55.005' | Water Surface to Top of Handle (C):

Time of Collection: 10:10 | GPS Accuracy: | Length of Core (from bottom) (D): 1.4

Time Depart Station: 10:15 | Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Ø.Ø	fine Sandy Silt w/ fibrous detritus, gradually less detritus w/ increasing depth gravel throughout		2.5 3/2 dark brown	firm	~~fine~~ gravel ~ 2cm	unique odor, difficult to describe	S-1ØA-CØØ5-Ø.-Ø.5
1.4							S-1ØA-CØØ5-Ø.5-1.Ø

Comments: Split open and sampled on 4/7/10

4/7/10
S-10A-C005
Station: 030E
length: 1.4 ft.
NON-METALLIC

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10
Logged By: KM
Collection Mechanism: avg
Time on Station: 11:05
Time of Collection: 11:07
Time Depart Station: 11:15

Station ID: Φ3ΦW
Core Sample ID: S-1ΦA-CΦΦ6
Latitude: 41°40.749'
Longitude: 70°55.Φ35'
GPS Accuracy:

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
Water Surface to Top of Handle (C):
Length of Core (from bottom) (D): 1.5ft
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

Elevation (NGVD) (i.e. Bottom = H)	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.Φ	fine sandy silt w/ fibrous organic detritus, small gravel throughout gradually less detritus w/ increasing depth		2.5Y 3/2 dark brown	firm	1cm gravel	unique odor, sort of sweet	S-1ΦA-CΦΦ6-Φ-Φ.5 S-1ΦA-CΦΦ6-Φ.5-1.Φ
1.5							

Comments: Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØØ6
station: Ø3Ø W
length: 1.5 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA
Vessel:
Client: USACE NAE
Chief Scientist:

Date: 4/6/10
Station ID: Φ33
All Measurements are ± 0.1 feet
Logged By: KM
Core Sample ID: S-1ΦA-CΦΦ7
Water Depth (A):
Collection Mechanism: PC
Latitude: 41° 40.743'
Length of Push Core Assembly (B):
Time on Station: 13:35
Longitude: 70°55.024'
Water Surface to Top of Handle (C):
Time of Collection: 13:38
GPS Accuracy:
Length of Core (from bottom) (D): 1.35
Time Depart Station: 13:52
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	coarse poorly sorted sand w/ gravel		2.5Y 3/3	loose	4cm gravel	none	S-1ΦA-CΦΦ7-Φ-Φ.5
0.4	medium to fine well sorted sand		2.5Y 3/2	firm	<1cm	none	S-1ΦA-CΦΦ7-Φ.5-1.Φ
0.9	fine sandy clay w/ gravel		2.5Y 3/1	firm	3cm	none (slight H_2S)	
1.35							

Comments

split open & sampled on 4/7/10

4/7/10
S-10A-C007
Station: 033
length: 1.35 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA
Vessel:
Client: USACE NAE
Chief Scientist:

Date: 04/06/10
Station ID: 033 DUP.
All Measurements are ± 0.1 feet
Logged By: DB
Core Sample ID: S-1ΦA-CΦΦ7 REP
Water Depth (A):
Collection Mechanism: DC
Latitude: 41° 40.743'
Length of Push Core Assembly (B):
Time on Station: 13:35
Longitude: 70° 55.023'
Water Surface to Top of Handle (C):
Time of Collection: 13:43
GPS Accuracy:
Length of Core (from bottom) (D): 1.2
Time Depart Station: 13:52
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	very coarse sand w/ gravel, organic detritus in top 0.1 ft.		2.5Y 3/3	loose	3cm	none	S-1ΦA-CΦΦ7-Φ-Φ.5REP
0.4	fine grain sand, well sorted, some gravel		2.5Y 3/2	firm	1cm	none	S-1ΦA-CΦΦ7-Φ.5-1.ΦREP
1.1	clay w/ sand w/ gravel		2.5Y 3/1	firm	3cm	none	
1.2							

Comments

Split open & sampled on 4/7/10

4/7/10
S-1ØA-CØØ7REP
station: Ø33
length: 1.2ft

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10
Station ID: Φ38
Logged By: KM
Core Sample ID: S-1ΦA-CΦΦ8
Collection Mechanism: PC
Latitude: 41°40.727'
Time on Station: 13:55
Longitude: 70°55.Φ31'
Time of Collection: ~~13:58~~ KM 14:25
GPS Accuracy:
Time Depart Station: 14:29

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
Water Surface to Top of Handle (C):
Length of Core (from bottom) (D): 1.4
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): G - (B - C)

(z*) Elevation of visual transition (NGVD): H + (distance to visual transition)

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): H + D

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): G - A

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	silt,		black 2.5Y 2.5/1	loose	fine		S-1ΦA-CΦΦ8-Φ-Φ.5
0.1	sandy clay w/ lots of shell hash, organic detritus (chucks of wood) poorly sorted fine to coarse sand		2.5Y 3/1	firm	1cm		S-1ΦA-CΦΦ8-Φ.5-
1.3							
1.4	lots of oyster shell hash		2.5Y 3/2				

Comments: took 3 unsuccessful cores - lost sed. @ bottom, bent core barrel due to hard bottom. kept 4th core: needed use of fingers split open & sampled on 4/7/10

4/7/10
S-1ØA-CØØ8
Station: Ø38
length: 1.4 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10	Station ID: Φ39	All Measurements are ± 0.1 feet	
Logged By: KM	Core Sample ID: S-1ΦA-CΦΦ9	Water Depth (A)	X
Collection Mechanism: PC	Latitude: 41° 40.726'	Length of Push Core Assembly (B)	X
Time on Station: 14:30	Longitude: 70° 55.Φ25'	Water Surface to Top of Handle (C)	X
Time of Collection: 14:32	GPS Accuracy:	Length of Core (from bottom) (D): 1.2	
Time Depart Station: 14:35		Tide Elevation (from tide board) (G)	X

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ – 0.1	silt, organic detritus		black 2.5Y 2.5/1	loose	fine		S-1ΦA-CΦΦ9-Φ-Φ.5
0.1 – 0.4	silty sand, fine to coarse poorly sorted		2.5Y 2.5/1	firm	1cm	none	
0.4 – 1.2	~~clayey~~ KM sandy clay w/ lots of shell hash (oyster shell)		2.5Y 3/1	firm	fine	none	S-1ΦA-CΦΦ9-0.5-1.Φ

S-1ΦA-CΦΦ9-Φ-Φ.5 QA

Comments

Split open & sampled on 4/7/10
QA SPLIT on top 1/2 ft.

4/7/10
S-1ØA-CØØ9
Station: Ø39
length: 1.2 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10	Station ID: ΦΦΦ	All Measurements are ± 0.1 feet	
Logged By: KM	Core Sample ID: S-1ΦA-CΦ1Φ	Water Depth (A)	
Collection Mechanism: PC	Latitude: 41° 40.726'	Length of Push Core Assembly (B)	
Time on Station: 14:39	Longitude: 70° 55.014'	Water Surface to Top of Handle (C)	
Time of Collection: 14:55	GPS Accuracy:	Length of Core (from bottom) (D):	0.85
Time Depart Station: 15:05		Tide Elevation (from tide board) (G)	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	silt w/organic detritus, very fine sand		2.5y 2.5/1	loose	fine		S-1ΦA-CΦΦ-Φ-Φ.5
0.35	silty sand, poorly sorted fine sand to gravel		2.5y 3/3	firm	2-3 cm		S-1ΦA-CΦ1Φ-Φ.5-~~Φ.85~~ Φ.9
0.85							

Comments: 2 unsuccessful grabs, hard bottom > 0.5 ft deep bent core barrel, reached refusal, kept 3rd core sample, used fingers, ~ 10 inches Splits sampled on 4/7/10

4/7/10
S-1ØA-CØ1Ø
Station: Ø4Ø
length: Ø.85 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10	Station ID: Φ48	All Measurements are ± 0.1 feet	
Logged By: KM	Core Sample ID: S-1ΦA-CΦ11	Water Depth (A)	
Collection Mechanism: PC	Latitude: 41°40.706'	Length of Push Core Assembly (B)	
Time on Station: 15:19	Longitude: 70°55.024'	Water Surface to Top of Handle (C)	
Time of Collection: 15:21	GPS Accuracy:	Length of Core (from bottom) (D)	1.5
Time Depart Station: 15:25		Tide Elevation (from tide board) (G)	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ	silty organic detritus (leafy)		2.5Y 2.5/1 black	loose	fine		S-1ΦA-CΦ11-Φ-Φ.5
0.4	clay		2.5Y 3/1	firm	fine	H_2S	
0.9	sandy clay w/ large gravel		2.5Y 3/1	firm	5cm	H_2S	S-1ΦA-CΦ11-Φ.5-1.Φ
1.2	medium to coarse well sorted sand		2.5Y 5/3	loose	1cm		
1.45 1.5	sandy clay, coarse sand		2.5Y 3/1	firm	1cm	H_2S	

Comments

Split and sampled on 4/7/10

4/7/10
S-1ØA-CØ11
station: Ø48
length: 1.5 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date	4/6/10	Station ID	Φ49	All Measurements are ± 0.1 feet	
Logged By	KM	Core Sample ID	S-1ΦA-CΦ12	Water Depth (A)	X
Collection Mechanism	PC	Latitude	41°40.708'	Length of Push Core Assembly (B)	
Time on Station	15:06	Longitude	70°55.013'	Water Surface to Top of Handle (C)	
Time of Collection	15:10	GPS Accuracy		Length of Core (from bottom) (D)	1.Φ
Time Depart Station	15:13			Tide Elevation (from tide board) (G)	X

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD): **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

X

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ	silt w/ organic detritus		2.5Y 2.5/1	loose	fine		S-1ΦA-CΦ12-Φ-Φ.5
0.2	clay		2.5Y 4/1	firm	fine		S-1ΦA-CΦ12-Φ.5-1.Φ
0.6	medium to fine well sorted sand		2.5Y ~~4/1~~ KM 4/4	firm	medium		
1.Φ							

Comments

refusal @~10 inches
split and sampled on 4/7/10

4/7/10
S-1ØA-CØ12
Station: Ø49
length: 1.Ø ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10	Station ID: Φ55	All Measurements are ± 0.1 feet	
Logged By: KH	Core Sample ID: S-1ΦA-CΦ13	Water Depth (A)	
Collection Mechanism: PC	Latitude: 41° 40.685'	Length of Push Core Assembly (B)	
Time on Station: 15:27	Longitude: 70° 55.013'	Water Surface to Top of Handle (C)	
Time of Collection: 15:31	GPS Accuracy:	Length of Core (from bottom) (D): 1.Φ5	
Time Depart Station: 15:35		Tide Elevation (from tide board) (G)	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ							
0.1	silty organic detritus		2.5Y 2.5/1	loose	fine		S-1ΦA-CΦ13-Φ-Φ.5
	Clayey sand, fine to coarse sand, poorly sorted		2.5Y 3/1	firm	1cm		S-1ΦA-CΦ13-Φ.5-1.Φ
1.Φ5							

Comments

Split & sampled on 4/7/10

4/7/10
S-1ØA-CØ13
Station: Ø55
length: 1.Ø5 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 4/6/10
Logged By: KM
Collection Mechanism: PC
Time on Station: 15:40
Time of Collection: 15:44
Time Depart Station: 15:48

Station ID: Φ62
Core Sample ID: S-1ΦA-CΦ14
Latitude: 41° 40.669'
Longitude: 70° ~~55.~~ KM 54.991'
GPS Accuracy: 16 ft.

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
Water Surface to Top of Handle (C):
Length of Core (from bottom) (D): 1.2
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

Elevation (NGVD) (i.e. Bottom = H)	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ	Sandy Silty clay stratified layers of fine to coarse, poorly Sorted sand throughout, chuck of degraded wood at 0.4 and 0.8 ft.		2.5Y 3/1	firm	1cm	none	S-1ΦA-CΦ14-Φ-Φ.5 S-1ΦA-CΦ14-Φ.5-1.Φ
1.2							

Comments: Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ14
station: Ø62
length: 1.2 ft.

Project Name: New Bedford Harbor Environmental Monitoring | Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA | Vessel:
Client: USACE NAE | Chief Scientist:

Date: 4/6/10 | Station ID: ~~NWS33~~ KM NWS-33 | All Measurements are ± 0.1 feet
Logged By: KM | Core Sample ID: S-1ΦA-CΦ15 | Water Depth (A):
Collection Mechanism: avg | Latitude: 41° 40.813' | Length of Push Core Assembly (B):
Time on Station: 10:44 | Longitude: 70° 55.041' | Water Surface to Top of Handle (C):
Time of Collection: 10:45 | GPS Accuracy: | Length of Core (from bottom) (D): 1.3
Time Depart Station: 10:47 | Tide Elevation (from tide board) (G): X

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ	silty sand with lots of fiberous organic detritus (roots, etc) with gravel decreasing amount of detritus with increasing depth		2.5Y 3/3	firm	1cm	none	S-1ΦA-CΦ15-Φ-Φ.5 MSMST S-1ΦA-CΦ15-Φ.5-
1.3							

S-1ΦA-CΦ15-Φ-Φ.5

Comments: Split open and sampled on 4/7/10

QC sample collected

4/7/10
S-1ØA-CØ15
Station: NNS-33
length: 1.3 ft.

Project Name: New Bedford Harbor Environmental Monitoring | Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA | Vessel:
Client: USACE NAE | Chief Scientist:

Date: 4/6/10 | Station ID: NWS-34 | All Measurements are ± 0.1 feet
Logged By: KM | Core Sample ID: S-1ΦA-CΦ16 | Water Depth (A):
Collection Mechanism: avg | Latitude: 41° 40.794' | Length of Push Core Assembly (B):
Time on Station: 10:50 | Longitude: 70° 55.040' | Water Surface to Top of Handle (C):
Time of Collection: 10:52 | GPS Accuracy: | Length of Core (from bottom) (D): 1.3
Time Depart Station: 10:55 | | Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

Φ-Φ

~~Elevation (NGVD) (i.e. Bottom - H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Silty sand, organic detritus (decreasing amount w/ increasing depth), some gravel throughout			2.5Y 3/3	firm	2cm		S-1ΦA-CΦ16-Φ-Φ.5 S-1ΦA-CΦ16-Φ.5-1.Φ

1.3

Comments: Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ16
station: NWS-34
length: 1.3 ft.
Ambi-dex

Project Name: New Bedford Harbor Environmental Monitoring | Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA | Vessel:
Client: USACE NAE | Chief Scientist:

Date: 4/6/10	Station ID: NWS-3S	All Measurements are ± 0.1 feet	
Logged By: DB	Core Sample ID: S-1ΦA-CΦ17	Water Depth (A):	
Collection Mechanism: aq	Latitude: 41°40.766	Length of Push Core Assembly (B):	
Time on Station: 09:18	Longitude: 70°55.003	Water Surface to Top of Handle (C):	
Time of Collection: 09:23	GPS Accuracy:	Length of Core (from bottom) (D): 1.4	
Time Depart Station: 09:25		Tide Elevation (from tide board) (G):	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ	silty sand w/ organic detritus		2.5y 3/2	firm	<1cm		S-1ΦA-CΦ17-Φ-Φ.5
0.6	silty clayey sand		2.5y 3/2	firm	1cm		S-1ΦA-CΦ17-Φ.5-1.Φ
1.1	clayey sand w/ gravel		2.5y 4/1	firm	2cm		
1.4							

S-1ΦA-CΦ17-Φ-Φ.5 MS/MSD

Comments: Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ17
station: NWS-35
length: 1.4 ft.

Project Name: New Bedford Harbor Environmental Monitoring
Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA
Vessel:
Client: USACE NAE
Chief Scientist:

Date: 04/06/10
Station ID: NWS-36
All Measurements are ± 0.1 feet
Logged By: DB
Core Sample ID: S-1ΦA-CΦ18
Water Depth (A):
Collection Mechanism: AG
Latitude: 41° 40.767
Length of Push Core Assembly (B):
Time on Station: 09:31
Longitude: 70° 55.001
Water Surface to Top of Handle (C):
Time of Collection: 09:37
GPS Accuracy:
Length of Core (from bottom) (D): 1.2
Time Depart Station: 09:41
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom - H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
0.0	Silt w/ gravel and lots of organic detritus		2.5Y 3/3	firm	1cm		S-1ΦA-CΦ18-Φ-Φ.5
0.7	(fine to gravel sand) silty sand with gravel, some organic detritus		2.5Y 4/2	firm	3cm		S-1ΦA-CΦ18-Φ.5-1.Φ
1.2							

Comments

Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ18
Station: NWS-36
length: 1.2 ft.
Ambi-dex

Project Name: New Bedford Harbor Environmental Monitoring
Location: New Bedford, MA
Client: USACE NAE

Project #: W912WJ-09-D-0001, Task Order No. 0010
Vessel:
Chief Scientist:

Date: 04/06/10
Logged By: DB
Collection Mechanism: AG
Time on Station: 08:52
Time of Collection: 09:08
Time Depart Station: 09:10

Station ID: NUS-37
Core Sample ID: S-1ΦA-CΦ19
Latitude: 41° 40.754
Longitude: 70°54.997
GPS Accuracy: 12

All Measurements are ± 0.1 feet
Water Depth (A):
Length of Push Core Assembly (B):
Water Surface to Top of Handle (C):
Length of Core (from bottom) (D): 1.4
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) Ft. Bottom - Ft~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ sandy silt with lots of organic detritus fine to coarse, poorly sorted sand 1.4			2.5y 3/3	firm	1cm	none	S-1ΦA-CΦ19-Φ-Φ.5 S-1ΦA-CΦ19-Φ.5-1.Φ

Comments: split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ19
Station: NWS-37
length: 1.4 ft.
Ambi-dex

Project Name: New Bedford Harbor Environmental Monitoring
Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA
Vessel:
Client: USACE NAE
Chief Scientist:

Date: 4/6/10
Station ID: NWS-38
All Measurements are ± 0.1 feet
Logged By: KM
Core Sample ID: S-1ΦA-CΦ2Φ
Water Depth (A):
Collection Mechanism: ag
Latitude: 41° 4Φ. 776'
Length of Push Core Assembly (B):
Time on Station: 09:45
Longitude: 70° 55. ΦΦ4'
Water Surface to Top of Handle (C):
Time of Collection: 09:47
GPS Accuracy:
Length of Core (from bottom) (D): 1.4
Time Depart Station: 09:50
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD)~~ (i.e. Bottom = H)	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ							
	sandy silt w/ organic detritus		2.5y 3/2	firm	fine	none	S-1ΦA-CΦ2Φ-Φ-Φ.5
0.4							
	Sandy Silt w/ very large gravel throughout		2.5y 3/2	firm	4cm	none	S-1ΦA-CΦ20-Φ.5-1.Φ
1.4							

Comments

Split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ20
station: NWS-38
length: 1.4 ft.
Ambi-dex
POWDER FREE DISPOSABLE NITRILE GLOVES
63-338PF
Large

Project Name: New Bedford Harbor Environmental Monitoring
Project #: W912WJ-09-D-0001, Task Order No. 0010
Location: New Bedford, MA
Vessel:
Client: USACE NAE
Chief Scientist:

Date: 4/6/10
Station ID: NWS-39
All Measurements are ± 0.1 feet
Logged By: KM
Core Sample ID: S-1ΦA-CΦ21
Water Depth (A):
Collection Mechanism: ag
Latitude: 41°40.777'
Length of Push Core Assembly (B):
Time on Station: 10:00
Longitude: 70°55.003'
Water Surface to Top of Handle (C):
Time of Collection: 10:03
GPS Accuracy:
Length of Core (from bottom) (D): 1.4
Time Depart Station: 10:05
Tide Elevation (from tide board) (G):

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD) (as read from tide board):

(H) Elevation of the bottom of the core (NGVD): **G - (B - C)**

(z*) Elevation of visual transition (NGVD(: **H + (distance to visual transition)**

(I) Elevation of the sediment-water interface as measured from bottom of core (NGVD): **H + D**

(I_2) Elevation of the sediment-water interface as measured from water depth (NGVD): **G - A**

(Note if $I \neq I_2$ within + 1.0 feet, discard and resample)

~~Elevation (NGVD) (i.e. Bottom = H)~~	Litology - Include USCS Code	Type	Color	Consistency	Maximum Particle Size	Odor	Sample IDs
Φ.Φ							
	sandy silt w/ organic detritus		2.5y 3/3	firm	fine		S-1ΦA-CΦ21-Φ-Φ.5
0.3							
	sandy silt w/ some organic detritus and large gravel		2.5y 4/1	firm	4cm		S-1ΦA-CΦ21-Φ.5-1.Φ
1.4							

Comments: split open and sampled on 4/7/10

4/7/10
S-1ØA-CØ21
Station: NWS-39
length: 1.4 ft.
Abbit-dex

APPENDIX B: ALPHA ANALYTICAL LABORATORIES REPORTS AND ANALYTICAL DATA

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ANALYTICAL REPORT

Lab Number:	L1005022
Client:	Woods Hole Group 81 Technology Park Drive East Falmouth, MA 02536
ATTN:	Dave Walsh
Phone:	(508) 540-8080
Project Name:	NEW BEDFORD HARBOR
Project Number:	TO-0010
Report Date:	04/23/10

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LAO00299), ME (MA0030), PA (Registration #68-02089), LA NELAC (03090), FL NELAC (E87814), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010

Lab Number: L1005022
Report Date: 04/23/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1005022-01	EB-040610-01	NEW BEDFORD, MA	04/06/10 16:15
L1005022-02	S-10A-C001-0-0.5	NEW BEDFORD, MA	04/07/10 08:50
L1005022-03	S-10A-C001-0.5-0.9	NEW BEDFORD, MA	04/07/10 08:50
L1005022-04	S-10A-C002-0-0.5	NEW BEDFORD, MA	04/07/10 09:05
L1005022-05	S-10A-C002-0.5-0.9	NEW BEDFORD, MA	04/07/10 09:05
L1005022-06	S-10A-C003-0-0.5	NEW BEDFORD, MA	04/07/10 09:20
L1005022-07	S-10A-C003-0.5-1.0	NEW BEDFORD, MA	04/07/10 09:20
L1005022-08	S-10A-C004-0-0.5	NEW BEDFORD, MA	04/07/10 09:30
L1005022-09	S-10A-C004-0.5-1.0	NEW BEDFORD, MA	04/07/10 09:30
L1005022-10	S-10A-C005-0-0.5	NEW BEDFORD, MA	04/07/10 09:45
L1005022-11	S-10A-C005-0.5-1.0	NEW BEDFORD, MA	04/07/10 09:45
L1005022-12	S-10A-C006-0-0.5	NEW BEDFORD, MA	04/07/10 10:05
L1005022-13	S-10A-C006-0.5-1.0	NEW BEDFORD, MA	04/07/10 10:05
L1005022-14	S-10A-C007-0-0.5	NEW BEDFORD, MA	04/07/10 10:25
L1005022-15	S-10A-C007-0.5-1.0	NEW BEDFORD, MA	04/07/10 10:25
L1005022-16	S-10A-C008-0-0.5	NEW BEDFORD, MA	04/07/10 10:50
L1005022-17	S-10A-C008-0.5-1.0	NEW BEDFORD, MA	04/07/10 10:50
L1005022-18	S-10A-C009-0-0.5	NEW BEDFORD, MA	04/07/10 11:10
L1005022-19	S-10A-C009-0.5-1.0	NEW BEDFORD, MA	04/07/10 11:10
L1005022-20	S-10A-C007-0-0.5REP	NEW BEDFORD, MA	04/07/10 10:40
L1005022-21	S-10A-C007-0.5-1.0REP	NEW BEDFORD, MA	04/07/10 10:40
L1005022-22	S-10A-C010-0-0.5	NEW BEDFORD, MA	04/07/10 11:25
L1005022-23	S-10A-C010-0.5-0.9	NEW BEDFORD, MA	04/07/10 11:25
L1005022-24	S-10A-C011-0-0.5	NEW BEDFORD, MA	04/07/10 11:35
L1005022-25	S-10A-C011-0.5-1.0	NEW BEDFORD, MA	04/07/10 11:35
L1005022-26	S-10A-C012-0-0.5	NEW BEDFORD, MA	04/07/10 11:50
L1005022-27	S-10A-C012-0.5-1.0	NEW BEDFORD, MA	04/07/10 11:50
L1005022-28	S-10A-C013-0-0.5	NEW BEDFORD, MA	04/07/10 12:00
L1005022-29	S-10A-C013-0.5-1.0	NEW BEDFORD, MA	04/07/10 12:00
L1005022-30	S-10A-C014-0-0.5	NEW BEDFORD, MA	04/07/10 12:15
L1005022-31	S-10A-C014-0.5-1.0	NEW BEDFORD, MA	04/07/10 12:15

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1005022-32	S-10A-C015-0-0.5	NEW BEDFORD, MA	04/07/10 12:55
L1005022-33	S-10A-C015-0.5-1.0	NEW BEDFORD, MA	04/07/10 12:55
L1005022-34	S-10A-C016-0-0.5	NEW BEDFORD, MA	04/07/10 13:05
L1005022-35	S-10A-C016-0.5-1.0	NEW BEDFORD, MA	04/07/10 13:05
L1005022-37	S-10A-C017-0-0.5	NEW BEDFORD, MA	04/07/10 13:15
L1005022-38	S-10A-C017-0.5-1.0	NEW BEDFORD, MA	04/07/10 13:15
L1005022-40	S-10A-C018-0-0.5	NEW BEDFORD, MA	04/07/10 13:25
L1005022-41	S-10A-C018-0.5-1.0	NEW BEDFORD, MA	04/07/10 13:25
L1005022-42	S-10A-C019-0-0.5	NEW BEDFORD, MA	04/07/10 13:35
L1005022-43	S-10A-C019-0.5-1.0	NEW BEDFORD, MA	04/07/10 13:35
L1005022-44	S-10A-C020-0-0.5	NEW BEDFORD, MA	04/07/10 13:45
L1005022-45	S-10A-C020-0.5-1.0	NEW BEDFORD, MA	04/07/10 13:45
L1005022-46	S-10A-C021-0-0.5	NEW BEDFORD, MA	04/07/10 14:00
L1005022-47	S-10A-C021-0.5-1.0	NEW BEDFORD, MA	04/07/10 14:00

Project Name:	NEW BEDFORD HARBOR	**Lab Number:**	L1005022
Project Number:	TO-0010	**Report Date:**	04/23/10

Case Narrative

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

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

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

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

Sample Receipt

Sediment samples were received intact on April 7, 2010. Aliquots of the samples were analyzed for percent solids. Based on the results of the percent solids, samples underwent air drying and were placed in refrigerated storage until April 15, 2010 and April 16, 2010 when they were removed to extract samples for PCB Congener analysis and analyze for air-dried percent solids.

PCB Congeners by 8082

The PCB Congener analysis was performed utilizing dual column confirmation with the higher of the two values reported. Technical judgment was employed in the case of an observed interference. In each case that interference was observed on one column, the value from the opposite column was reported regardless of

Project Name:	NEW BEDFORD HARBOR	**Lab Number:**	L1005022
Project Number:	TO-0010	**Report Date:**	04/23/10

Case Narrative (continued)

whether it was the higher or lower value.

The majority of samples were re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compounds that exceeded the calibration range.

L1005022-42: The internal standard (IS) response on Rtx-CLPII column was elevated due to possible interference, therefore the results were reported of the compliant RTX-5 column, with the exception of compounds BZ#28, BZ#66 and BZ#153. The results for these compounds were reported off the Rtx-CLPII column due to the obvious interference observed on RTX-5. The results were flagged with an "E" qualifier due to the potentially low bias. The sample was re-analyzed at additional dilution to eliminate the interference.

The WG408427-4 and WG408427-5 MS/MSD recoveries associated with L1005022-32 were above the acceptance criteria for multiple compounds due to sample matrix interference; however, the associated LCS/LCSD recoveries were within criteria. The results of the sample utilized for the MS/MSD are considered to have a potentially high bias for these compounds.

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

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative Date: 04/23/10

ORGANICS

PCBS

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-01	Date Collected:	04/06/10 16:15
Client ID:	EB-040610-01	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082	Extraction Date:	04/13/10 14:40
Analytical Date:	04/17/10 03:22	Cleanup Method1:	- - - -
Analyst:	NS		- - - -
		Cleanup Method2:	

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	ND		ug/l	0.00102	1
Cl3-BZ#18	ND		ug/l	0.00102	1
Cl3-BZ#28	ND		ug/l	0.00102	1
Cl4-BZ#44	ND		ug/l	0.00102	1
Cl4-BZ#52	ND		ug/l	0.00102	1
Cl4-BZ#66	ND		ug/l	0.00102	1
Cl5-BZ#101	ND		ug/l	0.00102	1
Cl5-BZ#105	ND		ug/l	0.00102	1
Cl5-BZ#118	ND		ug/l	0.00102	1
Cl6-BZ#128	ND		ug/l	0.00102	1
Cl6-BZ#138	ND		ug/l	0.00102	1
Cl7-BZ#170	ND		ug/l	0.00102	1
Cl7-BZ#180	ND		ug/l	0.00102	1
Cl7-BZ#187	ND		ug/l	0.00102	1
Cl8-BZ#195	ND		ug/l	0.00102	1
Cl9-BZ#206	ND		ug/l	0.00102	1
Cl10-BZ#209	ND		ug/l	0.00102	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	103		30-150
BZ 198	85		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-01	Date Collected:	04/06/10 16:15
Client ID:	EB-040610-01	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082	Extraction Date:	04/13/10 14:40
Analytical Date:	04/17/10 03:22	Cleanup Method1:	- - - -
Analyst:	NS		- - - -
		Cleanup Method2:	

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl6-BZ#153	ND		ug/l	0.00102	1

DBOB	103	30-150
BZ 198	85	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-02	Date Collected:	04/07/10 08:50
Client ID:	S-10A-C001-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/19/10 23:50	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	18.3		ug/kg	1.32	1
Cl3-BZ#18	55.8	E	ug/kg	1.32	1
Cl5-BZ#101	32.0	E	ug/kg	1.32	1
Cl5-BZ#118	19.5		ug/kg	1.32	1
Cl6-BZ#128	3.78		ug/kg	1.32	1
Cl6-BZ#138	12.0		ug/kg	1.32	1
Cl7-BZ#170	1.44		ug/kg	1.32	1
Cl7-BZ#180	2.46		ug/kg	1.32	1
Cl8-BZ#195	ND		ug/kg	1.32	1
Cl10-BZ#209	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	96		30-150
BZ 198	86		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-02	Date Collected:	04/07/10 08:50
Client ID:	S-10A-C001-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/19/10 23:50	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	73.0	E	ug/kg	1.32	1
Cl4-BZ#44	38.1	E	ug/kg	1.32	1
Cl4-BZ#52	61.7	E	ug/kg	1.32	1
Cl4-BZ#66	45.5	E	ug/kg	1.32	1
Cl5-BZ#105	7.74		ug/kg	1.32	1
Cl6-BZ#153	3.83		ug/kg	1.32	1
Cl7-BZ#187	1.97		ug/kg	1.32	1
Cl9-BZ#206	ND		ug/kg	1.32	1

DBOB	96	30-150
BZ 198	86	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-02 D	Date Collected:	04/07/10 08:50
Client ID:	S-10A-C001-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 00:31	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	76.6		ug/kg	13.2	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-02 D	Date Collected:	04/07/10 08:50
Client ID:	S-10A-C001-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 00:31	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	89.8		ug/kg	13.2	10
Cl4-BZ#44	52.5		ug/kg	13.2	10
Cl4-BZ#52	80.1		ug/kg	13.2	10
Cl4-BZ#66	58.7		ug/kg	13.2	10
Cl5-BZ#101	30.9		ug/kg	13.2	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-04 D2	Date Collected:	04/07/10 09:05
Client ID:	S-10A-C002-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 12:30	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	233		ug/kg	33.1	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-04 D2	Date Collected:	04/07/10 09:05
Client ID:	S-10A-C002-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 12:30	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	448		ug/kg	33.1	25
Cl4-BZ#52	440		ug/kg	33.1	25
Cl4-BZ#66	177		ug/kg	33.1	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-04 D	Date Collected:	04/07/10 09:05
Client ID:	S-10A-C002-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 01:52	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	131		ug/kg	6.63	5
Cl3-BZ#18	236	E	ug/kg	6.63	5
Cl4-BZ#66	152	E	ug/kg	6.63	5
Cl5-BZ#118	76.1		ug/kg	6.63	5
Cl6-BZ#128	13.9		ug/kg	6.63	5
Cl6-BZ#138	52.2		ug/kg	6.63	5
Cl7-BZ#170	7.44		ug/kg	6.63	5
Cl7-BZ#180	10.6		ug/kg	6.63	5
Cl9-BZ#206	ND		ug/kg	6.63	5
Cl10-BZ#209	ND		ug/kg	6.63	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	95		30-150
DBOB	71		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-04 D	Date Collected:	04/07/10 09:05
Client ID:	S-10A-C002-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 01:52	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	302	E	ug/kg	6.63	5
Cl4-BZ#44	120		ug/kg	6.63	5
Cl4-BZ#52	302	E	ug/kg	6.63	5
Cl5-BZ#101	82.4		ug/kg	6.63	5
Cl5-BZ#105	18.0		ug/kg	6.63	5
Cl6-BZ#153	26.1		ug/kg	6.63	5
Cl7-BZ#187	11.2		ug/kg	6.63	5
Cl8-BZ#195	ND		ug/kg	6.63	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	95		30-150
DBOB	71		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-06 D2	Date Collected:	04/07/10 09:20
Client ID:	S-10A-C003-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 11:15	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	269		ug/kg	33.4	25
Cl4-BZ#52	323		ug/kg	33.4	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-06 D	Date Collected:	04/07/10 09:20
Client ID:	S-10A-C003-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 03:14	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	92.1		ug/kg	13.4	10
Cl3-BZ#18	215		ug/kg	13.4	10
Cl4-BZ#66	180		ug/kg	13.4	10
Cl5-BZ#118	97.2		ug/kg	13.4	10
Cl6-BZ#128	19.1		ug/kg	13.4	10
Cl6-BZ#138	75.5		ug/kg	13.4	10
Cl7-BZ#170	ND		ug/kg	13.4	10
Cl7-BZ#180	16.3		ug/kg	13.4	10
Cl7-BZ#187	20.6		ug/kg	13.4	10
Cl9-BZ#206	ND		ug/kg	13.4	10
Cl10-BZ#209	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	141		30-150
DBOB	71		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-06 D	Date Collected:	04/07/10 09:20
Client ID:	S-10A-C003-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 03:14	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	350	E	ug/kg	13.4	10
Cl4-BZ#44	149		ug/kg	13.4	10
Cl4-BZ#52	437	E	ug/kg	13.4	10
Cl5-BZ#101	124		ug/kg	13.4	10
Cl5-BZ#105	18.8		ug/kg	13.4	10
Cl6-BZ#153	51.6		ug/kg	13.4	10
Cl8-BZ#195	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	141		30-150
DBOB	71		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-08 D2	Date Collected:	04/07/10 09:30
Client ID:	S-10A-C004-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 08:25	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	375		ug/kg	67.1	50
Cl3-BZ#18	779		ug/kg	67.1	50
Cl4-BZ#66	447		ug/kg	67.1	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-08 D2	Date Collected:	04/07/10 09:30
Client ID:	S-10A-C004-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 08:25	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1160		ug/kg	67.1	50
Cl4-BZ#44	396		ug/kg	67.1	50
Cl4-BZ#52	863		ug/kg	67.1	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-08 D	Date Collected:	04/07/10 09:30
Client ID:	S-10A-C004-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 05:58	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	274	E	ug/kg	6.71	5
Cl3-BZ#18	484	E	ug/kg	6.71	5
Cl4-BZ#66	285	E	ug/kg	6.71	5
Cl5-BZ#118	116		ug/kg	6.71	5
Cl6-BZ#128	18.4		ug/kg	6.71	5
Cl7-BZ#170	9.79		ug/kg	6.71	5
Cl7-BZ#180	12.6		ug/kg	6.71	5
Cl7-BZ#187	15.3		ug/kg	6.71	5
Cl8-BZ#195	ND		ug/kg	6.71	5
Cl9-BZ#206	ND		ug/kg	6.71	5
Cl10-BZ#209	ND		ug/kg	6.71	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	62		30-150
DBOB	36		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-08 D	Date Collected:	04/07/10 09:30
Client ID:	S-10A-C004-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 05:58	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	663	E	ug/kg	6.71	5
Cl4-BZ#44	219	E	ug/kg	6.71	5
Cl4-BZ#52	474	E	ug/kg	6.71	5
Cl5-BZ#101	133		ug/kg	6.71	5
Cl5-BZ#105	24.7		ug/kg	6.71	5
Cl6-BZ#138	34.9		ug/kg	6.71	5
Cl6-BZ#153	47.8		ug/kg	6.71	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	62		30-150
DBOB	36		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-10 D2	Date Collected:	04/07/10 09:45
Client ID:	S-10A-C005-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 12:37	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl4-BZ#52	180		ug/kg	13.3	10
Cl4-BZ#66	163		ug/kg	13.3	10
Cl5-BZ#118	144		ug/kg	13.3	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-10 D2	Date Collected:	04/07/10 09:45
Client ID:	S-10A-C005-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 12:37	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	137		ug/kg	13.3	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-10 D	Date Collected:	04/07/10 09:45
Client ID:	S-10A-C005-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 07:20	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	15.0		ug/kg	6.65	5
Cl3-BZ#18	35.7		ug/kg	6.65	5
Cl4-BZ#44	82.7		ug/kg	6.65	5
Cl4-BZ#52	190	E	ug/kg	6.65	5
Cl4-BZ#66	174	E	ug/kg	6.65	5
Cl5-BZ#118	140	E	ug/kg	6.65	5
Cl6-BZ#128	31.7		ug/kg	6.65	5
Cl6-BZ#138	112		ug/kg	6.65	5
Cl7-BZ#170	15.5		ug/kg	6.65	5
Cl7-BZ#180	21.2		ug/kg	6.65	5
Cl7-BZ#187	18.4		ug/kg	6.65	5
Cl8-BZ#195	ND		ug/kg	6.65	5
Cl9-BZ#206	ND		ug/kg	6.65	5
Cl10-BZ#209	ND		ug/kg	6.65	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	96		30-150
BZ 198	106		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-10 D	Date Collected:	04/07/10 09:45
Client ID:	S-10A-C005-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 07:20	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	144	E	ug/kg	6.65	5
Cl5-BZ#101	118		ug/kg	6.65	5
Cl5-BZ#105	35.1		ug/kg	6.65	5
Cl6-BZ#153	38.6		ug/kg	6.65	5

DBOB	96	30-150
BZ 198	106	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-12 D2	Date Collected:	04/07/10 10:05
Client ID:	S-10A-C006-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 13:18	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl4-BZ#52	172		ug/kg	13.2	10
Cl4-BZ#66	236		ug/kg	13.2	10
Cl5-BZ#118	214		ug/kg	13.2	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-12 D2	Date Collected:	04/07/10 10:05
Client ID:	S-10A-C006-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 13:18	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl5-BZ#101	175		ug/kg	13.2	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-12 D	Date Collected:	04/07/10 10:05
Client ID:	S-10A-C006-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 08:42	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	17.2		ug/kg	6.62	5
Cl3-BZ#18	60.9		ug/kg	6.62	5
Cl4-BZ#44	82.4		ug/kg	6.62	5
Cl4-BZ#52	161	E	ug/kg	6.62	5
Cl4-BZ#66	231	E	ug/kg	6.62	5
Cl5-BZ#118	201	E	ug/kg	6.62	5
Cl7-BZ#180	25.0		ug/kg	6.62	5
Cl7-BZ#187	22.8		ug/kg	6.62	5
Cl8-BZ#195	ND		ug/kg	6.62	5
Cl9-BZ#206	ND		ug/kg	6.62	5
Cl10-BZ#209	ND		ug/kg	6.62	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	98		30-150
BZ 198	103		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-12 D	Date Collected:	04/07/10 10:05
Client ID:	S-10A-C006-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 08:42	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	129		ug/kg	6.62	5
Cl5-BZ#101	157	E	ug/kg	6.62	5
Cl5-BZ#105	18.5		ug/kg	6.62	5
Cl6-BZ#128	8.01		ug/kg	6.62	5
Cl6-BZ#138	45.0		ug/kg	6.62	5
Cl6-BZ#153	53.7		ug/kg	6.62	5
Cl7-BZ#170	9.38		ug/kg	6.62	5

DBOB	98	30-150
BZ 198	103	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-14	Date Collected:	04/07/10 10:25
Client ID:	S-10A-C007-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/19/10 23:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl4-BZ#66	8.59		ug/kg	1.32	1
Cl5-BZ#101	8.06		ug/kg	1.32	1
Cl5-BZ#118	4.72		ug/kg	1.32	1
Cl6-BZ#128	ND		ug/kg	1.32	1
Cl6-BZ#138	3.65		ug/kg	1.32	1
Cl7-BZ#180	ND		ug/kg	1.32	1
Cl7-BZ#187	ND		ug/kg	1.32	1
Cl10-BZ#209	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	85		30-150
DBOB	68		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-14	Date Collected:	04/07/10 10:25
Client ID:	S-10A-C007-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/19/10 23:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	4.74		ug/kg	1.32	1
Cl3-BZ#18	12.0		ug/kg	1.32	1
Cl3-BZ#28	17.5		ug/kg	1.32	1
Cl4-BZ#44	6.65		ug/kg	1.32	1
Cl4-BZ#52	20.9		ug/kg	1.32	1
Cl5-BZ#105	ND		ug/kg	1.32	1
Cl6-BZ#153	2.09		ug/kg	1.32	1
Cl7-BZ#170	ND		ug/kg	1.32	1
Cl8-BZ#195	ND		ug/kg	1.32	1
Cl9-BZ#206	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	85		30-150
DBOB	68		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-16 D2	Date Collected:	04/07/10 10:50
Client ID:	S-10A-C008-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 13:59	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	452		ug/kg	33.4	25
Cl4-BZ#44	187		ug/kg	33.4	25
Cl4-BZ#52	516		ug/kg	33.4	25
Cl4-BZ#66	209		ug/kg	33.4	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-16 D	Date Collected:	04/07/10 10:50
Client ID:	S-10A-C008-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 10:03	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	170		ug/kg	13.4	10
Cl3-BZ#18	216		ug/kg	13.4	10
Cl5-BZ#118	215		ug/kg	13.4	10
Cl7-BZ#170	23.6		ug/kg	13.4	10
Cl7-BZ#180	31.4		ug/kg	13.4	10
Cl7-BZ#187	40.0		ug/kg	13.4	10
Cl9-BZ#206	ND		ug/kg	13.4	10
Cl10-BZ#209	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	140		30-150
DBOB	82		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-16 D	Date Collected:	04/07/10 10:50
Client ID:	S-10A-C008-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 10:03	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	706	E	ug/kg	13.4	10
Cl4-BZ#44	278	E	ug/kg	13.4	10
Cl4-BZ#52	774	E	ug/kg	13.4	10
Cl4-BZ#66	306	E	ug/kg	13.4	10
Cl5-BZ#101	255		ug/kg	13.4	10
Cl5-BZ#105	37.2		ug/kg	13.4	10
Cl6-BZ#128	17.8		ug/kg	13.4	10
Cl6-BZ#138	73.2		ug/kg	13.4	10
Cl6-BZ#153	111		ug/kg	13.4	10
Cl8-BZ#195	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	140		30-150
DBOB	82		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-18 D2	Date Collected:	04/07/10 11:10
Client ID:	S-10A-C009-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 09:06	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	172		ug/kg	65.8	50
Cl3-BZ#18	366		ug/kg	65.8	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-18 D2	Date Collected:	04/07/10 11:10
Client ID:	S-10A-C009-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 09:06	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	529		ug/kg	65.8	50
Cl4-BZ#44	256		ug/kg	65.8	50
Cl4-BZ#52	1180		ug/kg	65.8	50
Cl4-BZ#66	261		ug/kg	65.8	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-18 D	Date Collected:	04/07/10 11:10
Client ID:	S-10A-C009-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 11:25	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	294	E	ug/kg	13.2	10
Cl3-BZ#18	692	E	ug/kg	13.2	10
Cl5-BZ#118	119		ug/kg	13.2	10
Cl6-BZ#128	21.3		ug/kg	13.2	10
Cl7-BZ#170	13.7		ug/kg	13.2	10
Cl7-BZ#180	19.3		ug/kg	13.2	10
Cl7-BZ#187	42.5		ug/kg	13.2	10
Cl9-BZ#206	ND		ug/kg	13.2	10
Cl10-BZ#209	ND		ug/kg	13.2	10

DBOB	87	30-150
BZ 198	100	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-18 D	Date Collected:	04/07/10 11:10
Client ID:	S-10A-C009-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 11:25	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	664	E	ug/kg	13.2	10
Cl4-BZ#44	330	E	ug/kg	13.2	10
Cl4-BZ#52	1540	E	ug/kg	13.2	10
Cl4-BZ#66	360	E	ug/kg	13.2	10
Cl5-BZ#101	188		ug/kg	13.2	10
Cl5-BZ#105	20.3		ug/kg	13.2	10
Cl6-BZ#138	40.5		ug/kg	13.2	10
Cl6-BZ#153	103		ug/kg	13.2	10
Cl8-BZ#195	ND		ug/kg	13.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	87		30-150
BZ 198	100		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-20 D2	Date Collected:	04/07/10 10:40
Client ID:	S-10A-C007-0-0.5REP	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/21/10 15:21	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	182		ug/kg	33.0	25
Cl4-BZ#52	212		ug/kg	33.0	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-20 D	Date Collected:	04/07/10 10:40
Client ID:	S-10A-C007-0-0.5REP	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 14:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	170		ug/kg	13.2	10
Cl5-BZ#118	72.9		ug/kg	13.2	10
Cl6-BZ#128	14.9		ug/kg	13.2	10
Cl7-BZ#170	ND		ug/kg	13.2	10
Cl7-BZ#180	ND		ug/kg	13.2	10
Cl7-BZ#187	17.2		ug/kg	13.2	10
Cl8-BZ#195	ND		ug/kg	13.2	10
Cl9-BZ#206	ND		ug/kg	13.2	10
Cl10-BZ#209	ND		ug/kg	13.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	112		30-150
DBOB	86		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-20 D	Date Collected:	04/07/10 10:40
Client ID:	S-10A-C007-0-0.5REP	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 14:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	73.4		ug/kg	13.2	10
Cl3-BZ#28	277	E	ug/kg	13.2	10
Cl4-BZ#44	117		ug/kg	13.2	10
Cl4-BZ#52	338	E	ug/kg	13.2	10
Cl4-BZ#66	124		ug/kg	13.2	10
Cl5-BZ#101	95.7		ug/kg	13.2	10
Cl5-BZ#105	14.1		ug/kg	13.2	10
Cl6-BZ#138	28.6		ug/kg	13.2	10
Cl6-BZ#153	36.9		ug/kg	13.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	112		30-150
DBOB	86		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-22 D2	Date Collected:	04/07/10 11:25
Client ID:	S-10A-C010-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 09:47	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	154		ug/kg	66.0	50
Cl3-BZ#18	328		ug/kg	66.0	50
Cl4-BZ#52	699		ug/kg	66.0	50
Cl5-BZ#118	159		ug/kg	66.0	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-22 D2	Date Collected:	04/07/10 11:25
Client ID:	S-10A-C010-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/22/10 09:47	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	714		ug/kg	66.0	50
Cl4-BZ#44	296		ug/kg	66.0	50
Cl4-BZ#66	282		ug/kg	66.0	50
Cl5-BZ#101	223		ug/kg	66.0	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-22 D	Date Collected:	04/07/10 11:25
Client ID:	S-10A-C010-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 15:31	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	404	E	ug/kg	13.2	10
Cl3-BZ#18	760	E	ug/kg	13.2	10
Cl4-BZ#52	1670	E	ug/kg	13.2	10
Cl5-BZ#118	423	E	ug/kg	13.2	10
Cl6-BZ#128	83.9		ug/kg	13.2	10
Cl7-BZ#170	47.3		ug/kg	13.2	10
Cl7-BZ#180	67.2		ug/kg	13.2	10
Cl7-BZ#187	86.3		ug/kg	13.2	10
Cl8-BZ#195	ND		ug/kg	13.2	10
Cl9-BZ#206	ND		ug/kg	13.2	10
Cl10-BZ#209	ND		ug/kg	13.2	10

DBOB	61	30-150
BZ 198	143	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-22 D	Date Collected:	04/07/10 11:25
Client ID:	S-10A-C010-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/15/10 09:56
Analytical Date:	04/20/10 15:31	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/16/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1280	E	ug/kg	13.2	10
Cl4-BZ#44	589	E	ug/kg	13.2	10
Cl4-BZ#66	576	E	ug/kg	13.2	10
Cl5-BZ#101	439	E	ug/kg	13.2	10
Cl5-BZ#105	72.3		ug/kg	13.2	10
Cl6-BZ#138	140		ug/kg	13.2	10
Cl6-BZ#153	246		ug/kg	13.2	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	61		30-150
BZ 198	143		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-24 D2	Date Collected:	04/07/10 11:35
Client ID:	S-10A-C011-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 10:28	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	97%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	404		ug/kg	136	100
Cl3-BZ#18	836		ug/kg	136	100
Cl4-BZ#52	1600		ug/kg	136	100
Cl5-BZ#118	345		ug/kg	136	100
Cl6-BZ#138	272		ug/kg	136	100

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-24 D2	Date Collected:	04/07/10 11:35
Client ID:	S-10A-C011-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 10:28	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	97%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1520		ug/kg	136	100
Cl4-BZ#44	645		ug/kg	136	100
Cl4-BZ#66	634		ug/kg	136	100
Cl5-BZ#101	505		ug/kg	136	100

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-24 D	Date Collected:	04/07/10 11:35
Client ID:	S-10A-C011-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 23:42	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	97%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	385	E	ug/kg	13.6	10
Cl3-BZ#18	748	E	ug/kg	13.6	10
Cl4-BZ#52	1580	E	ug/kg	13.6	10
Cl5-BZ#118	358	E	ug/kg	13.6	10
Cl6-BZ#128	62.8		ug/kg	13.6	10
Cl6-BZ#138	273	E	ug/kg	13.6	10
Cl7-BZ#170	43.6		ug/kg	13.6	10
Cl7-BZ#180	58.2		ug/kg	13.6	10
Cl7-BZ#187	75.7		ug/kg	13.6	10
Cl9-BZ#206	ND		ug/kg	13.6	10
Cl10-BZ#209	ND		ug/kg	13.6	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	111		30-150
DBOB	48		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-24 D	Date Collected:	04/07/10 11:35
Client ID:	S-10A-C011-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 23:42	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	97%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1190	E	ug/kg	13.6	10
Cl4-BZ#44	519	E	ug/kg	13.6	10
Cl4-BZ#66	517	E	ug/kg	13.6	10
Cl5-BZ#101	430	E	ug/kg	13.6	10
Cl5-BZ#105	58.6		ug/kg	13.6	10
Cl6-BZ#153	238		ug/kg	13.6	10
Cl8-BZ#195	ND		ug/kg	13.6	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	111		30-150
DBOB	48		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-26 D2	Date Collected:	04/07/10 11:50
Client ID:	S-10A-C012-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 11:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	353		ug/kg	134	100
Cl3-BZ#18	800		ug/kg	134	100
Cl4-BZ#52	1780		ug/kg	134	100
Cl5-BZ#118	407		ug/kg	134	100

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-26 D2	Date Collected:	04/07/10 11:50
Client ID:	S-10A-C012-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 11:09	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1790		ug/kg	134	100
Cl4-BZ#44	747		ug/kg	134	100
Cl4-BZ#66	725		ug/kg	134	100
Cl5-BZ#101	581		ug/kg	134	100
Cl6-BZ#153	411		ug/kg	134	100

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-26 D	Date Collected:	04/07/10 11:50
Client ID:	S-10A-C012-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 00:23	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	401	E	ug/kg	13.4	10
Cl3-BZ#18	589	E	ug/kg	13.4	10
Cl4-BZ#52	2130	E	ug/kg	13.4	10
Cl5-BZ#118	501	E	ug/kg	13.4	10
Cl7-BZ#170	60.6		ug/kg	13.4	10
Cl7-BZ#180	83.4		ug/kg	13.4	10
Cl7-BZ#187	105		ug/kg	13.4	10
Cl9-BZ#206	14.5		ug/kg	13.4	10

DBOB	52	30-150
BZ 198	138	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-26 D	Date Collected:	04/07/10 11:50
Client ID:	S-10A-C012-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 00:23	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	1410	E	ug/kg	13.4	10
Cl4-BZ#44	657	E	ug/kg	13.4	10
Cl4-BZ#66	663	E	ug/kg	13.4	10
Cl5-BZ#101	534	E	ug/kg	13.4	10
Cl5-BZ#105	76.5		ug/kg	13.4	10
Cl6-BZ#128	37.1		ug/kg	13.4	10
Cl6-BZ#138	156		ug/kg	13.4	10
Cl6-BZ#153	299	E	ug/kg	13.4	10
Cl8-BZ#195	ND		ug/kg	13.4	10
Cl10-BZ#209	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	52		30-150
BZ 198	138		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-28 D2	Date Collected:	04/07/10 12:00
Client ID:	S-10A-C013-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 19:26	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	337		ug/kg	33.2	25
Cl4-BZ#52	357		ug/kg	33.2	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-28 D	Date Collected:	04/07/10 12:00
Client ID:	S-10A-C013-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 01:04	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	172		ug/kg	13.3	10
Cl5-BZ#101	238		ug/kg	13.3	10
Cl5-BZ#118	151		ug/kg	13.3	10
Cl6-BZ#128	33.7		ug/kg	13.3	10
Cl6-BZ#138	119		ug/kg	13.3	10
Cl7-BZ#170	18.8		ug/kg	13.3	10
Cl7-BZ#180	24.1		ug/kg	13.3	10
Cl9-BZ#206	ND		ug/kg	13.3	10
Cl10-BZ#209	ND		ug/kg	13.3	10

DBOB	79	30-150
BZ 198	114	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-28 D	Date Collected:	04/07/10 12:00
Client ID:	S-10A-C013-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 01:04	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	80.7		ug/kg	13.3	10
Cl3-BZ#28	484	E	ug/kg	13.3	10
Cl4-BZ#44	185		ug/kg	13.3	10
Cl4-BZ#52	500	E	ug/kg	13.3	10
Cl4-BZ#66	228		ug/kg	13.3	10
Cl5-BZ#105	37.5		ug/kg	13.3	10
Cl6-BZ#153	77.0		ug/kg	13.3	10
Cl7-BZ#187	29.6		ug/kg	13.3	10
Cl8-BZ#195	ND		ug/kg	13.3	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	79		30-150
BZ 198	114		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-30 D2	Date Collected:	04/07/10 12:15
Client ID:	S-10A-C014-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 20:07	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	161		ug/kg	33.5	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-30 D2	Date Collected:	04/07/10 12:15
Client ID:	S-10A-C014-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 20:07	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	351		ug/kg	33.5	25
Cl4-BZ#52	388		ug/kg	33.5	25

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-30 D	Date Collected:	04/07/10 12:15
Client ID:	S-10A-C014-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 01:44	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	275	E	ug/kg	13.4	10
Cl5-BZ#101	214		ug/kg	13.4	10
Cl5-BZ#118	121		ug/kg	13.4	10
Cl7-BZ#170	14.7		ug/kg	13.4	10
Cl7-BZ#180	20.8		ug/kg	13.4	10
Cl7-BZ#187	26.8		ug/kg	13.4	10
Cl10-BZ#209	ND		ug/kg	13.4	10

DBOB	77	30-150
BZ 198	108	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-30 D	Date Collected:	04/07/10 12:15
Client ID:	S-10A-C014-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 01:44	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	130		ug/kg	13.4	10
Cl3-BZ#28	501	E	ug/kg	13.4	10
Cl4-BZ#44	210		ug/kg	13.4	10
Cl4-BZ#52	571	E	ug/kg	13.4	10
Cl4-BZ#66	192		ug/kg	13.4	10
Cl5-BZ#105	23.4		ug/kg	13.4	10
Cl6-BZ#128	ND		ug/kg	13.4	10
Cl6-BZ#138	45.7		ug/kg	13.4	10
Cl6-BZ#153	66.8		ug/kg	13.4	10
Cl8-BZ#195	ND		ug/kg	13.4	10
Cl9-BZ#206	ND		ug/kg	13.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	77		30-150
BZ 198	108		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-32	Date Collected:	04/07/10 12:55
Client ID:	S-10A-C015-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 20:48	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	3.58		ug/kg	1.32	1
Cl4-BZ#52	10.9		ug/kg	1.32	1
Cl5-BZ#101	9.81		ug/kg	1.32	1
Cl5-BZ#118	8.10		ug/kg	1.32	1
Cl6-BZ#128	1.56		ug/kg	1.32	1
Cl6-BZ#138	5.92		ug/kg	1.32	1
Cl7-BZ#170	ND		ug/kg	1.32	1
Cl7-BZ#180	ND		ug/kg	1.32	1
Cl8-BZ#195	ND		ug/kg	1.32	1
Cl9-BZ#206	ND		ug/kg	1.32	1
Cl10-BZ#209	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	88		30-150
DBOB	86		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-32	Date Collected:	04/07/10 12:55
Client ID:	S-10A-C015-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 20:48	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	1.40		ug/kg	1.32	1
Cl3-BZ#28	12.1		ug/kg	1.32	1
Cl4-BZ#44	4.26		ug/kg	1.32	1
Cl4-BZ#66	6.90		ug/kg	1.32	1
Cl5-BZ#105	3.02		ug/kg	1.32	1
Cl6-BZ#153	2.24		ug/kg	1.32	1
Cl7-BZ#187	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	88		30-150
DBOB	86		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-34	Date Collected:	04/07/10 13:05
Client ID:	S-10A-C016-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 21:29	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	1.53		ug/kg	1.31	1
Cl3-BZ#18	6.61		ug/kg	1.31	1
Cl4-BZ#44	20.7		ug/kg	1.31	1
Cl5-BZ#101	64.8	E	ug/kg	1.31	1
Cl5-BZ#118	65.9	E	ug/kg	1.31	1
Cl6-BZ#128	16.4		ug/kg	1.31	1
Cl6-BZ#138	58.4	E	ug/kg	1.31	1
Cl7-BZ#170	7.34		ug/kg	1.31	1
Cl7-BZ#180	10.4		ug/kg	1.31	1
Cl7-BZ#187	5.52		ug/kg	1.31	1
Cl9-BZ#206	ND		ug/kg	1.31	1
Cl10-BZ#209	ND		ug/kg	1.31	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	69		30-150
BZ 198	81		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-34	Date Collected:	04/07/10 13:05
Client ID:	S-10A-C016-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 21:29	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	20.8		ug/kg	1.31	1
Cl4-BZ#52	19.8		ug/kg	1.31	1
Cl4-BZ#66	36.1	E	ug/kg	1.31	1
Cl5-BZ#105	19.7		ug/kg	1.31	1
Cl6-BZ#153	9.02		ug/kg	1.31	1
Cl8-BZ#195	ND		ug/kg	1.31	1

DBOB	69	30-150
BZ 198	81	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-34 D	Date Collected:	04/07/10 13:05
Client ID:	S-10A-C016-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 16:12	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl5-BZ#101	104		ug/kg	13.1	10
Cl5-BZ#118	98.1		ug/kg	13.1	10
Cl6-BZ#138	82.6		ug/kg	13.1	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-34 D	Date Collected:	04/07/10 13:05
Client ID:	S-10A-C016-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 16:12	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	100%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl4-BZ#66	100		ug/kg	13.1	10

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-37	Date Collected:	04/07/10 13:15
Client ID:	S-10A-C017-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 22:10	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	4.24		ug/kg	1.33	1
Cl5-BZ#118	3.92		ug/kg	1.33	1
Cl7-BZ#170	ND		ug/kg	1.33	1
Cl7-BZ#180	ND		ug/kg	1.33	1
Cl7-BZ#187	ND		ug/kg	1.33	1
Cl8-BZ#195	ND		ug/kg	1.33	1
Cl9-BZ#206	ND		ug/kg	1.33	1
Cl10-BZ#209	ND		ug/kg	1.33	1

DBOB	103	30-150
BZ 198	87	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-37	Date Collected:	04/07/10 13:15
Client ID:	S-10A-C017-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 22:10	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	98%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	9.62		ug/kg	1.33	1
Cl3-BZ#28	9.06		ug/kg	1.33	1
Cl4-BZ#44	4.37		ug/kg	1.33	1
Cl4-BZ#52	9.70		ug/kg	1.33	1
Cl4-BZ#66	2.73		ug/kg	1.33	1
Cl5-BZ#101	3.40		ug/kg	1.33	1
Cl5-BZ#105	1.37		ug/kg	1.33	1
Cl6-BZ#128	1.68		ug/kg	1.33	1
Cl6-BZ#138	5.03		ug/kg	1.33	1
Cl6-BZ#153	1.85		ug/kg	1.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	103		30-150
BZ 198	87		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-40	Date Collected:	04/07/10 13:25
Client ID:	S-10A-C018-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 22:51	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	2.02		ug/kg	1.31	1
Cl4-BZ#52	6.08		ug/kg	1.31	1
Cl5-BZ#118	4.18		ug/kg	1.31	1
Cl7-BZ#170	ND		ug/kg	1.31	1
Cl7-BZ#180	ND		ug/kg	1.31	1
Cl7-BZ#187	ND		ug/kg	1.31	1
Cl8-BZ#195	ND		ug/kg	1.31	1
Cl9-BZ#206	ND		ug/kg	1.31	1
Cl10-BZ#209	ND		ug/kg	1.31	1

DBOB	77	30-150
BZ 198	76	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-40	Date Collected:	04/07/10 13:25
Client ID:	S-10A-C018-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/21/10 22:51	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	3.98		ug/kg	1.31	1
Cl3-BZ#28	5.54		ug/kg	1.31	1
Cl4-BZ#44	2.47		ug/kg	1.31	1
Cl4-BZ#66	2.22		ug/kg	1.31	1
Cl5-BZ#101	3.20		ug/kg	1.31	1
Cl5-BZ#105	ND		ug/kg	1.31	1
Cl6-BZ#128	1.32		ug/kg	1.31	1
Cl6-BZ#138	4.20		ug/kg	1.31	1
Cl6-BZ#153	1.73		ug/kg	1.31	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	77		30-150
BZ 198	76		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-42 D2	Date Collected:	04/07/10 13:35
Client ID:	S-10A-C019-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 11:49	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	442		ug/kg	66.7	50
Cl4-BZ#44	348		ug/kg	66.7	50
Cl4-BZ#52	884		ug/kg	66.7	50
Cl5-BZ#101	851		ug/kg	66.7	50
Cl5-BZ#105	222		ug/kg	66.7	50
Cl5-BZ#118	728		ug/kg	66.7	50
Cl6-BZ#138	679		ug/kg	66.7	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-42 D2	Date Collected:	04/07/10 13:35
Client ID:	S-10A-C019-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 11:49	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	558		ug/kg	66.7	50
Cl4-BZ#66	718		ug/kg	66.7	50
Cl6-BZ#153	348		ug/kg	66.7	50

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-42 D	Date Collected:	04/07/10 13:35
Client ID:	S-10A-C019-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 18:15	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	72.6		ug/kg	13.3	10
Cl3-BZ#18	459	E	ug/kg	13.3	10
Cl4-BZ#44	384	E	ug/kg	13.3	10
Cl4-BZ#52	987	E	ug/kg	13.3	10
Cl5-BZ#101	934	E	ug/kg	13.3	10
Cl5-BZ#105	268	E	ug/kg	13.3	10
Cl5-BZ#118	852	E	ug/kg	13.3	10
Cl6-BZ#128	230		ug/kg	13.3	10
Cl6-BZ#138	810	E	ug/kg	13.3	10
Cl7-BZ#170	118		ug/kg	13.3	10
Cl7-BZ#180	156		ug/kg	13.3	10
Cl7-BZ#187	75.1		ug/kg	13.3	10
Cl8-BZ#195	ND		ug/kg	13.3	10
Cl9-BZ#206	ND		ug/kg	13.3	10
Cl10-BZ#209	ND		ug/kg	13.3	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	96		30-150
BZ 198	138		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-42 D	Date Collected:	04/07/10 13:35
Client ID:	S-10A-C019-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/20/10 18:15	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#28	296	E	ug/kg	13.3	10
Cl4-BZ#66	403	E	ug/kg	13.3	10
Cl6-BZ#153	172	E	ug/kg	13.3	10

DBOB	96	30-150
BZ 198	138	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-44	Date Collected:	04/07/10 13:45
Client ID:	S-10A-C020-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 00:12	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	1.96		ug/kg	1.32	1
Cl5-BZ#118	2.83		ug/kg	1.32	1
Cl6-BZ#128	ND		ug/kg	1.32	1
Cl7-BZ#170	ND		ug/kg	1.32	1
Cl7-BZ#180	ND		ug/kg	1.32	1
Cl7-BZ#187	ND		ug/kg	1.32	1
Cl8-BZ#195	ND		ug/kg	1.32	1
Cl9-BZ#206	ND		ug/kg	1.32	1
Cl10-BZ#209	ND		ug/kg	1.32	1

DBOB	84	30-150
BZ 198	83	30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-44	Date Collected:	04/07/10 13:45
Client ID:	S-10A-C020-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:04
Analytical Date:	04/22/10 00:12	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	ND		ug/kg	1.32	1
Cl3-BZ#28	3.41		ug/kg	1.32	1
Cl4-BZ#44	2.37		ug/kg	1.32	1
Cl4-BZ#52	4.32		ug/kg	1.32	1
Cl4-BZ#66	2.26		ug/kg	1.32	1
Cl5-BZ#101	2.85		ug/kg	1.32	1
Cl5-BZ#105	ND		ug/kg	1.32	1
Cl6-BZ#138	3.71		ug/kg	1.32	1
Cl6-BZ#153	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	84		30-150
BZ 198	83		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-46	Date Collected:	04/07/10 14:00
Client ID:	S-10A-C021-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:07
Analytical Date:	04/22/10 00:53	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl3-BZ#18	6.43		ug/kg	1.32	1
Cl4-BZ#66	6.68		ug/kg	1.32	1
Cl5-BZ#101	4.36		ug/kg	1.32	1
Cl5-BZ#118	4.16		ug/kg	1.32	1
Cl6-BZ#128	ND		ug/kg	1.32	1
Cl6-BZ#138	3.24		ug/kg	1.32	1
Cl7-BZ#180	ND		ug/kg	1.32	1
Cl7-BZ#187	ND		ug/kg	1.32	1
Cl8-BZ#195	ND		ug/kg	1.32	1
Cl9-BZ#206	ND		ug/kg	1.32	1
Cl10-BZ#209	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	81		30-150
DBOB	98		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

SAMPLE RESULTS

Lab ID:	L1005022-46	Date Collected:	04/07/10 14:00
Client ID:	S-10A-C021-0-0.5	Date Received:	04/07/10
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Sediment	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	04/16/10 11:07
Analytical Date:	04/22/10 00:53	Cleanup Method1:	EPA 3630
Analyst:	NS	Cleanup Date1:	04/19/10
Percent Solids:	99%	Cleanup Method2:	- - - -

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab					
Cl2-BZ#8	7.28		ug/kg	1.32	1
Cl3-BZ#28	10.7		ug/kg	1.32	1
Cl4-BZ#44	4.47		ug/kg	1.32	1
Cl4-BZ#52	11.6		ug/kg	1.32	1
Cl5-BZ#105	1.32		ug/kg	1.32	1
Cl6-BZ#153	1.67		ug/kg	1.32	1
Cl7-BZ#170	ND		ug/kg	1.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
BZ 198	81		30-150
DBOB	98		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/17/10 01:19
Analyst: NS

Extraction Method: EPA 3510C
Extraction Date: 04/13/10 14:40
Cleanup Method1: - - - -
Cleanup Date1:
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 01 Batch: WG407917-1				
Cl2-BZ#8	ND		ug/l	0.00100
Cl3-BZ#18	ND		ug/l	0.00100
Cl3-BZ#28	ND		ug/l	0.00100
Cl4-BZ#44	ND		ug/l	0.00100
Cl4-BZ#52	ND		ug/l	0.00100
Cl4-BZ#66	ND		ug/l	0.00100
Cl5-BZ#101	ND		ug/l	0.00100
Cl5-BZ#105	ND		ug/l	0.00100
Cl5-BZ#118	ND		ug/l	0.00100
Cl6-BZ#128	ND		ug/l	0.00100
Cl6-BZ#138	ND		ug/l	0.00100
Cl7-BZ#170	ND		ug/l	0.00100
Cl7-BZ#180	ND		ug/l	0.00100
Cl7-BZ#187	ND		ug/l	0.00100
Cl8-BZ#195	ND		ug/l	0.00100
Cl9-BZ#206	ND		ug/l	0.00100
Cl10-BZ#209	ND		ug/l	0.00100

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	93		30-150
BZ 198	87		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/17/10 01:19
Analyst: NS

Extraction Method: EPA 3510C
Extraction Date: 04/13/10 14:40
Cleanup Method1: - - - -
Cleanup Date1:
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 01 Batch: WG407917-1				
Cl6-BZ#153	ND		ug/l	0.00100
Cl7-BZ#184	ND		ug/l	0.00100

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	93		30-150
BZ 198	87		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/19/10 21:06
Analyst: NS

Extraction Method: EPA 3540C
Extraction Date: 04/15/10 09:56
Cleanup Method1: EPA 3630
Cleanup Date1: 04/16/10
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 02,04,06,08,10,12,14,16,18,20,22 Batch: WG408251-1				
Cl2-BZ#8	ND		ug/kg	1.33
Cl3-BZ#18	ND		ug/kg	1.33
Cl3-BZ#28	ND		ug/kg	1.33
Cl4-BZ#44	ND		ug/kg	1.33
Cl4-BZ#52	ND		ug/kg	1.33
Cl4-BZ#66	ND		ug/kg	1.33
Cl5-BZ#101	ND		ug/kg	1.33
Cl5-BZ#105	ND		ug/kg	1.33
Cl5-BZ#118	ND		ug/kg	1.33
Cl6-BZ#128	ND		ug/kg	1.33
Cl6-BZ#138	ND		ug/kg	1.33
Cl7-BZ#170	ND		ug/kg	1.33
Cl7-BZ#180	ND		ug/kg	1.33
Cl7-BZ#187	ND		ug/kg	1.33
Cl8-BZ#195	ND		ug/kg	1.33
Cl9-BZ#206	ND		ug/kg	1.33
Cl10-BZ#209	ND		ug/kg	1.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	94		30-150
BZ 198	118		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/19/10 21:06
Analyst: NS

Extraction Method: EPA 3540C
Extraction Date: 04/15/10 09:56
Cleanup Method1: EPA 3630
Cleanup Date1: 04/16/10
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 02,04,06,08,10,12,14,16,18,20,22 Batch: WG408251-1				
Cl6-BZ#153	ND		ug/kg	1.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	94		30-150
BZ 198	118		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/20/10 23:01
Analyst: NS

Extraction Method: EPA 3540C
Extraction Date: 04/16/10 11:04
Cleanup Method1: EPA 3630
Cleanup Date1: 04/19/10
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 24,26,28,30,32,34,37,40,42,44,46 Batch: WG408427-1				
Cl2-BZ#8	ND		ug/kg	1.33
Cl3-BZ#18	ND		ug/kg	1.33
Cl3-BZ#28	ND		ug/kg	1.33
Cl4-BZ#44	ND		ug/kg	1.33
Cl4-BZ#52	ND		ug/kg	1.33
Cl4-BZ#66	ND		ug/kg	1.33
Cl5-BZ#101	ND		ug/kg	1.33
Cl5-BZ#105	ND		ug/kg	1.33
Cl5-BZ#118	ND		ug/kg	1.33
Cl6-BZ#128	ND		ug/kg	1.33
Cl6-BZ#138	ND		ug/kg	1.33
Cl7-BZ#170	ND		ug/kg	1.33
Cl7-BZ#180	ND		ug/kg	1.33
Cl7-BZ#187	ND		ug/kg	1.33
Cl8-BZ#195	ND		ug/kg	1.33
Cl9-BZ#206	ND		ug/kg	1.33
Cl10-BZ#209	ND		ug/kg	1.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	112		30-150
BZ 198	99		30-150

Project Name: NEW BEDFORD HARBOR **Lab Number:** L1005022

Project Number: TO-0010 **Report Date:** 04/23/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 04/20/10 23:01
Analyst: NS

Extraction Method: EPA 3540C
Extraction Date: 04/16/10 11:04
Cleanup Method1: EPA 3630
Cleanup Date1: 04/19/10
Cleanup Method2: - - - -
Cleanup Date2:

Parameter	Result	Qualifier	Units	RDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 24,26,28,30,32,34,37,40,42,44,46 Batch: WG408427-1				
Cl6-BZ#153	ND		ug/kg	1.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	112		30-150
BZ 198	99		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab Associated sample(s): 24,26,28,30,32,34,37,40,42,44,46 QC Batch ID: WG408427-4 WG408427-5 QC Sample: L1005022-32 Client ID: S-10A-C015-0-0.5												
Cl2-BZ#8	1.40	3.31	4.78	102		4.50	94		40-140	9		30
Cl3-BZ#18	3.58	3.31	7.94	132		8.46	**147**	Q	40-140	11		30
Cl3-BZ#28	12.1	3.31	28.6	**498**	Q	20.1	**241**	Q	40-140	**70**	Q	30
Cl4-BZ#44	4.26	3.31	9.95	**172**	Q	8.01	113		40-140	**41**	Q	30
Cl4-BZ#52	10.9	3.31	20.6	**293**	Q	18.0	**214**	Q	40-140	**31**	Q	30
Cl4-BZ#66	6.90	3.31	14.0	**214**	Q	10.8	118		40-140	**58**	Q	30
Cl5-BZ#101	9.81	3.31	14.0	126		12.2	72		40-140	**54**	Q	30
Cl5-BZ#105	3.02	3.31	5.60	78		4.67	50		40-140	**44**	Q	30
Cl5-BZ#118	8.10	3.31	13.9	**175**	Q	11.6	106		40-140	**49**	Q	30
Cl6-BZ#128	1.56	3.31	4.13	78		4.04	75		40-140	4		30
Cl6-BZ#138	5.92	3.31	10.0	123		8.68	83		40-140	**39**	Q	30
Cl6-BZ#153	2.24	3.31	3.97	52		3.46	**37**	Q	40-140	**35**	Q	30
Cl7-BZ#170	ND	3.31	3.61	109		3.39	102		40-140	7		30
Cl7-BZ#180	ND	3.31	4.34	131		4.11	124		40-140	5		30
Cl7-BZ#187	ND	3.31	4.37	132		3.68	111		40-140	17		30
Cl8-BZ#195	ND	3.31	3.02	91		2.82	85		40-140	7		30
Cl9-BZ#206	ND	3.31	2.74	83		3.00	90		40-140	9		30
Cl10-BZ#209	ND	3.31	2.67	81		2.76	83		40-140	3		30

Matrix Spike Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab Associated sample(s): 24,26,28,30,32,34,37,40,42,44,46 QC Batch ID: WG408427-4 WG408427-5 QC Sample: L1005022-32 Client ID: S-10A-C015-0-0.5												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
BZ 198	96		97		30-150
DBOB	87		79		30-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 01		Batch: WG407917-2 WG407917-3					
Cl2-BZ#8	91		84		40-140	7		30
Cl3-BZ#18	75		82		40-140	8		30
Cl3-BZ#28	84		92		40-140	9		30
Cl4-BZ#44	80		85		40-140	6		30
Cl4-BZ#52	78		83		40-140	6		30
Cl4-BZ#66	86		92		40-140	7		30
Cl5-BZ#101	78		85		40-140	9		30
Cl5-BZ#105	90		97		40-140	8		30
Cl5-BZ#118	88		97		40-140	10		30
Cl6-BZ#128	85		91		40-140	6		30
Cl6-BZ#138	87		93		40-140	6		30
Cl7-BZ#170	80		85		40-140	6		30
Cl7-BZ#180	82		87		40-140	6		30
Cl7-BZ#187	79		84		40-140	6		30
Cl8-BZ#195	76		88		40-140	15		30
Cl9-BZ#206	82		87		40-140	6		30
Cl10-BZ#209	73		77		40-140	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 01		Batch: WG407917-2		WG407917-3			

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
DBOB	92		97		30-150

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 01		Batch: WG407917-2		WG407917-3			
Cl6-BZ#153	76		68		40-140	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
DBOB	92		97		30-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 02,04,06,08,10,12,14,16,18,20,22 Batch: WG408251-2 WG408251-3							
Cl2-BZ#8	87		80		40-140	8		30
Cl3-BZ#18	88		77		40-140	13		30
Cl3-BZ#28	88		86		40-140	2		30
Cl4-BZ#44	88		84		40-140	5		30
Cl4-BZ#52	102		91		40-140	11		30
Cl4-BZ#66	92		89		40-140	3		30
Cl5-BZ#101	88		85		40-140	3		30
Cl5-BZ#105	93		88		40-140	6		30
Cl5-BZ#118	97		94		40-140	3		30
Cl6-BZ#128	98		92		40-140	6		30
Cl6-BZ#138	90		90		40-140	0		30
Cl7-BZ#170	92		87		40-140	6		30
Cl7-BZ#187	95		88		40-140	8		30
Cl8-BZ#195	88		81		40-140	8		30
Cl9-BZ#206	101		95		40-140	6		30
Cl10-BZ#209	92		87		40-140	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s):	02,04,06,08,10,12,14,16,18,20,22	Batch:	WG408251-2	WG408251-3			
DBOB	99		90		30-150			
BZ 198	124		106		30-150			

PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s):	02,04,06,08,10,12,14,16,18,20,22	Batch:	WG408251-2	WG408251-3			
Cl6-BZ#153	105		88		40-140	18		30
Cl7-BZ#180	114		99		40-140	14		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
DBOB	99		90		30-150
BZ 198	124		106		30-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 24,26,28,30,32,34,37,40,42,44,46 Batch: WG408427-2 WG408427-3							
Cl2-BZ#8	79		79		40-140	0		30
Cl3-BZ#18	87		79		40-140	10		30
Cl3-BZ#28	96		94		40-140	2		30
Cl4-BZ#44	94		91		40-140	3		30
Cl4-BZ#52	94		94		40-140	0		30
Cl4-BZ#66	106		101		40-140	5		30
Cl5-BZ#101	96		94		40-140	2		30
Cl5-BZ#105	102		100		40-140	2		30
Cl5-BZ#118	107		106		40-140	1		30
Cl6-BZ#128	101		99		40-140	2		30
Cl6-BZ#138	102		100		40-140	2		30
Cl7-BZ#170	92		89		40-140	3		30
Cl7-BZ#180	102		104		40-140	2		30
Cl7-BZ#187	95		93		40-140	2		30
Cl8-BZ#195	80		79		40-140	1		30
Cl9-BZ#206	89		88		40-140	1		30
Cl10-BZ#209	81		80		40-140	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s):	24,26,28,30,32,34,37,40,42,44,46	Batch:	WG408427-2	WG408427-3			
DBOB	106		96		30-150			
BZ 198	90		89		30-150			

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s):	24,26,28,30,32,34,37,40,42,44,46	Batch:	WG408427-2	WG408427-3			
Cl6-BZ#153	101		97		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
DBOB	106		96		30-150
BZ 198	90		89		30-150

INORGANICS
&
MISCELLANEOUS

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-02
Client ID: S-10A-C001-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 08:50
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.6		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	85.5		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-04
Client ID: S-10A-C002-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 09:05
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.4		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	80.0		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-06
Client ID: S-10A-C003-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 09:20
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.9		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	59.2		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-08
Client ID: S-10A-C004-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 09:30
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.5		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	53.3		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-10
Client ID: S-10A-C005-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 09:45
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.0		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	78.9		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-12
Client ID: S-10A-C006-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 10:05
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.5		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	62.9		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-14
Client ID: S-10A-C007-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 10:25
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.8		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	82.6		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-16
Client ID: S-10A-C008-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 10:50
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.8		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	65.5		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-18
Client ID: S-10A-C009-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 11:10
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.8		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	73.2		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-20
Client ID: S-10A-C007-0-0.5REP
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 10:40
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.6		%	0.100	1	-	04/12/10 13:40	30,2540G	KB
Solids, Total (Pre-Dried)	78.5		%	0.100	1	-	04/09/10 16:23	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-22
Client ID: S-10A-C010-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 11:25
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.2		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	64.2		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-24
Client ID: S-10A-C011-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 11:35
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	97.4		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	41.8		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-26
Client ID: S-10A-C012-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 11:50
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.3		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	48.0		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-28
Client ID: S-10A-C013-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 12:00
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.6		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	75.2		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-30
Client ID: S-10A-C014-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 12:15
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.8		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	51.7		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-32
Client ID: S-10A-C015-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 12:55
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.3		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	77.0		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-34
Client ID: S-10A-C016-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 13:05
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.8		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	84.0		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-37
Client ID: S-10A-C017-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 13:15
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.4		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	74.3		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-40
Client ID: S-10A-C018-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 13:25
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.0		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	67.7		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-42
Client ID: S-10A-C019-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 13:35
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	98.7		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	43.7		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-44
Client ID: S-10A-C020-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 13:45
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.4		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	78.7		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010
Lab Number: L1005022
Report Date: 04/23/10

SAMPLE RESULTS

Lab ID: L1005022-46
Client ID: S-10A-C021-0-0.5
Sample Location: NEW BEDFORD, MA
Matrix: Sediment

Date Collected: 04/07/10 14:00
Date Received: 04/07/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab									
Solids, Total	99.2		%	0.100	1	-	04/12/10 14:05	30,2540G	KB
Solids, Total (Pre-Dried)	69.1		%	0.100	1	-	04/09/10 16:25	30,2540G	KB

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010

Lab Number: L1005022
Report Date: 04/23/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 02,04,06,08,10,12,14,16,18,20 QC Batch ID: WG407493-1 QC Sample: L1005022-04 Client ID: S-10A-C002-0-0.5						
Solids, Total (Pre-Dried)	80	79.8	%	0		20
General Chemistry - Mansfield Lab Associated sample(s): 22,24,26,28,30,32,34,37,40,42,44,46 QC Batch ID: WG407495-1 QC Sample: L1005022-22 Client ID: S-10A-C010-0-0.5						
Solids, Total (Pre-Dried)	64.2	63.3	%	1		20
General Chemistry - Mansfield Lab Associated sample(s): 02,04,06,08,10,12,14,16,18,20 QC Batch ID: WG407731-1 QC Sample: L1005022-04 Client ID: S-10A-C002-0-0.5						
Solids, Total	99.4	99.6	%	0		20
General Chemistry - Mansfield Lab Associated sample(s): 22,24,26,28,30,32,34,37,40,42,44,46 QC Batch ID: WG407737-1 QC Sample: L1005022-22 Client ID: S-10A-C010-0-0.5						
Solids, Total	99.2	99.5	%	0		20

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010

Lab Number: L1005022
Report Date: 04/23/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005022-01A	Amber 1000ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA()
L1005022-01B	Amber 1000ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA()
L1005022-02A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-03A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-04A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-05A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-06A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-07A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-08A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-09A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-10A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-11A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-12A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-13A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-14A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-15A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-16A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-17A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)

*Hold days indicated by values in parentheses

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010

Lab Number: L1005022
Report Date: 04/23/10

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005022-18A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-19A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-20A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-21A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-22A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-23A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-24A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-25A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-26A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-27A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	HOLD(14)
L1005022-28A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-29A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	HOLD(14)
L1005022-30A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-31A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-32A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-MS/MSD(),A2-TS-PREDRIED(7)
L1005022-32B	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-MS/MSD(),A2-TS-PREDRIED(7)
L1005022-33A	Glass 250ml unpreserved	B	N/A	4.5	Y	Absent	HOLD(14)
L1005022-34A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-35A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	HOLD(14)
L1005022-36A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	-
L1005022-37A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-MS/MSD(),A2-TS-PREDRIED(7)
L1005022-37B	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-MS/MSD(),A2-TS-PREDRIED(7)
L1005022-38A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	HOLD(14)
L1005022-39A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	-

*Hold days indicated by values in parentheses

Project Name: NEW BEDFORD HARBOR
Project Number: TO-0010

Lab Number: L1005022
Report Date: 04/23/10

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005022-40A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-41A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	HOLD(14)
L1005022-42A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-43A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-44A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-45A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)
L1005022-46A	Glass 250ml unpreserved	B	N/A	4.1	Y	Absent	A2-PCBCONG-8082-NOAA(),A2-TS(7),A2-TS-PREDRIED(7)
L1005022-47A	Glass 250ml unpreserved	A	N/A	2.7	Y	Absent	HOLD(14)

*Hold days indicated by values in parentheses

Project Name:	NEW BEDFORD HARBOR	**Lab Number:**	L1005022
Project Number:	TO-0010	**Report Date:**	04/23/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report

Project Name:	NEW BEDFORD HARBOR	**Lab Number:**	L1005022
Project Number:	TO-0010	**Report Date:**	04/23/10

REFERENCES

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

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

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

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

Certificate/Approval Program Summary

Last revised December 15, 2009 – Mansfield Facility

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

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. Organic Parameters: EPA 625, 608.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045, 9014. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B, Organic Parameters: EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270,)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

Biological Tissue (Inorganic Parameters: EPA 6020. Organic Parameters: EPA 3570, 3510, 3610, 3630, 3640, 8270.)

Maine Department of Human Services Certificate/Lab ID: MA0030.

Wastewater (Inorganic Parameters: EPA 120.1, 300.0, SM 2320, 2510B, 2540C, 2540D, EPA 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.

Non-Potable Water (Inorganic Parameters: SM4500H+B. Organic Parameters: EPA 624.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. Organic Parameters: EPA 625, 608.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 9040B, 6020, 9010B, 9014 Organic Parameters: EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610B, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-02089. ***NELAP Accredited.***

Non-Potable Water (Organic Parameters: EPA 5030B, EPA 8260)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via LA-DEQ.***

Refer to MA-DEP Certificate for Non-Potable Water.

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 3005A,3020, 6020, 245.1, 245.7, 1631E, 7470A, 7474, 9014, 120.1, 9050A, 180.1, SM4500H-B, 2320B, 2510B, 2540D,9040. Organic Parameters: EPA 3510C, 5030B, 9010B, 624, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312,3051, 6020, 747A, 7474, 9045C,9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl.

CHAIN OF CUSTODY

PAGE 1 OF 5

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L100 5022

0423012:54

Client Information

Client: Woods Hole Group
Address: 81 Technology Park Dr
E. Falmouth, MA 02536
Phone: 508-540-8080
Fax: 508-540-1001
Email: dwalsh@whgrp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: ~~FD - NBH EMC Sediment Monitoring~~
Project Location: New Bedford, MA
Project #: TO-0010
Project Manager: Dave Walsh
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
level III data report and project specific EDD *please homogenize all samples

ANALYSIS: NOAA 18 PCB cong archive

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NOAA 18 PCB cong	archive	Sample Specific Comments	TOTAL # BOTTLES
5022-1	EB-040610-01	4/6/10	16:15	SW	KGM	X		equip. blank	2
2	S-10A-C001-0-0.5	4/7/10	08:50	SE	KGM	X		Sample	1
3	S-10A-C001-0.5-0.9	4/7/10	08:50	SE	KGM		X KM	archive	1
4	S-10A-C002-0-0.5		09:05			X	KM	Sample	1
5	S-10A-C002-0.5-0.9		09:05			KM	X	archive	1
6	S-10A-C003-0-0.5		09:20			X	KM	Sample	1
7	S-10A-C003-0.5-1.0		09:20			KM	X	archive	1
8	S-10A-C004-0-0.5		09:30			X	KM	Sample	1
9	S-10A-C004-0.5-1.0		09:30			KM	X	archive	1
10	S-10A-C005-0-0.5		09:45			X		Sample	1

Container Type	A	A
Preservative	A	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Kaela McCarthy	4/7/10 15:45	P. Gillett	4-7-10 15:45
P. Gillett	4-7-10 16:45	Eileen Sullivan	4/7/10 16:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE 2 OF 5

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

0423012-54

Client Information

Client: Woods Hole Grup
Address: 81 Technology Park Dr.
E. Falmouth MA 02536
Phone: 508-540-8080
Fax: 508-540-1001
Email: dwalsh@whgrp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: NBH Env. Monitoring
Project Location: New Bedford, MA
Project #: TO-0010
Project Manager: Dave Walsh
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Other Project Specific Requirements/Comments/Detection Limits:
Level III data report
· Project specific EDD

Date Rec'd in Lab:

ALPHA Job #: L1005022

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS: NOAA IS PCB cong. archive

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials			Sample Specific Comments	TOTAL # BOTTLES
5022-11	S-1ΦA-CΦΦ5-Φ.5-1.Φ	4/7/10	09:45	SE	KGM		X	archive	1
12	S-1ΦA-CΦΦ6-Φ-Φ.5		10:05			X		sample	1
13	S-1ΦA-CΦΦ6-Φ.5-1.Φ		10:05				X	archive	1
14	S-1ΦA-CΦΦ7-Φ-Φ.5		10.25			X		sample	1
15	S-1ΦA-CΦΦ7-Φ.5-1.Φ		10:25				X	archive	1
16	S-1ΦA-CΦΦ8-Φ-Φ.5		10:50			X		sample	1
17	S-1ΦA-CΦΦ8-Φ.5-1.Φ		10:50				X	archive	1
18	S-1ΦA-CΦΦ9-Φ-Φ.5		11:10			X		sample	1
19	S-1ΦA-CΦΦ9-Φ.5-1.Φ		11:10				X	archive	1
20	S-1ΦA-CΦΦ7-Φ-Φ.5REP		10:40			X		sample	1
	Container Type					A	A		
	Preservative					A	A		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01 (rev. 14-OCT-07)

Relinquished By:	Date/Time	Received By:	Date/Time
Kathy McCann	4/7/10 15:45	P. Gilbert	4-7-10 15:45
P. Gilbert	4-7-10 16:45	Eileen Sullivan	4/7/10 16:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

CHAIN OF CUSTODY

PAGE 3 OF 5

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

0423012:54

Client Information

Client: Woods Hole Group
Address: 81 Technology Park Dr. E. Falmouth, MA 02536
Phone: 508-540-8080
Fax: 508-540-1001
Email: dwalsh@whgrp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: NBH Environmental monitoring
Project Location: New Bedford, MA
Project #: TO-0010
Project Manager: Dave Walsh
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Other Project Specific Requirements/Comments/Detection Limits:
Level III data report
Project specific EDD

Date Rec'd in Lab:

ALPHA Job #: L1005022

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS: NOA is PCB cong; archive

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials												Sample Specific Comments	TOTAL # BOTTLES
5022-21	S-10A-C007-0.5-1.0 REP	4/7/10	10:40	SE	KGM		X										archive	1
22	S-10A-C010-0-0.5		11:25			X											sample	1
23	S-10A-C010-0.5-0.9		11:25				X										archive	1
24	S-10A-C011-0-0.5		11:35			X											sample	1
25	S-10A-C011-0.5-1.0		11:35				X										archive	1
26	S-10A-C012-0-0.5		11:50			X											sample	1
27	S-10A-C012-0.5-1.0		11:50				X										archive	1
28	S-10A-C013-0-0.5		12:00			X											sample	1
29	S-10A-C013-0.5-1.0		12:00				X										archive	1
30	S-10A-C014-0-0.5		12:15			X											sample	1
	Container Type					A	A											
	Preservative					A	A											

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01 (rev. 14-OCT-07)

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/7/10 15:45	[signature]	4/7/10 15:45
P. Gilbert	4-7-10 16:45	Eileen Sullivan	4/7/10 16:45

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CHAIN OF CUSTODY

PAGE 4 OF 5

Date Rec'd in Lab:

ALPHA Job #: L1005022

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

0423012:54

Client Information

Client: Woods Hole Grp
Address: 81 Technology Park Dr. E. Falmouth, MA 02536
Phone: 508-540-8080
Fax: 508-540-1001
Email: dwalsh@whgrp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: NBH Env. Monitoring
Project Location: New Bedford, MA
Project #: TO-0010
Project Manager: Dave Walsh
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
Level III data report
project specific EDD

ANALYSIS: NOAA-18 PCB cong. | archive

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NOAA-18 PCB cong.	archive	Sample Specific Comments	TOTAL # BOTTLES
5022-31	S-1ΦA-CΦ14-Φ.5-1.Φ	4/7/10	12:15	SE	KGM		X	archive	1
32	S-1ΦA-CΦ15-Φ-Φ.5		12:55			X		sample	1
33	S-1ΦA-CΦ15-Φ.5-1.Φ		12:55				X	archive	1
34	S-1ΦA-CΦ16-Φ-Φ.5		13:05			X		sample	1
35	S-1ΦA-CΦ16-Φ.5-1.Φ		13:05				X	archive	1
-32 ~~36~~	S-1ΦA-CΦ15-Φ-Φ.5 MSMSD		12:55			X		MSMSD sample	1
37	S-1ΦA-CΦ17-Φ-Φ.5		13:15			X		sample	1
~~38~~	S-1ΦA-CΦ17-Φ.5-1.Φ		13:15				X	archive	1
-37 ~~39~~	S-1ΦA-CΦ17-Φ-Φ.5 MSMSD		13:15			X		MSMSD Sample	1
40	S-1ΦA-CΦ18-Φ-Φ.5		13:25			X		sample	1

Container Type	A	A													
Preservative	A	A													

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01 (rev. 14-OCT-07)

Relinquished By:	Date/Time	Received By:	Date/Time
P. Gillett	4/7/10 15:45	P. Gillett	4/7/10 15:45
	4-7-10 16:45	Eileen Sullivan	4/7/10 16:45

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CHAIN OF CUSTODY

PAGE 5 OF 5

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

0423012:54

Date Rec'd in Lab:

ALPHA Job #: L1005022

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E. Falmouth, MA 02536
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ALPHA Quote #:

Turn-Around Time

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Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /~~Fed~~ Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
Level III data report
project specific EDD

ANALYSIS: NOAA & PCB Cong | archive

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NOAA & PCB Cong	archive	Sample Specific Comments	TOTAL # BOTTLES
5022-41	S-1ΦA-CΦ18-Φ.5-1.Φ	4/7/10	13:25	SE	KCM		X	archive	1
42	S-1ΦA-CΦ19-Φ-Φ.5		13:35			X		sample	1
43	S-1ΦA-CΦ19-Φ5-1.Φ		13:35				X	archive	1
	~~S-1ΦA-CΦ19~~ KCM								
44	S-1ΦA-CΦ2Φ-Φ-Φ.5		13:45			X		sample	1
45	S-1ΦA-CΦ2Φ-Φ.5-1.Φ		13:45				X	archive	1
46	S-1ΦA-CΦ21-Φ-Φ.5		14:00			X		sample	1
47	S-1ΦA-CΦ21-Φ.5-1.Φ		14:00				X	archive	1

Container Type	A	A
Preservative	A	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
K. McCarthy	4/7/10 15:45	P. Gilbert	4/7/10 15:45
P. Gilbert	4/7/10 16:45	Lillian Sullivan	4/7/10 16:45

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