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FINAL
Sediment Monitoring Summary Report 2006 Remedial Dredging

Environmental Monitoring, Sampling, and Analysis

New Bedford Harbor Superfund Site

New Bedford Harbor, MA

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FINAL REPORT

Sediment Monitoring Summary Report
2006 Remedial Dredging

Environmental Monitoring, Sampling, and Analysis
New Bedford Harbor Superfund Site
New Bedford Harbor, MA

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EXECUTIVE SUMMARY

Sediment sampling in support of remedial dredging activities in New Bedford Harbor occurred from June through mid-November 2006. In 2006, dredge activities occurred primarily in two areas: 'Area A' encompassing southern sections of Dredged Management Unit (DMU) DMU-1 and DMU-102, and 'Area B' encompassing sections of DMU-2 and DMU-3. Additional dredging activities were conducted in Areas 'C' and 'D' located in DMU-2. Dredging activities targeted removal of sediments to the approximate depth of the target dredge elevation (where PCB concentrations are predicted, based on modeling, to be less than the 10 mg/kg remediation criteria). Sediment cores were collected before, during, and after dredging to evaluate the target dredge elevation through visual characterization and documentation of the elevation of sediment-type transitions. In addition, during portions of the 2006 field season volatile organic compounds (VOCs) were detected in the dredge slurry entering the treatment facilities. This was related to dredging activities along the shoreline near the Aerovox site. The detection of VOCs at the treatment facilities prompted a field sampling event to assess *in situ* VOC concentrations in the sediments near Aerovox. Finally, surficial sediment sampling was conducted at 17 locations associated with the OU3 Pilot Cap Site, a localized area of elevated PCB concentrations located outside the hurricane barrier, to determine the extent of change in PCB concentrations a year after the previous sampling.

Measured transition elevations were within 1-ft of the target dredge elevations (based on visual observation of the transition from overlying black fluidized mud [OL] to native clay [OH] layers) at more than half of the locations sampled prior to dredging. Where the departure from target dredge elevation was greater than 1-ft, it was always in a positive direction (i.e. the actual transition was not as deep as target dredge elevation). These data were used to refine the dredge plan and as a result target dredge depths were reduced, thereby reducing dredging and disposal efforts.

The collection of post-dredge cores revealed the depth of the sediment surface and the overall thickness of OL layers was reduced across all dredged regions. However, the post-dredge cores generally had less distinct visual transitions. The transitions generally occurred over a relatively broad band (>0.5-ft) of mixed sediment and in many cases, the elevation of the post-dredge visual transition also occurred at a deeper elevation than seen pre-dredge.

Samples from the post-dredge cores were also submitted for PCB analysis. However, because no pre-dredge PCB analysis was conducted pre/post dredge comparisons cannot be made. Post-dredge samples were limited to samples collected above the visual transition (where observed) and PCB concentrations ranged from 0.69 mg/kg to 4,400 mg/kg. In general, the highest concentrations remained in the regions due east of Aerovox and to the southeast of Aerovox. This is not surprising considering the proximity of the locations to the contamination source – i.e. these are the traditional hotspot areas. An average of 0.63-ft of overlying sediment remained at the post-dredge locations (range = 0.0 to 2.2-ft). Overall, PCB concentrations were not correlated with the amount of sediment remaining or with percent fines or total organic carbon. However, in areas where little overlying sediment remained, PCBs tended to be relatively low. This was the case on the western half of Area A. In the areas where elevated PCBs were found, the depth of the remaining OL layer was highly variable.

Additional sediment sampling adjacent to the Aerovox site revealed elevated levels of VOCs, primarily consisting of trichloroethene and related degradation products. Highest concentrations

were found at stations closer to the shore and elevated levels were found in sediments collected from both above and below the visual transition level, depending on the collection location. Elevated PCB concentrations were also found in selected samples analyzed from this area and while in most cases the elevated PCB and VOC concentrations were co-located, not enough information was available to evaluate the source or potential flux of VOCs into the sediments or the impact of the VOCs on potential PCB transport into the sediments. Additional studies in this area are proposed for 2007.

Results of sampling at the OU3 Pilot Capping site in 2006 were either similar to or lower than those in the 2005 samples, indicating the cap placement was still effective in these areas.

1.0 INTRODUCTION

This report describes the activities conducted in 2006 during sampling in Upper New Bedford Harbor in support of dredging operations as part of the remediation of the New Bedford Harbor Superfund Site. Site background information is presented in Section 1. A description of survey and analytical methods is provided in Section 2. Results of sampling and testing are provided in Section 3. A discussion of the survey results are provided in Section 4.

1.1 Site Description

The New Bedford Harbor Superfund Site (Site), located in Bristol County, Massachusetts, extends from the shallow northern reaches of the Acushnet River estuary south through the commercial harbor of New Bedford and into 17,000 adjacent acres of Buzzards Bay (Figure 1). 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. At least two manufacturers in the area used PCBs while producing electronic devices from 1940 to the late 1970s, when the use of PCBs was banned by the EPA. Based on human health concerns and ecological risk assessments, the U.S. 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 U.S. Army Corps of Engineers, New England District (USACE NAE), the USACE is responsible for carrying out the design and implementation of the remedial measures at the site.

Aerovox Inc. in New Bedford, MA used PCBs from c. 1940 to c. 1977 in the manufacture of electrical capacitors and transformers. This facility is considered one of the major sources of historic PCB contamination to New Bedford Harbor. The highest concentrations of PCBs were found in sediments in a 5-acre area in the northern portion of the Acushnet River Estuary adjacent to the Aerovox facility. These 'hot spot' sediments, which contained PCBs upwards of 100,000 mg/kg, were removed between 1994 and 1995 as part of USEPA's first clean-up phase. Full scale remediation dredging was initiated in 2004 and continued in 2005 and 2006. To a lesser extent, PCB contamination in New Bedford Harbor is related to activities at the Cornell-Dubilier mill on the western shore of the outer harbor. In 2005 a 15 acre underwater cap pilot project was implemented near Cornell-Dubilier to cap PCB contaminated sediments (Figure 2).

The Site is divided into a series of DMUs based on contamination levels, contamination sources, topography, and other factors (Figure 3). In 2006, dredge activities were planned for two areas (1) 'Area A' located in the southern sections of DMU-1 and DMU-102, and (2) 'Area B' located along the boundary of DMU-2 and DMU-3. Additional dredging activities were conducted in Areas 'C' and 'D' located in DMU-2.

The remediation of this site involves the excavation and dredging of approximately 880,000 cubic yards of PCB contaminated sediment. The majority of contaminated material is being removed utilizing a hydraulic dredge that will pump dredge slurry to the project's Sawyer Street facility where it will be mechanically processed to remove all sand, gravel, and debris material. The silt and clay size materials will then be pumped to the Area D Dewatering Facility located on Herman Melville Boulevard where it will be mechanically dewatered and transported off-site for disposal.

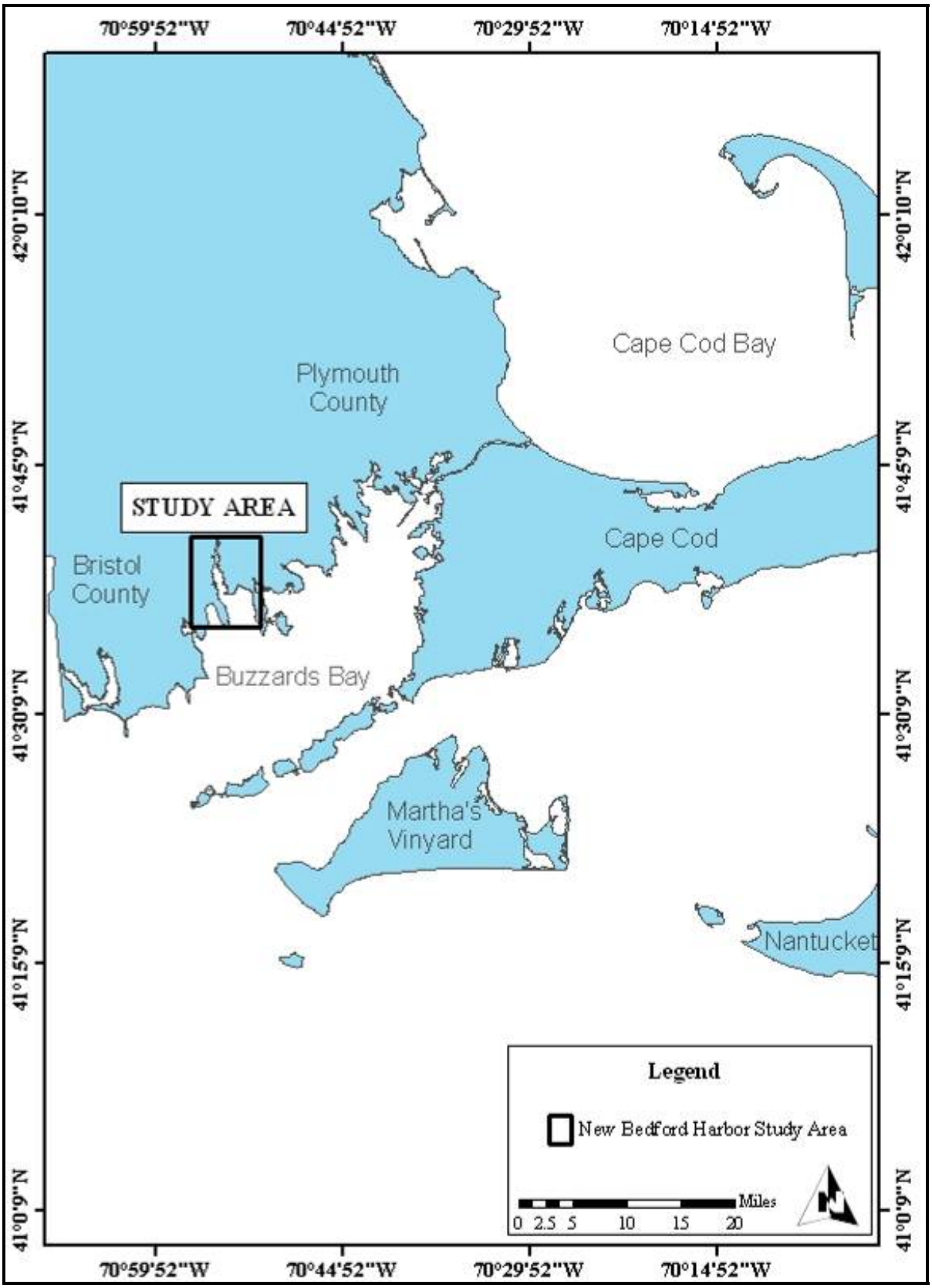


Figure 1. Location of the Site in Southeastern, MA.

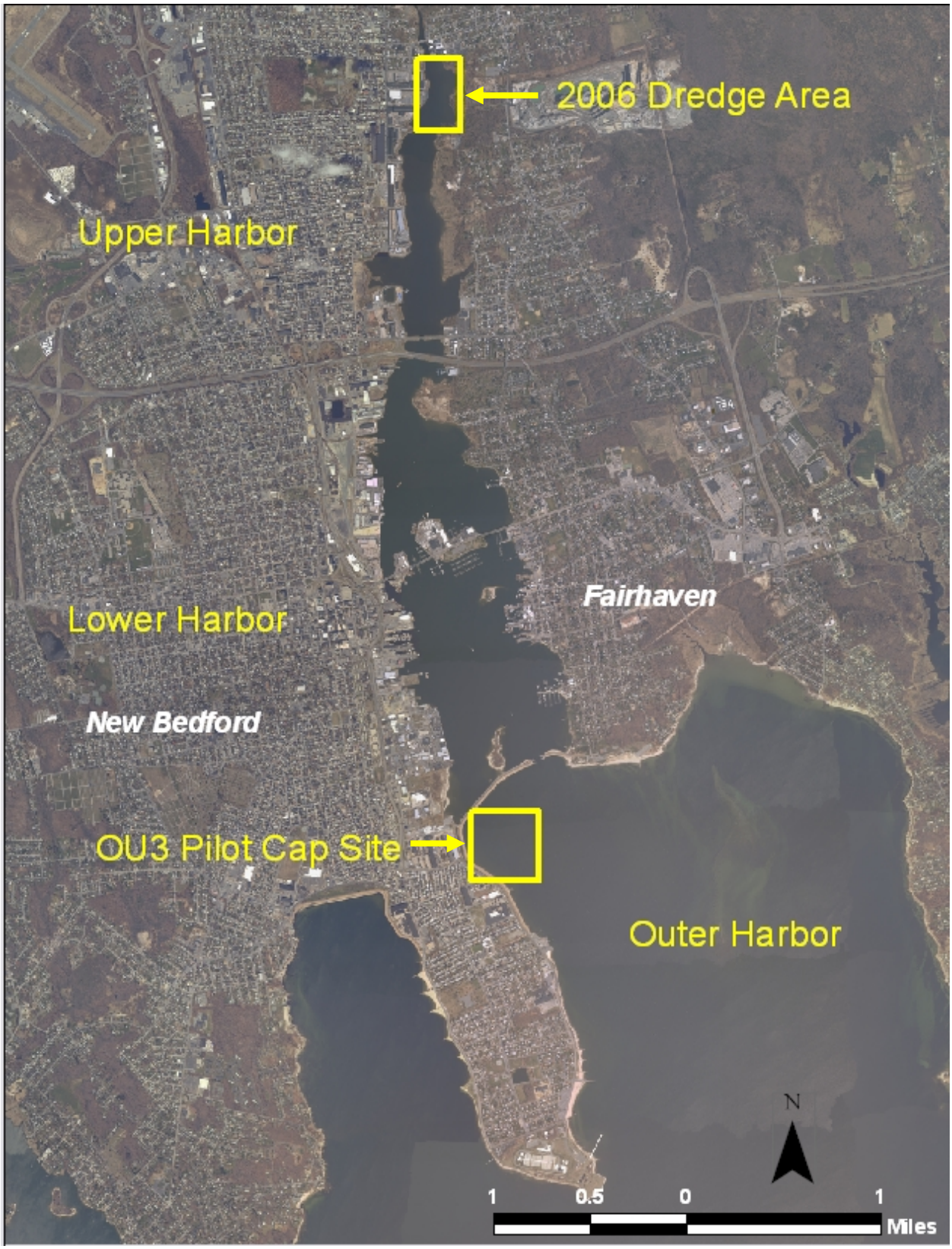


Figure 2. Location of the 2006 Dredge Activity Area within New Bedford Harbor.

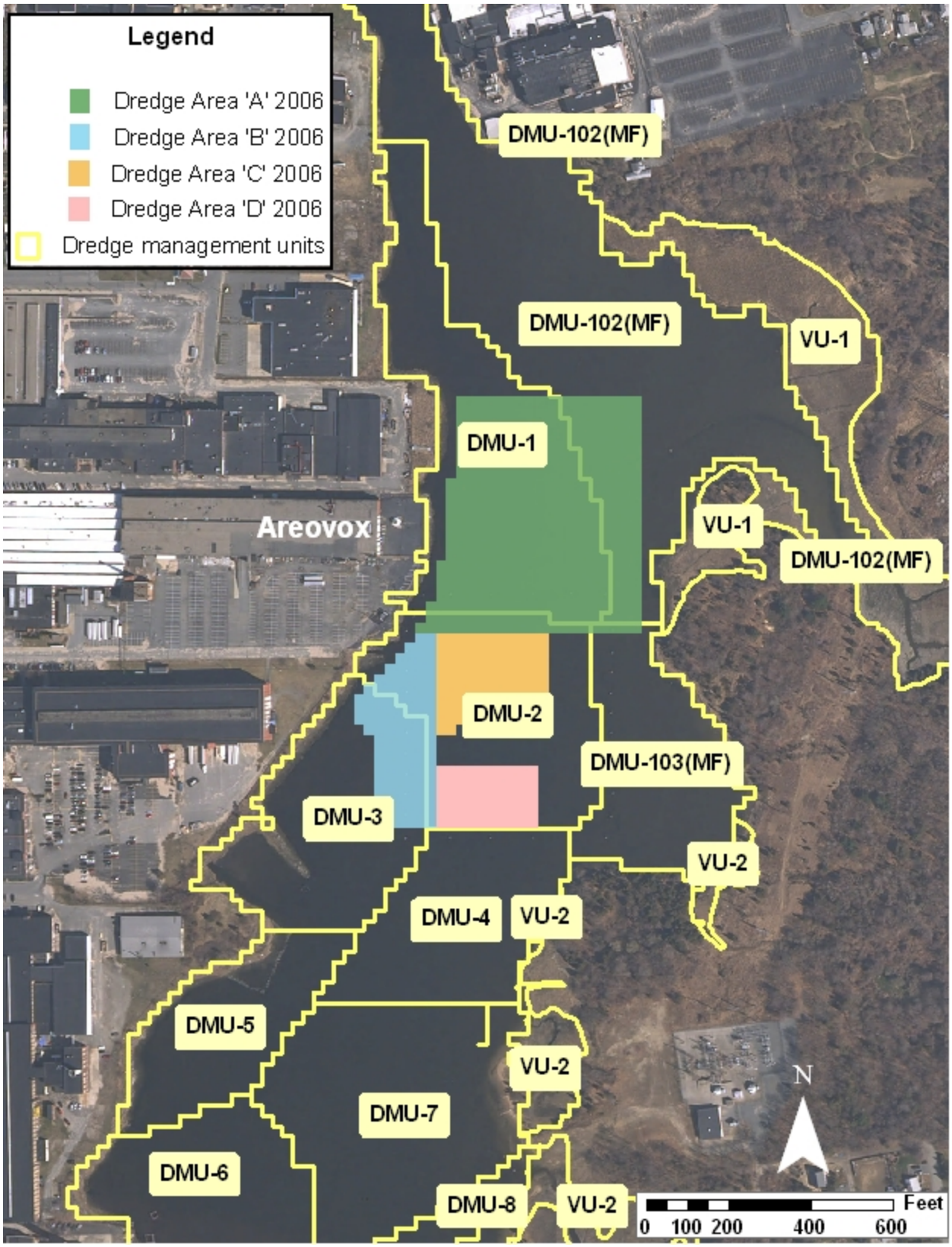


Figure 3. 2006 Dredge Areas.

1.2 Project Objectives

The primary objectives of this sampling task were to 1) provide sediment thickness and elevation data to assist dredge planning, 2) provide field reconnaissance information during the dredge season to maximize overall dredging productivity, and 3) conduct sampling after the completion of dredging operations to assess the overall performance of the dredging operation and support future needs. In addition, several unplanned sampling events were conducted at the direction of the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers – New England District (NAE). These sampling activities included the collection of grab samples from the pilot cap site OU3 near the Cornell-Dubilier mill, and collection of sediment samples for volatile organic compounds (VOC) just offshore from the Aerovox facility.

1.2.1 Pre-dredge Sediment Sampling

The entire upper harbor, including the planned 2006 dredge areas depicted in Figure 3, have been parceled into discrete 25-foot by 25-foot 'z-blocks'. During remedial design, a geostatistical model was used to predict a target elevation for dredging each z-block. This target dredge elevation represents the elevation where PCB concentrations are predicted to be less than the 10 mg/kg remediation criteria (Figure 4). Using target dredge elevations in combination with bathymetric data, a preliminary dredge plan was developed which estimated the required depth of dredging and the thickness of the overlying sediment to be removed. The pre-dredge sediment sampling plan was designed to confirm these estimates or adjust elevations as needed. Coring locations were placed onto the z-block map to achieve sufficient spatial coverage for making an evaluation of the target dredge elevations. In areas where the target dredge elevations changed substantially within adjacent z-blocks the concentration of sampling locations was increased. Visual characterization data from the pre-dredge cores was used by NAE and Jacobs Engineering Group (Jacobs) to prepare the final 2006 dredge plan.

1.2.2 Progress-dredge Sediment Sampling

Samples were collected during dredge activities to evaluate the progress of dredging operations. These push core samples were collected each week to support verification of dredge effectiveness. Dredging operations were conducted based on opportunity (tides, weather, equipment, etc) and sample locations were determined through weekly discussions between NAE, Battelle, and Jacobs, based on the dredge operations. Samples collected during this activity received visual characterization only (Section 2.2).

1.2.3 Post-dredge Sediment Sampling

Post-dredge sediment sampling was conducted to assess the sediment condition relative to the target dredge elevation for the entire 2006 dredging event and to assist with future site needs. Additional post-dredge locations were sampled to assess the condition of sites dredged in 2004 and 2005. Visual characterization of these samples was used to determine the elevation and thickness of overlying material remaining after the completion of dredging. Chemical analysis was also performed to assess concentration of PCB remaining in the sediments in these areas.

1.2.4 Volatile Organic Compound (VOC) Sampling

During portions of the 2006 field season VOCs were detected in the dredge slurry entering the treatment facilities. This was related to dredging activities along the shoreline near the Aerovox site.

The detection of VOCs at the treatment facilities prompted a field sampling event to assess *in situ* VOC concentrations in the sediments near Aerovox.

1.2.5 OU3 Pilot Cap Site Sampling

The OU3 Pilot Cap Site is a localized area of elevated PCB concentrations located outside the hurricane barrier in New Bedford, MA (Figure 2). In 2005 the OU3 Pilot Cap Site was capped with parent material dredged during the construction of a navigational dredged material Confined Aquatic Disposal (CAD) cell in New Bedford Harbor. Sampling was conducted at 17 locations to determine the extent of change in PCB concentrations a year after the previous sampling. Surficial sediments were collected by grab sampling a these locations and were submitted for PCB analysis.

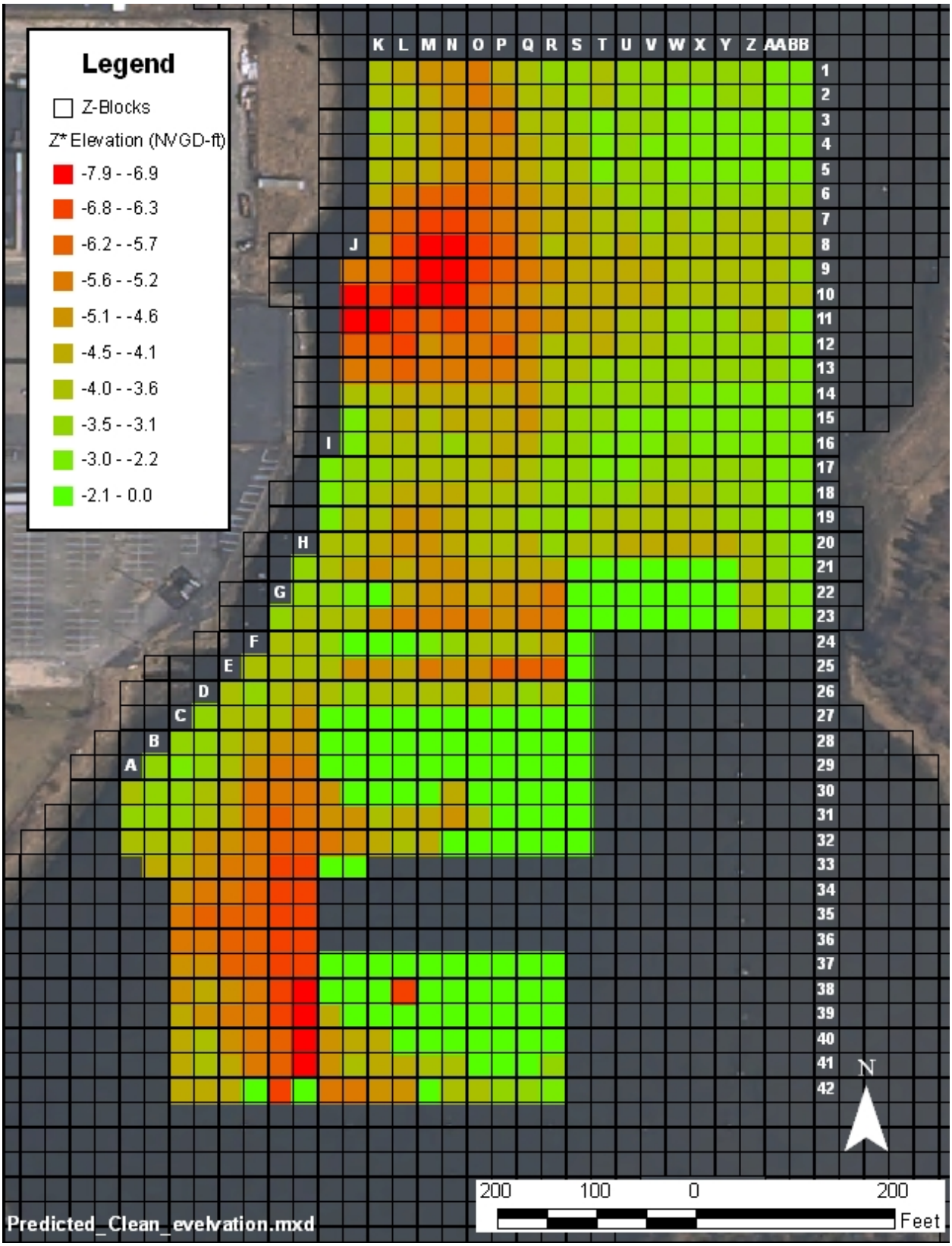


Figure 4. 2006 Planned Dredge Areas With Z-blocks and Target Dredge Elevations.

2.0 METHODS

The Battelle Quality Assurance Project Plan (QAPP) (Battelle, June 2006a) and the Sediment Monitoring Field Sampling Plan (FSP) (Battelle, July 2006b) contain additional details on survey/sampling methods. Sediment Sampling Log sheets along with summary tables of sample collection stations, collection dates and times and station coordinates are provided in Appendix A.

2.1 Sediment Collections

2.1.1 Pre-, Progress, and Post-Dredging Push Core Collections

Figure 5 shows the pre-dredge, progress dredge, and post-dredge core sample locations. Sampling of sediments was conducted with a push-core sampling device utilizing 3-inch diameter Lexan™ core barrels. The sampling device was designed to securely hold one end of a pre-cut length of core barrel. Core lengths were targeted so that penetration exceeded the expected depth of the target dredge elevation by at least one foot. A piston assembly inside the core barrel was used to create suction during retrieval of the sample to prevent sediment loss from the bottom of the barrel.

Once the individual components of the push core sampler were assembled, sample collection was achieved as follows. The core assembly was measured from the bottom of the core to the top of the assembly. The piston assembly was positioned just inside the leading end of the core liner and the piston line was held loosely on deck. The device was lowered into the water until the leading end of the core bore barrel contacted the sediment surface. The piston attachment line was then tied off securely on the deck, thus fixing the elevation of piston assembly. In driving the push-core into the sediment, the piston created a syringe effect as the core liner was driven past the fixed elevation of the piston. The core liner was then driven to the maximum depth of either refusal or the limiting depth allowed by the length of the piston attachment line. When retrieving the core assembly (with sample) tension was held on the piston line so that the piston and sample were not pulled back down the core liner by suction from the sediments. The sampler was recovered onto the deck. The bottom end of the core barrel was fitted with a plastic cap, after which the sediment on the external body of the sampler was rinsed off. After thoroughly cleaning the sampling device the core liner was removed from the socket assembly, the piston assembly was then removed, and the top of the core liner was fitted with a plastic end cap.

Upon recovery, the core was examined for acceptability. The goal of the dredge area sampling was to identify visual transitions. If it did not appear that a clear transition layer was captured, the field team used professional judgment to determine the cause. Possible causes included; 1) the core was not long/deep enough to capture transition layers, 2) smearing of overlying sediments obscured the transition, and 3) the entire core was composed of the characteristic native material. In cases 1 and 2 the collection of a second core (longer for case 1) at the same location was conducted. In case 3 the field team repositioned slightly and collected a second core. Other factors which were considered in determining acceptability included: 1) too much water at the top of the core, 2) signs of significant compaction at the top of the core, and 3) signs of loss of sediment from the bottom of the core. Because of the wide range of possible scenarios, overall core acceptability was based on the experience and judgment of the Chief Scientist and the field team. All decision making was documented on the Sediment Sampling Log sheets (Attachment A).

Determination of the accurate vertical elevation of the samples was critical in achieving the objectives of the project. Elevation of the water levels, sediment-water interface, apparent target dredge elevation, and other sediment transition zones were all critical measurements for this project (see Section 3 and Appendix A). The project elevation datum is MLW NGVD-29. A series of measurements were conducted for each sample to correct elevations for tidal fluctuations. All measurements were recorded as ±0.1 feet. The required measurements and techniques are listed below. See Figure 6 for graphical depiction of the measurements.

A = **Water depth**. Recorded the water depth using either a lead line or a measuring pole.
B = **Length of push core assembly**. Prior to deployment, the full length of the push core assembly from the top of the handle to the bottom edge of the core liner was recorded.
C = **Water surface to top of core assembly handle**. Once the core assembly was fully inserted (refusal or full core penetration), the length of the assembly remaining above the water surface was recorded.
D = **Core Length**. Measured and recorded core length. Measured from bottom up.
E = **Surveyed elevation**. Prior to operations the dredge contractor installed a fixed sheet pile with markings indicating a survey elevation (NGVD 29). Recorded this elevation. This elevation was the reference point for all elevation calculations.
F = **Water surface from surveyed elevation**. After sample collection navigated the vessel to the fixed sheet pile with surveyed elevations (position to be determined). Recorded the distance from the water surface to the surveyed elevation.

From theses measurements a number of calculations were made to determine true elevations (NGVD 29):

E - *F* = **Elevation of water surface** (G).

G - *(B* - *C)* = **Elevation of bottom of core** (*H*).
The *H* elevation (bottom of core) was used to determine the elevation of all visual transitions, including apparent target dredge elevation. i.e:

H + *(distance to visual transition)* = **Elevation of visual transition** (target dredge elevation)
And;
H + D = **Elevation of sediment water interface** (I).

The elevation of the sediment water interface was also calculated from:
G - *A* = **Elevation of sediment water interface** (I_2).

I and I_2 were compared at each station. In soft sediments the sediment water interface may have been difficult to discern from soundings (i.e. it is difficult to feel). Additionally, the sediment water interface within a core was subject to compaction during collection, settling after recovery, and other factors which may have impacted the accuracy of elevation measurements. If *I* and I_2 varied by more than 1.0 foot, the core was discarded and a new sample collected.

Once the core was deemed acceptable, a Sediment Sampling Log sheet was completed. The log form included date and time, sample coordinates, sample ID, sediment characteristics, and any other descriptive information. The field measurements required for determining vertical elevation of the

sediment-water interface and each transitional layer was also included on the Sediment Sampling Log sheet. These measurements are described in more detail below. The Sediment Sampling Log sheets are provided in Appendix A. The core barrel was labeled with a sample ID, date, and the orientation for the top of the core. Chain of Custody for each core section was initiated in the field. Core samples were capped tightly and stored on ice in coolers in the field. Aliquot samples and intact archive cores were maintained in the freezers in the Sawyer St. field trailer.

2.1.2 VOC Sediment Core Collections

The Battelle field team worked in conjunction with a field team from Jacobs Engineering Group to collect VOC samples near Aerovox to assess the spatial extent and range of concentrations of VOCs in sediments planned for dredging. A series of locations were pre-selected to characterize the North-South and East-West extent of elevated VOCs. These locations are shown on Figure 7. At each location, a push core was collected as described above. Once the core was on deck the core was visually characterized and the sediment transition layer identified. Samples were collected from just above and just below the transition layer. The core was cut open at the target sampling location. A 5ml syringe was used to extract sediment samples. For each sample a series of subsamples were collected into pre-preserved vials prepared by the analytical laboratory (Alpha – Woods Hole Group). One vial contained methanol preservative, two of the vials contained deionized water preservative, and one vial contained no preservative. These replicate vials allowed the lab to select the appropriate sample based on interferences seen during the analysis. During the field collection a separate aliquot was also taken by the Jacobs field team for immediate head space analysis using a portable Photo Ionization Detector (PID). The head space analysis was used to establish presence/absence and approximate levels of VOC in each sample. This information was used to select samples for analysis. Of the thirty collected samples, 20 were selected for analysis. Based on results from the VOC analysis a second field effort was conducted to revisit a subset of the VOC sampling sites and collect sediment samples for PCB analysis.

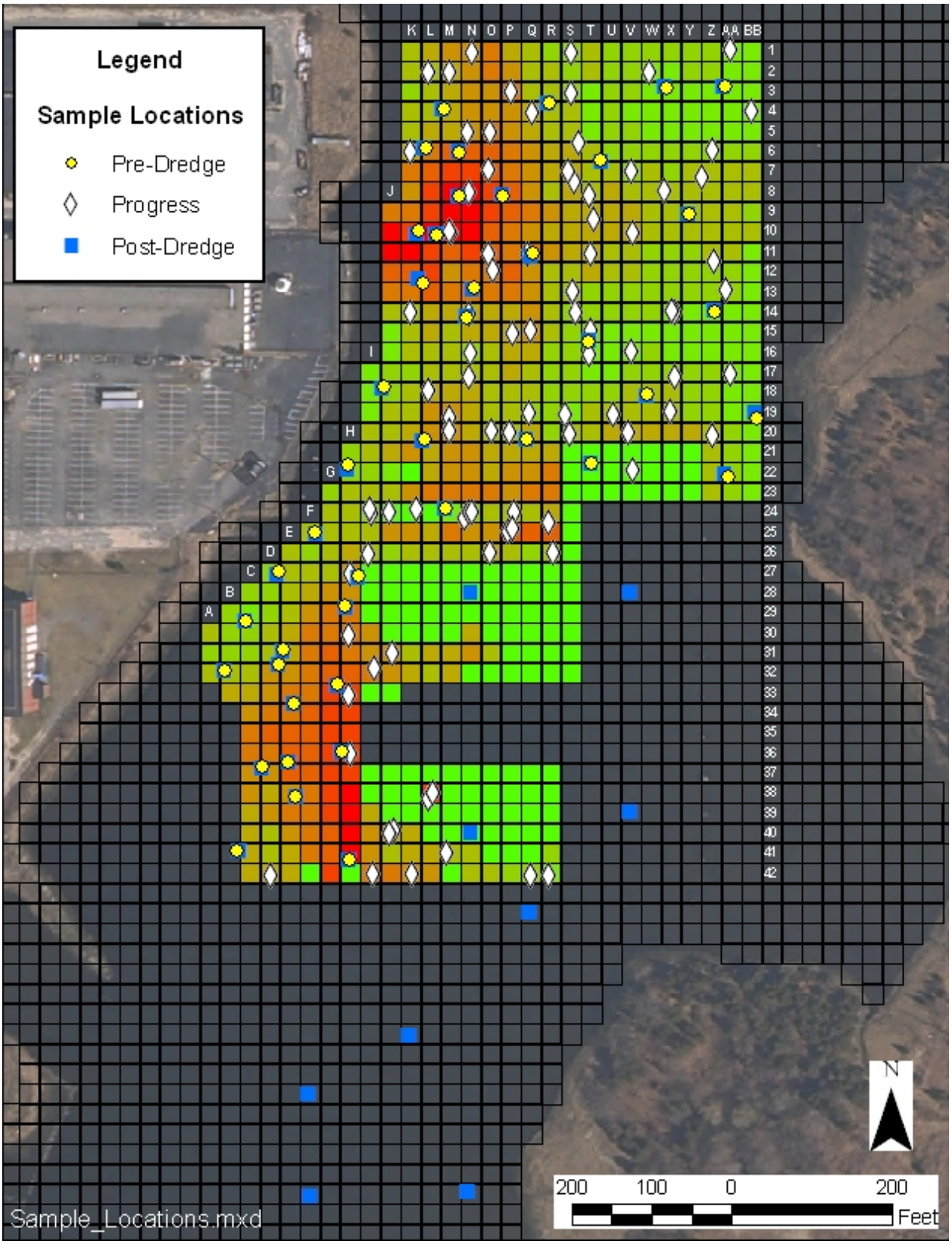


Figure 5. Pre-Dredge, Progress, and Post-Dredge sample Locations.

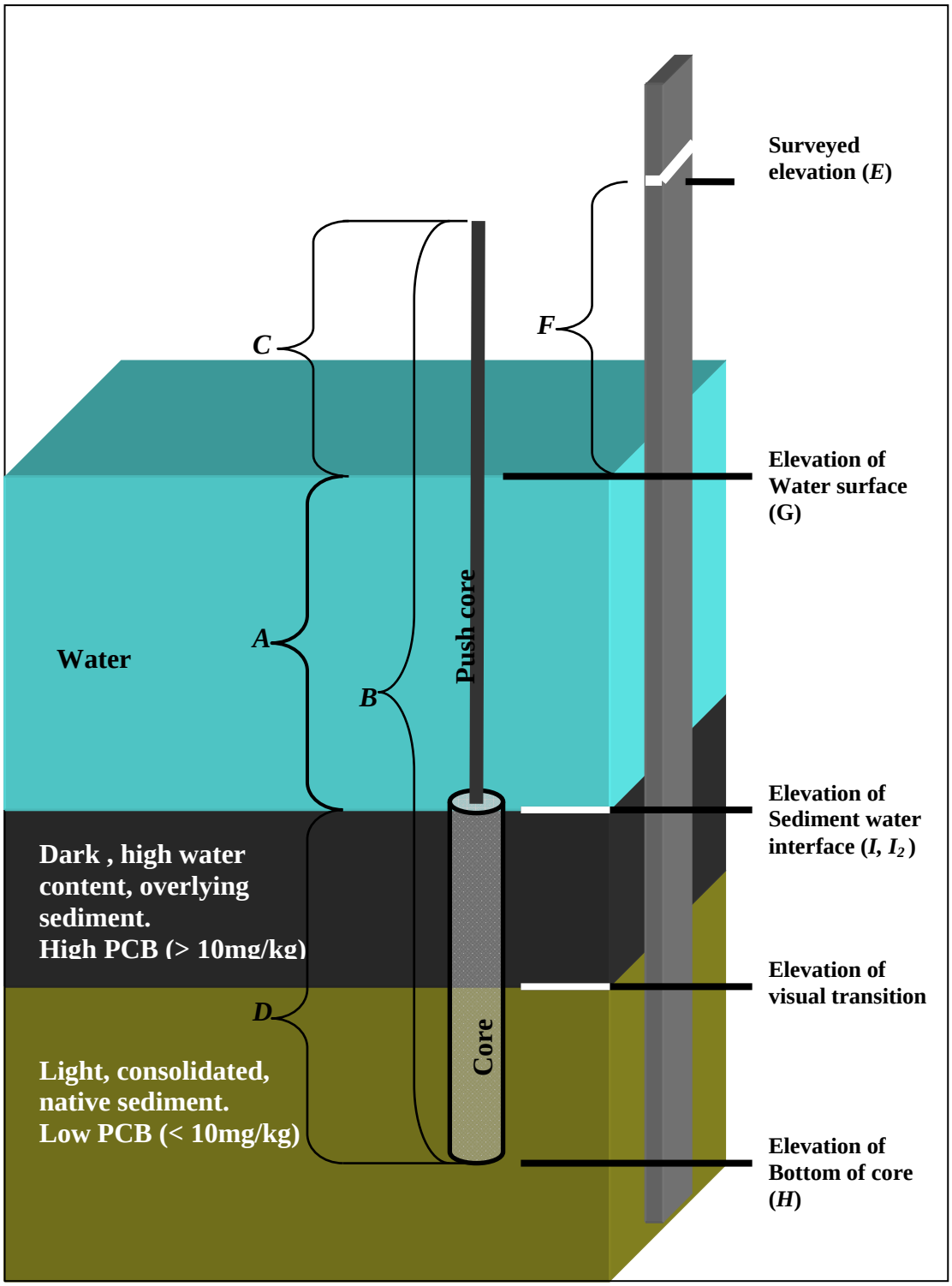


Figure 6. Graphical Depiction of Required Measurements.

Figure 7. VOC Sample Locations Near Aerovox.

2.1.3 Sediment Grab Collections (OU3)

Grab sampling was conducted at 17 sample locations at the OU3 Pilot Capping site to collect surficial sediments for PCB analysis (Figure 2). A 0.04m^2 modified Van Veen grab was used to collect sediment samples. Sample locations were based on stations previously visited by ENSR/AECom on August 25, 2005, shortly after the completion of capping activities (ENSR 2006). Bathymetric data collected just after the capping event revealed a series of ridges and valleys formed by placement of cap materials along an east-west axis. At the time of the 2005 bathymetry and sampling as much as a 4-foot difference in elevation existed amongst the topography at this site. The 2005 sediment sampling locations were positioned to achieve good spatial coverage over the site and to obtain data representative of the high and low spots existing in the sediment cap at that time. The 2006 sampling target coordinates were taken from the 2005 sampling event; however, it was expected that local currents and wave action may have resulted in a general smoothing of the topography over the past year. To achieve representative collections of both ridge and valley locations, the vessel transited towards a target station on a heading that was perpendicular to the orientation of the ridges. As the target coordinates were approached the Ridges and valleys were clearly discernable on the fathometer of the vessel. . Depending on the station, either a valley or a ridge was targeted. As the appropriate feature emerged on the fathometer, a 10 lbs lead weight attached to a line and surface float was thrown overboard to mark the feature. The vessel then transited back towards the location to confirm that the marker did, in fact, accurately mark the feature. If it did not, the method was repeated until successful (usually this was unnecessary). Once the feature was accurately marked, the sample was collected from that location and the actual sample coordinates were recorded. The top 3” from each sample was homogenized and subsampled. One field duplicate sample was collected.

2.2 Sample Processing

2.2.1 Photodocumentation

In general, it has been shown at the site that dark, high water content, organic silts in the upper portion of the sediment are related to elevated PCBs (FWENC 2001, FWENC 2002, ENSR 2005, ENSR 2006). These sediments fall under the “OL” description in the Unified Soil Classification System. At the site these contaminated OL sediments generally overlie lighter colored, more consolidated native clays which have lower PCBs concentrations. The use of this visual transition as a general indicator of the vertical location of contamination provides a rapid and inexpensive method to assess dredge targets and performance.

To document this visual transition, all cores collected during all phases of sediment sampling were documented with digital photographs. The file name of each photo taken was recorded on the Sediment Sampling Log forms. Digital photographs of the cores were uploaded to the New Bedford Harbor project database. These photographs are linked in the database to the location information and to the analytical results and can be viewed individually.

Each photograph contained the following elements in the frame:

- *The sediment core*. Photographing was done through the clear liner. Alternatively, for cores that were examined on deck with no collection of analytical subsamples, the cores were

extruded from the core liner on deck for photographing. Also, for cores that did receive additional subsample processing, the core liners were cut open longitudinally to expose the sediment for sampling and photographing.

- *Measurement reference*. A tape measure (or equivalent) marked in decimal feet ran parallel to length of the core.
- *Sample identifier*. A card, paper, whiteboard, or equivalent was placed next to the core with the following written information:
    - Sample ID
    - Station location
    - Date
    - Time
    - Indication of the top vs. bottom of the core

2.2.2 Sediment Sample Processing

During pre and post-dredge sampling activities the cores were kept intact in the liners and returned to the Sawyer St. field trailer for photodocumentation and visual characterization. No Progress cores were retained. Depending on the objectives and requirements of each survey type sediment samples received varying degrees of processing as described below.

Pre-Dredge Cores. The cores collected during the pre-dredge surveys were stored on ice in on the boat until transfer to the field trailer for processing. At the trailer each core was visually characterized and photodocumented. The pre-dredge sampling plan included a subset of cores to be selected for PCB analysis. However, based on determinations by the project team no samples were selected for analysis. Instead, each of the cores was frozen and held in the field freezer for possible analysis at a later date.

Progress Sample Cores. All cores collected during the progress dredging survey were processed immediately on the deck of the sampling barge. No analytical samples were required during this phase, so these cores received visual characterization only (with photodocumentation).

Post-Dredge Sample Cores. All samples collected during these phases were returned to the field trailer. Each core was photographed through the core liner as described above. Additionally, each core was subsampled for PCB, grain size, and total organic carbon (TOC) analysis. Based in the visual characterization a 6-inch segment above the visual interface was collected for analysis. A 6-inch segment below the visual interface was also sampled and archived for potential future analysis. The sediment was removed from the core using a disposable plastic spoon and homogenized in a disposable aluminum bowl. Processing equipment was used for one sample each then disposed of. This approach limited potential for cross-contamination and reduced the use of solvents. The sediment was then placed in the appropriate containers and preserved as described in the QAPP (Battelle 2006a)

A subset of the samples was selected for PCB homologue analysis (Table 1). Sediments for homologue analysis were taken from the same sample jar as the PCB congener samples. The field team assigned samples for homologue analysis based on horizontal location within the sampling site to achieve a representative distribution of samples across the area.

VOC Sample Cores. Sediment samples collected for VOC analysis were processed aboard the sampling barge. This process is described in the field collection methods of section 2.1.2.

Sediment Grab Collections (OU3). No sample processing was required for these samples beyond the field sampling methods described in section 2.1.3.

2.3 Analytical

See the QAPP Addendum *Environmental Monitoring, Sampling, and Analysis at the New Bedford Harbor Superfund Site, New Bedford, MA* for detailed analytical requirements (Battelle, 2006a). Table 1 summarizes the number of samples collected and analyzed for each phase of sampling. Results for each analysis are summarized in Section 3 and full analytical results are provided in Appendices B through D.

2.3.1 PCB Analysis

The analysis of 18 NOAA PCB congeners and PCB homologue groups in sediment/soil samples were conducted by Battelle Duxbury laboratory. Sediment/soil samples were extracted following modified EPA Method 3545. Samples were air-dried overnight to ensure percent solids in the samples were >50%. Approximately 5 g of air-dried sample was spiked with surrogates and extracted using Accelerated Solvent Extraction (ASE). The extracts for the first batch of sediments analyzed (batch 06-0320) were concentrated, processed through activated copper, alumina cleanup column, concentrated, and further purified by GPC/HPLC. The extracts for the remaining sediment batches (06-0378, 06-0381, 06-0385, and 06-0386) received activated copper treatment and disposable Florisil column clean-up after ASE extraction. Analytical results indicated that the sediment samples processed through different clean-up procedures did not show significant differences in surrogate recoveries and matrix interference, suggesting that all clean-up procedures are sufficient and effective. In response to expected high concentrations of PCBs in these samples, most of the sample extracts were pre-diluted prior to analysis to prevent detrimental contamination on the analytical instrument. However, most of the extracts still required further dilution in order to resolve concentrations for compounds that exceeded the calibration range during the initial analyses.

The post-Florisil extract was concentrated and fortified with internal standards (IS). All extracts were analyzed for 18 NOAA PCB congeners using gas chromatography/electron capture detector (GC/ECD), following modified EPA Method 8082. Sample data were quantified by the method of internal standards, using the spiked IS compounds. Positive congener results were confirmed by a secondary column confirmation analysis with the higher of the two results reported, unless analyst discretion required otherwise (e.g. the result without an interference signal was reported).

Extracts selected for PCB homologue analysis (approximately 7.5% of all the samples) were analyzed using gas chromatography/mass spectrometry (GC/MS), following modified EPA Method 1668A. Sample data were quantified by the method of internal standards, using the IS compounds.

Analytical quality control included analysis of a laboratory control sample (LCS), a matrix spike and matrix spike duplicate (MS/MSD), an analytical duplicate and a method blank.

2.3.2 VOC Analysis

Volatile Organic Compounds (VOCs) were analyzed by Alpha Woods Hole Labs in Raynham, MA. Samples were extracted following EPA Method 5035 and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS) following EPA Method 8260B. One trip blank was also submitted along with the field samples. Analytical quality control included analysis of a laboratory control sample, and laboratory control sample duplicate (LCS, LCSD), a matrix spike and matrix spike duplicate (MS/MSD), an analytical duplicate and a method blank.

2.3.3 Grain Size and Total Organic Carbon Analysis

Grain size analyses were performed according to ASTM Method D422 and reported as percent gravel, sand, silt and clay. Quality control for grain size analyses included analysis of an analytical duplicate. Total Organic Carbon (TOC) was analyzed by EPA Method 9060 and reported as percent dry weight. Quality control for TOC included analysis of an analytical duplicate. Both analyses were performed by Applied Marine Sciences of League City, Texas.

Table 1. Number of Sample Collected During Each Phase of Sampling.

Survey Type	Number of Push Cores	Number of Grabs	Number of PCB Congener Samples	Number of PCB Homologues Samples	GS Samples	VOC Samples	TOC Samples
Pre-Dredge	43	0	0	0	0	0	0
Progress Dredge	94	0	0	0	0	0	0
Post-Dredge	57	0	57	9	57	0	57
OU3	0	17	18	1	0	0	0
VOC Sampling	16	0	8	0	0	20	0

3.0 RESULTS

3.1 Field Activities

3.1.1 Dredging and Field Monitoring Summary

Dredging was conducted from mid-August to mid-October. Dredging was initiated in Area A, which is located in the southern sections of DMU-1 and DMU-102. The eastern portion of Area A (in DMU-102) is intertidal. As a result, dredging could not always be conducted during lower tides. To maintain efficiency a second dredge was set up on stand-by in Area B (located along the boundary of DMU-2, DMU-3, and DMU-4) or in Areas C and D of DMU-2 (Figure 3). When low water prevented dredging in Area A, dredge crews moved over to the second dredge. This approach meant that the dredging location was variable from day to day and even within days. Based on weekly bathymetric data and the progress sediment core samples discussed in this report dredgers frequently returned to previously dredged areas to perform dredge passes. Dredging in Areas A and B were primarily conducted in a North-South orientation, while dredging in Areas C and D were primarily conducted East-West.

Dredging was performed using a Mud Cat™ hydraulic dredge equipped with a horizontal auger (Figure 8). The dredge was propelled by winching itself along a traverse cable which spans the dredge area to opposite sides of the perimeter cable. As a pass is completed, support crews relocated the cable to position for the next pass. The auger on the dredge is eight-ft wide. Six foot wide dredge passes were conducted. This provided two feet of overlap into the previous pass to capture any residual sediment which may have sloughed into the new cut. Dredge material was pumped through a pipeline to a booster pump, then to the desanding facility at Sawyer Street. Following desanding, the remaining fine material was pumped via a separate pipeline to the dewatering, treatment, and handling facility in the Lower Harbor. In total, the 2006 dredging removed over 20,000 cubic yards of material.

Figure 8. Mud CatTM Hydraulic Dredge.

The hydraulic dredge can not handle large debris which is common in this portion of the harbor. Debris removal was accomplished by 'raking' the bottom with a barge-mounted excavator (Figure 9). Barges secured to the side of the debris removal platform stored the debris and were moved offsite as needed. Support boats were used throughout the operation to transport crews, maintain dredges, handle the pipeline, and move barges.

Figure 9. Debris Removal Excavator.

Dredging related sediment sampling included sediment core collections prior to, during and upon completion of dredging activities. In addition to these dredge related sampling events additional sediment sampling efforts were conducted in 2006. This included the collection of VOC and PCB samples near the Aerovox facility and the sediment grab samples at the OU3 Pilot Cap site outside the New Bedford hurricane barrier. Results from all of these sampling activities are provided below.

3.1.2 Pre-Dredge Sediment Sampling

Pre-dredge sediment sampling was conducted at forty three locations from June 20 – 22, 2006. Visual characterization of these samples was used to support the 2006 dredge plan. Results from the pre-dredge sampling effort consisted of vertical elevation data based on physical measurements and visual characterization of the sediment cores. No analysis was conducted on the pre-dredge samples. However, pre-dredge samples are been stored frozen and may be analyzed at a later date if warranted. Results from the pre-dredge coring event were supplied to Jacobs Engineering in May of 2006 to support the development of the dredge plan. Table 2 lists the relevant elevation data from the pre-dredge sampling event. The table provides a comparison of predicted versus measured elevations of: A) the visual transition between native and OL sediment layers, B) the sediment surface (i.e. sediment/water interface), and C) the amount of contaminated material to be dredged (calculated as the difference between A and B). Field collection and characterization logs for each core are provided in Appendix A. Digital photographs of the cores were uploaded to the New Bedford Harbor project database. These photographs are linked in the database to the location information and to the analytical results and can be viewed individually.

A total of 43 cores were collected during the pre-dredge event. Core locations spanned the horizontal extent of the planned dredge areas for 2006. In areas where the target dredge elevation was predicted to change rapidly over small horizontal distances, there was an increase in the sample density. In general, the target dredge elevation predictions were fairly consistent with visual assessments of the transition layer between native and contaminated material. However, in some cases there were fairly large departures for the predicted elevations (>1-ft). Figure 10 shows the target dredge elevation with an overlay showing the difference between this value and the actual elevation of the visual transition. These departures were generally in a positive direction. (i.e. target dredge elevation had over-predicted depth of the transition). In almost all cases this effect was seen where the target dredge elevation is predicted to be particularly deep. This is the case in the two former hot-spot areas that lie directly east and to the southeast of the Aerovox facility.

The physical characteristics of the pre-dredge cores were typical of sediments previously described at the Site. The cores were generally comprised of two distinct layers. The overlying layer is comprised of a very fine-grained loose black organic silt with very high moisture content (‘OL’ in the Unified Soil Classification System (USCS)). This layer ranged from about 0.4 to 3.1-ft of OL, with an average of 1.4-ft. Below this OL layer the sediment type was generally a moderately stiff olive-gray clay (‘OH’ in the USCS). Only 4 pre-dredge cores did not fit this general description (F36, Y08, U06, and G25). These cores were primarily sandy sediment with a mixed content of silt, clay, shells, and occasional wood chips. These cores were spread out over the sampling area, and did not appear to be characteristic of any particular area or feature but rather display the occasional patchiness of the sediment types. Figure 11 shows the thickness of the OL layer overlayed on the target dredge elevations. As expected increased sediment thickness relates to deeper target dredge elevation depths with thicker OL layers on the western side of the river. In these thicker OL layers

on the western side of the river, the upper sediments were often associated with oil sheens, oil smearing on the core barrel, and odors typical of hydrogen sulfide or hydrocarbons.

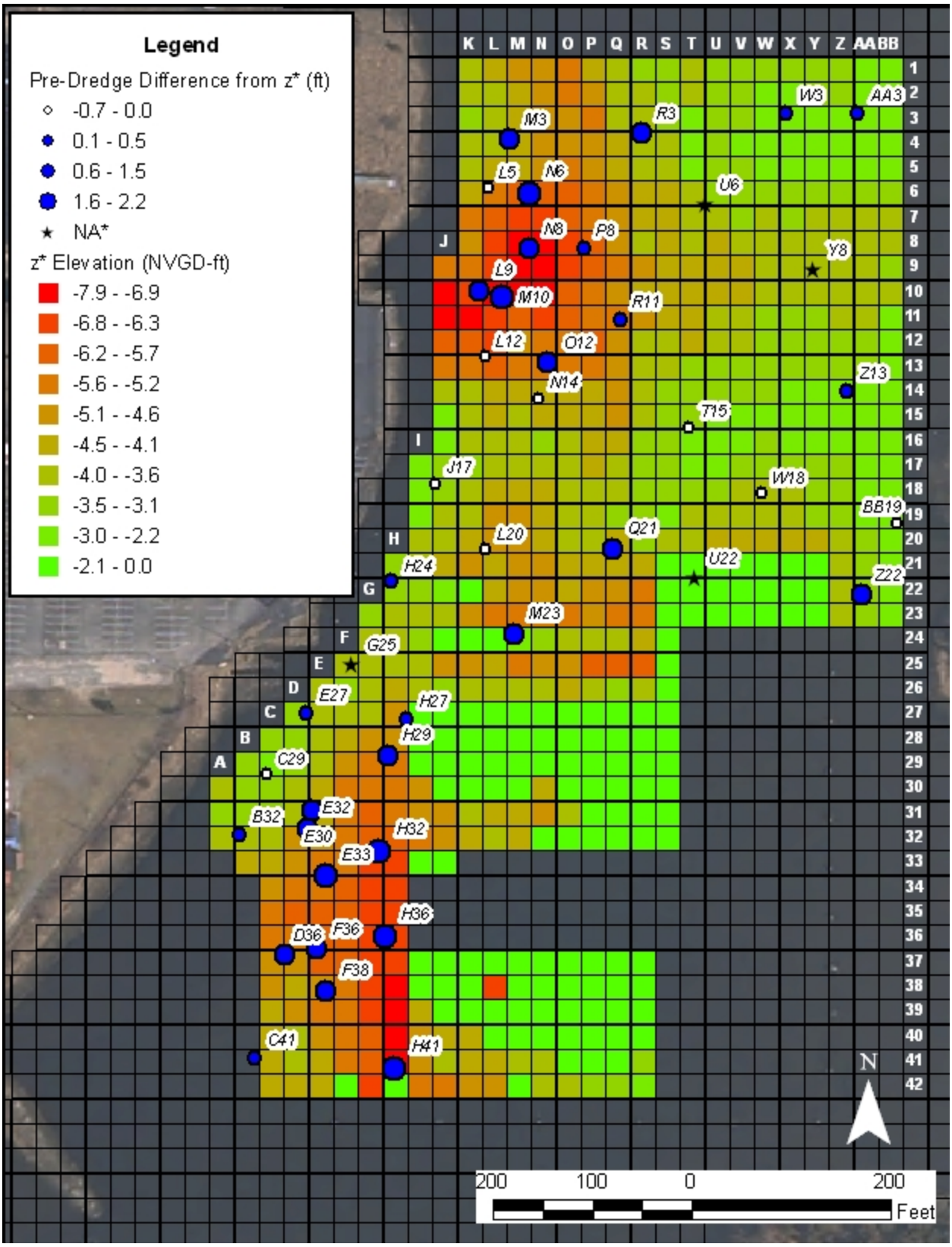
Table 2. Elevation Data From the Pre-Dredge Sampling Event.

	Predicted Elevations			Measured Elevations (ft)			Differences (Predicted vs Measured) (ft)		
Station (Z Block)	Target Depth Elevation (NGVD ft)	Predicted Elevation of Sediment surface (NGVD ft)	Predicted Sediment Thickness to be Dredged (ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (NGVD ft)	Actual vs. Predicted Sediment Surface Elevation (NGVD ft)	Actual vs. Predicted Sediment Thickness (ft)
C29	-3	-1.80	1.2	-3.30	-2.10	1.20	-0.30	-0.30	0.00
C41	-4.2	-2.70	1.5	-4.05	-2.55	1.50	0.15	0.15	0.00
D36	-5.5	-2.40	3.1	-4.30	-2.60	1.70	1.20	-0.20	-1.40
E27	-3.6	-1.80	1.8	-3.20	-2.00	1.20	0.40	-0.20	-0.60
E30	-4.2	-1.90	2.3	-3.55	-2.05	1.50	0.65	-0.15	-0.80
E32	-4.8	-2.10	2.7	-3.30	-2.20	1.10	1.50	-0.10	-1.60
E33	-5.4	-2.10	3.3	-3.70	-2.30	1.40	1.70	-0.20	-1.90
F36	-6	-2.60	3.4	-4.90	-3.40	1.50	1.10	-0.80	-1.90
F38	-5.6	-2.60	3	-4.15	-2.55	1.60	1.45	0.05	-1.40
G25	-4	-1.60	2.4	-1.90 [a]	-1.90	0.0 [a]	2.10 [a]	-0.30 [a]	-2.40 [a]
H24	-3.6	-1.90	1.7	-3.55	-1.65	1.90	0.05	0.25	0.20
H27	-4.7	-2.40	2.3	-4.20	-2.80	1.40	0.50	-0.40	-0.90
H29	-5.4	-2.20	3.2	-4.30	-2.80	1.50	1.10	-0.60	-1.70
H32	-6.1	-2.40	3.7	-4.05	-2.90	1.15	2.05	-0.50	-2.55
H36	-6.7	-3.00	3.7	-4.50	-3.00	1.50	2.20	0.00	-2.20
H41	-7.2	-3.90	3.3	-5.35	-3.10	2.25	1.85	0.80	-1.05
J17	-3.1	-2.10	1	-3.45	-1.65	1.80	-0.35	0.45	0.80
L5	-4.1	-1.7	2.4	-4.3	-2.8	1.5	-0.2	-1.1	-0.9
L9	-6.5	-1.60	4.9	-5.15	-2.45	2.70	1.35	-0.85	-2.20
L12	-6.3	-1.90	4.4	-6.50	-3.70	2.80	-0.20	-1.80	-1.60
L20	-4.8	-2.60	2.2	-5.50	-3.90	1.60	-0.70	-1.30	-0.60
M3	-4.2	-2.2	2	-3.35	-1.95	1.4	0.85	0.25	-0.6
M10	-6.9	-1.90	5	-5.30	-2.20	3.10	1.60	-0.30	-1.90
M23	-5.3	-2.80	2.5	-4.65	-3.35	1.30	0.65	-0.55	-1.20
N6	-5.7	-2.2	3.5	-4.9	-3	1.9	0.8	-0.8	-1.6
N8	-7.5	-2.2	5.3	-5.95	-4.85	1.1	1.55	-2.65	-4.2
N14	-4.5	-2.7	1.8	-4.9	-3.35	1.55	-0.4	-0.65	-0.25
O12	-5.4	-2.40	3	-3.90	-3.20	0.70	1.50	-0.80	-2.30
P8	-5.9	-2.7	3.2	-5.5	-4.5	1	0.4	-1.8	-2.2
Q21	-4.1	-2.80	1.3	-3.55	-2.30	1.25	0.55	0.50	-0.05
R3	-3.7	-1.8	1.9	-2.95	-2.05	0.9	0.75	-0.25	-1
R11	-5	-2.00	3	-4.50	-3.70	0.80	0.50	-1.70	-2.20

Table 2 (cont). Elevation Data From the Pre-Dredge Sampling Event.

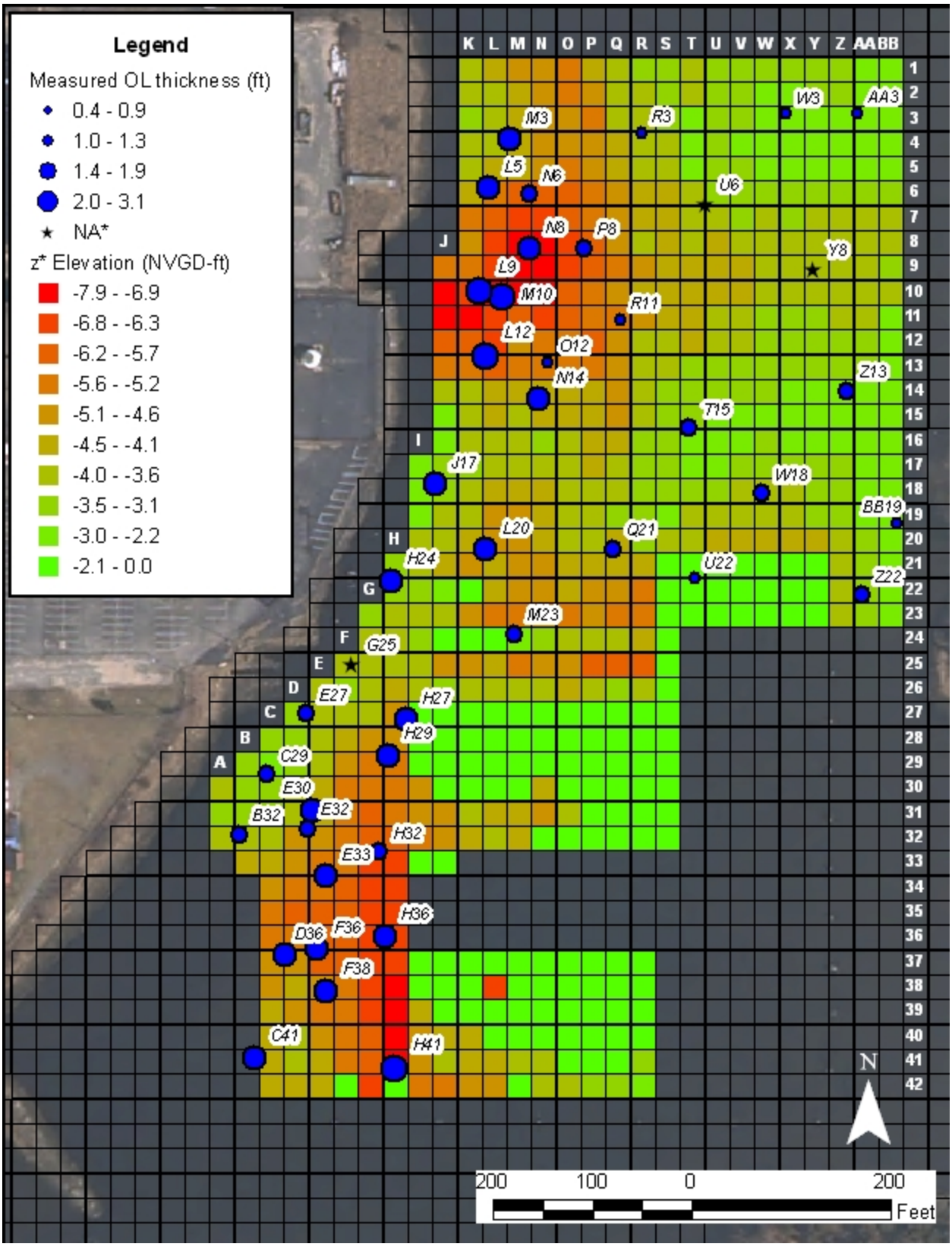
	Predicted Elevations			Measured Elevations (ft)			Differences (Predicted vs Measured) (ft)		
Station (Z Block)	Target Depth Elevation (NGVD ft)	Predicted Elevation of Sediment surface (NGVD ft)	Predicted Sediment Thickness to be Dredged (ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (NGVD ft)	Actual vs. Predicted Sediment Surface Elevation (NGVD ft)	Actual vs. Predicted Sediment Thickness (ft)
T15	-3.3	-2.00	1.3	-3.60	-2.50	1.10	-0.30	-0.50	-0.20
U6	-3.5	-1.70	1.8	-2.50 [a]	-2.50	0.0 [a]	1.00 [a]	-0.80 [a]	-1.80 [a]
U22	[b]	[b]	[b]	-5.95	-5.55	0.40	[b]	[b]	[b]
W3	-2.8	-1.7	1.1	-2.5	-1.7	0.8	0.3	0	-0.3
W18	-3.7	-2.00	1.7	-3.80	-2.70	1.10	-0.10	-0.70	-0.60
Y8	-3.8	-1.5	2.3	-1.90 [a]	-1.90	0.0 [a]	1.90 [a]	-0.40 [a]	-2.30 [a]
Z13	-3.3	-1.60	1.7	-3.00	-1.70	1.30	0.30	-0.10	-0.40
Z22	-4	-1.90	2.1	-2.80	-1.70	1.10	1.20	0.20	-1.00
AA3	-2.7	-1.5	1.2	-2.6	-1.7	0.9	0.1	-0.2	-0.3
B32	-3.6	-1.90	1.7	-3.10	-2.00	1.10	0.50	-0.10	-0.60
BB19	-2.6	-1.60	1	-2.75	-2.10	0.65	-0.15	-0.50	-0.35

[a] – No OL was present. No visual transition was present. Sediment-water interface is used as the measured depth of the transition with 0.0-ft of contaminated sediment remaining.
[b] – No target dredge elevation value was available for this z-block.



*Stations Y8, Z6, and G25 had no visual transition to compare to predicted clean elevation.
Data for the predicted clean elevation of station U22 was incomplete.

Figure 10. Pre-Dredge Transition Elevations Compared to Target Dredge Elevation.



*Stations Y8, Z6, and G25 had no visual transition to compare to predicted clean elevation.

Figure 11. Pre-Dredge Thickness of OL Layer.

3.1.3 Progress Dredge Sediment Sampling

Progress dredge samples were collected as needed during the 2006 dredge season to provide feedback regarding dredge progress and success. In general, this sampling was conducted during each week of the dredge season, although during the early stages or when progress was slow, this sampling was not required. This sampling was conducted to provide feedback to the dredge operators regarding the performance of dredge activities conducted during that week. Core samples received visual characterization and elevation measurements directly aboard the sampling barge. No samples were retained for chemical analysis. Following collection of each core, the sediment was shaken out of the core barrel at the station. Characterization and elevation measurements were targeted at identifying the elevation of the sediment-water interface and the visual transition from OL to OH. This information helped dredge operators confirm the amount and depth of remaining contaminated sediment. These elevation measurements were also useful in determining if areas were overdredged. Based on progress dredge core results and the weekly bathymetric survey, dredge operators returned to areas to remove any remaining material. Figure 5 shows the location of the progress samples and Table 3 list the field data collected during each of the progress dredge events. However, it should be noted that because additional passes were conducted following the progress coring, this data is not indicative of the sediment condition at the completion of the 2006 dredge season. Field collection and characterization logs for each core are provided in Appendix A. Digital photographs of the cores were uploaded to the New Bedford Harbor project database. These photographs are linked in the database to the location information and to the analytical results and can be viewed individually.

Table 3. Elevation Data From the Progress Dredge Sampling Events.

Station (Z Block)	Target Dredge Elevation (NGVD ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (ft)
D42	-4.40	-5.05	-4.90	0.15	-0.65
H27	-4.10	-4.15	-2.45	1.70	-0.05
H30	-4.10	-4.10	-2.50	1.60	0.00
H33	-4.70	-4.20	-2.40	1.80	0.50
H36	-4.60	-4.20	-2.70	1.50	0.40
I24	-3.40	-4.10	-2.60	1.50	-0.70
I24	-3.40	-2.90	-2.90	0.00	0.50
I26	-3.30	-4.05	-3.60	0.45	-0.75
I32	-3.50	-3.45	-2.30	1.15	0.05
I42	-5.20	-5.55	-5.10	0.45	-0.35
J24	-2.80	-4.85	-3.85	1.00	-2.05
J31	-3.20	-4.45	-3.60	0.85	-1.25
J40	-4.20	-5.60	-4.80	0.80	-1.40
J40	-4.20	-4.45	-3.30	1.15	-0.25
K6	-4.40	-5.10	-4.80	0.30	-0.70
K14	-4.10	-3.80	-3.55	0.25	0.30
K24	-3.30	-5.40	-5.20	0.20	-2.10

Table 3 (cont.). Elevation Data From the Progress Dredge Sampling Events.

Station (Z Block)	Target Dredge Elevation (NGVD ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (ft)
K42	-4.60	-6.50	-5.70	0.80	-1.90
L2	-4.00	-3.90	-3.60	0.30	0.10
L18	-4.70	-5.00	-4.40	0.60	-0.30
L38	-6.30	-6.50	-6.40	0.10	-0.20
L38	-6.30	-4.60	-4.40	0.20	1.70
M2	-4.30	-4.50	-4.00	0.50	-0.20
M10	-5.30	-5.10	-3.80	1.30	0.20
M10	-5.30	-6.00	-4.80	1.20	-0.70
M19	-5.30	-5.25	-4.05	1.20	0.05
M20	-5.40	-5.50	-5.00	0.50	-0.10
M41	-3.90	-4.55	-4.10	0.45	-0.65
N1	-5.10	-4.90	-4.80	0.10	0.20
N5	-4.20	-5.10	-4.30	0.80	-0.90
N8	-6.30	-6.70	-6.70	0.00	-0.40
N14	-4.40	-5.00	-3.70	1.30	-0.60
N16	-3.60	-5.30	-5.10	0.20	-1.70
N17	-4.10	-4.60	-4.00	0.60	-0.50
N24	-4.80	-4.80	-4.55	0.25	0.00
N24	-4.80	-5.30	-4.80	0.50	-0.50
N24	-4.80	-5.20	-4.20	1.00	-0.40
O5	-4.40	-4.80	-3.90	0.90	-0.40
O7	-5.30	-5.40	-3.50	1.90	-0.10
O11	-4.60	-4.90	-3.50	1.40	-0.30
O12	-4.20	-4.50	-4.00	0.50	-0.30
O20	-3.60	-3.70	-3.20	0.50	-0.10
O26	-4.30	-3.60	-2.90	0.70	0.70
P3	-5.40	-5.30	-4.10	1.20	0.10
P15	-4.50	-4.50	-3.60	0.90	0.00
P20	-3.50	-4.20	-3.50	0.70	-0.70
P24	-4.80	-5.70	-5.70	0.00	-0.90
P25	-5.80	-4.60	-4.00	0.60	1.20
P25	-5.80	-5.40	-4.50	0.90	0.40
Q4	-3.40	-3.70	-3.30	0.40	-0.30
Q11	-4.40	-3.65	-3.50	0.15	0.75
Q15	-5.00	-3.95	-3.60	0.35	1.05
Q19	-2.80	-3.65	-3.50	0.15	-0.85
Q42	-3.20	-4.00	-3.50	0.50	-0.80
R24	-4.60	-5.10	-5.00	0.10	-0.50
R26	-3.60	-4.90	-4.40	0.50	-1.30
R42	-3.00	-3.65	-3.50	0.15	-0.65

Table 3 (cont). Elevation Data From the Progress Dredge Sampling Events.

Station (Z Block)	Target Dredge Elevation (NGVD ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (ft)
S1	-3.30	-4.05	-4.05	0.00	-0.75
S3	-3.50	-3.70	-3.60	0.10	-0.20
S7	-3.00	-4.15	-4.05	0.10	-1.15
S7	-3.00	-4.70	-3.85	0.85	-1.70
S11	-3.40	-4.15	-2.35	1.80	-0.75
S13	-3.70	-4.00	-3.50	0.50	-0.30
S13	-3.70	-3.70	-3.20	0.50	0.00
S15	-3.30	-4.20	-3.80	0.40	-0.90
S19	-3.30	-5.65	-3.95	1.70	-2.35
S20	-4.20	-4.90	-4.20	0.70	-0.70
T6	-2.65	-2.05	-2.05	0.00	0.60
T8	-2.70	-4.15	-3.55	0.60	-1.45
T9	-2.90	-5.25	-4.40	0.85	-2.35
T11	-3.20	-3.80	-3.20	0.60	-0.60
T15	-3.60	-3.40	-2.40	1.00	0.20
T16	-3.30	-4.50	-4.10	0.40	-1.20
U19	-4.40	-3.65	-3.10	0.55	0.75
V7	-2.80	-4.75	-3.70	1.05	-1.95
V10	-2.80	-3.10	-2.60	0.50	-0.30
V16	-3.00	-5.10	-3.60	1.50	-2.10
V20	-5.00	-6.15	-5.45	0.70	-1.15
V22	-5.20	-5.90	-5.45	0.45	-0.70
W2	-2.80	-5.35	-4.95	0.40	-2.55
X8	-2.70	-3.80	-3.40	0.40	-1.10
X14	-2.90	-3.10	-3.00	0.10	-0.20
X14	-2.90	-3.40	-2.90	0.50	-0.50
X17	-3.20	-3.20	-2.90	0.30	0.00
X19	-3.50	-3.90	-3.80	0.10	-0.40
Z11	-3.50	-3.70	-3.20	0.50	-0.20
Z6	-3.90	-3.60	-3.50	0.10	0.30
Z7	-2.90	-2.60	-2.60	0.00	0.30
Z20	-3.70	-4.00	-3.60	0.40	-0.30
AA1	-2.50	-3.50	-3.10	0.40	-1.00
AA1	-2.50	-3.60	-3.25	0.35	-1.10
AA13	-3.20	-3.40	-3.15	0.25	-0.20
AA17	-2.80	-2.85	-2.50	0.35	-0.05
BB4	-2.50	-2.40	-2.40	0.00	0.10

3.1.4 Post-Dredge Sediment Sampling

The post-dredge sampling event was conducted from October 31 to November 7, 2006 following the completion of dredge activities. This effort was conducted to verify the final sediment condition at the end of the 2006 dredge season. The majority of stations represented a revisit of pre-dredge locations for direct comparison of dredging performance. Additionally, cores were collected from the 2004 and 2005 dredge areas. A total of 57 cores were collected during the post-dredge event. Of these samples 48 were revisits of the pre-dredge stations (including 5 duplicates) and 9 were in previously dredged areas. Table 4 lists the elevation data collected for the post-dredge core samples. The average thickness of remaining contaminated sediment in the post-dredge cores is 0.63-ft, with a range of 0.0 to 2.2-ft (based in visual characterization only).

The post-dredge core results were compared to the pre-dredge cores to assess the success of the 2006 dredge efforts. Table 5 compares the elevations of visual transition as well as the sediment-water interface for each core during both events. The final two columns of the table describe any changes in the elevation of the transition (i.e. if dredging occurred below the pre-dredge transition layer) and the depth of sediment dredged at each location during the 2006 season. This comparison ranged from -3.4-ft to 2.2-ft. Negative values in the comparison of transition elevations indicate that the post-dredge transition is deeper than pre-dredge. This generally suggests that dredging related activities occurred deeper than the transition identified pre-dredge. However, horizontal variability is also present, and pre/post-dredge cores may not be perfectly correlated. This is particularly pronounced in areas where the target dredge elevation changes rapidly over short horizontal distances. Positive values in the elevation comparison column of Table 5 are clearly an expression of this horizontal variability (i.e. transition elevation can not become shallower due to dredging), and the negative values may also contain some degree of this uncertainty. Overall it appears that dredging activity resulted in only a slight increase in the target dredge elevation (mean = -0.35-ft, median = -0.25-ft).

The final column in Table 5 indicates the depth of material removed during dredging at each of the distinct sample locations. As described above horizontal variability accounts for some error in these measurements. This is clearly expressed as negative values in this column, but also results in an unknown margin of uncertainty in the positive results. The negative values can not be considered true values (i.e. negative amounts of sediments dredged), however the values are presented as a reference for the degree of uncertainty in these measurements. The average depth of contaminated sediment dredged at the sample locations was 1.12-ft.

The physical characteristics of the post-dredge cores had the same general characteristics as seen in the pre-dredge events. There were typically two distinct layers (OL overlying OH). However, as expected there were noticeable differences. As indicated by the elevation results discussed above, the overall thickness of the OL was clearly decreased. The visual transition zone in many of the post-dredge cores was noticeably different from the pre-dredge cores. There were fewer cores with sharp demarcations between the OL and OH layers, and these blurred transitions tended to be thicker (>0.5-ft) than seen in pre-dredge cores.

Each post-dredge core was subsampled for PCB, grain size, and total organic carbon (TOC) analysis. Based on the visual characterization a 6-inch segment above the visual interface was collected for

analysis. Analytical results are discussed in subsequent sections. Field collection and characterization logs for each core are provided in Appendix A. Digital photographs of the cores were uploaded to the New Bedford Harbor project database. These photographs are linked in the database to the location information and to the analytical results and can be viewed individually.

Table 4. Elevation Data From the Post Dredge Sampling Event.

Station (Z Block)	Target Dredge Elevation (NGVD ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (ft)
B32 [b]	-2.90	-3.20	-2.20	1.00	-0.30
C29 [b]	-3.10	-3.10	-2.10	1.00	0.00
C41 [b]	-3.70	-3.90	-3.00	0.90	-0.20
C41-DUP [b]	-3.70	-4.00	-2.90	1.10	-0.30
D36 [b]	-4.50	-4.00	-3.60	0.40	0.50
E27 [b]	-3.20	-3.60	-3.50	0.10	-0.40
E30 [b]	-3.50	-4.90	-4.40	0.50	-1.40
E32 [b]	-3.50	-4.50	-4.50	0.00	-1.00
E33 [b]	-3.80	-3.80	-3.30	0.50	0.00
F36 [b]	-4.50	-4.60	-4.60	0.00	-0.10
F38 [b]	-4.50	-4.70	-4.40	0.30	-0.20
F53	[a]	-6.40	-4.50	1.90	[a]
F58	[a]	-6.30	-5.90	0.40	[a]
G25 [b]	-2.50	-3.00	-2.70	0.30	-0.50
H24	-3.40	-3.50	-1.30	2.20	-0.10
H27	-4.10	-4.30	-4.10	0.20	-0.20
H29	-4.40	-4.40	-4.20	0.20	0.00
H32	-4.00	-4.90	-4.00	0.90	-0.90
H36 [b]	-4.60	-4.70	-4.50	0.20	-0.10
H41	-5.20	-5.30	-5.10	0.20	-0.10
J17 [b]	-3.40	-3.80	-3.30	0.50	-0.40
K50	[a]	-5.90	-5.40	0.50	[a]
L5 [b]	-4.10	-5.10	-4.50	0.60	-1.00
L9 [b]	-5.00	-5.80	-5.50	0.30	-0.80
L12 [b]	-6.20	-5.90	-5.60	0.30	0.30
L20 [b]	-5.40	-5.40	-4.20	1.20	0.00
L20-DUP [b]	-5.40	-5.60	-4.30	1.30	-0.20
M3 [b]	-4.20	-4.80	-4.00	0.80	-0.60
M10 [b]	-5.30	-5.30	-4.60	0.70	0.00
M10-DUP [b]	-5.30	-5.30	-4.60	0.70	0.00
M23 [b]	-4.80	-4.00	-3.00	1.00	0.80
M23-DUP [b]	-4.80	-4.20	-3.10	1.10	0.60
N6 [b]	-4.80	-5.60	-5.30	0.30	-0.80
N8 [b]	-6.30	-6.30	-5.60	0.70	0.00
N8-DUP [b]	-6.30	-6.30	-5.60	0.70	0.00
N14	-4.40	-4.70	-4.40	0.30	-0.30

Table 4 (cont). Elevation Data From the Post Dredge Sampling Event.

Station (Z Block)	Target Dredge Elevation (NGVD ft)	Measured Elevation of Visual Transition (Native to OL) (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Actual vs. Predicted Transition Elevation (ft)
N28	[a]	-6.40	-5.10	1.30	[a]
N40	[a]	-5.10	-3.90	1.20	[a]
N58	[a]	-4.30	-3.20	1.10	[a]
O12	-4.20	-4.50	-4.20	0.30	-0.30
P8	-5.40	-5.60	-4.60	1.00	-0.20
Q21	-3.90	-3.80	-3.20	0.60	0.10
Q44	[a]	-3.90	-3.50	0.40	[a]
R3	-3.60	-3.70	-3.10	0.60	-0.10
R11	-4.20	-4.50	-3.50	1.00	-0.30
T15	-3.60	-3.90	-3.40	0.50	-0.30
U6	-3.50	-3.80	-2.80	1.00	-0.30
U22	-5.00	-5.90	-5.10	0.80	-0.90
V28	[a]	-6.50	-5.80	0.70	[a]
V39	[a]	-4.00	-3.80	0.20	[a]
W3	-2.70	-3.00	-3.00	0.00	-0.30
W18	-3.80	-4.30	-3.60	0.70	-0.50
Y8	-2.80	-3.60	-3.60	0.00	-0.80
Z13	-3.20	-3.30	-3.10	0.20	-0.10
Z22	-3.60	-3.70	-3.10	0.60	-0.10
AA3	-2.70	-2.90	-2.90	0.00	-0.20
BB19	-2.60	-2.70	-2.50	0.20	-0.10

[a] – No data
[b] – Target Dredge Elevation was not reached at this location.

Table 5. Comparison of Pre-dredge and Post-dredge Elevations.

	Pre-dredge			Post-dredge			Comparison	
Station (Z Block)	**Measured Elevation of Visual Transition (NGVD ft)**	**Measured Elevation of Sediment Surface (NGVD ft)**	**Measured Sediment Thickness Remaining (ft)**	**Measured Elevation of Visual Transition (NGVD ft)**	**Measured Elevation of Sediment Surface (NGVD ft)**	**Measured Sediment Thickness Remaining (ft)**	**Pre-Post Difference In Transition Elevation[a] (ft)**	**Amount of Sediment Dredged[b] (ft)**
B32 [c]	-3.10	-2.00	1.10	-3.20	-2.20	1.00	-0.10	0.20
C29 [c]	-3.30	-2.10	1.20	-3.10	-2.10	1.00	0.20	0.00
C41 [c]	-4.05	-2.55	1.50	-3.90	-3.00	0.90	0.15	0.45
D36 [c]	-4.30	-2.60	1.70	-4.00	-3.60	0.40	0.30	1.00
E27 [c]	-3.20	-2.00	1.20	-3.60	-3.50	0.10	-0.40	1.50
E30 [c]	-3.55	-2.05	1.50	-4.90	-4.40	0.50	-1.35	2.35
E32 [c]	-3.30	-2.20	1.10	-4.50	-4.50	0.00	-1.20	2.30
E33 [c]	-3.70	-2.30	1.40	-3.80	-3.30	0.50	-0.10	1.00

Table 5 (cont). Comparison of Pre-dredge and Post-dredge Elevations.

	Pre-dredge			Post-dredge			Comparison	
Station (Z Block)	Measured Elevation of Visual Transition (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Measured Elevation of Visual Transition (NGVD ft)	Measured Elevation of Sediment Surface (NGVD ft)	Measured Sediment Thickness Remaining (ft)	Pre-Post Difference In Transition Elevation[a] (ft)	Amount of Sediment Dredged[b] (ft)
F36 [c]	-4.90	-3.40	1.50	-4.60	-4.60	0.00	0.30	1.20
F38 [c]	-4.15	-2.55	1.60	-4.70	-4.40	0.30	-0.55	1.85
G25 [c]	-1.90	-1.90	0.00	-3.00	-2.70	0.30	-1.10	0.80
H24	-3.55	-1.65	1.90	-3.50	-1.30	2.20	0.05	-0.35
H27	-4.20	-2.80	1.40	-4.30	-4.10	0.20	-0.10	1.30
H29	-4.30	-2.80	1.50	-4.40	-4.20	0.20	-0.10	1.40
H32	-4.05	-2.90	1.15	-4.90	-4.00	0.90	-0.85	1.10
H36 [c]	-4.50	-3.00	1.50	-4.70	-4.50	0.20	-0.20	1.50
H41	-5.35	-3.10	2.25	-5.30	-5.10	0.20	0.05	2.00
J17 [c]	-3.45	-1.65	1.80	-3.80	-3.30	0.50	-0.35	1.65
L5 [c]	-4.30	-2.80	1.50	-5.10	-4.50	0.60	-0.80	1.70
L9 [c]	-5.15	-2.45	2.70	-5.80	-5.50	0.30	-0.65	3.05
L12 [c]	-6.50	-3.70	2.80	-5.90	-5.60	0.30	0.60	1.90
L20 [c]	-5.50	-3.90	1.60	-5.40	-4.20	1.20	0.10	0.30
M3 [c]	-3.35	-1.95	1.40	-4.80	-4.00	0.80	-1.45	2.05
M10 [c]	-5.30	-2.20	3.10	-5.30	-4.60	0.70	0.00	2.40
M23 [c]	-4.65	-3.35	1.30	-4.00	-3.00	1.00	0.65	-0.35
N6 [c]	-4.90	-3.00	1.90	-5.60	-5.30	0.30	0.35	0.45
N8 [c]	-5.95	-4.85	1.10	-6.30	-5.60	0.70	-1.40	2.60
N14	-4.90	-3.35	1.55	-4.70	-4.40	0.30	0.20	1.05
O12	-3.90	-3.20	0.70	-4.50	-4.20	0.30	-0.60	1.00
P8	-5.50	-4.50	1.00	-5.60	-4.60	1.00	-0.10	0.10
Q21	-3.55	-2.30	1.25	-3.80	-3.20	0.60	-0.25	0.90
R3	-2.95	-2.05	0.90	-3.70	-3.10	.60	-1.55	1.45
R11	-4.50	-3.70	0.80	-4.50	-3.50	1.00	0.80	-0.60
T15	-3.60	-2.50	1.10	-3.90	-3.40	0.50	-0.30	0.90
U6	-2.50	-2.50	0.00	-3.80	-2.8	1.00	-3.40	2.60
U22	-5.95	-5.55	0.40	-5.90	-5.10	0.80	2.15	-2.75
W3	-2.50	-1.70	0.80	-3.00	-3.00	0.00	-0.50	1.30
W18	-3.80	-2.70	1.10	-4.30	-3.60	0.70	-0.50	0.90
Y8	-1.90	-1.90	0.00	-3.60	-3.60	0.00	-1.70	1.70
Z13	-3.00	-1.70	1.30	-3.30	-3.10	0.20	-0.30	1.40
Z22	-2.80	-1.70	1.10	-3.70	-3.10	0.60	-0.90	1.40
AA3	-2.60	-1.70	0.90	-2.90	-2.90	0.00	-0.30	1.20
BB19	-2.75	-2.10	0.65	-2.70	-2.50	0.20	0.05	0.40

[a] – Negative vales indicate that the post-dredge transition elevation is deeper than pre-dredge. However, horizontal variability is also present, and pre/post-dredge cores may not be perfectly correlated, such as instances with a positive value in this column

[b] – As described in footnote 'a', horizontal variability accounts for some error in these measurements. This is clearly expressed as negative values in this column, but also results in an unknown margin of error in the positive results. Although negative values can not be considered 'real' dredge amounts, they are presented as an indication of the degree of potential variability in the measurements.

[c] – Target Dredge Elevation was not reached at this location.

3.1.5 VOC Sampling

Sampling for VOCs was conducted at 16 locations on the western side of the river, near the Aerovox facility. At each location samples were collected from at least two depths; 1) above the visual transition, and 2) below the visual transition. The headspace readings conducted by Jacobs Engineering were used to identify a subset of the samples to be submitted for analysis. Table 6 lists the samples selected for analysis. Sediments near the Aerovox shoreline were very oily and had strong odors which were not readily identifiable.

Table 6. VOC Samples Selected for Laboratory Analysis.

Station ID	Analytical Sample ID (Suffix 'T' = sample from top layer (Suffix 'B' = sample from Bottom layer)	Elevation of transition (OL/OH) (NGVD ft)	Elevation of Sample (NGVD ft)
2voc	S-06C-0002-T	-3.8	-3.4
4 voc	S-06C-0004-T	-4.5	-3.7
6 voc	S-06C-0006-B	-2.5	-2.8
6 voc	S-06C-0006-T	-2.5	-1.8
7 voc	S-06C-0007-B	-4.8	-5.0
7 voc	S-06C-0007-T	-4.8	-4.0
8 voc	S-06C-0008-B	-2.6	-3.2
8 voc	S-06C-0008-T	-2.6	-1.2
9 voc	S-06C-0009-B	-5.4	-5.8
9 voc	S-06C-0009-T	-5.4	-4.9
10 voc	S-06C-0010-B	-3.75	-4.0
10 voc	S-06C-0010-T	-3.75	-3.3
11 voc	S-06C-0011-B	-2.9	-3.2
11 voc	S-06C-0011-T	-2.9	-1.2
12 voc	S-06C-0012-B	-5.5	-5.8
12 voc	S-06C-0012-T	-5.5	-3.8
13 voc	S-06C-0013-T	-4.2	-3.7
13 voc	S-06C-0013-T	-4.2	-3.7
15 voc	S-06C-0015-B	-2.9	-3.2
15 voc	S-06C-0015-T	-2.9	-2.75

3.1.6 OU3 Sampling

Grab samples collected at the OU3 Pilot Cap Site were collected from either ridges or valleys as described in Section 2.2. Although no detailed bathymetry was conducted in 2006, based on water depths and field observations from fathometer readings it appears that the locations of these ridges and valleys has changed very little. Sediments from all samples were generally similar, although there was some variation between the ridge samples and the valley samples. All of the samples had a thin (<1cm) light brown surface coating representative of an active algal layer. All samples were mostly fine sand. Based on the visual characterizations, the valley locations tended to have somewhat higher silt content than the ridge locations although this was not universally true. Field collection and characterization logs for each core are provided in Appendix A.

3.2 Analytical

3.2.1 PCB Analyses

For chemical analysis, 57 post-dredging sediment samples (52 field samples + 5 field duplicate), 8 sediment samples from the Aerovox area, and 18 surface sediment samples (17 field samples + 1 field duplicate) from the OU3 Pilot Cap Site were analyzed for PCB congeners. Out of these 83 samples for congener analysis, 11 samples were selected by the Battelle field team to be analyzed for PCB homologue groups. Sample analyses were performed by Battelle Duxbury laboratory. Detailed analytical results, including concentrations for individual 18 congeners and total PCBs (calculated as sum of 18 congeners times the site specific factor of 2.6) for all the samples, as well as concentrations for individual homologue groups and total PCBs (calculated as sum of homologue groups) for the selected samples, are presented in Appendix B.

Note that for congener-based results, the final total PCB concentrations presented represent the sum of the18 NOAA congeners times the site-specific factor of 2.6. For the homolog-based results, the final total PCB concentration represents the sum of the 10 homolog group concentrations. For both congener and homologue data, non-detect results were treated as 0 mg/kg, and not included in the calculation of total PCBs.

3.2.1.1 PCB Congeners

2006 Post-Dredging Sediments

Table 7 summarizes the total PCB concentrations in the post-dredging sediment samples analyzed for PCB congeners. Total PCBs in these samples ranged from 0.69 mg/kg to 4,400 mg/kg. Sampling locations and total PCB results (based on congener analysis) for the samples are also presented in Figure 12.

Table 7. Total PCB Concentrations in 2006 Post-Dredging Sediment Samples.

Station ID	Sample ID	PCB Conc. [a] (mg/kg)	Sample Depth Below Mudline (ft)
B32 [b]	S-06D-0B32-00-05	720	0.0-0.5
C29 [b]	S-06D-0C29-05-10	440	0.5-1.0
C41 [b]	S-06D-0C41-04-09	200	0.4-0.9
C41-DUP [b]	S-06D-0C41-04-09-DUP	200	0.4-0.9
D36 [b]	S-06D-0D36-00-05	980	0.0-0.5
E27 [b]	S-06D-0E27-00-05	250	0.0-0.5
E30 [b]	S-06D-0E30-00-05	300	0.0-0.5
E32 [b]	S-06D-0E32-00-05	310	0.0-0.5
E33 [b]	S-06D-0E33-00-05	1800	0.0-0.5
F36 [b]	S-06D-0F36-00-05	780	0.0-0.5
F38 [b]	S-06D-0F38-00-05	4400	0.0-0.5
F53	S-06D-0F53-14-19	0.87	1.4-1.9
F58	S-06D-0F58-00-05	420	0.0-0.5
G25 [b]	S-06D-0G25-00-05	630	0.0-0.5
H24	S-06D-0H24-22-27	6.1	2.2-2.7

Table 7 (cont). Total PCB Concentrations in 2006 Post-Dredging Sediment Samples.

Station ID	Sample ID	PCB Conc. [a] (mg/kg)	Sample Depth Below Mudline (ft)
H27	S-06D-0H27-00-05	260	0.0-0.5
H29	S-06D-0H29-00-05	100	0.0-0.5
H32	S-06D-0H32-00-05	90	0.0-0.5
H36 [b]	S-06D-0H36-00-05	2200	0.0-0.5
H41	S-06D-0H41-00-05	14	0.0-0.5
J17 b	S-06D-0J17-00-05	1800	0.0-0.5
K50	S-06D-0K50-00-05	0.81	0.0-0.5
L5 [b]	S-06D-0L05-00-06	6.3	0.0-0.6
L9 [b]	S-06D-0L09-00-03	260	0.0-0.3
L12 [b]	S-06D-0L12-00-03	85	0.0-0.3
L20 [b]	S-06D-0L20-07-12	850	0.7-1.2
L20-DUP [b]	S-06D-0L20-07-12-DUP	1100	0.7-1.2
M3 [b]	S-06D-0M03-03-08	93	0.3-0.8
M10 [b]	S-06D-0M10-02-07	1900	0.2-0.7
M10-DUP	S-06D-0M10-02-07-DUP	2000	0.2-0.7
M23 [b]	S-06D-0M23-05-10	260	0.5-1.0
M23-DUP [b]	S-06D-0M23-05-10-DUP	310	0.5-1.0
N6 [b]	S-06D-0N06-00-05	130	0.0-0.5
N8 [b]	S-06D-0N08-00-17	860	0.0-1.7
N8-DUP [b]	S-06D-0N08-00-17-DUP	2300	0.0-1.7
N14	S-06D-0N14-00-05	280	0.0-0.5
N28	S-06D-0N28-08-13	320	0.8-1.3
N40	S-06D-0N40-07-12	850	0.7-1.2
N58	S-06D-0N58-00-05	27	0.0-0.5
O12	S-06D-0O12-00-05	1100	0.0-0.5
P8	S-06D-0P08-05-10	99	0.5-1.0
Q21	S-06D-0Q21-00-06	150	0.0-0.6
Q44	S-06D-0Q44-00-05	580	0.0-0.5
R3	S-06D-0R03-00-13	190	0.0-1.3
R11	S-06D-0R11-10-15	0.69	1.0-1.5
T15	S-06D-0T15-00-05	160	0.0-0.5
U6	S-06D-0U06-05-14	110	0.5-1.4
U22	S-06D-0U22-02-07	610	0.2-0.7
V28	S-06D-0V28-02-07	330	0.2-0.7
V39	S-06D-0V39-00-05	68	0.0-0.5
W3	S-06D-0W03-00-05	86	0.0-0.5
W18	S-06D-0W18-00-06	90	0.0-0.6
Y8	S-06D-0Y08-00-06	94	0.0-0.6
Z13	S-06D-0Z13-00-02	220	0.0-0.2
Z22	S-06D-0Z22-00-06	4.9	0.0-0.6
AA3	S-06D-AA03-00-05	21	0.0-0.5
BB19	S-06D-BB19-00-06	64	0.0-0.6

[a] – Sum of 18 congeners x 2.6
[b] – Target Dredge Elevation was not reached at this location.

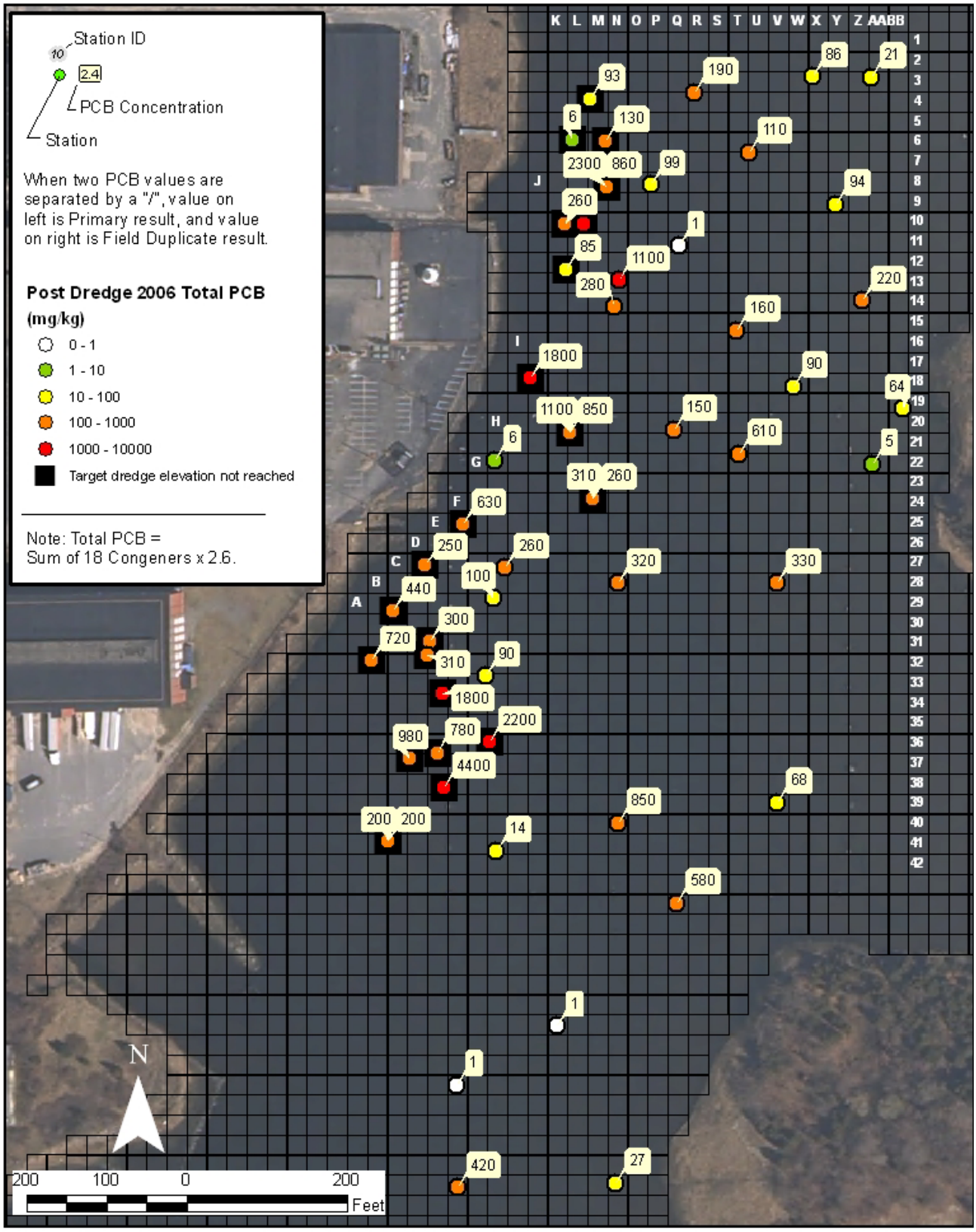


Figure 12. Post-Dredge PCB Congener Results.

Aerovox Sediments

Table 8 summarizes the total PCB concentrations in Aerovox sediment samples analyzed for PCB congeners. Total PCBs in these samples ranged from 0.7 mg/kg to 190,000 mg/kg. Higher concentrations were observed in samples collected above the visual transition with the highest concentrations found in the sample collected just offshore of the northeast corner of the Aerovox property. Sampling locations and total PCB results (based on congener analysis) for the samples are also presented in Figure 13. The VOC results of this sampling effort are discussed in Section 3.2.3.

Table 8. Total PCB Concentrations in Aerovox Sediment Samples.

Station ID	Sample ID[a]	PCB Conc.[b] (mg/kg)
8100206	S-06C-0008-B	5.8
8100206	S-06C-0008-T	1100
9100206	S-06C-0009-B	0.7
9100206	S-06C-0009-T	1100
11100206	S-06C-0011-B	140
11100206	S-06C-0011-T	18000
05A101306	S-06C-0005A-T	190000
9101306	S-06C-0009-D	140

[a] – T and B indicate "Top" and "Bottom"6-inches relative to the visual transition; D indicates sample collected deeper than 6-inches below visual transition.
[b] – Sum of 18 congeners x 2.6

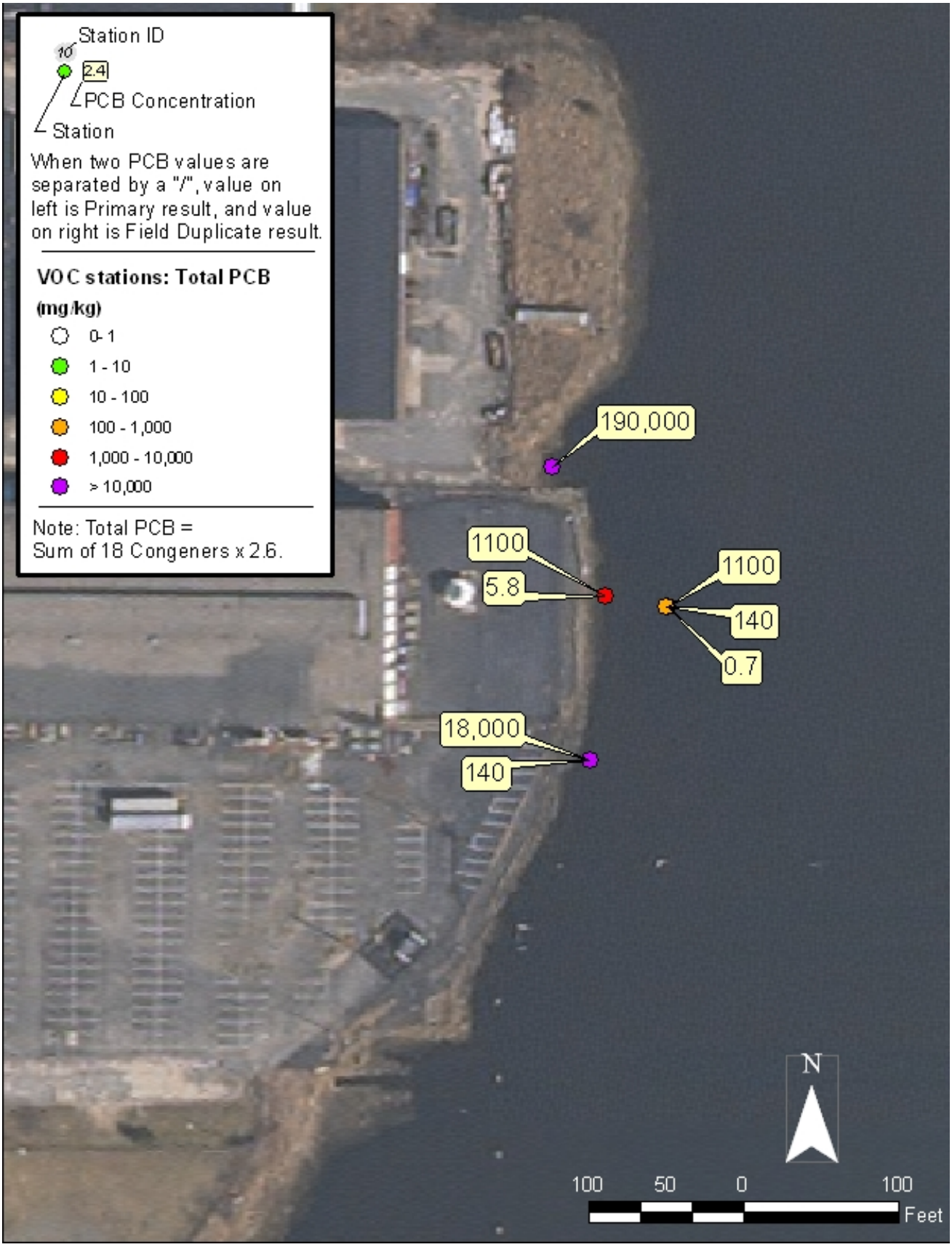


Figure 13. PCB Congener Results Associated with VOC sample Locations.

OU3 Pilot Cap Site Sediments

Table 9 summarizes the total PCB concentrations in the surface sediment samples collected from the OU3 Pilot Cap Site outside the hurricane barrier. Total PCBs in these samples ranged from 0.041 mg/kg to 17 mg/kg. Sampling locations and total PCB results (based on congener analysis) for the samples are also presented in Figure 14.

Table 9. Total PCB Concentrations in OU3 Pilot Cap Site Sediment Samples.

Station ID	Sample ID	PCB Conc.[a] (mg/kg)
OU1	S-06B-OU01-00-03	1.1
OU2	S-06B-OU02-00-03	0.46
OU3	S-06B-OU03-00-03	0.41
OU4	S-06B-OU04-00-03	1.6
OU5	S-06B-OU05-00-03	1.6
OU6	S-06B-OU06-00-03	0.99
OU6	S-06B-OU06-00-03 Dup	0.98
OU7	S-06B-OU07-00-03	2.3
OU8	S-06B-OU08-00-03	0.8
OU9	S-06B-OU09-00-03	1.3
OU10	S-06B-OU10-00-03	1.6
OU11	S-06B-OU11-00-03	3.9
OU12	S-06B-OU12-00-03	4.6
OU13	S-06B-OU13-00-03	17
OU14	S-06B-OU14-00-03	4.3
OU15	S-06B-OU15-00-03	4.5
OU16	S-06B-OU16-00-03	2.2
OU17	S-06B-OU17-00-03	0.041

[a] – Sum of 18 congeners x 2.6

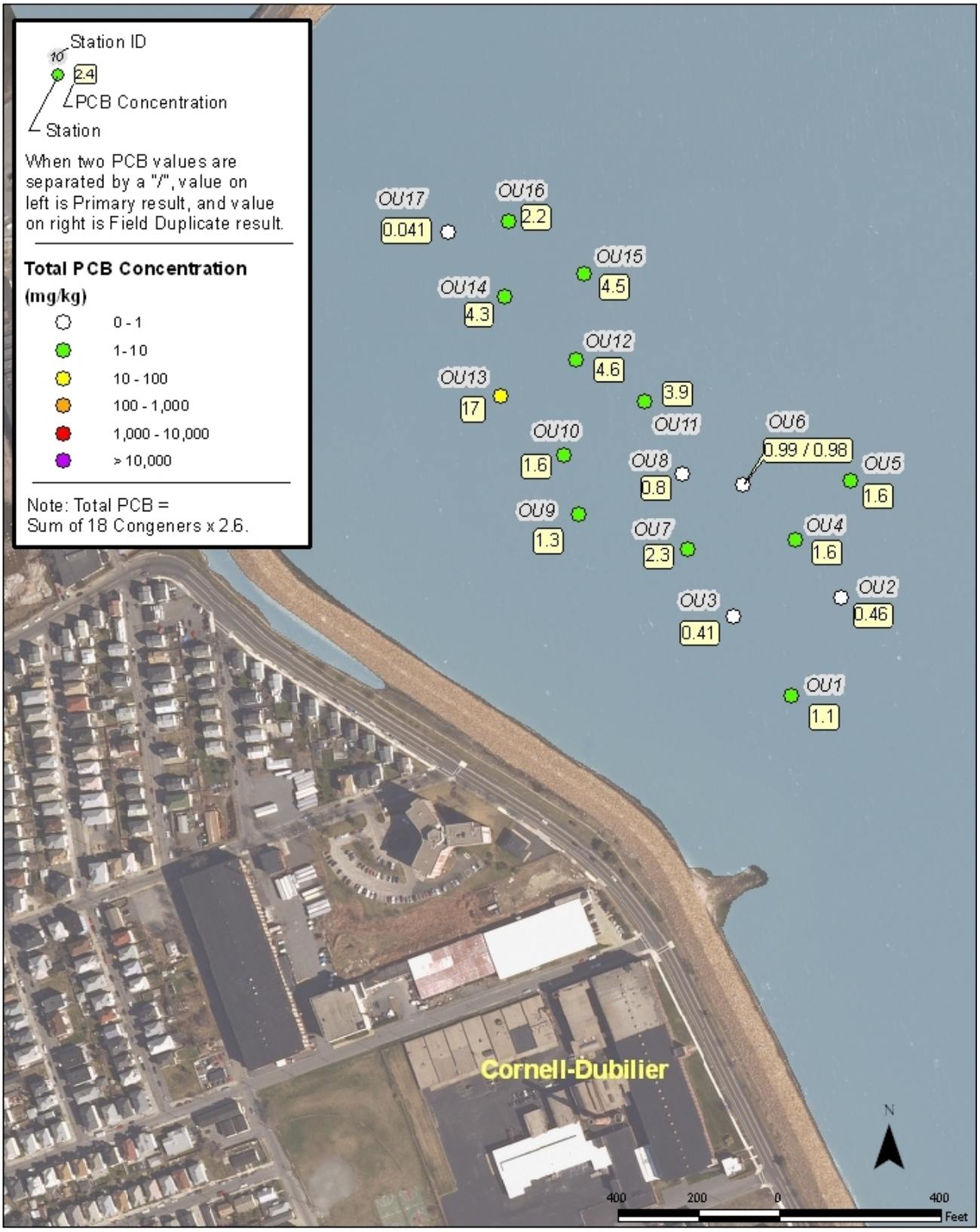


Figure 14. PCB Congener Results at OU3 Locations.

3.2.1.2 Homologues

Out of the 83 samples collected from the post-dredging sampling event, Aerovox area, and OU3 Pilot Cap Site for PCB congener analysis, 11 samples were selected for PCB homologue group analysis. Total PCB concentrations calculated by homologue results and the corresponding total PCB concentrations calculated by congener results for the 11 samples are presented in Table 10. Also included in Table 10 are the congener and homologue results for the 4 North of Wood Street samples that were discussed separately in the North of Wood Street Sediment Report (Battelle 2007). As indicated in Table 10, total PCB concentrations calculated by congener results are in general comparable to those calculated by homologue results. However, for this data set of 15 samples, with the exception of the one outer harbor sample, total PCBs calculated by congener results were all somewhat lower than those calculated by homologue results, with the difference increasing with decreasing total PCB concentration in the sample.

Table 10. Total PCB Concentrations Calculated by Congener and Homologue Results.

Sampling Area	Sample ID	Total PCBs Calculated by Congener Results[a] (mg/kg)	Total PCBs Calculated by Homologue Results[b] (mg/kg)
Post-Dredging	S-06D-0W18-00-06	90	110
Post-Dredging	S-06D-0L20-07-12	850	970
Post-Dredging	S-06D-0L20-07-12-DUP	1100	1200
Post-Dredging	S-06D-0Z22-00-06	4.9	7.1
Post-Dredging	S-06D-0C41-04-09	200	230
Post-Dredging	S-06D-0C41-04-09-DUP	200	210
Post-Dredging	S-06D-0E33-00-05	1800	2100
Post-Dredging	S-06D-0H24-22-27	6.1	9.7
Post-Dredging	S-06D-0E30-00-05	300	360
OU3	S-06B-OU16-00-03	2.2	1.7
Aerovox	S-06C-0009-B	0.7	1.7
North of Wood St	S-06D-C006028-00-05	18	19
North of Wood St	S-06D-C006028-00-05-DUP	9.4	11
North of Wood St	S-06D-06NWS34-00-05	3.3	3.9
North of Wood St	S-06D-06NWS38-00-05	0.15	0.29

[a] – Sum of 18 congeners x 2.6, non-detect = 0 mg/kg.
[b] – Sum of 10 homologue groups, non-detect = 0 mg/kg

3.2.2 Congener QA/QC Results

One procedural blank, laboratory control sample (LCS), matrix spike (MS), and matrix spike duplicate (MSD) were extracted and analyzed as QC samples for every batch of 20 field samples. In addition, extraction efficiency was measured by recoveries of surrogate compounds that were spiked into the samples prior to extraction. Overall, the quality of the data was found to be acceptable. In the MS and MSD samples, due to the highly-contaminated nature of the background samples, some of the target compounds were not spiked at a concentration > 5x background. Therefore the MS/MSD result associated with these compounds could not be used for data evaluation. In some samples, surrogate compounds were recovered slightly above the QC criteria of 40% - 120%, probably due to interference from the highly-contaminated native samples. Additionally, surrogate

compounds were sometimes "diluted-out" due to the dilutions performed on the sample extracts. In general, the impact of these minor QC exceedences on the overall data quality is minimal.

3.2.3 VOC Analyses

VOCs were analyzed in 20 sediment samples collected adjacent to the Aerovox site (Figure 6). Samples were collected from each core corresponding to the 6 inches of sediment on top (T) of or below (B) the visual transition from native to overlying material. A summary of the results for the complete list of VOCs list analyzed is presented in Appendix C. VOC compounds detected were limited to tetrachloroethene, trichloroethene (TCE) and related degradation products at most stations along with isolated detection of some petroleum related VOCs such as ethylbenzene and toluene. (stations 7, 8, 9 10 and 12) (Table 11). Figure 15 shows the concentrations of the three most prevalent VOCs at each sampling location for both top and bottom samples.

The highest VOC concentrations were found in sediments collected above the visual transition at station 08, just offshore of the Aerovox building. The primary VOC found in sediments at station 08 was trichloroethene (TCE), at a concentration of 23,300 mg/kg (ppm). Dichloroethenes (DCE) and vinylchloride (VC) as well as ethylbenzene and chlorobenzenes were also found in this sample. Relatively low concentrations of VOCs were detected in sediments collected from below the visual transition at Station 08. Lower concentrations of TCE were detected in sediments above the visual transition at stations 06 and 11, located to the north and south of station 08 and at station 12 in both top and bottom samples. VOCs were detected at lower and variable concentrations at all of the remaining stations with the exception of Station 02, the northernmost station sampled.

Overall, the quality of the data was found to be acceptable. Some quality control (QC) exceedances were noted including several samples with high surrogate recoveries, possibly attributed to matrix interference and the fact that these samples had greater than 50% moisture content. Analytical duplicate results showed several compounds exceeding relative percent difference (RPD) limits, most likely due to the non-homogeneity of the sample. Matrix spike results indicated good recoveries with the exception of 2 compounds, 1,1-dichloroethene and benzene, which were recovered under the lower limit of 70%. Most samples required dilution prior to analysis. Values reported were taken from the sample analyzed within the calibration range for that compound. A trip blank was also analyzed. Acetone, a common laboratory contaminant, was the only VOC detected in the trip blank. Acetone was also detected at similar levels in the procedural blank analyzed with that sample.

Table 11. VOC Detections in Sediments (mg/kg dry weight).

Sample ID	S-06C-0002-T	S-06C-0004-T	S-06C-0006-B	S-06C-0006-T	S-06C-0007-B	S-06C-0007-T	S-06C-0008-B	S-06C-0008-T	S-06C-0009-B	S-06C-0009-T	S-06C-0010-B	S-06C-0010-T	S-06C-0011-B	S-06C-0011-T	S-06C-0012-B	S-06C-0012-T	S-06C-0013-B	S-06C-0013-T	S-06C-0015-B	S-06C-0015-T
Station	**02T**	**04T**	**06B**	**06T**	**07B**	**07T**	**08B**	**08T**	**09B**	**09T**	**10B**	**10T**	**11B**	**11T**	**12B**	**12T**	**13B**	**13T**	**15B**	**15T**
Cis-1,2-Dichloroethene	ND	0.828	80.4	614	419	8.25	0.546	854	222	102	62	14.2	2350	3.68	415	2920	0.544	11.6	251	40.9
Ethylbenzene	ND	ND	ND	ND	0.348	ND	ND	33.4	1.88	ND	ND	0.516	ND	ND	ND	32.3	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.03	ND	ND	ND	ND
P/M Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	239	0.884	ND	ND	ND	ND	3.1	ND	60.6	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	0.747	ND	ND	17.8	0.612	ND	ND	ND	ND	ND	ND	8.69	ND	ND	ND	ND
Trans-1,2-Dichloroethene	ND	ND	0.901	3.28	1.31	ND	ND	ND	1.47	ND	0.373	0.678	20.6	ND	1.5	8.05	ND	ND	3.06	0.685
Trichloroethene	ND	0.309	4.73	42.9	ND	0.28	3.6	23300	510	ND	0.247	ND	ND	42.3	289	1830	0.202	1.93	0	1.59
Vinyl Chloride	ND	ND	5.95	20	32.6	1.84	ND	22.2	1.23	23.8	8.14	31.5	318	3.64	39.6	192	ND	3.94	60	19.6
1,1-Dichloroethene	ND	ND	ND	ND	0.293	ND	ND	ND	ND	ND	ND	ND	4.77	ND	4.81	2.7	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	0.267	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.26	0	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	11.2	0.205	ND	60.2	ND	ND	0.369	ND	ND	ND	ND	14.3	ND	0.473	ND	ND
1,2,4-Trichlorobenezene	ND	ND	0.838	4.55	16.7	0.781	ND	469	ND	ND	1.5	0.245	ND	5.19	ND	105	0.415	3.84	ND	0.452
1,3-Dichlorobenzene	ND	ND	0.654	ND	ND	ND	ND	ND	ND	ND	ND	1.57	ND	4.73	ND	4.78	ND	0.552	ND	0.784
1,4-Dichlorobenzene	ND	0.238	0.709	ND	0.737	0.301	ND	ND	ND	ND	ND	6.57	ND	17.6	ND	9.29	ND	1.33	ND	3.67

ND indicates Not Detected

Figure 15. VOC Results Near the Aerovox site.

3.2.4 Grain Size and Total Organic Carbon Analyses

Grain Size and TOC results are provided in Table 12. TOC values ranged from <1% at station BB19 to 18.3% at Station B32 with an average TOC of 5.6%. Grain size results indicated that on the average, samples were approximately 28% clay, 48% silt. Sand and gravel content were more variable though the majority of the samples contained less than 20% sand and only 5 stations contained more than 15% gravel and those stations were limited to the perimeters of dredge area A.

Field duplicates were collected at four locations (indicated by 'REP'). Relative percent differences were calculated for grain size and TOC results. RPDs for TOC ranged from 7 to 28%. RPDs for the various grain size fractions ranged from 3 to 38% for the clay through sand fractions. RPD for gravel measurements were considerably higher ranging from 0 to 200%. In general, field duplicates indicate that representative samples are being collected from a given location.

Table 12. Summary of Grain Size and TOC Results.

Station ID	Collected	QC Code	Sample ID	Clay % dry wt.	Silt % dry wt.	Sand % dry wt.	Gravel % dry wt.	TOC % dry wt.
B32	11/7/2006	SA	S-06D-0B32-00-05	31.9	60.5	7.6	0.0	18.3
C29	11/3/2006	SA	S-06D-0C29-05-10	32.8	56.3	8.7	2.2	7.8
C41	11/3/2006	SA	S-06D-0C41-04-09	34.6	46.4	12.0	7.0	3.6
C41-DUP	11/3/2006	REP [a]	S-06D-0C41-04-09-DUP	36.5	50.2	13.3	0.0	3.1
D36	11/7/2006	SA	S-06D-0D36-00-05	32.2	52.3	11.6	4.0	4.2
E27	11/3/2006	SA	S-06D-0E27-00-05	29.4	50.3	14.2	6.1	7.1
E30	11/7/2006	SA	S-06D-0E30-00-05	34.0	57.0	9.0	0.0	4.5
E32	11/7/2006	SA	S-06D-0E32-00-05	30.8	59.9	8.6	0.8	4.8
E33	11/3/2006	SA	S-06D-0E33-00-05	25.1	63.3	11.9	0.5	11.4
F36	11/3/2006	SA	S-06D-0F36-00-05	32.5	58.2	7.0	2.2	4.0
F38	11/3/2006	DUP [b]	S-06D-0F38-00-05	26.0	58.3	15.6	3.1	7.0
F53	11/8/2006	SA	S-06D-0F53-14-19	25.6	41.2	26.4	6.7	9.2
F58	11/8/2006	SA	S-06D-0F58-00-05	37.7	54.6	5.2	2.5	6.9
G25	11/3/2006	SA	S-06D-0G25-00-05	10.3	11.1	66.4	12.2	3.8
H24	11/3/2006	SA	S-06D-0H24-22-27	40.0	55.4	4.6	0.0	11.9
H27	11/3/2006	SA	S-06D-0H27-00-05	33.3	56.4	10.3	0.0	4.0
H29	11/3/2006	SA	S-06D-0H29-00-05	36.9	58.6	4.5	0.0	3.4
H32	11/3/2006	SA	S-06D-0H32-00-05	39.4	54.3	6.3	0.0	3.2
H36	11/3/2006	SA	S-06D-0H36-00-05	23.8	52.5	20.3	3.4	7.9
H41	11/3/2006	SA	S-06D-0H41-00-05	40.9	55.6	2.7	0.8	6.4
J17	11/2/2006	SA	S-06D-0J17-00-05	19.6	36.6	42.0	1.8	4.1
K50	11/8/2006	SA	S-06D-0K50-00-05	15.6	32.7	48.6	3.1	1.7
L5	10/31/2006	SA	S-06D-0L05-00-06	31.4	63.4	5.2	0.0	3.2
L9	11/1/2006	SA	S-06D-0L09-00-03	19.9	45.8	4.5	29.9	3.7
L12	11/1/2006	SA	S-06D-0L12-00-03	27.1	44.2	25.2	3.5	9.9
L20	11/2/2006	SA	S-06D-0L20-07-12	37.8	56.4	5.9	0.0	7.5
L20-DUP	11/2/2006	REP	S-06D-0L20-07-12-DUP	34.8	59.8	5.5	0.0	5.6
M3	10/31/2006	SA	S-06D-0M03-03-08	32.8	57.8	7.3	2.1	4.2
M10	11/1/2006	SA	S-06D-0M10-02-07	31.8	53.3	9.4	5.5	4.8
M23	11/3/2006	SA	S-06D-0M23-05-10	11.3	22.8	65.1	0.8	4.3

Table 12 (cont). Summary of Grain Size and TOC Results.

Station ID	Collected	QC Code	Sample ID	Clay % dry wt.	Silt % dry wt.	Sand % dry wt.	Gravel % dry wt.	TOC % dry wt.
M23-DUP	11/3/2006	REP	S-06D-0M23-05-10-DUP	10.9	25.4	63.4	0.3	5.0
N6	10/31/2006	SA	S-06D-0N06-00-05	25.6	45.3	9.1	19.9	4.4
N8	10/31/2006	SA	S-06D-0N08-00-17	32.2	59.8	6.8	1.2	5.4
N8-DUP	10/31/2006	REP	S-06D-0N08-00-17-DUP	24.2	40.8	6.2	28.9	5.8
N14	11/2/2006	SA	S-06D-0N14-00-05	34.7	55.3	10.0	0.0	4.3
N28	11/7/2006	SA	S-06D-0N28-08-13	42.1	55.2	2.8	0.0	9.1
N40	11/7/2006	SA	S-06D-0N40-07-12	36.4	57.5	6.1	0.0	8.4
N58	11/8/2006	SA	S-06D-0N58-00-05	5.3	7.7	80.9	6.1	0.9
O12	11/2/2006	SA	S-06D-0O12-00-05	34.9	53.0	9.1	3.0	4.6
P8	10/31/2006	SA	S-06D-0P08-05-10	28.3	57.1	11.8	2.8	3.2
Q21	11/2/2006	SA	S-06D-0Q21-00-06	17.7	29.4	43.7	9.1	5.2
Q44	11/8/2006	DUP	S-06D-0Q44-00-05	25.3	58.0	17.5	0.0	9.3
R3	10/31/2006	SA	S-06D-0R03-00-13	21.7	43.5	22.0	12.8	4.5
R11	11/1/2006	DUP	S-06D-0R11-10-15	27.9	57.4	11.3	4.9	3.1
T15	11/1/2006	SA	S-06D-0T15-00-05	25.2	31.9	37.4	5.6	5.3
U6	10/31/2006	SA	S-06D-0U06-05-14	28.9	58.7	12.5	0.0	6.9
U22	11/2/2006	SA	S-06D-0U22-02-07	28.9	54.1	9.8	7.2	5.2
V28	11/7/2006	SA	S-06D-0V28-02-07	34.3	62.7	2.8	0.2	7.1
V39	11/7/2006	SA	S-06D-0V39-00-05	35.6	55.4	8.3	0.6	3.8
W3	10/31/2006	SA	S-06D-0W03-00-05	20.3	37.3	11.5	30.9	8.2
W18	11/1/2006	SA	S-06D-0W18-00-06	24.1	53.1	7.5	15.3	3.7
Y8	10/31/2006	SA	S-06D-0Y08-00-06	19.8	27.2	19.0	34.1	5.5
Z13	11/1/2006	SA	S-06D-0Z13-00-02	37.9	52.5	7.8	1.8	4.7
Z22	11/2/2006	SA	S-06D-0Z22-00-06	30.9	57.0	9.1	3.1	3.6
AA3	10/31/2006	SA	S-06D-AA03-00-05	17.2	30.9	10.4	41.5	6.0
BB19	11/1/2006	SA	S-06D-BB19-00-06	7.3	14.7	60.4	17.7	0.8

[a] – REP indicates a Field Duplicate
[b] – DUP indicates Analytical Replicate

4.0 DISCUSSION

4.1 Vertical Elevation Results Related to Dredging

The collection of pre-dredge core samples for visual characterization provided information necessary for effective dredge planning. Site-wide geostatistical modeling based on historical PCB data has been used to develop an estimation of the vertical elevation of PCB contamination in the sediments (target dredge elevation). The dredge plan for each year is based on the target dredge elevations and contours within the planned footprint of dredging. Changes in sediment condition over time or uncertainties in the model can result in a discrepancy between the target dredge elevation estimates and the existing features at the site. Elevation data based on visual characterization of cores collected in June of 2006 were used to refine the dredge plan in terms of target dredge depths and sediment thickness.

Of the 43 cores that were collected prior to dredging, 26 had a visual transition elevation that was less than ±1-ft of the target dredge elevation (Table 2). The rest of the samples had a >1-ft departure from the target dredge elevation. In all cases where the departure from the target dredge elevation was > 1-ft, it was in a positive direction (i.e. the actual transition was not as deep as predicted by the target dredge elevation). The discrepancies from the target dredge elevation were fairly consistent based on location. In regions where the target dredge elevation was predicted to be fairly consistent over large areas, the target dredge elevation predictions were generally accurate. However, in areas where the target dredge elevation was expected to change rapidly over short distances or was particularly deep, such as near Aerovox, visual characterization of sediments suggested that the target dredge elevation depths were over estimated. These data were used to refine the dredge plan and as a result target dredge depths were reduced, thereby reducing dredging and disposal efforts. However, these adjustments were strictly based on the visual characterization of sediments and the transition from oily black depositional material to native clays. As the remediation project continues, the relationship of this visual characterization to actual PCB concentrations will need to be continually reevaluated. At this point in the program, this method appears to be a relatively inexpensive and simple means to determine dredge depths thus maximizing funding towards remedial efforts.

During the course of dredging operators use benchmarked dGPS information for horizontal and vertical control. This allows for accurate dredging operations and minimizes both ineffective under-dredging and expensive over-dredging. However, variables such as wind and debris, can result in incomplete dredging along dredge lines. The use of weekly bathymetric surveys and sediment core collections serve as good checks for dredge performance and provide feedback to operators regarding areas requiring a dredge pass.

The collection of post-dredge cores provides a characterization of the post-dredge sediment condition relative to the pre-dredge condition as well as setting a baseline for recently dredged areas. This baseline informs the planning process for subsequent years and provides feedback regarding redeposition of sediments as a result of dredging or natural processes. Comparison of the visual characterization of the pre and post-dredge cores revealed a number of things. First, the depth of the sediment surface and the overall thickness of OL layers was reduced across all dredged regions. These were clear and expected results of the dredging. Other post-dredge observations related to the visual transition between sediment types. The post-dredge cores generally had less distinct visual

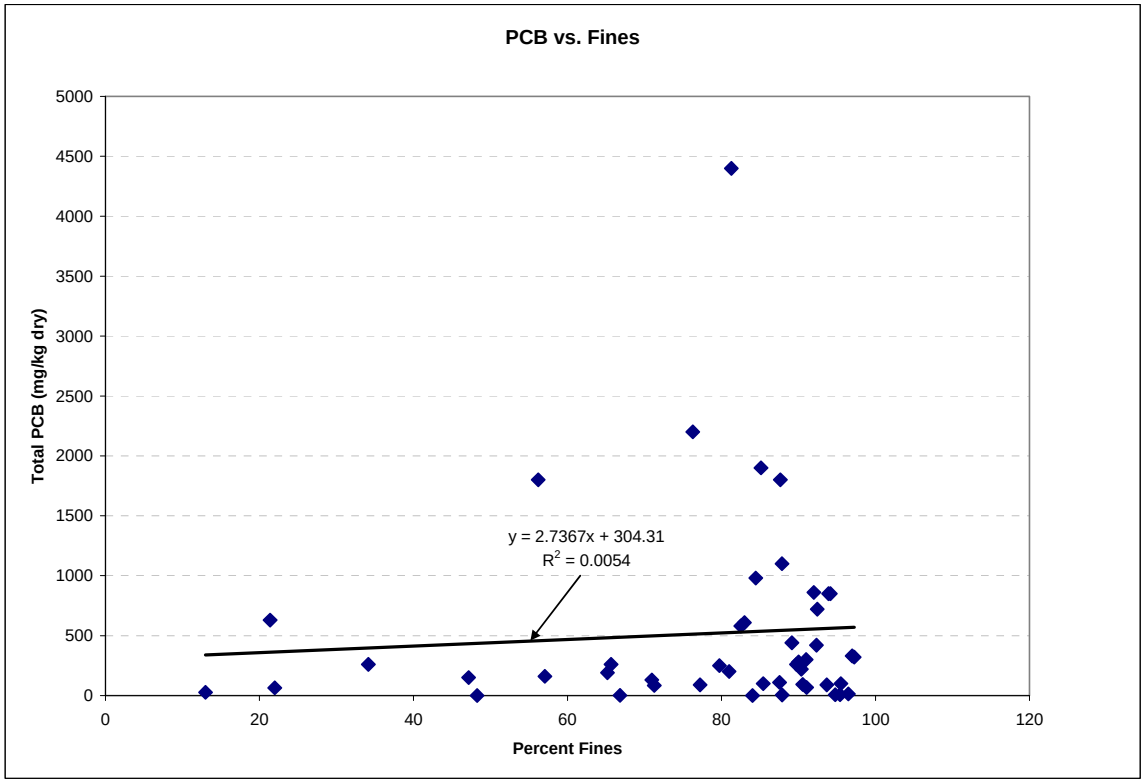
transitions. The transitions generally occurred over a relatively broad band (>0.5-ft) of mixed sediment. In most of these cases it appeared that the visual transition zone may have been disturbed during the debris removal process. In many cases, the elevation of the post-dredge visual transition also occurred at a deeper elevation than seen pre-dredge. As discussed in section 3.1.4, horizontal variability is also present, and pre/post-dredge cores may not be perfectly correlated. This is particularly pronounced in areas where the target dredge elevation changes rapidly over short horizontal distances. Overall it appears that dredging activity resulted in only a slight increase in the target dredge elevation (mean = -0.35-ft, median = -0.25-ft).

The post-dredge core results were compared to the pre-dredge cores to assess the success of the 2006 dredge efforts. Table 5 compares the elevations of visual transition as well as the sediment-water interface for each core during both events. The final two columns of the table describe any changes in the elevation of the transition (i.e. if dredging occurred below the pre-dredge transition layer) and the depth of sediment dredged at each location during the 2006 season. This comparison ranged from -3.4-ft to 2.2-ft. Negative values in the comparison of transition elevations indicate that the post-dredge transition is deeper than pre-dredge. This generally suggests that dredging related activities occurred deeper than the transition identified pre-dredge.

Samples from the post-dredge cores were also submitted for PCB analysis. However, because no pre-dredge PCB analysis was conducted pre/post dredge comparisons cannot be made. No samples have been collected in comparable location since prior to 2002. Although samples were collected from similar locations during the planning and remedial design stages of the program, significant dredging activities have been performed since then reducing the ability to directly relate PCB sample concentrations. Post-dredge PCB concentrations ranged from 0.69 mg/kg to 4,400 mg/kg (Table 13). In general, the highest concentrations remained in the regions due east of Aerovox and to the southeast of Aerovox. An average of 0.63-ft of overlying sediment above the visual transition layer remained at the Post-dredge locations (range = 0.0 to 2.2-ft). Overall, PCB concentrations were not correlated with the amount of sediment remaining. However, in areas where little overlying sediment remained, PCBs tended to be relatively low. This was the case on the western half of Area A. In the areas where elevated PCBs were found, the depth of the remaining OL layer was highly variable. It is suspected that even small amounts of redeposited or mixed contaminants contribute a large PCB signal in these areas.

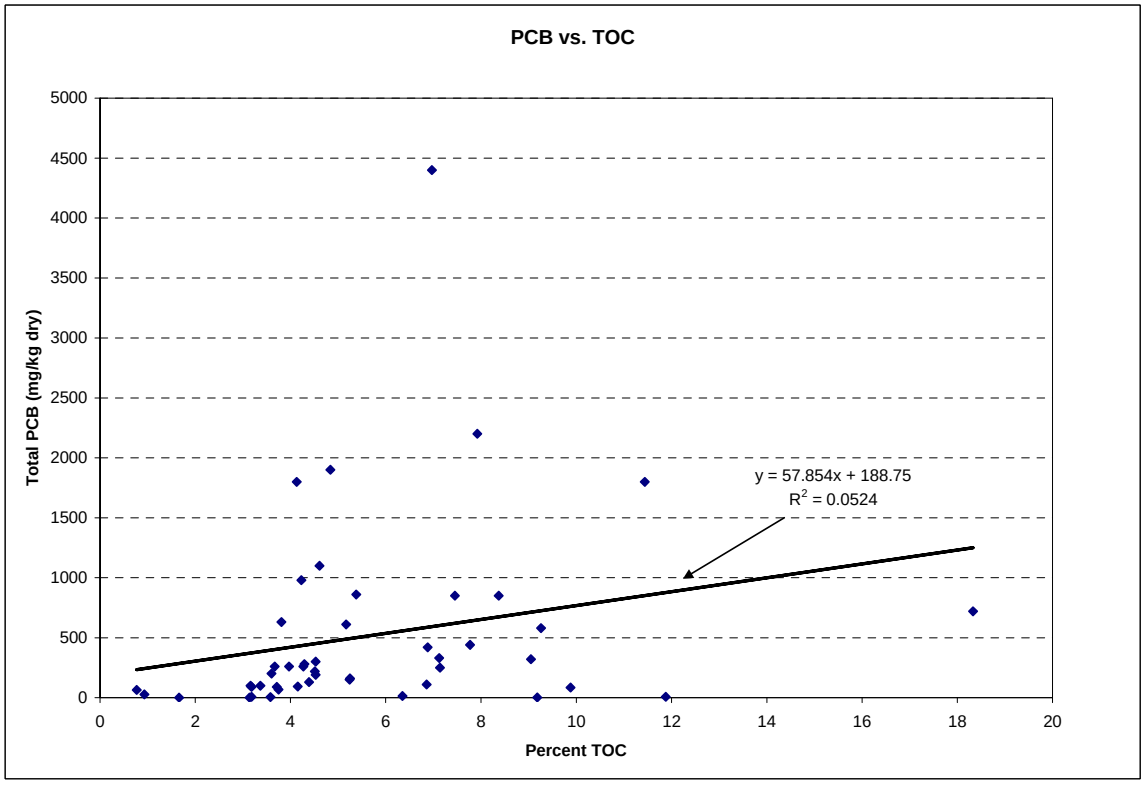
4.2 PCBs, Grain Size and TOC in Post Dredge Samples

Figures 16 and 17 present XY plots of Total PCB concentrations versus percent fines (silt plus clay) and TOC. The plots indicate that no significant relationship exists between PCBs and these parameters in samples collected post dredging. Grain size results (Table 12) indicate that the post-dredge samples include a wide range of sediment types. All but 5 of the samples analyzed represent sediment remaining above the visual transition. These 5 ‘native samples’ (those samples collected from stations with no visual transition) ranged from silty clay to silty gravel and contained PCB concentrations ranging from 21 to 780 mg/kg. Post-dredge samples representing material remaining above the visual transition ranged from sandy silts to silty clays and contained PCB concentrations ranging from less than 1 mg/kg to 4400 mg/kg. While the highest PCBs were generally found in the sediments with higher percent fines, the overall lack of correlation of PCBs in these samples to either grain size or TOC is characteristic of mixed, disturbed sediments.



Note: Native Sediments Excluded

Figure 16. Total PCB Concentrations vs. Percent Fines.



Note: Native Sediments Excluded

Figure 17. Total PCB Concentrations vs. Percent TOC.

4.3 VOC Samples

Elevated VOC concentrations were detected in a number of sediment samples collected adjacent to the Aerovox site. The highest concentrations appear to be isolated just offshore of the Aerovox facility (Figure 18). The highest concentrations of VOCs observed are attributable primarily to trichloroethene, a chlorinated solvent used to remove grease from metal parts. High concentrations of the breakdown products of trichloroethene were also found at stations closest to the shoreline including dichlroethenes and vinylchloride. PCBs are soluble in VOCs such as these and it is possible that movement of these VOCs into the harbor could facilitate the movement of PCBs. Figure 18 shows Total VOCs (sum of detected VOCs) and Total PCBs at a limited number of stations adjacent to the Aerovox facility and shows that the highest PCB concentrations observed in the sediments were also found along the shore. It is notable that the one sample collected from more that 6 inches below the visual transition (sample S06C-0009-D) had a total PCB concentration of 140 mg/kg. Additionally, more than half of the samples from the below the visual transition exhibited higher sums of TCE, DCE, and vinyl chloride than the corresponding samples above the visual transition. Results from this study are not adequate to characterize the extent of VOCs in the harbor or the impact of VOCs on PCB transport; however, additional studies are scheduled for 2007 to investigate VOC and related PCB flux into the harbor.

Figure 18. Total VOC and PCB Results near the Aerovox site.

4.4 Comparison between 2005 and 2006 Sediment PCBs at OU3 Pilot Cap Site

The OU3 Pilot Cap Site is a localized area of elevated PCB concentrations located outside the hurricane barrier in New Bedford, MA. In 2005 the OU3 Pilot Cap Site was capped with parent material dredged during the construction of a Confined Aquatic Disposal (CAD) cell in New Bedford Harbor. On August 25, 2005, shortly after the completion of capping activities, ENSR/AECom conducted a sediment sampling effort to collect surficial grab samples (top 3") at 17 stations to determine the effectiveness of cap placement in lowering ambient surficial PCB concentrations. In September 2006, Battelle revisited these 17 locations to determine the extent of change in PCB concentrations a year after the previous sampling.

Total PCB results for sediment samples collected during the ENSR/AECom August 2005 and Battelle September 2006 sampling events are compared in Table 13. At most of the sampling stations, total PCB concentrations in the 2006 samples were either similar to or lower than those in the 2005 samples, indicating the cap placement was still effective in these areas. Some extent of increase in PCB concentrations were observed in samples collected from Stations OU4 (from 0.5 mg/kg to 1.6 mg/kg), OU11 (from 0.4 mg/kg to 3.6 mg/kg), and OU13 (from 8.9 mg/kg to 17 mg/kg).

Table 13. 2005 and 2006 Sediment PCB Results at OU3 Pilot Cap Site.

	Ridge or Valley Location	ENSR Aug. 2005 Sampling	Battelle Sept. 2006 Sampling
		PCB Conc. [a] (mg/kg)	PCB Conc. [a] (mg/kg)
OU1	Ridge	1.2	1.1
OU2	Valley	1.1	0.46
OU3	Valley	1.5	0.41
OU4	Ridge	0.5	1.6
OU5	Ridge	1.9	1.6
OU6	Valley	3.2	0.99
OU7	Valley	3.8	2.3
OU8	Valley	3.3	0.8
OU9	Valley	2.1	1.3
OU10	Valley	1.6	1.6
OU11	Ridge	0.4	3.9
OU12	Valley	6.8	4.6
OU13	Valley	8.9	17
OU14	Valley	9.8	4.3
OU15	Ridge	3.5	4.5
OU16	Valley	3.2	2.2
OU17	Ridge	0.4	0.041

[a] – Sum of 18 congeners x 2.6

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Appendix A

Daily Operations Logs, Sampling and Core Characterization Logs

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Summary Tables

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Appendix A – Sample Collection Locations, Date, Time and Coordinates

Table A-1. Listing of Collection Data from the Pre-Dredge Core Surveys.

Station (Z Block)	Collection Date	Collection Time	Northing (NAD 83 MA, ft)	Easting (NAD 83 MA, ft)
N8	6/20/2006	10:50	2707069	815760
P8	6/20/2006	11:19	2707070	815815
N6	6/20/2006	11:45	2707124	815760
L5	6/20/2006	12:03	2707130	815719
M3	6/20/2006	12:28	2707178	815741
R3	6/20/2006	12:45	2707185	815873
W3	6/20/2006	13:00	2707205	816019
AA3	6/20/2006	13:12	2707205	816092
Y8	6/20/2006	13:42	2707047	816047
Z13	6/20/2006	14:04	2706926	816080
BB19	6/20/2006	14:22	2706792	816131
Z22	6/20/2006	14:43	2706719	816095
W18	6/20/2006	15:00	2706822	815994
N14	6/21/2006	9:42	2706918	815770
O12	6/21/2006	9:53	2706954	815779
L20	6/21/2006	10:08	2706765	815717
M23	6/21/2006	10:26	2706680	815745
H27	6/21/2006	10:40	2706595	815636
H29	6/21/2006	11:00	2706558	815618
H32	6/21/2006	11:12	2706461	815610
H36	6/21/2006	11:25	2706376	815615
H41	6/21/2006	12:02	2706242	815625
C41	6/21/2006	12:18	2706254	815484
F38	6/21/2006	12:32	2706321	815556
D36	6/21/2006	13:03	2706357	815515
U22	6/21/2006	13:18	2706736	815926
Q21	6/21/2006	13:40	2706766	815844
T15	6/21/2006	13:55	2706888	815921
J17	6/21/2006	14:12	2706832	815666
H24	6/21/2006	14:31	2706734	815621
R11	6/22/2006	12:47	2706997	815852
M10	6/22/2006	12:58	2707020	815733
L9	6/22/2006	13:18	2707026	815710
L12	6/22/2006	13:32	2706960	815716
U6	6/22/2006	13:45	2707113	815938
G25	6/22/2006	13:58	2706649	815581
E27	6/22/2006	14:10	2706600	815536
E30	6/22/2006	14:19	2706503	815541
E32	6/22/2006	14:29	2706485	815537
E33	6/22/2006	14:40	2706436	815555
B32	6/22/2006	14:55	2706478	815468
C29	6/22/2006	15:06	2706539	815495
F36	6/22/2006	15:24	2706363	815547

Table A-2. Listing of Collection Data from the Progress Dredge Core Surveys.

Station (Z Block)	Collection Date	Collection Time	Northing (NAD 83 MA, ft)	Easting (NAD 83 MA, ft)
K24	8/24/2006	10:27	2706680	815708
N24	8/24/2006	10:38	2706668	815768
R24	8/24/2006	10:57	2706663	815872
S3	8/24/2006	11:19	2707198	815901
S7	8/24/2006	11:49	2707088	815906
S11	8/24/2006	12:18	2707885	814250
T06	8/24/2006	12:35	2707137	815910
T08	8/24/2006	12:53	2707070	815924
T09	8/24/2006	13:13	2707040	815929
S19	8/24/2006	13:29	2706797	815894
U19	8/25/2006	9:00	2706797	815953
T11	8/25/2006	9:18	2706998	815925
S15	8/25/2006	9:30	2706925	815907
I24	8/31/2006	11:22	2706675	815652
N24	8/31/2006	11:38	2706676	815773
P24	8/31/2006	11:49	2706675	815830
P25	8/31/2006	12:00	2706652	815823
S1	8/31/2006	12:24	2707250	815901
W2	8/31/2006	12:36	2707224	815999
V7	8/31/2006	12:50	2707101	815976
V10	8/31/2006	13:04	2707024	815979
S13	8/31/2006	13:15	2706949	815904
T16	8/31/2006	13:25	2706873	815924
S20	8/31/2006	13:34	2706773	815899
V22	8/31/2006	13:51	2706727	815978
S7	8/31/2006	14:14	2707102	815898
V16	8/31/2006	14:25	2706876	815975
V20	8/31/2006	14:32	2706775	815973
AA1	9/8/2006	8:39	2707252	816100
BB4	9/8/2006	8:53	2707175	816126
AA13	9/8/2006	9:12	2706954	816093
AA17	9/8/2006	9:23	2706849	816100
Z11	9/8/2006	9:33	2706989	816079
Z7	9/8/2006	9:42	2707093	816064
Z6	9/8/2006	9:57	2707127	816077
J24	9/8/2006	10:15	2706677	815675
I26	9/8/2006	10:23	2706624	815649
O26	9/8/2006	10:33	2706625	815800
R26	9/8/2006	10:42	2706625	815878
P25	9/8/2006	10:52	2706656	815828
X19	9/8/2006	11:24	2706802	816025
X8	9/8/2006	11:39	2707077	816016
X14	9/8/2006	12:03	2706924	816030
AA1	9/14/2006	10:08	2707253	816099
Z20	9/14/2006	10:22	2706771	816078
X17	9/14/2006	10:41	2706844	816030
T15	9/14/2006	10:52	2706902	815926
X14	9/14/2006	11:04	2706928	816026
S13	9/14/2006	11:16	2706952	815903
I24	9/14/2006	11:29	2706679	815650
N24	9/14/2006	11:40	2706675	815778

Station (Z Block)	Collection Date	Collection Time	Northing (NAD 83 MA, ft)	Easting (NAD 83 MA, ft)
L38	9/14/2006	11:54	2706318	815724
J40	9/14/2006	12:15	2706279	815680
Q42	9/14/2006	12:25	2706223	815851
K42	9/14/2006	12:38	2706224	815703
Q4	9/21/2006	8:20	2707174	815853
Q11	9/21/2006	8:42	2706999	815847
Q15	9/21/2006	8:55	2706902	815850
Q19	9/21/2006	9:10	2706799	815849
J31	9/21/2006	9:46	2706499	815679
R42	9/21/2006	10:06	2706223	815873
I32	9/21/2006	10:30	2706481	815657
D42	9/21/2006	10:54	2706222	815527
I42	9/21/2006	11:12	2706225	815654
L38	9/21/2006	11:26	2706325	815728
J40	9/21/2006	11:37	2706276	815675
M41	9/21/2006	11:54	2706250	815746
M2	10/6/2006	8:15	2707225	815750
N5	10/6/2006	8:39	2707149	815772
O7	10/6/2006	9:01	2707103	815799
M10	10/6/2006	9:20	2707025	815751
O11	10/6/2006	9:32	2706998	815799
N14	10/6/2006	9:47	2706923	815774
N17	10/6/2006	10:02	2706845	815773
M19	10/6/2006	10:15	2706794	815750
O20	10/6/2006	10:31	2706776	815802
H27	10/6/2006	10:48	2706599	815626
H30	10/6/2006	11:03	2706522	815625
H33	10/6/2006	11:20	2706447	815625
H36	10/6/2006	11:33	2706374	815626
N1	10/12/2006	10:19	2707249	815778
L2	10/12/2006	10:38	2707225	815724
P3	10/12/2006	10:51	2707200	815827
O5	10/12/2006	11:09	2707150	815801
K6	10/12/2006	11:23	2707125	815700
N8	10/12/2006	11:37	2707075	815774
M10	10/12/2006	11:57	2707026	815750
O12	10/12/2006	12:15	2706977	815803
P15	10/12/2006	12:31	2706899	815829
K14	10/12/2006	12:52	2706925	815701
N16	10/12/2006	13:05	2706874	815775
L18	10/12/2006	13:17	2706828	815724
M20	10/12/2006	13:29	2706776	815750
P20	10/12/2006	13:45	2706775	815825

Table A-3. Listing of Collection Data from the Post-Dredge Core Surveys.

Station (Z Block)	Collection Date	Collection Time	Northing (NAD 83 MA ft)	Easting (NAD 83 MA ft)
M3	10/31/2006	9:41	2707178	815741
R3	10/31/2006	11:06	2707186	815871
W3	10/31/2006	11:21	2707206	816018
AA3	10/31/2006	11:33	2707205	816091
U6	10/31/2006	11:48	2707112	815939
Y8	10/31/2006	12:06	2707047	816047
P8	10/31/2006	12:22	2707071	815816
L5	10/31/2006	12:35	2707128	815718
N6	10/31/2006	12:47	2707126	815760
N8	10/31/2006	13:02	2707069	815761
N8-DUP	10/31/2006	13:09	2707069	815761
L9	11/1/2006	10:40	2707023	815709
R11	11/1/2006	10:59	2706995	815851
M10	11/1/2006	11:18	2707022	815733
M10-DUP	11/1/2006	11:27	2707022	815733
T15	11/1/2006	11:49	2706890	815923
L12	11/1/2006	12:15	2706966	815711
W18	11/1/2006	12:30	2706820	815994
Z13	11/1/2006	13:26	2706927	816080
BB19	11/1/2006	13:41	2706799	816130
L20	11/2/2006	10:51	2706763	815715
L20-DUP	11/2/2006	10:56	2706763	815715
O12	11/2/2006	11:33	2706952	815777
Q21	11/2/2006	12:32	2706766	815845
J17	11/2/2006	13:37	2706830	815666
U22	11/2/2006	14:06	2706736	815926
Z22	11/2/2006	14:19	2706723	816092
N14	11/2/2006	14:43	2706919	815771
H24	11/3/2006	7:48	2706728	815622
G25	11/3/2006	8:14	2706648	815582
E27	11/3/2006	8:30	2706597	815534
C29	11/3/2006	8:55	2706540	815494
C41	11/3/2006	9:13	2706253	815488
C41-DUP	11/3/2006	9:17	2706253	815488
M23	11/3/2006	9:37	2706680	815744
M23-DUP	11/3/2006	9:45	2706680	815744
H27	11/3/2006	10:01	2706594	815635
H32	11/3/2006	10:12	2706459	815610
H29	11/3/2006	10:37	2706556	815620
E33	11/3/2006	10:51	2706437	815556
F36	11/3/2006	11:11	2706363	815550
H41	11/3/2006	11:24	2706241	815624
F38	11/3/2006	11:39	2706320	815558
H36	11/3/2006	11:52	2706377	815615
D36	11/7/2006	8:24	2706356	815515
B32	11/7/2006	8:44	2706478	815468
E32	11/7/2006	9:14	2706485	815537
E30	11/7/2006	9:32	2706502	815541
N28	11/7/2006	9:57	2706575	815775
V28	11/7/2006	10:16	2706575	815974
V39	11/7/2006	10:32	2706301	815974
N40	11/7/2006	10:53	2706276	815775
F53	11/8/2006	9:16	2705949	815574
F58	11/8/2006	9:47	2705822	815575
N58	11/8/2006	10:08	2705827	815773
K50	11/8/2006	10:23	2706023	815700
Q44	11/8/2006	10:43	2706176	815849

Table A-4. Listing of Collection Data from the VOC Core Surveys.

VOC Core Collections				
Station	Collection Date	Collection Time	Northing (NAD 83 MA ft)	Easting (NAD 83 MA ft)
16voc	10/2/2006	10:56	2706752	815725
13voc	10/2/2006	11:35	2706851	815729
10voc	10/2/2006	11:52	2706951	815725
7voc	10/2/2006	12:10	2707049	815726
4voc	10/2/2006	12:35	2707149	815726
2voc	10/2/2006	12:44	2707249	815724
1voc	10/2/2006	13:02	2707248	815684
3voc	10/2/2006	13:25	2707149	815669
6voc	10/2/2006	13:51	2707043	815675
9voc	10/2/2006	14:47	2706949	815676
12voc	10/2/2006	15:10	2706849	815674
15voc	10/2/2006	15:40	2706749	815676
14voc	10/2/2006	15:58	2706753	815621
11voc	10/2/2006	16:16	2706850	815626
8voc	10/2/2006	16:40	2706956	815635
5voc	10/2/2006	17:10	2707047	815649
PCB Core Collections				
8voc	10/13/2006	12:05	2706955	815645
9voc	10/13/2006	12:45	2706949	815675
5Avoc	10/13/2006	13:25	2707040	815601
11voc	10/13/2006	13:55	2706852	815627

Table A-5. Listing of Collection Data from the OU3 Grab Survey.

OU3 Grab Collections				
Station	Collection Date	Collection Time	Northing (NAD 83 MA, ft)	Easting (NAD 83 MA, ft)
OU4	9/13/2006	9:03	2686039	818041
OU5	9/13/2006	9:15	2686187	818177
OU6	9/13/2006	9:31	2686174	817913
OU7	9/13/2006	9:45	2686017	817776
OU8	9/13/2006	9:59	2686203	817760
OU9	9/13/2006	10:13	2686101	817504
OU10	9/13/2006	10:27	2686249	817468
OU11	9/13/2006	10:41	2686383	817668
OU12	9/13/2006	10:59	2686484	817498
OU13	9/13/2006	11:12	2686395	817313
OU14	9/13/2006	11:23	2686642	817322
OU15	9/13/2006	11:38	2686698	817517
OU16	9/13/2006	11:52	2686830	817330
OU17	9/13/2006	12:03	2686802	817183
OU3	9/13/2006	12:15	2685849	817889
OU2	9/13/2006	12:29	2685897	818155
OU1	9/13/2006	12:40	2685652	818032

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Pre-Dredge Core Characterization Logs

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Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + barge
Client: *USACE NAE* | Chief Scientist: A. m [illegible]

Station ID:	① ~~NBB~~ NB-N8	Time On Station:	10:25	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-ON08-00-23	Northing (NAD 83):	41° 40.488'	Water Depth (*A*):	3.6'
Logged by:	LM	Easting (NAD 83):	70° 54.950'	Length of push core assembly (*B*):	Pipe 6' / 9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	2.35'
Date:	6-20-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.3'
		Time of Collection:	1050	Surveyed elevation (NVGD 29) (*E*):	Water: -0.5
		Time Depart Station:	1103	Water surface from surveyed elevation (*F*):	—

Revised station ID!
NBN8 062006

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.5' measured from Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.15'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.95'
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.85'
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.10'

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.85	2.3'								
-5.95	1.2	—	—	—	—	—	—	—	—
-7.15	0.0								

File ID of digital photograph(s): 0103, 0104, 0105

Comments:
- Discarded first core, piston slipped. No visible sheen.
- Kept 2nd core Depth of OL = 1.1 from SWI.
  1.2 from Bottom

① W.O. [illegible] 6/26

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	P8	Time On Station:	1108	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0P08-00-28	Northing (NAD 83):	41°40.488'	Water Depth (*A*):	3.95'
Logged by:	JM	Easting (NAD 83):	70° 54.938'	Length of push core assembly (*B*):	4.9'/7.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.9'
Date:	6-26-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~3.5~~ 2.8' ①
		Time of Collection:	11:19	Surveyed elevation (NVGD 29) (*E*):	water -0.3
Revised Station ID: P8062006		Time Depart Station:	11:23	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.3' measured at Tideboard
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.3'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.5'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.25'

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.5'	2.8'		Oily Black Silt	Black	Oily Soft	fine			
-5.5	1.8'	—	—	—	—	—	—	—	Oily at Transition
			Med Sand ↓	DK Grey ↓ gradient	Sand ↓	med			
-7.3'	0.0'		Clay	Olive gray	med Cohesion	fine			

File ID of digital photograph(s): 0108, 0109

Comments:

① Core settled, remeasured AM 6/20/06

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	N6	Time On Station:	11:33	**All measurements are ±0.1 feet**	
Core Sample ID:	J-06A-0N06-00-39	Northing (NAD 83):	41°40.497'	Water Depth (*A*):	1.8'
Logged by:	Jm	Easting (NAD 83):	70° 54.950'	Length of push core assembly (*B*):	4.5'/7.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	0.9'
Date:	6-20-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.9'
		Time of Collection:	11:45	Surveyed elevation (NVGD 29) (*E*):	-0.3 water N6
Revised Station ID! N6082006		Time Depart Station:	11:52	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.3 NGVD from Tideboard
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.9
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.0	3.9								
			Silt and Sand	Black and Brown	Soft To Grainy	med Sand			
-4.9	2.0	—	—	—	—	—	—	—	
			clay	Olive grey	Med cohesion	fine			
-6.9	0.0								

File ID of digital photograph(s):

Comments:
- ~~1.75~~ 2.0' from bottom To Transition Remeasured Jm 6/20/06
- Clear, 80s, SW ~5knots

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	L5	Time On Station:	1155	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0L05-00-29	Northing (NAD 83):	41° 40.498'	Water Depth (*A*):	2.5'
Logged by:	JM	Easting (NAD 83):	70° 54.959'	Length of push core assembly (*B*):	3.5' / 6.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	0.9
Date:	6-20-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.9'
Revised Station ID: L5 062006		Time of Collection:	1203	Surveyed elevation (NVGD 29) (*E*):	Water: -0.1'
		Time Depart Station:	1207	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.1 measured @ Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (LT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.8	2.9'								
			Silt	Black	Soft	fine			
-4.3	1.4'		Shell Hash + clay	Olive Gray	Coarse + fine				Intermediate transition w/ Shell hash
	1.1'								
			clay	Olive Gray	Med Cohesion	fine			
-5.7	0.0								

File ID of digital photograph(s): 0078, 0079

Comments:
1.4' Bottom To Transition

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	M3	Time On Station:	12:15	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0M03-00-19	Northing (NAD 83):	41° 40.506'	Water Depth (*A*):	2.25'
Logged by:	AM	Easting (NAD 83):	70° 54.954'	Length of push core assembly (*B*):	3.5'/6.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	2.4'
Date:	6-20-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9'
Revised Station ID:		Time of Collection:	12:28	Surveyed elevation (NVGD 29) (*E*):	Water 0.25'
M3062006		Time Depart Station:	12:32	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.25' NGVD from Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.85
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.35
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.95
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.0

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.95	1.9'								
			Silt	Black	Soft	fine			
-3.35	0.5'		Clay w/ Med Sand Shell Hash	Olive Grey w/ Brown	Med Cohesion	fine to coarse			
-3.85	0.0								

File ID of digital photograph(s): 0080, 0081

Comments:

0.5' Bottom To Transition

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	R3	Time On Station:	1241	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OR03-00-12	Northing (NAD 83):	41°40.507'	Water Depth (*A*):	2.1'
Logged by:	AM	Easting (NAD 83):	70°54.925'	Length of push core assembly (*B*):	2.5'/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	2.0'
Date:	6.20.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	1245	Surveyed elevation (NVGD 29) (*E*):	0.25'
Revised Station ID: R3062006		Time Depart Station:	1250	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.25' NVGD Tide Board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.25
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.95
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.05
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.85

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.05	1.2'		silt	Black	soft	fine			
-2.95	0.3		clay	olive Grey	med cohesion	fine			
-3.25	0.0								

File ID of digital photograph(s): 0068, 0069

Comments:

~~1.3'~~ 0.3' bottom To Transition.

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	W3	Time On Station:	1255	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-CW03-00-17	Northing (NAD 83):	41° 40.510'	Water Depth (*A*):	2.2'
Logged by:	AM	Easting (NAD 83):	70° 54.893'	Length of push core assembly (*B*):	2.0'/5.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.1'
Date:	6.20.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.7'
		Time of Collection:	1300	Surveyed elevation (NVGD 29) (*E*):	0.5' w/o Tar
		Time Depart Station:	1305	Water surface from surveyed elevation (*F*):	—

Revised StationID: W3062006

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.5' NVGD from Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.7

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.7	1.7		Black silt	Black	Soft	fine			
-2.5	0.9'		silt/clay	DK Grey	Soft	fine			Transition zone
	0.6'		clay	olive Grey	med cohesion	fine			
-3.4	0.0								

File ID of digital photograph(s) 0070, 0071

Comments:
- Clear, 90°, SW ~5 knots
- 0.9' bottom to transition

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	AA3 16①	Time On Station:	1309	All measurements are ±0.1 feet	
Core Sample ID:	S-06-AA03-00-16	Northing (NAD 83):	41°40.510'	Water Depth (*A*):	2.4'
Logged by:	Jm	Easting (NAD 83):	70°54.877'	Length of push core assembly (*B*):	2.0'/5.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	0.9'
Date:	6.20.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	② 1.6
		Time of Collection:	1312	Surveyed elevation (NVGD 29) (*E*):	0.8' Water
		Time Depart Station:	1317	Water surface from surveyed elevation (*F*):	—

Revised Station ID:
AA3062006

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.8' Reading from T.B.
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.3
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.6

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

Elevation (NVGD)	(I.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.7		1.6		Silt	Black	soft	fine			
-2.6		0.7		clay	Olive Grey	med cohesion	fine			
-3.3		0.0								

File ID of digital photograph(s): 0066, 0067

Comments:

0.7' Bottom To Transition

① W.O. JM 6/20

② W.O. Jm 6/20

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

(1)

Station ID:	Y8	Time On Station:	1323	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0108-00-14	Northing (NAD 83):	41°40.484'	Water Depth (*A*):	~~2.9'~~ 3.0'
Logged by:	AM	Easting (NAD 83):	70°54.887'	Length of push core assembly (*B*):	3.0'/6.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	1.5'
Date:	6-20.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.45'
Revised Station ID: Y8 06 2006		Time of Collection:	1342	Surveyed elevation (NVGD 29) (*E*):	1.2' water
		Time Depart Station:	1346	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.2' measured @ T.B.
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.3'
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	NA see notes
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.8

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.9	1.45		med Sand	DK Brown		med			NO Black OL Present
	0.9		fine Sand	DK Grey	Sand	fine			
	0.4		clay	olive Grey	med Cohesion	fine			
-3.3	0.0								

File ID of digital photograph(s): 0062, 0063

Comments:

(1) took 10 min break. remeasured W.D. AM 6/20

~~0.4' Bottom To Transition~~ ON closer inspection it is seen that upper layers are sand w/ clay underneath, No OL present

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	Z13	Time On Station:	13:56	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0Z13-00-21	Northing (NAD 83):	41° 40.464'	Water Depth (*A*):	3.2'
Logged by:	AM	Easting (NAD 83):	70° 54.880	Length of push core assembly (*B*):	2.5/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	0.0'
Date:	6·20·06	Predicted Tide (ft):	~~4404~~	Length of core (from bottom) (*D*):	2.1'
		Time of Collection:	1404	Surveyed elevation (NVGD 29) (*E*):	1.7 NGVD
Revised Station ID: Z13062006		Time Depart Station:	1407	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	~~0.8 wrong~~ (1) 1.7' on T.B.
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.8
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.0
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.5

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.7		2.1		Silt	Black	Soft	fine			
-3.0		0.8		Clay w/ med Sand	Olive Grey + Brown	Med Cohesion	med Sand			lower layer has gradient of sand content more Top ↓ less Bottom
-3.8		0.0								

File ID of digital photograph(s): 0082, 0083

Comments:

0.8' Bottom To Transition

(1) wrote wrong value AM 6/20/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	BB19	Time On Station:	1413	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-BB19-00-09	Northing (NAD 83):	41° 40.442'	Water Depth (*A*):	3.4'
Logged by:	LM	Easting (NAD 83):	70° 54.869'	Length of push core assembly (*B*):	2.0'/7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9"	Water surface to top of handle (*C*):	2.0'
Date:	6·20·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~1.0~~ 0.9' (1)
Revised Station ID: BB19062006		Time of Collection:	1422	Surveyed elevation (NVGD 29) (*E*):	2.0' water
		Time Depart Station:	1425	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	2.0' @ Tide Board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.0
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.75
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.4

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

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-2.1	0.9'		Black silt	Black	Soft	fine			
	-2.75	-0.25	—	clay	DK Gray	Soft	fine			
	-3.0	0.0								

File ID of digital photograph(s): 0072, 0073

Comments:

Wind Picking up S ~10+ Knots

~~0.85 Bottom To interface~~ (1) 0.25

(1) Some settling occured – Remeasured

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Barge + skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	Z22	Time On Station:	1433	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-Z22-00-23	Northing (NAD 83):	41° 40.430'	Water Depth (*A*):	4.1'
Logged by:	AM	Easting (NAD 83):	70° 54.877'	Length of push core assembly (*B*):	3.0/8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9'	Water surface to top of handle (*C*):	1.5'
Date:	6.20.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.3'
		Time of Collection:	14:43	Surveyed elevation (NVGD 29) (*E*):	2.5 water
		Time Depart Station:	14:48	Water surface from surveyed elevation (*F*):	—

Revised Station ID: Z22062006

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.5' Measured from Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-2.0~~ -4.0
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-5.8~~ -2.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-4.7~~ -1.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.6

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

1

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
					Black	Silt				Gradual Transition at ~ 1.2 from Bottom
	-2.8									
	-4.0	2.3'								Bottom 0.2' and ~~Fro~~ Gradual Transition to coarse sand + shell hash

File ID of digital photograph(s): 0017

Comments:

1.3 To Transition, second Transition is deeper.

1 m: calculated first set of values, rechecked + revised AM 6/20

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Barger skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	W18	Time On Station:	1452	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0W18-00-20	Northing (NAD 83):	41°40.447'	Water Depth (*A*):	4.9'
Logged by:	Jm	Easting (NAD 83):	70°54.899'	Length of push core assembly (*B*):	2.5/7.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	9.0'	Water surface to top of handle (*C*):	0.0'
Date:	6-20-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1500	Surveyed elevation (NVGD 29) (*E*):	2.8' Water
		Time Depart Station:	1505	Water surface from surveyed elevation (*F*):	—

Revised Station ID:
W18 062006

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	2.8' NVGD
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.7	2.0		Silt	Black	Soft	fine			Transition is Gradual from 0.9' (from Bottom) To 0.7'
-3.8	0.9		clay	Olive Gray	Med Cohesion	fine			
-4.7	0.00								

File ID of digital photograph(s): 0048 0049

Comments:
0.9' Bottom To Transition

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	N14	Time On Station:	0936	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0N14-00-30	Northing (NAD 83):	41°40.463'	Water Depth (*A*):	2.0'
Logged by:	DM	Easting (NAD 83):	70°54.948'	Length of push core assembly (*B*):	4.0/7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.45
Date:	6.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0'
		Time of Collection:	0942	Surveyed elevation (NVGD 29) (*E*):	-0.8 water
Revised Station ID: N14062106		Time Depart Station:	0947	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.8' water @ TB
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.35
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.35
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.8

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

	Elevation (NVGD)	(i.e. Bottom = *H*) length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-3.35	3.0'								
				Silt	Black	Soft	fine			
-4.9	① ~~-4.3~~	1.45								
				clay	olive gray	med cohesion	fine			
	-6.35	0.0								

File ID of digital photograph(s): 0084, 0085

Comments:
1st Station of Day:
- Departed Dock @ 0900
- Clear, 80, No breeze

① W.O. DM 6/23/06

1.45' Bottom To Transition

Oil sheen upon core collection

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	012	Time On Station:	0950	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0012-00-25	Northing (NAD 83):	41° 40.469'	Water Depth (*A*):	1.75'
Logged by:	gm	Easting (NAD 83):	70° 54.946'	Length of push core assembly (*B*):	3.5'/6.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.75'
Date:	6.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5'
		Time of Collection:	0953	Surveyed elevation (NVGD 29) (*E*):	-0.95' water
		Time Depart Station:	0959	Water surface from surveyed elevation (*F*):	—

Revised Station ID: ① ~~0021062106~~ 012062106

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.95 from T. de board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.7
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.2	2.5		Oily Silt	Black	Soft	fine			Oil pockets
-3.9	1.8'	—	—	—	—	—	—	—	—
			clay w/some oil	olive gray	med cohesive	fine			Some oil pockets present. May be result of smearing on core walls
-5.7	0.0								

File ID of digital photograph(s): 0086, 0087

Comments:
- 1.8' Bottom to Transition
- Very heavy sheen on collection
- "Oil" in core

Page ____ of ____

① WO 2.d. 10/20/06

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	L20	Time On Station:	1003	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0L20-00-26	Northing (NAD 83):	41°40.938'	Water Depth (*A*):	2.15
Logged by:	LM	Easting (NAD 83):	70°54.960'	Length of push core assembly (*B*):	3.0'/6.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.5' ①
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~1.0~~ 2.6
		Time of Collection:	1008	Surveyed elevation (NVGD 29) (*E*):	-1.0 Water
		Time Depart Station:	1014	Water surface from surveyed elevation (*F*):	—

Revised Station ID: L20 062106

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.0 Water surface @ Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.15

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.9		2.6'		Silt	Black	Soft	fine			
-5.5		1.0'		Clay	Olive Grey	Med Cohesion	fine			
-6.5		~~2.6~~ 0.0 ②								

File ID of digital photograph(s): 0088, 0089

Comments:
Clear, 80, No breeze
① wrong line DM 6/21/06 ② wrote wrong number DM 6/23/06
1.0' Bottom To Transition

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H27	Time On Station:	1038	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0H27-00-3S	Northing (NAD 83):	41° 40.410'	Water Depth (*A*):	1.5
Logged by:	AM	Easting (NAD 83):	70° 54.978	Length of push core assembly (*B*):	3.5/6.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.5'
Date:	6-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1040	Surveyed elevation (NVGD 29) (*E*):	-0.8' Water
Revised Station ID: H27062106		Time Depart Station:	1044	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.8' Water @ Tide Board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.8
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.8	3.0		Oily Silt	Black	Soft	fine	oil		
-4.2	1.6		Clay	Olive Grey	Med Cohesion	fine			
-5.8	00								

File ID of digital photograph(s): 0090, 0091

Comments:
1.6' Bottom To Transition
Strong Sheen

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H29	Time On Station:	1050	**All measurements are ±0.1 feet**	
Core Sample ID:	S-OGA-OH29.00.22	Northing (NAD 83):	41° 40.404'	Water Depth (*A*):	1.3
Logged by:	AM	Easting (NAD 83):	70° 54.982	Length of push core assembly (*B*):	4.0/7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.75'
Date:	6.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.25'
Revised Station ID: H29062106		Time of Collection:	1100	Surveyed elevation (NVGD 29) (*E*):	-0.8' water
		Time Depart Station:	1105	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.8 measured at Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.05
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.8	2.25'		Silt	Black	Soft	fine			
-4.3	0.75		Clay	Olive Grey	Med cohesion	fine			
-5.05	0.0								

File ID of digital photograph(s): 0050, 0051

Comments:

0.75' Bottom To Transition

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H32	Time On Station:	1109	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OH32-00-29	Northing (NAD 83):	41°40.388'	Water Depth (*A*):	1.7'
Logged by:	Am	Easting (NAD 83):	70°54.984'	Length of push core assembly (*B*):	4.5'/7.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.5'
Date:	6.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~3.0~~ 2.9' ①
		Time of Collection:	1112	Surveyed elevation (NVGD 29) (*E*):	-0.8' water
Revised station ID: H32062106		Time Depart Station:	1115	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.8' Measured at Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.8
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.05
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.5

(Note if I ≠ I_2 within ± 1.0 feet, discard and resample)

Elevation (NVGD) (i.e. Bottom = *H*)	length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.9	2.9		Silt	Black	Soft	fine			Oil pockets just above transition
-4.05	1.75		Clay	Olive Grey	Med cohesion	fine			
-5.8	0.0								

File ID of digital photograph(s): 0074, 0075

Comments:

1.75' Bottom to Transition

① remeasured Am 6/21/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H36	Time On Station:	1122	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-01-H36-00-35	Northing (NAD 83):	41°40.374'	Water Depth (*A*):	1.8'
Logged by:	AM	Easting (NAD 83):	70°54.983'	Length of push core assembly (*B*):	5.0'/8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.2'
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.5'
		Time of Collection:	1125	Surveyed elevation (NVGD 29) (*E*):	-0.7 water
		Time Depart Station:	1128	Water surface from surveyed elevation (*F*):	—

Revised Station ID: H36062106

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.7' measured @ Tide Board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.5

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

Elevation (NVGD) (i.e. Bottom = *H*)	length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.0	3.5								
			Silt	Black	Soft	fine			
									Clear Transition
-4.5	2.0	—	—	—	—	—	—	—	—
			Clay	olive Gray	med cohesion	fine			
-6.5	0.0								

File ID of digital photograph(s): 0046, 0047

Comments:

2.0' Bottom To Transition

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H41	Time On Station:	1150	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OH41-00.40	Northing (NAD 83):	41° 40.352'	Water Depth (*A*):	2.1
Logged by:	Am	Easting (NAD 83):	70° 54.981'	Length of push core assembly (*B*):	4.5'/7.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.9'
Date:	6.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	4.0'
Revised Station ID:		Time of Collection:	1202	Surveyed elevation (NVGD 29) (*E*):	-0.5' Water
H41062106		Time Depart Station:	1209	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.5' measured at Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.1
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.35
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.10
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (L)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.10	4.0'								
			Silt	Black	Soft	fine			
-5.35	1.75	—	—	—	—	—	—	—	
			Clay	Olive Gray	Med Cohes.	fine			
-7.1	0.0								

File ID of digital photograph(s): 0092, 0093

Comments:

1.75' Bottom To Transition

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Barge + Shift
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	C41	Time On Station:	1212	**All measurements are ±0.1 feet**	
Core Sample ID:	~~[illegible]~~	Northing (NAD 83):	41° 40.354'	Water Depth (*A*):	1.8'
Logged by:	AM	Easting (NAD 83):	70° 55.012'	Length of push core assembly (*B*):	3.0'/6.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.25'
Date:	6-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6
Revised Station ID: C41062106		Time of Collection:	1218	Surveyed elevation (NVGD 29) (*E*):	-0.4' Water
S-06A-0C41-00-2.6		Time Depart Station:	1223	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.4' Measured at Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.15
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.05
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.55
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.2

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.55	2.6'		Silt w/ shell Hash	Black	Soft	Fine			
-4.05	1.1'	—	—	—	—	—	—	—	
			clay	Olive Grey	med cohesion	Fine			
-5.15	0.0								

File ID of digital photograph(s): 0094, 0095

Comments:
1.1' Bottom To interface
Breeze picking up: 80°, clear, S 10-15 knts

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	D36	Time On Station:	1257	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OD36-00-40	Northing (NAD 83):	41°40.371N	Water Depth (*A*):	2.1'
Logged by:	bm	Easting (NAD 83):	70°55.005W	Length of push core assembly (*B*):	4.5'/7.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.9'
Date:	6-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	4.0'
		Time of Collection:	1303	Surveyed elevation (NVGD 29) (*E*):	0.0' Water
		Time Depart Station:	1306	Water surface from surveyed elevation (*F*):	—

Revised Station ID: D36062106

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.0' measured at water surface
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.6 Tide Board
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.3
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.6
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.6		4.0								
				Silt	Black	Soft	fine			
-4.3		2.3'	—	—	—	—	—	—	—	—
				Clay	Olive Gray	Med Cohesion	fine			
-6.6		0.0								

File ID of digital photograph(s): 0096, 0097

Comments:

2.3' Bottom to Transition

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	Q21	Time On Station:	1336	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-Q21-00-15	Northing (NAD 83):	41°40.438'	Water Depth (*A*):	2.6'
Logged by:	dm	Easting (NAD 83):	70°54.932'	Length of push core assembly (*B*):	2.5/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.2'
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5
		Time of Collection:	1340	Surveyed elevation (NVGD 29) (*E*):	0.5' water
		Time Depart Station:	1346	Water surface from surveyed elevation (*F*):	—

Revised Station ID:
Q21062106

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.5' water at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.55'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.0

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (Ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.3	1.5'		Silt	Black	soft	Fine			
-3.55	-0.25	—	—	—	—	—	—	—	—
-3.8	0.0		clay	olive Gray	med cohesion	fine			

File ID of digital photograph(s): 0064, 0065

Comments:
0.25' Bottom To Transition

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	T15	Time On Station:	1352	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0T15-00-20	Northing (NAD 83):	41° 40.458	Water Depth (*A*):	2.8'
Logged by:	JM	Easting (NAD 83):	70° 54.915'	Length of push core assembly (*B*):	25/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.2
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	1355	Surveyed elevation (NVGD 29) (*E*):	0.8' water
Revised Station ID:		Time Depart Station:	1400	Water surface from surveyed elevation (*F*):	—
T15062106					

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.8' measured at Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.6
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.0

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

Elevation (NVGD) (i.e. Bottom = *H*)	length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.5	2.0'								
			Silt w/ Shell Hash	Black	Soft	fine			
-3.6	0.9	—	—	—	—	—	—	—	—
			fine Sand ↓ gradient	Dk grey ↓	Sand ↓				
-4.5	0.0		Clay	Olive Grey	med cohesion				

File ID of digital photograph(s): 0098, 0099, 00100

Comments:

0.9' Bottom To Transition

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	J17	Time On Station:	1405	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0J17-00-21	Northing (NAD 83):	41°40.449'	Water Depth (*A*):	2.5'
Logged by:	Dm	Easting (NAD 83):	70°54.971	Length of push core assembly (*B*):	2.5/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.75'
Date:	4-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.1'
Revised Station ID: J17062106		Time of Collection:	1412	Surveyed elevation (NVGD 29) (*E*):	1.0 water
		Time Depart Station:	1418	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.0 measured at Tideboard
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.75
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.45
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.65
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.5

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.65	2.1'		Oily Silt	Black	Oily Soft	fine	Petroleum		Most of core is extremely oily black silt. Strong petroleum odor smells more like diesel than typical PCB odor
-3.45	0.3'		clay	olive Gray	med cohesion	fine			
-3.75	0.0								

File ID of digital photograph(s): 0054, 0055

Comments:

0.3' Bottom To Transition

Heavy sheen, ~~too~~ strong oil odor, oil on outside of core tube

Station ~ 40' from drain out south side of Aerovox

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	H24	Time On Station:	1423	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OH24-00-20	Northing (NAD 83):	41° 40.493'	Water Depth (*A*):	2.6'
Logged by:	JM	Easting (NAD 83):	70° 54.981	Length of push core assembly (*B*):	2.5' / 0.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.75'
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	1431	Surveyed elevation (NVGD 29) (*E*):	1.1' Water
Revised Station ID: H24062106		Time Depart Station:	1436	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	1.1' Measured at Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.65
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.55
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.65
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.5

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.65	2.0'		Silt	Black	Soft	Fine			Barely got into Transition layer at Bottom of core
-3.65	0.0'								

File ID of digital photograph(s): 0058, 0059

Comments:
Could not get right on station ~46' E of Target
~0.3' Bottom To Transition, Difficult To see Transition. Could not penetrate any Deeper.
Last core of Day, Head back To dock

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR Skiff + barge
Client: *USACE NAE* **Chief Scientist:** A Mansfield

Station ID:	R11	Time On Station:	1235	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-OR11-00-19	Northing (NAD 83):	41°40.476'	Water Depth (*A*):	~~2.9~~ 2.9
Logged by:	AM	Easting (NAD 83):	70°54.930	Length of push core assembly (*B*):	3.5'/6.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.5
Date:	6/22/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9
		Time of Collection:	1247	Surveyed elevation (NVGD 29) (*E*):	-0.6 water
Revised Station ID: R11 062206		Time Depart Station:	1250	Water surface from surveyed elevation (*F*):	—

W.O. AM 6/22

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.6 measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.7	1.9		Silt	Black	soft/ Fine				clear Transition
-4.5	1.1'		clay	Olive grey	med Cohesion/ fine				
-5.6	0.0								

File ID of digital photograph(s):

Comments:
- 1st station of the day. Departed dock at 12:10
- Clear, ~80°, S 10-15 knts
1.1' Bottom to transition

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff - Barge
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	M10	Time On Station:	1251	All measurements are ±0.1 feet	(1)
Core Sample ID:	S-06A-OM10-00-40	Northing (NAD 83):	41°40.480	Water Depth (*A*):	1.3'
Logged by:	AM	Easting (NAD 83):	70°54.956	Length of push core assembly (*B*):	4.0/7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.1'
Date:	6.22.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.5'
		Time of Collection:	1258	Surveyed elevation (NVGD 29) (*E*):	-0.5 water
Revised Station ID: M10062206		Time Depart Station:	1308	Water surface from surveyed elevation (*F*):	~~-0.5~~

1.5
5.0/8.0
4.0'
-0.3

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.5/-0.3 measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.2'
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.2'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.8'

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.2	4.0		Fine sand	DK Gr.					
			Silty	Black	Soft	fine			Multiple layers: - Thin lens of fine sand on top - Several ft of OK - fine sand - Native material
-5.3	0.9'		Fine Sand	LT Brown					
-5.9	0.3		Clay	olive Gray	med cohesion	fine			
-6.2	0.0								

Correction AM 6/22

File ID of digital photograph(s): 0044 0045

Comments: (1) 1st attempt recovered ~~4.5~~ 3.5' core w/ No Transitions. Attempted 5'
Bottom To Transitions:
0.3 olive gray
0.9 fine sand
light layer of fine sand on top

Strong oil sheen

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	L9	Time On Station:	1310	**All measurements are ±0.1 feet**	
Core Sample ID:	S-064-OL09-00-32	Northing (NAD 83):	41°40.481'	Water Depth (*A*):	1.5'
Logged by:	AM	Easting (NAD 83):	70°54.961'	Length of push core assembly (*B*):	4.5/7.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.0
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.2
Revised Station ID: L9062206		Time of Collection:	1318	Surveyed elevation (NVGD 29) (*E*):	-0.15 water
		Time Depart Station:	1320	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.15 measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.65
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.15
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.45
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-2~~ -1.65 AM 6/23/06
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	(1) Corrected value

	Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-2.45	3.2'								
				silt	Black	Soft/ Fine				Oily Black silt
	-5.15	0.5'		clay	olive Gray	medium cohesive				
	-5.65	0.0'								

File ID of digital photograph(s): 0034, 0035

Comments:
0.5' Bottom To Transition
Strong oil sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

1ST 2ND
2.9 2.9
5.0/8.0 5.0/8.0
0.8 0.8
3.5' 3.5'
0.0' 0.0'

Station ID:	612	Time On Station:	1321	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0612-00-3.5	Northing (NAD 83):	41° 40.470'	Water Depth (*A*):	2.9
Logged by:	JM	Easting (NAD 83):	70° 54.960'	Length of push core assembly (*B*):	3.5/6.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.75
Date:	6.22.06	Predicted Tide (ft):	/	Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1325/1332	Surveyed elevation (NVGD 29) (*E*):	water
Revised Station ID:		Time Depart Station:	1340	Water surface from surveyed elevation (*F*):	—
612062206					

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.0 measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.2
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.7	3.5'								
-6.5	0.7								
-7.2	0.0								

File ID of digital photograph(s): 00101, 00102

Comments:
1ST attempt, retrieved 3.0' core w/ no transition. Attempted 5'
0.7' Bottom to transition
① W.O. JM 6/02

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Dredge
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	1122	Time On Station:	1313	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0022-00-15	Northing (NAD 83):	41°46.433′	Water Depth (*A*):	5.5
Logged by:	AM	Easting (NAD 83):	70°54.914′	Length of push core assembly (*B*):	2.0/9.6′
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8′	Water surface to top of handle (*C*):	2.25
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5′
Revised Station ID: U22062106		Time of Collection:	1318	Surveyed elevation (NVGD 29) (*E*):	0.3 water
		Time Depart Station:	1332	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.3′ measured at Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.05
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.95
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.55
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.2

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

Elevation (NVGD) (i.e. Bottom = *H*)	length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-5.55	1.5′		Sit	Black	Soft	Fine			Transition is somewhat mixed Appears that some disruption of interface has occured (Dredging) Top of Transition identified
-5.95	1.0′ (1)		Clay	Olive Gray	Med cohesion	Fine			
-7.05	0.0								

File ID of digital photograph(s): 0042, 0043

Comments:

1.1′ Bottom To Transition

(1) W.O. DM 6/23/06

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: QR Barge + skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	F38	Time On Station:	1228	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0F38-00-31	Northing (NAD 83):	41°40.365'	Water Depth (*A*):	1.9'
Logged by:	SM	Easting (NAD 83):	70°54.996'	Length of push core assembly (*B*):	4.0/7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.75
Date:	6·21·06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.1'
		Time of Collection:	12:32	Surveyed elevation (NVGD 29) (*E*):	-0.4' water
Revised Station ID: F38062106		Time Depart Station:	1238	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.4' measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.65
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.15
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.55
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-2.55	3.1'								
				Black OL	Black	Silt	Fine			
	-4.15	-1.5'	—	—	—	—	—	—	—	Oil pocket just below transition
				Native med clay	olive Grey	medium stiff clay				
	-5.65	~~3.1'~~ 0.0								

File ID of digital photograph(s): 0028, 0029, 0031

Comments:
1.5' Bottom to Transition
88, S 10-15 KATS, clear

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR JR: Hft Barge
Client: *USACE NAE* **Chief Scientist:** A. Mansfield

Station ID:	M23	Time On Station:	1018	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0M23-00-29	Northing (NAD 83):	41°40.424'	Water Depth (*A*):	1.6'
Logged by:	Am	Easting (NAD 83):	70°54.954'	Length of push core assembly (*B*):	3.5/6.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.25
Date:	6-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.9'
Revised Station ID: M23062106		Time of Collection:	1026	Surveyed elevation (NVGD 29) (*E*):	-1.0 water
		Time Depart Station:	1030	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.0 measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.25
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.65
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.35
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.35	2.9		Med Sand	Dark Grey					Thin overlying Sand Layer
-3.95'	2.3		Silt	Black	fine				Fine Black silty OL
-4.65'	1.6'		silt clay w/ wood chips	Olive Grey w/ light Brown	mixed Fine w/ med particles				Entire layer is native material w/ wood particles mixed in. Wood especially concentrated at 1.3' from bottom
-6.25	0.0								

File ID of digital photograph(s): ~~0025, 0026~~ 0027, 0028 (incorrect file #s)

Comments:
- Core has 3 transition layers
  - Bottom 1.6'
  - 2.3' sand.

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + barge
Client: *USACE NAE* | Chief Scientist: L. Mansfield

Station ID:	V6	Time On Station:	1342	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0006-00-10	Northing (NAD 83):	41°40.495'	Water Depth (*A*):	2.2
Logged by:	AM	Easting (NAD 83):	70°54.911'	Length of push core assembly (*B*):	2.5/3.5 ①
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.5
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0
		Time of Collection:	1345	Surveyed elevation (NVGD 29) (*E*):	+0.5 water elv
Revised Station ID V6062206		Time Depart Station:	1352	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.5 measured at Tideboard
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-1.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	NA - See notes
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-0.5	1.0		Mixed silt sand shell wood chips	Mixed Black Gray Brown	mixed				No clear Transition core is a mix of silt, sand, shells, and wood. Wood especially present at bottom
-1.5	0.0								

File ID of digital photograph(s): 0036, 0037

Comments:
① 2nd Attempt
multiple layers sand/silt/shell hash/wood

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR SK: ff+Barge
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	G25	Time On Station:	1355	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0G25-00-12	Northing (NAD 83):	41° 40.419	Water Depth (*A*):	1.4'
Logged by:	dm	Easting (NAD 83):	70° 54.990	Length of push core assembly (*B*):	3.0'/6.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.8
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.25'
Revised Station ID: G25 062206		Time of Collection:	1358	Surveyed elevation (NVGD 29) (*E*):	0.1' water
		Time Depart Station:	1400	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.1' measured at Tide board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.1
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	NA see Description
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-1.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.9'	1.25'		Fine Sand ↓	Dark Grey ↓					No clear Transitions entire core is Sand with Gradual change from Dark fine sand at Top To lighter coarse sand at Bottom
-3.1'	0.0'		Coarse Sand	Grey					

File ID of digital photograph(s): 0022, 0023, 0024

Comments:
No clear Transitions but gradual change from fine sand at Top and coarse sand at bottom

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	E27	Time On Station:	1407	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0E27-00-21	Northing (NAD 83):	41°40.411'	Water Depth (*A*):	2.0'
Logged by:	AM	Easting (NAD 83):	70°55.000	Length of push core assembly (*B*):	2.5/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.1'
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.1'
		Time of Collection:	1410	Surveyed elevation (NVGD 29) (*E*):	0.3'
Revised Station ID: E27062206		Time Depart Station:	1413	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.7

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

Elevation (NVGD) (I.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.0'	2.1'		silt	Black	soft	fine			
-3.2	0.9'	—	—	—	—	—	—	—	—
			clay	olive Grey	Med cohesion	fine			
-4.1	0.0'								

File ID of digital photograph(s): 0056, 0057

Comments:
Overcast, 75°, S 10-15 Knts

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR skiff - barge
Client: *USACE NAE* **Chief Scientist:** A. Mustello

Station ID:	E30	Time On Station:	1414	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0E30-00-25	Northing (NAD 83):	41°40.395'	Water Depth (*A*):	3.3'
Logged by:	AM	Easting (NAD 83):	70°54.999'	Length of push core assembly (*B*):	3.0/6.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.0
Date:	6.22.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5
		Time of Collection:	1419	Surveyed elevation (NVGD 29) (*E*):	0.45 water
		Time Depart Station:	1422	Water surface from surveyed elevation (*F*):	—

Revised station ID: E30062206

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.45 measured at Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.55
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.55
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.05
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.85

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.05	2.5'		Silt	Black	soft/ fine				Clear Transition, although Some smearing present
-3.55	1.0'		clay	Olive Gray	Med cohesion fine				
-4.55	0.0'								

File ID of digital photograph(s): 0040, 0041

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** ER Barge + Skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	E32	Time On Station:	1424	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0E32-00-28	Northing (NAD 83):	41° 40.392'	Water Depth (*A*):	2.4'
Logged by:	AM	Easting (NAD 83):	70° 55.000'	Length of push core assembly (*B*):	3.5/6.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	5'	Water surface to top of handle (*C*):	1.0'
Date:	6.22.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.8'
Revised Station ID:		Time of Collection:	1429	Surveyed elevation (NVGD 29) (*E*):	0.5 water
E32 062206		Time Depart Station:	1432	Water surface from surveyed elevation (*F*):	-

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.5' measured at Tide Board
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.0'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.2'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.9'

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (FT)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.2	2.8		Silt	Black	fine				Transition is somewhat gradual
-3.3'	1.7'								Top end of Transition starts at 1.7' (from bottom) and goes to ~1.3' (from bottom)
			Clay	Olive Gray	fine w/ med cohesion				
-5.0	0.0'								

File ID of digital photograph(s): 0032, 0033

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	E33	Time On Station:	1436	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0E33-00-37	Northing (NAD 83):	41° 40.384'	Water Depth (*A*):	2.6'
Logged by:	DM	Easting (NAD 83):	70° 54.996	Length of push core assembly (*B*):	4.5/7.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	1.0'
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.7'
		Time of Collection:	1440	Surveyed elevation (NVGD 29) (*E*):	0.5 water
		Time Depart Station:	1446	Water surface from surveyed elevation (*F*):	–

Revised station ID: E33062206

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.5 measured at Tide board (DM 6/22)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~0.5~~ -6.0
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.3	3.7'		Silt w/ shell Hash	Black	soft	fine			
-3.7	2.3	–	–	–	–	–	–	–	–
			Clay/	olive Gray/	med cohesion	fine			
-6.0	0.0								

File ID of digital photograph(s): 0106, 0107

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:**
Client: *USACE NAE* **Chief Scientist:**

Station ID:	B32	Time On Station:	1450	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0B32-00-21	Northing (NAD 83):	41° 40.391'	Water Depth (*A*):	2.6'
Logged by:	AM	Easting (NAD 83):	70° 55.015'	Length of push core assembly (*B*):	2.5/5.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.7'
Date:	6.22.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.1
		Time of Collection:	1455	Surveyed elevation (NVGD 29) (*E*):	0.7' water
Revised Station ID: B32 062206		Time Depart Station:	1500	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.9

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.0	2.1'								
			silt	Black	soft	fine	oil		
-3.1	1.0'								
			clay	olive Gray	med cohesion	fine			
-4.1	0.0								

File ID of digital photograph(s): 0060, 0061

Comments:
2 dead strippers floating
moderate oil sheen

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR SK. H+barge
Client: *USACE NAE* **Chief Scientist:** A. Mc-Cl

Station ID:	C29	Time On Station:	1503	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06A-0C29-00-21	Northing (NAD 83):	41° 40.401'	Water Depth (*A*):	2.7
Logged by:	AM	Easting (NAD 83):	70° 55.009	Length of push core assembly (*B*):	2.5/5.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	0.4
Date:	6-22-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.1
Revised Station ID: C29 062206		Time of Collection:	1506	Surveyed elevation (NVGD 29) (*E*):	0.9 water
		Time Depart Station:	1509	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.9 measured at Tide board
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.2
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.3
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.8

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

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.1	2.1'		Black Silt	Black	Soft	fine			Transition is somewhat gradual from 0.9' (from Bottom) to 0.6'
-3.3	0.9'		Clay	Olive Gray	Med Cohesion	fine			
-4.2	00'								

File ID of digital photograph(s): 0052, 0053

Comments:
moderate oil sheen

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Barge + skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	F36	Time On Station:	1514	All measurements are ±0.1 feet	
Core Sample ID:	S-06A-0F36-00-30	Northing (NAD 83):	41°40.372'	Water Depth (*A*):	3.9
Logged by:	AM	Easting (NAD 83):	70°54.998'	Length of push core assembly (*B*):	(1) 4.5/~~7.5~~/9.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	8'	Water surface to top of handle (*C*):	2.0
Date:	6.22.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0'
Revised Station ID: F3606 2206		Time of Collection:	1524	Surveyed elevation (NVGD 29) (*E*):	1.1' water
		Time Depart Station:	1530	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	1.1' measured at Tideboard
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.4'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.4
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.8

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD) (i.e. Bottom = *H*)	Length (ft)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.4	3.0'		Silt	Black	Soft	Very fine	Oil		Very soft Black Strong oil sheen Pockets of oil Some small shell hash
-4.9'	1.5'		Clayey	Olive Grey	Med Stiff		NA		Pockets of oil. Could be from smearing on sides of core
-6.4	0.0'								

File ID of digital photograph(s): 0020, 0021

Comments:
- Very strong oil sheen
- Last station of day – Last pre-dredge core

(1) Multiple attempts, used different handle configuration AM 6/22

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Progress Dredge Core Characterization Logs

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Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Barge + SKiff
Client: *USACE NAE* | Chief Scientist: ~~Alex~~ Mansfield

Station ID:	K24	Time On Station:	1020	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41°40.424'	Water Depth (*A*):	7.2'
Logged by:	AM	Easting (NAD 83):	70°54.962'	Length of push core assembly (*B*):	15.75
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	6.5'
Date:	8-24-06	Predicted Tide (ft):	3.4	Length of core (from bottom) (*D*):	1.3
		Time of Collection:	1027	Surveyed elevation (NVGD 29) (*E*):	~~+1.5'~~ +2.75' (2)
		Time Depart Station:	1030	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation +2.75' (2) ~~+1.5~~ elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	(1) ~~-8.25~~ ~~-7.75~~ -6.5 (2)
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	(1) ~~-6.75~~ ~~-6.65~~ -5.4 (2)
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-6.45~~ -5.2 (2)
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-5.70~~ -4.45 (2)

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

	Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
(2)	~~-5.9~~ ~~-6.65~~		-1.0	—	Silt clay	black olive grey	soft med cohesion	fine fine	—	—	
(2)	~~-6.5'~~ ~~-7.75~~		-0.0'								

File ID of digital photograph(s):

Comments:
1.1' Bottom To Transition. 0.2' of overlying sediment

(1) miscalculated AM 8/24/06
(2) JE identified error in placement of Tide board correction = +1.25'
AM 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	N24	Time On Station:	1033	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41° 42.422	Water Depth (*A*):	6.9'
Logged by:	AW	Easting (NAD 83):	70° 54.949	Length of push core assembly (*B*):	15.75
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	7.5'
Date:	8-24-06	Predicted Tide (ft):	3.3	Length of core (from bottom) (*D*):	1.45'
		Time of Collection:	1038	Surveyed elevation (NVGD 29) (*E*):	~~+1.0~~ Tide 2.25 (1)
		Time Depart Station:	1049	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	~~+1.0~~ 2.25' (1)
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-7.25~~ - 6.0'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-6.05~~ - 4.8'
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-5.8~~ ~~-5.2~~ -4.55
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-5.9~~ - 4.65

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

	Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
(1)	-4.8	~~-6.05~~	1.3 / 1.2		Silt	black	Soft	fine			
					clay	olive grey	Med cohesion	fine			
(1)	-6.0'	~~-7.25~~	0.0								

File ID of digital photograph(s):

Comments: 1.2' bottom to moderate transition, 1.3' to clear transition.
1.45' total core

(1) JE identified error in placement of tide board. Correction = 1.25'
AM 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff and barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	R24	Time On Station:	1050	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41°40.421	Water Depth (*A*):	6.7'
Logged by:	AM	Easting (NAD 83):	70°54.926	Length of push core assembly (*B*):	15.75'
Collection Mechanism:	*Push-Core*	GPS Accuracy:		Water surface to top of handle (*C*):	7.9
Date:	8-24-06	Predicted Tide (ft):	3.1'	Length of core (from bottom) (*D*):	0.7'
		Time of Collection:	1057	Surveyed elevation (NVGD 29) (*E*):	~~0.9~~ Tide 2.15 (1)
		Time Depart Station:	1101	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~0.9'~~ 2.15' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-6.95~~ -5.7'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-6.35~~ -5.1'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-6.25~~ -5.0'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-5.8'~~ -4.55'

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

	Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
(1)	-5.1	~~-6.35~~	0.6'	—	Silt	black	Soft	fine	—	—	
					clay	olive grey	Med Cohesive	fine			
(1)	-5.7	~~-6.95~~	0.0								

File ID of digital photograph(s):

Comments: Bottom To Transition = 0.6' Total core = 0.7'

(1) JE identified error in Tide board placement correction = + 1.25 AM 8/31/06

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff
Chief Scientist: Alex Mansfield

Station ID:	S3	Time On Station:	1105	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41°40.509'	Water Depth (*A*):	4.6'
Logged by:	DM	Easting (NAD 83):	70°54.919	Length of push core assembly (*B*):	15.75'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	10.0'
Date:	8-24-06	Predicted Tide (ft):	2.7	Length of core (from bottom) (*D*):	0.2'
		Time of Collection:	1119	Surveyed elevation (NVGD 29) (*E*):	~~0.1'~~ +1.95' (1)
		Time Depart Station:	1134	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~0.1'~~ +1.95' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-5.05~~ -3.8'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-4.95~~ -3.7'
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-4.85~~ -3.6'
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-3.9~~ -2.65'

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments

File ID of digital photograph(s):

Comments: Total core only 0.2'. Bottom=hard shell hash. ~0.1' of black sed

(1) JE identified error in Tide board placement. correction factor = 1.25'
rmm 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	S7	Time On Station:	1145	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41°40.491	Water Depth (*A*):	4.5'
Logged by:	DM	Easting (NAD 83):	70°54.918	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	16'	Water surface to top of handle (*C*):	4.6
Date:	8-24-06	Predicted Tide (ft):	2.1'	Length of core (from bottom) (*D*):	0.2
		Time of Collection:	1149	Surveyed elevation (NVGD 29) (*E*):	~~-0.1~~ +1.15' (1)
		Time Depart Station:	1205	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~-0.1~~ +1.15' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-5.5'~~ -4.25'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-5.4'~~ -4.15'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-5.3'~~ -4.05'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-4.8'~~ -3.35'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments

File ID of digital photograph(s):

Comments:

Short core - hard clay bottom could not penetrate.
~0.1' of overlying black silt

(1) JE identified error in Tideboard placement correction = +1.25
DM 8/31/06

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR SKIFF + barge
Client: *USACE NAE* | Chief Scientist: A Mcstrield

Station ID:	S11	Time On Station:	1209	All measurements are ±0.1 feet	1st Attempt / 2nd
Core Sample ID:		Northing (NAD 83):	41° 40.478'	Water Depth (*A*):	4.0' / 4.0'
Logged by:	AM	Easting (NAD 83):	70° 54.921'	Length of push core assembly (*B*):	10.0' / 10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	3.1' / 2.9'
Date:	8-24-06	Predicted Tide (ft):	1.5'	Length of core (from bottom) (*D*):	NA / 2.8'
		Time of Collection:	1215/1218	Surveyed elevation (NVGD 29) (*E*):	~~-0.4~~ / ~~-0.4~~
		Time Depart Station:	1224	Water surface from surveyed elevation (*F*):	+0.85 (1)

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~-0.4~~ water elevation	+0.85 (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-6.4~~	-5.15
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-5.4~~	-4.15
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-3.6~~	-2.35
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-4.4~~	-3.15

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.35 (1)	~~-3.6~~	2.8'								
				silt	black	very soft	fine	—		
(1) -4.15	~~-5.4~~	1.0'	—	—	—	—	—	—	—	—
				clay	olive gray	firm	fine	—		
(1) -5.15	~~-6.4~~	0.0'								

File ID of digital photograph(s):

Comments:
Sediment blew out on 1st attempt
Total core = 2.8' Bottom to transition = 1.0'

(1) JE identified error in tide board placement. correction = +1.25'

AM 8/31/06

Page ___ of ___

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff and Barge
Chief Scientist: [illegible]

Station ID:	T6	Time On Station:	1229	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41° 40.499'	Water Depth (*A*):	3.5'
Logged by:	[illegible]	Easting (NAD 83):	70° 54.917'	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	5.7'
Date:	8-24.06	Predicted Tide (ft):	1.1	Length of core (from bottom) (*D*):	1.9'
		Time of Collection:	1235	Surveyed elevation (NVGD 29) (*E*):	~~-0.9~~ Tide +0.35 (1)
		Time Depart Station:	1241	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~-0.9'~~ +0.35 Water elevatio
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.95'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	see notes
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.05
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.95

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.05	1.9		Wood chips w/some Silt	Brown Black					
-3.95	0.0								

File ID of digital photograph(s):

Comments: Bottom To Transition
NOT a clear Transition. Sediment is full of wood chips, NOT Typical native or OL layers

(1) JE identified error in Tide board placement. correction = 1.25'

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel:
Client: *USACE NAE* | Chief Scientist:

Station ID:	T8	Time On Station:	1248	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	41° 40.488'	Water Depth (*A*):	3.2'
Logged by:	AM	Easting (NAD 83):	70° 54.914	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	5.4'
Date:	8-24-06	Predicted Tide (ft):	1.0'	Length of core (from bottom) (*D*):	1.1
		Time of Collection:	1253	Surveyed elevation (NVGD 29) (*E*):	~~-1.3'~~ Tide
		Time Depart Station:	1258	Water surface from surveyed elevation (*F*):	-0.05 (1)

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD): *E - F*	-0.05' (1)	
(H) Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-1.3~~	Tidal elevation
(z*) Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-5.9'~~	-4.65
(I) Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-5.4~~	-4.15
(I_2) Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-4.8~~	-3.55
(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	~~-4.5~~	-3.25

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.55		1.1'		silt	black	fine	fine			
-4.15		0.5'	—	—	—	—	—	—	—	—
-4.65'		0.0		clay/+ sand+ shells	olive grey w/mixed sand+ shells	firm	med	NA		

File ID of digital photograph(s):

Comments:
Bottom clay-sand-shells.
Total core = 1.1'
Bottom To Transition = 0.5'

(1) JE identified error in Tide board placement correction = +1.25 AM 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + boat
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	T9	Time On Station:	1303	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	41°46.483'	Water Depth (*A*):	3.4'
Logged by:	AM	Easting (NAD 83):	70°54.913'	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	15'	Water surface to top of handle (*C*):	4.6
Date:	8-24-06	Predicted Tide (ft):	1.5	Length of core (from bottom) (*D*):	~~2.25~~ 1.25
		Time of Collection:	1313	Surveyed elevation (NVGD 29) (*E*):	~~-1.5~~ -0.25' (1)
		Time Depart Station:	1320	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~-1.5~~ -0.25' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.65'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.25'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.65'

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

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.25'		Silt w/ wood chips	black/ brown	fine w/ pebbles	med			
		0.4'	—	clay	olive grey	firm	fine			
		0.0'								

File ID of digital photograph(s):

Comments:

Total core = 1.25

Bottom to Transition = 0.4'

Clay Bottom, Silt w/ wood chips

(1) JE identified error w/ Tide board placement correction = +1.25'

AM 8/21/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: GR Shift tug
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	S19	Time On Station:	1327	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41° 40.443'	Water Depth (*A*):	3.6'
Logged by:	JM	Easting (NAD 83):	70° 54.921	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	4.3'
Date:	8-24-06	Predicted Tide (ft):	0.6	Length of core (from bottom) (*D*):	2.2'
		Time of Collection:	1329	Surveyed elevation (NVGD 29) (*E*):	~~-1.7'~~ -0.45' (1)
		Time Depart Station:	1340	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	~~-1.7'~~ -0.45'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.15'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.65'
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.95
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.05

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.95	2.2'								
			silt	black	soft	fine			
-5.65	0.5'		clay	gray	firm	fine			
-6.15	0.0								

File ID of digital photograph(s):

Comments:

Total core = 2.2'

Bottom To Transition = 0.5'

(1) JE identified error w/ Tide board placement correction = +1.25'

JM 8/31/06

Battelle — The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + barge
Client: *USACE NAE* | Chief Scientist: D. Mansfield

Station ID:	V19	Time On Station:	0857	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41°40.443'	Water Depth (*A*):	5.5
Logged by:	DM	Easting (NAD 83):	70°54.908'	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	16'	Water surface to top of handle (*C*):	2.8'
Date:	8.25.06	Predicted Tide (ft):	4.1	Length of core (from bottom) (*D*):	1.25'
		Time of Collection:	0900	Surveyed elevation (NVGD 29) (*E*):	~~+1.6'~~ +2.85' (1)
		Time Depart Station:	0910	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~+1.6'~~ +2.85' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.35
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.65
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.10
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.65

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.25'		Silt	black	soft	fine			
0.7'		clay	gray	firm	fine			
0.0								

File ID of digital photograph(s):

Comments:

Total core = 1.25'

Bottom To Transition = 0.7' Somewhat blurred Transition.

(1) JE identified error w/ Tide board placement correction = +1.25'

DM 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff and barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	T11	Time On Station:	0914	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	41° 40.476'	Water Depth (*A*):	5.8
Logged by:	AW	Easting (NAD 83):	70° 54.914'	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	2.75'
Date:	8.25.06	Predicted Tide (ft):	4.7'	Length of core (from bottom) (*D*):	1.1'
		Time of Collection:	0918	Surveyed elevation (NVGD 29) (*E*):	~~+1.7'~~ +2.95 (1)
		Time Depart Station:	0925	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~+1.7'~~ +2.95' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.85

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.2'	1.1'		silt	black	soft	fine			
-3.8'	0.5	—	—	—	—	—	—	—	
			clay	gray	firm	fine			
-4.3'	0.0								

File ID of digital photograph(s):

Comments: Bottom To Transition 0.5'
Total core 1.1'.

(1) JE identified an error w/ the Tide board position. Correction = +1.25'
AW 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR skiff + barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	S15	Time On Station:	0928	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	41° 40.464'	Water Depth (*A*):	6.5'
Logged by:	AM	Easting (NAD 83):	70° 54.918'	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	10'	Water surface to top of handle (*C*):	~~0.75~~ 1.75 WO AM 8/25
Date:	8.25.06	Predicted Tide (ft):	4.2	Length of core (from bottom) (*D*):	1.4'
		Time of Collection:	0930	Surveyed elevation (NVGD 29) (*E*):	~~+1.8'~~ +3.05'
		Time Depart Station:	0942	Water surface from surveyed elevation (*F*):	— (1)

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~+1.8'~~ +3.05' (1)
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.2'
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.8'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.45'

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.8'		1.4'		silt	black	soft	fine			
-4.2'		1.0'	—	—	—	—	—	—	—	—
				clay	grey	firm	fine			
-5.2'		0.0								

File ID of digital photograph(s):

Comments: Total Core = 1.4'
Bottom To Transition : 1.0'

(1) JE identified error w/ Tide board placement. CORRECTION = +1.25'
AM 8/31/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	I 24	Time On Station:	1112	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706674.46	Water Depth (*A*):	3.2'
Logged by:	AM	Easting (NAD 83):	815651.94	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.6'	Water surface to top of handle (*C*):	1.7'
Date:	8-31-06	Predicted Tide (ft):	2.9'	Length of core (from bottom) (*D*):	2.4'
		Time of Collection:	1122	Surveyed elevation (NVGD 29) (*E*):	+1.3' water
		Time Depart Station:	1128	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.0'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.10'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.60
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.90

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.6'	2.4'								
			silt	black	soft	fine			
-4.1'	0.9'								
	0.6		clay	olive grey	firm	fine			
	0.4		wood chips	brown		med			
-5.0'	0.0'		clay	olive grey	firm	fine			

File ID of digital photograph(s):

Comments:

Bottom To Transition = 0.9'

0-0.4 olive grey clay, 0.4'-0.6' wood chips, 0.6-0.9' olive grey clay

0.9-2.4' = black silt

Heavy sheen and odor associated w/ core. Station appears too close to cable line for dredge to be able to ~~reach~~ in E-W orientation.

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	N24	Time On Station:	1136	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706675.98	Water Depth (*A*):	5.6'
Logged by:	JM	Easting (NAD 83):	815773.24	Length of push core assembly (*B*):	8'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8'	Water surface to top of handle (*C*):	0.0'
Date:	8-31-06	Predicted Tide (ft):	3.0'	Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1138	Surveyed elevation (NVGD 29) (*E*):	+1.6' Tide
		Time Depart Station:	1144	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.8		1.5'		OL	black	very soft	very fine			
-5.3		1.1'								
				clay w/ wood chips + some sand	olive grey w/ mixed particles	firm	med			
-6.4		0.0								

File ID of digital photograph(s):

Comments:

Bottom To Transition = 1.1' Bottom is clay, woodchips w/ some sand
Top is OL

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

Project #: *G606422*
Vessel: CR Skiff + barge
Chief Scientist: Alex Mansfield

Station ID:	P24	Time On Station:	1146	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706675.3	Water Depth (*A*):	6.8'
Logged by:	DM	Easting (NAD 83):	815830.1	Length of push core assembly (*B*):	11'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.6'
Date:	8-31-06	Predicted Tide (ft):	3.1'	Length of core (from bottom) (*D*):	0.9'
		Time of Collection:	1149	Surveyed elevation (NVGD 29) (*E*):	+1.8'
		Time Depart Station:	1156	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.8'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.0

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-5.7'	0.9'		Wood/sand	Brown		med			
	0.7'		clay	gray	firm	fine			
-6.6	0.0								

File ID of digital photograph(s):

Comments:
Transition from clay/ To Wood/sand at 0.7' No Apparent OL

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: Alex Mansfield

Station ID:	P25	Time On Station:	1157	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	270665.94	Water Depth (*A*):	5.3'
Logged by:	SM	Easting (NAD 83):	815823.19	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	0.0'
Date:	8-31-06	Predicted Tide (ft):	3.1	Length of core (from bottom) (*D*):	2.1
		Time of Collection:	1200	Surveyed elevation (NVGD 29) (*E*):	1.9'
		Time Depart Station:	1210	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.0	2.1'		OL w/wood	black	soft	fine			
-4.6	1.5'								
			clay	gray	firm	fine			
-6.1	0.0								

File ID of digital photograph(s):

Comments:
Bottom To Transition = 1.5' olive grey clay under OL w/ some wood chips

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + barge
Chief Scientist: Alex Mansfield

Station ID:	S 1	Time On Station:	1222	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707249.6	Water Depth (*A*):	4.8*/5.5
Logged by:	AM	Easting (NAD 83):	815900.5	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	0.75'
Date:	8-31-06	Predicted Tide (ft):	3.1	Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	1224	Surveyed elevation (NVGD 29) (*E*):	2.0' water elv.
		Time Depart Station:	1229	Water surface from surveyed elevation (*F*):	-

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.25
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.05 (No Transition)
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.05
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.05	1.2'		clay	olive grey	firm	fine			
-5.25	0.0								

File ID of digital photograph(s):

Comments:
No OL, all grey clay.
~~5.5~~* Attempted core but hit something hard. moved over ~2' rechecked water depth (5.5') and collected core

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + barge
Chief Scientist: A. Mansfield

Station ID:	W2	Time On Station:	1233	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707223.7	Water Depth (*A*):	6.3'
Logged by:	SM	Easting (NAD 83):	815999.3	Length of push core assembly (*B*):	11
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2"	Water surface to top of handle (*C*):	1.95'
Date:	8-31-06	Predicted Tide (ft):	3.4	Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	1236	Surveyed elevation (NVGD 29) (*E*):	2.1' water elev.
		Time Depart Station:	1243	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.95
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.35
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.95
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.2

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.95	2.0		silt/ wood chips	black	soft				
-5.35	1.6'	—	—	—	—	—	—	—	—
			clay	grey	firm	fine			
-6.95	0.0								

File ID of digital photograph(s):

Comments:
Bottom To Transition: 1.6' Black silt w/ wood chips over grey clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: Alex Mansfield

Station ID:	V7	Time On Station:	1250	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707101.2	Water Depth (*A*):	5.9'
Logged by:	AM	Easting (NAD 83):	815975.5	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	2.75'
Date:	8-31-06	Predicted Tide (ft):	3.5	Length of core (from bottom) (*D*):	2.15'
		Time of Collection:	1250	Surveyed elevation (NVGD 29) (*E*):	+2.4' water elv.
		Time Depart Station:	1258	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.4
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.85
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.75
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.70
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.7	2.15		Silt shells	black	soft	med			
-4.75	1.1'	—	—	—	—	—	—	—	—
			clay	olive gray	firm	fine			
-5.85	0.0								

File ID of digital photograph(s):

Comments:
Bottom To Transition = 1.1' Black silt w/ some shells over gray clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: Alex Mansfield

Station ID:	V10	Time On Station:	1300	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2702023.6	Water Depth (*A*):	4.9'
Logged by:	dm	Easting (NAD 83):	815978.6	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8'	Water surface to top of handle (*C*):	1.6'
Date:	8-31-06	Predicted Tide (ft):	3.6'	Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	1304	Surveyed elevation (NVGD 29) (*E*):	+2.6' water elv.
		Time Depart Station:	1309	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-2.6'	1.2'		Silt w/ wood chips	Black Brown	mixed	med			
	-3.1	0.7'	—	—	—	—	—	—	—	
				clay	gray	firm	fine			
	-3.8	0.0								

File ID of digital photograph(s):

Comments:
Bottom To Transition = 0.7' Black silt w/ wood chips over gray clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	S13	Time On Station:	1313	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706949.0	Water Depth (*A*):	6.0'
Logged by:	Lm	Easting (NAD 83):	815903.7	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1'	Water surface to top of handle (*C*):	0.0'
Date:	8-31-06	Predicted Tide (ft):	3.6'	Length of core (from bottom) (*D*):	1.9'
		Time of Collection:	1315	Surveyed elevation (NVGD 29) (*E*):	2.6' water elv.
		Time Depart Station:	1320	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.5	1.9'		silt	black	soft	fine			
-4.0	1.4'	—	—	—	—	—	—	—	—
			clay	gray	firm	fine			
-5.4	0.0								

File ID of digital photograph(s):

Comments: Bottom To Transition = 1.4' fine black silt over gray clay

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

Project #: *G606422*
Vessel: CR Skiff + Lunt
Chief Scientist: Alex Mansfield

Station ID:	T16	Time On Station:	1324	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706872.9	Water Depth (*A*):	6.1
Logged by:	DM	Easting (NAD 83):	815923.8	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.7'
Date:	8-31-06	Predicted Tide (ft):	3.6'	Length of core (from bottom) (*D*):	1.6'
		Time of Collection:	1325	Surveyed elevation (NVGD 29) (*E*):	2.6' water elv.
		Time Depart Station:	1328	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-4.1	1.6'		silt	black	soft	fine			
-4.5	1.2'	— —	shell Hash	—	—	— —	—	— —	—
			clay	grey	firm	fine			
-5.7	0.0'								

File ID of digital photograph(s):

Comments:

0 - Transition = 1.2' fine black silt over grey clay. Some shell Hash at Transition

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* Project #: *G606422*
Location: *New Bedford, MA* Vessel:
Client: *USACE NAE* Chief Scientist:

Station ID:	S20	Time On Station:	1333	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706772.7	Water Depth (*A*):	6.2'
Logged by:	dm	Easting (NAD 83):	815898.6	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.4'
Date:	8-31-06	Predicted Tide (ft):	3.6	Length of core (from bottom) (*D*):	1.8'
		Time of Collection:	1334	Surveyed elevation (NVGD 29) (*E*):	2.6' water elv.
		Time Depart Station:	1340	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.0'								
		1.7'	—	—	silt	black	soft	fine	—	—
				mixed silt clay	Dark gray	soft	fine			
		1.1'	—	—	—	—	—	—	—	—
				clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Bottom To Transition 1.1'
0-1.1' gray clay, 1.1'-1.7' gray silt, 1.7-1.8 Black fine silt.

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mearfield

Station ID:	V22	Time On Station:	1350	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706727.4	Water Depth (*A*):	7.4'
Logged by:	AM	Easting (NAD 83):	815978.4	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	0.5'
Date:	8-31-06	Predicted Tide (ft):	3.7'	Length of core (from bottom) (*D*):	2.35'
		Time of Collection:	1351	Surveyed elevation (NVGD 29) (*E*):	2.7' water elv.
		Time Depart Station:	1354	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.8'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.9'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.45
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.7'

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-5.45		2.35'								
-5.9		1.9	–	OL	black	very soft	very fine	–	–	–
				clay	gray	firm	fine			
-7.8		0.0'								

File ID of digital photograph(s):

Comments:

Bottom To Transition 1.9'. OL over grey clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: Alex Mansfield

Station ID:	S7	Time On Station:	1410	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707101.7	Water Depth (*A*):	6.2'
Logged by:	Dm	Easting (NAD 83):	815898.3	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.8'
Date:	8-31-06	Predicted Tide (ft):	3.6	Length of core (from bottom) (*D*):	1.45'
		Time of Collection:	1414	Surveyed elevation (NVGD 29) (*E*):	2.9' water elv.
		Time Depart Station:	1419	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.9'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.3'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.7'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.85
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.85	1.45								
			silt/ shell hash	black	soft/ mixed	med			
-4.7	0.6'								
			clay	gray	firm	fine			
-5.3'	0.0								

File ID of digital photograph(s):

Comments:

Bottom To Transition = 0.6' fine black silt w/ some shell hash over gray clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CRS Raff + Barge
Chief Scientist:

Station ID:	V16	Time On Station:	1423	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706875.8	Water Depth (*A*):	7.0'
Logged by:	AM	Easting (NAD 83):	815975.4	Length of push core assembly (*B*):	11.
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1'	Water surface to top of handle (*C*):	2.2'
Date:	8-31-06	Predicted Tide (ft):	3.6'	Length of core (from bottom) (*D*):	2.3'
		Time of Collection:	1425	Surveyed elevation (NVGD 29) (*E*):	2.9' w/ Tide elv.
		Time Depart Station:	1429	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+ 2.9'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.9'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.1'

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.6	2.3'								
			silt	black	soft	fine			
-5.1	0.8	—	—	—	—	—	—	—	—
			clay	olive grey	firm	fine			
-5.9	0.0								

File ID of digital photograph(s):

Comments:
Bottom To Transition = 0.8'

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: Alex Mansfield

Station ID:	V20	Time On Station:	1431	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706774.8	Water Depth (*A*):	7.6'
Logged by:	AM	Easting (NAD 83):	815972.9	Length of push core assembly (*B*):	11.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.6'	Water surface to top of handle (*C*):	0.45'
Date:	8-31-06	Predicted Tide (ft):	3.6'	Length of core (from bottom) (*D*):	2.3'
		Time of Collection:	1432	Surveyed elevation (NVGD 29) (*E*):	2.8' water elv.
		Time Depart Station:	1440	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.75
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.15
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.45
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.8

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-5.45	2.3'		fine black silt						
-6.15	1.6	—	clay, sand shells	—					
	1.3	—	clay w/ shell Hash	DK Gry					
-7.75	0.0								

File ID of digital photograph(s):

Comments:

0-1.6 To Transition

Battelle *The Business of Innovation*

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: J Mansfield

Station ID:	AA1	Time On Station:	0834	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707251.9	Water Depth (*A*):	6.9
Logged by:	DM	Easting (NAD 83):	816100.0	Length of push core assembly (*B*):	9.9
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.1'	Water surface to top of handle (*C*):	1.4
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	7.4
		Time of Collection:	0839	Surveyed elevation (NVGD 29) (*E*):	4.0' Water
		Time Depart Station:	0841	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.5'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.4'		Silt + Peat	Black	mixed	med			
	1.0'		clay	dk grey	firm	fine			
	0.1'								

File ID of digital photograph(s):

Comments:

Bottom To Transition = 1.0'

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: A. Mansfield

Station ID:	BB4	Time On Station:	0850	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707174.9	Water Depth (*A*):	6.8 / 7.0'
Logged by:	AM	Easting (NAD 83):	816125.7	Length of push core assembly (*B*):	9.9' →
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1'	Water surface to top of handle (*C*):	1.3 / 0.6' / 2.4
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0'
		Time of Collection:	0853	Surveyed elevation (NVGD 29) (*E*):	4.1' water elev
		Time Depart Station:	0906	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.4'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.4'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7'

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

Elevation (NVGD)	(i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-2.4		1.0		clay	dire grey	form	fine			
-3.4'		0.0'								

File ID of digital photograph(s):

Comments:

1ST attempt Plunger slipped, core no good

2nd attempt No Transition seen, suspect bad core

3rd Core length 1.0' No Transition - all grey clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	AA13	Time On Station:	0911	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270695.35	Water Depth (*A*):	7.3'
Logged by:	AM	Easting (NAD 83):	816093.3	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8'	Water surface to top of handle (*C*):	1.5'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.15'
		Time of Collection:	0917	Surveyed elevation (NVGD 29) (*E*):	4.1' water elev
		Time Depart Station:	0920	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.4'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.15'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.2'

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.15								
	-0.9		fluff	Black	V. light	fine			
			clay	olive gray	firm	fine			
	-0.0'								

File ID of digital photograph(s):

Comments:

Bottom To Transition = 0.9'

Moderate sheen when removing core

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: AM

Station ID:	AA17	Time On Station:	0922	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270684.85	Water Depth (*A*):	6.6'
Logged by:	AM	Easting (NAD 83):	816099.9	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	2.8'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.6'
		Time of Collection:	0923	Surveyed elevation (NVGD 29) (*E*):	4.0' water elv.
		Time Depart Station:	0929	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.10'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.85'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.5'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.6		Silt + Sand	Black Brown	Soft	med			
	0.0		med Sand	light Brown	firm packed	med			

File ID of digital photograph(s):

Comments:
Bottom = med sand
0.25 To Transition

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A Mansfield

Station ID:	Z11	Time On Station:	0931	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706988.9	Water Depth (*A*):	7.4'
Logged by:	AM	Easting (NAD 83):	816078.5	Length of push core assembly (*B*):	9.9
Collection Mechanism:	Push-Core	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	1.5'
Date:	9/8/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	0933	Surveyed elevation (NVGD 29) (*E*):	4.0'
		Time Depart Station:	0938	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.2'								
			Silt	Black	Soft	fine			
	0.7'								
			clay	olive grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Bottom To Transitional = 0.7'

fine Black silt over grey clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: AM

Station ID:	27	Time On Station:	0941	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707092.9	Water Depth (*A*):	6.5'
Logged by:	AM	Easting (NAD 83):	816063.7	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5'	Water surface to top of handle (*C*):	2.5'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.9'
		Time of Collection:	0942	Surveyed elevation (NVGD 29) (*E*):	3.9' water elv.
		Time Depart Station:	0946	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.9'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.9'		clay + sand	olive grey + brown	firm	med/fine			
	0.0'								

File ID of digital photograph(s):

Comments:

No Transition - no OL

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: AM

Station ID:	26	Time On Station:	0949	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2707126.9	Water Depth (*A*):	6.6'
Logged by:	AM	Easting (NAD 83):	816077.1	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.4'	Water surface to top of handle (*C*):	1.5
Date:	9/8/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	0957	Surveyed elevation (NVGD 29) (*E*):	3.7 water elev
		Time Depart Station:	1001	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.2								
	1.1	—	fluff	black	v. soft	v. fine	—	—	
			clay	olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Bottom To Transition = 1.1'

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: [illegible]

Station ID:	J24	Time On Station:	1014	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706676.5	Water Depth (*A*):	6.8'
Logged by:	[illegible]	Easting (NAD 83):	815675.2	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.2	Water surface to top of handle (*C*):	1.35'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4'
		Time of Collection:	1015	Surveyed elevation (NVGD 29) (*E*):	3.3'
		Time Depart Station:	1020	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.3' water elevation
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.25
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.85
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.85
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.4'		OL	Black	V. soft	V. fine	Hydrocarbon odor		
	0.4		clay	gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

OL over grey clay
Heavy sheen when removing core
Bottom to Transition = 0.4'

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* Project #: *G606422*
Location: *New Bedford, MA* Vessel:
Client: *USACE NAE* Chief Scientist:

Station ID:	I26	Time On Station:	1022	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706624.3	Water Depth (*A*):	6.55'
Logged by:	DM	Easting (NAD 83):	815648.5	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	1.7'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1023	Surveyed elevation (NVGD 29) (*E*):	3.1'
		Time Depart Station:	1030	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.05
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.45

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.5'								
			OL	Black	Very Soft	Very fine	Hydrocarbon		
	1.05								
			clay	olive grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:
OL after grey clay
Bottom To Transition @ 1.05'

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	D26	Time On Station:	1033	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706625.3	Water Depth (*A*):	5.8'
Logged by:	AM	Easting (NAD 83):	815799.9	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.8'	Water surface to top of handle (*C*):	3.0'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0'
		Time of Collection:	1033	Surveyed elevation (NVGD 29) (*E*):	3.0'
		Time Depart Station:	1040	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.9'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.6'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.8'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.0'		Silt + Sand	Black + Brown	mixed	med			
		0.3	—	—	—	—	—	—	—	
		0.0		clay	olive grey	firm	fine			

File ID of digital photograph(s):

Comments:

Heavy sheen seen when removing core

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A - Mansfield

Station ID:	R26	Time On Station:	1041	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270667.9	Water Depth (*A*):	6.95
Logged by:	AM	Easting (NAD 83):	815877.9	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-6	Water surface to top of handle (*C*):	1.5'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	1042	Surveyed elevation (NVGD 29) (*E*):	2.8'
		Time Depart Station:	1048	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.15

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.2'								
	0.9		fluff	black	very soft	very fine			
			Sand Peat	DK Grey	mixed	med			
	0.7'								
			clay	olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	P25	Time On Station:	1051	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706655.8	Water Depth (*A*):	6.1'
Logged by:	AM	Easting (NAD 83):	815827.5	Length of push core assembly (*B*):	9.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-4	Water surface to top of handle (*C*):	1.5
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3'
		Time of Collection:	1052	Surveyed elevation (NVGD 29) (*E*):	2.6 water elev
		Time Depart Station:	1054	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.6'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.4
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.3		fluff	Black	very soft	very fine			
	1.0		mixed clay silt	DK grey	mixed	med			
	0.4		clay	grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

multiple layers. very soft fluff on top.

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR Sk. ft + Barge
Client: *USACE NAE* **Chief Scientist:** A Mc[illegible]

Station ID:	X19	Time On Station:	1120	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706801.7	Water Depth (*A*):	5.9'
Logged by:	AM	Easting (NAD 83):	816025-0	Length of push core assembly (*B*):	6.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1'	Water surface to top of handle (*C*):	0.9'
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.5'
		Time of Collection:	1124	Surveyed elevation (NVGD 29) (*E*):	1.7'
		Time Depart Station:	1126	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	1.7'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9'
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.8'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.2'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		—	—	fluff	Black	soft	fine	—	—	—
				clay	grey	firm	fine			

File ID of digital photograph(s):

Comments:
Dredge wire right on station (Dredge just finished clean-up pass)
0.4' Bottom To Transition + 0.1' fluff

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Sk. H+Barge
Chief Scientist: A. Mansfield

Station ID:	X B	Time On Station:	1139	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2707077.0	Water Depth (*A*):	4.5
Logged by:	AM	Easting (NAD 83):	816616.4	Length of push core assembly (*B*):	6.9
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	1.1
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.9'
		Time of Collection:	1139	Surveyed elevation (NVGD 29) (*E*):	1.5'
		Time Depart Station:	1146	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	3.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.9'		Peat + shell	Black + Grey	mixed	med			
	-0.5		clay	olive grey	firm	fine			
	-0.0								

File ID of digital photograph(s):

Comments:

Dredge just passed over site
0.4' of peat + shell hash over grey clay

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	X14	Time On Station:	1150	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706924.0	Water Depth (*A*):	4.2
Logged by:	AM	Easting (NAD 83):	816029.7	Length of push core assembly (*B*):	6.9
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-2	Water surface to top of handle (*C*):	2.3
Date:	9-8-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.8'
		Time of Collection:	1203	Surveyed elevation (NVGD 29) (*E*):	0.8
		Time Depart Station:	1210	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.8'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.8'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.1'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.8								
	0.7	—	fluff	black	v. soft	v. fine	—	—	—
			clay	grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Dredge just finished cleanup pass over site

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: M. Mansfield

Station ID:	AA1	Time On Station:	10:00	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2707253.4	Water Depth (*A*):	3.4'
Logged by:	AM	Easting (NAD 83):	816098.9	Length of push core assembly (*B*):	6.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.2	Water surface to top of handle (*C*):	1.2
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.85'
		Time of Collection:	10:08	Surveyed elevation (NVGD 29) (*E*):	0.7' Water elev
		Time Depart Station:	10:14	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.25
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.85								
0.5	—	Silt + Peat	DK grey	Soft	med fine	—	—	
0.0		clay w/ shells	grey	firm (mixed)	med			

File ID of digital photograph(s):

Comments:

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	220	Time On Station:	1021	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	270677.1	Water Depth (*A*):	3.7
Logged by:	DM	Easting (NAD 83):	816078.0	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.7	Water surface to top of handle (*C*):	1.4
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3
		Time of Collection:	1022	Surveyed elevation (NVGD 29) (*E*):	0.7' Water elv.
		Time Depart Station:	1030	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.4

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

	Elevation (NVGD) (I.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.3		Silt + Peat (plus fine sand)	DK grey	Soft	Med fine			
		0.9	—	—	—	—	—	—	—	
		0.0		olive grey clay - shells at bottom	grey	Very firm	fine			

File ID of digital photograph(s):

Comments:
Strong sheen upon removal

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

Station ID:	X17	Time On Station:	1038	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706843.9	Water Depth (*A*):	3.4'
Logged by:	AM	Easting (NAD 83):	816030.1	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.7	Water surface to top of handle (*C*):	1.6
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5
		Time of Collection:	1041	Surveyed elevation (NVGD 29) (*E*):	1.0' water elev.
		Time Depart Station:	10:47	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.4

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5		fine sand silt	pk gray	soft	fine	—	—	
		-1.2			olive gray	very firm	fine			
				clay						
		0.0								

File ID of digital photograph(s):

Comments:
Strong sheen from upper material upon removal

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

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Station ID:	T15	Time On Station:	10:51	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706901.9	Water Depth (*A*):	3.7'
Logged by:	AM	Easting (NAD 83):	815926.4	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	2.0
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5
		Time of Collection:	10:52	Surveyed elevation (NVGD 29) (*E*):	1.1' water el.
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.4
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5		Silt + Peat	DK grey	Soft	fine			
		0.5		Mixed Transition						
		0.0		grey clay	grey	firm	fine			

File ID of digital photograph(s):

Comments:

Strong sheen from upper layer upon removal

Transition is streaked clay + silt ~0.4'

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR Skiff + Barge
Client: *USACE NAE* | Chief Scientist: A. Mansfield

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Station ID:	X 14	Time On Station:	1103	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706927.6	Water Depth (*A*):	4.0'
Logged by:	AM	Easting (NAD 83):	816025.8	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	AM ~~1103~~ 2.2	Water surface to top of handle (*C*):	1.6'
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4
		Time of Collection:	1104	Surveyed elevation (NVGD 29) (*E*):	1.1 water elev.
		Time Depart Station:		Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.4
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.4'								
		-0.9		Silt fine sand Peat	DK gray	Soft	med			
		-0.0		clay w/ some shells + Peat & wood chips	gray	firm	med			

File ID of digital photograph(s):

Comments:
Sheen released from surface layer upon removal

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* Project #: *G606422*
Location: *New Bedford, MA* Vessel:
Client: *USACE NAE* Chief Scientist:

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Station ID:	S13	Time On Station:	11:15	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706951.6	Water Depth (*A*):	4.4
Logged by:	DM	Easting (NAD 83):	815903.2	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3'	Water surface to top of handle (*C*):	1.6
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.1
		Time of Collection:	1116	Surveyed elevation (NVGD 29) (*E*):	1.1' water level
		Time Depart Station:	1121	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.1								
		Silt fine Sand	Black	Soft	fine			
0.6								Blurred Transition
0.4								
		clay	olive grey	firm	fine			
0.0								

File ID of digital photograph(s):

Comments:
Sheens from Top layer seen upon removal

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + barge
Chief Scientist: A. Mansfield

Station ID:	I 24	Time On Station:	1128	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706678.7	Water Depth (*A*):	3.1
Logged by:	dm	Easting (NAD 83):	815650.2	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.5'
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1129	Surveyed elevation (NVGD 29) (*E*):	1.1'
		Time Depart Station:	1136	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)	1.5	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
				OL	black	Very Soft	Very fine	oil		Notible Sheen
		0.5		clay	olive grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:
Heavy Sheen when collecting core

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Skiff + Barge
Chief Scientist: A. Mansfield

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Station ID:	N24	Time On Station:	1138	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706675.3	Water Depth (*A*):	5.5'
Logged by:	AM	Easting (NAD 83):	815777.9	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.6'	Water surface to top of handle (*C*):	0.0'
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6'
		Time of Collection:	1140	Surveyed elevation (NVGD 29) (*E*):	1.2' Waterele
		Time Depart Station:	1145	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.2'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.6		fine Sand Silt Peat	Black/ DK gray	Soft	med/ fine			
0.6								
0.0		Clay w/ some Peat	gray	firm	fine			

File ID of digital photograph(s):

Comments:
Strong Sheen upon removal

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR SX. ff + Barge
Chief Scientist: Alex Mansfield

Station ID:	L 38	Time On Station:	1152	All measurements are ±0.1 feet	
Core Sample ID:		Northing (NAD 83):	2706318.2	Water Depth (*A*):	7.5
Logged by:	AM	Easting (NAD 83):	815724.1	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9'	Water surface to top of handle (*C*):	1.5
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.6
		Time of Collection:	1154	Surveyed elevation (NVGD 29) (*E*):	1.5'
		Time Depart Station:	1200	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-6.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-6.0

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.6								
0.5	— — —	fluff	Black	very soft	very fine	—	—	
0.6		clay mixed w/ chips	DK grey	firm	med			

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR 3K. ff + Barge
Chief Scientist: D. Mansfield

Station ID:	340	Time On Station:	1213	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270 6278.9	Water Depth (*A*):	6.7
Logged by:	Dm	Easting (NAD 83):	815680.1	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3'	Water surface to top of handle (*C*):	2.0
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3
		Time of Collection:	1215	Surveyed elevation (NVGD 29) (*E*):	1.9'
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	1.9'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.1
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.6
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.8

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.3		Silt (very fine)	Black	Very soft	Very fine			
		0.5		clay	Grey clay	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* Project #: *G606422*
Location: *New Bedford, MA* Vessel:
Client: *USACE NAE* Chief Scientist:

Station ID:	Q42	Time On Station:	1224	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706223.4	Water Depth (*A*):	5.4'
Logged by:	AM	Easting (NAD 83):	815850.8	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	0.0
Date:	9-14-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1225	Surveyed elevation (NVGD 29) (*E*):	2.0'
		Time Depart Station:	1232	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.5'		Silt Peat shells	DK grey	mixed	med			
	1.0		Clay	olive grey	very firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:
moderate sheen upon removal.

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR Smith + Dryer
Chief Scientist: A. Mansfield

Station ID:	K42	Time On Station:	1235	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706224.1	Water Depth (*A*):	7.1'
Logged by:	AM	Easting (NAD 83):	815703.2	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	0.9
Date:	9.14.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4'
		Time of Collection:	1238	Surveyed elevation (NVGD 29) (*E*):	2.0'
		Time Depart Station:	1242	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.1

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.4		fine Silt	Black	very soft	very fine	black		
		0.6		clay	grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	Q19	Time On Station:	0908	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706798.8	Water Depth (*A*):	~~5.8~~ 5.6 w.o. datum
Logged by:	JW	Easting (NAD 83):	815849.2	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	3.6'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.6'
		Time of Collection:	0910	Surveyed elevation (NVGD 29) (*E*):	2.3' water elv
		Time Depart Station:	0922	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.65
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.6								
0.45	—	silt	black	soft	fine	—	—	—
0.6		clay	gray	firm	fine			

File ID of digital photograph(s):

Comments:
Heavy Sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	Q15	Time On Station:	0853	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	270690.9	Water Depth (*A*):	6.1
Logged by:	[illegible]	Easting (NAD 83):	815850.3	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.8	Water surface to top of handle (*C*):	3.15
Date:	9/21/06	Predicted Tide (ft):	—	Length of core (from bottom) (*D*):	0.75'
		Time of Collection:	0855	Surveyed elevation (NVGD 29) (*E*):	2.5' [illegible]
		Time Depart Station:	0922	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.35
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.95
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.75		fine						
				silt	Black	soft	fine			
		0.4	—	—	—	—	—	—	—	—
				clay	grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	Q4	Time On Station:	0818	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270713.6	Water Depth (*A*):	6.5
Logged by:	MW	Easting (NAD 83):	815853.1	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	2.4
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6
		Time of Collection:	0820	Surveyed elevation (NVGD 29) (*E*):	2.7 water elv.
		Time Depart Station:	0833	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.8
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.6		fine silt	Black	soft	fine			
		1.2	—	—	—	—	—	—	—	
				clay	grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	Q 11	Time On Station:	0840	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706998.5	Water Depth (*A*):	6.2
Logged by:	SM	Easting (NAD 83):	815847.4	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.1	Water surface to top of handle (*C*):	2.45
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	6.35
		Time of Collection:	0842	Surveyed elevation (NVGD 29) (*E*):	2.7 water elv
		Time Depart Station:	0850	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.85
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.65
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.35		fine silt	Black	loose soft	fine	—	—	—
1.2	—	—	—	—	—			
		clay	grey	firm	fine			
0.0								

File ID of digital photograph(s):

Comments:

slight sheen

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	J31	Time On Station:	0945	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706499.3	Water Depth (*A*):	5.3'
Logged by:	AM	Easting (NAD 83):	815678.7	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3'	Water surface to top of handle (*C*):	3.25
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.15
		Time of Collection:	0946	Surveyed elevation (NVGD 29) (*E*):	2.0'
		Time Depart Station:	1000	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.75
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.45
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.15								
1.0	—	Silt	Black	soft	fine	—	—	
0.8	—	Clay	Gray	soft	fine	—	—	
		Silt/OL	Black	soft	fine			
0.3	—	—	—	—	—	—	—	
0.0		Clay/	gray	firm	fine			

File ID of digital photograph(s):

Comments:

Heavy sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	R42	Time On Station:	1003	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706223.2	Water Depth (*A*):	5.0'
Logged by:	AM	Easting (NAD 83):	815873.3	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	0.8'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0'
		Time of Collection:	1006	Surveyed elevation (NVGD 29) (*E*):	1.7' water elv.
		Time Depart Station:	1015	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.65
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.0								
		0.85		silt	black	soft	fine			
				clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	I32	Time On Station:	1027	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270648 0.5	Water Depth (*A*):	3.3'
Logged by:	Am	Easting (NAD 83):	815656.5	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	Push-Core	GPS Accuracy:	1.9'	Water surface to top of handle (*C*):	1.95'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.45
		Time of Collection:	1030	Surveyed elevation (NVGD 29) (*E*):	1.3 water elev.
		Time Depart Station:	1039	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.75
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.45
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.45		fluff OL	black	soft	fine	0.1		
	0.3	—	—	—	—	—	—	—	—
	0.0		clay	olive gray	firm	fine			

File ID of digital photograph(s):

Comments: Coring under Dredge wire threw when removing core

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	D42	Time On Station:	1048	**All measurements are ±0.1 feet**	
Core Sample ID:	-	Northing (NAD 83):	2706222.1	Water Depth (*A*):	5.5'
Logged by:	Jm	Easting (NAD 83):	815526.5	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	3.2'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.9'
		Time of Collection:	1054	Surveyed elevation (NVGD 29) (*E*):	1.0' water elv
		Time Depart Station:	1105	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.05
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5

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

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.9								
		0.75	—	—	—	—	—	—	—	—
				silt	Black	soft	fine			some shell hash
				clay	olive grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	I 42	Time On Station:	1109	**All measurements are ±0.1 feet**	
Core Sample ID:	-	Northing (NAD 83):	2706225.1	Water Depth (*A*):	5.8'
Logged by:	JM	Easting (NAD 83):	815654.4	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3'	Water surface to top of handle (*C*):	2.95
Date:	9-21-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.25
		Time of Collection:	1112	Surveyed elevation (NVGD 29) (*E*):	0.7' @ Tide Board
		Time Depart Station:	1122	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.35'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.55
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.1

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.25		silT	Black	soft	fine			
	0.8	—	—	—	—	—	—	—	—
			clay	olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	L38	Time On Station:	1124	**All measurements are ±0.1 feet**	
Core Sample ID:	–	Northing (NAD 83):	270325.4	Water Depth (*A*):	4.7'
Logged by:	JM	Easting (NAD 83):	845720.4	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.85	Water surface to top of handle (*C*):	4.4'
Date:	9.21.06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.7'
		Time of Collection:	1126	Surveyed elevation (NVGD 29) (*E*):	0.5'
		Time Depart Station:	1133	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.1'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.6'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.2'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.7'								
		0.5		Silt	Black	soft	fine			
		0.0		Clay w/shell Hash	gray/	firm	fine			

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	040	Time On Station:	1135	**All measurements are ±0.1 feet**	
Core Sample ID:	-	Northing (NAD 83):	270627 6.0	Water Depth (*A*):	3.5'
Logged by:	[illegible]	Easting (NAD 83):	815675.3	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.9'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1137	Surveyed elevation (NVGD 29) (*E*):	0.3' water elev
		Time Depart Station:	1147	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.8'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.45'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.3'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.2'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5'		Silt + Sand	Black	Soft ↓ Stiff	fine			
		0.35	—	—	—	—	—	—	—	—
		0.0		clay w/silt	olive gray	firm	fine			

File ID of digital photograph(s):

Comments:
slight sheen when dumping core

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M41	Time On Station:	1152	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	270625.3	Water Depth (*A*):	4.0'
Logged by:	DM	Easting (NAD 83):	815745.7	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	1.75'
Date:	9/21/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.15
		Time of Collection:	1154	Surveyed elevation (NVGD 29) (*E*):	0.0' @ Tide Board
		Time Depart Station:	1204	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.25'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.55'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.1'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.15'								
			silt	Black	soft	fine			
	0.7	—	—	—	—	—	—	—	—
			clay	olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	M2	Time On Station:	0803	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707225	Water Depth (*A*):	7.7'
Logged by:	AW	Easting (NAD 83):	815750	Length of push core assembly (*B*):	11.5'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.4'	Water surface to top of handle (*C*):	2.0'
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.7'
		Time of Collection:	0815	Surveyed elevation (NVGD 29) (*E*):	3.8 water elev
		Time Depart Station:	0817	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*) Elevation of Water Surface (NVGD): *E - F* — 3.8

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

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

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

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

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.7								
	1.2		Silt/clay	DK grey					
			Clay	olive grey	firm				
	0.0								

File ID of digital photograph(s):

Comments:
Moderate Sheen when collecting core.
* Probed around to ensure sample was in high spot of ridge. Confirmed high point despite water depth ~1.5' deeper than expected from bathy.

Page ___ of ___

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N5	Time On Station:	0836	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707149	Water Depth (*A*):	8.0
Logged by:	DM	Easting (NAD 83):	815772	Length of push core assembly (*B*):	11.5
Collection Mechanism:	Push-Core	GPS Accuracy:	2.9'	Water surface to top of handle (*C*):	1.2
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5
		Time of Collection:	0839	Surveyed elevation (NVGD 29) (*E*):	3.5 elev
		Time Depart Station:	0855	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.5								
		1.7								
		0.0								

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	07	Time On Station:	0900	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707103	Water Depth (*A*):	6.1
Logged by:	JM	Easting (NAD 83):	815799	Length of push core assembly (*B*):	11.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.5
Date:	10/6/06	Predicted Tide (ft):	0	Length of core (from bottom) (*D*):	~~2.5~~ 2.5
		Time of Collection:	0901	Surveyed elevation (NVGD 29) (*E*):	3.0
		Time Depart Station:	0911	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.4
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.1

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.5								
				Silt	Black	Soft				
		0.6								
		0.0		Clay/ Sand/ Shells	grey	Firm	Coarse			

File ID of digital photograph(s):

Comments: Moderate Sheen

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M10	Time On Station:	0915	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270225	Water Depth (*A*):	6.5
Logged by:	AM	Easting (NAD 83):	815751	Length of push core assembly (*B*):	11.5
Collection Mechanism:	Push-Core	GPS Accuracy:		Water surface to top of handle (*C*):	2.1
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.9
		Time of Collection:	0920	Surveyed elevation (NVGD 29) (*E*):	2.7
		Time Depart Station:	0927	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.8

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

	Elevation (NVGD) (I.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.9								
			Black Silt		Soft				
	-1.6								
			Clay Some Shells	grey	Firm				
	-0.0								

File ID of digital photograph(s):

Comments:
Heavy Sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	011	Time On Station:	0931	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706998	Water Depth (*A*):	6.0
Logged by:	Am	Easting (NAD 83):	815799	Length of push core assembly (*B*):	11.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	3.6
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9
		Time of Collection:	0932	Surveyed elevation (NVGD 29) (*E*):	2.5
		Time Depart Station:	0939	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.9		Silt	Black	Soft				
	-0.5		clay	gray	firm				
	-0.0								

File ID of digital photograph(s):

Comments:
Moderate Sheen

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N14	Time On Station:	0946	**All measurements are ±0.1 feet**	
Core Sample ID:	–	Northing (NAD 83):	2706923	Water Depth (*A*):	6.0'
Logged by:	AM	Easting (NAD 83):	815774	Length of push core assembly (*B*):	11.5'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	3.2'
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5
		Time of Collection:	0947	Surveyed elevation (NVGD 29) (*E*):	2.1 Water elev
		Time Depart Station:	0953	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.2
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.5								
				Silt	Black	Soft				
		-1.2								
				Clay	gey	firm				
		0.0								

File ID of digital photograph(s):

Comments:

Water elevation is ~1.5' Deeper than expected from bathy (possible dredging here after bathy)

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N17	Time On Station:	10:00	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706845	Water Depth (*A*):	6.0
Logged by:	AM	Easting (NAD 83):	815773	Length of push core assembly (*B*):	11.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	3.0
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6
		Time of Collection:	1002	Surveyed elevation (NVGD 29) (*E*):	1.9
		Time Depart Station:	1010	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.6		Silt	black	soft	fine			
-2.0		clay w/ shells	gey	firm				
-0.0								

File ID of digital photograph(s):

Comments:

Slight Sheen.

Water Depth ~1.5' deeper than expected

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M19	Time On Station:	1014	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706794	Water Depth (*A*):	5.6'
Logged by:	AM	Easting (NAD 83):	815750	Length of push core assembly (*B*):	11.5'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	2.75'
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.1
		Time of Collection:	1015	Surveyed elevation (NVGD 29) (*E*):	1.6 @ Tide Board
		Time Depart Station:	1026	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.6
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.15
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.25
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.05
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
3.1								
		Silt	black	soft	fine			
1.9								
		clay	gry	firm	fine			
0.0								

File ID of digital photograph(s):

Comments:

Water Depth is ~1.5' deeper than expected bathy. Possibly dredged here post bathy?

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	020	Time On Station:	1030	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706776	Water Depth (*A*):	4.7
Logged by:	DW	Easting (NAD 83):	815802	Length of push core assembly (*B*):	8.5
Collection Mechanism:	Push-Core	GPS Accuracy:	1.7	Water surface to top of handle (*C*):	2.6
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5
		Time of Collection:	1031	Surveyed elevation (NVGD 29) (*E*):	1.2
		Time Depart Station:	1045	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	1.2
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

	Elevation (NVGD) (I.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.5		Black Silt						
	1.0	mixed Top + Bottom seds							
			Clay + Shells	grey	firm				
	0.0								

File ID of digital photograph(s):

Comments:

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The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	H27	Time On Station:	1047	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	270659.99	Water Depth (*A*):	2.7
Logged by:	AM	Easting (NAD 83):	815626	Length of push core assembly (*B*):	8.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.25
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	10:48	Surveyed elevation (NVGD 29) (*E*):	0.8
		Time Depart Station:	10:56	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.45
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.15
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.45
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	3.0		Shell Hash Silt Oily	Black	Soft		Strong 0.1 odor		
	1.3								
	1.0		mixed layer			DK	gray		
			clay	Grey	firm				
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	H30	Time On Station:	1102	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706522	Water Depth (*A*):	2.8
Logged by:	Jm	Easting (NAD 83):	815625	Length of push core assembly (*B*):	8.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.7
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.8'
		Time of Collection:	1103	Surveyed elevation (NVGD 29) (*E*):	0.5'
		Time Depart Station:	1115	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.8		OL	Black	Very soft	Very fine	0.1		Very oily
	1.2		clay	olive grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:
Heavy sheen from Dropping spuds

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	H33	Time On Station:	1119	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706447	Water Depth (*A*):	2.5
Logged by:	JM	Easting (NAD 83):	815625	Length of push core assembly (*B*):	8.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	3.4
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6
		Time of Collection:	1120	Surveyed elevation (NVGD 29) (*E*):	0.1 at Trolley Board
		Time Depart Station:	1132	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.4

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.6		Oil Silt	Black	Soft	Fine		very oily	
		1.4	Blurred Transition							
		0.8		clay	gray	from fine				
		0.0								

File ID of digital photograph(s):

Comments:

Heavy Sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	H36	Time On Station:	1132	**All measurements are ±0.1 feet**	
Core Sample ID:		Northing (NAD 83):	2706374	Water Depth (*A*):	2.5'
Logged by:	JM	Easting (NAD 83):	815626	Length of push core assembly (*B*):	8.5'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	3.0'
Date:	10/6/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1133	Surveyed elevation (NVGD 29) (*E*):	-0.2' Tide Board
		Time Depart Station:	1155	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.2'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.7'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.7'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		3.0		OL Silt	Black	Soft	fine			
		2.0		mixed Silt + Clay						
		1.5		Clay	grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:
Heavy Sheen

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N 1	Time On Station:	10:11	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707249	Water Depth (*A*):	6.6'
Logged by:	AM	Easting (NAD 83):	815778	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push-Core	GPS Accuracy:	1.8	Water surface to top of handle (*C*):	1.5
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.8
		Time of Collection:	10:19	Surveyed elevation (NVGD 29) (*E*):	2.4' Tide Board
		Time Depart Station:	1030	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	~~3.4'~~ 2.4'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	~~-5.6~~ -6.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-3.9~~ -4.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	~~-3.8~~ -4.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-3.2~~ -4.2

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

1

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.8			Fluff					
		1.7		Silt	Black	soft	fine			Slightly blurred Transition
				Clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

1 Carried wrong value onto line "G", should have been 2.4' NOT 3.4', resulted in incorrect values on remaining lines. AM 10/16/06

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	L2	Time On Station:	1036	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707225	Water Depth (*A*):	6.0
Logged by:	AM	Easting (NAD 83):	815724	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push-Core	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.2
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	1038	Surveyed elevation (NVGD 29) (*E*):	2.7 water elv.
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	2.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.0'		DK Gray	Silt	fine				
	1.7								mixed layer
	1.4		Clay	Olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:
Moderate sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	23	Time On Station:	1049	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707200	Water Depth (*A*):	6.6
Logged by:	DM	Easting (NAD 83):	815827	Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.5
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1051	Surveyed elevation (NVGD 29) (*E*):	2.9' water el
		Time Depart Station:	1059	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.1
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.7

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.0		Silt fine Sand	Dk gray / Black	soft	fine			
		0.8		clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	05	Time On Station:	1108	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707150	Water Depth (*A*):	6.6
Logged by:	tm	Easting (NAD 83):	815800.9	Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	1.6
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1109	Surveyed elevation (NVGD 29) (*E*):	3.0 water elv.
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.0		Silt	black	soft	fine			
		-1.1		Mixed Clay Silt	Blk / gray	mixed				
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

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Station ID:	K6	Time On Station:	1121	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707125	Water Depth (*A*):	7.6'
Logged by:	AW	Easting (NAD 83):	815700	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push Core	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	0.7
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.7
		Time of Collection:	1123	Surveyed elevation (NVGD 29) (*E*):	3.3' water elv.
		Time Depart Station:	1130	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.3

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.7'		fluff Silt	Black	very soft	fine			
	1.4								Slightly mixed transition
	1.2		clay	grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N8	Time On Station:	1135	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2707075	Water Depth (*A*):	10.0
Logged by:	DM	Easting (NAD 83):	815774	Length of push core assembly (*B*):	14.0
Collection Mechanism:	Push-Core	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	2.8
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.8
		Time of Collection:	1137	Surveyed elevation (NVGD 29) (*E*):	3.7' water elev
		Time Depart Station:	1145	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-6.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-6.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.8	All clay grey firm fine							
	-0.0								

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M10	Time On Station:	1155	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	270026	Water Depth (*A*):	8.3'
Logged by:	DM	Easting (NAD 83):	815750	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push-Core	GPS Accuracy:	2-9	Water surface to top of handle (*C*):	0.1
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9'
		Time of Collection:	1157	Surveyed elevation (NVGD 29) (*E*):	3.7' Water elv
		Time Depart Station:	1204	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.7
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.6

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

	Elevation (NVGD) (I.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.9'		fluff silt OL	Black	Very soft	Very fine	0.1		Very oily
		0.7		clay	grey	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:
Heavy Sheen
Very oily

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	012	Time On Station:	1213	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706977	Water Depth (*A*):	7.7'
Logged by:	AM	Easting (NAD 83):	815803	Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.0	Water surface to top of handle (*C*):	1.4
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4
		Time of Collection:	1215	Surveyed elevation (NVGD 29) (*E*):	3.7' OATT/dw
		Time Depart Station:	1221	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+3.7
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.4		fluff silt	black	very soft	very fine			
		0.9		clay w/some sand	Gray w/some black	firm mixed	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	P15	Time On Station:	1230	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706899	Water Depth (*A*):	7.3'
Logged by:	SW	Easting (NAD 83):	815829	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push-Core	GPS Accuracy:	3.8	Water surface to top of handle (*C*):	1.0'
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1231	Surveyed elevation (NVGD 29) (*E*):	3.9' water elv.
		Time Depart Station:	1245	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.0								
				silt	black	Very soft	fine			
		-1.1								
				clay	gray w/ some shells	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	K14	Time On Station:	1251	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706925	Water Depth (*A*):	7.0
Logged by:	AM	Easting (NAD 83):	815701	Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	4.8	Water surface to top of handle (*C*):	2.2
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.65
		Time of Collection:	1252	Surveyed elevation (NVGD 29) (*E*):	4.1 water elev.
		Time Depart Station:	1259	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	4.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.2
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.55
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.65								
	0.4		OL	Black	Soft	fine			
	0.0		clay	gray	firm	fine			

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N16	Time On Station:	1304	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706874	Water Depth (*A*):	~~8.4~~ 8.9
Logged by:	AM	Easting (NAD 83):	815775	Length of push core assembly (*B*):	14.0
Collection Mechanism:	Push Core	GPS Accuracy:	4.6	Water surface to top of handle (*C*):	3.1
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.8
		Time of Collection:	1305	Surveyed elevation (NVGD 29) (*E*):	4.0 water elev
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

AM

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+4.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.9

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

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.8		fluff						
				Silt	Black	Soft	fine			
		1.6								
				clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	L18	Time On Station:	1316	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706828	Water Depth (*A*):	8.2
Logged by:	DW	Easting (NAD 83):	815724	Length of push core assembly (*B*):	14.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	4.0	Water surface to top of handle (*C*):	3.9
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9
		Time of Collection:	1317	Surveyed elevation (NVGD 29) (*E*):	3.8 water ow
		Time Depart Station:	1325	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.4
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (I.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.9								
				Silt + Sand	Black + Gray	soft	med			
		1.3								
				clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M20	Time On Station:	1328	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706776	Water Depth (*A*):	8.7
Logged by:	AW	Easting (NAD 83):	815750	Length of push core assembly (*B*):	14.0
Collection Mechanism:	Push-Core	GPS Accuracy:	3.5	Water surface to top of handle (*C*):	3.3
Date:	10/12/06	Predicted Tide (ft):	—	Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1329	Surveyed elevation (NVGD 29) (*E*):	3.7' wat elv.
		Time Depart Station:	1338	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.0'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.5'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.0'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.0'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.0								
		1.5		Silt	black	soft	fine			
				clay	gray	firm	fine			
		2.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	P20	Time On Station:	1343	**All measurements are ±0.1 feet**	
Core Sample ID:	—	Northing (NAD 83):	2706775	Water Depth (*A*):	7.2
Logged by:	DM	Easting (NAD 83):	815825	Length of push core assembly (*B*):	10.5
Collection Mechanism:	Push-Core	GPS Accuracy:	2-6	Water surface to top of handle (*C*):	2.3
Date:	10/12/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0
		Time of Collection:	1345	Surveyed elevation (NVGD 29) (*E*):	3.7 water elv.
		Time Depart Station:	1355	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.0		Silt	Black	Soft	fine			
		0.3								
		0.0		Clay	gray	form	fine			

File ID of digital photograph(s):

Comments:

Post-Dredge Core Characterization Logs

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	M3	Time On Station:	0939	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0M03-08-24	Northing (NAD 83):	2707178	Water Depth (*A*):	39'
Logged by:	AM	Easting (NAD 83):	815741	Length of push core assembly (*B*):	8.2'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.9'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.4'
		Time of Collection:	0941	Surveyed elevation (NVGD 29) (*E*):	-0.1'
		Time Depart Station:	1015	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.1'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.8' *
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.4	*	Mixed silt sand clay	DK gray	Mixed	med			S-06D-0M03-08 -03
-1.6		clay	olive gray	firm	fine			S-06D-0M03-08-13 (Archive)
0.0								

File ID of digital photograph(s):

Comments:

* Upper layers are mixed sediment types. Appears that disturbance (Debris removal?) is mixing upper layers. This may have mixed OC seds into deeper layers. Top of distinct clay layer is used for the "elevation of visual transition" value.

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	R3	Time On Station:	1026	All measurements are ±0.1 feet	4th / 1st / 2nd / 3rd
Core Sample ID:	S-06D-OR03-00-13	Northing (NAD 83):	2707186	Water Depth (*A*):	3.3' / 3.2 / 3.2 / 3.3'
Logged by:	AM	Easting (NAD 83):	815871	Length of push core assembly (*B*):	7.4' / 8.2 / 8.2 / 8.2'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8	Water surface to top of handle (*C*):	2.8' / 1.2 / 1.1' / 1.9'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3 / NA / NA / NA
		Time of Collection:	1028 / 1040 / 1050 / 1106	Surveyed elevation (NVGD 29) (*E*):	+0.2 / +0.1 / +0.1 / +0.2
		Time Depart Station:	1111	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.2'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.4'
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7'
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.1'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.1'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	—

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.3		SILT	DK gray	soft	fine		① ~~S-06D-OR03-00-06~~ S-06D-OR03-00-13	
0.7		Blurred Transition						
		clay	gray	firm	fine		S-06D-OR03-06-11 (ARCHIVE)	
0.0								

① NOTE: Sample ID labelled incorrectly on Jar and COC. Did NOT notice until analysis complete and Data submitted to Database. Changing ID here to maintain consistency with ~~everything~~ else.

dm 1/8/07

File ID of digital photograph(s):

Comments:

* 1st Attempt NG - plunger slipped
2nd Attempt NG - plunger slipped
3rd Attempt NG - Washout
4th Attempt switched to short core liner - good!

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* 1118 **Chief Scientist:** Alex Mansfield

Station ID:	W3	Time On Station:	2707206	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0W03-00-09	Northing (NAD 83):	816018	Water Depth (*A*):	3.3
Logged by:	AM	Easting (NAD 83):	3.1	Length of push core assembly (*B*):	8.2
Collection Mechanism:	*Push-Core*	GPS Accuracy:		Water surface to top of handle (*C*):	3.8'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.9
		Time of Collection:	1121	Surveyed elevation (NVGD 29) (*E*):	+0.5'
		Time Depart Station:	1128	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.9'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	NA
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.8

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.9	silt ↑ clay ↓	mixed silt + clay	grey	mixed	fine			Took Top 0.5 as only sample S-06D-0W03-00-05
	0.0								

File ID of digital photograph(s):

Comments:

No overlying sediment

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	AA3	Time On Station:	1131	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-AA03-00-12	Northing (NAD 83):	2707205	Water Depth (*A*):	3.4
Logged by:	DM	Easting (NAD 83):	816091	Length of push core assembly (*B*):	6.8
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-5	Water surface to top of handle (*C*):	2.0
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2
		Time of Collection:	1133	Surveyed elevation (NVGD 29) (*E*):	+0.7
		Time Depart Station:	1141	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.9 (NO TRANSITION, USED SWI)
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.2		Clay Streaked w/ Silt	grey w/ Black Streaks	firm	fine			Took Top 0.5' as only sample S-06D-AA03-00-05 (ARCHIVE)
		0.0								

File ID of digital photograph(s):

Comments:

No overlying Sediment

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	U6	Time On Station:	1147	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0006-00-14	Northing (NAD 83):	2707112	Water Depth (*A*):	3.5'
Logged by:	[illegible]	Easting (NAD 83):	815939	Length of push core assembly (*B*):	7.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	3.0'
Date:	10/31/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4'
		Time of Collection:	1148	Surveyed elevation (NVGD 29) (*E*):	+0.7
		Time Depart Station:	1156	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.7'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.2
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.8

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.4								
			Silt	DK gray	Soft	fine			~~S-06D-0006-05-14~~
								(1)	S-06D-0006-05-14
	0.4		Blurred Transition						
	0.0		clay	olive grey	firm	fine			S-06D-0006-10-14 (archive)

(1) Note: Sample Id labelled incorrectly on Jar + COC. Not identified until data in database. Changing Id here to maintain consistency with everything else. AM 1/8/07

File ID of digital photograph(s):

Comments:

Sheen on water and outside of core

Transition is blurred

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The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	Y8	Time On Station:	1202	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0408-00-06	Northing (NAD 83):	2707047	Water Depth (*A*):	3.7
Logged by:	AM	Easting (NAD 83):	816047	Length of push core assembly (*B*):	6.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.5'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.6
		Time of Collection:	1206	Surveyed elevation (NVGD 29) (*E*):	+0.8'
		Time Depart Station:	1217	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.8'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.2
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	NA (-3.6 = SWI)
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.6								
		0.0		Clay w/ Sand + Shell Hash	Mixed Grey + Brown	mixed	med			entire core Homogenized into sample S-06D-0408-00-06

File ID of digital photograph(s):

Comments:

Clay + Shell Hash
No overlying sediment

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	P8	Time On Station:	1218	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0P08-00-20	Northing (NAD 83):	2707071	Water Depth (*A*):	5.6'
Logged by:	AM	Easting (NAD 83):	865816	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	2.3
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0
		Time of Collection:	1222	Surveyed elevation (NVGD 29) (*E*):	+1.1
		Time Depart Station:	1229	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.6'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.0								
			silt	Black	soft	fine			S-06D-0P08-05-10
	1.0		Somewhat - Blurred						
			clay	olive gray	firm	fine			S-06D-0P08-10-05 (Arch.)
	0.0								

File ID of digital photograph(s):

Comments:

Heavy sheen + strong oil odor.

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	L5	Time On Station:	1233	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0L05-00-20	Northing (NAD 83):	2707128	Water Depth (*A*):	6.0
Logged by:	Dm	Easting (NAD 83):	815718	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.9	Water surface to top of handle (*C*):	3.0'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	1235	Surveyed elevation (NVGD 29) (*E*):	+1.5'
		Time Depart Station:	1246	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.0		Silt	DK grey	soft	fine			S-06D-0L05-00-0.6
	-1.4	—	—	—	—	—	—	—	S-06D-0L05-06-11 (Archive)
			clay	olive grey	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N6	Time On Station:	1246	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0N06-00-17	Northing (NAD 83):	270126	Water Depth (*A*):	7.1'
Logged by:	Am	Easting (NAD 83):	815760	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	2.3'
Date:	10-31-05	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6'
		Time of Collection:	1247	Surveyed elevation (NVGD 29) (*E*):	+1.8'
		Time Depart Station:	1253	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.3

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.6	*	Mixed silt clay	DK gray	Mixed	fine			Took Top 0.5' as only sample S-06D-0N06-00-05
	-1.3		olive gray clay	→	firm	fine			
	-0.0								

File ID of digital photograph(s):

Comments:
*No OL layer. looks like upper sediments have been mixed during Debris removal and/or dredging.

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	N8	Time On Station:	1254	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0N08-00-17*	Northing (NAD 83):	2707069	Water Depth (*A*):	7.4'
Logged by:	Am	Easting (NAD 83):	815761	Length of push core assembly (*B*):	11.7'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.4'
Date:	10-31-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.7'
		Time of Collection:	1302	Surveyed elevation (NVGD 29) (*E*):	+2.0'
		Time Depart Station:	1345	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.3'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.4

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.7'								
1.0	—	SiLT OL	DK gray/	soft	fine	—	(1)	~~S-06D-0N08-02-07~~ * S-06D-0N08-00-17
		clay/	olive gray/	firm	fine			S-06D-0N08-07-12 (Archive)
0.0								

(1) Note: Sample ID labelled incorrectly on Jar and COC. Not identified until data in database. Changing ID here to maintain consistency with everything else. Am 1/8/07

File ID of digital photograph(s):

Comments:
Strong odor and sheen

*DUP collected

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	N 8	Time On Station:	1259	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-ON08-00-17-DUP	Northing (NAD 83):	2707069	Water Depth (*A*):	7.4'
Logged by:	AM	Easting (NAD 83):	815761	Length of push core assembly (*B*):	11.7'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.3'
Date:	10/31/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.8'
		Time of Collection:	1309	Surveyed elevation (NVGD 29) (*E*):	+2.0'
		Time Depart Station:	1345	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-5.6~~ -5.4'
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	① Wrong calc AM '07

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.8'								
		OL	DK gray	Soft	fine		①	S-06D-ON08-00-17-DUP ~~S-06D-ON08-02-07-DUP~~
1.1								
		clay	olive gray	firm	fine			S-06D-ON08-07-12-DUP (Archive)
0.0								

File ID of digital photograph(s):

Comments:

① Note: Sample ID labelled incorrectly on Jar and COC. Not identified until data in database. Changing ID here to maintain consistency w/ everything else. AM 1/8/07

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	L9	Time On Station:	1030	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0L09-00-16	Northing (NAD 83):	2707023	Water Depth (*A*):	5.2
Logged by:	[illegible]	Easting (NAD 83):	815709	Length of push core assembly (*B*):	8.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.09	Water surface to top of handle (*C*):	0.5
Date:	11/1/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6'
		Time of Collection:	1040	Surveyed elevation (NVGD 29) (*E*):	-0.3
		Time Depart Station:	1050	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-6.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.5

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		-1.3'	—	SILT	Dk gray	soft	fine	—	—	S-06D-0L09-00-03
				clay	olive gray	firm	fine			S-06D-0L09-03-08 (Archive)
		0.0								

File ID of digital photograph(s):

Comments:

Strong sheen + oil odor

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	R11	Time On Station:	1057	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0R11-00-2.5	Northing (NAD 83):	2706995	Water Depth (*A*):	29'
Logged by:	JM	Easting (NAD 83):	815851	Length of push core assembly (*B*):	8.0''
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.7	Water surface to top of handle (*C*):	2.5'
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5'
		Time of Collection:	1059	Surveyed elevation (NVGD 29) (*E*):	-0.5
		Time Depart Station:	1112	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.0'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.5		Silt Shells	Black	Soft	fine			S-06D-0R11-10-15
	1.5		mixed Transition						
			clay	olive gray	firm	fine			S-06D-0R11-15-20 (Archive)
	0.0								

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	M10	Time On Station:	1116	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0M10-00-13*	Northing (NAD 83):	2707022	Water Depth (*A*):	3.8'
Logged by:	Dm	Easting (NAD 83):	815733	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-3	Water surface to top of handle (*C*):	1.9'
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3
		Time of Collection:	1118	Surveyed elevation (NVGD 29) (*E*):	-0.8
		Time Depart Station:	1140	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.9
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.3		SIT OL	Black	Soft	fine			S-06D-0M10-02-07*
		0.6		clay	olive gray	firm	fine			S-06D-0M10-07-12 ARCHIVE
		0.0								

File ID of digital photograph(s):

Comments:

*Dup collected

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Project Name: *New Bedford Harbor Environmental Monitoring* Project #: *G606422*
Location: *New Bedford, MA* Vessel: CR environmental skiff
Client: *USACE NAE* Chief Scientist: Alex Mansfield

Station ID:	M10	Time On Station:	1116	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0M10-00-13-DUP	Northing (NAD 83):	2707022	Water Depth (*A*):	3.9'
Logged by:	AM	Easting (NAD 83):	815733	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2-3	Water surface to top of handle (*C*):	1.8'
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.3
		Time of Collection:	1127	Surveyed elevation (NVGD 29) (*E*):	~~-0.9~~ -0.7'
		Time Depart Station:	1140	Water surface from surveyed elevation (*F*):	W.O. AM

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.9'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.6'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.3		OL	Black	soft	fine			S-06D-0M10-02-07-DUP
		0.6	—	—	—	—	—	—	—	—
		0.0		clay	olive gray	firm	fine			S-06D-0M10-07-12 (archive)

File ID of digital photograph(s):

Comments:

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	T15	Time On Station:	1146	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0T15-00-14	Northing (NAD 83):	2706896	Water Depth (*A*):	3.2
Logged by:	NM	Easting (NAD 83):	815923	Length of push core assembly (*B*):	7.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.02	Water surface to top of handle (*C*):	2.9
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4
		Time of Collection:	1149	Surveyed elevation (NVGD 29) (*E*):	-0.2
		Time Depart Station:	1155	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.2
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.4		OL	Black	fine soft	fine			S-06D-0T15-00-05 *
		0.9		Shell Hash Clay	gray	Mixed stiff	large			S-06D-0T15-05-10 (Archive)
		0.0								

File ID of digital photograph(s):

Comments:

Also
S-06D-0T15-00-05-MS
S-06D-0T15-~~05-10~~
00-05-MSD

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

					1st	2nd	3rd
Station ID:	L12	Time On Station:	1202	**All measurements are ±0.1 feet**			
Core Sample ID:	S-06D-0L12-00-14	Northing (NAD 83):	2706465.6	Water Depth (*A*):	4.7	4.9	4.9'
Logged by:	mw	Easting (NAD 83):	815710.7	Length of push core assembly (*B*):	7.0'	7.0'	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.99	Water surface to top of handle (*C*):	0.4	0.1	2.8
Date:	11/1/06	Predicted Tide (ft):	1st / 2nd / 3rd	Length of core (from bottom) (*D*):			1.4
		Time of Collection:	1206 / 1211 / 1215	Surveyed elevation (NVGD 29) (*E*):	+0.2		+0.2
		Time Depart Station:	1222	Water surface from surveyed elevation (*F*):	—		

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.2
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.00
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.9
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5 / -4.7 / -4.7

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.0	1.4		Silt	Black	Soft	Fine			S-06D-0L12-00-03
0.3	1.1		Peat	Brown/Black	wood chips ↓ Fine sand/silt	medium ↓ Fine			S-06D-0L12-03-08 (Archive)
1.4	0.0								

File ID of digital photograph(s):

Comments:

1st Attempt no good - Heavy peat/wood denied penetration
2nd Attempt no good -

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	W18	Time On Station:	1224	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0W18-00-19	Northing (NAD 83):	2706820	Water Depth (*A*):	3.9
Logged by:	AM	Easting (NAD 83):	815994	Length of push core assembly (*B*):	7.4
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.8	Water surface to top of handle (*C*):	1.6
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9
		Time of Collection:	1230	Surveyed elevation (NVGD 29) (*E*):	+0.3
		Time Depart Station:	1238	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.5'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.9		silt	DK grey	fine soft	fine			S-06D-0W18-00-06*
		1.2		clay	olive grey	firm	fine			S-06D-0W18-06-11
		0.0								

File ID of digital photograph(s):

Comments:

*Congener + Homologue

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

					1ST	2nd
Station ID:	213	Time On Station:	1301	**All measurements are ±0.1 feet**		
Core Sample ID:	S-06D-0213-00-16	Northing (NAD 83):	2706927	Water Depth (*A*):	3.8	4.0'
Logged by:	DM	Easting (NAD 83):	816080	Length of push core assembly (*B*):	7.0'	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	1.8'	1.5'
Date:	11-1-06	Predicted Tide (ft):	1ST / 2nd	Length of core (from bottom) (*D*):	1.0	~1
		Time of Collection:	1304 / 1326	Surveyed elevation (NVGD 29) (*E*):	+0.8	+1.0'
		Time Depart Station:	1336	Water surface from surveyed elevation (*F*):		

Calculations for Determination of Z* Elevation (from 1ST) *

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.3'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.10'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.0								
	0.8		SILT	Black	soft	fine			→ Top 0.2 S-06D-0213-00-02
	0.0		clay w/ wood chips	gray	firm	fine			S-06D-0213-02-08 (Archive)

File ID of digital photograph(s):

Comments:

* Recovery of first core was questionable. Held 1ST core and collected a second. Recovery and results similar, so kept 1ST and discarded 2nd.

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	BB19	Time On Station:	1339	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-BB19-00-06	Northing (NAD 83):	2706799	Water Depth (*A*):	3.4'
Logged by:	[illegible]	Easting (NAD 83):	816130	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.6	Water surface to top of handle (*C*):	2.6'
Date:	11-1-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.6
		Time of Collection:	1341	Surveyed elevation (NVGD 29) (*E*):	+1.3
		Time Depart Station:	1400	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.1'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.7'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0.6		Sandy silt	Black	Soft	Med			entire core Homogenized into sample S-06D-BB19-00-06
	0.4		Clay w/ gravel	gray	stiff	Large			
	0.0								

File ID of digital photograph(s):

Comments:

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	L20	Time On Station:	1040	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0L20-00-2.2*	Northing (NAD 83):	2706763	Water Depth (*A*):	3.7'
Logged by:	AM	Easting (NAD 83):	815715	Length of push core assembly (*B*):	1.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	2.5'
Date:	11-2-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.2'
		Time of Collection:	1051	Surveyed elevation (NVGD 29) (*E*):	-1.0'
		Time Depart Station:	1110	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.4'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.7

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.2		OL	Black	soft	fine			S-06D-0L20-07-12*
1.3		Streaking - Blurred Transition						
1.0		clay	gray	firm	fine			S-06D-0L20-12-17 (Archive)
0.0								

File ID of digital photograph(s):

Comments:
Sheen on water + core liner, slight oil odor

*Dup collected

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	L20	Time On Station:	1040	All measurements are ±0.1 feet	
*Core Sample ID:	S-06D-0L20-00-22-DUP	Northing (NAD 83):	2706763	Water Depth (*A*):	3.7'
Logged by:	AM	Easting (NAD 83):	815715	Length of push core assembly (*B*):	7.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	2.0'
Date:	11-2-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6'
		Time of Collection:	1056	Surveyed elevation (NVGD 29) (*E*):	-1.0'
		Time Depart Station:	1110	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD): *E - F*	-1.0'	
(H) Elevation of the bottom of the core (NVGD): *G - (B - C)*	wrong ~~-6.8~~	-6.9
(z*) Elevation of visual transition (NVGD): *H + (distance to visual transition)*	calc ~~-5.5'~~	-5.6
(I) Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	AM 11/6 -4.3	
(I_2) Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.7	
(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)		

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.6								
		OL	Black	Soft	fine			S-06D-0L20-07-12-DUP
1.3		Blurred		Transition				
		Clay	Olive gray	firm	fine			
0.0								

File ID of digital photograph(s):

Comments:

* Although longer core collected During Dup, retained same Sample ID To maintain linkage between original and Dup.

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	012	Time On Station:	1120	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0012-00-12	Northing (NAD 83):	2706952	Water Depth (*A*):	2.9
Logged by:	AN	Easting (NAD 83):	815777	Length of push core assembly (*B*):	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	2.9'
Date:	11-2-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	1133	Surveyed elevation (NVGD 29) (*E*):	-1.3'
		Time Depart Station:		Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.2'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.2								
		0.9		OL	Black	soft	fine			Took top 0.5' as only sample S-06D-0012-00-05
				clay	gray	firm	fine			
		0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	Q21	Time On Station:	1216	All measurements are ±0.1 feet	1st	2nd	3rd
Core Sample ID:	S-06D-0Q21-00-11	Northing (NAD 83):	2706766.2	Water Depth (*A*):	2.3	2.4'	2.[illegible]
Logged by:	MW	Easting (NAD 83):	815544.6	Length of push core assembly (*B*):	7.0	7.0'	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	3.1	3.5	3.[illegible]
Date:	11/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	-1.1		(1.1)
		Time of Collection:	1220 / 1224 / 1232	Surveyed elevation (NVGD 29) (*E*):	-0.6	-0.4	-0.[illegible]
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—		

Calculations for Determination of Z* Elevation

		1st	2nd & 3rd
(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.6'	-0.4
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.3	-4.3
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.8	-3.8
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2	-3.2
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9	-2.9

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.1		fine sand silt	Blk Gray	sand	fine			well mixed
	0.5								S-06D-0Q21-00-06
	0.0		Clay Shells	gray	firm	fine/large			S-06D-0Q21-06-11 (Archive)

File ID of digital photograph(s):

Comments:
1st Attempt No Good - Shells deny penetration
2nd Attempt No Good - Shells deny penetration
3rd good

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

					1st	2nd	3rd
Station ID:	J17	Time On Station:	1319	**All measurements are ±0.1 feet**			
Core Sample ID:	S-060-0J17-00-11	Northing (NAD 83):	2706830	Water Depth (*A*):	3.4	3.5	3.6
Logged by:	AM	Easting (NAD 83):	815666	Length of push core assembly (*B*):	7.0	7.0	7.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.0	Water surface to top of handle (*C*):	1.5	2.8	2.4
Date:	11-2-06	Predicted Tide (ft):	1st / 2nd / 3rd	Length of core (from bottom) (*D*): *	NA	NA	1.1
		Time of Collection:	1323 / 1330 / 1337	Surveyed elevation (NVGD 29) (*E*):	0.0	+0.1	+0.2
		Time Depart Station:	1345	Water surface from surveyed elevation (*F*):	—		

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.2
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.4
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.4

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.1		SILT OL	Black	Soft	fine			S-060-0317-00-05
		0.6	—	—	—	—	—	—	—	Some streaking
				clay	gray	firm	fine			S-060-0317-05-11
		0.0								

File ID of digital photograph(s):

Comments:
Strong oil sheen and oil odor
* 1st attempt NG - overpenetrated
2nd attempt plungers lipped - poor recovery

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	U22	Time On Station:	1400	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0022-00-14	Northing (NAD 83):	2706736	Water Depth (*A*):	6.1' / 6.1'
Logged by:	LM	Easting (NAD 83):	815926	Length of push core assembly (*B*):	7.0' / 10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5'	Water surface to top of handle (*C*):	0.0 / 2.5
Date:	11-2-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	NG / 1.4
		Time of Collection:	1402/1406	Surveyed elevation (NVGD 29) (*E*):	+1.0
		Time Depart Station:	1412	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5 ~~-7.4~~ Wrong calc
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.9 ~~-6.8'~~ LM 11/2/06
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.4								
1.0		Silt Peat Clay	Black	Soft	fine ↓ medium			S-06D-0022-02-07
0.6								Blurred Transition (Streaking)
0.0		Clay	gray	firm	fine			S-06D-0022-07-12 (Archive)

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	222	Time On Station:	1416	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0222-00-16	Northing (NAD 83):	270672227	Water Depth (*A*):	4.0'
Logged by:	MW	Easting (NAD 83):	816091.8	Length of push core assembly (*B*):	2.3'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	1.3'
Date:	11/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6
		Time of Collection:	1419	Surveyed elevation (NVGD 29) (*E*):	+1.3'
		Time Depart Station:	1427	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.3'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.6		Clay/silt	gray black	firm	fine			S-06D-0222-00-0.6
		1.0								
		0.0		Clay	olive gray	firm	fine			S-06D-0222-06-11 (Archive)

File ID of digital photograph(s):

Comments:

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

					1st	2nd
Station ID:	N14	Time On Station:	1432	**All measurements are ±0.1 feet**		
Core Sample ID:	S-06D-ØN14-ØØ-12	Northing (NAD 83):	2706919.4	Water Depth (*A*):	5.4'	5.4'
Logged by:	MW	Easting (NAD 83):	815771.3	Length of push core assembly (*B*):	10.0'	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	2.4'	2.4'
Date:	11/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):		1.2'
		Time of Collection:	1435 / 1443	Surveyed elevation (NVGD 29) (*E*):	+1.5	+1.5
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—	

Calculations for Determination of Z* Elevation

		1ST	2ND
(*G*)	Elevation of Water Surface (NVGD): *E - F*	+1.5	+1.5
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.1	-5.6
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.2	-4.7
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.9	-4.4
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.9	-3.9

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.2		silt sand	gray black	mixed loose	fine	—	—	mixed dredge material (resettled)
	0.9		clay	gray	stiff	fine			Took Top 0.5' as only sample S-06D-ØN14-ØØ-05
	0.0								

File ID of digital photograph(s):

Comments:
Strong odor and sheen on core
1st Attemp no good
2nd good

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

					1st	2nd	3rd	4th
Station ID:	H24	Time On Station:	0726	All measurements are ±0.1 feet				
Core Sample ID:	S-06D-OH24-00-33	Northing (NAD 83):	2706728.1	Water Depth (*A*):	3.3'	3.2	3.0	3.0'
Logged by:	MW	Easting (NAD 83):	815622.2	Length of push core assembly (*B*):		8.0	9.0'	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.5	Water surface to top of handle (*C*):	1.4'	1.4'	1.4	2.7
Date:	11/3/06	Predicted Tide (ft):	1st 2nd 3rd	Length of core (from bottom) (*D*): *	—	—	3.3	3.3
		Time of Collection:	0728 / 0732 / 0744 / 0748	Surveyed elevation (NVGD 29) (*E*):	+1.7'			+1.7
		Time Depart Station:	0754	Water surface from surveyed elevation (*F*):	—			

Calculations for Determination of Z* Elevation

		3rd	4th
(*G*)	Elevation of Water Surface (NVGD): *E - F*	+1.7	+1.7
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.9	-4.6
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.8	-3.5
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.6	-1.3
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.3	-1.3

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
00	3.3		OL silt fluff	Black	loose	fine			
	2.7		OL silt clay	Black ↓ blk/gray	loose ↓ stiff	fine			S-06D-OH24-22-27 *
22	1.1		clay	black/gray	stiff	fine			S-06D-OH24-27-32
	0.0								

File ID of digital photograph(s):

Comments:
1st Attempt core liner too short - overpenetrated with 2' liner - All OL recovered
strong odor and sheen
2nd Attempt core liner too short - overpenetrated with 3' liner - All OL recovered
3rd Attempt ~~accepted~~ overpenetrated

* Homologue + ms/msD

Page ___ of ___

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

					1st	2nd	3rd
Station ID:	625	Time On Station:	0801	**All measurements are ±0.1 feet**			
Core Sample ID:	S-06D-0625-00-14	Northing (NAD 83):	270648.3	Water Depth (*A*):	3.5'	3.3'	3.5'
Logged by:	MM	Easting (NAD 83):	815581.7	Length of push core assembly (*B*):	6.9'	6.9'	6.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8	Water surface to top of handle (*C*):	2.5	2.4'	1.7'
Date:	11/3/06	Predicted Tide (ft):	1st / 2nd / 3rd	Length of core (from bottom) (*D*):			1.4
		Time of Collection:	0805 / 0807 / 0814	Surveyed elevation (NVGD 29) (*E*):			1.1'
		Time Depart Station:	0830	Water surface from surveyed elevation (*F*):			

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.4
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.4		Silty sand	Blk	loose	fine			Sand washout from runoff throughout all layers
		1.1		Sand peat	Blk		fine medium			
		0.4		Sand clay	gray Blk	firm	Firm			
		0.0								
										S-06D-0625-00-05
										S-06D-0625-05-10 (Again)

File ID of digital photograph(s):

Comments:
1st Attempt no good (plunger too loose)
2nd Attempt no good (Hit scale can)
3rd Accepted - Sheen

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	E27	Time On Station:	0829	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0E27-00-12	Northing (NAD 83):	2706597	Water Depth (*A*):	3.2
Logged by:	Jm	Easting (NAD 83):	815534	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.8	Water surface to top of handle (*C*):	1.6'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.2'
		Time of Collection:	0830	Surveyed elevation (NVGD 29) (*E*):	+0.7
		Time Depart Station:	0842	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+0.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.6'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.5'

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.2								
1.1	—	silt OL	Black	soft	fine	—	—	Thin layer of silt/fluff over clay - streaking throughout core
		Clay	olive gray	firm	fine			
0.0								S-06D-0E27-00-05 *
								S-06D-0E27-05-10 (Archive)

File ID of digital photograph(s):

Comments:

S-06D-0E27-00-05-MS
S-06D-0E27-00-05-MSD

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The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	C29	Time On Station:	0847	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0C29-00-20	Northing (NAD 83):	2706540	Water Depth (*A*):	2.3
Logged by:	dm	Easting (NAD 83):	815494	Length of push core assembly (*B*):	8.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.6	Water surface to top of handle (*C*):	3.7'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	0855	Surveyed elevation (NVGD 29) (*E*):	+0.8'
		Time Depart Station:	0903	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+0.2
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.1
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.1
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.1

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.0'								
				silt	Black	Soft	fine			S-06D-0C29-05-10*
		1.0'								
				clay	olive gray	firm	fine			S-06D-0C29-10-15
		0.0'								

File ID of digital photograph(s):

Comments:
*MS/MSD

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	C41	Time On Station:	0911	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0C41-00-24	Northing (NAD 83):	2706253	Water Depth (*A*):	3.0'
Logged by:	AM	Easting (NAD 83):	815488	Length of push core assembly (*B*):	7.9
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	2.5'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.4
		Time of Collection:	0913	Surveyed elevation (NVGD 29) (*E*):	0.0'
		Time Depart Station:	0920	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.0'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.2'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.4			OL	Black	Soft	fine			S-06D-0C41-04-09 *
			Blurred Transition						
1.5			clay	olive gray	firm	fine			S-06D-0C41-09-14 (Archive)
0.0									

File ID of digital photograph(s):

Comments:
Strong oil sheen + oil odor

* Dup + Homologue S-06D-0C41-04-09-DUP

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	C41 24	Time On Station:	1911	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0C41-00-04-DUP	Northing (NAD 83):	270253	Water Depth (*A*):	2.9
Logged by:	DM	Easting (NAD 83):	815488	Length of push core assembly (*B*):	7.9
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	2.5
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6
		Time of Collection:	0917	Surveyed elevation (NVGD 29) (*E*):	-0.10
		Time Depart Station:	0920	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.1
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(*l*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.9
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.0

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.6		OL	Black	Soft	fine		S-06D-0C41-04-09-DUP	
	1.5		Blurred Transition						
			clay	Olive gray	firm	fine			
	0.0								

File ID of digital photograph(s):

Comments:
Strong oil sheen + odor

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	M23	Time On Station:	0928	All measurements are ±0.1 feet	1ST	2nd
** Core Sample ID:	S-06D-DM23-00-15	Northing (NAD 83):	2606680	Water Depth (*A*):	2.5'	2.4'
Logged by:	DM	Easting (NAD 83):	865744	Length of push core assembly (*B*):	7.0'	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	3.0'	2.7'
Date:	11-3-06	Predicted Tide (ft):	1ST / 2nd	Length of core (from bottom) (*D*):	—	1.5'
		Time of Collection:	* 0930 / 0937	Surveyed elevation (NVGD 29) (*E*):		-0.2'
		Time Depart Station:	0955	Water surface from surveyed elevation (*F*):	—	

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.2
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.5		fluff w/ sand	Black	soft	med			S-06D-DM23-05-10**
	0.5								
	0.0		clay	olive gray	firm	fine			S-06D-DM23-10-15 (Archive)

File ID of digital photograph(s):

Comments:

* 1st attempt did not recover sufficient material below transition. 2nd attept OK.

** Dup collected

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	M23	Time On Station:	0928	All measurements are ±0.1 feet	
*Core Sample ID:	S-06D-0M23-00-15-DUP	Northing (NAD 83):	270668.0	Water Depth (*A*):	2.2'
Logged by:	Dm	Easting (NAD 83):	815744	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	Push Core	GPS Accuracy:	2.3	Water surface to top of handle (*C*):	2.3'
Date:	11/3/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	0945	Surveyed elevation (NVGD 29) (*E*):	-0.4'
		Time Depart Station:	0955	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.4'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.1'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.1'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6'

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.0								
			fluff silt w/ some Sand	Black	Soft	Med			S-06D-0M23-05-10-DUP
	0.9								
			clay	olive gray	firm	fine			
	0.0'								

File ID of digital photograph(s):

Comments:

*Although core longer Than 1st, Kept same Id for Dup To maintain Original/Dup connection

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	H27	Time On Station:	0957	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0H27-00-10	Northing (NAD 83):	206594	Water Depth (*A*):	3.6'
Logged by:	AM	Easting (NAD 83):	815635	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.7	Water surface to top of handle (*C*):	2.4'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0'
		Time of Collection:	1001	Surveyed elevation (NVGD 29) (*E*):	-0.5'
		Time Depart Station:	1008	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.5'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.1
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.3
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.1

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.0								
0.8	—	fluff	Black	V. Soft	V. fine	—	—	S-06D-0H27-00-05
		Clay	olive gray	firm	fine			S-06D-0H27-05-10 (Archive)
0.0								

File ID of digital photograph(s):

Comments:

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	H32	Time On Station:	1011	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-OH32-0015	Northing (NAD 83):	2706459	Water Depth (*A*):	3.3
Logged by:	AM	Easting (NAD 83):	815610	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.6	Water surface to top of handle (*C*):	2.2'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1012	Surveyed elevation (NVGD 29) (*E*):	-0.7
		Time Depart Station:	1021	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.7
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.0
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5		Organics mixed w/ clay	DK gray / olive gray	firm	fine			Organics mixed into native material due to disturbance (Debris removal?)
		0.0								S-06D-OH32-00-05 S-06D-OH32-05-10 (Archive)

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	H29	Time On Station:	1029	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0H29-00-10	Northing (NAD 83):	2706556	Water Depth (*A*):	3.2
Logged by:	em	Easting (NAD 83):	815620	Length of push core assembly (*B*):	7.1
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	2.7
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0
		Time of Collection:	1037	Surveyed elevation (NVGD 29) (*E*):	-0.8
		Time Depart Station:	1045	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.2
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.4
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.2
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.0								
-0.8	—	OL	Black	soft	fine	—	—	S-06D-0H29-00-05
		clay	dive gray	firm	fine			S-06D-0H29-05-10 (archive)
0.0								

File ID of digital photograph(s):

Comments:
Strong sheen + odor

Page ____ of ____

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	E33	Time On Station:	1049	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0E33-00-14	Northing (NAD 83):	2706437.1	Water Depth (*A*):	1.6'
Logged by:	MW	Easting (NAD 83):	815555.5	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.4	Water surface to top of handle (*C*):	3.7'
Date:	11/3/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.4'
		Time of Collection:	1051	Surveyed elevation (NVGD 29) (*E*):	-0.9
		Time Depart Station:	1058	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.7
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.3
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~-1.6~~ -2.5

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-1.4		silt	Black	loose ↓ firm	fine			S-06D-0E33-00-05 *
-0.9								Blurred Transition
		Clay	olive gray	firm	fine			S-06D-0E33-05-10 (Archive
-0.0								

File ID of digital photograph(s):

Comments:

+ Homologue

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

					1st	2nd
Station ID:	F36	Time On Station:	1102	All measurements are ±0.1 feet		
Core Sample ID:	S-06D-0F36-00-15	Northing (NAD 83):	2706363.1	Water Depth (*A*):	2.8'	2.8'
Logged by:	MW	Easting (NAD 83):	815549.8	Length of push core assembly (*B*):	6.8'	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.9	Water surface to top of handle (*C*):	1.6'	2.2
Date:	11/3/06	Predicted Tide (ft):	1st / 2nd	Length of core (from bottom) (*D*):		1.5'
		Time of Collection:	1106 / 1111	Surveyed elevation (NVGD 29) (*E*):		-1.3
		Time Depart Station:	1117	Water surface from surveyed elevation (*F*):	—	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.3
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.1'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.6'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.6'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.1'

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5		Clay	Olive gray	firm	fine			loose silt/Flock layer over clay
		0.0								S-06D-0F36-00-05 S-06D-0F36-05-10 (Archive)

File ID of digital photograph(s):

Comments:
1st Attempt overpenetrated
2nd good

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	41	Time On Station:	1122	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0H41-00-11	Northing (NAD 83):	270624	Water Depth (*A*):	3.6'
Logged by:	dm	Easting (NAD 83):	815624	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	2.3'
Date:	11-3-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.1'
		Time of Collection:	1124	Surveyed elevation (NVGD 29) (*E*):	-1.5
		Time Depart Station:	1131	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.2'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.3'
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.1'
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.1'

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.1		OL	Black	soft	fine			S-06D-0H41 00-05
		0.9		clay	olive gray	firm	fine			S-06D-0H41-05-10 (Archive)
		0.0								

File ID of digital photograph(s):

Comments:
Sheen on outside of core

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	F38 12	Time On Station:	1137	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0F38-00-~~11~~	Northing (NAD 83):	2706320.4	Water Depth (*A*):	2.3'
Logged by:	MW	Easting (NAD 83):	815557.9	Length of push core assembly (*B*):	7.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	3.0' MW
Date:	11/3/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~1.4~~ 1.2'
		Time of Collection:	1139	Surveyed elevation (NVGD 29) (*E*):	-1.6'
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.6 ~~-1.6~~ Calculation error Noted DM 12/14/06
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6 ~~-5.6~~
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.7 ~~-3.7~~
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4 ~~-4.4~~
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.9 ~~-3.9~~

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.2		Silt/Clay	gray/black	loose	fine			well mixed
0.9								
	ℓ	Clay	gray	firm	fine			S-06D-0F38-00-05
								S-06D-0F38-05-10
0.0								(ARCHIVE)

File ID of digital photograph(s):

Comments:
① 11/3/06 MW - water on surface

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	H36	Time On Station:	1151	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0H36-00-09	Northing (NAD 83):	2706376.5	Water Depth (*A*):	2.3'
Logged by:	MW	Easting (NAD 83):	815614.7	Length of push core assembly (*B*):	6.6'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	2.9'
Date:	11/3/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	0.9'
		Time of Collection:	1152	Surveyed elevation (NVGD 29) (*E*):	-1.7'
		Time Depart Station:	1159	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-1.7'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.7
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.9		Silt/fluff	gray Black	loose	fine			S-06D-0H36-00-05
		0.7		Clay	olive gray	firm	fine			S-06D-0H36-05-09 (Archive)
		0.0								

File ID of digital photograph(s):

Comments:
Sheen on core

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	D36	Time On Station:	0822	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0D36-00-27	Northing (NAD 83):	2706356	Water Depth (*A*):	6.6
Logged by:	tm	Easting (NAD 83):	815515	Length of push core assembly (*B*):	11.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	0.8
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.75
		Time of Collection:	0824	Surveyed elevation (NVGD 29) (*E*):	3.9' water elv
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.3
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.0
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.6
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.7		Silt Fine Sand	Black	soft	fine		S-06D-0D36-00-05	
		-2.3	—	—	—	—	—	—	—	S-06D-0D36-05-10 (Archive)
				clay	olive grey	firm	fine			
		-0.0								

File ID of digital photograph(s):

Comments:
STrong sheen + Odor

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	B32	Time On Station:	0842	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0B32-00-20	Northing (NAD 83):	276478	Water Depth (*A*):	6.1'
Logged by:	Aw	Easting (NAD 83):	815468	Length of push core assembly (*B*):	9.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.2	Water surface to top of handle (*C*):	0.8
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.0'
		Time of Collection:	0841	Surveyed elevation (NVGD 29) (*E*):	4.0 water clr.
		Time Depart Station:	0907	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.20
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.20
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-2.20
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.10

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.0								
							(1)	S-06D-0B32-00-05
								~~S-06D-0B32-05-10~~
1.0								
								S-06D-0B32-10-15 (Archive)
0.0								

File ID of digital photograph(s):

Comments:
(1) Note: Sample ID labelled incorrectly on Jar and COC. Not identified until data in database. Changing ID to maintain consistency with everything else. AW 1/8/07

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Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	E32	Time On Station:	0911	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0E32-00-27	Northing (NAD 83):	2706485	Water Depth (*A*):	8.4'
Logged by:	AM	Easting (NAD 83):	815537	Length of push core assembly (*B*):	15.75
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	4.6'
Date:	11-7-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.75
		Time of Collection:	0914	Surveyed elevation (NVGD 29) (*E*):	3.9'
		Time Depart Station:	0929	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.25
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.5

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.75		Silt + clay	Dk gray	firm	fine			No clear Transitions. Core gradually fades to more clay content at deeper depths. Used SWI as Transition elevation. S-06D-0E32-00-05 S-06D-0E32-05-10 (Archive)
		0.0		Clay + silt	Olive gray					

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

Station ID:	E30	Time On Station:	0930	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0E30-00-25	Northing (NAD 83):	2706502	Water Depth (*A*):	8.2'
Logged by:	Am	Easting (NAD 83):	815541	Length of push core assembly (*B*):	11.9'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.4	Water surface to top of handle (*C*):	1.2'
Date:	11-7-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5'
		Time of Collection:	0932	Surveyed elevation (NVGD 29) (*E*):	+3.8'
		Time Depart Station:	0945	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.9'
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.9'
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.4'
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.4'

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
2.5'		OL	Black	SOFT	fine			S-06D-0E30-00-05 *
		Blurred Transition						
2.0								
		Clay	olive gray	firm	fine			S-06D-0E30-05-10 (Archive)
0.0		Peat						

File ID of digital photograph(s):

Comments:
Strong H_2S odor

* Homologue

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N28	Time On Station:	0955	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0N28-00-19	Northing (NAD 83):	2706575	Water Depth (*A*):	8.5
Logged by:	Dm	Easting (NAD 83):	815775	Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	0.0
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.9
		Time of Collection:	0957	Surveyed elevation (NVGD 29) (*E*):	3.5. water elv.
		Time Depart Station:	1005	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.5
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.4
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.1
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.0

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	1.9							Lost	Top 0.3'
			Silt	Black	soft	fine			
									S-06D-0N28-08-13
	-0.6		clay	olive grey	firm	f.we			S-06D-0N28-13-18 (Archive)
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	V28	Time On Station:	1014 ~~2706675~~ w0 2706575	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0V28-00-16	Northing (NAD 83):	815974	Water Depth (*A*):	8.6
Logged by:	dm	Easting (NAD 83):		Length of push core assembly (*B*):	10.5
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	0.0
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6
		Time of Collection:	1016	Surveyed elevation (NVGD 29) (*E*):	3.1 water elv
		Time Depart Station:	1020	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	3.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.40
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.50
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.8
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	~~8.6~~ -5.5

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

Elevation (NVGD) (I.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.6								
		Silt	Black	Soft	Fine			S-06D-0V28-07-07
0.9	—	—	—	—	—	Blurred		Transitional
		clay	olive grey	Firm	Fine			S-06D-0V28-07-12 (Archive)
0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	V39	Time On Station:	1028	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0V39-00-08	Northing (NAD 83):	2706301	Water Depth (*A*):	6.6
Logged by:	Am	Easting (NAD 83):	815974	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.9	Water surface to top of handle (*C*):	2.5
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	~~2.5~~ 0.8'
		Time of Collection:	1032	Surveyed elevation (NVGD 29) (*E*):	2.9' water dr.
		Time Depart Station:	1035	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.9'
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.60
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.00
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.80
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.70

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		0.8		S.It	Black	soft	fine			S-06D-0V39-00-05*
		0.6	—	clay	olive gray	firm	fine	—	—	
		0.0		Hard Bottom (shells?)						~~S-06D~~ NA Not enough volume for Archive

File ID of digital photograph(s):

Comments:
* GS, TOC, PCB

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	N40	Time On Station:	10.50	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0N40-00-25	Northing (NAD 83):	2706276	Water Depth (*A*):	5.9'
Logged by:	Dm	Easting (NAD 83):	815775	Length of push core assembly (*B*):	11.0
Collection Mechanism:	Push Core	GPS Accuracy:	2.7	Water surface to top of handle (*C*):	2.2
Date:	11/7/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.5
		Time of Collection:	10.53	Surveyed elevation (NVGD 29) (*E*):	2.4 water elv
		Time Depart Station:	10.55	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.4
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.4
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.1
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	site ~~2.5~~ -3.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.0	2.5		~~clay~~ Silt	Black	Soft	fine			S-06D-0N40-07-12
1.2	1.3		clay	olive grey	firm	fine			S-06D-0N40-12-17
	0.0								

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

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

Project #: *G606422*
Vessel: CR environmental skiff
Chief Scientist: Alex Mansfield

					1st	2nd
Station ID:	F53	Time On Station:	0900	**All measurements are ±0.1 feet**		
Core Sample ID:	S-06D-0F53-00-26	Northing (NAD 83):	2705949.0	Water Depth (*A*):	7.9'	8.2
Logged by:	MW	Easting (NAD 83):	815574.2	Length of push core assembly (*B*):	13.8	14
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	2.9	2.8
Date:	11/8/06	Predicted Tide (ft):	1st 2nd	Length of core (from bottom) (*D*):		2.6
		Time of Collection:	0905 0916	Surveyed elevation (NVGD 29) (*E*):	+4.1	
		Time Depart Station:	922	Water surface from surveyed elevation (*F*):	—	

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+4.1
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.1
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.4
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-4.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.1

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

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.0	2.6		silt OL	Black	loose	fine			
1.2	1.4	—	—	—	—	—	—	—	—
			silt and clay	gray Black	firm	fine			
1.9	0.7	—	—	—	—	—	—	—	S-06D-0F53-14-19
			clay	olive gray	firm	fine			S-06D-0F53-19-24 (Archive)
	0.0								

File ID of digital photograph(s):

Comments:
Heavy sheen on core and strong oil and H_2S odor
- 1st Attempt 2' core liner too short - could not reach clay layer - overpenetrated - All OL
Heavy sheen on water when core was dumped
2nd Attempt - Good - Heavy sheen

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

					1st	2nd
Station ID:	F58	Time On Station:	0936	**All measurements are ±0.1 feet**		
Core Sample ID:	S-06D-0F58-00-19	Northing (NAD 83):	270588.1	Water Depth (*A*):	9.2'	9.1'
Logged by:	MW	Easting (NAD 83):	815575.1	Length of push core assembly (*B*):	13'	14.2'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.7	Water surface to top of handle (*C*):	1.8'	2.6'
Date:	11/8/06	Predicted Tide (ft):	1st, 2nd	Length of core (from bottom) (*D*):		1.8
		Time of Collection:	0941 / 0947	Surveyed elevation (NVGD 29) (*E*):		+3.9
		Time Depart Station:	0956	Water surface from surveyed elevation (*F*):	—	

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+3.9
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-7.7
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-6.3
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.9
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-5.2

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
~1.5		Silt	Black	loose	fine			S-06D-0F58-00-05
~1.4	— —	—	—	—	— —	—	— —	— — — — — — — —
		Clay silt	Dark olive gray	firm	fine			Clay layer well mixed below transition
0.0								S-06D-0F58-05-10 (Archive)

File ID of digital photograph(s):

Comments: 1st Attempt - could not reach clay layer - Slight sheen on core - Strong H_2S odor
2nd Attempt - good - sheen on core

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	N58	Time On Station:	1007	All measurements are ±0.1 feet	
Core Sample ID:	S-06D-0N58-00-15	Northing (NAD 83):	270.5827.0	Water Depth (*A*):	6.7'
Logged by:	MW	Easting (NAD 83):	815772.6	Length of push core assembly (*B*):	10.0'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	1.3'
Date:	11/8/09	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5'
		Time of Collection:	1008	Surveyed elevation (NVGD 29) (*E*):	+4.0
		Time Depart Station:	1017	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+4.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.70
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.30
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.20
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.70

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-1.5		silt	Black	loose	fine			
	-1.5	—	—	—	—	—	—	—	S-06D-0N58-00-05
			sand	gray Brown	loose	fine to med			S-06D-0N58-05-10 (Archive)
	-0.4	—	—	—	—	—	—	—	
			sand	light Brown	loose	fine			
	-0.0								

File ID of digital photograph(s):

Comments:

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The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	K50	Time On Station:	1022	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0K50-00-11	Northing (NAD 83):	2706083.1	Water Depth (*A*):	8.5'
Logged by:	MW	Easting (NAD 83):	815699.6	Length of push core assembly (*B*):	13.6'
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.0	Water surface to top of handle (*C*):	2.6'
Date:	11/8/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.1'
		Time of Collection:	1023	Surveyed elevation (NVGD 29) (*E*):	+3.9
		Time Depart Station:	1031	Water surface from surveyed elevation (*F*):	–

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.9
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-5.4
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.6

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

	Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	0 1.1								Clay throughout with some sand Thin flock on Top
	0.5 0.6		Clay	gray	firm	fine	—	—	
	0.0								~~Took only Top 0.5 As sample (no Archive)~~ NA MW 11/15
									S-06D-0K50-00-05
									S-06D-0K50-05-10 Archive

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	Q44	Time On Station:	1036	**All measurements are ±0.1 feet**	
Core Sample ID:	S-06D-0Q44-00-15	Northing (NAD 83):	2706176.4	Water Depth (*A*):	6.3
Logged by:	MW	Easting (NAD 83):	815849.3	Length of push core assembly (*B*):	10.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.1	Water surface to top of handle (*C*):	1.4
Date:	11/8/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.5
		Time of Collection:	1043	Surveyed elevation (NVGD 29) (*E*):	+3.6
		Time Depart Station:	1050	Water surface from surveyed elevation (*F*):	—

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.6
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-3.5
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.7

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

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
1.5		Silt	Black	loose	fine		S-06D-0Q44-00-05	
1.1		clay with ribbons of silt	olive gray	firm	fine		S-06D-0Q44-05-10	(Archive)
0.0								

File ID of digital photograph(s):

Comments:
Sheen on core

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VOC Core Characterization Logs

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Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	08 (VOC)	Time On Station:	1635	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83): *	2706956	Water Depth (*A*):	3.5'
Logged by:	AM	Easting (NAD 83):	815635	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	3.5	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
Revised Station ID: 08100206		Time of Collection:	1640	Surveyed elevation (NVGD 29) (*E*):	4.0'
		Time Depart Station:	1702	Water surface from surveyed elevation (*F*):	1.2

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.8
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.7
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.6
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	-0.7
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	

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

2.8

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
3.5								
-0.7								
-1.2 * 1.9'								S-06C-0008-T
~ Transition approx @ -2.6								
Total 3.0'								S-06C-0008-B
-3.2 *								

File ID of digital photograph(s):

Comments:
* As far east as possible (against wire ~8' from shore)
Bottom vs Top are distinct OL + OH, but transition is blurred. Top sample ~0.5' from Top Bottom ~0.5 from Bottom

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	05 (VOC)	Time On Station:	1704	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707047	Water Depth (*A*):	4.4
Logged by:	DM	Easting (NAD 83):	815649	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.6	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.6
Revised Station ID: 05100206		Time of Collection:	17:10	Surveyed elevation (NVGD 29) (*E*):	4.0
		Time Depart Station:	17:30	Water surface from surveyed elevation (*F*):	1.4

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+2.6
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.4
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.7
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.8

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

2.6

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
4.4								
-1.8								
-2.3 0.9 *		OL						S-06C-0005-T S-06C-0005-T-MS S-06C-0005-T-MSD S-06C-0005-T-DUP
-2.7								
-2.9 *		OH						S-06C-0005-B
	gravel							

File ID of digital photograph(s):

Comments:
* As far west as possible (wire) ~20' East of Target

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	16 (VOC)	Time On Station:	1040	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706752	Water Depth (*A*):	3.25
Logged by:	dm	Easting (NAD 83):	815725	Length of push core assembly (*B*):	/
Collection Mechanism:	Push Core	GPS Accuracy:	1.63	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.7
Revised Station ID: 16 100206		Time of Collection:	1056	Surveyed elevation (NVGD 29) (*E*):	4.0
		Time Depart Station:	1118	Water surface from surveyed elevation (*F*):	-4.05

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	-0.05
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.0
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	~~-1.25~~ -4.50 AM 10/2
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

-0.05

	Elevation (NVGD)	(i.e. Bottom = *H*) -3.25	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		-3.30								
	-4.3	1.2		OL						S-06C-0016-T
	-4.5									
	-4.7	1.5		gray clay						S-06C-0016-B

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	13 (VOC)	Time On Station:	1127	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706851	Water Depth (*A*):	3.1'
Logged by:	→ m	Easting (NAD 83):	815729	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.5'	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft)		Length of core (from bottom) (*D*):	2.4
Revised Station ID: 13100206		Time of Collection:	1135	Surveyed elevation (NVGD 29) (*E*):	4.0
		Time Depart Station:	1142	Water surface from surveyed elevation (*F*):	4.1

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	-0.1
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.2
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.2

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

-0.1

	Elevation (NVGD)	(I.e. Bottom = *H*) -3.1'	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		-3.2								
		↑ 1.0								
	-3.7	↓ *		OL	Black					S-06C-0013-T
		-4.2								
	-4.4	*		Clay	grey					S-06C-0013-B

File ID of digital photograph(s):

Comments:

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	10 (VOC)	Time On Station:	1147	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706951	Water Depth (*A*):	2.85
Logged by:	DW	Easting (NAD 83):	815725	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.3
		Time of Collection:	1152	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised Station ID: 10100206		Time Depart Station:	1202	Water surface from surveyed elevation (*F*):	-3.9

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.10
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.05
(z*)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.75
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.75

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

+0.1

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		2.85								
		-2.75								
		1.0'		OL						S-06C-0010-T
	-3.3	*								
	(1)	-3.75		DK grey Somewhat Darker, Softer, wetter Than OH Typically experienced in underlying layer						
	-4.0	*								S-06C-0010-B

File ID of digital photograph(s):

Comments:
(1) 2.5' less overlying sed. than expected.

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	07 (VOC)	Time On Station:	1205	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707049	Water Depth (*A*):	3.5
Logged by:	DM	Easting (NAD 83):	815726	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	1.72	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.7
		Time of Collection:	1210	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised Station ID: 07100206		Time Depart Station:	1219	Water surface from surveyed elevation (*F*):	-3.8

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.2
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.0
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.8
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.3

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

+0.2

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		-3.5								
		-3.3								
		1.5'		OL						S-06C-0007-T
	-4.0	*								
		-4.8								
	-5.0	*		OH						S-06C-0007-B

File ID of digital photograph(s):

Comments:

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	04 (VOC)	Time On Station:	1224	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707149	Water Depth (*A*):	3.4
Logged by:	AM	Easting (NAD 83):	815726	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.6
		Time of Collection:	1235	Surveyed elevation (NVGD 29) (*E*):	-4.0
Revised Station ID: 04100206		Time Depart Station:	1241	Water surface from surveyed elevation (*F*):	3.5

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.50
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-4.5
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

0.5

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
-3.4								
-2.9								
1.6'								S-06C-0004-T
-3.7 *								
-4.5								
-4.0 *								S-06C-0004-B

File ID of digital photograph(s):

Comments:

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	02 (VOC)	Time On Station:	1243	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707249	Water Depth (*A*):	3.6
Logged by:	DM	Easting (NAD 83):	815724	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.3
		Time of Collection:	1244	Surveyed elevation (NVGD 29) (*E*):	4.0'
Revised Station ID: 02100206		Time Depart Station:	1255	Water surface from surveyed elevation (*F*):	-3.3

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	0.7
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.2
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-3.8
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.9

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

+0.7

	Elevation (NVGD) (i.e. Bottom = *H*)	3.6 -2.9	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-3.4	* 0.9'		silt	black	soft				S-06C-0002-T
		-3.8								
	-4.1	*		clay	gray	firm				S-06C-0002-B

File ID of digital photograph(s):

Comments:

Battelle
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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	01 (VOC)	Time On Station:	1301	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707248	Water Depth (*A*):	2.0'
Logged by:	JM	Easting (NAD 83): *	815684	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.9'	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1302	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised Station ID: 01100206		Time Depart Station:	1317	Water surface from surveyed elevation (*F*):	3.05'

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	0.95
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.05
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.55
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.05

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

+0.95
~~+2.95~~

	Elevation (NVGD)	(i.e. Bottom = *H*) -2.0 -1.05 ~~0.95~~	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-1.3*	0.25'		Silt	DK. Brown			↑ H_2S		S-06C-0001-T
				Clay Silt	Brown					
		1.25'		Sand				↓		
	-2.55									
	-2.75*			Clay	Olive Gray	+ Shells				S-06C-0001-B

File ID of digital photograph(s):

Comments:
* AT Dredge wire, 27' east of Target

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	03 (VOC)	Time On Station:	1320	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707149	Water Depth (*A*):	1.5'
Logged by:	Dm	Easting (NAD 83):	815669	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	3.2	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1325	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised station ID: 03100206		Time Depart Station:	1336	Water surface from surveyed elevation (*F*):	3.0

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+1.0
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-1.75
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-0.5

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

+1.0

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5								
		-0.5								
				silt + clay	DK grey	stiff + cohesive		H_2S		S-06C-0003-T
	-1.2 *	1.25'								
		-1.75								
	-2.1 *			clay	grey	stiff + cohesive				S-06C-0003-B

File ID of digital photograph(s):

Comments: On edge of River Sediment smells of H_2S but NOT organics

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	06 (VOC)	Time On Station:	1340	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	* 2707043	Water Depth (*A*):	2.4'
Logged by:	[illegible]	Easting (NAD 83):	815675	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.8
		Time of Collection:	1351	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised station ID: 06100206		Time Depart Station:	1400	Water surface from surveyed elevation (*F*):	-2.6

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+1.4
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-4.8
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.5
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.0

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

+1.4

	Elevation (NVGD) (i.e. Bottom = *H*)	-2.4	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		-1.0								
		1.5		OL	Black	Soft				S-06C-0006-T
	-1.8	*								
		-2.5	—	—	—	—	—	—	—	S-06C-0006-B
	-2.8	*		OH	Grey (soft clay)		Possible reworking of sediment. Clay not as stiff			

File ID of digital photograph(s):

Comments:

*~7 S of Target

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Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

1ST 2ND

Station ID:	09 (roc)	Time On Station:	1406	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706949	Water Depth (*A*):	6.2' / *6.4'
Logged by:	DM	Easting (NAD 83):	815676	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	3.6'	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.2
		Time of Collection:	1447	Surveyed elevation (NVGD 29) (*E*):	4.0
Revised Station ID 09100206		Time Depart Station:	1500	Water surface from surveyed elevation (*F*):	-1.9

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+2.1
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.4
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-4.3

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

+2.1

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		6.4								
		-4.3								
	-4.9	1.1' *		OL						S-06C-0009-T S-06C-0009-T-MS S-06C-0009-T-MSD S-06C-0009-T-DUP
		-5.4	—	—	—	—	—	—	—	
	-5.8	*1.1'		Peat						
										S-06C-0009-B
		-6.5								

File ID of digital photograph(s):

Comments:
Water Depth much Deeper Than shown on Bathy (6.2 vs 1.6) possibly on edge of slope.
1ST attempt did not recover OH. Peat lodged in Bottom.
2nd attempt recovered 1.1' of peat, can not penetrate deeper. Took Sample in this layer.

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	12 (VOC)	Time On Station:	1508	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706849	Water Depth (*A*):	*6.0
Logged by:	Dm	Easting (NAD 83):	815674	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0'
		Time of Collection:	1510	Surveyed elevation (NVGD 29) (*E*):	4.0'
Revised Station ID: ~~120~~ 12100206		Time Depart Station:	1532	Water surface from surveyed elevation (*F*):	-1.5

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+2.5
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-6.5
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-5.5
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-3.5

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

+2.5

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-6.0								
	-3.5								
-3.8	*		OL	Black					
	2.0'			very soft					S-06C-0012-T
				very oily					
	*								
									S-06C-0012-B
	* — Head space sample								
	-5.5								
-5.8	*			DK grey clay					
				Darker, softer, wetter					
				than typical underlying					
				clay					

File ID of digital photograph(s):

Comments:
* Water Depth Considerably more than expected. possibly Near edge of slope
Very oily

① INO 2.S. 10/20/06

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The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	15 (VOC)	Time On Station:	1535	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706749	Water Depth (*A*):	5.3
Logged by:	AM	Easting (NAD 83):	815676	Length of push core assembly (*B*):	✓
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.8	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.0
		Time of Collection:	1540	Surveyed elevation (NVGD 29) (*E*):	4.0'
		Time Depart Station:	1549	Water surface from surveyed elevation (*F*):	1.3

Revised Station ID:
15V00206

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	+2.7
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-5.6
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.9
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	✓
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-2.6

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

2.7

	Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		5.3								
		-2.6								
	-2.75	0.3*		OL						S-06C-0015-T
		-2.9								
	-3.2	*		OH						
		2.7								
										S-06C-0015-B

File ID of digital photograph(s):

Comments:
Very little OL

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* | Project #: *G606422*
Location: *New Bedford, MA* | Vessel: CR environmental skiff
Client: *USACE NAE* | Chief Scientist: Alex Mansfield

Station ID:	14 (VOC)	Time On Station:	1555	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706753	Water Depth (*A*):	4.0'
Logged by:	AM	Easting (NAD 83):	815621	Length of push core assembly (*B*):	/
Collection Mechanism:	*Push-Core*	GPS Accuracy:	2.1	Water surface to top of handle (*C*):	/
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.7
		Time of Collection:	1556	Surveyed elevation (NVGD 29) (*E*):	4.0'
Revised station ID: 1410020E		Time Depart Station:	1608	Water surface from surveyed elevation (*F*):	1.25

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+2.75
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.95
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.75
(l)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(l_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-1.5

(Note if $l \neq l_2$ within ± 1.0 feet, discard and resample)

2.75

	Elevation (NVGD) (i.e. Bottom = *H*)	4.0 -1.25	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		1.5'		OL						S-06C-0014-T
	-2.0	*								
		-2.75								S-06C-0014-B
	-3.0	*								
		1.2'		OH						

File ID of digital photograph(s):

Comments:
Very oily

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	11 (VOC)	Time On Station:	1615	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706850	Water Depth (*A*):	3.9'
Logged by:	AM	Easting (NAD 83):	815626	Length of push core assembly (*B*):	/
Collection Mechanism:	Push-Core	GPS Accuracy:	2.6	Water surface to top of handle (*C*):	
Date:	10/2/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	
		Time of Collection:	1616	Surveyed elevation (NVGD 29) (*E*):	4.0'
Revised Station ID: 11100206		Time Depart Station:	1632	Water surface from surveyed elevation (*F*):	1.0'

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	-3.5
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	-2.9
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	/
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	-0.9

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

3.0

	Elevation (NVGD) (i.e. Bottom = *H*)	3.9 -0.9	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	-1.2	*								S-06C-0011-T
		(1)								
		Total 2.6'								
		*	~ Transition at -2.9							S-06C-0011-B
	-3.2									
		-3.5								

File ID of digital photograph(s):

Comments:
No clear transition although Top is OL + Bottom is DK grey clay Took sample at 0.3 from Top and 0.3 from Bottom

Battelle *The Business of Innovation*

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	08 VOC	Time On Station:	1143	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706955	Water Depth (*A*):	3.4
Logged by:	AM	Easting (NAD 83):	815645	Length of push core assembly (*B*):	9.0'
Collection Mechanism:	Push-Core	GPS Accuracy:	2.5	Water surface to top of handle (*C*):	1.0'
Date:	10/13/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	
		Time of Collection:	1205	Surveyed elevation (NVGD 29) (*E*):	2.1' water level
		Time Depart Station:	1218	Water surface from surveyed elevation (*F*):	—

Revised Station ID: 08101306

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD): *E - F* _____

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

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

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

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

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

	Elevation (NVGD) (i.e. Bottom = *H*)		Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
		3.0'	Sample							S-06C-0008-T
				OL	Black					
		1.0								* S-06C-0008-B
				clay	grey					
		0.5								
		0.0	Peat	DK	brown					~~S-06C-0008-D~~
										Did not take Deeper sample. Could only penetrate 3'

File ID of digital photograph(s):

Comments:

Returned to marked station #8
Used 6' barrell. Only able to penetrate 3'. Hit peat layer
* Only used bottom 0.5' for sample to avoid OL contamination
Top sample is Top

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* 1224 **Chief Scientist:** Alex Mansfield

Station ID:	09 VOC	Time On Station:	2706949	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	815675	Water Depth (*A*):	6.5
Logged by:	SW	Easting (NAD 83):	2.7	Length of push core assembly (*B*):	11.0
Collection Mechanism:	*Push-Core*	GPS Accuracy:		Water surface to top of handle (*C*):	0.2
Date:	10-13-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	3.4
		Time of Collection:	1245	Surveyed elevation (NVGD 29) (*E*):	2.3' water elv.
		Time Depart Station:		Water surface from surveyed elevation (*F*):	—

Revised Station ID
09 101306

Calculations for Determination of Z* Elevation

(G) Elevation of Water Surface (NVGD): *E - F* 2.3'

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

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

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

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

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

Elevation (NVGD)	(I.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	3.4								
	2.6		OL	Black	Very fine	fine			
			Sample						S-06C-0009-T
	1.7								
	0.9		Peat	Reddish Brown w/ sand					S-06C-0009-B
	0.0			Bottom 0.3' Brown Decomposed organics (old peat) w/ some sand					S-06C-0009-D

File ID of digital photograph(s):

Comments: Black OL over Peat. ~ 0.4 - 0.6 Smeared OL/Peat.

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	05A (VOC)	Time On Station:	1305	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2707040	Water Depth (*A*):	3.0'
Logged by:	AM	Easting (NAD 83):	815601	Length of push core assembly (*B*):	5.8
Collection Mechanism:	*Push-Core*	GPS Accuracy:	±1.0	Water surface to top of handle (*C*):	1.25
Date:	10-13-06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	1.0
		Time of Collection:	1325	Surveyed elevation (NVGD 29) (*E*):	+3.0'
Revised Station ID: 05A 101306		Time Depart Station:	1349	Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(G)	Elevation of Water Surface (NVGD): *E - F*	+3.0
(H)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	
(z)*	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	
(I)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	

Elevation (NVGD) (i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
0.0 1.0		Black oil						very oily S-06C-005A-T
-0.5								↓ Sample is a composite of the bottom Half of the core
0.0	Leaf litter at bottom							

File ID of digital photograph(s):

Comments:
Sample inside core at North end of aerovox. in line with small channel coming out of marsh grass extremely oily/sheeny. Could only penetrate ~1.0' (Attempted several locations) very Rocky

Battelle
The Business of Innovation

Project Name: *New Bedford Harbor Environmental Monitoring* **Project #:** *G606422*
Location: *New Bedford, MA* **Vessel:** CR environmental skiff
Client: *USACE NAE* **Chief Scientist:** Alex Mansfield

Station ID:	11 (VOC)	Time On Station:	1352	**All measurements are ±0.1 feet**	
Core Sample ID:	See below	Northing (NAD 83):	2706852	Water Depth (*A*):	4.1'
Logged by:	AM	Easting (NAD 83):	815627	Length of push core assembly (*B*):	9
Collection Mechanism:	Push-Core	GPS Accuracy:	1.9	Water surface to top of handle (*C*):	0.5'
Date:	10/13/06	Predicted Tide (ft):		Length of core (from bottom) (*D*):	2.4
		Time of Collection:	1355	Surveyed elevation (NVGD 29) (*E*):	3.1'
Revised Station ID: 11101306		Time Depart Station:		Water surface from surveyed elevation (*F*):	

Calculations for Determination of Z* Elevation

(*G*)	Elevation of Water Surface (NVGD): *E - F*	3.1'
(*H*)	Elevation of the bottom of the core (NVGD): *G - (B - C)*	
(*z**)	Elevation of visual transition (NVGD): *H + (distance to visual transition)*	
(*I*)	Elevation of the sediment-water interface as measured from bottom of core (NVGD): *H + D*	
(I_2)	Elevation of the sediment-water interface as measured from water depth (NVGD): *G - A*	
	(Note if $I \neq I_2$ within ± 1.0 feet, discard and resample)	

Elevation (NVGD)	(i.e. Bottom = *H*)	Lithology - Include USCS code	Type	Color	Consistency	Maximum particle size	Odor	Sample IDs	Comments
	2.4								
	2.2		Sand	lt gray	mixed		0.5'		S-06C-0011-T
			OL	Black	Soft				
		Blurred Transition							
			Clay	gray					S-06C-0011-B
	0.0								

File ID of digital photograph(s):

Comments:
Took sample @ previously staked location

Appendix B

PCB Analytical Data

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2006 Post-Dredging Sediment Analytical Results

Station ID	0L05			0M03			0N06			0N08-DUP		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			REP		
Sample ID	S-06D-0L05-00-06			S-06D-0M03-03-08			S-06D-0N06-00-05			S-06D-0N08-00-17-DUP		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.306	MG/KG_DRYWT	D	3.638	MG/KG_DRYWT	D	8.887	MG/KG_DRYWT	D	157.006	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.445	MG/KG_DRYWT	D	6.43	MG/KG_DRYWT	D	11.385	MG/KG_DRYWT	D	175.733	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.418	MG/KG_DRYWT	D	5.248	MG/KG_DRYWT	D	9.491	MG/KG_DRYWT	D	146.738	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.145	MG/KG_DRYWT	D	3.495	MG/KG_DRYWT	D	3.472	MG/KG_DRYWT	D	75.218	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.702	MG/KG_DRYWT	D	11.663	MG/KG_DRYWT	D	9.604	MG/KG_DRYWT	D	111.7	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.079	MG/KG_DRYWT	D	0.549	MG/KG_DRYWT	Dp	1.88	MG/KG_DRYWT	D	57.46	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.099	MG/KG_DRYWT	D	1.678	MG/KG_DRYWT	D	1.989	MG/KG_DRYWT	D	44.368	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.026	MG/KG_DRYWT	D	0.099	MG/KG_DRYWT	DU	0.422	MG/KG_DRYWT	D	18.935	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.063	MG/KG_DRYWT	D	0.771	MG/KG_DRYWT	D	1.329	MG/KG_DRYWT	D	34.144	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.0088	MG/KG_DRYWT	R	0.1	MG/KG_DRYWT	DU	0.137	MG/KG_DRYWT	R	4.908	MG/KG_DRYWT	Dp
2,2',3,4,4',5'-Hexacb (PCB 138)	0.058	MG/KG_DRYWT	D	0.851	MG/KG_DRYWT	D	0.92	MG/KG_DRYWT	D	24.462	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.083	MG/KG_DRYWT	D	1.265	MG/KG_DRYWT	D	1.57	MG/KG_DRYWT	D	29.857	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.0062	MG/KG_DRYWT	R	0.1	MG/KG_DRYWT	DU	0.156	MG/KG_DRYWT	R	2.797	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.013	MG/KG_DRYWT	R	0.039	MG/KG_DRYWT	R	0.202	MG/KG_DRYWT	R	3.776	MG/KG_DRYWT	Dp
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0095	MG/KG_DRYWT	R	0.159	MG/KG_DRYWT	D	0.145	MG/KG_DRYWT	R	1.234	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.01	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.131	MG/KG_DRYWT	DU	1.661	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.01	MG/KG_DRYWT	DU	0.099	MG/KG_DRYWT	DU	0.13	MG/KG_DRYWT	DU	1.645	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.01	MG/KG_DRYWT	DU	0.099	MG/KG_DRYWT	DU	0.13	MG/KG_DRYWT	DU	1.645	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	6.3	MG/KG_DRYWT		93	MG/KG_DRYWT		130	MG/KG_DRYWT		2300	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0N08			0P08			0R03			0U06		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0N08-00-17			S-06D-0P08-05-10			S-06D-0R03-00-13			S-06D-0U06-05-14		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	59.424	MG/KG_DRYWT	D	4.904	MG/KG_DRYWT	D	9.522	MG/KG_DRYWT	D	3.28	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	66.15	MG/KG_DRYWT	D	5.25	MG/KG_DRYWT	D	12.676	MG/KG_DRYWT	D	6.52	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	56.766	MG/KG_DRYWT	D	4.199	MG/KG_DRYWT	D	14.665	MG/KG_DRYWT	D	5.235	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	29.878	MG/KG_DRYWT	D	3.134	MG/KG_DRYWT	D	7.286	MG/KG_DRYWT	D	3.053	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	42.233	MG/KG_DRYWT	D	4.315	MG/KG_DRYWT	D	16.224	MG/KG_DRYWT	D	15.469	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	23.002	MG/KG_DRYWT	D	2.299	MG/KG_DRYWT	D	2.072	MG/KG_DRYWT	D	0.422	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	16.176	MG/KG_DRYWT	D	3.338	MG/KG_DRYWT	D	3.41	MG/KG_DRYWT	D	2.393	MG/KG_DRYWT	Dp
2,3,3',4,4'-Pentacb (PCB 105)	7.852	MG/KG_DRYWT	D	1.477	MG/KG_DRYWT	D	0.38	MG/KG_DRYWT	D	0.189	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	11.98	MG/KG_DRYWT	D	3.032	MG/KG_DRYWT	D	2.003	MG/KG_DRYWT	D	1.441	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	1.961	MG/KG_DRYWT	R	0.445	MG/KG_DRYWT	D	0.204	MG/KG_DRYWT	R	0.097	MG/KG_DRYWT	R
2,2',3,4,4',5'-Hexacb (PCB 138)	8.791	MG/KG_DRYWT	D	2.553	MG/KG_DRYWT	D	1.682	MG/KG_DRYWT	D	1.184	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	9.147	MG/KG_DRYWT	D	2.568	MG/KG_DRYWT	Dp	2.994	MG/KG_DRYWT	D	2.768	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	1.436	MG/KG_DRYWT	R	0.198	MG/KG_DRYWT	Dp	0.221	MG/KG_DRYWT	R	0.182	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	1.526	MG/KG_DRYWT	R	0.243	MG/KG_DRYWT	D	0.348	MG/KG_DRYWT	Dp	0.285	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	1.433	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.388	MG/KG_DRYWT	Dp	0.344	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,6-Octacb (PCB 195)	1.447	MG/KG_DRYWT	DU	0.101	MG/KG_DRYWT	DU	0.124	MG/KG_DRYWT	DU	0.139	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	1.433	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.123	MG/KG_DRYWT	DU	0.137	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	1.433	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.123	MG/KG_DRYWT	DU	0.137	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	860	MG/KG_DRYWT		99	MG/KG_DRYWT		190	MG/KG_DRYWT		110	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0W03			0Y08			AA03			0L09		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0W03-00-05			S-06D-0Y08-00-06			S-06D-AA03-00-05			S-06D-0L09-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	3.24	MG/KG_DRYWT	DpME	4.419	MG/KG_DRYWT	D	0.406	MG/KG_DRYWT	DME	13.51	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	4.508	MG/KG_DRYWT	D	7.539	MG/KG_DRYWT	D	0.857	MG/KG_DRYWT	D	15.822	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	4.06	MG/KG_DRYWT	D	6.33	MG/KG_DRYWT	D	0.906	MG/KG_DRYWT	D	15.41	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	2.537	MG/KG_DRYWT	D	2.699	MG/KG_DRYWT	D	0.547	MG/KG_DRYWT	D	7.834	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	10.43	MG/KG_DRYWT	D	9.868	MG/KG_DRYWT	D	2.725	MG/KG_DRYWT	D	18.144	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.74	MG/KG_DRYWT	D	0.549	MG/KG_DRYWT	D	0.11	MG/KG_DRYWT	D	4.515	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	2.217	MG/KG_DRYWT	D	1.563	MG/KG_DRYWT	D	0.568	MG/KG_DRYWT	Dp	6.479	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.234	MG/KG_DRYWT	D	0.101	MG/KG_DRYWT	DU	0.112	MG/KG_DRYWT	D	1.694	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	1.335	MG/KG_DRYWT	D	0.935	MG/KG_DRYWT	D	0.402	MG/KG_DRYWT	D	5.25	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.122	MG/KG_DRYWT	R	0.102	MG/KG_DRYWT	DU	0.065	MG/KG_DRYWT	D	0.642	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	1.165	MG/KG_DRYWT	D	0.733	MG/KG_DRYWT	D	0.431	MG/KG_DRYWT	D	4.127	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	2.245	MG/KG_DRYWT	D	1.501	MG/KG_DRYWT	D	0.674	MG/KG_DRYWT	D	5.014	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.15	MG/KG_DRYWT	R	0.102	MG/KG_DRYWT	DU	0.022	MG/KG_DRYWT	D	0.464	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.219	MG/KG_DRYWT	Dp	0.051	MG/KG_DRYWT	R	0.077	MG/KG_DRYWT	D	0.618	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.288	MG/KG_DRYWT	D	0.127	MG/KG_DRYWT	D	0.084	MG/KG_DRYWT	D	0.455	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.047	MG/KG_DRYWT	R	0.102	MG/KG_DRYWT	DU	0.012	MG/KG_DRYWT	R	0.098	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.031	MG/KG_DRYWT	R	0.101	MG/KG_DRYWT	DU	0.011	MG/KG_DRYWT	R	0.016	MG/KG_DRYWT	R
Decacb - Congener (PCB 209)	0.067	MG/KG_DRYWT	DU	0.101	MG/KG_DRYWT	DU	0.00035	MG/KG_DRYWT	R	0.097	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	86	MG/KG_DRYWT		94	MG/KG_DRYWT		21	MG/KG_DRYWT		260	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0L12			0M10-DUP			0M10			0R11		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			REP			SA			SA		
Sample ID	S-06D-0L12-00-03			S-06D-0M10-02-07-DUP			S-06D-0M10-02-07			S-06D-0R11-10-15		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	4.031	MG/KG_DRYWT	D	116.068	MG/KG_DRYWT	D	102.559	MG/KG_DRYWT	D	0.053	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	6.894	MG/KG_DRYWT	D	126.355	MG/KG_DRYWT	D	109.341	MG/KG_DRYWT	D	0.066	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	5.276	MG/KG_DRYWT	D	113.501	MG/KG_DRYWT	D	98.643	MG/KG_DRYWT	D	0.059	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	2.611	MG/KG_DRYWT	D	73.033	MG/KG_DRYWT	D	67.509	MG/KG_DRYWT	D	0.028	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	9.541	MG/KG_DRYWT	D	111.953	MG/KG_DRYWT	D	103.347	MG/KG_DRYWT	D	0.048	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.428	MG/KG_DRYWT	Dp	50.478	MG/KG_DRYWT	D	45.009	MG/KG_DRYWT	D	0.041	MG/KG_DRYWT	R
2,2',4,5,5'-Pentacb (PCB 101)	1.373	MG/KG_DRYWT	D	49.722	MG/KG_DRYWT	D	50.345	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	Dp
2,3,3',4,4'-Pentacb (PCB 105)	0.101	MG/KG_DRYWT	DU	17.105	MG/KG_DRYWT	D	16.692	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,3',4,4',5-Pentacb (PCB 118)	0.725	MG/KG_DRYWT	D	44.576	MG/KG_DRYWT	D	45.634	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	R
2,2',3,3',4,4'-Hexacb (PCB 128)	0.102	MG/KG_DRYWT	DU	5.767	MG/KG_DRYWT	D	6.214	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	0.653	MG/KG_DRYWT	D	32.724	MG/KG_DRYWT	D	34.093	MG/KG_DRYWT	D	0.0063	MG/KG_DRYWT	R
2,2',4,4',5,5'-Hexacb (PCB 153)	1.216	MG/KG_DRYWT	D	33.923	MG/KG_DRYWT	D	35.921	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.102	MG/KG_DRYWT	DU	2.979	MG/KG_DRYWT	D	2.973	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.102	MG/KG_DRYWT	DU	3.809	MG/KG_DRYWT	D	4.02	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.11	MG/KG_DRYWT	D	1.539	MG/KG_DRYWT	D	1.226	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.102	MG/KG_DRYWT	DU	1.02	MG/KG_DRYWT	DU	1.02	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.101	MG/KG_DRYWT	DU	1.01	MG/KG_DRYWT	DU	1.01	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.101	MG/KG_DRYWT	DU	1.01	MG/KG_DRYWT	DU	1.01	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	85	MG/KG_DRYWT		2000	MG/KG_DRYWT		1900	MG/KG_DRYWT		0.69	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0T15			0W18			0Z13			BB19		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0T15-00-05			S-06D-0W18-00-06			S-06D-0Z13-00-02			S-06D-BB19-00-06		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	8.097	MG/KG_DRYWT	D	5.714	MG/KG_DRYWT	D	10.732	MG/KG_DRYWT	D	1.646	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	12.014	MG/KG_DRYWT	D	6.57	MG/KG_DRYWT	D	17.814	MG/KG_DRYWT	D	3.084	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	10.693	MG/KG_DRYWT	D	6.062	MG/KG_DRYWT	D	14.559	MG/KG_DRYWT	D	3.171	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	5.731	MG/KG_DRYWT	D	3.281	MG/KG_DRYWT	D	6.598	MG/KG_DRYWT	D	1.896	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	14.875	MG/KG_DRYWT	D	4.762	MG/KG_DRYWT	D	26.378	MG/KG_DRYWT	D	4.071	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	1.42	MG/KG_DRYWT	D	2.633	MG/KG_DRYWT	D	0.317	MG/KG_DRYWT	D	1.514	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	2.791	MG/KG_DRYWT	D	1.929	MG/KG_DRYWT	D	2.05	MG/KG_DRYWT	D	2.34	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.1	MG/KG_DRYWT	DU	0.172	MG/KG_DRYWT	D	0.102	MG/KG_DRYWT	DU	0.43	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	1.938	MG/KG_DRYWT	D	1.577	MG/KG_DRYWT	D	0.793	MG/KG_DRYWT	Dp	2.033	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.101	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.103	MG/KG_DRYWT	DU	0.241	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	1.249	MG/KG_DRYWT	D	0.746	MG/KG_DRYWT	D	1.595	MG/KG_DRYWT	D	1.751	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	2.21	MG/KG_DRYWT	D	1.036	MG/KG_DRYWT	D	2.172	MG/KG_DRYWT	D	2.196	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.06	MG/KG_DRYWT	R	0.1	MG/KG_DRYWT	DU	0.103	MG/KG_DRYWT	DU	0.138	MG/KG_DRYWT	Dp
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.14	MG/KG_DRYWT	Dp	0.051	MG/KG_DRYWT	R	0.04	MG/KG_DRYWT	R	0.217	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.244	MG/KG_DRYWT	D	0.099	MG/KG_DRYWT	DU	0.601	MG/KG_DRYWT	D	0.033	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.101	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU	0.103	MG/KG_DRYWT	DU	0.099	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.1	MG/KG_DRYWT	DU	0.099	MG/KG_DRYWT	DU	0.018	MG/KG_DRYWT	DpJ	0.098	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.1	MG/KG_DRYWT	DU	0.099	MG/KG_DRYWT	DU	0.102	MG/KG_DRYWT	DU	0.098	MG/KG_DRYWT	DU
Total MonoCB				0.441	MG/KG_DRYWT	D						
Total DiCB				16.645	MG/KG_DRYWT	D						
Total TriCB				44.15	MG/KG_DRYWT	D						
Total TetraCB				25.209	MG/KG_DRYWT	D						
Total PentaCB				11.934	MG/KG_DRYWT	D						
Total HexaCB				5.958	MG/KG_DRYWT	D						
Total HeptaCB				1.681	MG/KG_DRYWT	D						
Total OctaCB				0.198	MG/KG_DRYWT	DU						
Total NonaCB				0.198	MG/KG_DRYWT	DU						
DecaCB				0.198	MG/KG_DRYWT	DU						
Total PCB Congeners (sum CONG x 2.6)	160	MG/KG_DRYWT		90	MG/KG_DRYWT		220	MG/KG_DRYWT		64	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)				110	MG/KG_DRYWT							

2006 Post-Dredging Sediment Analytical Results

Station ID	0J17			0L20-DUP			0L20			0N14		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			REP			SA			SA		
Sample ID	S-06D-0J17-00-05			S-06D-0L20-07-12-DUP			S-06D-0L20-07-12			S-06D-0N14-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	48.591	MG/KG_DRYWT	D	46.072	MG/KG_DRYWT	D	35.237	MG/KG_DRYWT	D	14.072	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	75.894	MG/KG_DRYWT	D	72.939	MG/KG_DRYWT	D	54.751	MG/KG_DRYWT	D	18.41	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	64.64	MG/KG_DRYWT	D	64.016	MG/KG_DRYWT	D	45.959	MG/KG_DRYWT	D	17.879	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	47.827	MG/KG_DRYWT	D	31.793	MG/KG_DRYWT	D	23.379	MG/KG_DRYWT	D	7.71	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	102.579	MG/KG_DRYWT	D	92.797	MG/KG_DRYWT	D	67.634	MG/KG_DRYWT	D	19.67	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	36.397	MG/KG_DRYWT	D	14.953	MG/KG_DRYWT	D	11.015	MG/KG_DRYWT	D	5.032	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	90.748	MG/KG_DRYWT	D	34.788	MG/KG_DRYWT	D	26.443	MG/KG_DRYWT	D	7.23	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	19.867	MG/KG_DRYWT	D	5.988	MG/KG_DRYWT	D	4.69	MG/KG_DRYWT	D	1.38	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	71.145	MG/KG_DRYWT	D	24.425	MG/KG_DRYWT	D	18.656	MG/KG_DRYWT	D	4.999	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	8.009	MG/KG_DRYWT	D	2.361	MG/KG_DRYWT	D	1.912	MG/KG_DRYWT	Dp	0.541	MG/KG_DRYWT	Dp
2,2',3,4,4',5'-Hexacb (PCB 138)	47.53	MG/KG_DRYWT	D	16.894	MG/KG_DRYWT	D	12.864	MG/KG_DRYWT	D	3.464	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	70.778	MG/KG_DRYWT	D	27.785	MG/KG_DRYWT	D	21.43	MG/KG_DRYWT	D	5.397	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	4.801	MG/KG_DRYWT	Dp	1.77	MG/KG_DRYWT	R	1.47	MG/KG_DRYWT	R	0.227	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	7.401	MG/KG_DRYWT	D	2.933	MG/KG_DRYWT	D	2.227	MG/KG_DRYWT	D	0.676	MG/KG_DRYWT	Dp
2,2',3,4',5,5',6-Heptacb (PCB 187)	4.51	MG/KG_DRYWT	D	2.609	MG/KG_DRYWT	D	1.814	MG/KG_DRYWT	Dp	0.438	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	1.098	MG/KG_DRYWT	DU	0.42	MG/KG_DRYWT	R	0.614	MG/KG_DRYWT	DU	0.251	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	1.087	MG/KG_DRYWT	DU	0.281	MG/KG_DRYWT	R	0.608	MG/KG_DRYWT	DU	0.249	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	1.087	MG/KG_DRYWT	DU	0.61	MG/KG_DRYWT	DU	0.608	MG/KG_DRYWT	DU	0.249	MG/KG_DRYWT	DU
Total MonoCB				2.288	MG/KG_DRYWT	D	1.697	MG/KG_DRYWT	D			
Total DiCB				152.857	MG/KG_DRYWT	D	118.685	MG/KG_DRYWT	D			
Total TriCB				451.034	MG/KG_DRYWT	D	344.749	MG/KG_DRYWT	D			
Total TetraCB				301.543	MG/KG_DRYWT	D	229.468	MG/KG_DRYWT	D			
Total PentaCB				215.574	MG/KG_DRYWT	D	177.579	MG/KG_DRYWT	D			
Total HexaCB				97.546	MG/KG_DRYWT	D	82.591	MG/KG_DRYWT	D			
Total HeptaCB				20.699	MG/KG_DRYWT	D	14.869	MG/KG_DRYWT	D			
Total OctaCB				1.22	MG/KG_DRYWT	DU	1.217	MG/KG_DRYWT	DU			
Total NonaCB				1.22	MG/KG_DRYWT	DU	1.217	MG/KG_DRYWT	DU			
DecaCB				1.22	MG/KG_DRYWT	DU	1.217	MG/KG_DRYWT	DU			
Total PCB Congeners (sum CONG x 2.6)	1800	MG/KG_DRYWT		1100	MG/KG_DRYWT		850	MG/KG_DRYWT		280	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)				1200	MG/KG_DRYWT		970	MG/KG_DRYWT				

2006 Post-Dredging Sediment Analytical Results

Station ID	0O12			0Q21			0U22			0Z22		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0O12-00-05			S-06D-0Q21-00-06			S-06D-0U22-02-07			S-06D-0Z22-00-06		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	64.25	MG/KG_DRYWT	D	5.572	MG/KG_DRYWT	D	24.224	MG/KG_DRYWT	D	0.208	MG/KG_DRYWT	U
2,2',5-Tricb (PCB 18)	77.295	MG/KG_DRYWT	D	9.187	MG/KG_DRYWT	D	47.782	MG/KG_DRYWT	D	0.352	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	69.173	MG/KG_DRYWT	D	8.603	MG/KG_DRYWT	D	38.488	MG/KG_DRYWT	D	0.348	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	35.406	MG/KG_DRYWT	D	4.433	MG/KG_DRYWT	D	19.598	MG/KG_DRYWT	D	0.199	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	53.396	MG/KG_DRYWT	D	14.678	MG/KG_DRYWT	D	62.299	MG/KG_DRYWT	D	0.652	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	29.407	MG/KG_DRYWT	D	1.478	MG/KG_DRYWT	D	3.556	MG/KG_DRYWT	D	0.039	MG/KG_DRYWT	U
2,2',4,5,5'-Pentacb (PCB 101)	23.92	MG/KG_DRYWT	D	3.647	MG/KG_DRYWT	D	12.368	MG/KG_DRYWT	D	0.112	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	6.674	MG/KG_DRYWT	D	0.36	MG/KG_DRYWT	D	0.675	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	17.667	MG/KG_DRYWT	D	2.391	MG/KG_DRYWT	D	6.475	MG/KG_DRYWT	D	0.065	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	1.892	MG/KG_DRYWT	R	0.159	MG/KG_DRYWT	R	0.565	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	10.918	MG/KG_DRYWT	D	1.548	MG/KG_DRYWT	D	5.4	MG/KG_DRYWT	D	0.058	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	14.997	MG/KG_DRYWT	D	3.281	MG/KG_DRYWT	D	11.869	MG/KG_DRYWT	D	0.101	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	1.577	MG/KG_DRYWT	R	0.221	MG/KG_DRYWT	R	0.739	MG/KG_DRYWT	R	0.0066	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	2.05	MG/KG_DRYWT	R	0.314	MG/KG_DRYWT	Dp	1.067	MG/KG_DRYWT	R	0.011	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.617	MG/KG_DRYWT	R	0.369	MG/KG_DRYWT	Dp	1.658	MG/KG_DRYWT	Dp	0.012	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	1.115	MG/KG_DRYWT	DU	0.107	MG/KG_DRYWT	DU	0.565	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	1.104	MG/KG_DRYWT	DU	0.106	MG/KG_DRYWT	DU	0.559	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	1.104	MG/KG_DRYWT	DU	0.106	MG/KG_DRYWT	DU	0.559	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU
Total MonoCB										0.0086	MG/KG_DRYWT	DJ
Total DiCB										0.795	MG/KG_DRYWT	D
Total TriCB										2.501	MG/KG_DRYWT	D
Total TetraCB										1.873	MG/KG_DRYWT	D
Total PentaCB										1.406	MG/KG_DRYWT	D
Total HexaCB										0.457	MG/KG_DRYWT	D
Total HeptaCB										0.083	MG/KG_DRYWT	D
Total OctaCB										0.02	MG/KG_DRYWT	DU
Total NonaCB										0.02	MG/KG_DRYWT	DU
DecaCB										0.02	MG/KG_DRYWT	DU
Total PCB Congeners (sum CONG x 2.6)	1100	MG/KG_DRYWT		150	MG/KG_DRYWT		610	MG/KG_DRYWT		4.9	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)										7.1	MG/KG_DRYWT	

2006 Post-Dredging Sediment Analytical Results

Station ID	0C29			0C41-DUP			0C41			0E27		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			REP			SA			SA		
Sample ID	S-06D-0C29-05-10			S-06D-0C41-04-09-DUP			S-06D-0C41-04-09			S-06D-0E27-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	22.367	MG/KG_DRYWT	D	10.984	MG/KG_DRYWT	D	11.826	MG/KG_DRYWT	D	14.744	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	34.076	MG/KG_DRYWT	D	15.495	MG/KG_DRYWT	D	16.372	MG/KG_DRYWT	D	18	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	31.578	MG/KG_DRYWT	D	13.052	MG/KG_DRYWT	D	14.145	MG/KG_DRYWT	D	15.084	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	11.849	MG/KG_DRYWT	D	6.862	MG/KG_DRYWT	D	6.416	MG/KG_DRYWT	D	7.079	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	44.933	MG/KG_DRYWT	D	10.731	MG/KG_DRYWT	D	11.59	MG/KG_DRYWT	D	24.385	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	2.366	MG/KG_DRYWT	D	5.079	MG/KG_DRYWT	D	4.374	MG/KG_DRYWT	D	1.681	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	7.277	MG/KG_DRYWT	D	4.703	MG/KG_DRYWT	D	4.566	MG/KG_DRYWT	D	4.628	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.46	MG/KG_DRYWT	D	0.25	MG/KG_DRYWT	D	0.26	MG/KG_DRYWT	D	0.309	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	3.707	MG/KG_DRYWT	D	3.414	MG/KG_DRYWT	D	3.246	MG/KG_DRYWT	D	2.753	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.301	MG/KG_DRYWT	DU	0.117	MG/KG_DRYWT	R	0.125	MG/KG_DRYWT	R	0.146	MG/KG_DRYWT	R
2,2',3,4,4',5'-Hexacb (PCB 138)	4.087	MG/KG_DRYWT	D	1.298	MG/KG_DRYWT	D	1.305	MG/KG_DRYWT	D	1.959	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	6.601	MG/KG_DRYWT	D	2.814	MG/KG_DRYWT	D	2.738	MG/KG_DRYWT	D	4.001	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.301	MG/KG_DRYWT	DU	0.195	MG/KG_DRYWT	R	0.187	MG/KG_DRYWT	R	0.252	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.589	MG/KG_DRYWT	R	0.3	MG/KG_DRYWT	Dp	0.306	MG/KG_DRYWT	Dp	0.366	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.946	MG/KG_DRYWT	D	0.21	MG/KG_DRYWT	R	0.22	MG/KG_DRYWT	R	0.552	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.301	MG/KG_DRYWT	DU	0.114	MG/KG_DRYWT	DU	0.109	MG/KG_DRYWT	DU	0.163	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.298	MG/KG_DRYWT	DU	0.113	MG/KG_DRYWT	DU	0.108	MG/KG_DRYWT	DU	0.162	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.298	MG/KG_DRYWT	DU	0.113	MG/KG_DRYWT	DU	0.108	MG/KG_DRYWT	DU	0.162	MG/KG_DRYWT	DU
Total MonoCB				0.73	MG/KG_DRYWT	D	0.873	MG/KG_DRYWT	D			
Total DiCB				35.134	MG/KG_DRYWT	D	40.366	MG/KG_DRYWT	D			
Total TriCB				82.629	MG/KG_DRYWT	D	92.76	MG/KG_DRYWT	D			
Total TetraCB				49.508	MG/KG_DRYWT	D	53.423	MG/KG_DRYWT	D			
Total PentaCB				28.021	MG/KG_DRYWT	D	27.465	MG/KG_DRYWT	D			
Total HexaCB				12.013	MG/KG_DRYWT	D	10.851	MG/KG_DRYWT	D			
Total HeptaCB				2.149	MG/KG_DRYWT	D	0.216	MG/KG_DRYWT	DU			
Total OctaCB				0.225	MG/KG_DRYWT	DU	0.216	MG/KG_DRYWT	DU			
Total NonaCB				0.225	MG/KG_DRYWT	DU	0.216	MG/KG_DRYWT	DU			
DecaCB				0.225	MG/KG_DRYWT	DU	0.216	MG/KG_DRYWT	DU			
Total PCB Congeners (sum CONG x 2.6)	440	MG/KG_DRYWT		200	MG/KG_DRYWT		200	MG/KG_DRYWT		250	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)				210	MG/KG_DRYWT		230	MG/KG_DRYWT				

2006 Post-Dredging Sediment Analytical Results

Station ID	0E33			0F36			0F38			0G25		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0E33-00-05			S-06D-0F36-00-05			S-06D-0F38-00-05			S-06D-0G25-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	122.712	MG/KG_DRYWT	D	49.67	MG/KG_DRYWT	D	262.447	MG/KG_DRYWT	D	30.204	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	180.437	MG/KG_DRYWT	D	60.234	MG/KG_DRYWT	D	401.476	MG/KG_DRYWT	D	45.594	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	130.067	MG/KG_DRYWT	D	58.486	MG/KG_DRYWT	D	318.127	MG/KG_DRYWT	D	42.085	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	36.176	MG/KG_DRYWT	D	29.252	MG/KG_DRYWT	D	155.907	MG/KG_DRYWT	D	19.907	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	148.778	MG/KG_DRYWT	D	35.676	MG/KG_DRYWT	D	220.375	MG/KG_DRYWT	D	58.55	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	9.344	MG/KG_DRYWT	D	27.729	MG/KG_DRYWT	D	122.784	MG/KG_DRYWT	D	5.79	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	19.062	MG/KG_DRYWT	D	15.258	MG/KG_DRYWT	D	75.153	MG/KG_DRYWT	D	12.947	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	1.405	MG/KG_DRYWT	D	1.737	MG/KG_DRYWT	D	6.764	MG/KG_DRYWT	D	1.145	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	13.552	MG/KG_DRYWT	D	11.617	MG/KG_DRYWT	D	56.413	MG/KG_DRYWT	D	7.582	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	1.016	MG/KG_DRYWT	DU	0.694	MG/KG_DRYWT	R	2.872	MG/KG_DRYWT	Dp	0.507	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	8.155	MG/KG_DRYWT	D	4.628	MG/KG_DRYWT	D	23.937	MG/KG_DRYWT	D	5.469	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	17.743	MG/KG_DRYWT	D	7.192	MG/KG_DRYWT	D	42.459	MG/KG_DRYWT	D	9.945	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	1.016	MG/KG_DRYWT	DU	0.855	MG/KG_DRYWT	R	1.128	MG/KG_DRYWT	Dp	0.507	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	2.073	MG/KG_DRYWT	R	1.06	MG/KG_DRYWT	R	5.1	MG/KG_DRYWT	D	0.987	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	1.934	MG/KG_DRYWT	R	0.28	MG/KG_DRYWT	R	3.521	MG/KG_DRYWT	Dp	1.31	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,6-Octacb (PCB 195)	1.016	MG/KG_DRYWT	DU	0.591	MG/KG_DRYWT	DU	1.029	MG/KG_DRYWT	DU	0.507	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	1.006	MG/KG_DRYWT	DU	0.585	MG/KG_DRYWT	DU	1.018	MG/KG_DRYWT	DU	0.502	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	1.006	MG/KG_DRYWT	DU	0.585	MG/KG_DRYWT	DU	1.018	MG/KG_DRYWT	DU	0.502	MG/KG_DRYWT	DU
Total MonoCB	6.284	MG/KG_DRYWT	D									
Total DiCB	450.298	MG/KG_DRYWT	D									
Total TriCB	961.682	MG/KG_DRYWT	D									
Total TetraCB	455.487	MG/KG_DRYWT	D									
Total PentaCB	161.518	MG/KG_DRYWT	D									
Total HexaCB	69.836	MG/KG_DRYWT	D									
Total HeptaCB	13.133	MG/KG_DRYWT	D									
Total OctaCB	2.012	MG/KG_DRYWT	DU									
Total NonaCB	2.012	MG/KG_DRYWT	DU									
DecaCB	2.012	MG/KG_DRYWT	DU									
Total PCB Congeners (sum CONG x 2.6)	1800	MG/KG_DRYWT		780	MG/KG_DRYWT		4400	MG/KG_DRYWT		630	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)	2100	MG/KG_DRYWT										

2006 Post-Dredging Sediment Analytical Results

Station ID	0H24			0H27			0H29			0H32		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0H24-22-27			S-06D-0H27-00-05			S-06D-0H29-00-05			S-06D-0H32-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.303	MG/KG_DRYWT	DME	13.746	MG/KG_DRYWT	D	7.671	MG/KG_DRYWT	D	4.379	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.456	MG/KG_DRYWT	D	21.211	MG/KG_DRYWT	D	9.03	MG/KG_DRYWT	D	5.161	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.422	MG/KG_DRYWT	D	19.681	MG/KG_DRYWT	D	7.339	MG/KG_DRYWT	D	4.341	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.178	MG/KG_DRYWT	D	6.846	MG/KG_DRYWT	D	2.774	MG/KG_DRYWT	D	3.627	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.496	MG/KG_DRYWT	D	23.917	MG/KG_DRYWT	D	7.56	MG/KG_DRYWT	D	7.25	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.082	MG/KG_DRYWT	D	2.511	MG/KG_DRYWT	D	1.258	MG/KG_DRYWT	D	1.96	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.127	MG/KG_DRYWT	D	4.387	MG/KG_DRYWT	D	1.482	MG/KG_DRYWT	D	2.825	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.018	MG/KG_DRYWT	D	0.475	MG/KG_DRYWT	D	0.139	MG/KG_DRYWT	D	0.195	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.094	MG/KG_DRYWT	D	2.773	MG/KG_DRYWT	D	1.051	MG/KG_DRYWT	D	1.577	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.011	MG/KG_DRYWT	DU	0.254	MG/KG_DRYWT	DU	0.06	MG/KG_DRYWT	R	0.082	MG/KG_DRYWT	R
2,2',3,4,4',5'-Hexacb (PCB 138)	0.06	MG/KG_DRYWT	D	1.854	MG/KG_DRYWT	D	0.588	MG/KG_DRYWT	D	0.965	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.097	MG/KG_DRYWT	D	3.258	MG/KG_DRYWT	D	1.148	MG/KG_DRYWT	D	1.86	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.011	MG/KG_DRYWT	DU	0.254	MG/KG_DRYWT	DU	0.105	MG/KG_DRYWT	R	0.136	MG/KG_DRYWT	R
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.013	MG/KG_DRYWT	R	0.414	MG/KG_DRYWT	R	0.14	MG/KG_DRYWT	R	0.209	MG/KG_DRYWT	Dp
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0059	MG/KG_DRYWT	R	0.372	MG/KG_DRYWT	R	0.124	MG/KG_DRYWT	R	0.176	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.011	MG/KG_DRYWT	DU	0.254	MG/KG_DRYWT	DU	0.07	MG/KG_DRYWT	DU	0.038	MG/KG_DRYWT	R
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.01	MG/KG_DRYWT	DU	0.251	MG/KG_DRYWT	DU	0.069	MG/KG_DRYWT	DU	0.014	MG/KG_DRYWT	R
Decacb - Congener (PCB 209)	0.01	MG/KG_DRYWT	DU	0.251	MG/KG_DRYWT	DU	0.069	MG/KG_DRYWT	DU	0.063	MG/KG_DRYWT	DU
Total MonoCB	0.047	MG/KG_DRYWT	D									
Total DiCB	0.717	MG/KG_DRYWT	D									
Total TriCB	2.013	MG/KG_DRYWT	D									
Total TetraCB	0.952	MG/KG_DRYWT	D									
Total PentaCB	5.979	MG/KG_DRYWT	D									
Total HexaCB	0.021	MG/KG_DRYWT	DU									
Total HeptaCB	0.021	MG/KG_DRYWT	DU									
Total OctaCB	0.021	MG/KG_DRYWT	DU									
Total NonaCB	0.021	MG/KG_DRYWT	DU									
DecaCB	0.021	MG/KG_DRYWT	DU									
Total PCB Congeners (sum CONG x 2.6)	6.1	MG/KG_DRYWT		260	MG/KG_DRYWT		100	MG/KG_DRYWT		90	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)	9.7	MG/KG_DRYWT										

2006 Post-Dredging Sediment Analytical Results

Station ID	0H36			0H41			0M23-DUP			0M23		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			REP			SA		
Sample ID	S-06D-0H36-00-05			S-06D-0H41-00-05			S-06D-0M23-05-10-DUP			S-06D-0M23-05-10		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	108.405	MG/KG_DRYWT	D	0.847	MG/KG_DRYWT	D	11.275	MG/KG_DRYWT	D	9.963	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	150.317	MG/KG_DRYWT	D	1.046	MG/KG_DRYWT	D	18.782	MG/KG_DRYWT	D	16.312	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	127.623	MG/KG_DRYWT	D	0.904	MG/KG_DRYWT	D	16.763	MG/KG_DRYWT	D	14.435	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	68.48	MG/KG_DRYWT	D	0.403	MG/KG_DRYWT	D	9.063	MG/KG_DRYWT	D	7.983	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	148.923	MG/KG_DRYWT	D	0.997	MG/KG_DRYWT	D	28.083	MG/KG_DRYWT	D	22.299	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	43.68	MG/KG_DRYWT	D	0.192	MG/KG_DRYWT	D	3.989	MG/KG_DRYWT	D	3.999	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	76.849	MG/KG_DRYWT	D	0.261	MG/KG_DRYWT	D	10.501	MG/KG_DRYWT	D	8.57	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	3.008	MG/KG_DRYWT	D	0.016	MG/KG_DRYWT	DU	0.489	MG/KG_DRYWT	D	0.463	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	53.243	MG/KG_DRYWT	D	0.22	MG/KG_DRYWT	D	7.143	MG/KG_DRYWT	D	5.773	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	1.409	MG/KG_DRYWT	R	0.016	MG/KG_DRYWT	DU	0.254	MG/KG_DRYWT	R	0.259	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	21.637	MG/KG_DRYWT	D	0.099	MG/KG_DRYWT	D	3.179	MG/KG_DRYWT	D	2.594	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	50.178	MG/KG_DRYWT	D	0.191	MG/KG_DRYWT	D	7.805	MG/KG_DRYWT	D	5.989	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	3.017	MG/KG_DRYWT	R	0.0021	MG/KG_DRYWT	R	0.244	MG/KG_DRYWT	DU	0.259	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	4.829	MG/KG_DRYWT	Dp	0.011	MG/KG_DRYWT	DpJ	0.682	MG/KG_DRYWT	Dp	0.553	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	4.271	MG/KG_DRYWT	Dp	0.0051	MG/KG_DRYWT	DpJ	0.701	MG/KG_DRYWT	Dp	0.504	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	1.573	MG/KG_DRYWT	DU	0.016	MG/KG_DRYWT	DU	0.244	MG/KG_DRYWT	DU	0.259	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	1.558	MG/KG_DRYWT	DU	0.016	MG/KG_DRYWT	DU	0.241	MG/KG_DRYWT	DU	0.256	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	1.558	MG/KG_DRYWT	DU	0.016	MG/KG_DRYWT	DU	0.241	MG/KG_DRYWT	DU	0.256	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	2200	MG/KG_DRYWT		14	MG/KG_DRYWT		310	MG/KG_DRYWT		260	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0B32			0D36			0E30			0E32		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0B32-00-05			S-06D-0D36-00-05			S-06D-0E30-00-05			S-06D-0E32-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	15.596	MG/KG_DRYWT	D	65.944	MG/KG_DRYWT	D	16.191	MG/KG_DRYWT	D	12.956	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	24.434	MG/KG_DRYWT	D	87.105	MG/KG_DRYWT	D	24.799	MG/KG_DRYWT	D	29.659	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	19.212	MG/KG_DRYWT	D	72.144	MG/KG_DRYWT	D	19.781	MG/KG_DRYWT	D	25.831	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	26.389	MG/KG_DRYWT	D	27.343	MG/KG_DRYWT	D	8.083	MG/KG_DRYWT	D	8.878	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	108.584	MG/KG_DRYWT	D	65.28	MG/KG_DRYWT	D	29.275	MG/KG_DRYWT	D	28.312	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	5.961	MG/KG_DRYWT	D	12.874	MG/KG_DRYWT	D	1.731	MG/KG_DRYWT	D	2.12	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	26.183	MG/KG_DRYWT	D	16.053	MG/KG_DRYWT	D	4.47	MG/KG_DRYWT	D	4.256	MG/KG_DRYWT	Dp
2,3,3',4,4'-Pentacb (PCB 105)	1.771	MG/KG_DRYWT	D	0.858	MG/KG_DRYWT	D	0.318	MG/KG_DRYWT	D	0.31	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	12.414	MG/KG_DRYWT	D	11.176	MG/KG_DRYWT	D	2.84	MG/KG_DRYWT	D	2.912	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.946	MG/KG_DRYWT	R	0.498	MG/KG_DRYWT	DU	0.247	MG/KG_DRYWT	DU	0.265	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	12.909	MG/KG_DRYWT	D	4.894	MG/KG_DRYWT	D	2.015	MG/KG_DRYWT	D	1.668	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	20.178	MG/KG_DRYWT	D	10.69	MG/KG_DRYWT	D	4.159	MG/KG_DRYWT	D	3.594	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.508	MG/KG_DRYWT	R	0.498	MG/KG_DRYWT	DU	0.182	MG/KG_DRYWT	R	0.265	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	1.648	MG/KG_DRYWT	Dp	1.102	MG/KG_DRYWT	Dp	0.4	MG/KG_DRYWT	R	0.265	MG/KG_DRYWT	DU
2,2',3,4',5,5',6-Heptacb (PCB 187)	2.955	MG/KG_DRYWT	D	0.97	MG/KG_DRYWT	Dp	0.555	MG/KG_DRYWT	Dp	0.381	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.514	MG/KG_DRYWT	DU	0.498	MG/KG_DRYWT	DU	0.247	MG/KG_DRYWT	DU	0.265	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.509	MG/KG_DRYWT	DU	0.493	MG/KG_DRYWT	DU	0.244	MG/KG_DRYWT	DU	0.262	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.509	MG/KG_DRYWT	DU	0.493	MG/KG_DRYWT	DU	0.244	MG/KG_DRYWT	DU	0.262	MG/KG_DRYWT	DU
Total MonoCB							0.726	MG/KG_DRYWT	D			
Total DiCB							64.036	MG/KG_DRYWT	D			
Total TriCB							149.12	MG/KG_DRYWT	D			
Total TetraCB							86.286	MG/KG_DRYWT	D			
Total PentaCB							38.48	MG/KG_DRYWT	D			
Total HexaCB							19.669	MG/KG_DRYWT	D			
Total HeptaCB							3.742	MG/KG_DRYWT	D			
Total OctaCB							0.488	MG/KG_DRYWT	DU			
Total NonaCB							0.488	MG/KG_DRYWT	DU			
DecaCB							0.488	MG/KG_DRYWT	DU			
Total PCB Congeners (sum CONG x 2.6)	720	MG/KG_DRYWT		980	MG/KG_DRYWT		300	MG/KG_DRYWT		310	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)							360	MG/KG_DRYWT				

2006 Post-Dredging Sediment Analytical Results

Station ID	0N28			0N40			0V28			0V39		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0N28-08-13			S-06D-0N40-07-12			S-06D-0V28-02-07			S-06D-0V39-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	13.865	MG/KG_DRYWT	D	35.335	MG/KG_DRYWT	D	12.691	MG/KG_DRYWT	D	2.547	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	22.909	MG/KG_DRYWT	D	67.453	MG/KG_DRYWT	D	21.888	MG/KG_DRYWT	D	4.796	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	22.607	MG/KG_DRYWT	D	66.405	MG/KG_DRYWT	D	23.386	MG/KG_DRYWT	D	4.613	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	11.3	MG/KG_DRYWT	D	22.979	MG/KG_DRYWT	D	10.016	MG/KG_DRYWT	D	1.724	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	31.761	MG/KG_DRYWT	D	100.954	MG/KG_DRYWT	D	31.453	MG/KG_DRYWT	D	7.313	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	1.328	MG/KG_DRYWT	D	1.418	MG/KG_DRYWT	D	2.391	MG/KG_DRYWT	D	0.49	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	7.138	MG/KG_DRYWT	D	8.614	MG/KG_DRYWT	Dp	7.545	MG/KG_DRYWT	D	1.421	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.585	MG/KG_DRYWT	D	0.865	MG/KG_DRYWT	D	0.477	MG/KG_DRYWT	D	0.132	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	3.184	MG/KG_DRYWT	D	3.899	MG/KG_DRYWT	D	4.452	MG/KG_DRYWT	D	0.88	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.509	MG/KG_DRYWT	DU	0.668	MG/KG_DRYWT	R	0.263	MG/KG_DRYWT	DU	0.098	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	3.039	MG/KG_DRYWT	D	6.774	MG/KG_DRYWT	D	3.156	MG/KG_DRYWT	D	0.642	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	5.65	MG/KG_DRYWT	D	10.167	MG/KG_DRYWT	D	6.824	MG/KG_DRYWT	D	1.396	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.509	MG/KG_DRYWT	DU	0.521	MG/KG_DRYWT	DU	0.263	MG/KG_DRYWT	DU	0.098	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.698	MG/KG_DRYWT	R	1.463	MG/KG_DRYWT	Dp	0.665	MG/KG_DRYWT	Dp	0.155	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.642	MG/KG_DRYWT	R	2.246	MG/KG_DRYWT	D	0.88	MG/KG_DRYWT	Dp	0.149	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.509	MG/KG_DRYWT	DU	0.521	MG/KG_DRYWT	DU	0.263	MG/KG_DRYWT	DU	0.098	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.504	MG/KG_DRYWT	DU	0.515	MG/KG_DRYWT	DU	0.26	MG/KG_DRYWT	DU	0.097	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.504	MG/KG_DRYWT	DU	0.515	MG/KG_DRYWT	DU	0.26	MG/KG_DRYWT	DU	0.097	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	320	MG/KG_DRYWT		850	MG/KG_DRYWT		330	MG/KG_DRYWT		68	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0F53			0F58			0K50			0N58		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06D-0F53-14-19			S-06D-0F58-00-05			S-06D-0K50-00-05			S-06D-0N58-00-05		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.055	MG/KG_DRYWT	DME	28.159	MG/KG_DRYWT	D	0.027	MG/KG_DRYWT	D	0.75	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.082	MG/KG_DRYWT	D	38.494	MG/KG_DRYWT	D	0.06	MG/KG_DRYWT	D	1.66	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.112	MG/KG_DRYWT	Dp	32.961	MG/KG_DRYWT	D	0.066	MG/KG_DRYWT	D	2.076	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.016	MG/KG_DRYWT	D	9.888	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D	0.84	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.045	MG/KG_DRYWT	Dp	25.275	MG/KG_DRYWT	D	0.104	MG/KG_DRYWT	D	2.546	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.028	MG/KG_DRYWT	R	5.294	MG/KG_DRYWT	D	0.022	MG/KG_DRYWT	R	0.374	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.0064	MG/KG_DRYWT	DpJ	8.223	MG/KG_DRYWT	D	0.015	MG/KG_DRYWT	Dp	0.635	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.01	MG/KG_DRYWT	DU	0.34	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU	0.088	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.016	MG/KG_DRYWT	Dp	4.916	MG/KG_DRYWT	D	0.013	MG/KG_DRYWT	Dp	0.403	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.011	MG/KG_DRYWT	DU	0.259	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	0.011	MG/KG_DRYWT	DU	2.31	MG/KG_DRYWT	D	0.011	MG/KG_DRYWT	R	0.319	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.011	MG/KG_DRYWT	DU	5.457	MG/KG_DRYWT	D	0.0098	MG/KG_DRYWT	DpJ	0.553	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.011	MG/KG_DRYWT	DU	0.212	MG/KG_DRYWT	R	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.011	MG/KG_DRYWT	DU	0.675	MG/KG_DRYWT	Dp	0.01	MG/KG_DRYWT	DU	0.08	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.01	MG/KG_DRYWT	DU	0.63	MG/KG_DRYWT	Dp	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.011	MG/KG_DRYWT	DU	0.259	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.01	MG/KG_DRYWT	DU	0.257	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.01	MG/KG_DRYWT	DU	0.257	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.05	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	0.87	MG/KG_DRYWT		420	MG/KG_DRYWT		0.81	MG/KG_DRYWT		27	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

2006 Post-Dredging Sediment Analytical Results

Station ID	0Q44		
Fraction	TOTAL		
QC Code	SA		
Sample ID	S-06D-0Q44-00-05		
Param Name	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	18.018	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	29.767	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	26.881	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	21.116	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	73.282	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	3.289	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	17.485	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.605	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	8.822	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.521	MG/KG_DRYWT	DU
2,2',3,4,4',5'-Hexacb (PCB 138)	7.107	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	14.12	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.521	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.94	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	1.931	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.521	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.515	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.515	MG/KG_DRYWT	DU
Total MonoCB			
Total DiCB			
Total TriCB			
Total TetraCB			
Total PentaCB			
Total HexaCB			
Total HeptaCB			
Total OctaCB			
Total NonaCB			
DecaCB			
Total PCB Congeners (sum CONG x 2.6)	580	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)			

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Aerovox Sediment Analytical Results

Station ID	8100206			8100206			9100206			9100206		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06C-0008-B			S-06C-0008-T			S-06C-0009-B			S-06C-0009-T		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.178	MG/KG_DRYWT	D	30.368	MG/KG_DRYWT	D	0.04	MG/KG_DRYWT	D	35.5	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.259	MG/KG_DRYWT	D	67.83	MG/KG_DRYWT	D	0.048	MG/KG_DRYWT	D	58.549	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.218	MG/KG_DRYWT	D	25.378	MG/KG_DRYWT	D	0.058	MG/KG_DRYWT	D	66.57	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.17	MG/KG_DRYWT	D	25.748	MG/KG_DRYWT	D	0.027	MG/KG_DRYWT	Dp	38.011	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.371	MG/KG_DRYWT	D	152.183	MG/KG_DRYWT	D	0.077	MG/KG_DRYWT	D	93.544	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.131	MG/KG_DRYWT	D	13.361	MG/KG_DRYWT	D	0.038	MG/KG_DRYWT	R	14.706	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.217	MG/KG_DRYWT	D	29.064	MG/KG_DRYWT	D	0.018	MG/KG_DRYWT	D	28.862	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.101	MG/KG_DRYWT	Dp	6.326	MG/KG_DRYWT	D	0.0077	MG/KG_DRYWT	R	1.395	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.232	MG/KG_DRYWT	D	24.597	MG/KG_DRYWT	D	0.021	MG/KG_DRYWT	R	21.422	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.038	MG/KG_DRYWT	R	2.221	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU	0.961	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	0.187	MG/KG_DRYWT	D	18.648	MG/KG_DRYWT	D	0.014	MG/KG_DRYWT	R	13.581	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.168	MG/KG_DRYWT	D	27.681	MG/KG_DRYWT	D	0.0097	MG/KG_DRYWT	R	23.717	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.016	MG/KG_DRYWT	R	1.551	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU	1.303	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.024	MG/KG_DRYWT	R	2.218	MG/KG_DRYWT	D	0.00022	MG/KG_DRYWT	R	2.027	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0017	MG/KG_DRYWT	R	2.242	MG/KG_DRYWT	D	0.01	MG/KG_DRYWT	DU	2.78	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.01	MG/KG_DRYWT	DU	0.617	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.521	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.0099	MG/KG_DRYWT	DU	0.611	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.061	MG/KG_DRYWT	R
Decacb - Congener (PCB 209)	0.0099	MG/KG_DRYWT	DU	0.611	MG/KG_DRYWT	DU	0.01	MG/KG_DRYWT	DU	0.515	MG/KG_DRYWT	DU
Total MonoCB							0.02	MG/KG_DRYWT	DU			
Total DiCB							0.181	MG/KG_DRYWT	D			
Total TriCB							0.513	MG/KG_DRYWT	D			
Total TetraCB							0.374	MG/KG_DRYWT	D			
Total PentaCB							0.469	MG/KG_DRYWT	D			
Total HexaCB							0.192	MG/KG_DRYWT	D			
Total HeptaCB							0.02	MG/KG_DRYWT	DU			
Total OctaCB							0.02	MG/KG_DRYWT	DU			
Total NonaCB							0.02	MG/KG_DRYWT	DU			
DecaCB							0.02	MG/KG_DRYWT	DU			
Total PCB Congeners (sum CONG x 2.6)	5.8	MG/KG_DRYWT		1100	MG/KG_DRYWT		0.7	MG/KG_DRYWT		1100	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)							1.7	MG/KG_DRYWT				

Aerovox Sediment Analytical Results

Station ID	11100206			11100206			05A101306			9101306		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06C-0011-B			S-06C-0011-T			S-06C-0005A-T			S-06C-0009-D		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	2.672	MG/KG_DRYWT	D	285.808	MG/KG_DRYWT	Dp	8127.979	MG/KG_DRYWT	D	5.063	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	3.626	MG/KG_DRYWT	D	543.346	MG/KG_DRYWT	D	8398.179	MG/KG_DRYWT	D	6.096	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	2.14	MG/KG_DRYWT	D	328.778	MG/KG_DRYWT	D	7614.213	MG/KG_DRYWT	D	5.303	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	3.308	MG/KG_DRYWT	D	429.455	MG/KG_DRYWT	D	5988.558	MG/KG_DRYWT	D	4.277	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	6.815	MG/KG_DRYWT	D	1014.97	MG/KG_DRYWT	D	9095.508	MG/KG_DRYWT	D	6.97	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	3.501	MG/KG_DRYWT	D	642.624	MG/KG_DRYWT	D	5005.463	MG/KG_DRYWT	D	2.785	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	9.126	MG/KG_DRYWT	D	1422.346	MG/KG_DRYWT	D	7946.413	MG/KG_DRYWT	D	5.278	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	1.306	MG/KG_DRYWT	Dp	28.017	MG/KG_DRYWT	R	1384.303	MG/KG_DRYWT	Dp	2.147	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	7.675	MG/KG_DRYWT	D	1023.186	MG/KG_DRYWT	D	6761.663	MG/KG_DRYWT	D	4.897	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.54	MG/KG_DRYWT	D	107.906	MG/KG_DRYWT	DU	866.308	MG/KG_DRYWT	D	0.717	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	4.239	MG/KG_DRYWT	D	389.592	MG/KG_DRYWT	D	4943.705	MG/KG_DRYWT	D	3.834	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	5.691	MG/KG_DRYWT	D	733.874	MG/KG_DRYWT	D	5497.25	MG/KG_DRYWT	D	4.122	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.442	MG/KG_DRYWT	D	107.906	MG/KG_DRYWT	DU	462.963	MG/KG_DRYWT	D	0.344	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.686	MG/KG_DRYWT	D	107.906	MG/KG_DRYWT	DU	642.234	MG/KG_DRYWT	D	0.462	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.29	MG/KG_DRYWT	D	106.838	MG/KG_DRYWT	DU	155.176	MG/KG_DRYWT	D	0.124	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.103	MG/KG_DRYWT	DU	107.906	MG/KG_DRYWT	DU	132.895	MG/KG_DRYWT	DU	0.101	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.102	MG/KG_DRYWT	DU	106.838	MG/KG_DRYWT	DU	131.579	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.102	MG/KG_DRYWT	DU	106.838	MG/KG_DRYWT	DU	131.579	MG/KG_DRYWT	DU	0.1	MG/KG_DRYWT	DU
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	140	MG/KG_DRYWT		18000	MG/KG_DRYWT		190000	MG/KG_DRYWT		140	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

OU#3 Pilot Cap Site Sediment Analytical Results

Station ID	OU1			OU2			OU3			OU4		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06B-OU01-00-03			S-06B-OU02-00-03			S-06B-OU03-00-03			S-06B-OU04-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.007	MG/KG_DRYWT	D	0.0049	MG/KG_DRYWT	D	0.0059	MG/KG_DRYWT	D	0.028	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.016	MG/KG_DRYWT	D	0.007	MG/KG_DRYWT	D	0.0058	MG/KG_DRYWT	D	0.03	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.057	MG/KG_DRYWT	D	0.026	MG/KG_DRYWT	D	0.024	MG/KG_DRYWT	D	0.089	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.04	MG/KG_DRYWT	D	0.011	MG/KG_DRYWT	D	0.0097	MG/KG_DRYWT	D	0.043	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.06	MG/KG_DRYWT	D	0.022	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D	0.076	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.042	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D	0.014	MG/KG_DRYWT	D	0.048	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.044	MG/KG_DRYWT	D	0.022	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D	0.059	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.014	MG/KG_DRYWT	D	0.0064	MG/KG_DRYWT	D	0.0058	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.049	MG/KG_DRYWT	D	0.018	MG/KG_DRYWT	D	0.017	MG/KG_DRYWT	D	0.071	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.0066	MG/KG_DRYWT	D	0.0029	MG/KG_DRYWT	D	0.0027	MG/KG_DRYWT	D	0.0081	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	0.036	MG/KG_DRYWT	D	0.014	MG/KG_DRYWT	D	0.013	MG/KG_DRYWT	D	0.05	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.047	MG/KG_DRYWT	D	0.017	MG/KG_DRYWT	D	0.016	MG/KG_DRYWT	D	0.062	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.0039	MG/KG_DRYWT	D	0.0018	MG/KG_DRYWT	D	0.0017	MG/KG_DRYWT	D	0.0055	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.0061	MG/KG_DRYWT	D	0.0025	MG/KG_DRYWT	D	0.0023	MG/KG_DRYWT	D	0.0067	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0043	MG/KG_DRYWT	D	0.0015	MG/KG_DRYWT	D	0.0015	MG/KG_DRYWT	D	0.0049	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.0017	MG/KG_DRYWT	Dp	0.0009	MG/KG_DRYWT	Dp	0.00097	MG/KG_DRYWT	Dp	0.0023	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.00084	MG/KG_DRYWT	D	0.00051	MG/KG_DRYWT	R	0.00053	MG/KG_DRYWT	R	0.00087	MG/KG_DRYWT	Dp
Decacb - Congener (PCB 209)	0.00066	MG/KG_DRYWT	R	0.0005	MG/KG_DRYWT	R	0.00038	MG/KG_DRYWT	R	0.00062	MG/KG_DRYWT	R
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	1.1	MG/KG_DRYWT		0.46	MG/KG_DRYWT		0.41	MG/KG_DRYWT		1.6	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

OU#3 Pilot Cap Site Sediment Analytical Results

Station ID	OU5			OU6			OU6			OU7		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			REP			SA			SA		
Sample ID	S-06B-OU05-00-03			S-06B-OU06-00-03 Dup			S-06B-OU06-00-03			S-06B-OU07-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.019	MG/KG_DRYWT	D	0.016	MG/KG_DRYWT	D	0.013	MG/KG_DRYWT	D	0.077	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.027	MG/KG_DRYWT	D	0.019	MG/KG_DRYWT	D	0.016	MG/KG_DRYWT	D	0.069	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.083	MG/KG_DRYWT	D	0.054	MG/KG_DRYWT	D	0.055	MG/KG_DRYWT	D	0.129	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.043	MG/KG_DRYWT	D	0.028	MG/KG_DRYWT	D	0.029	MG/KG_DRYWT	D	0.054	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.08	MG/KG_DRYWT	D	0.05	MG/KG_DRYWT	D	0.051	MG/KG_DRYWT	D	0.114	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.049	MG/KG_DRYWT	D	0.032	MG/KG_DRYWT	D	0.036	MG/KG_DRYWT	D	0.062	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.063	MG/KG_DRYWT	D	0.035	MG/KG_DRYWT	D	0.037	MG/KG_DRYWT	D	0.075	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.022	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	D	0.026	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.072	MG/KG_DRYWT	D	0.043	MG/KG_DRYWT	D	0.046	MG/KG_DRYWT	D	0.091	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.0095	MG/KG_DRYWT	D	0.0053	MG/KG_DRYWT	D	0.0055	MG/KG_DRYWT	D	0.011	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	0.052	MG/KG_DRYWT	D	0.028	MG/KG_DRYWT	D	0.029	MG/KG_DRYWT	D	0.065	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.066	MG/KG_DRYWT	D	0.039	MG/KG_DRYWT	D	0.04	MG/KG_DRYWT	D	0.082	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.0059	MG/KG_DRYWT	D	0.0031	MG/KG_DRYWT	D	0.0032	MG/KG_DRYWT	D	0.006	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.0086	MG/KG_DRYWT	D	0.0046	MG/KG_DRYWT	D	0.0047	MG/KG_DRYWT	D	0.0089	MG/KG_DRYWT	D
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0061	MG/KG_DRYWT	D	0.0032	MG/KG_DRYWT	D	0.0032	MG/KG_DRYWT	D	0.0061	MG/KG_DRYWT	D
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.003	MG/KG_DRYWT	Dp	0.0017	MG/KG_DRYWT	Dp	0.0015	MG/KG_DRYWT	Dp	0.0025	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.0012	MG/KG_DRYWT	Dp	0.00067	MG/KG_DRYWT	Dp	0.00077	MG/KG_DRYWT	R	0.0013	MG/KG_DRYWT	Dp
Decacb - Congener (PCB 209)	0.00084	MG/KG_DRYWT	R	0.00062	MG/KG_DRYWT	R	0.00057	MG/KG_DRYWT	R	0.0013	MG/KG_DRYWT	R
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	1.6	MG/KG_DRYWT		0.98	MG/KG_DRYWT		0.99	MG/KG_DRYWT		2.3	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

OU#3 Pilot Cap Site Sediment Analytical Results

Station ID	OU8			OU9			OU10			OU11		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06B-OU08-00-03			S-06B-OU09-00-03			S-06B-OU10-00-03			S-06B-OU11-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.022	MG/KG_DRYWT	D	0.061	MG/KG_DRYWT	D	0.082	MG/KG_DRYWT	D	0.039	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.02	MG/KG_DRYWT	D	0.043	MG/KG_DRYWT	D	0.057	MG/KG_DRYWT	D	0.092	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.047	MG/KG_DRYWT	D	0.09	MG/KG_DRYWT	D	0.116	MG/KG_DRYWT	D	0.23	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.02	MG/KG_DRYWT	D	0.03	MG/KG_DRYWT	D	0.038	MG/KG_DRYWT	D	0.12	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.046	MG/KG_DRYWT	D	0.058	MG/KG_DRYWT	D	0.071	MG/KG_DRYWT	D	0.239	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.026	MG/KG_DRYWT	D	0.042	MG/KG_DRYWT	D	0.053	MG/KG_DRYWT	D	0.104	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.032	MG/KG_DRYWT	D	0.048	MG/KG_DRYWT	D	0.05	MG/KG_DRYWT	D	0.149	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.009	MG/KG_DRYWT	D	0.013	MG/KG_DRYWT	D	0.017	MG/KG_DRYWT	D	0.049	MG/KG_DRYWT	D
2,3',4,4',5-Pentacb (PCB 118)	0.028	MG/KG_DRYWT	D	0.047	MG/KG_DRYWT	D	0.057	MG/KG_DRYWT	D	0.159	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.0039	MG/KG_DRYWT	D	0.005	MG/KG_DRYWT	D	0.0057	MG/KG_DRYWT	D	0.021	MG/KG_DRYWT	R
2,2',3,4,4',5'-Hexacb (PCB 138)	0.02	MG/KG_DRYWT	D	0.026	MG/KG_DRYWT	D	0.029	MG/KG_DRYWT	D	0.123	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.024	MG/KG_DRYWT	D	0.03	MG/KG_DRYWT	Dp	0.034	MG/KG_DRYWT	Dp	0.159	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.0024	MG/KG_DRYWT	D	0.0027	MG/KG_DRYWT	D	0.0029	MG/KG_DRYWT	D	0.012	MG/KG_DRYWT	Dp
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.0034	MG/KG_DRYWT	D	0.0038	MG/KG_DRYWT	D	0.0039	MG/KG_DRYWT	D	0.02	MG/KG_DRYWT	Dp
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0023	MG/KG_DRYWT	D	0.0024	MG/KG_DRYWT	D	0.0023	MG/KG_DRYWT	D	0.014	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.0016	MG/KG_DRYWT	Dp	0.0022	MG/KG_DRYWT	Dp	0.0023	MG/KG_DRYWT	Dp	0.0035	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.00063	MG/KG_DRYWT	Dp	0.00083	MG/KG_DRYWT	R	0.00078	MG/KG_DRYWT	R	0.0025	MG/KG_DRYWT	Dp
Decacb - Congener (PCB 209)	0.00046	MG/KG_DRYWT	R	0.00089	MG/KG_DRYWT	R	0.0012	MG/KG_DRYWT	R	0.0019	MG/KG_DRYWT	R
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	0.8	MG/KG_DRYWT		1.3	MG/KG_DRYWT		1.6	MG/KG_DRYWT		3.9	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

OU#3 Pilot Cap Site Sediment Analytical Results

Station ID	OU12			OU13			OU14			OU15		
Fraction	TOTAL			TOTAL			TOTAL			TOTAL		
QC Code	SA			SA			SA			SA		
Sample ID	S-06B-OU12-00-03			S-06B-OU13-00-03			S-06B-OU14-00-03			S-06B-OU15-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.253	MG/KG_DRYWT	D	1.304	MG/KG_DRYWT	D	0.226	MG/KG_DRYWT	D	0.249	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.161	MG/KG_DRYWT	D	0.724	MG/KG_DRYWT	D	0.169	MG/KG_DRYWT	D	0.198	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.334	MG/KG_DRYWT	D	1.516	MG/KG_DRYWT	D	0.318	MG/KG_DRYWT	D	0.302	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.098	MG/KG_DRYWT	D	0.365	MG/KG_DRYWT	D	0.117	MG/KG_DRYWT	D	0.129	MG/KG_DRYWT	D
2,2',5,5'-Tetracb (PCB 52)	0.211	MG/KG_DRYWT	D	0.738	MG/KG_DRYWT	D	0.229	MG/KG_DRYWT	D	0.248	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.116	MG/KG_DRYWT	D	0.368	MG/KG_DRYWT	D	0.104	MG/KG_DRYWT	D	0.109	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.122	MG/KG_DRYWT	D	0.295	MG/KG_DRYWT	D	0.099	MG/KG_DRYWT	D	0.108	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.053	MG/KG_DRYWT	D	0.144	MG/KG_DRYWT	D	0.037	MG/KG_DRYWT	Dp	0.039	MG/KG_DRYWT	Dp
2,3',4,4',5-Pentacb (PCB 118)	0.147	MG/KG_DRYWT	D	0.372	MG/KG_DRYWT	D	0.123	MG/KG_DRYWT	D	0.128	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.017	MG/KG_DRYWT	Dp	0.025	MG/KG_DRYWT	Dp	0.014	MG/KG_DRYWT	Dp	0.013	MG/KG_DRYWT	Dp
2,2',3,4,4',5'-Hexacb (PCB 138)	0.094	MG/KG_DRYWT	D	0.217	MG/KG_DRYWT	D	0.081	MG/KG_DRYWT	D	0.079	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.121	MG/KG_DRYWT	D	0.264	MG/KG_DRYWT	D	0.099	MG/KG_DRYWT	D	0.095	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.0097	MG/KG_DRYWT	Dp	0.012	MG/KG_DRYWT	Dp	0.0084	MG/KG_DRYWT	D	0.0076	MG/KG_DRYWT	D
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.013	MG/KG_DRYWT	Dp	0.018	MG/KG_DRYWT	Dp	0.012	MG/KG_DRYWT	Dp	0.011	MG/KG_DRYWT	Dp
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.0092	MG/KG_DRYWT	Dp	0.012	MG/KG_DRYWT	Dp	0.0089	MG/KG_DRYWT	Dp	0.0076	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.004	MG/KG_DRYWT	Dp	0.0039	MG/KG_DRYWT	R	0.0025	MG/KG_DRYWT	Dp	0.0016	MG/KG_DRYWT	Dp
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.0017	MG/KG_DRYWT	R	0.0021	MG/KG_DRYWT	Dp	0.0034	MG/KG_DRYWT	R	0.0018	MG/KG_DRYWT	R
Decacb - Congener (PCB 209)	0.0014	MG/KG_DRYWT	R	0.0021	MG/KG_DRYWT	Dp	0.0044	MG/KG_DRYWT	R	0.0013	MG/KG_DRYWT	R
Total MonoCB												
Total DiCB												
Total TriCB												
Total TetraCB												
Total PentaCB												
Total HexaCB												
Total HeptaCB												
Total OctaCB												
Total NonaCB												
DecaCB												
Total PCB Congeners (sum CONG x 2.6)	4.6	MG/KG_DRYWT		17	MG/KG_DRYWT		4.3	MG/KG_DRYWT		4.5	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)												

OU#3 Pilot Cap Site Sediment Analytical Results

Station ID	OU16			OU17		
Fraction	TOTAL			TOTAL		
QC Code	SA			SA		
Sample ID	S-06B-OU16-00-03			S-06B-OU17-00-03		
Param Name	Result	Unit	FinQ	Result	Unit	FinQ
2,4'-Dicb (PCB 8)	0.121	MG/KG_DRYWT	D	0.0012	MG/KG_DRYWT	D
2,2',5-Tricb (PCB 18)	0.084	MG/KG_DRYWT	D	0.00093	MG/KG_DRYWT	D
2,4,4'-Tricb (PCB 28)	0.168	MG/KG_DRYWT	D	0.0027	MG/KG_DRYWT	D
2,2',3,5'-Tetracb (PCB 44)	0.066	MG/KG_DRYWT	D	0.00079	MG/KG_DRYWT	Dp
2,2',5,5'-Tetracb (PCB 52)	0.105	MG/KG_DRYWT	D	0.0017	MG/KG_DRYWT	D
2,3',4,4'-Tetracb (PCB 66)	0.063	MG/KG_DRYWT	D	0.0013	MG/KG_DRYWT	D
2,2',4,5,5'-Pentacb (PCB 101)	0.055	MG/KG_DRYWT	D	0.0015	MG/KG_DRYWT	D
2,3,3',4,4'-Pentacb (PCB 105)	0.021	MG/KG_DRYWT	D	0.00077	MG/KG_DRYWT	R
2,3',4,4',5-Pentacb (PCB 118)	0.069	MG/KG_DRYWT	D	0.0023	MG/KG_DRYWT	D
2,2',3,3',4,4'-Hexacb (PCB 128)	0.0074	MG/KG_DRYWT	D	0.00041	MG/KG_DRYWT	D
2,2',3,4,4',5'-Hexacb (PCB 138)	0.039	MG/KG_DRYWT	D	0.0015	MG/KG_DRYWT	D
2,2',4,4',5,5'-Hexacb (PCB 153)	0.046	MG/KG_DRYWT	Dp	0.0014	MG/KG_DRYWT	D
2,2',3,3',4,4',5-Heptacb (PCB 170)	0.004	MG/KG_DRYWT	D	0.0002	MG/KG_DRYWT	DU
2,2',3,4,4',5,5'-Heptacb (PCB 180)	0.0055	MG/KG_DRYWT	D	0.00028	MG/KG_DRYWT	R
2,2',3,4',5,5',6-Heptacb (PCB 187)	0.004	MG/KG_DRYWT	D	0.00007	MG/KG_DRYWT	R
2,2',3,3',4,4',5,6-Octacb (PCB 195)	0.0021	MG/KG_DRYWT	Dp	0.0002	MG/KG_DRYWT	DU
2,2',3,3',4,4',5,5',6-Nonacb (PCB 206)	0.0022	MG/KG_DRYWT	R	0.0002	MG/KG_DRYWT	DU
Decacb - Congener (PCB 209)	0.0038	MG/KG_DRYWT	R	0.0002	MG/KG_DRYWT	DU
Total MonoCB	0.0081	MG/KG_DRYWT	D			
Total DiCB	0.45	MG/KG_DRYWT	D			
Total TriCB	0.597	MG/KG_DRYWT	D			
Total TetraCB	0.33	MG/KG_DRYWT	D			
Total PentaCB	0.178	MG/KG_DRYWT	D			
Total HexaCB	0.118	MG/KG_DRYWT	D			
Total HeptaCB	0.022	MG/KG_DRYWT	D			
Total OctaCB	0.008	MG/KG_DRYWT	D			
Total NonaCB	0.00034	MG/KG_DRYWT	DJ			
DecaCB	0.00043	MG/KG_DRYWT	DU			
Total PCB Congeners (sum CONG x 2.6)	2.2	MG/KG_DRYWT		0.041	MG/KG_DRYWT	
Total PCB Homologues (sum HOM)	1.7	MG/KG_DRYWT				

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Appendix C

VOC Analytical Data

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	Station ID	2100206		4100206		6100206		6100206		7100206		7100206		8100206	
	Station Abbreviation	02-T		04-T		06-B		06-T		07-B		07-T		08-B	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0002-T		S-06C-0004-T		S-06C-0006-B		S-06C-0006-T		S-06C-0007-B		S-06C-0007-T		S-06C-0008-B	
Parameter	Units	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Acetone	mg/kg (dry wt.)	0.94	R	0.629	U	0.588	U	15.9	UD	0.89	U	0.663	U	0.612	U
Benzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Bromobenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Bromodichloromethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Bromoform	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Bromomethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Carbon Disulfide	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Carbon Tetrachloride	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Chlorobenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Chloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Chloroform	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Chloromethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Cis-1,2-Dichloroethene	mg/kg (dry wt.)	0.492	R	0.828		80.4		614	D	419		8.25		0.546	
Cis-1,3-Dichloropropene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Dibromochloromethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Dibromomethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Dichlorodifluoromethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Ethylbenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.348	jD	0.327	U	0.278	U
Hexachlorobutadiene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Isopropylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
Methylene Chloride	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
Methyl-Tert-Butyl-Ether (Mtbe)	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Naphthalene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
N-Butylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
N-Propylbenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
O-Xylene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
P-Isopropyltoluene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
P/M Xylene	mg/kg (dry wt.)	0.985	R	0.56	U	0.58	U	12.7	UD	1.04	UD	0.655	U	0.555	U
Sec-Butylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
Styrene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
Tert-Butylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
Tetrachloroethene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Toluene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.747	D	0.327	U	0.278	U
Trans-1,2-Dichloroethene	mg/kg (dry wt.)	0.492	R	0.28	U	0.901		3.28	jD	1.31	D	0.327	U	0.278	U

	Station ID	2100206		4100206		6100206		6100206		7100206		7100206		8100206	
	Station Abbreviation	02-T		04-T		06-B		06-T		07-B		07-T		08-B	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0002-T		S-06C-0004-T		S-06C-0006-B		S-06C-0006-T		S-06C-0007-B		S-06C-0007-T		S-06C-0008-B	
Parameter	**Units**	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Trans-1,3-Dichloropropene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Trichloroethene	mg/kg (dry wt.)	0.492	R	0.309		4.73		42.9	D	0.519	UD	0.28	j	3.6	
Trichlorofluoromethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Vinyl Acetate	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
Vinyl Chloride	mg/kg (dry wt.)	0.492	R	0.28	U	5.95		20	D	32.6	D	1.84		0.278	U
1,1-Dichloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,1-Dichloroethene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.293	jD	0.327	U	0.278	U
1,1-Dichloropropene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,1,1-Trichloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,1,1,2-Tetrachloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,1,2-Trichloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,1,2,2-Tetrachloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2-Dibromoethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2-Dibromo-3-Chloropropane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2-Dichlorobenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.267	jD	0.327	U	0.278	U
1,2-Dichloroethane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2-Dichloropropane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2,3-Trichlorobenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	11.2	D	0.205	j	0.694	U
1,2,3-Trichloropropane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,2,4-Trichlorobenezene	mg/kg (dry wt.)	1.23	R	0.699	U	0.838		4.55	jD	16.7		0.781	j	0.694	U
1,2,4-Trimethylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
1,3-Dichlorobenzene	mg/kg (dry wt.)	0.492	R	0.28	U	0.654		6.37	UD	0.519	UD	0.327	U	0.278	U
1,3-Dichloropropane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
1,3,5-Trimethylbenzene	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
1,4-Dichlorobenzene	mg/kg (dry wt.)	0.492	R	0.238	j	0.709		6.37	UD	0.737	D	0.301	j	0.278	U
2-Butanone	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
2-Chloroethyl Vinyl Ether	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
2-Chlorotoluene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
2-Hexanone	mg/kg (dry wt.)	1.23	R	0.699	U	0.725	U	15.9	UD	1.3	UD	0.818	U	0.694	U
2,2-Dichloropropane	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
4-Chlorotoluene	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U
4-Methyl-2-Pentanone	mg/kg (dry wt.)	0.492	R	0.28	U	0.29	U	6.37	UD	0.519	UD	0.327	U	0.278	U

	Station ID	8100206		9100206		9100206		10100206		10100206		11100206		11100206	
	Station Abbreviation	08-T		09-B		09-T		10-B		10-T		11-B		11-T	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0008-T		S-06C-0009-B		S-06C-0009-T		S-06C-0010-B		S-06C-0010-T		S-06C-0011-B		S-06C-0011-T	
Parameter	**Units**	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Acetone	mg/kg (dry wt.)	44.7	R	0.963	U	3.54	R	0.483	U	0.844	U	5.86	U	5.63	U
Benzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Bromobenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Bromodichloromethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Bromoform	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Bromomethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Carbon Disulfide	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Carbon Tetrachloride	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Chlorobenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Chloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Chloroform	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Chloromethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Cis-1,2-Dichloroethene	mg/kg (dry wt.)	854	D	222		102	D	62		14.2		2350		3.68	D
Cis-1,3-Dichloropropene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Dibromochloromethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Dibromomethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Dichlorodifluoromethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Ethylbenzene	mg/kg (dry wt.)	33.4	D	1.88	D	1.55	R	0.26	U	0.516		3.26	UD	2.44	UD
Hexachlorobutadiene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Isopropylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
Methylene Chloride	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
Methyl-Tert-Butyl-Ether (Mtbe)	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Naphthalene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
N-Butylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
N-Propylbenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
O-Xylene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
P-Isopropyltoluene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
P/M Xylene	mg/kg (dry wt.)	59.9	R	1.13	UD	3.11	R	0.52	U	0.771	U	6.52	UD	4.89	UD
Sec-Butylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
Styrene	mg/kg (dry wt.)	72.9	jD	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
Tert-Butylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
Tetrachloroethene	mg/kg (dry wt.)	239	D	0.884	D	1.55	R	0.26	U	0.385	U	3.26	UD	3.1	D
Toluene	mg/kg (dry wt.)	17.8	jD	0.612	D	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD

	Station ID	8100206		9100206		9100206		10100206		10100206		11100206		11100206	
	Station Abbreviation	08-T		09-B		09-T		10-B		10-T		11-B		11-T	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0008-T		S-06C-0009-B		S-06C-0009-T		S-06C-0010-B		S-06C-0010-T		S-06C-0011-B		S-06C-0011-T	
Parameter	**Units**	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Trans-1,2-Dichloroethene	mg/kg (dry wt.)	29.9	R	1.47	D	1.55	R	0.373		0.678		20.6	D	2.44	UD
Trans-1,3-Dichloropropene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Trichloroethene	mg/kg (dry wt.)	23300		510		1.55	R	0.247	j	0.385	U	3.26	UD	42.3	D
Trichlorofluoromethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Vinyl Acetate	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
Vinyl Chloride	mg/kg (dry wt.)	22.2	jD	1.23	D	23.8	D	8.14		31.5		318	D	3.64	D
1,1-Dichloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,1-Dichloroethene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	4.77	D	2.44	UD
1,1-Dichloropropene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,1,1-Trichloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,1,1,2-Tetrachloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,1,2-Trichloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,1,2,2-Tetrachloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2-Dibromoethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2-Dibromo-3-Chloropropane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2-Dichlorobenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2-Dichloroethane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2-Dichloropropane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2,3-Trichlorobenzene	mg/kg (dry wt.)	60.2	jD	1.42	UD	3.88	R	0.369	j	0.963	U	8.14	UD	6.11	UD
1,2,3-Trichloropropane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,2,4-Trichlorobenezene	mg/kg (dry wt.)	469	D	1.42	UD	3.88	R	1.5		0.245	j	8.14	UD	5.19	jD
1,2,4-Trimethylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
1,3-Dichlorobenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	1.57		3.26	UD	4.73	D
1,3-Dichloropropane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
1,3,5-Trimethylbenzene	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
1,4-Dichlorobenzene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	6.57		3.26	UD	17.6	D
2-Butanone	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
2-Chloroethyl Vinyl Ether	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
2-Chlorotoluene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
2-Hexanone	mg/kg (dry wt.)	74.8	R	1.42	UD	3.88	R	0.649	U	0.963	U	8.14	UD	6.11	UD
2,2-Dichloropropane	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
4-Chlorotoluene	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD
4-Methyl-2-Pentanone	mg/kg (dry wt.)	29.9	R	0.566	UD	1.55	R	0.26	U	0.385	U	3.26	UD	2.44	UD

	Station ID	12100206		12100206		13100206		13100206		15100206		15100206	
	Station Abbreviation	12-B		12-T		13-B		13-T		15-B		15-T	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0012-B		S-06C-0012-T		S-06C-0013-B		S-06C-0013-T		S-06C-0015-B		S-06C-0015-T	
Parameter	**Units**	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Acetone	mg/kg (dry wt.)	3.09	U	7.5	UD	0.499	U	1.23	B	6.16	U	0.833	U
Benzene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Bromobenzene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Bromodichloromethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Bromoform	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Bromomethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Carbon Disulfide	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Carbon Tetrachloride	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Chlorobenzene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Chloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Chloroform	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Chloromethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Cis-1,2-Dichloroethene	mg/kg (dry wt.)	415		2920		0.544		11.6		251	D	40.9	D
Cis-1,3-Dichloropropene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Dibromochloromethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Dibromomethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Dichlorodifluoromethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Ethylbenzene	mg/kg (dry wt.)	2.5	UD	32.3	D	0.267	U	0.44	U	5.67	UD	0.583	UD
Hexachlorobutadiene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Isopropylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
Methylene Chloride	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
Methyl-Tert-Butyl-Ether (Mtbe)	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Naphthalene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
N-Butylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
N-Propylbenzene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
O-Xylene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
P-Isopropyltoluene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
P/M Xylene	mg/kg (dry wt.)	5.01	UD	5.5	jBD	0.534	U	0.88	U	11.4	UD	1.17	UD
Sec-Butylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
Styrene	mg/kg (dry wt.)	6.26	UD	3.03	jD	0.667	U	1.1	U	14.2	UD	1.46	UD
Tert-Butylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
Tetrachloroethene	mg/kg (dry wt.)	2.5	UD	60.6	D	0.267	U	0.44	U	5.67	UD	0.583	UD
Toluene	mg/kg (dry wt.)	2.5	UD	8.69	D	0.267	U	0.44	U	5.67	UD	0.583	UD

	Station ID	12100206		12100206		13100206		13100206		15100206		15100206	
	Station Abbreviation	12-B		12-T		13-B		13-T		15-B		15-T	
	Date Collected	10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006		10/2/2006	
	Sample ID	S-06C-0012-B		S-06C-0012-T		S-06C-0013-B		S-06C-0013-T		S-06C-0015-B		S-06C-0015-T	
Parameter	**Units**	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ	Result	FinQ
Trans-1,2-Dichloroethene	mg/kg (dry wt.)	1.5	jD	8.05	D	0.267	U	0.44	U	3.06	jD	0.685	D
Trans-1,3-Dichloropropene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Trichloroethene	mg/kg (dry wt.)	289		1830		0.202	j	1.93		5.67	UD	1.59	D
Trichlorofluoromethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Vinyl Acetate	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
Vinyl Chloride	mg/kg (dry wt.)	39.6	D	192	D	0.267	U	3.94		60	D	19.6	D
1,1-Dichloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1-Dichloroethene	mg/kg (dry wt.)	4.81	D	2.7	jD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1-Dichloropropene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1,1-Trichloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1,1,2-Tetrachloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1,2-Trichloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,1,2,2-Tetrachloroethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2-Dibromoethane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2-Dibromo-3-Chloropropane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2-Dichlorobenzene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2-Dichloroethane	mg/kg (dry wt.)	1.26	jD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2-Dichloropropane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2,3-Trichlorobenzene	mg/kg (dry wt.)	6.26	UD	14.3	D	0.667	U	0.473	j	14.2	UD	1.46	UD
1,2,3-Trichloropropane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,2,4-Trichlorobenezene	mg/kg (dry wt.)	6.26	UD	105	D	0.415	j	3.84		14.2	UD	0.452	jD
1,2,4-Trimethylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
1,3-Dichlorobenzene	mg/kg (dry wt.)	2.5	UD	4.78	D	0.267	U	0.552		5.67	UD	0.784	D
1,3-Dichloropropane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
1,3,5-Trimethylbenzene	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
1,4-Dichlorobenzene	mg/kg (dry wt.)	2.5	UD	9.29	D	0.267	U	1.33		5.67	UD	3.67	D
2-Butanone	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
2-Chloroethyl Vinyl Ether	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
2-Chlorotoluene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
2-Hexanone	mg/kg (dry wt.)	6.26	UD	7.5	UD	0.667	U	1.1	U	14.2	UD	1.46	UD
2,2-Dichloropropane	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
4-Chlorotoluene	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD
4-Methyl-2-Pentanone	mg/kg (dry wt.)	2.5	UD	3	UD	0.267	U	0.44	U	5.67	UD	0.583	UD

Appendix D

Grain Size and Total Organic Carbon Analytical Data

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Summary Table Results

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New Bedford Harbor Summary Table											
Battelle ID	**Station ID**	**AMS ID**	**Date Sampled**	**Gravel (%)**	**Coarse Sand (%)**	**Medium Sand (%)**	**Fine Sand (%)**	**Silt (%)**	**Clay (%)**	**Moisture (%)**	**TOC (%)**
S-06D-0Y08-00-06	Y08	25937	11/1/2006	34.10	3.29	6.53	9.15	27.16	19.77	154	5.50
S-06D-0T15-00-05	T15	25938	11/1/2006	5.59	3.86	11.96	21.53	31.87	25.19	101	5.25
S-06D-0M10-00-07	M10	25939	11/1/2006	5.45	2.13	3.05	4.25	53.29	31.83	133	4.84
S-06D-0W18-00-06	W18	25940	11/1/2006	15.27	0.85	2.09	4.58	53.13	24.08	123	3.71
S-06D-0L09-00-03	L09	25941	11/1/2006	29.86	0.04	1.10	3.33	45.75	19.92	105	3.67
S-06D-0M03-03-08	M03	25942	11/1/2006	2.12	0.46	1.63	5.25	57.75	32.79	106	4.15
S-06D-0P08-05-10	P08	25943	11/1/2006	2.78	1.52	2.80	7.48	57.09	28.33	93	3.16
S-06D-0L12-00-03	L12	25944	11/1/2006	3.49	1.09	5.97	18.18	44.22	27.05	226	9.88
S-06D-0Q21-00-06	Q21	25945	11/2/2006	9.12	2.54	9.10	32.09	29.42	17.73	102	5.24
S-06D-0O12-00-05	O12	25946	11/2/2006	3.04	0.10	1.90	7.10	52.97	34.89	138	4.61
S-06D-0J17-00-05	J17	25947	11/2/2006	1.77	3.89	18.61	19.53	36.60	19.60	102	4.13
S-06D-0U22-02-07	U22	25948	11/2/2006	7.17	0.88	1.25	7.71	54.10	28.89	172	5.17
S-06D-BB19-00-06	BB19	25949	11/2/2006	17.65	13.94	21.61	24.83	14.65	7.32	29	0.77
S-06D-0R11-10-15	R11	25950	11/2/2006	4.65	0.45	1.46	9.40	56.11	27.93	100	3.14
S-06D-0Z13-00-02	Z13	25951	11/2/2006	1.82	0.34	1.99	5.49	52.51	37.85	126	4.51
S-06D-0L20-07-12	L20	25952	11/2/2006	0.00	0.14	1.14	4.57	56.36	37.79	188	7.45
S-06D-0L20-07-12-DUP	L20 DUP	25953	11/2/2006	0.00	0.32	1.07	4.08	59.78	34.75	159	5.60
S-06D-0N14-00-05	N14	25954	11/2/2006	0.00	0.20	2.10	7.71	55.27	34.72	130	4.29
S-06D-0N08-00-17	N08	25955	10/31/2006	1.21	1.03	1.13	4.63	59.76	32.24	143	5.38
S-06D-0N08-00-17-DUP	N08 DUP	25956	10/31/2006	28.88	0.77	1.37	4.01	40.79	24.18	156	5.78
S-06D-0N06-00-05	N06	25957	10/31/2006	19.92	1.55	1.82	5.75	45.34	25.62	116	4.39
S-06D-0R03-00-13	R03	25958	10/31/2006	12.80	1.53	3.69	16.79	43.49	21.70	126	4.53
S-06D-0U06-05-14	U06	25959	10/31/2006	0.00	0.25	0.73	11.47	58.68	28.87	150	6.86
S-06D-0L05-00-06	L05	25960	10/31/2006	0.00	0.33	1.13	3.77	63.37	31.40	101	3.18
S-06D-0W03-00-05	W03	25961	10/31/2006	30.91	0.50	1.16	9.86	37.32	20.25	157	8.16
S-06D-AA03-00-05	AA03	25962	10/31/2006	41.51	1.54	1.72	7.14	30.89	17.20	168	5.98
S-06D-0F36-00-05	F36	25963	11/3/2006	2.24	0.51	1.45	5.07	58.23	32.50	137	3.99
S-06D-0F38-00-05	F38	25964	11/3/2006	3.10	0.99	4.03	10.61	55.26	26.01	169	6.97
S-06D-0H41-00-05	H41	25965	11/3/2006	0.80	1.00	0.62	1.11	55.61	40.86	155	6.35
S-06D-0H32-00-05	H32	25966	11/3/2006	0.00	0.26	1.36	4.72	54.29	39.37	128	3.18

New Bedford Harbor Summary Table											
Battelle ID	**Station ID**	**AMS ID**	**Date Sampled**	**Gravel (%)**	**Coarse Sand (%)**	**Medium Sand (%)**	**Fine Sand (%)**	**Silt (%)**	**Clay (%)**	**Moisture (%)**	**TOC (%)**
S-06D-0G25-00-05	G25	25967	11/3/2006	12.21	13.32	28.56	24.53	11.07	10.31	63	3.81
S-06D-0H36-00-05	H36	25968	11/3/2006	3.42	0.85	4.11	15.35	52.48	23.79	154	7.92
S-06D-0Z22-00-06	Z22	25969	11/2/2006	3.08	0.28	1.89	6.88	56.97	30.90	94	3.58
S-06D-0H29-00-05	H29	25970	11/3/2006	0.00	0.37	1.18	2.95	58.61	36.89	121	3.37
S-06D-0E27-00-05	E27	25971	11/3/2006	6.11	2.00	5.33	6.83	50.31	29.42	141	7.14
S-06D-0H27-00-05	H27	25972	11/3/2006	0.00	0.86	2.47	6.94	56.44	33.29	141	3.97
S-06D-0C29-05-10	C29	25973	11/3/2006	2.19	0.62	1.98	6.07	56.34	32.80	140	7.77
S-06D-0C41-04-09	C41	25974	11/3/2006	6.98	0.44	2.64	8.95	46.38	34.61	98	3.60
S-06D-0C41-04-09-DUP	C41 DUP	25975	11/3/2006	0.00	0.65	2.88	9.76	50.21	36.50	97	3.06
S-06D-0M23-05-10	M23	25976	11/3/2006	0.77	2.61	18.85	43.63	22.84	11.30	60	4.27
S-06D-0M23-05-10-DUP	M23 DUP	25977	11/3/2006	0.31	1.88	19.14	42.39	25.39	10.89	58	5.00
S-06D-0E33-00-05	E33	25978	11/3/2006	0.46	0.42	2.52	8.95	63.23	24.42	165	11.44
S-06D-0H24-22-27	H24	25979	11/3/2006	0.00	0.27	0.75	3.57	55.44	39.97	142	11.88
S-06D-0E30-00-05	E30	25980	11/7/2006	0.00	0.48	2.52	6.01	57.00	33.99	124	4.53
S-06D-0E32-00-05	E32	25981	11/7/2006	0.79	0.91	2.53	5.11	59.90	30.76	127	4.80
S-06D-0D36-00-05	D36	25982	11/7/2006	3.96	1.21	3.28	7.11	52.28	32.16	147	4.23
S-06D-0V28-02-07	V28	25983	11/7/2006	0.20	0.18	0.41	2.25	62.71	34.25	209	7.12
S-06D-0N28-08-13	N28	25984	11/7/2006	0.00	0.00	0.07	2.71	55.17	42.05	215	9.05
S-06D-0V39-00-05	V39	25985	11/7/2006	0.61	0.23	1.53	6.57	55.43	35.63	125	3.75
S-06D-0B32-00-05	B32	25986	11/7/2006	0.00	0.93	1.18	5.45	60.52	31.92	151	18.33
S-06D-0N40-07-12	N40	25987	11/7/2006	0.00	0.38	0.51	5.21	57.51	36.39	138	8.37
S-06D-0F53-14-19	F53	25988	11/8/2006	6.74	2.76	6.68	17.00	41.18	25.64	114	9.18
S-06D-0K50-00-05	K50	25989	11/8/2006	3.09	2.36	14.41	31.87	32.65	15.62	58	1.66
S-06D-0F58-00-05	F58	25990	11/8/2006	2.48	0.79	0.94	3.46	54.59	37.74	177	6.88
S-06D-0N58-00-05	N58	25991	11/8/2006	6.11	0.00	12.40	68.50	7.69	5.30	40	0.93
S-06D-0Q44-00-05	Q44	25992	11/8/2006	0.00	0.69	4.04	12.77	57.25	25.25	156	9.26

Grain Size Results

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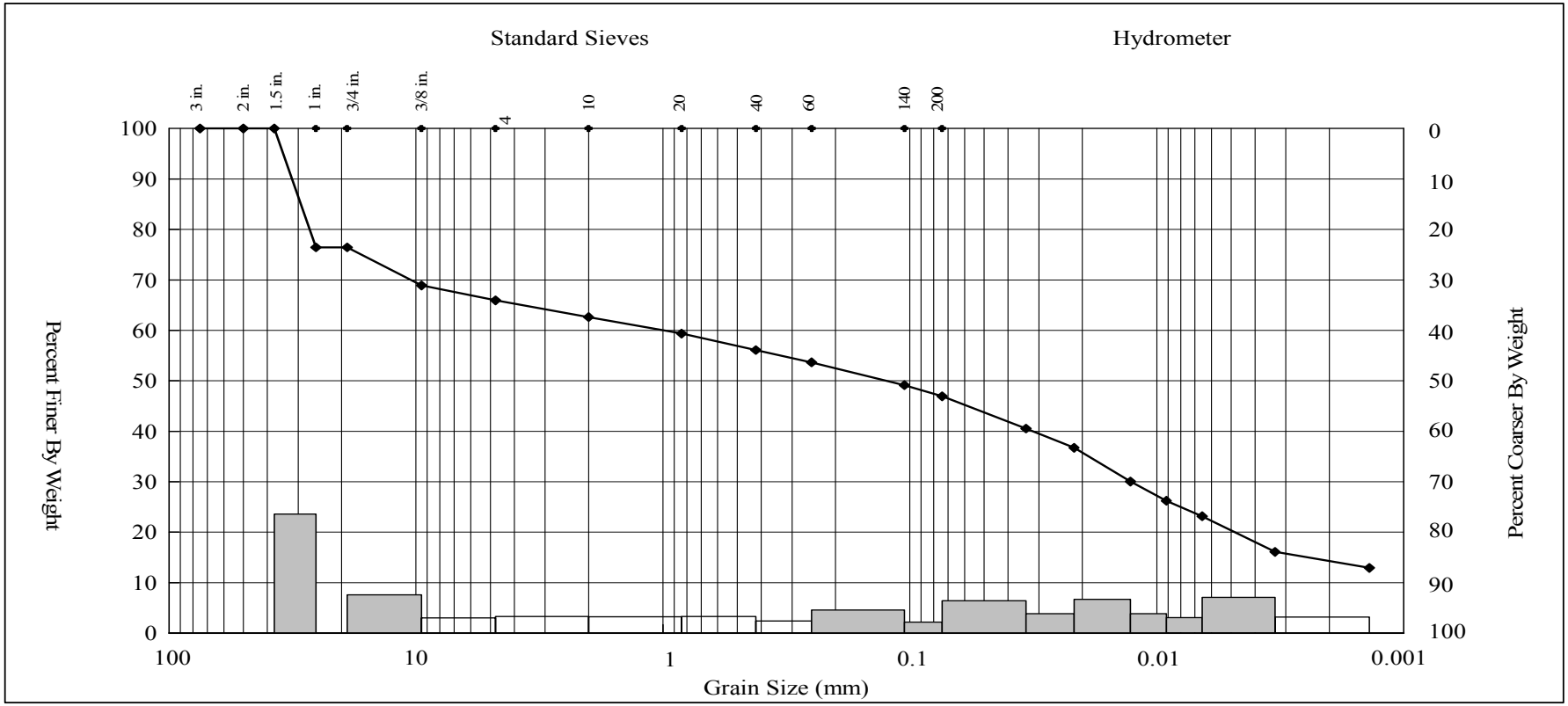
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
34.10	3.29	6.53	9.15	27.16	19.77

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
154										

Material Description

Silty Gravel with Sand ("GM"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Y08-00-06
AMS Sample ID:	25937

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These analyses were performed in accordance with ASTM standards, the 2006 DoD Quality Systems Manual (Version 3), and the 2003 NELAC Standard.

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AMS, Inc. Technical Director

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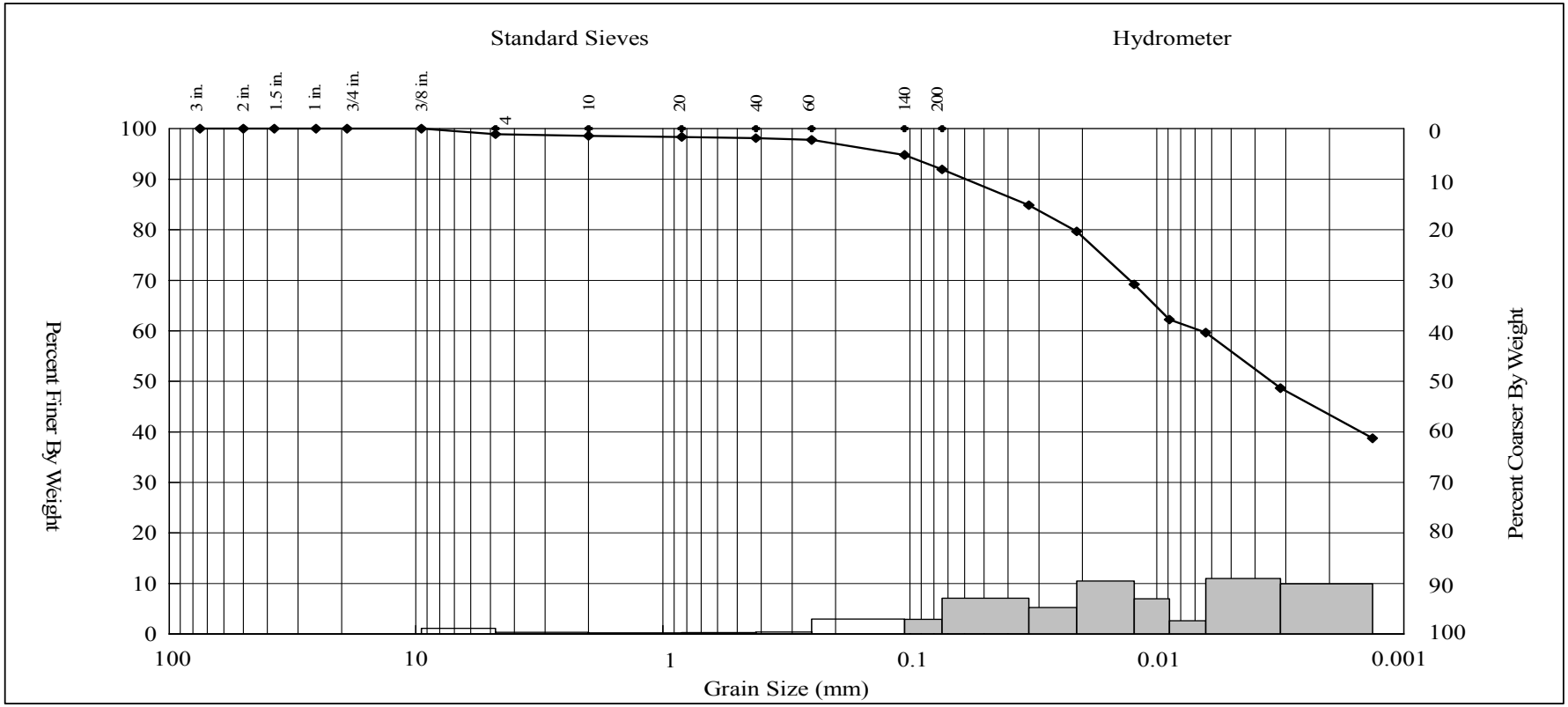
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
5.59	3.86	11.96	21.53	31.87	25.19

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
101										

Material Description

Sandy Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0T15-00-015
AMS Sample ID:	25938

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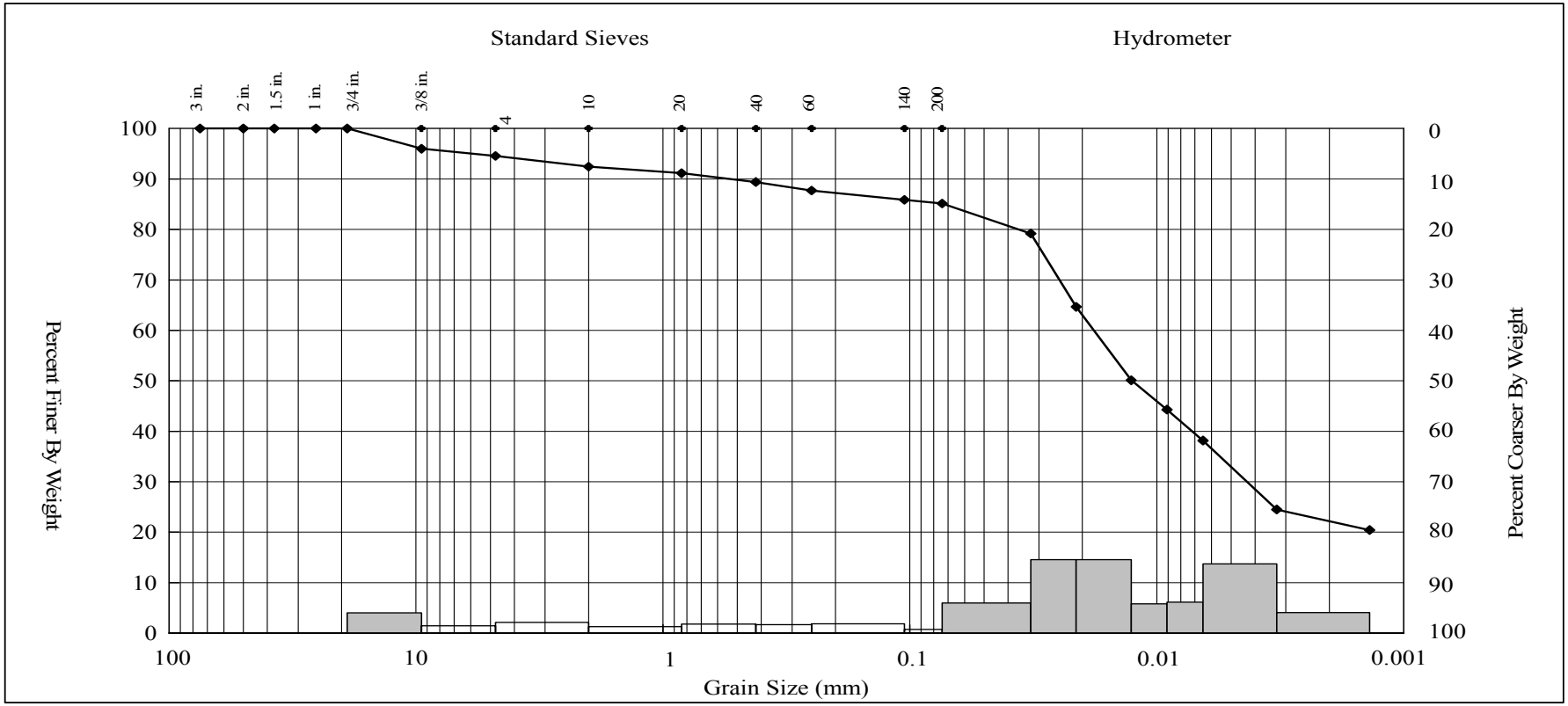
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
5.45	2.13	3.05	4.25	53.29	31.83

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
133										

Material Description

Elastic Silt ("MH"). very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0M10-00-07
AMS Sample ID:	25939

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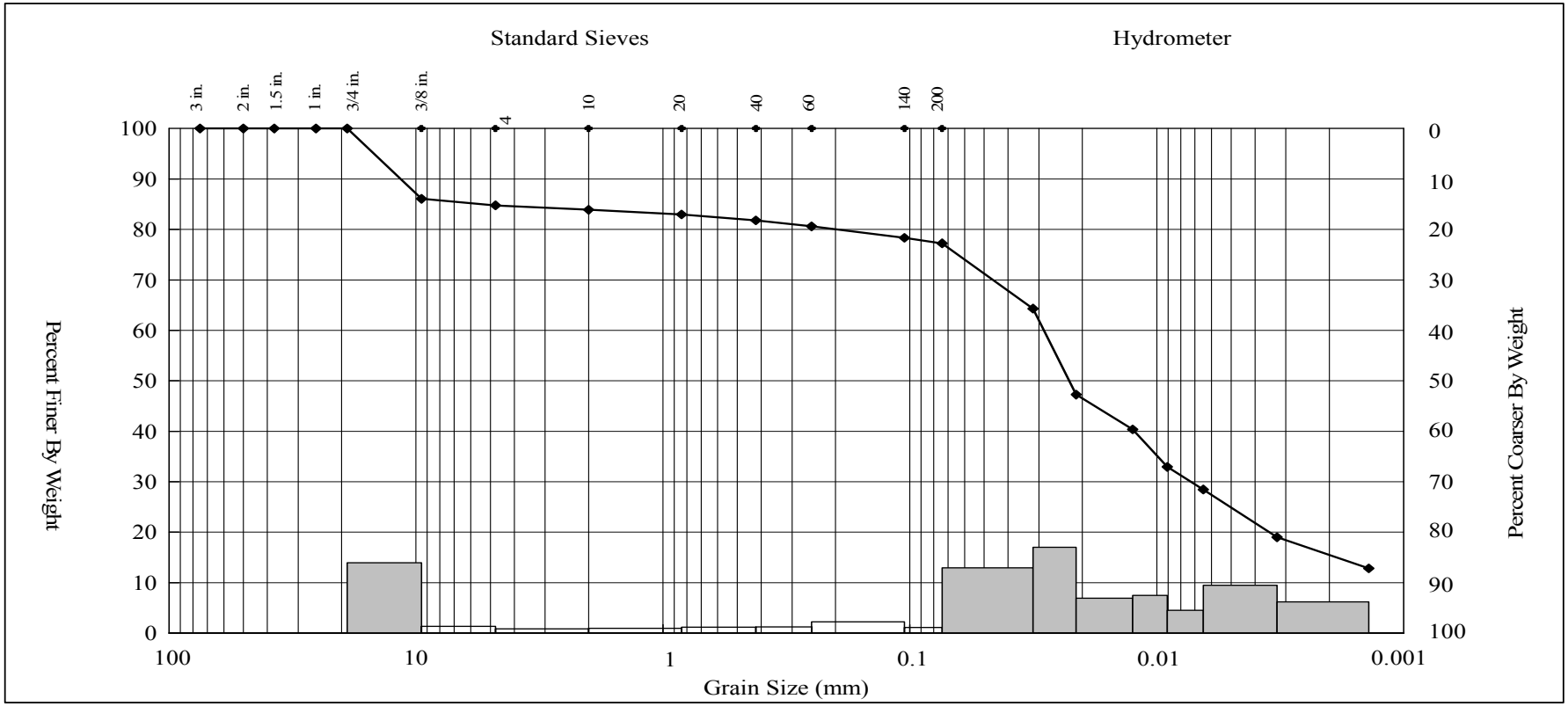
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
15.27	0.85	2.09	4.58	53.13	24.08

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
123										

Material Description

Elastic Silt with Gravel ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0W18-00-06
AMS Sample ID:	25940

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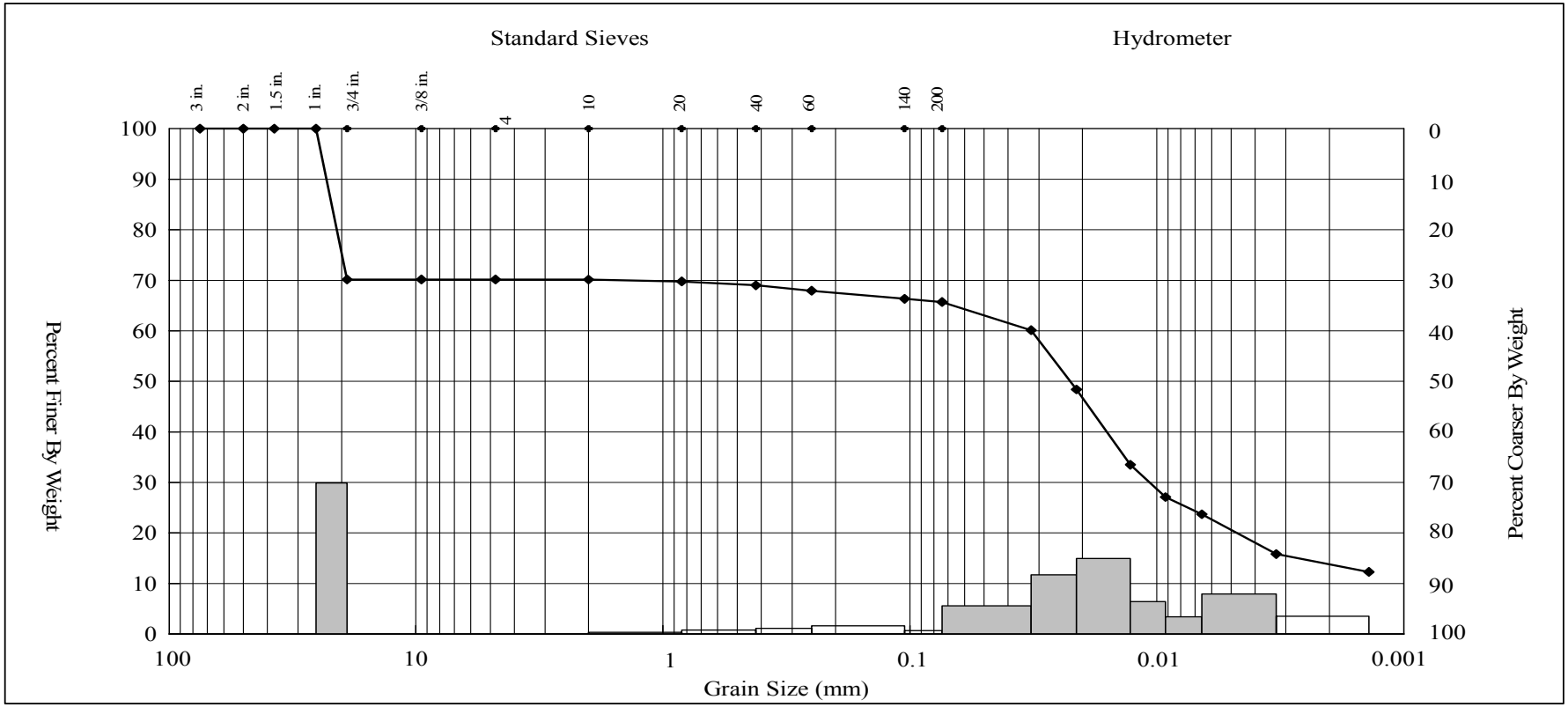
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
29.86	0.04	1.10	3.33	45.75	19.92

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
105										

Material Description

Gravelly Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0L09-00-03
AMS Sample ID:	25941

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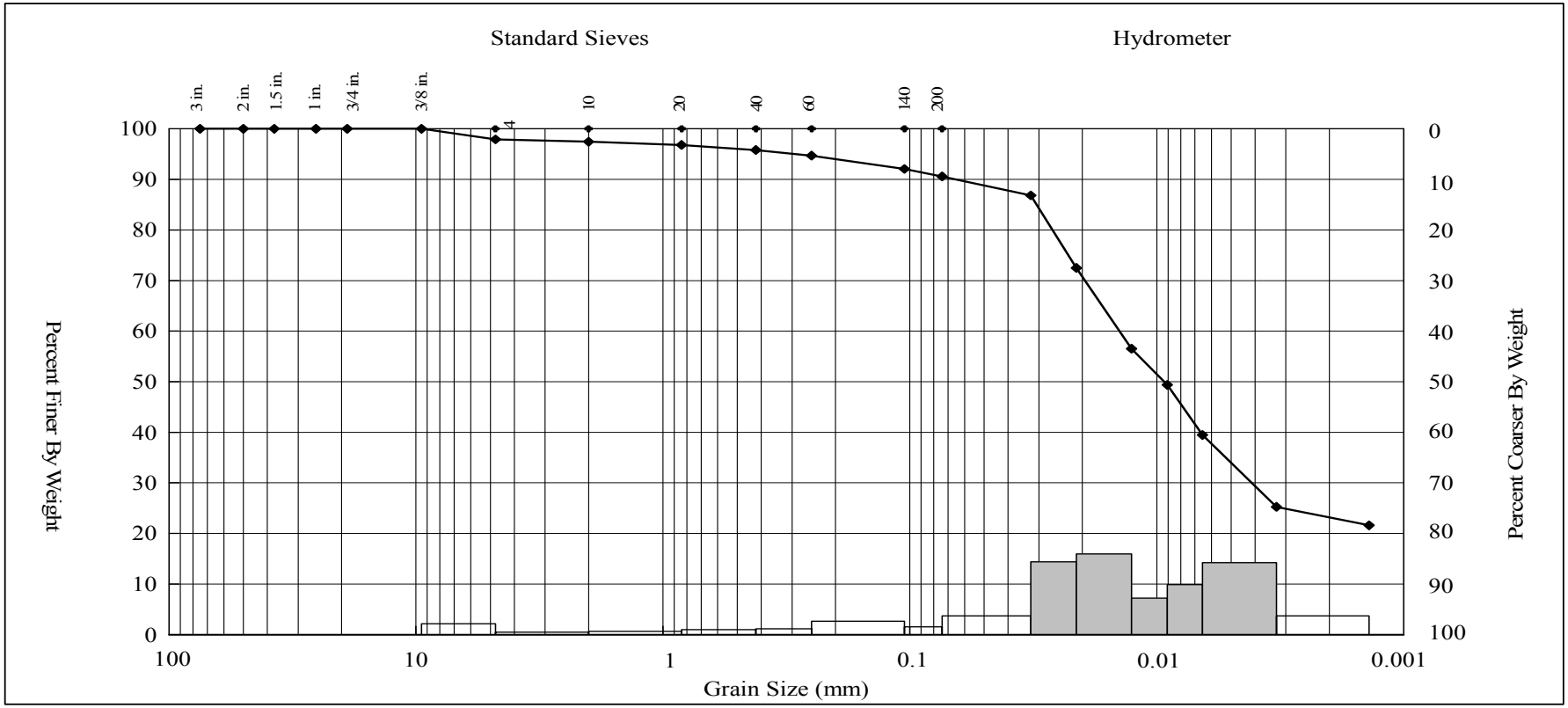
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
2.12	0.46	1.63	5.25	57.75	32.79

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
106										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0M03-03-08
AMS Sample ID:	25942

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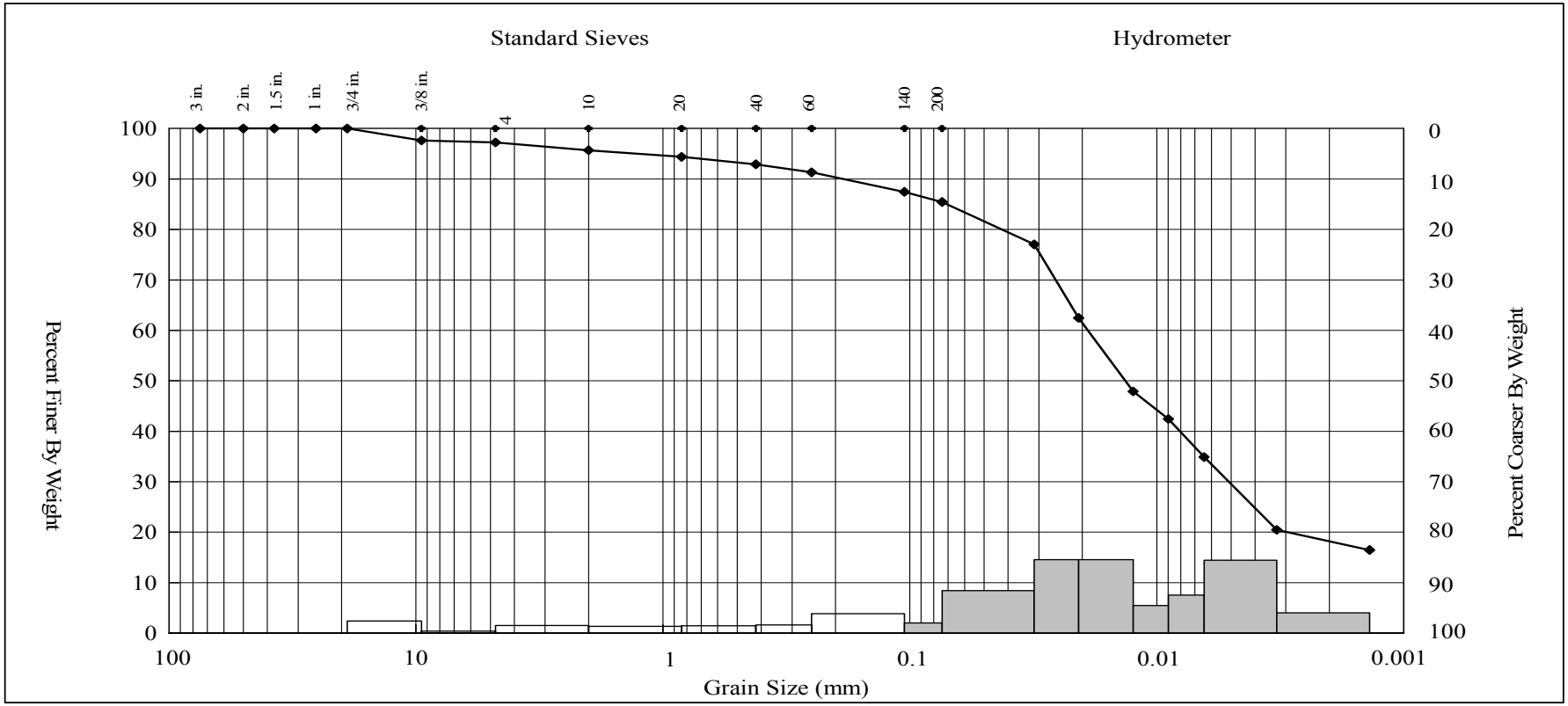
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
2.78	1.52	2.80	7.48	57.09	28.33

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
93										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0P08-05-10
AMS Sample ID:	25943

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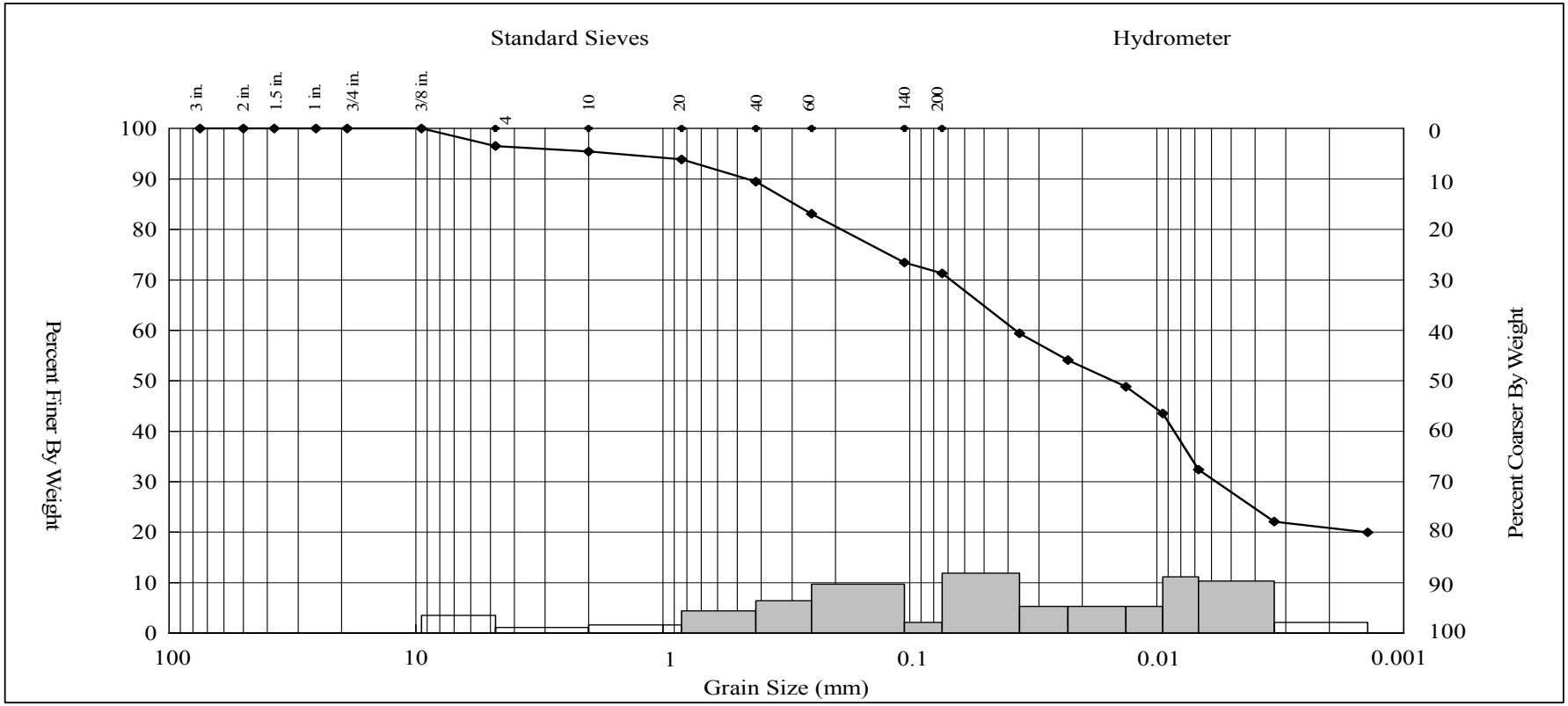
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.49	1.09	5.97	18.18	44.22	27.05

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
226										

Material Description

Elastic Silt with Sand ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0L12-00-03
AMS Sample ID:	25944

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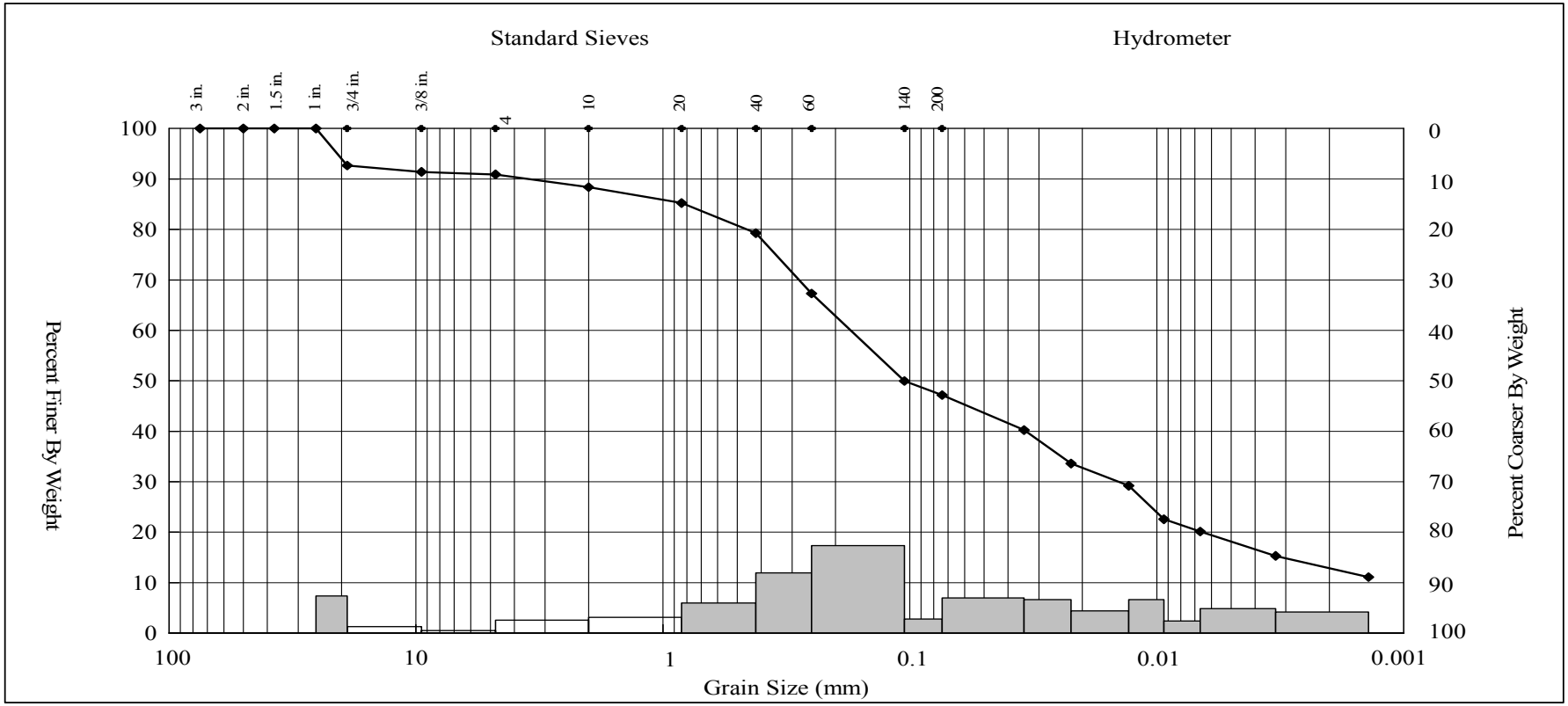
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
9.12	2.54	9.10	32.09	29.42	17.73

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
102										

Material Description

Silty Sand ("SM"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Q21-00-06
AMS Sample ID:	25945

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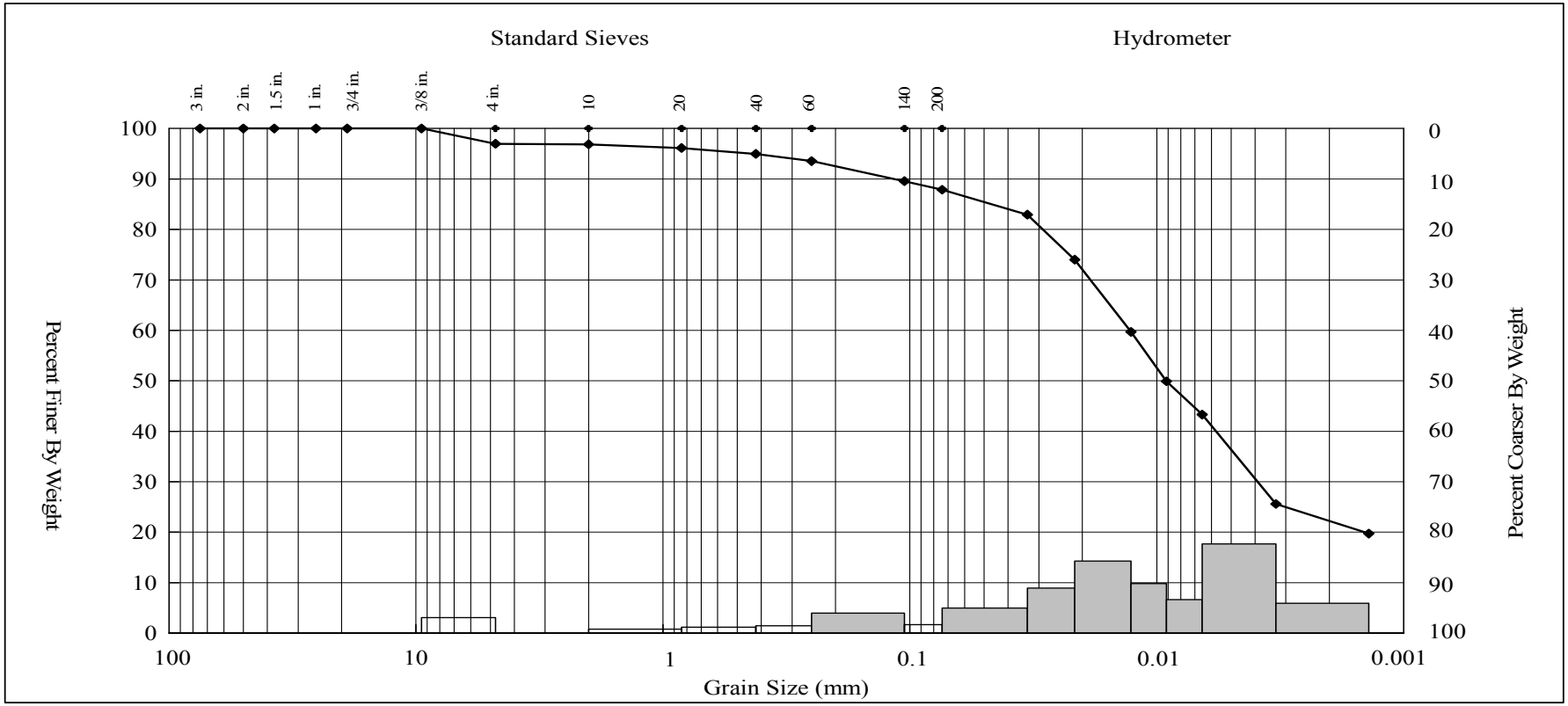
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.04	0.10	1.90	7.10	52.97	34.89

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
138										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0O12-00-05
AMS Sample ID:	25946

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AMS, Inc. Technical Director

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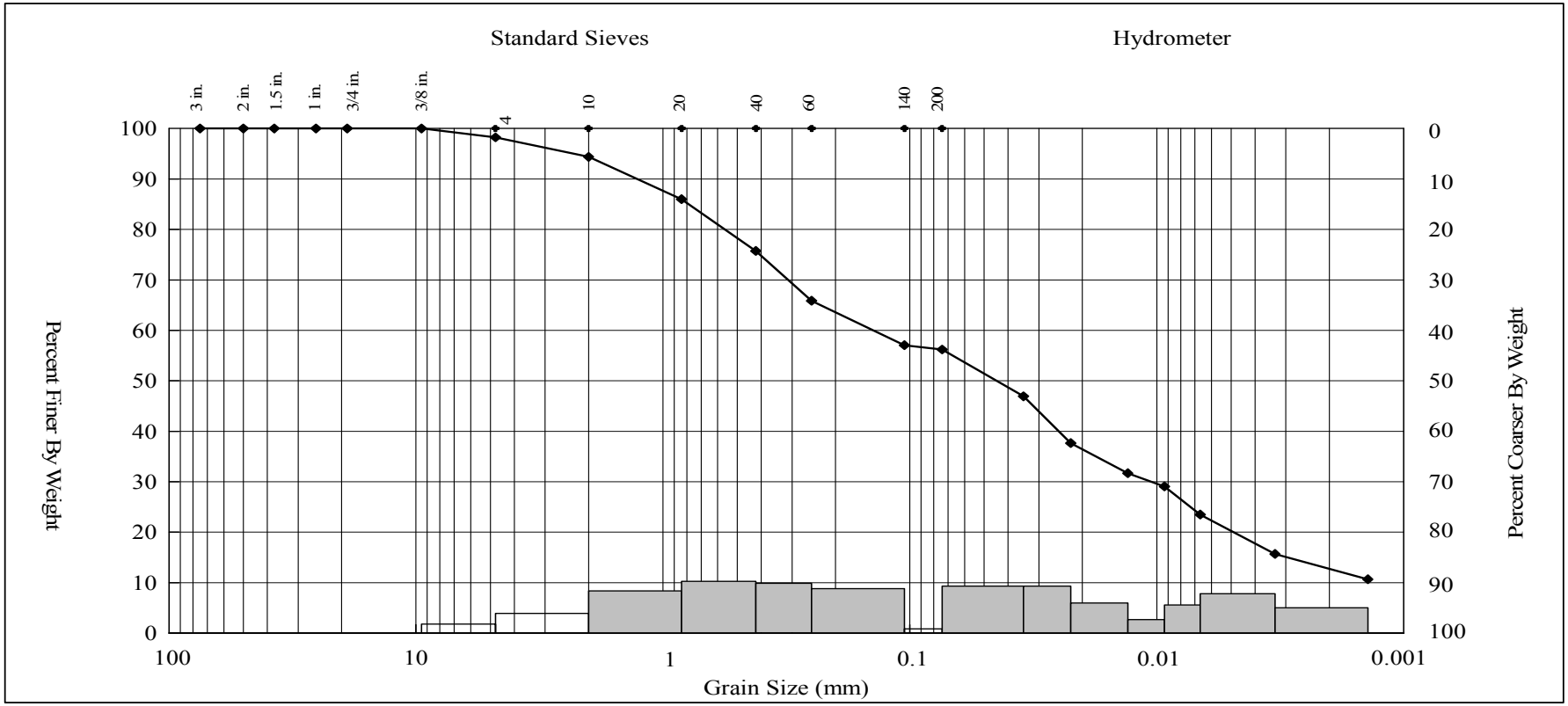
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
1.77	3.89	18.61	19.53	36.60	19.60

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
102										

Material Description

Sandy Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0J17-00-05
AMS Sample ID:	25947

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AMS, Inc. Technical Director

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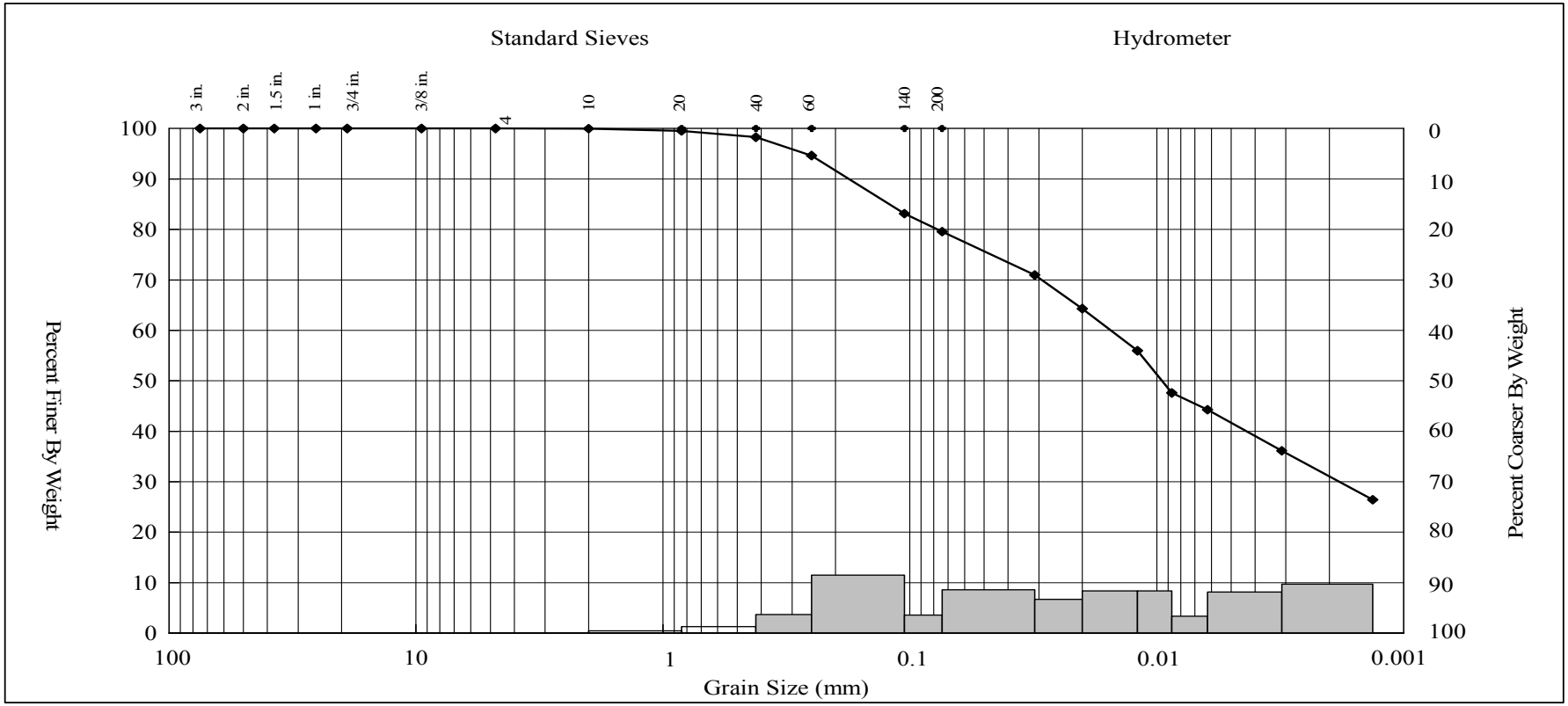
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
7.17	0.88	1.25	7.71	54.10	28.89

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
172										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0U22-02-07
AMS Sample ID:	25948

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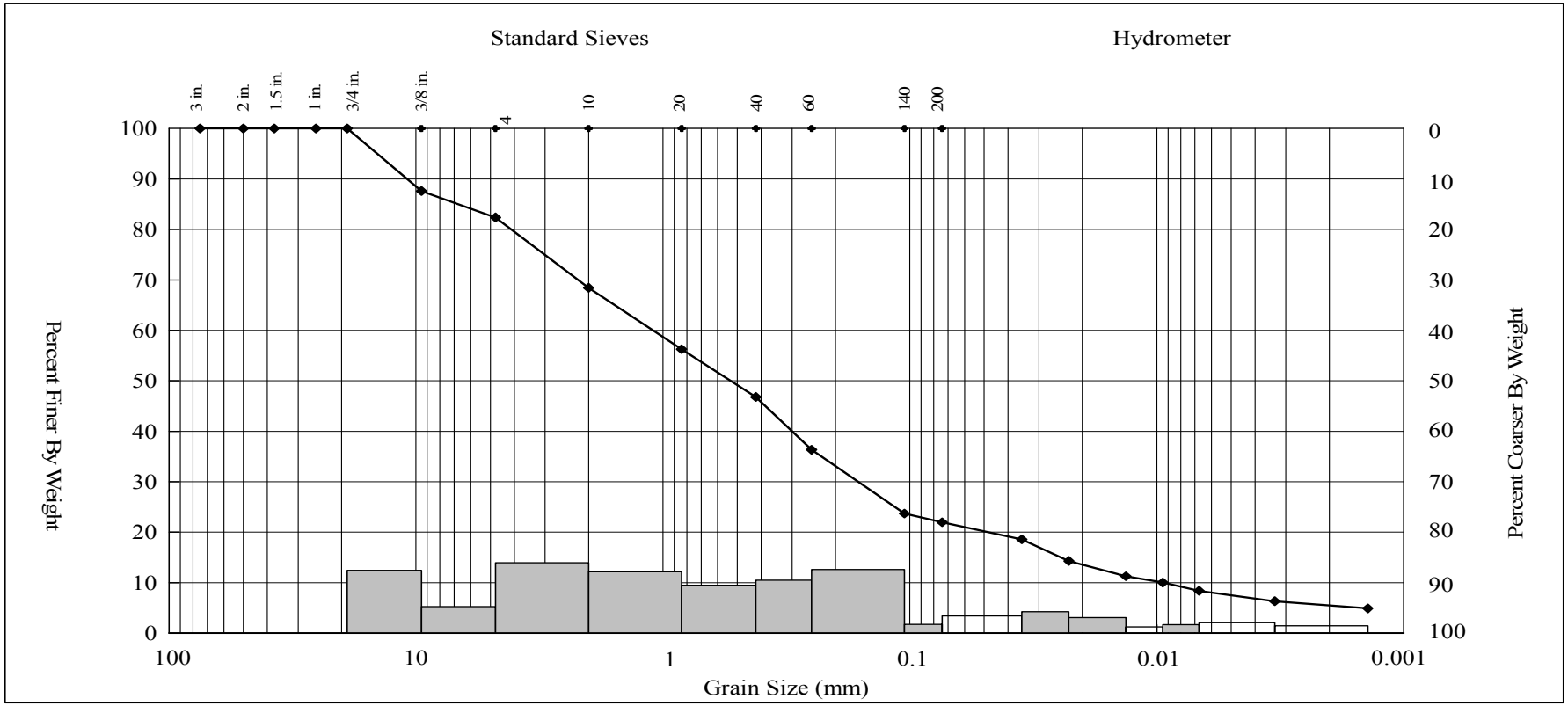
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
17.65	13.94	21.61	24.83	14.65	7.32

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
29										

Material Description

Silty Sand with Gravel ("SM"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-BB19-00-06
AMS Sample ID:	25949

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These analyses were performed in accordance with ASTM standards, the 2006 DoD Quality Systems Manual (Version 3), and the 2003 NELAC Standard.

K.S. Davis, P.G.
AMS, Inc. Technical Director

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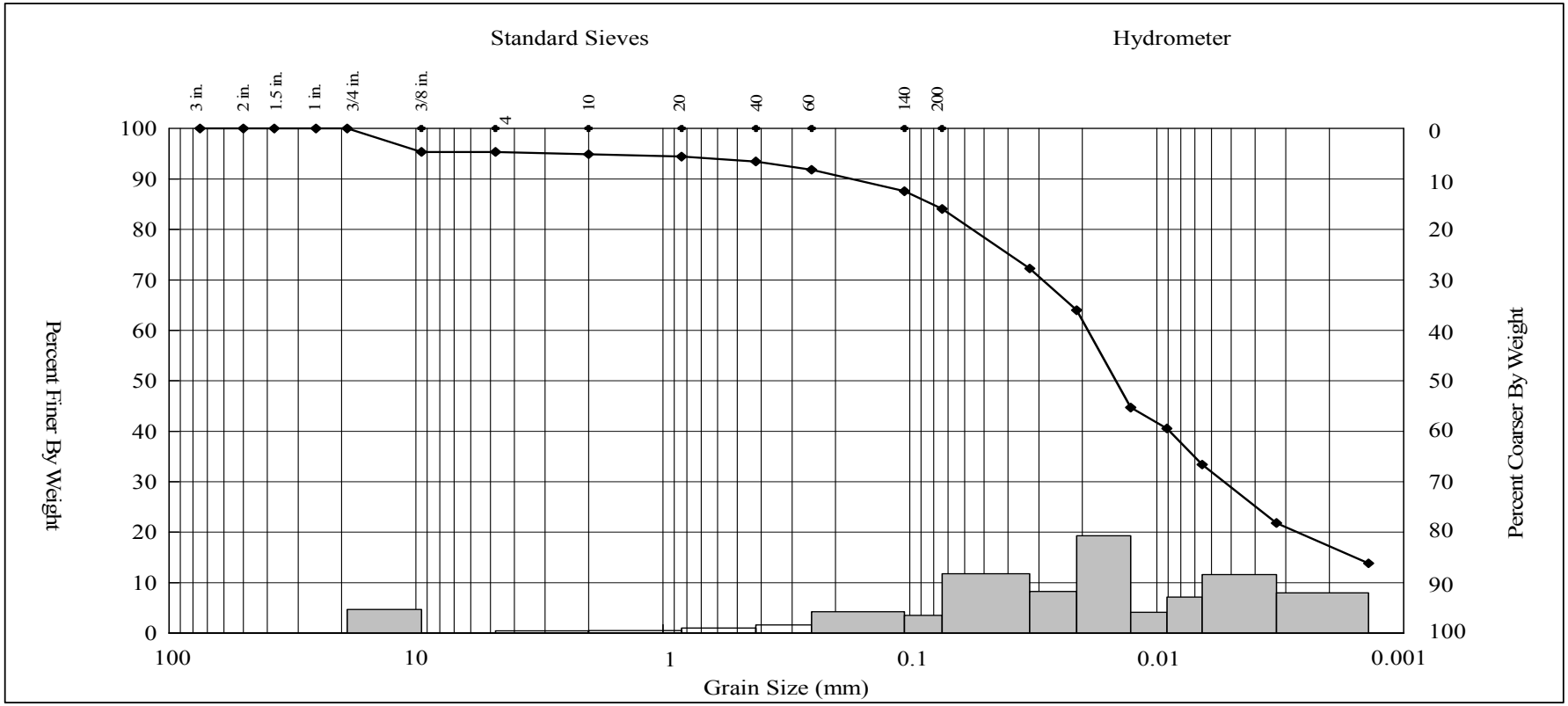
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
4.65	0.45	1.46	9.40	56.11	27.93

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
100										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0R11-10-15
AMS Sample ID:	25950

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K.S. Davis, P.G.
AMS, Inc. Technical Director

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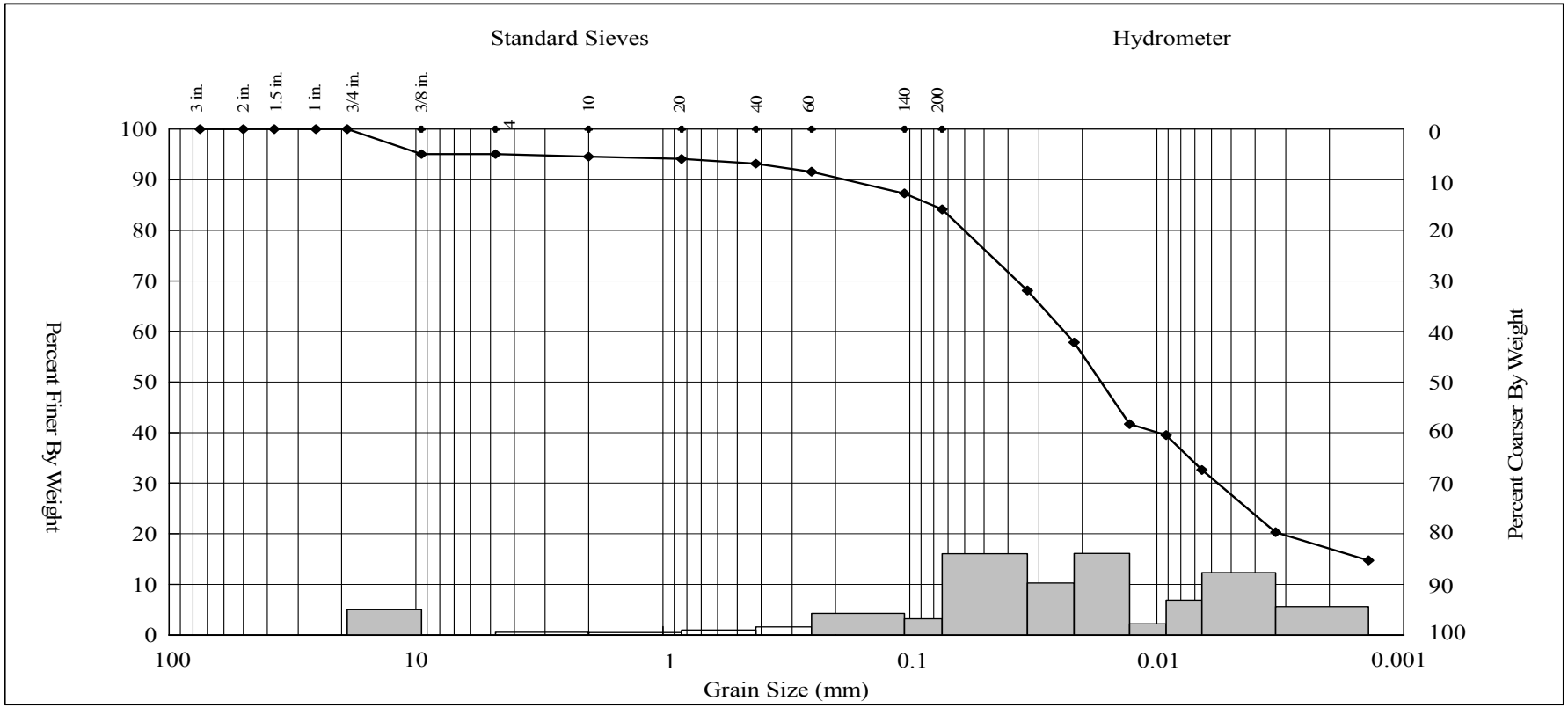
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
4.94	0.51	1.40	9.02	57.42	26.71

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
100										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/1/2006
Date Analyzed:	12/12/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0R11-10-15
AMS Sample ID:	25950-2

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Title:	New Bedford Harbor	Date Sampled:	11/2/2006
Project Number:	N/A	Date Analyzed:	12/12/2006
Client Sample ID:	S-06D-0R11-10-15	Matrix:	Sediment
AMS Sample ID:	25950	Method:	ASTM D 422
		Batch:	121206-01

Particle Diameter Range (mm)	U.S. Standard Sieve Mesh #	Size Class	Sample Result (%)	Duplicate Result (%)	RPD (%)	Data Qualifier	QC Limits (% RPD)
4.76	No. 4	Gravel	4.65	4.94	6.12		≤ 25
2.00	No. 10	Coarse Sand	0.45	0.51	11.91		≤ 25
0.425	No. 40	Medium Sand	1.46	1.40	4.01		≤ 25
0.074	No. 200	Fine Sand	9.40	9.02	4.08		≤ 25
<0.074 - 0.005	Hydrometer	Silt	56.11	57.42	2.31		≤ 25
<0.005	Hydrometer	Clay	27.93	26.71	4.49		≤ 25

Samples in Batch: 25937 25939 25941 25943 25945 25947 25949
25938 25940 25942 25944 25946 25948 25950

Qualifiers: Q - RPD value outside Quality Control Limits
I - Insufficient sample material to perform Quality Control Analyses

Soil Classification: Unified Soil Classification System (USCS) classifications are estimated in accordance with ASTM D 2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) unless the sample contains less than 5% fines (GW, GP, SW, and SP), or the Liquid Limit, Plastic Limit and Plasticity Index (Atterberg Limits) have been determined in accordance with ASTM D 4318. When these values have been determined the samples are definitively classified using ASTM D 2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).

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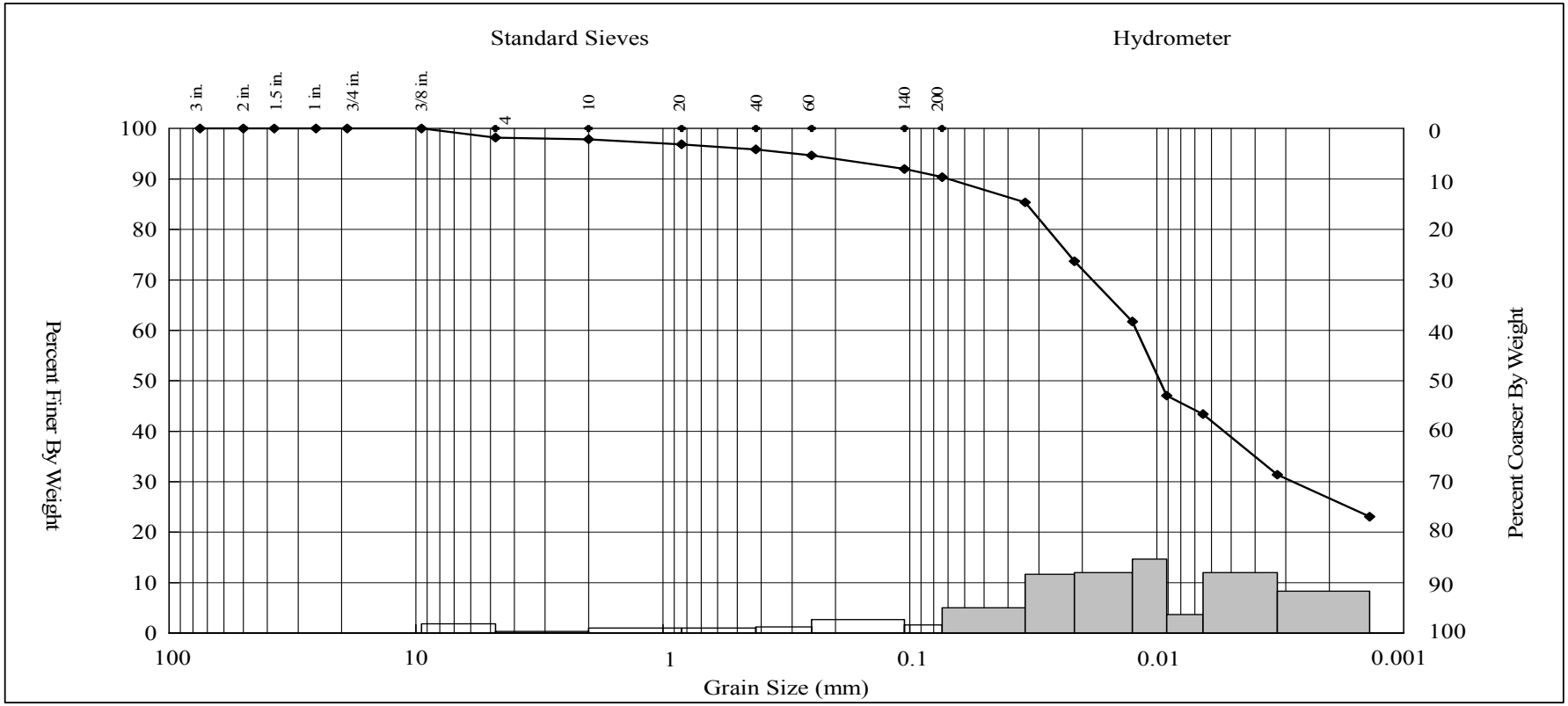

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
1.82	0.34	1.99	5.49	52.51	37.85

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
126										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Z13-00-02
AMS Sample ID:	25951

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AMS, Inc. Technical Director

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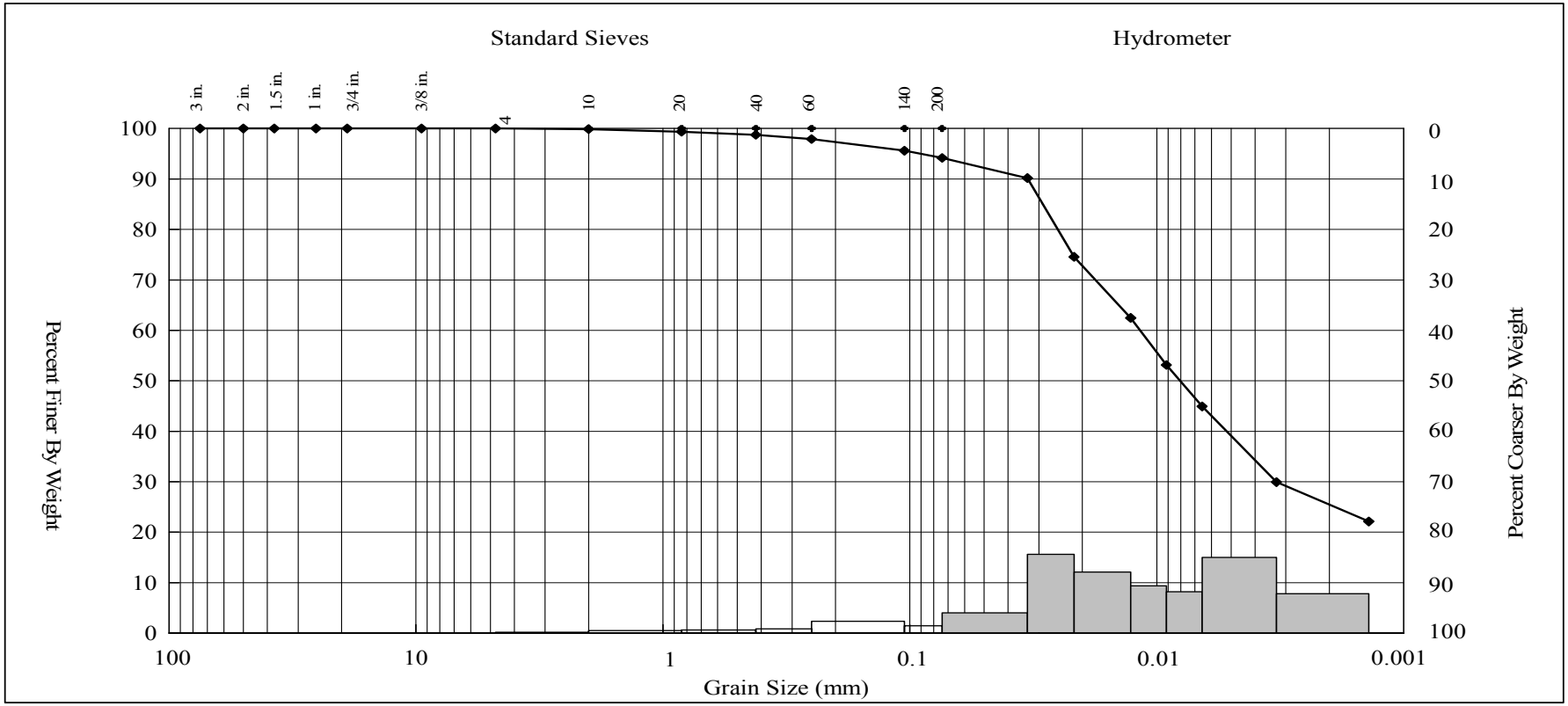
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.14	1.14	4.57	56.36	37.79

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
188										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0l20-07-12
AMS Sample ID:	25952

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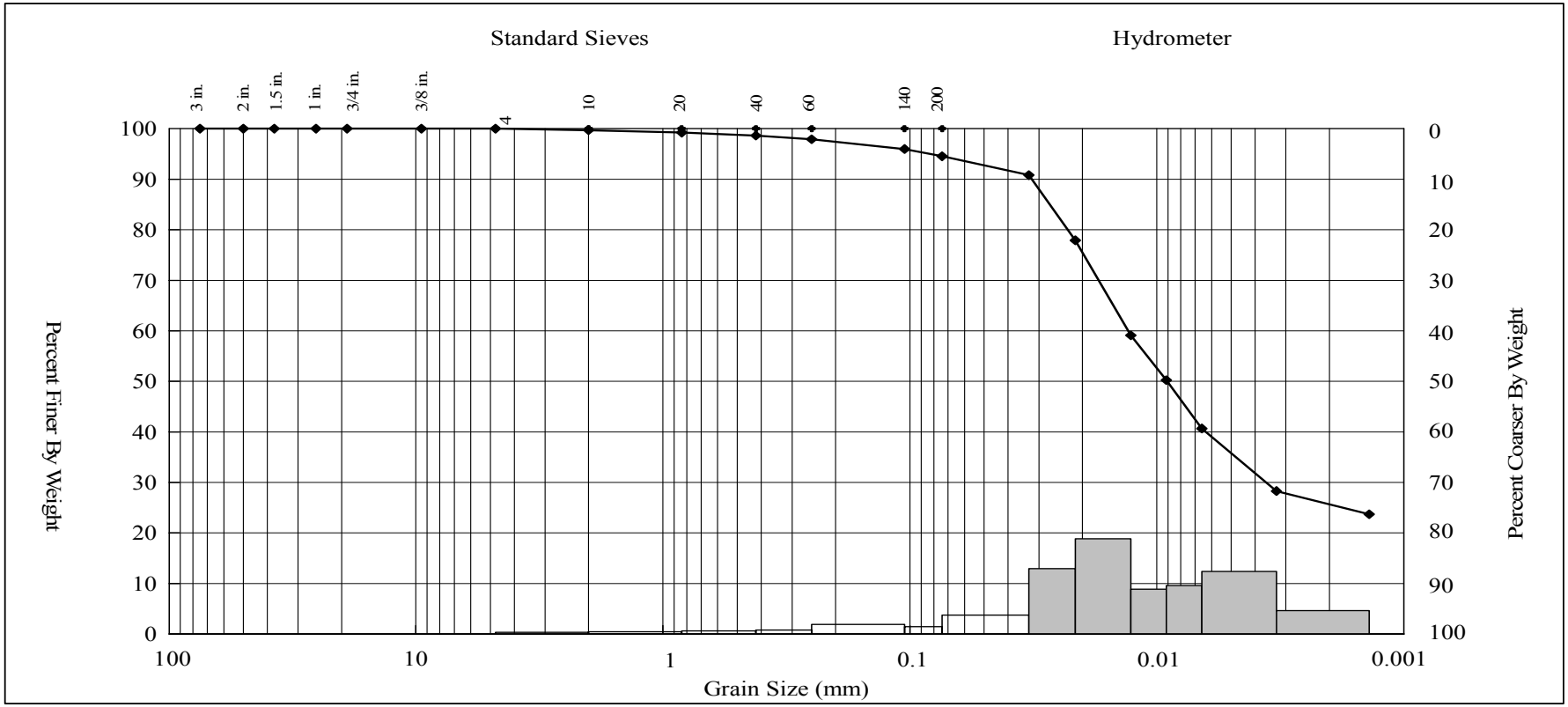
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.32	1.07	4.08	59.78	34.75

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
159										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0l20-07-12-DUP
AMS Sample ID:	25953

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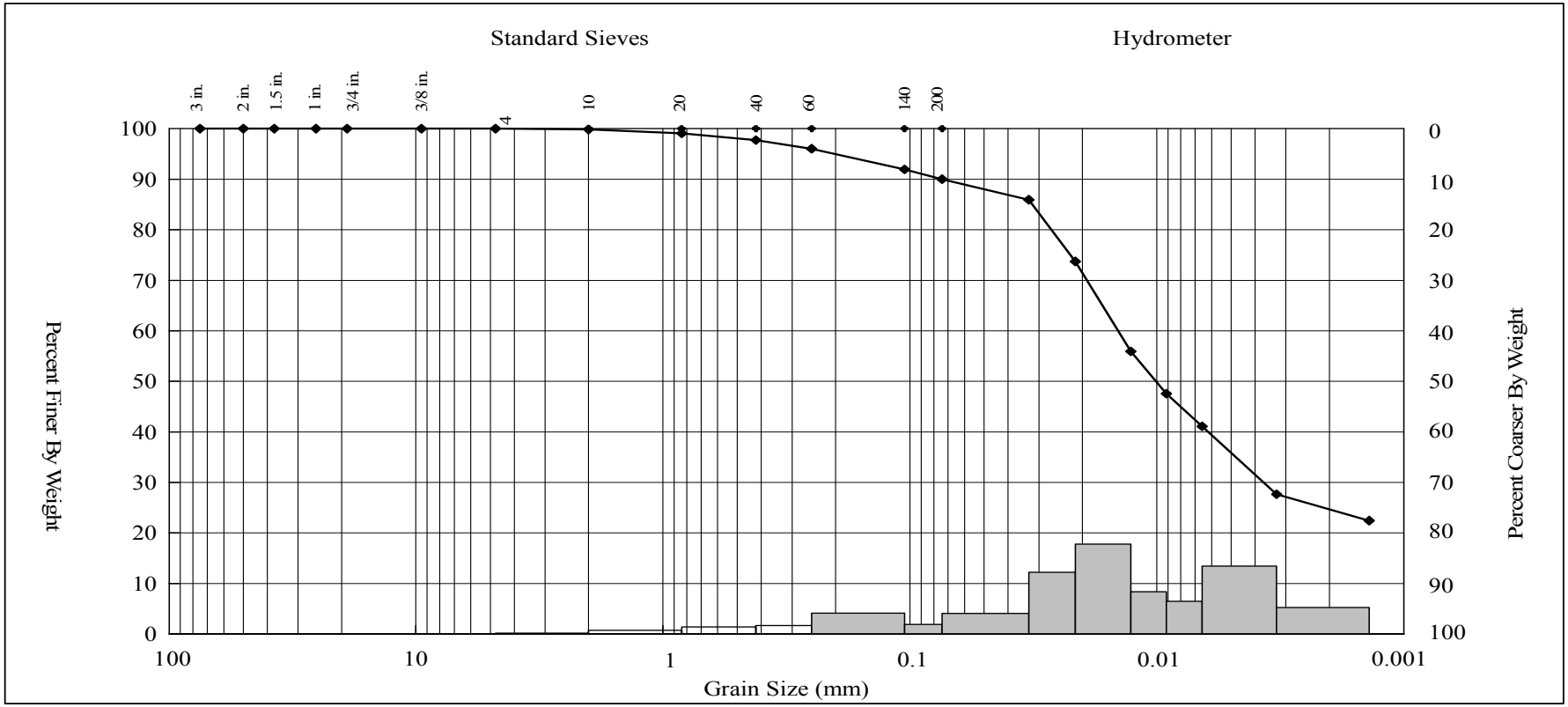

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.20	2.10	7.71	55.27	34.72

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
130										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N14-00-05
AMS Sample ID:	25954

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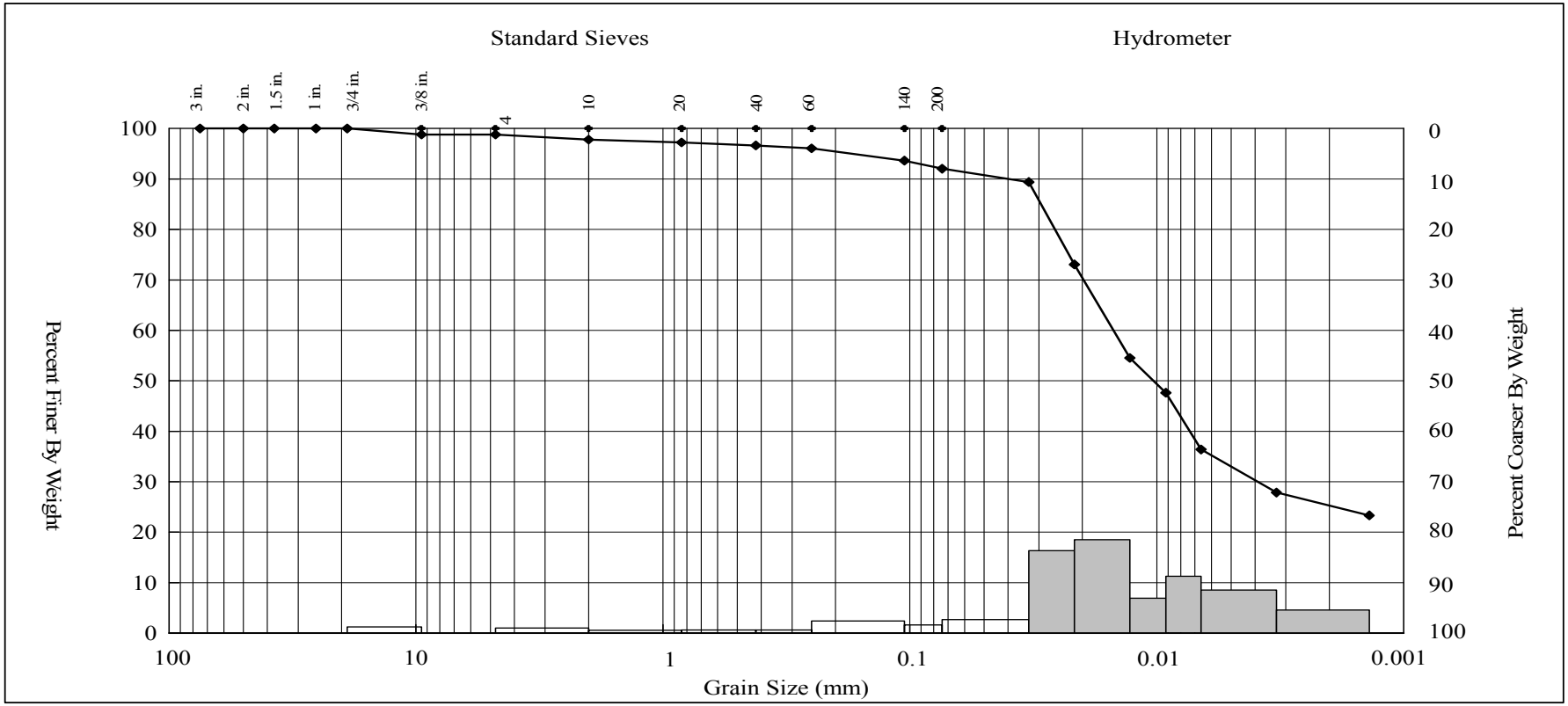
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
1.21	1.03	1.13	4.63	59.76	32.24

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
143										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N08-00-17
AMS Sample ID:	25955

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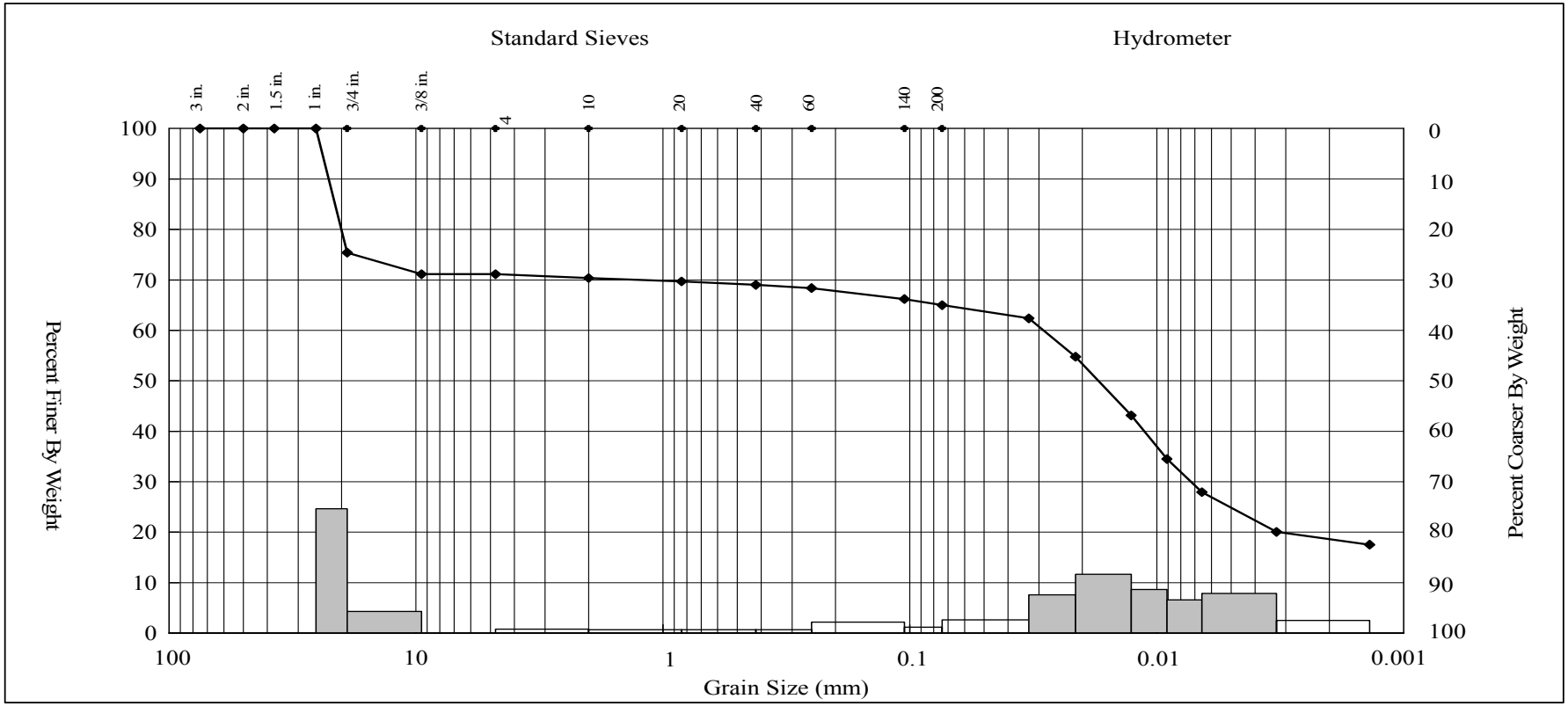
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
28.88	0.77	1.37	4.01	40.79	24.18

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
156										

Material Description

Gravelly Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N08-00-17-DUP
AMS Sample ID:	25956

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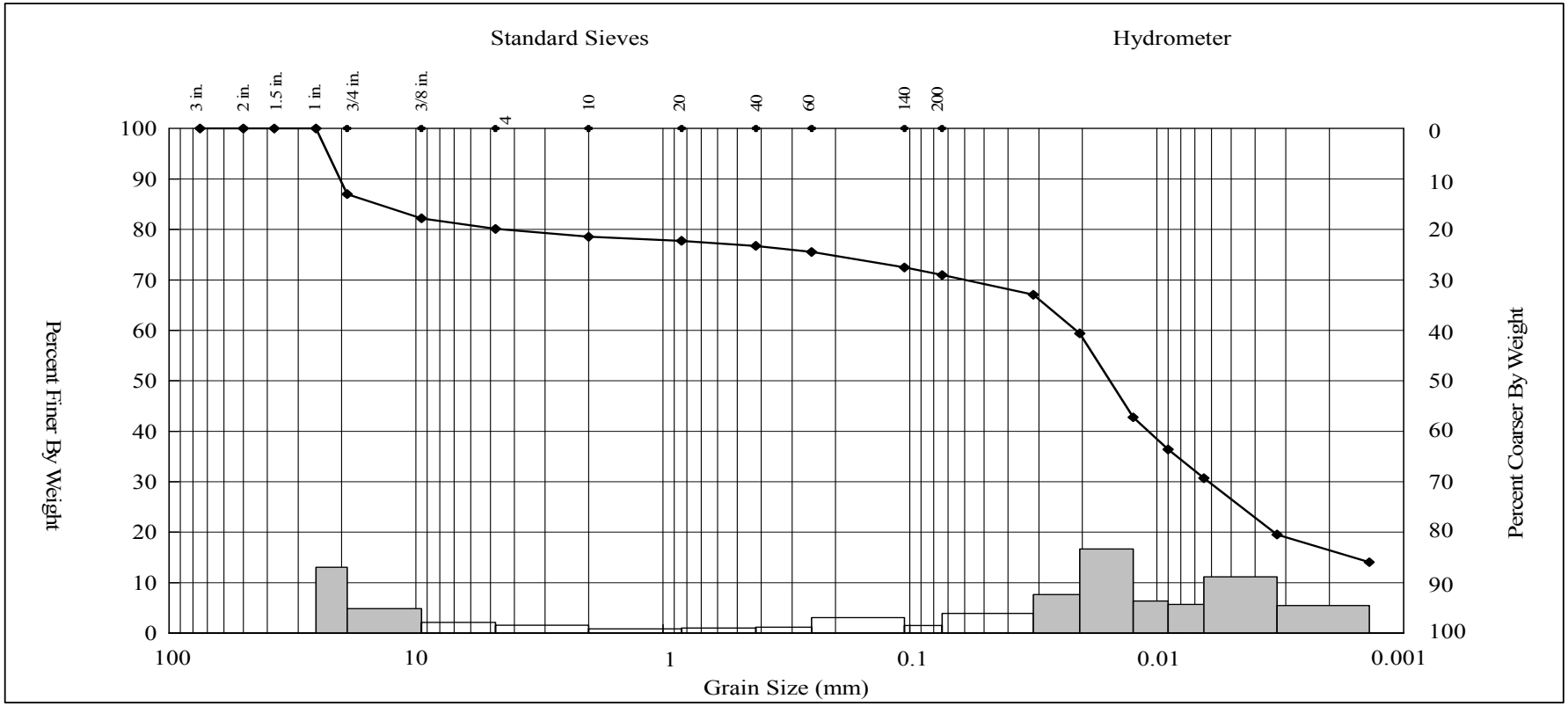
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
19.92	1.55	1.82	5.75	45.34	25.62

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
116										

Material Description

Elastic Silt with Gravel ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N06-00-05
AMS Sample ID:	25957

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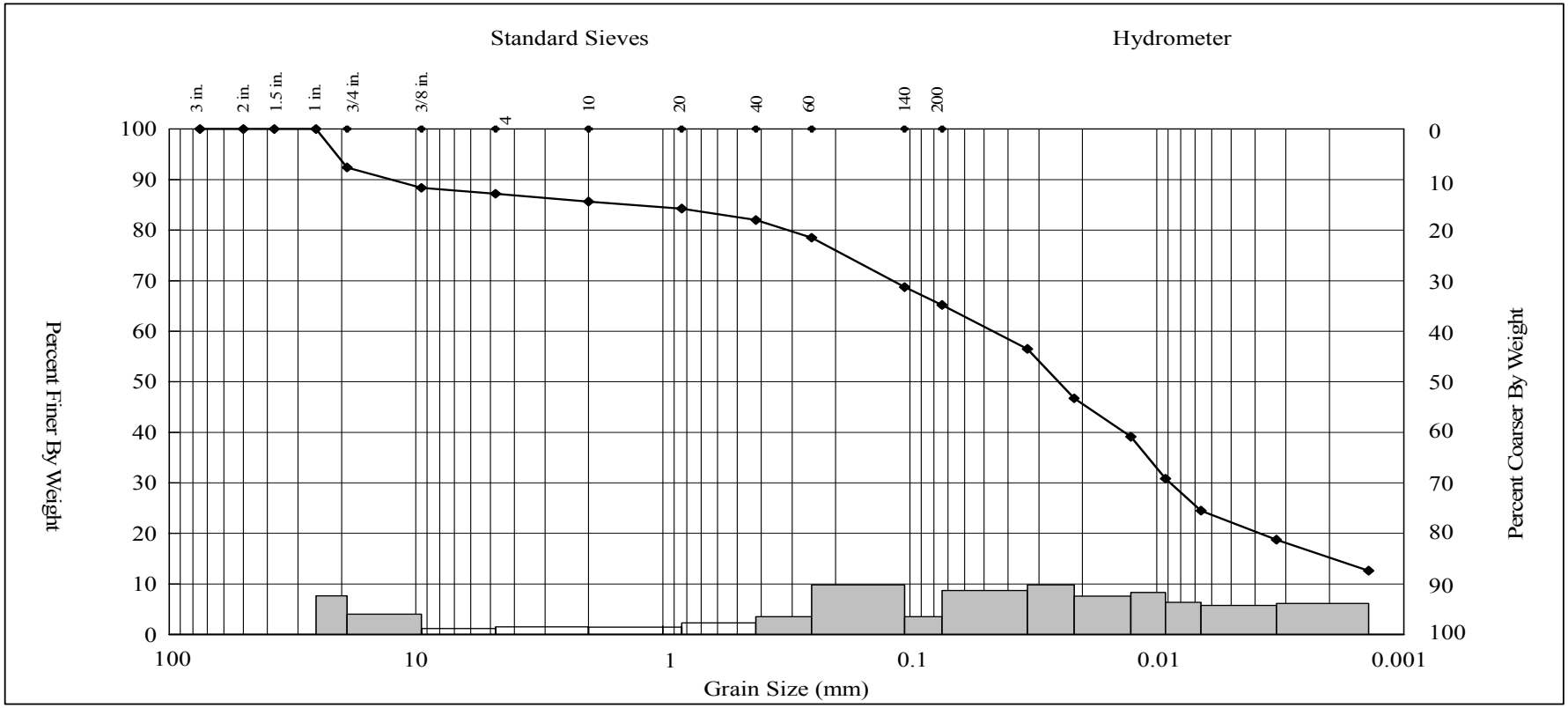
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
12.80	1.53	3.69	16.79	43.49	21.70

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
126										

Material Description

Sandy Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0R03-00-13
AMS Sample ID:	25958

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AMS, Inc. Technical Director

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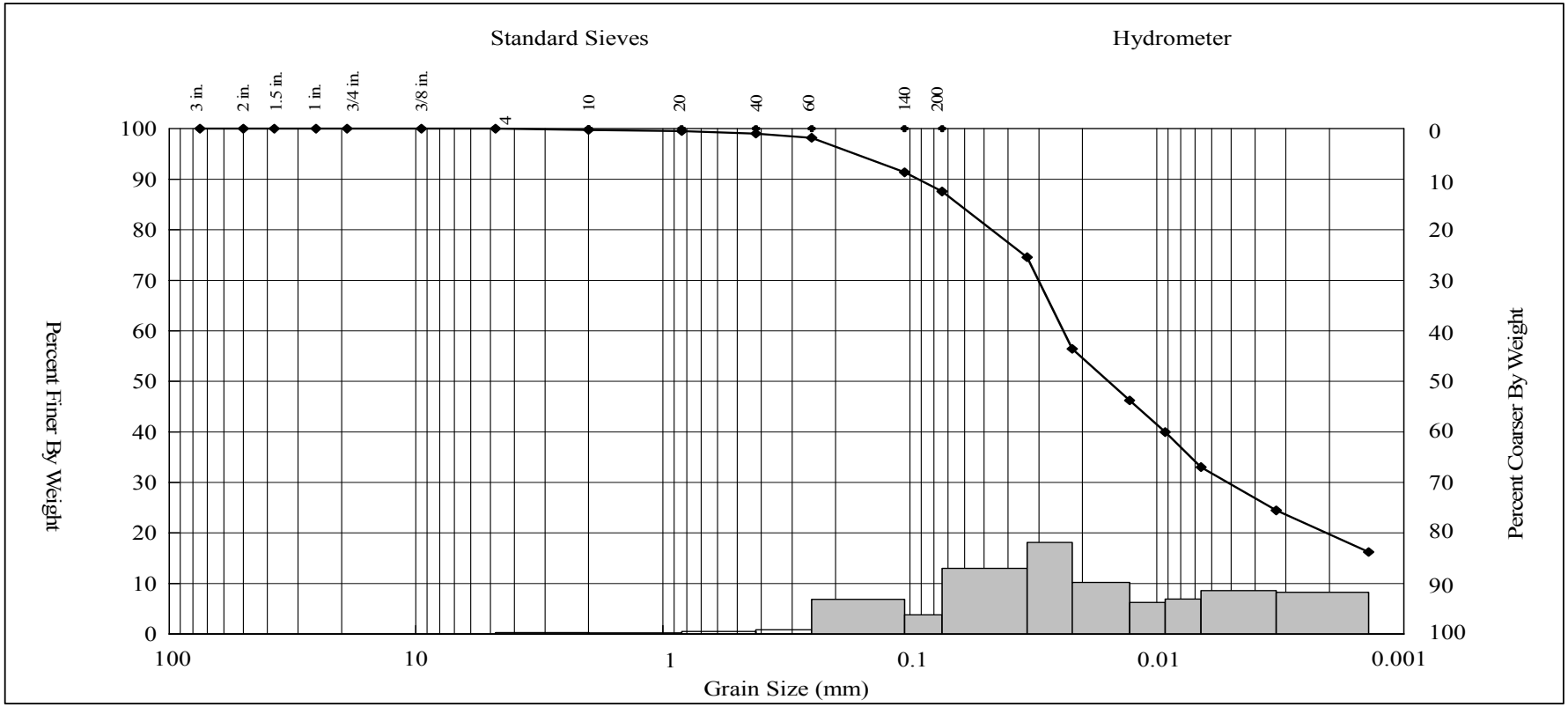
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.25	0.73	11.47	58.68	28.87

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
150										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0U06-05-14
AMS Sample ID:	25959

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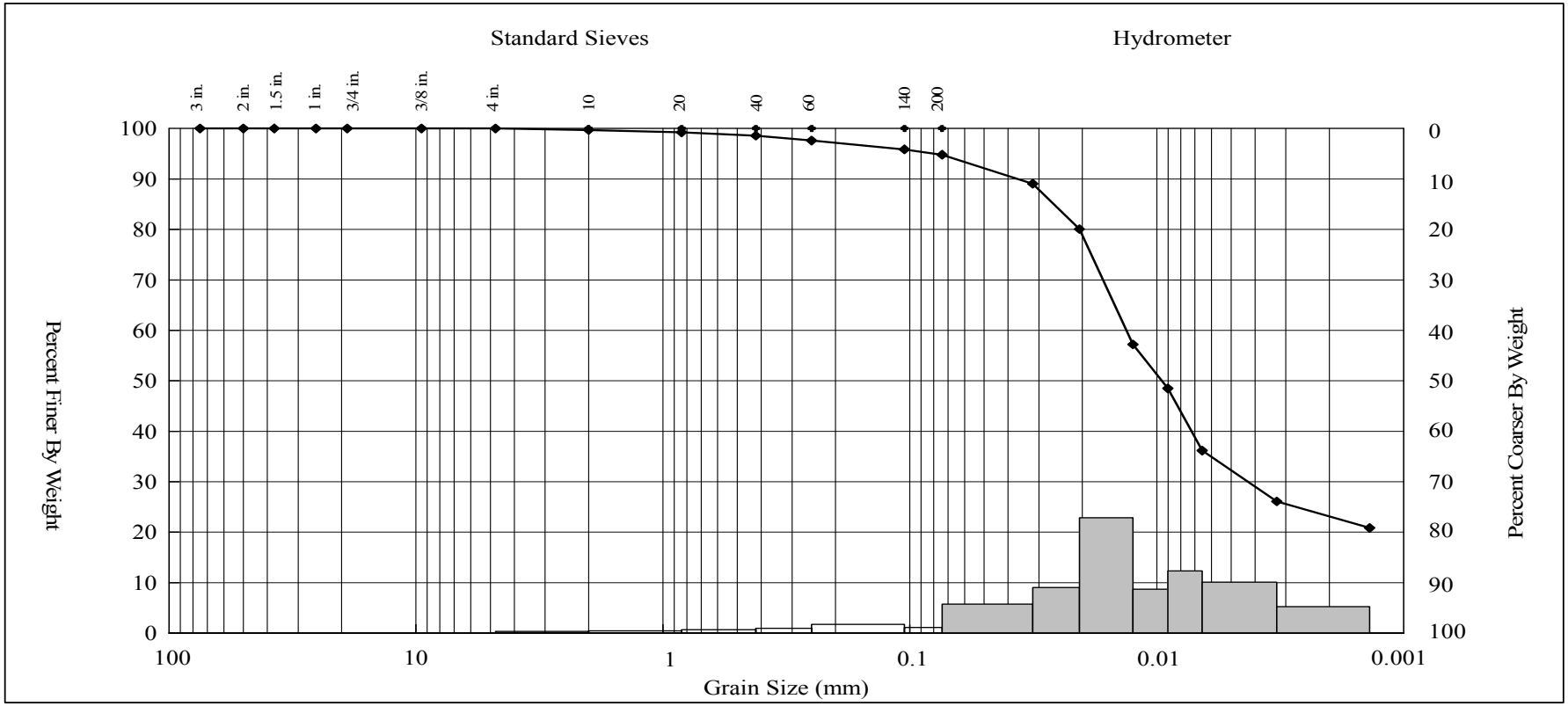
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.33	1.13	3.77	63.37	31.40

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
101										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0L05-00-06
AMS Sample ID:	25960

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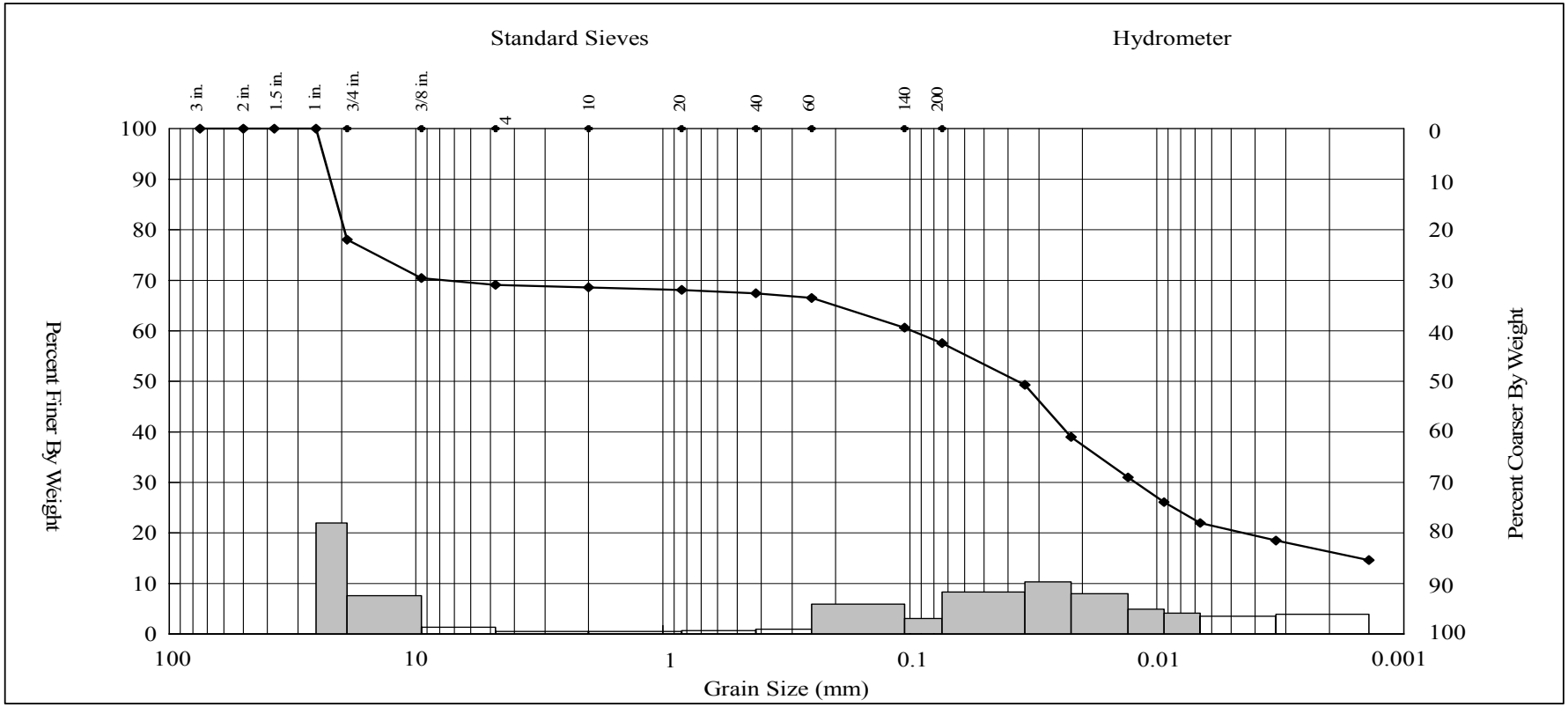
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
30.91	0.50	1.16	9.86	37.32	20.25

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
157										

Material Description

Gravelly Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0W03-00-05
AMS Sample ID:	25961

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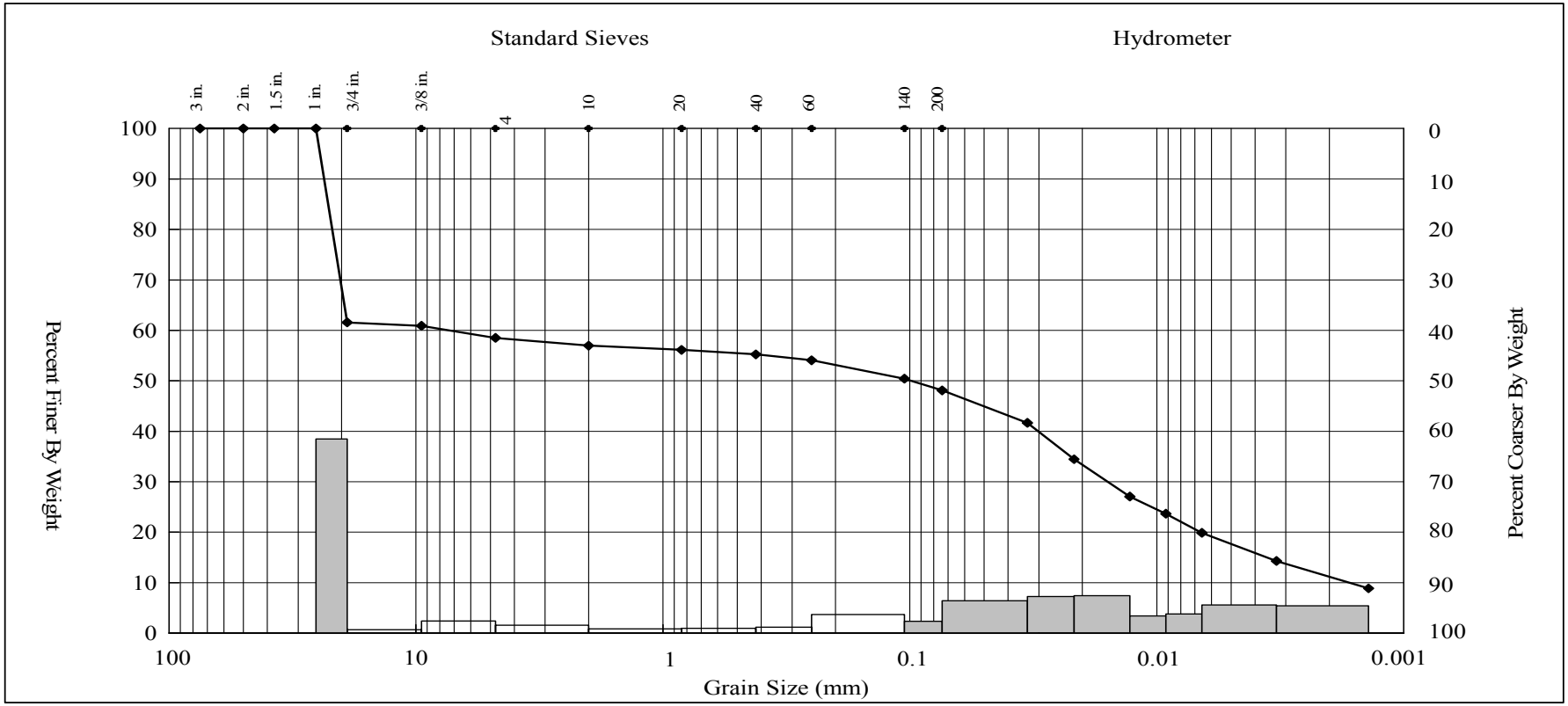
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
41.51	1.54	1.72	7.14	30.89	17.20

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
168										

Material Description

Silty Gravel ("GM"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	10/31/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-AA03-00-05
AMS Sample ID:	25962

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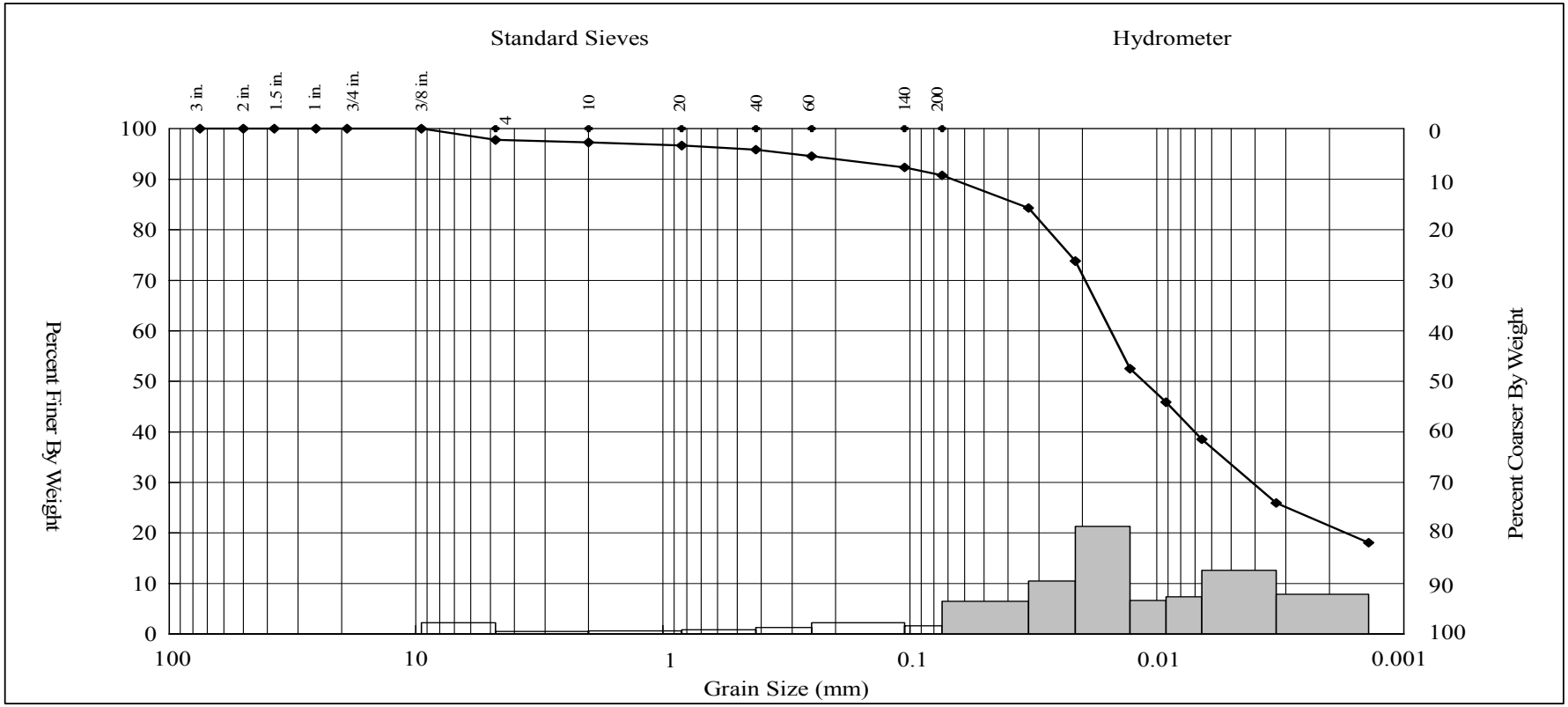
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
2.24	0.51	1.45	5.07	58.23	32.50

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
137										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0F36-00-05
AMS Sample ID:	25963

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K.S. Davis, P.G.
AMS, Inc. Technical Director

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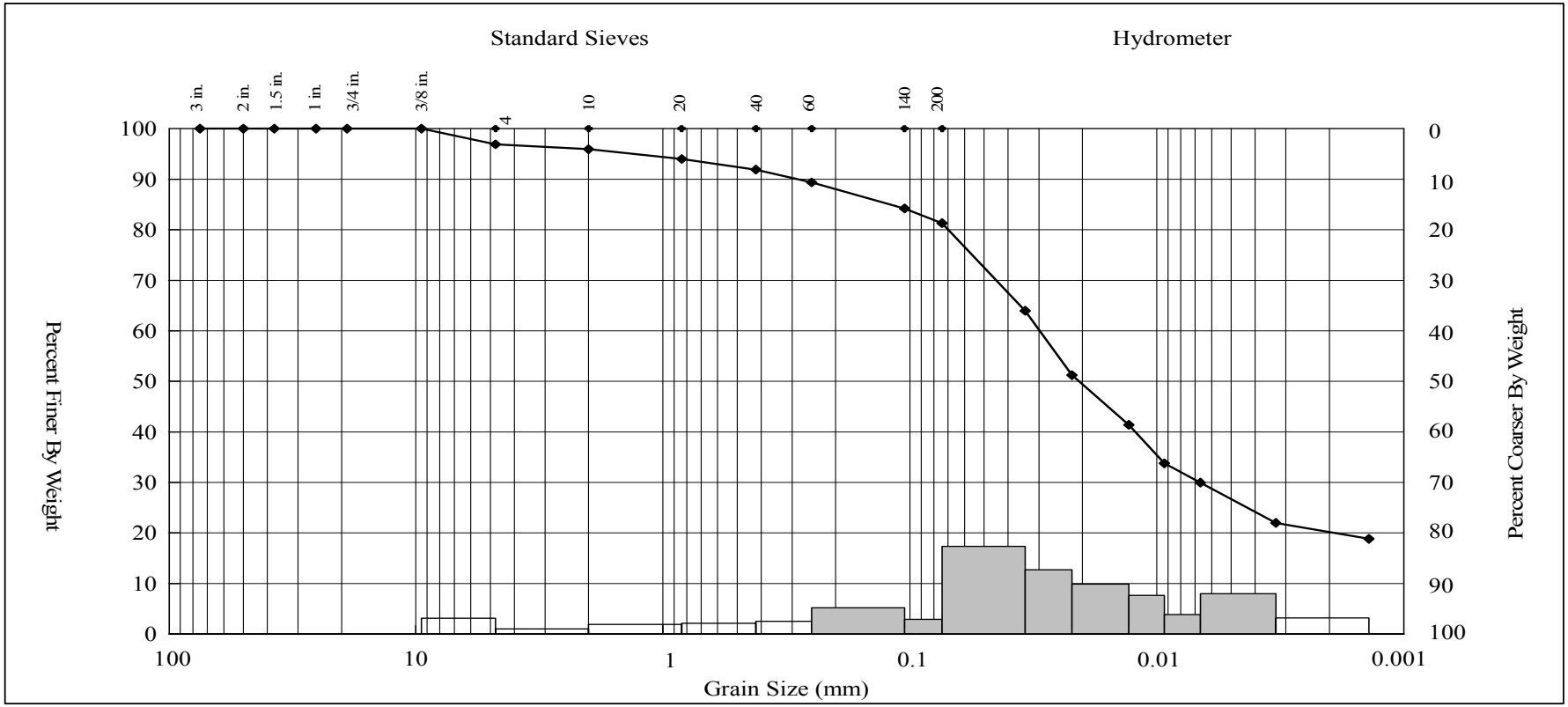
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.10	0.99	4.03	10.61	55.26	26.01

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
169										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0F38-00-05
AMS Sample ID:	25964

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AMS, Inc. Technical Director

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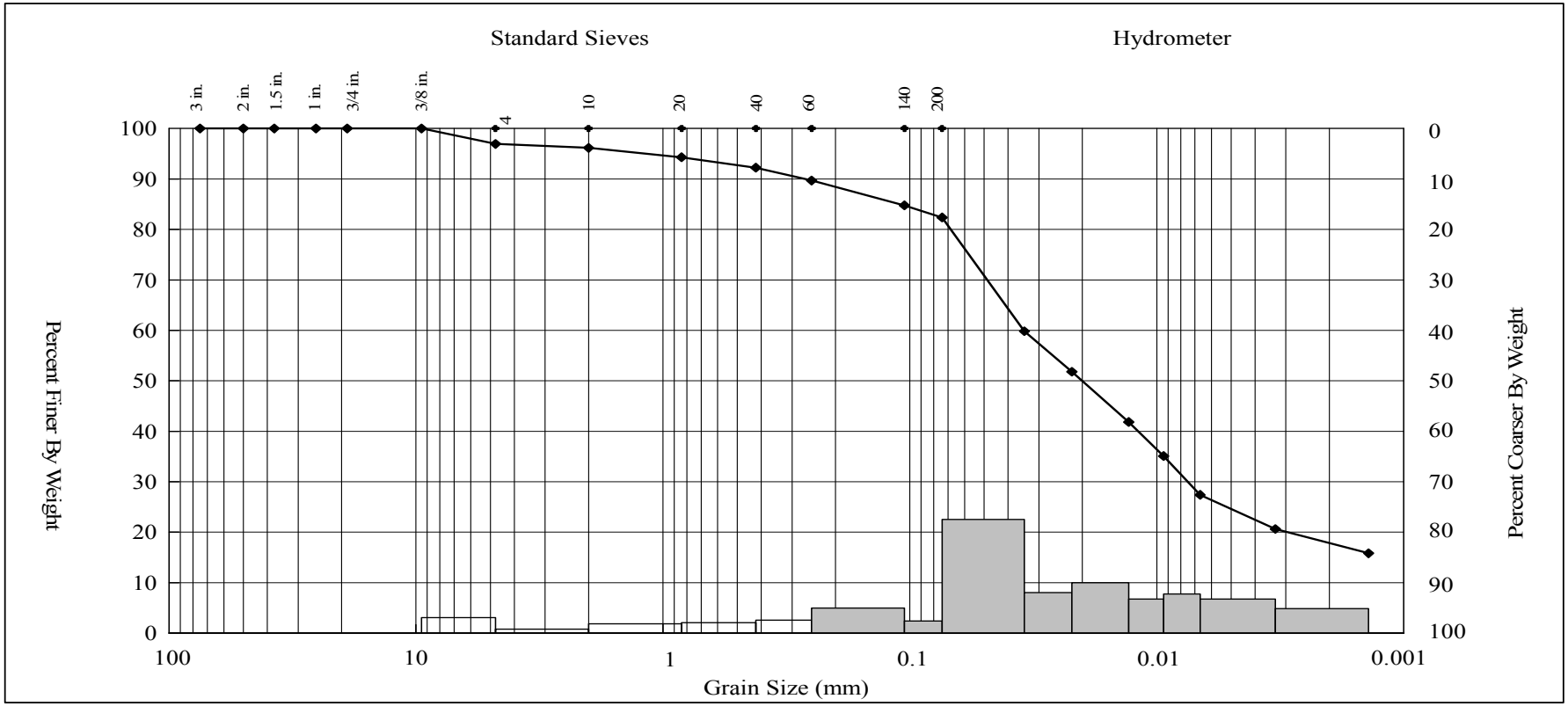
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.09	0.77	3.92	9.87	58.33	24.02

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
169										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/15/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0F38-00-05
AMS Sample ID:	25964-2

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Title:	New Bedford Harbor	Date Sampled:	11/3/2006
Project Number:	N/A	Date Analyzed:	12/15/2006
Client Sample ID:	S-06D-0F38-00-05	Matrix:	Sediment
AMS Sample ID:	25964	Method:	ASTM D 422
		Batch:	121506-01

Particle Diameter Range (mm)	U.S. Standard Sieve Mesh #	Size Class	Sample Result (%)	Duplicate Result (%)	RPD (%)	Data Qualifier	QC Limits (% RPD)
4.76	No. 4	Gravel	3.10	3.09	0.21		≤ 25
2.00	No. 10	Coarse Sand	0.99	0.77	24.43		≤ 25
0.425	No. 40	Medium Sand	4.03	3.92	2.75		≤ 25
0.074	No. 200	Fine Sand	10.61	9.87	7.21		≤ 25
<0.074 - 0.005	Hydrometer	Silt	55.26	58.33	5.39		≤ 25
<0.005	Hydrometer	Clay	26.01	24.02	7.97		≤ 25

Samples in Batch: 25951 25953 25955 25957 25959 25961 25963
25952 25954 25956 25958 25960 25962 25964

Qualifiers: Q - RPD value outside Quality Control Limits
I - Insufficient sample material to perform Quality Control Analyses

Soil Classification: Unified Soil Classification System (USCS) classifications are estimated in accordance with ASTM D 2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) unless the sample contains less than 5% fines (GW, GP, SW, and SP), or the Liquid Limit, Plastic Limit and Plasticity Index (Atterberg Limits) have been determined in accordance with ASTM D 4318. When these values have been determined the samples are definitively classified using ASTM D 2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).

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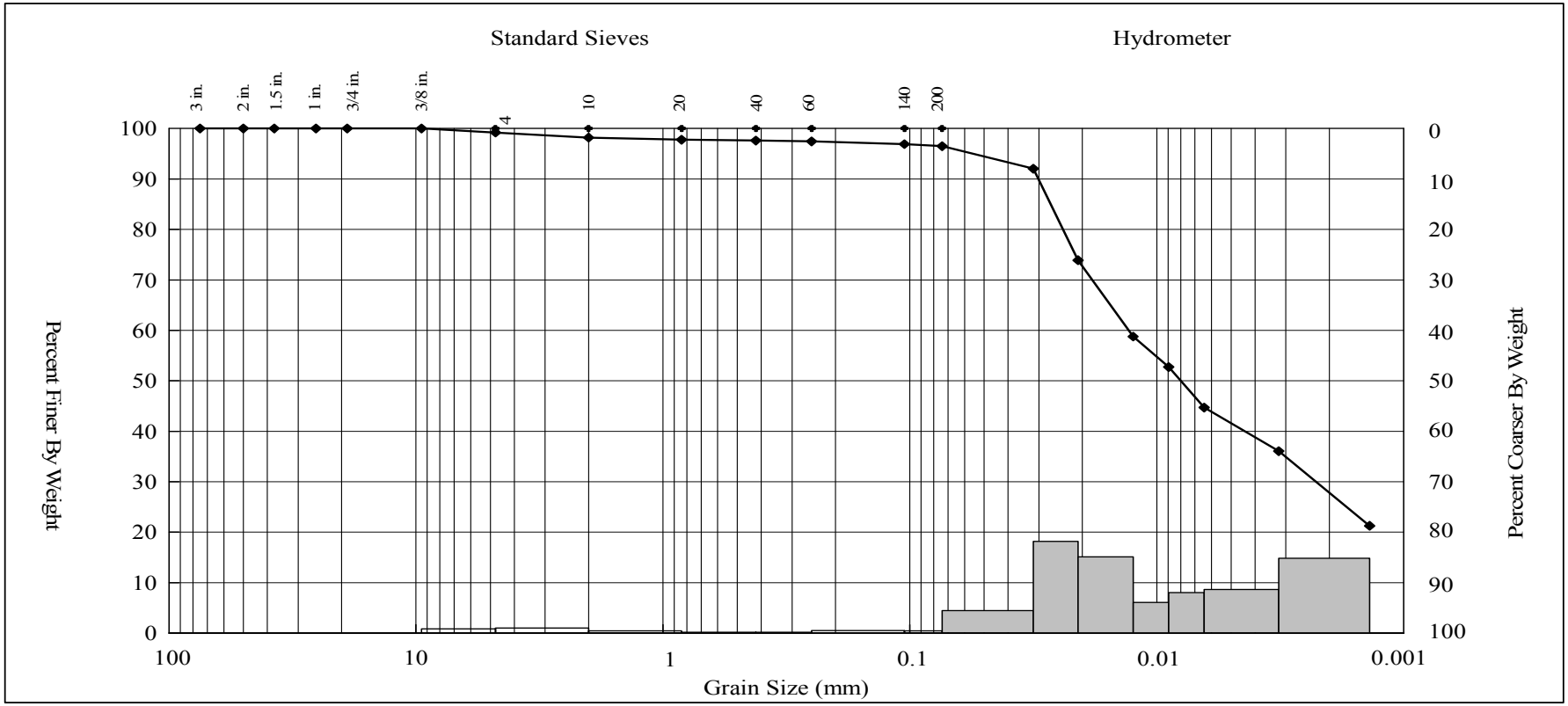

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.80	1.00	0.62	1.11	55.61	40.86

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
155										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H41-00-05
AMS Sample ID:	25965

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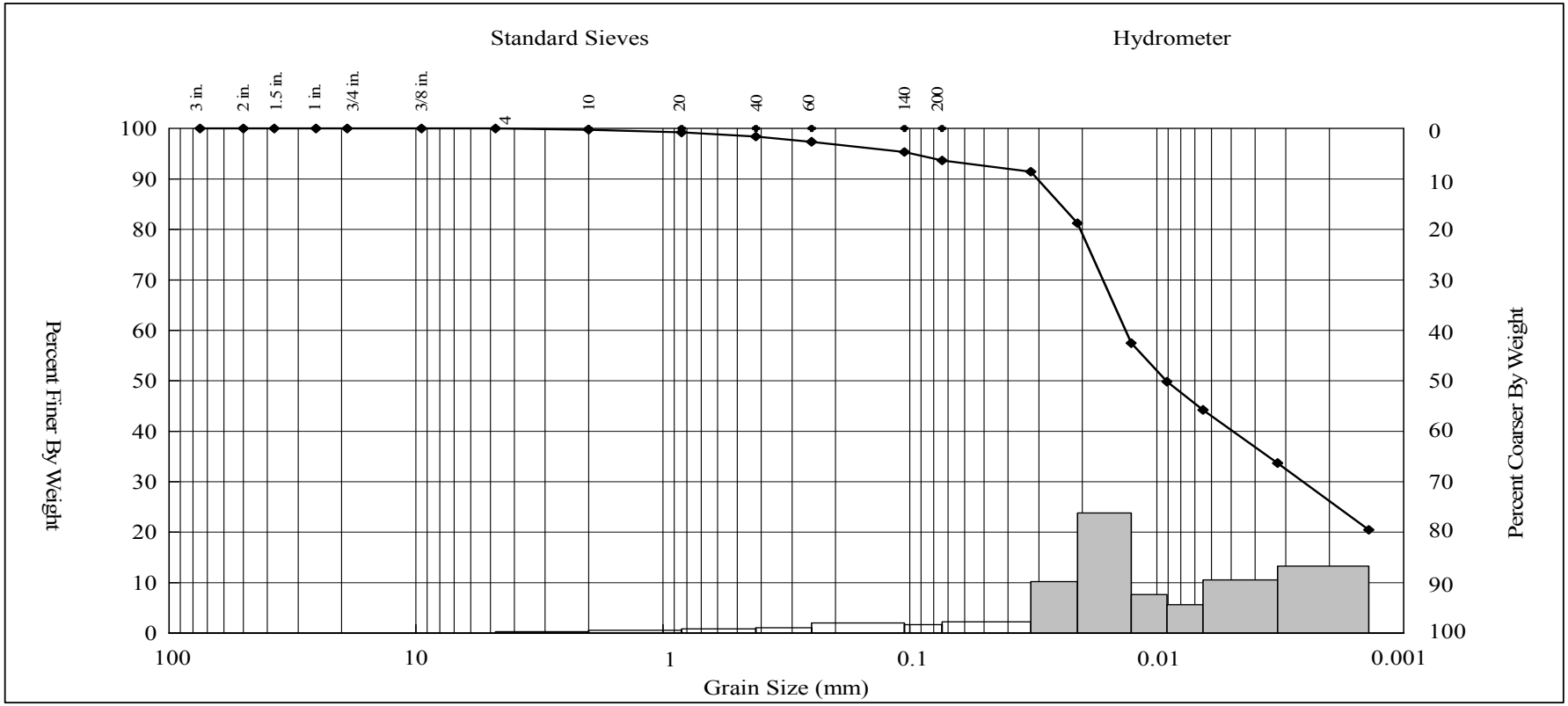
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.26	1.36	4.72	54.29	39.37

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
128										

Material Description

Elastic Silt ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H32-00-05
AMS Sample ID:	25966

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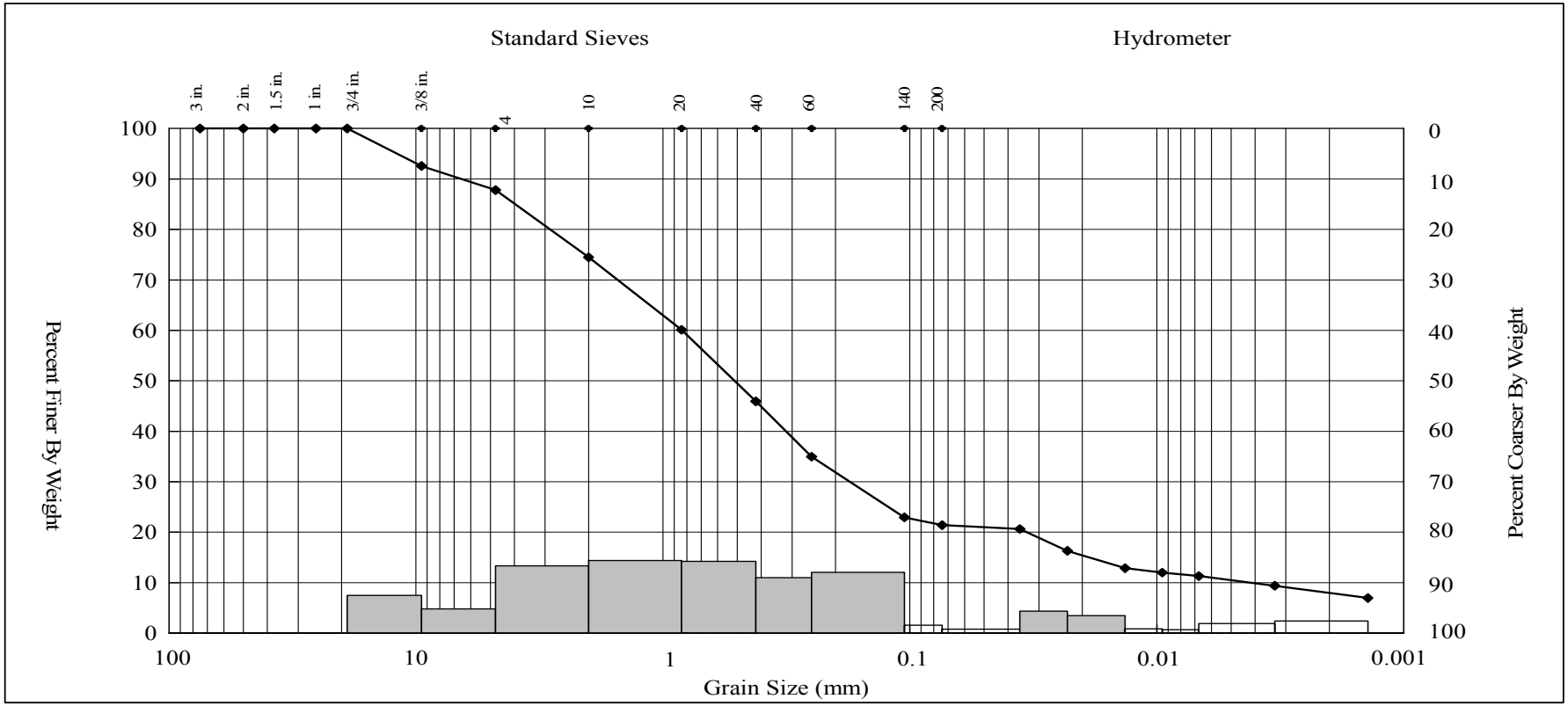
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
12.21	13.32	28.56	24.53	11.07	10.31

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
63										

Material Description

Silty Sand ("SM"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0G25-00-25
AMS Sample ID:	25967

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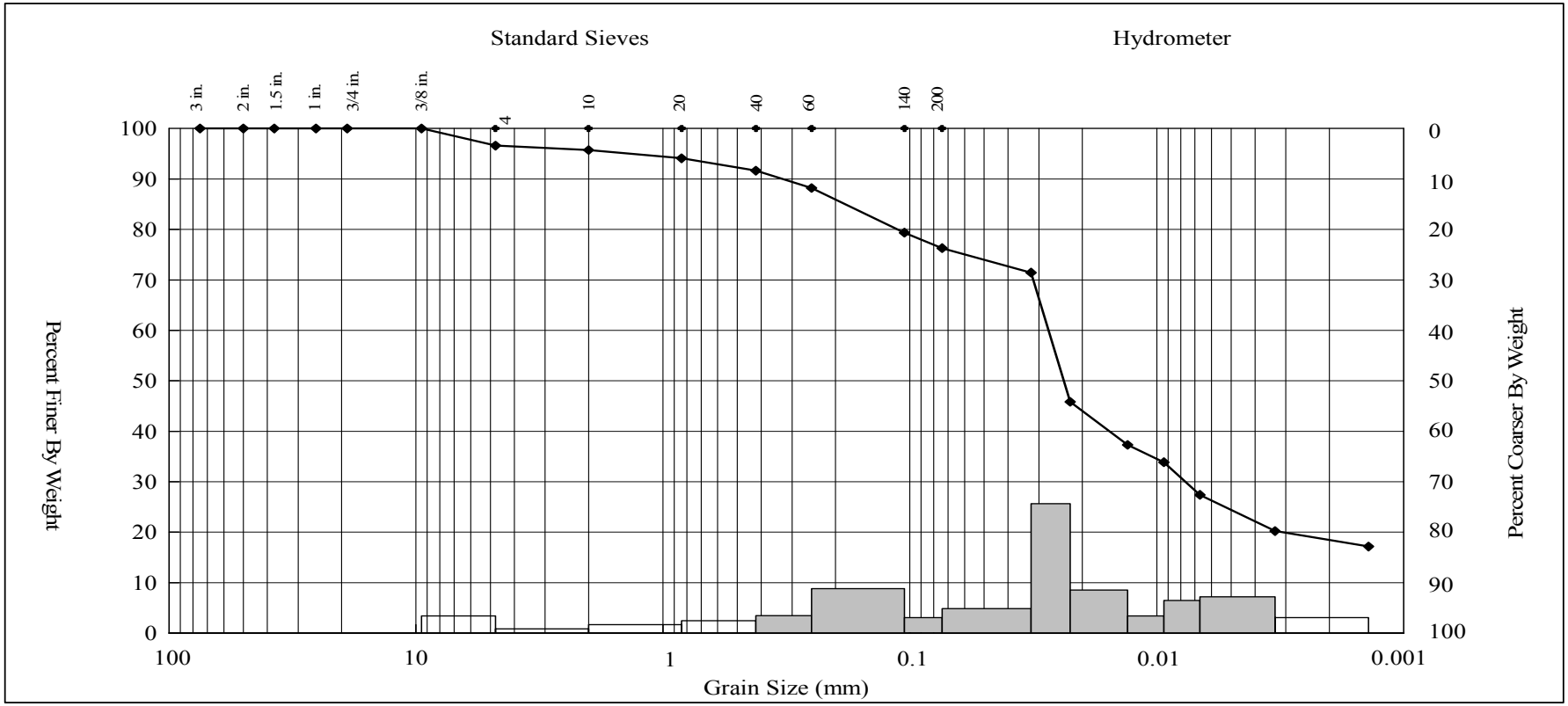
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.42	0.85	4.11	15.35	52.48	23.79

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
154										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H36-00-05
AMS Sample ID:	25968

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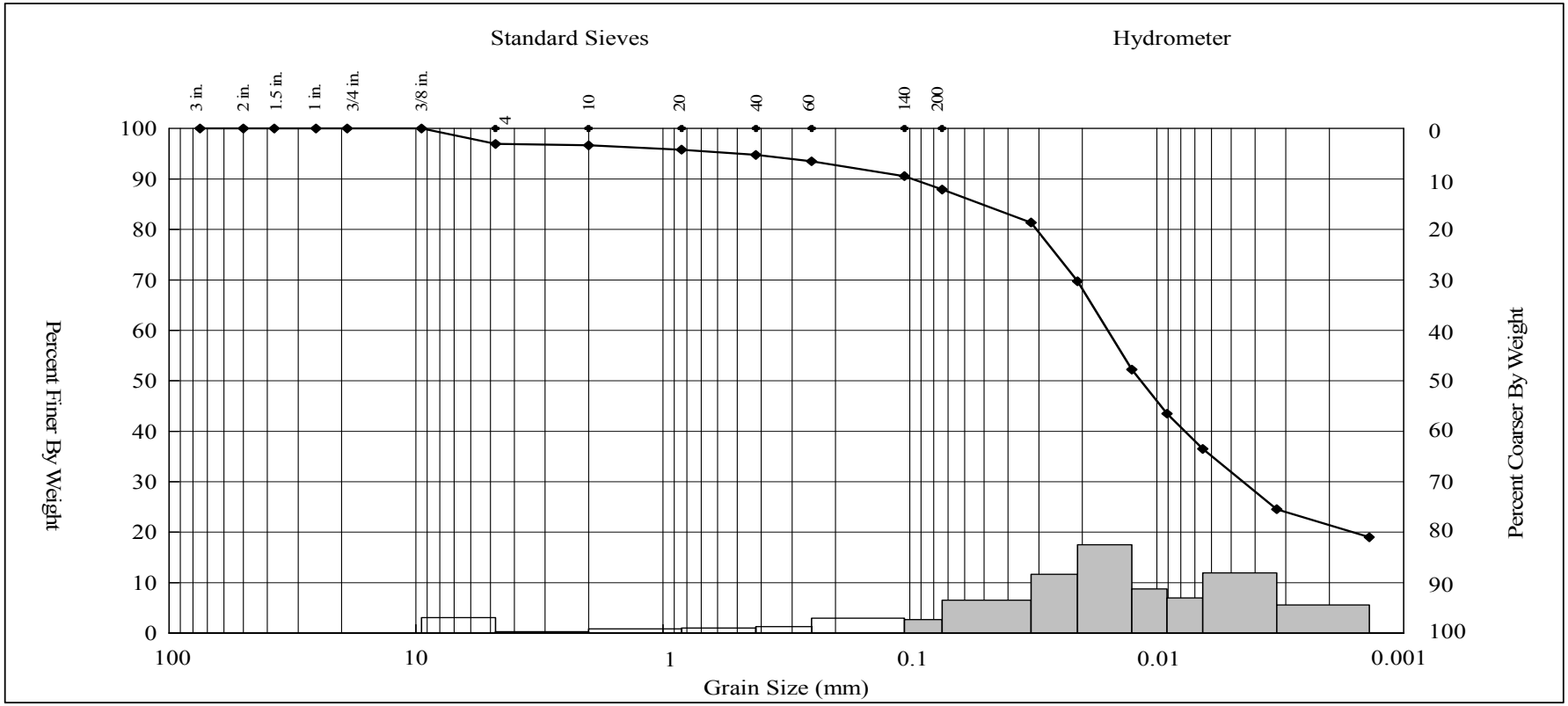
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.08	0.28	1.89	6.88	56.97	30.90

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
94										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/2/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Z22-00-06
AMS Sample ID:	25969

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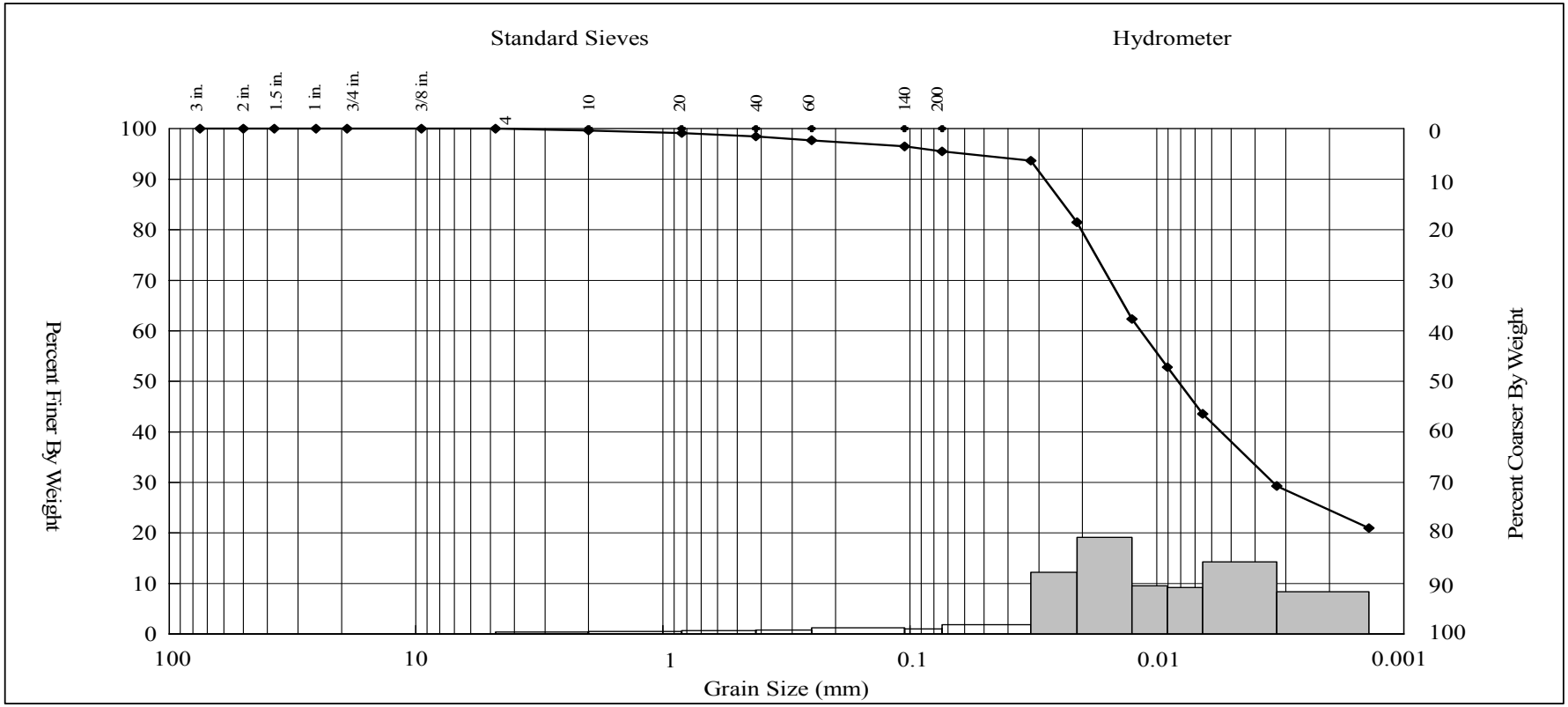
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.37	1.18	2.95	58.61	36.89

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
121										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H29-00-05
AMS Sample ID:	25970

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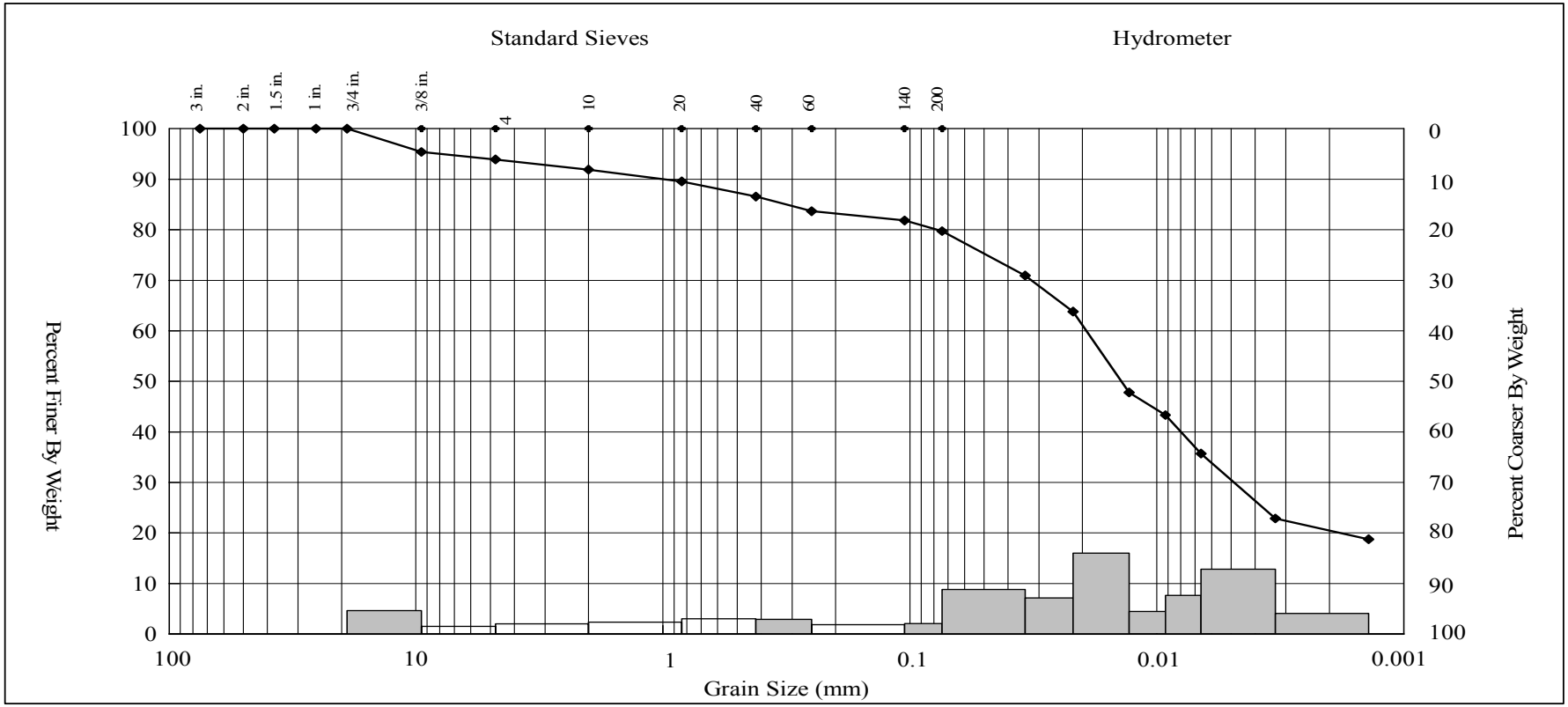
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
6.11	2.00	5.33	6.83	50.31	29.42

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
141										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0E27-00-05
AMS Sample ID:	25971

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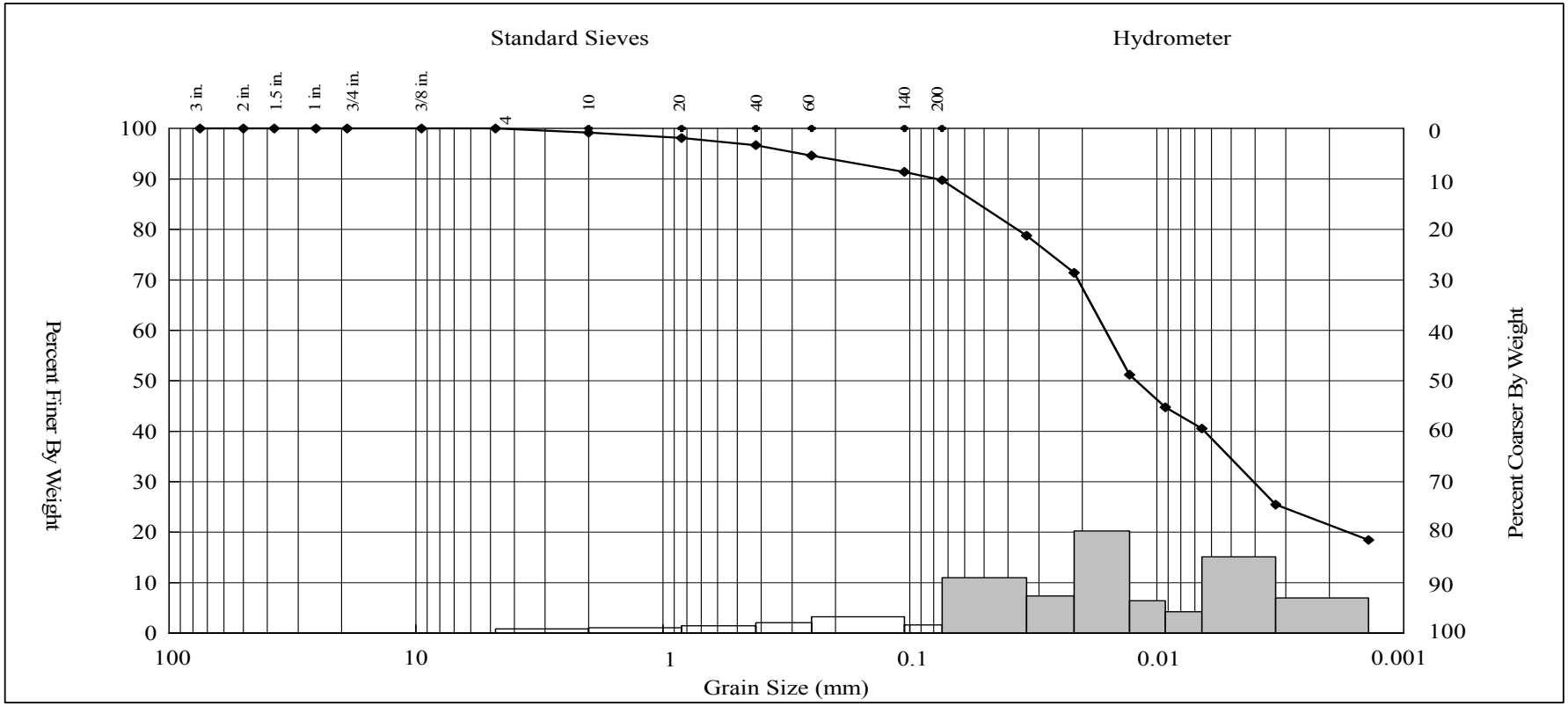
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.86	2.47	6.94	56.44	33.29

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
141										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H27-00-05
AMS Sample ID:	25972

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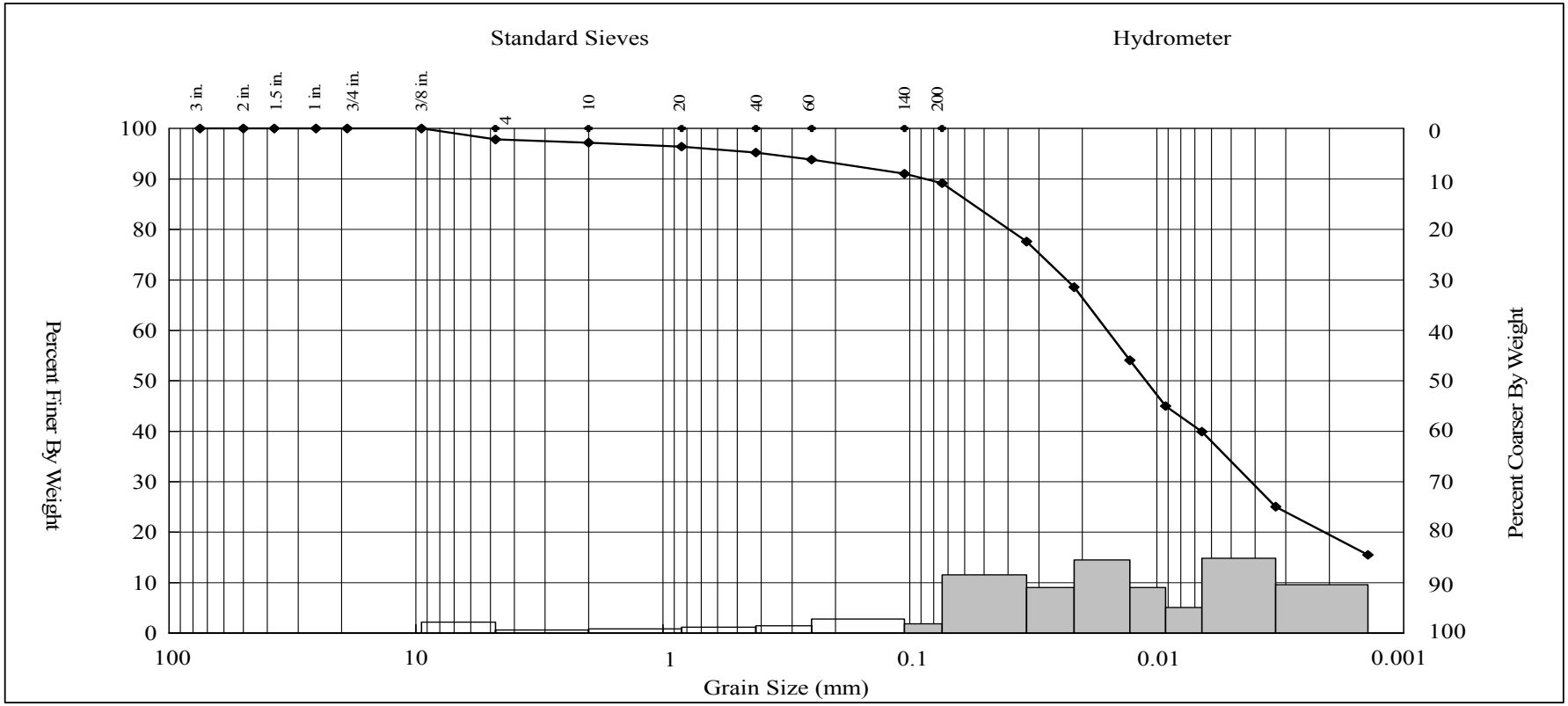
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
2.19	0.62	1.98	6.07	56.34	32.80

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
140										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0C29-05-10
AMS Sample ID:	25973

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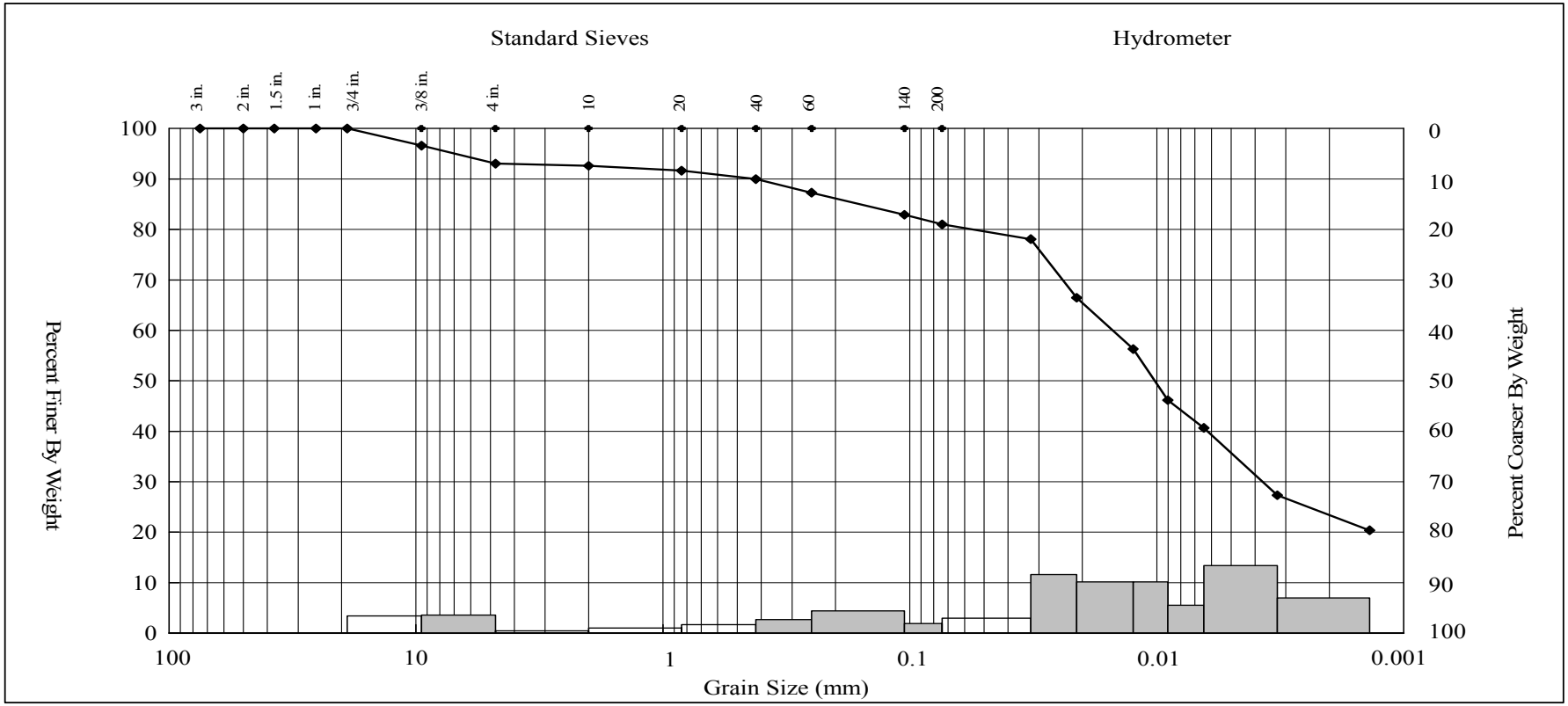
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
6.98	0.44	2.64	8.95	46.38	34.61

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
98										

Material Description

Elastic Silt with Sand ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0C41-04-09
AMS Sample ID:	25974

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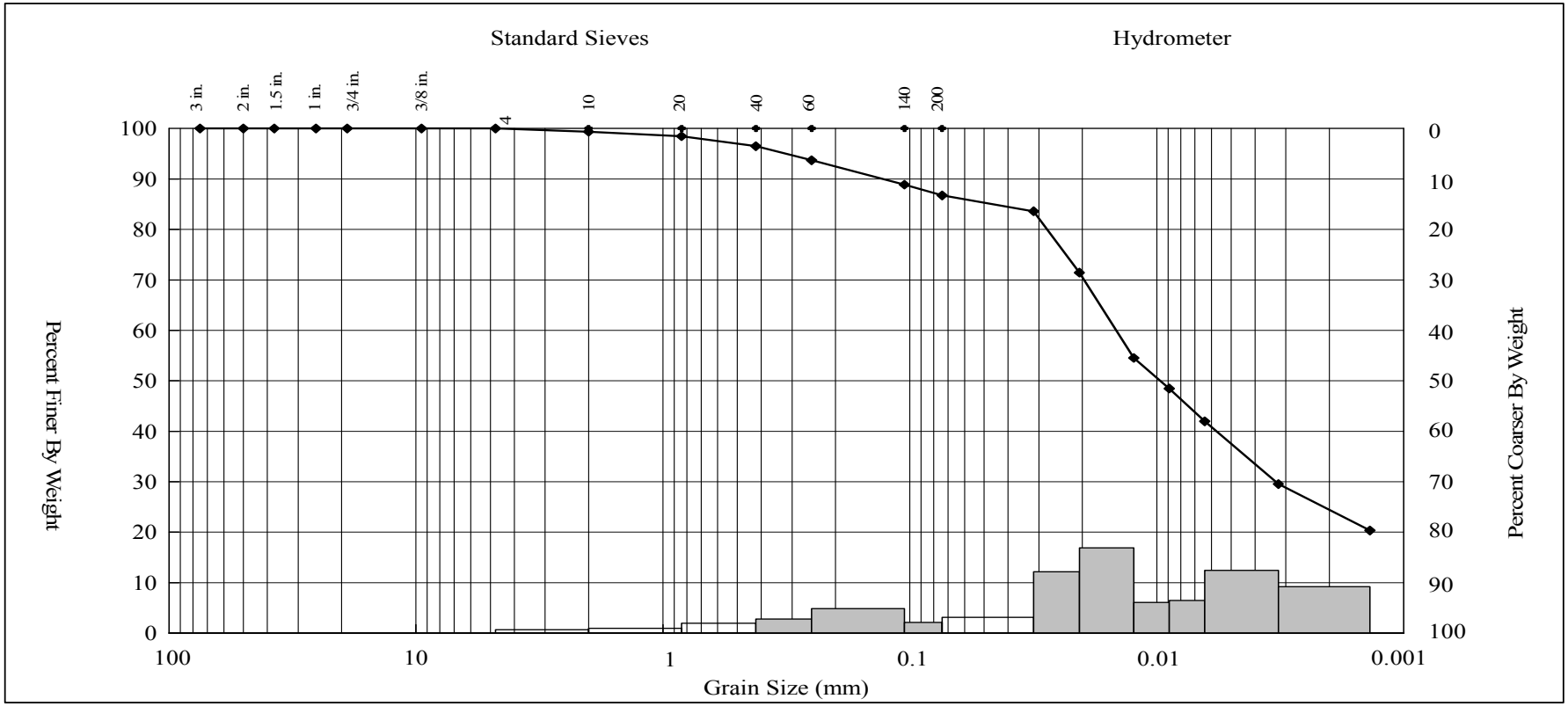
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.65	2.88	9.76	50.21	36.50

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
97										

Material Description

Elastic Silt ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0C41-04-09-DUP
AMS Sample ID:	25975

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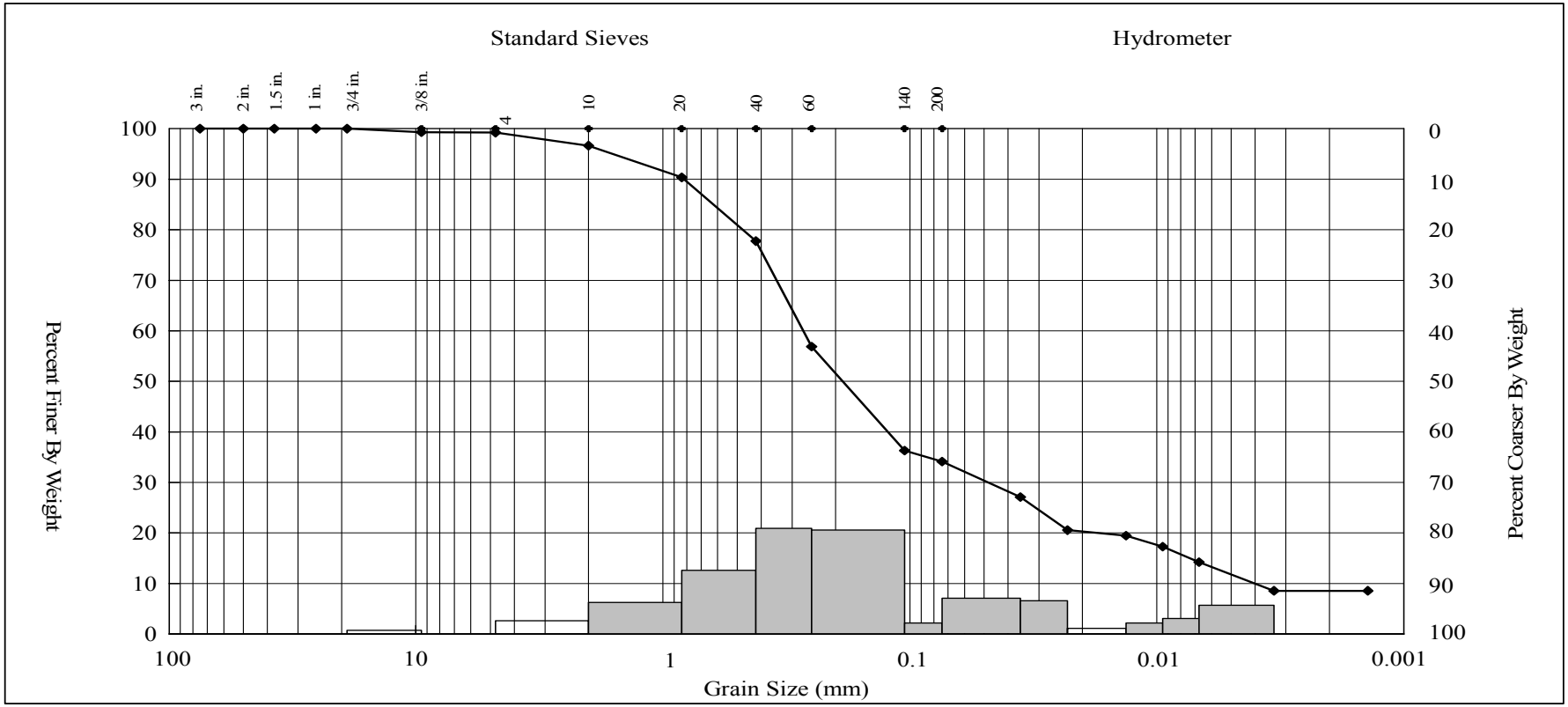
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.77	2.61	18.85	43.63	22.84	11.30

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
60										

Material Description

Silty Sand ("SM"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0M23-05-10
AMS Sample ID:	25976

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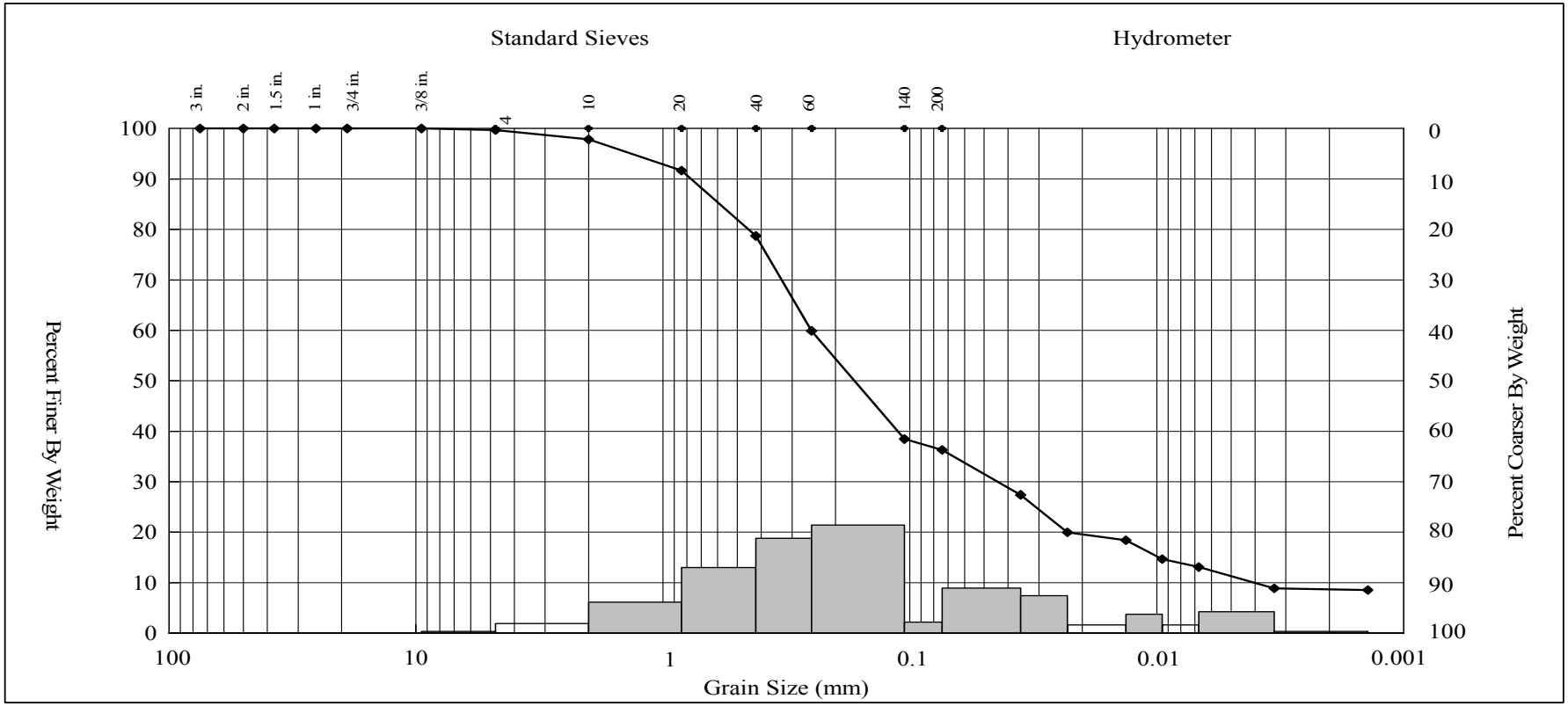
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.31	1.88	19.14	42.39	25.39	10.89

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
58										

Material Description

Silty Sand ("SM"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0M23-05-10-DUP
AMS Sample ID:	25977

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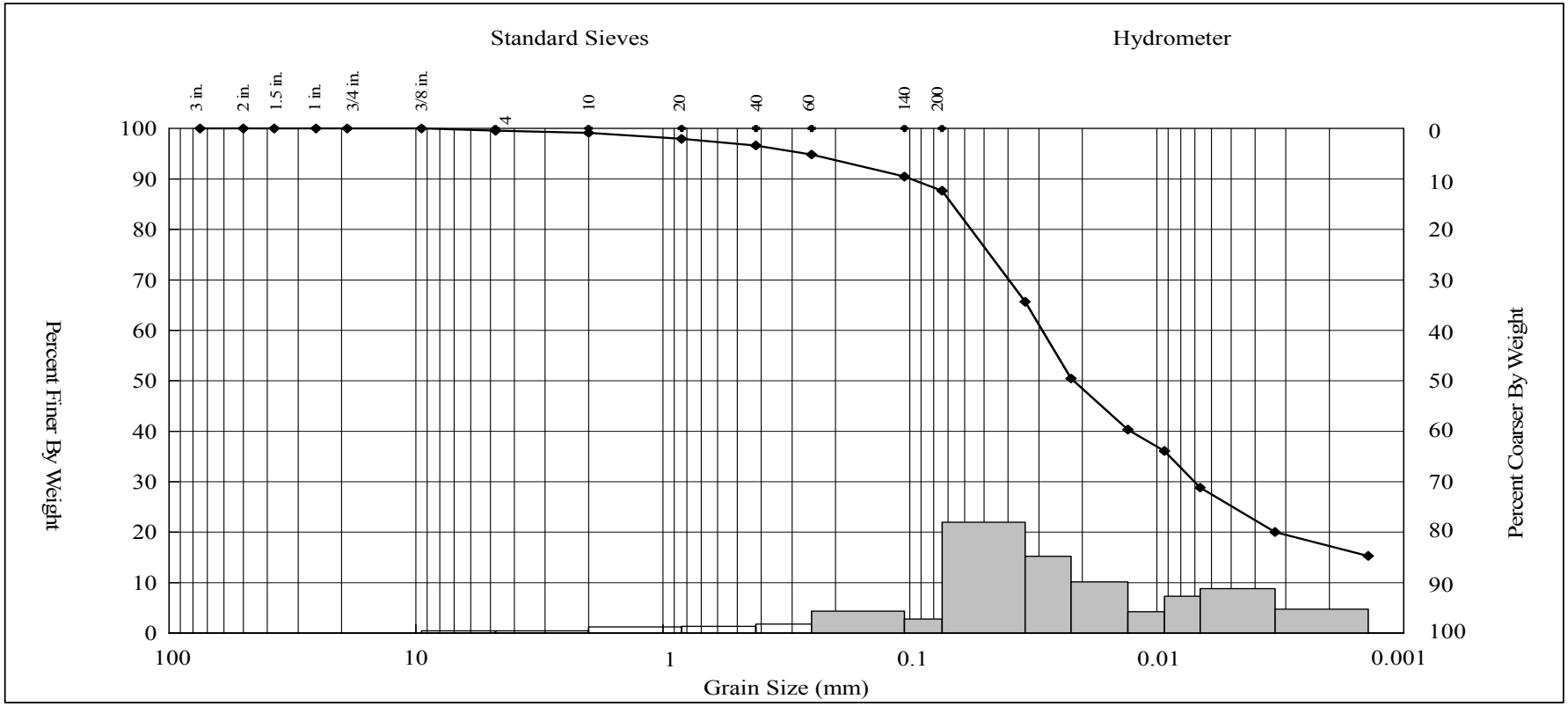
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.46	0.42	2.52	8.95	63.23	24.42

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
165										

Material Description

Elastic Silt ("MH"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0E33-00-05
AMS Sample ID:	25978

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281.554.7272 Tel.
281.554.6356 Fax

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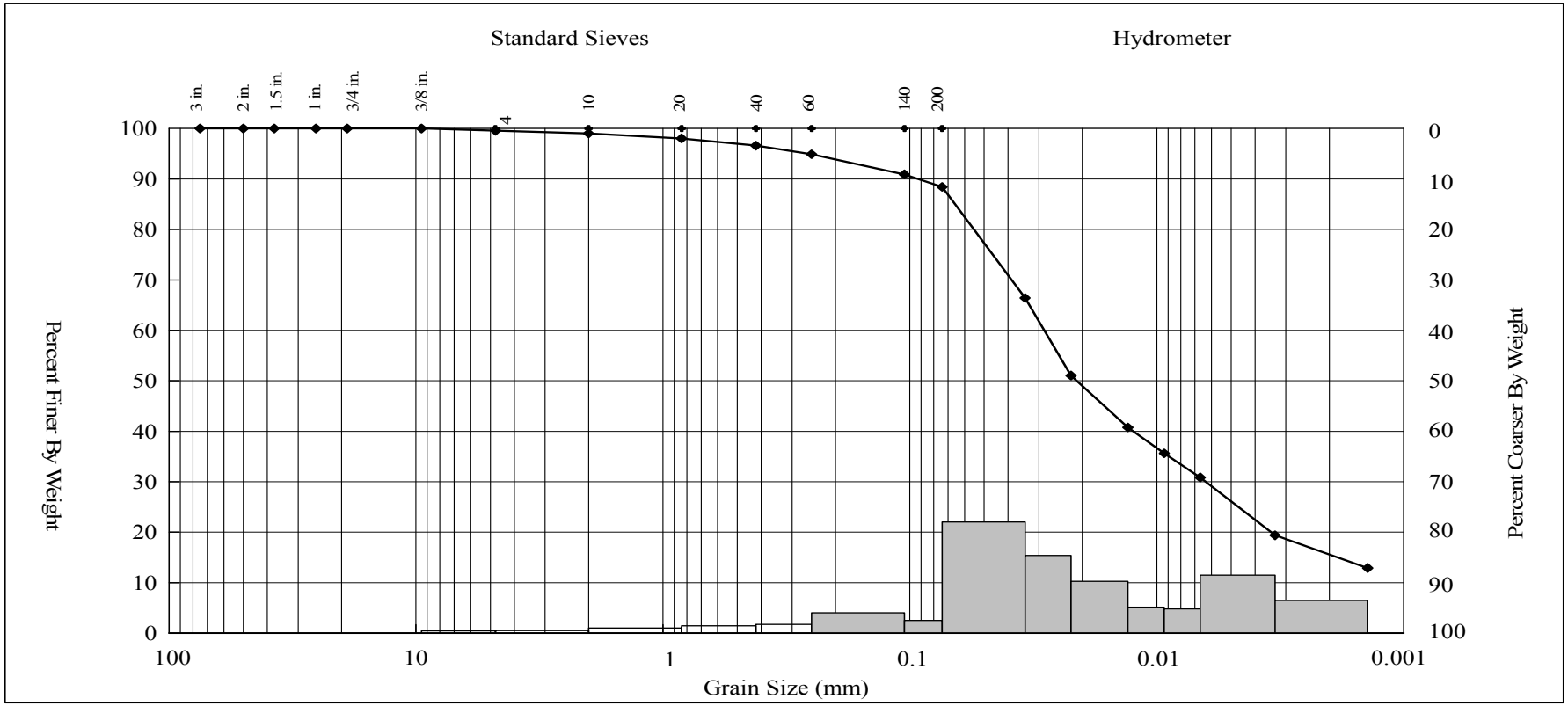
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.46	0.53	2.42	8.17	63.28	25.14

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
165										

Material Description

Elastic Silt ("MH"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/14/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0E33-00-05
AMS Sample ID:	25978-2

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Title:	New Bedford Harbor	Date Sampled:	11/3/2006
Project Number:	N/A	Date Analyzed:	12/14/2006
Client Sample ID:	S-06D-0E33-00-05	Matrix:	Sediment
AMS Sample ID:	25978	Method:	ASTM D 422
		Batch:	121406-01

Particle Diameter Range (mm)	U.S. Standard Sieve Mesh #	Size Class	Sample Result (%)	Duplicate Result (%)	RPD (%)	Data Qualifier	QC Limits (% RPD)
4.76	No. 4	Gravel	0.46	0.46	0.24		≤ 25
2.00	No. 10	Coarse Sand	0.42	0.53	21.58		≤ 25
0.425	No. 40	Medium Sand	2.52	2.42	3.81		≤ 25
0.074	No. 200	Fine Sand	8.95	8.17	9.19		≤ 25
<0.074 - 0.005	Hydrometer	Silt	63.23	63.28	0.09		≤ 25
<0.005	Hydrometer	Clay	24.42	25.14	2.91		≤ 25

Samples in Batch: 25965 25967 25969 25971 25973 25975 25977
25966 25968 25970 25972 25974 25976 25978

Qualifiers: Q - RPD value outside Quality Control Limits
I - Insufficient sample material to perform Quality Control Analyses

Soil Classification: Unified Soil Classification System (USCS) classifications are estimated in accordance with ASTM D 2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) unless the sample contains less than 5% fines (GW, GP, SW, and SP), or the Liquid Limit, Plastic Limit and Plasticity Index (Atterberg Limits) have been determined in accordance with ASTM D 4318. When these values have been determined the samples are definitively classified using ASTM D 2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).

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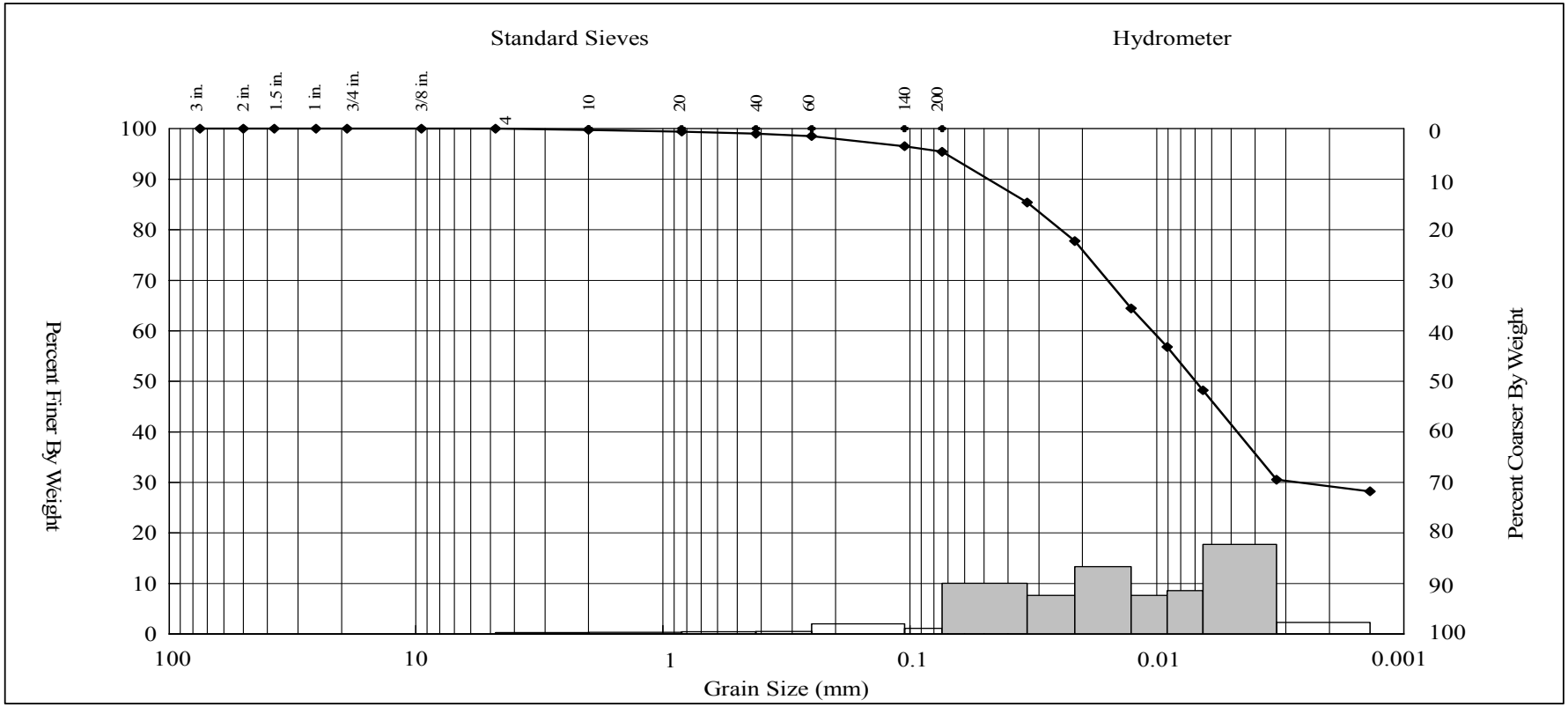

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.27	0.75	3.57	55.44	39.97

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
142										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/3/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0H24-22-27
AMS Sample ID:	23979

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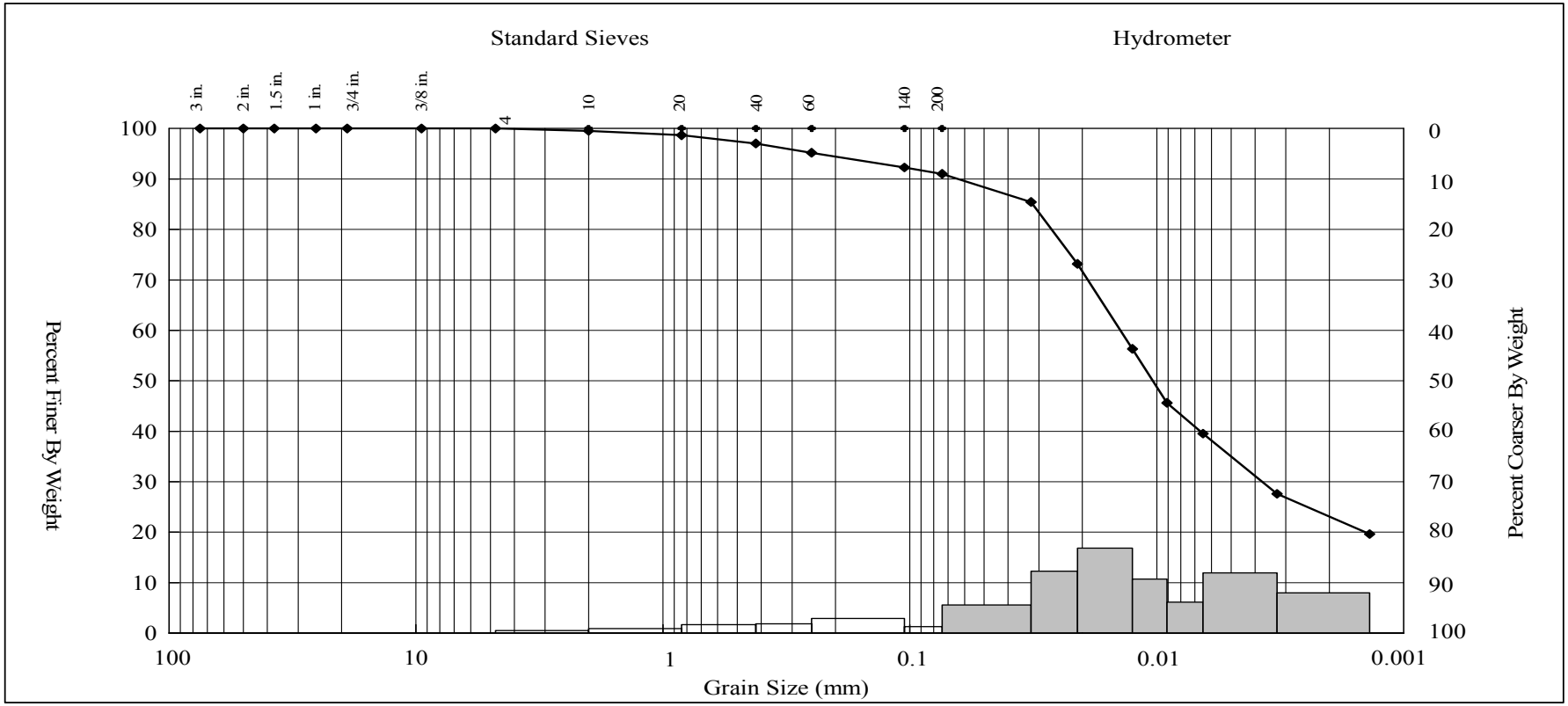
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.48	2.52	6.01	57.00	33.99

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
124										

Material Description

Elastic Silt ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0E30-00-05
AMS Sample ID:	23980

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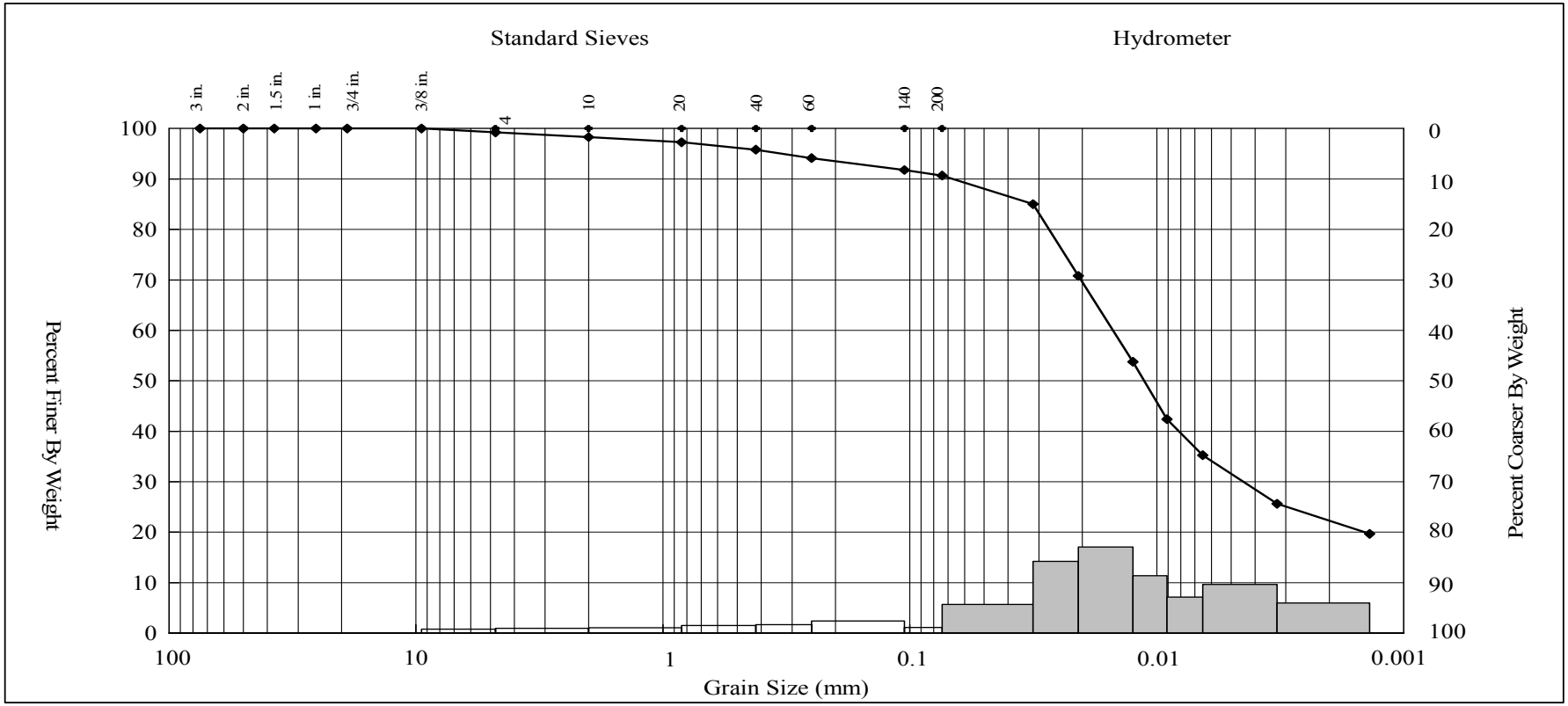
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.79	0.91	2.53	5.11	59.90	30.76

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
127										

Material Description

Elastic Silt ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S06D-0E32-00-05
AMS Sample ID:	23981

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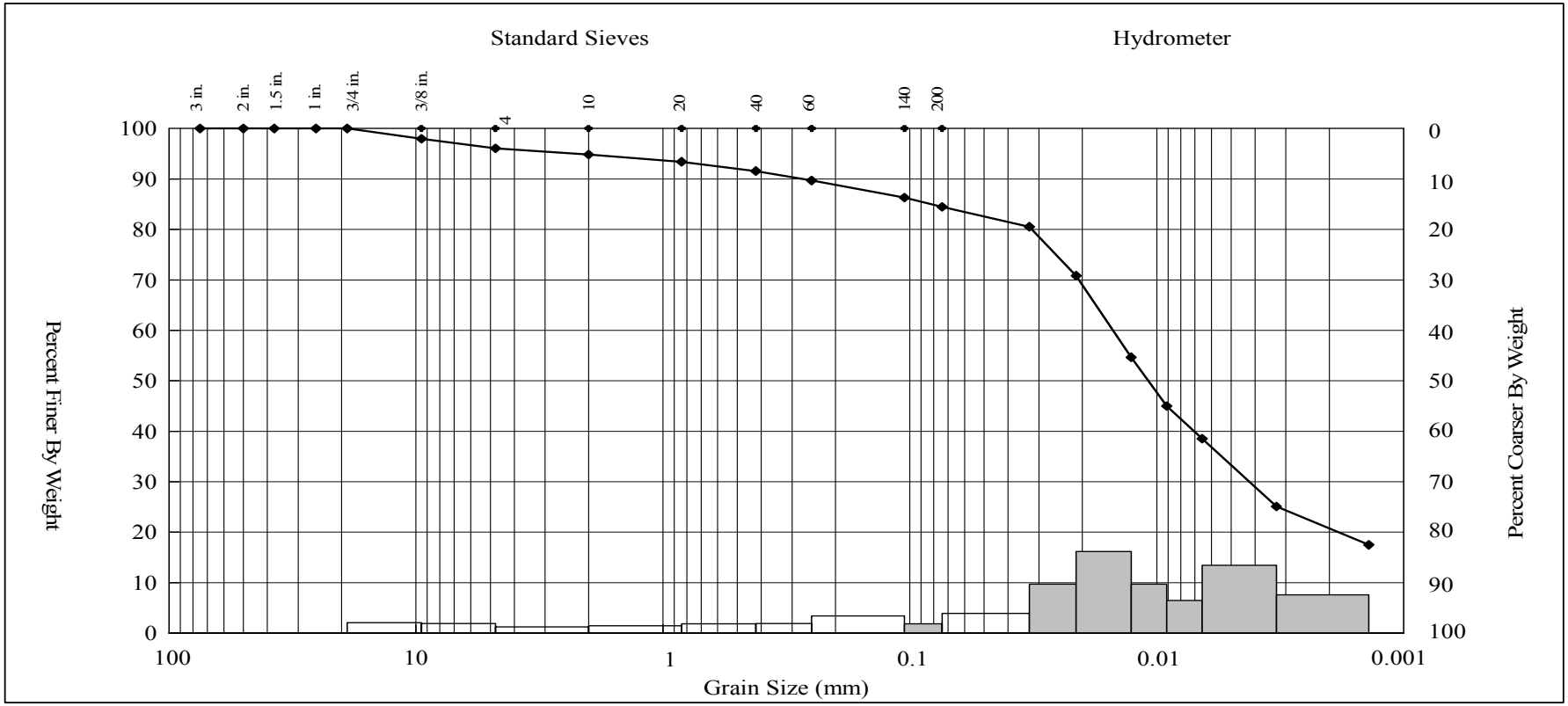
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.96	1.21	3.28	7.11	52.28	32.16

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
147										

Material Description

Elastic Silt with Sand ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0D36-00-05
AMS Sample ID:	23982

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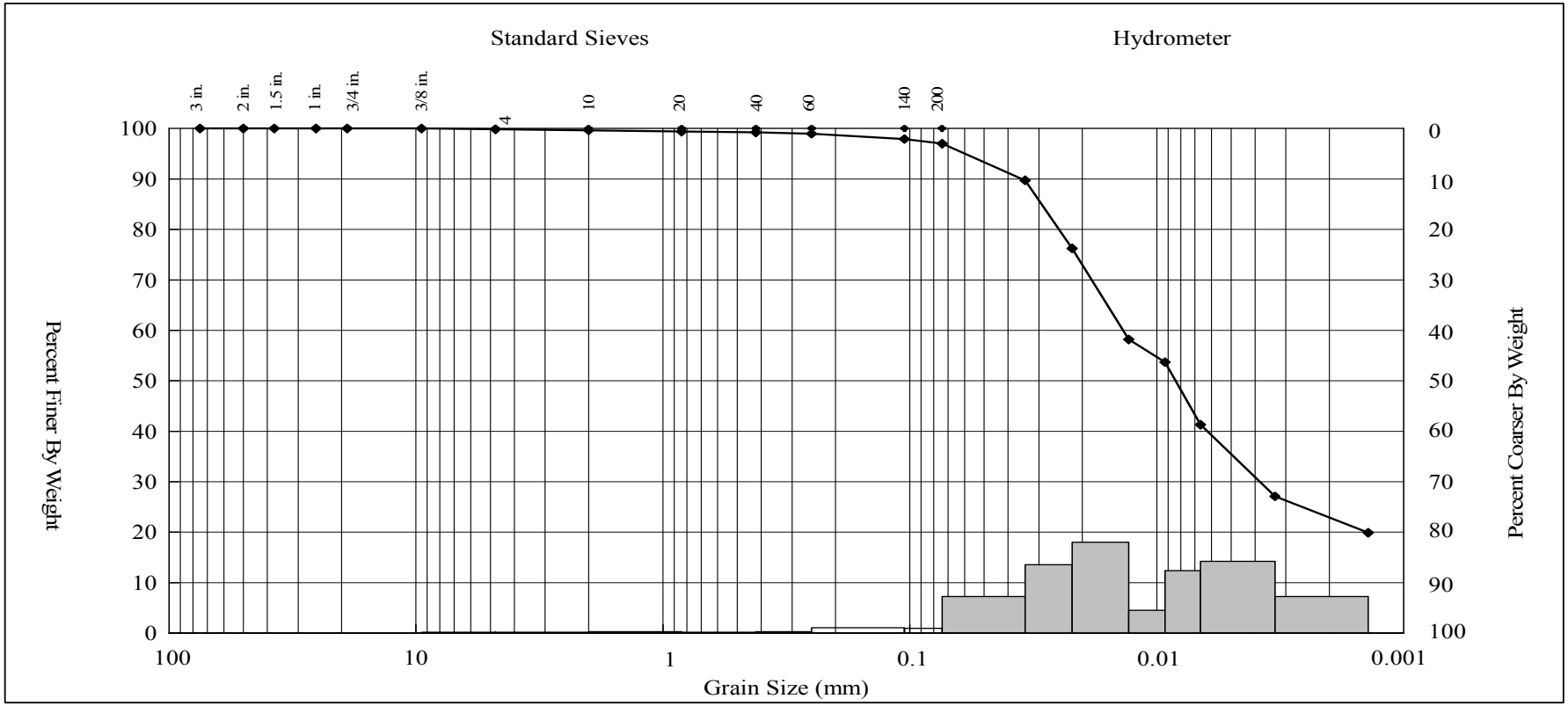
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.20	0.18	0.41	2.25	62.71	34.25

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
209										

Material Description

Elastic Silt ("MH"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0V28-02-07
AMS Sample ID:	23983

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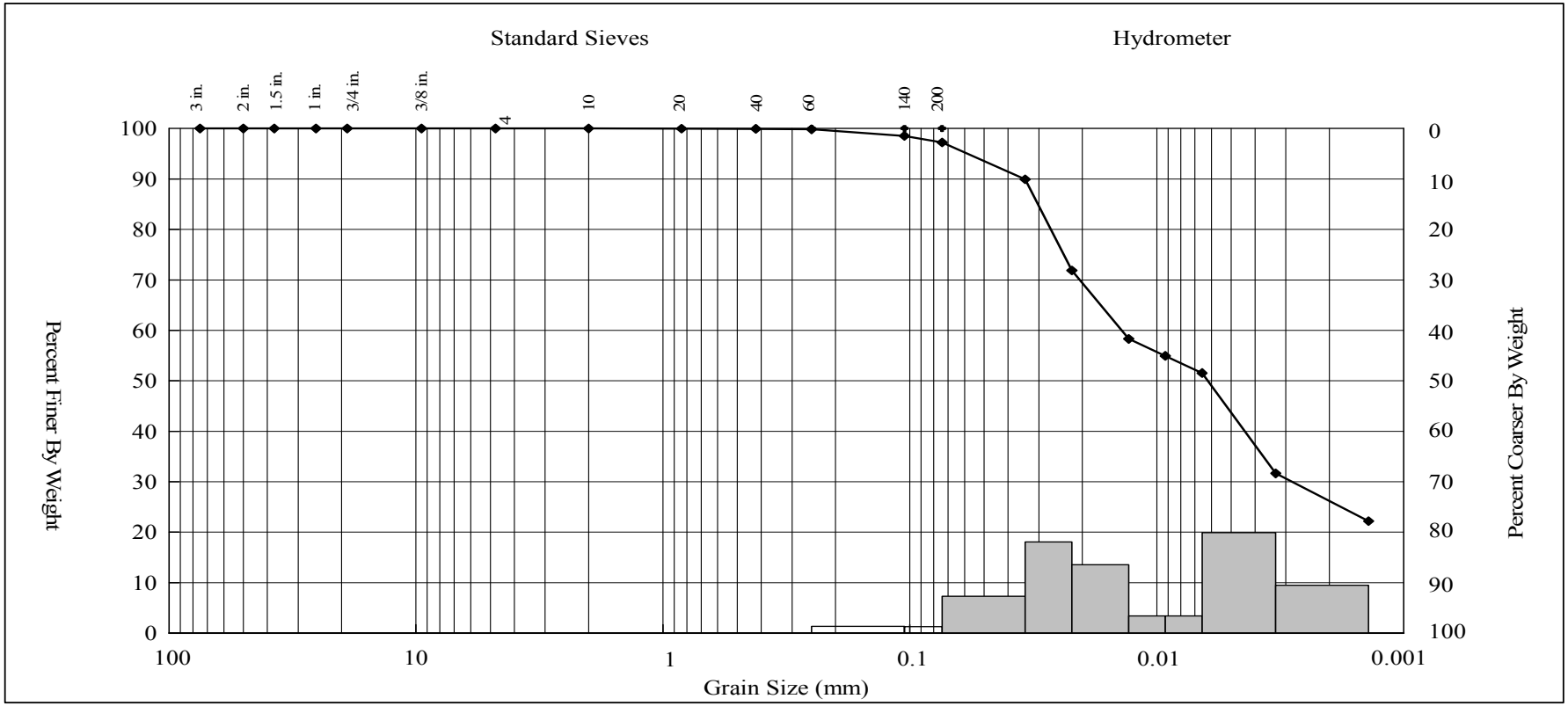

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.00	0.07	2.71	55.17	42.05

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
215										

Material Description

Elastic Silt ("MH"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N28-08-13
AMS Sample ID:	23984

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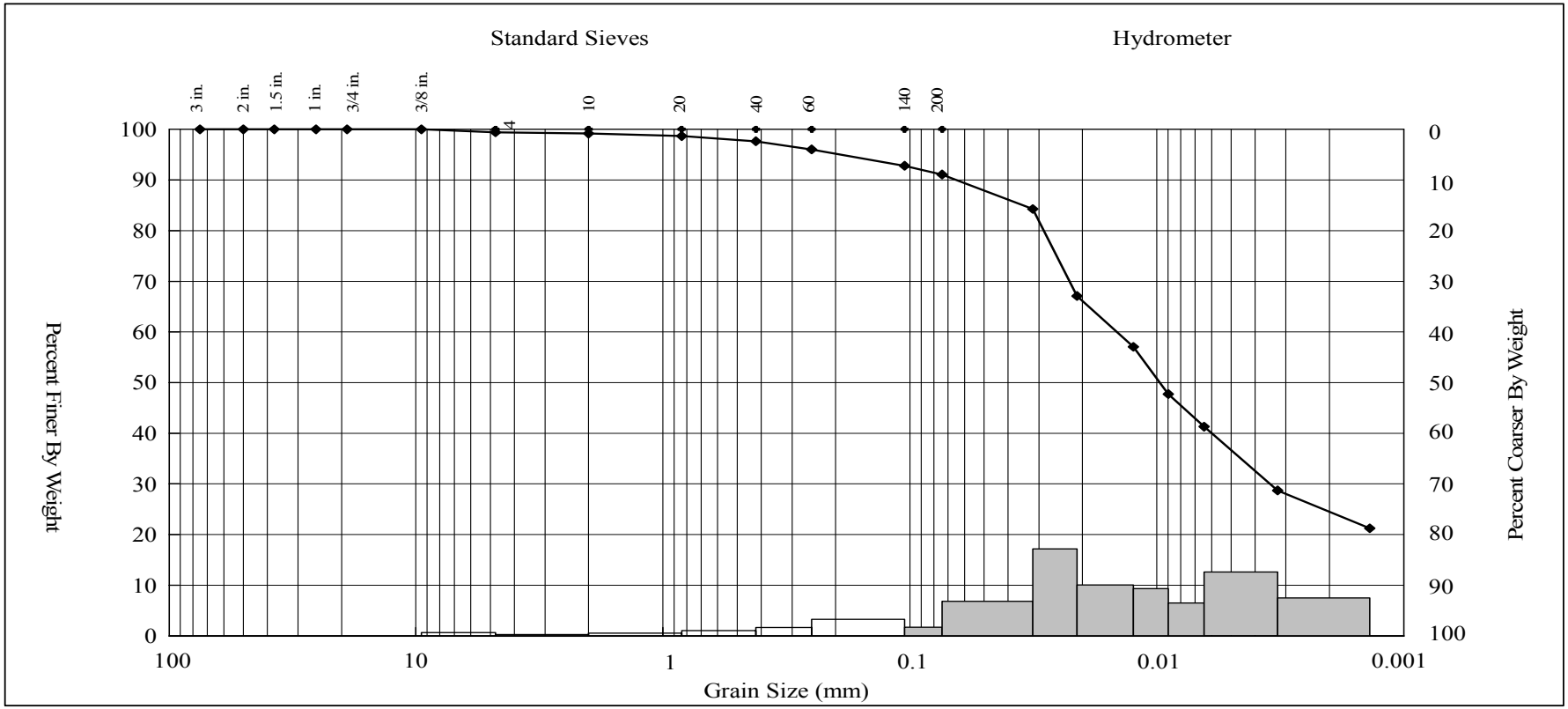
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.61	0.23	1.53	6.57	55.43	35.63

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
125										

Material Description

Elastic Silt ("MH"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0V39-00-05
AMS Sample ID:	23985

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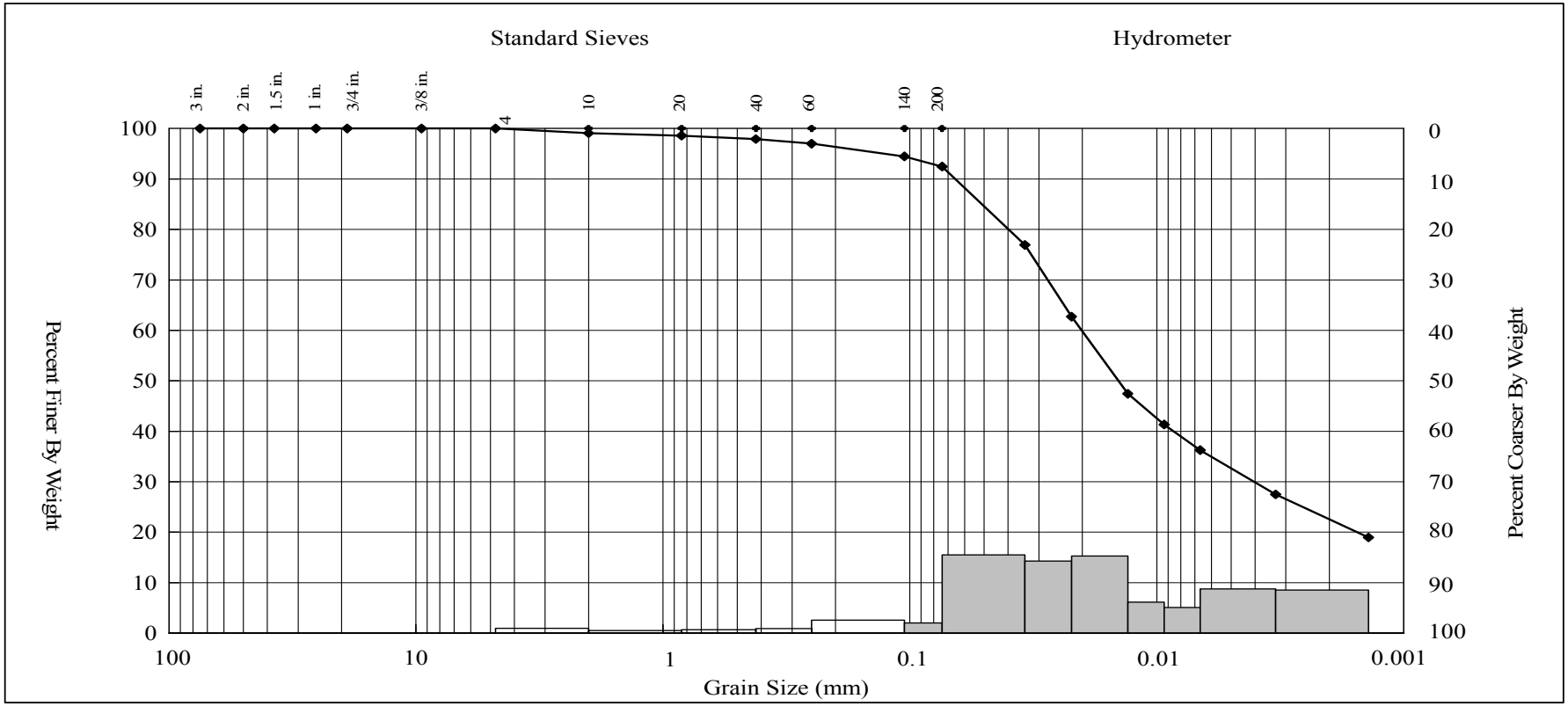

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.93	1.18	5.45	60.52	31.92

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
151										

Material Description

Elastic Silt ("MH"), black (N-1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0B32-00-05
AMS Sample ID:	23986

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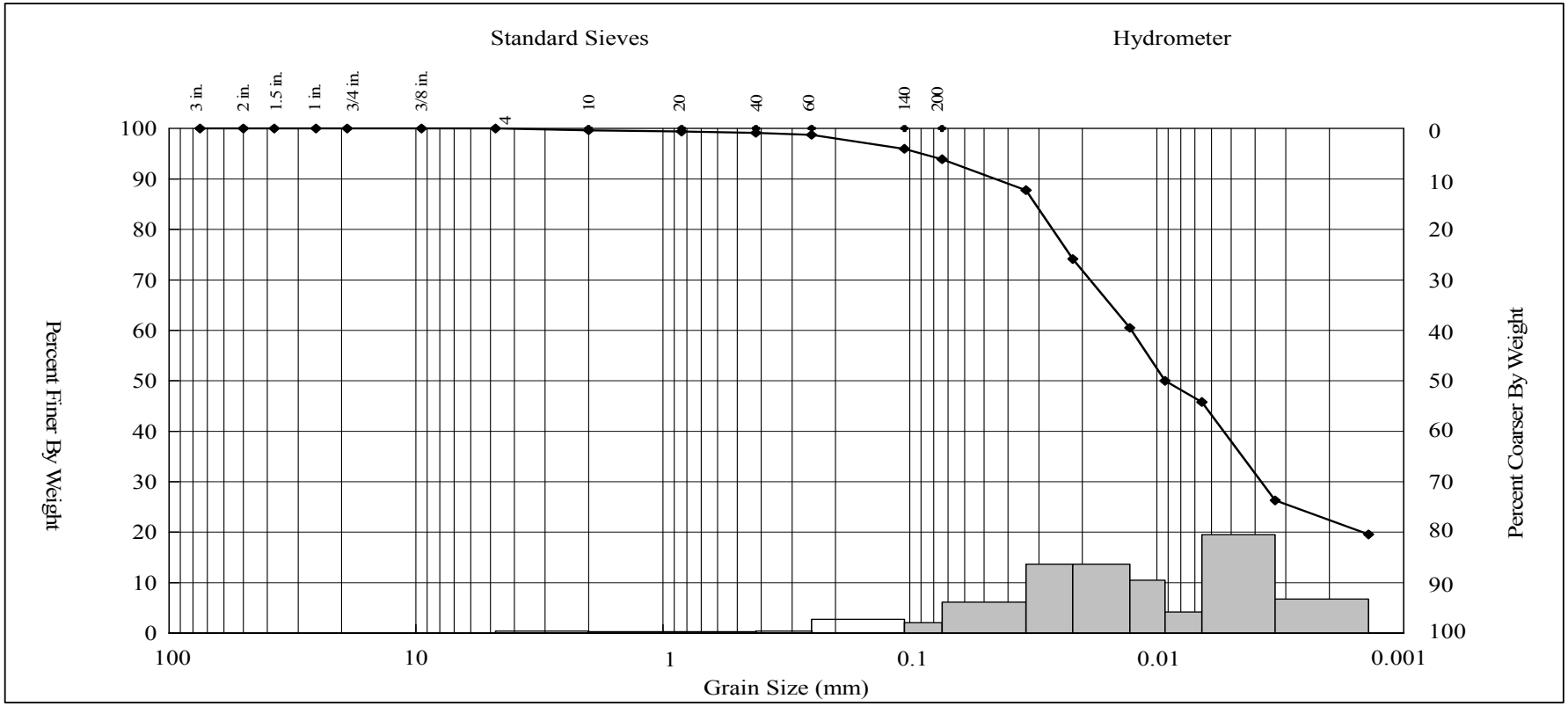

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.38	0.51	5.21	57.51	36.39

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
138										

Material Description

Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/7/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N40-07-12
AMS Sample ID:	23987

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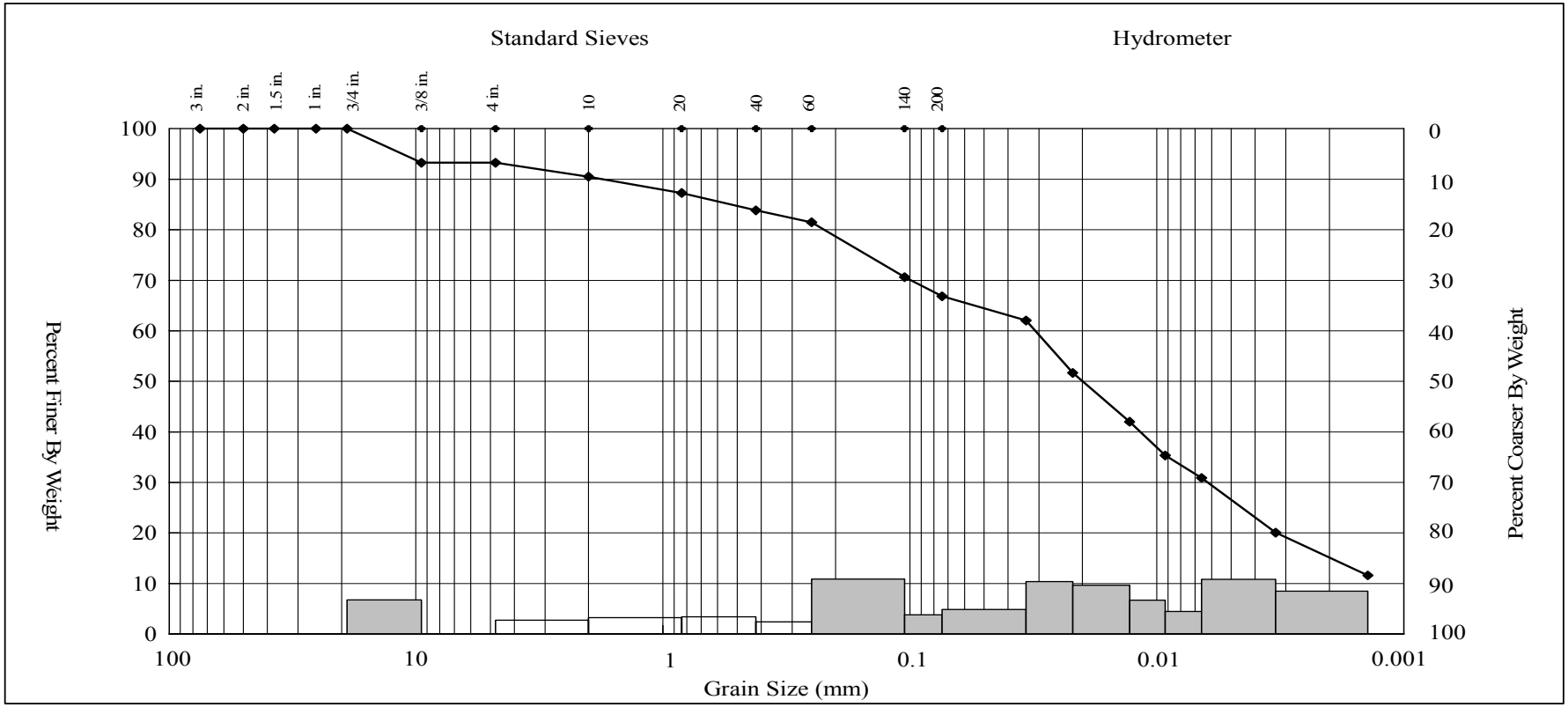
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
6.74	2.76	6.68	17.00	41.18	25.64

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
114										

Material Description

Sandy Elastic Silt ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0F53-14-19
AMS Sample ID:	23988

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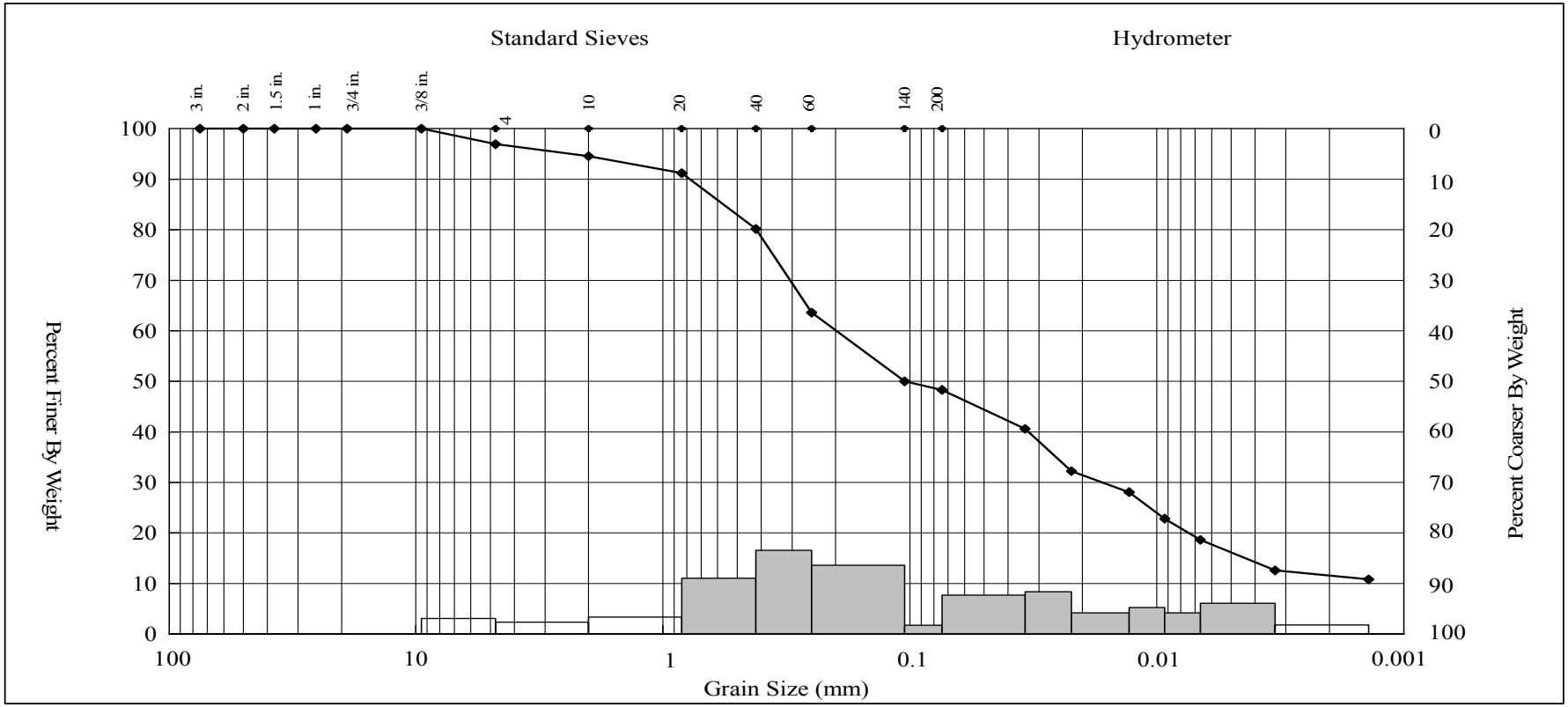

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
3.09	2.36	14.41	31.87	32.65	15.62

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
58										

Material Description

Silty Sand ("SM"), dark olive gray (5Y 3/2)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0K50-00-05
AMS Sample ID:	23989

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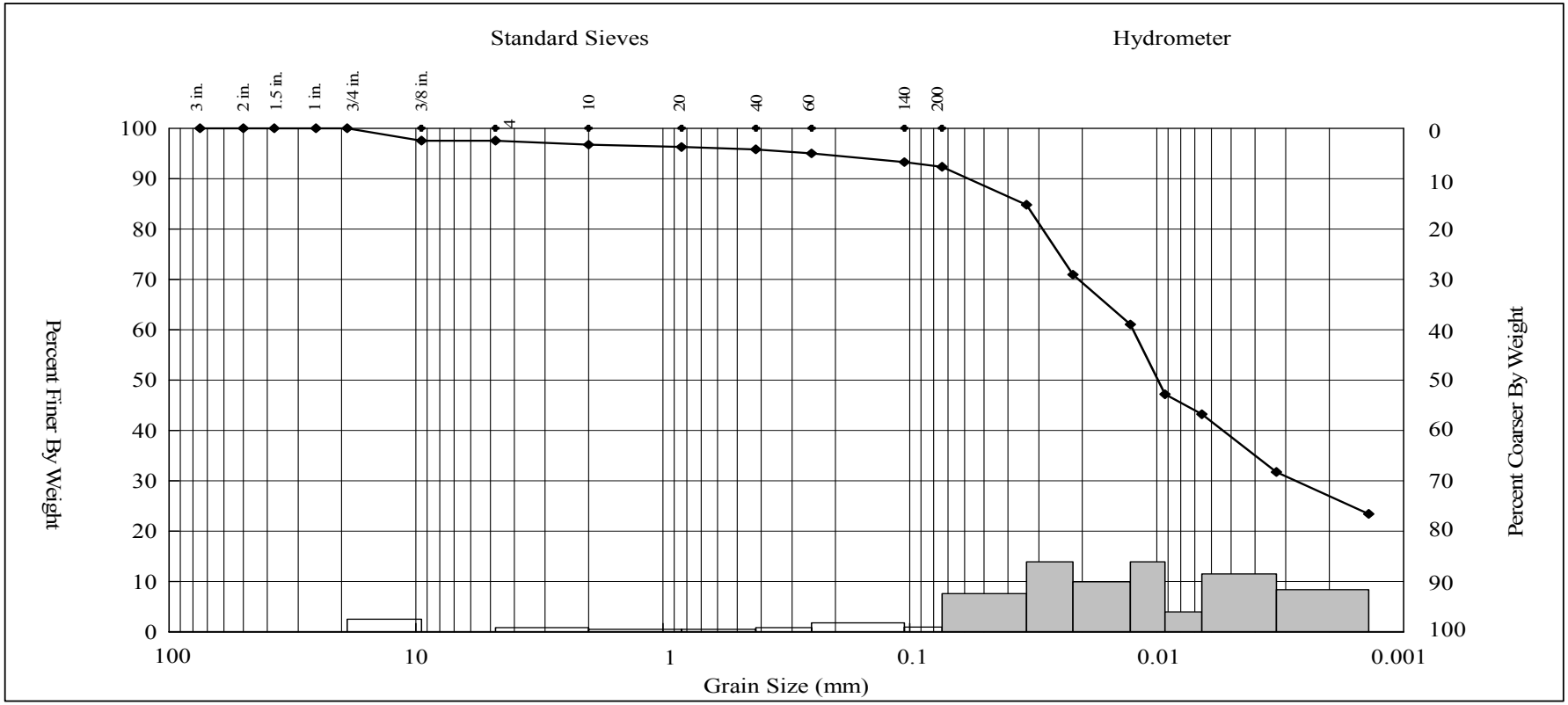

Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
2.48	0.79	0.94	3.46	54.59	37.74

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
177										

Material Description

Elastic Silt ("MH"), very dark gray (5Y 3/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0F58-00-05
AMS Sample ID:	23990

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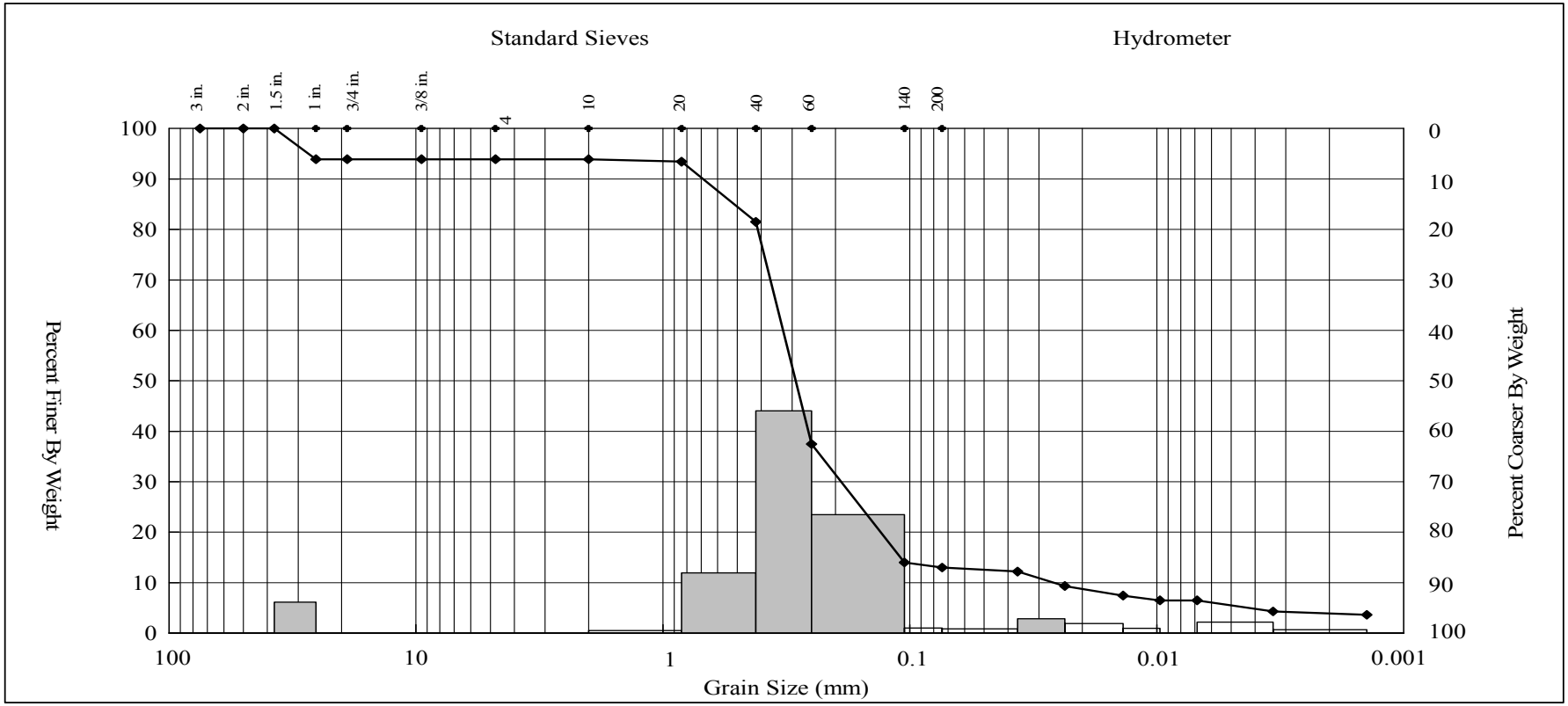
GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
6.11	0.00	12.40	68.50	7.69	5.30

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
40										

Material Description

Silty Sand ("SM"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0N58-00-05
AMS Sample ID:	23991

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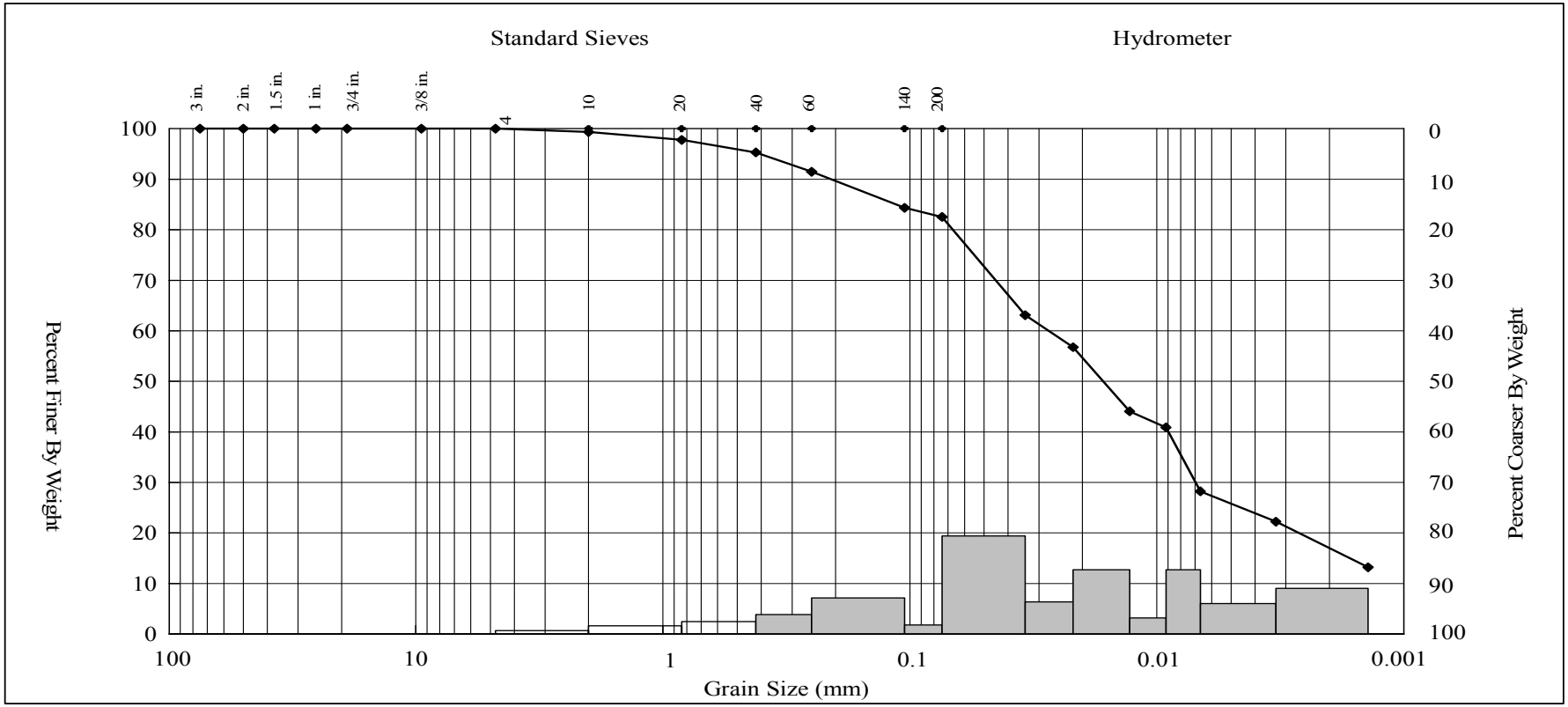
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.69	4.04	12.77	57.25	25.25

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
156										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Q44-00-05
AMS Sample ID:	23992

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502 N. Hwy 3, Suite B
League City, TX 77573
281.554.7272 Tel.
281.554.6356 Fax

These analyses were performed in accordance with ASTM standards, the 2006 DoD Quality Systems Manual (Version 3), and the 2003 NELAC Standard.

K.S. Davis, P.G.
AMS, Inc. Technical Director

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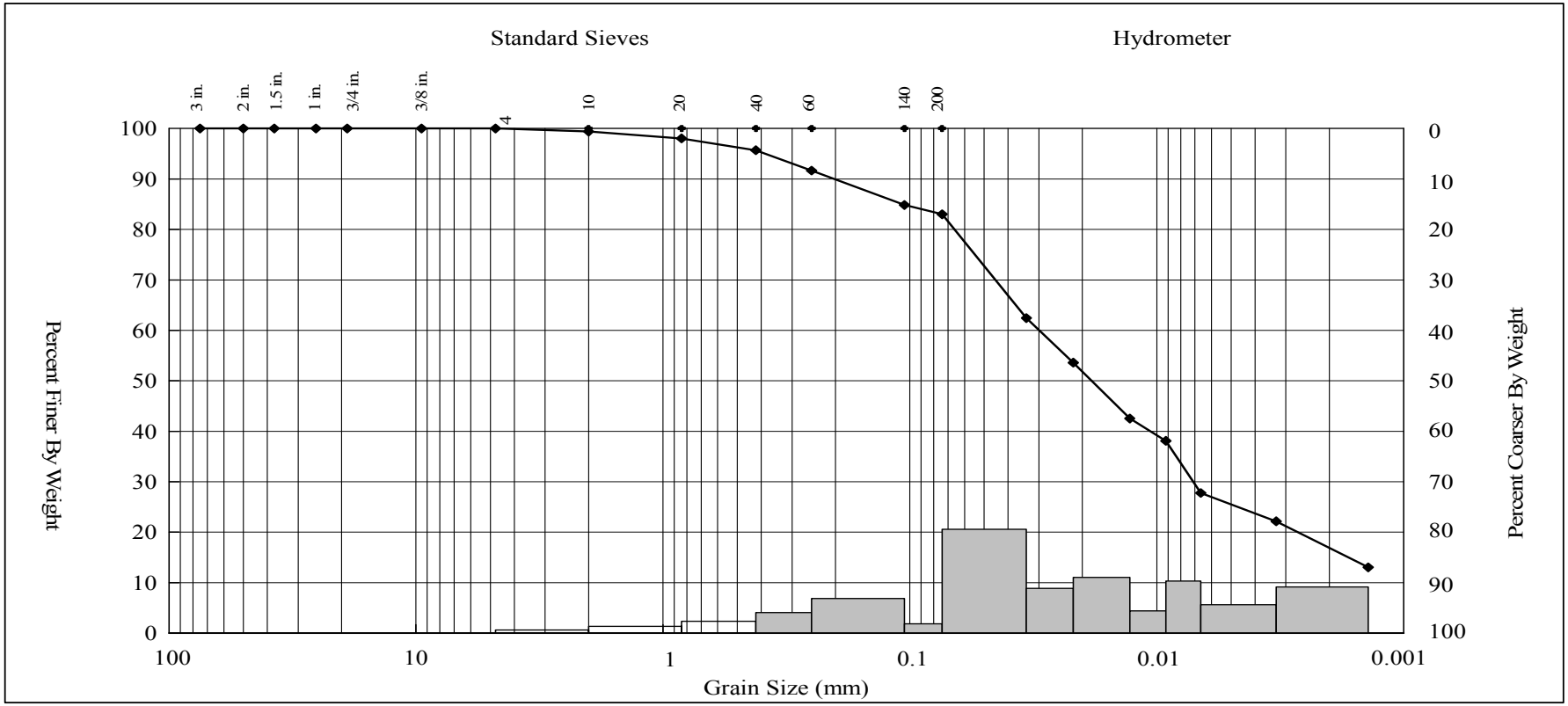
Laboratory No. E87956

GEOTECHNICAL RESULTS



Gravel (%)	Sand (%)			Fines (%)	
	Coarse	Medium	Fine	Silt	Clay
0.00	0.61	3.69	12.72	57.96	25.02

Water Cont. (%)	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
156										

Material Description

Elastic Silt with Sand ("MH"), black (5Y 2.5/1)

Client Project Title:	New Bedford Harbor
Client Project Number:	N/A
AMS Project Number:	2006-03-27
Date Sampled:	11/8/2006
Date Analyzed:	12/18/2006
Matrix:	Sediment
Method:	ASTM D 422
Client Sample ID:	S-06D-0Q44-00-05
AMS Sample ID:	25992-2

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Title:	New Bedford Harbor	Date Sampled:	11/8/2006
Project Number:	N/A	Date Analyzed:	12/18/2006
Client Sample ID:	S-06D-0Q44-00-05	Matrix:	Sediment
AMS Sample ID:	23992	Method:	ASTM D 422
		Batch:	121806-01

Particle Diameter Range (mm)	U.S. Standard Sieve Mesh #	Size Class	Sample Result (%)	Duplicate Result (%)	RPD (%)	Data Qualifier	QC Limits (% RPD)
4.76	No. 4	Gravel	0.00	0.00	--		≤ 25
2.00	No. 10	Coarse Sand	0.69	0.61	10.95		≤ 25
0.425	No. 40	Medium Sand	4.04	3.69	9.12		≤ 25
0.074	No. 200	Fine Sand	12.77	12.72	0.41		≤ 25
<0.074 - 0.005	Hydrometer	Silt	57.25	57.96	1.23		≤ 25
<0.005	Hydrometer	Clay	25.25	25.02	0.92		≤ 25

Samples in Batch: 23979 23981 23983 23985 23987 23989 23991
23980 23982 23984 23986 23988 23990 23992

Qualifiers: Q - RPD value outside Quality Control Limits
I - Insufficient sample material to perform Quality Control Analyses

Soil Classification: Unified Soil Classification System (USCS) classifications are estimated in accordance with ASTM D 2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) unless the sample contains less than 5% fines (GW, GP, SW, and SP), or the Liquid Limit, Plastic Limit and Plasticity Index (Atterberg Limits) have been determined in accordance with ASTM D 4318. When these values have been determined the samples are definitively classified using ASTM D 2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).

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Total Organic Carbon Results

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0Y08-00-06		
AMS Sample ID:	25937		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.50	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

* TOC sample not analyzed in quadruplicate
* TOC spike duplicate not analyzed every 10 samples

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0T15-00-05		
AMS Sample ID:	25938		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.25	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0M10-00-07		
AMS Sample ID:	25939		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.84	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0W18-00-06		
AMS Sample ID:	25940		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.71	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0L09-00-03		
AMS Sample ID:	25941		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.67	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0M03-03-08		
AMS Sample ID:	25942		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.15	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0P08-05-10		
AMS Sample ID:	25943		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.16	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/1/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0L12-00-03		
AMS Sample ID:	25944		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	9.88	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0Q21-00-06		
AMS Sample ID:	25945		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.24	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0O12-00-05		
AMS Sample ID:	25946		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.61	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0J17-00-05		
AMS Sample ID:	25947		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.13	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0U22-02-07		
AMS Sample ID:	25948		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.17	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-BB19-00-06		
AMS Sample ID:	25949		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	0.77	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0R11-10-15		
AMS Sample ID:	25950		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.14	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0Z13-00-02		
AMS Sample ID:	25951		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.51	%		0.01	0.03	EPA 9060A	Sediment	12/11/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0L20-07-12		
AMS Sample ID:	25952		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	7.45	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0L20-07-12-DUP		
AMS Sample ID:	25953		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.60	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N14-00-05		
AMS Sample ID:	25954		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.29	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N08-00-17		
AMS Sample ID:	25955		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.38	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N08-00-17-DUP		
AMS Sample ID:	25956		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.78	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N06-00-05		
AMS Sample ID:	25957		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.39	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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Laboratory No. E87956

Applied Marine Sciences, Inc.

502 N. Hwy 3, Suite B, League City, TX 77573, (281) 554-7272 Fax (281) 554-6356

ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0R03-00-13		
AMS Sample ID:	25958		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.53	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

* TOC sample not analyzed in quadruplicate
* TOC spike duplicate not analyzed every 10 samples

KS Davis, P.G.

AMS, Inc. Technical Director

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0U06-05-14		
AMS Sample ID:	25959		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	6.86	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0L05-00-06		
AMS Sample ID:	25960		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.18	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0W03-00-05		
AMS Sample ID:	25961		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	8.16	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	10/31/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-AA03-00-05		
AMS Sample ID:	25962		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.98	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0F36-00-05		
AMS Sample ID:	25963		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.99	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0F38-00-05		
AMS Sample ID:	25964		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	6.97	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H41-00-05		
AMS Sample ID:	25965		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	6.35	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H32-00-05		
AMS Sample ID:	25966		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.18	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0G25-00-05		
AMS Sample ID:	25967		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.81	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H36-00-05		
AMS Sample ID:	25968		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	7.92	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/2/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0Z22-00-06		
AMS Sample ID:	25969		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.58	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H29-00-05		
AMS Sample ID:	25970		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.37	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0E27-00-05		
AMS Sample ID:	25971		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	7.14	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H27-00-05		
AMS Sample ID:	25972		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.97	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0C29-05-10		
AMS Sample ID:	25973		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	7.77	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0C41-04-09		
AMS Sample ID:	25974		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.60	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0C41-04-09-DUP		
AMS Sample ID:	25975		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.06	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0M23-05-10		
AMS Sample ID:	25976		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.27	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0M23-05-10-DUP		
AMS Sample ID:	25977		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	5.00	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0E33-00-05		
AMS Sample ID:	25978		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	11.44	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/3/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0H24-22-27		
AMS Sample ID:	25979		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	11.88	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0E30-00-05		
AMS Sample ID:	25980		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.53	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0E32-00-05		
AMS Sample ID:	25981		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.80	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0D36-00-05		
AMS Sample ID:	25982		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	4.23	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0V28-02-07		
AMS Sample ID:	25983		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	7.12	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N28-08-13		
AMS Sample ID:	25984		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	9.05	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

* TOC sample not analyzed in quadruplicate
* TOC spike duplicate not analyzed every 10 samples

KS Davis, P.G.

AMS, Inc. Technical Director

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Laboratory No. E87956

Applied Marine Sciences, Inc.

502 N. Hwy 3, Suite B, League City, TX 77573, (281) 554-7272 Fax (281) 554-6356

ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0V39-00-05		
AMS Sample ID:	25985		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	3.75	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0B32-00-05		
AMS Sample ID:	25986		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	18.33	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/7/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N40-07-12		
AMS Sample ID:	25987		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	8.37	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/8/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0F53-14-19		
AMS Sample ID:	25988		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	9.18	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/8/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0K50-00-05		
AMS Sample ID:	25989		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	1.66	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/8/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0F58-00-05		
AMS Sample ID:	25990		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	6.88	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/8/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0N58-00-05		
AMS Sample ID:	25991		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	0.93	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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ANALYTICAL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Sampled:	11/8/2006
Project Name:	New Bedford Harbor	Date Received:	12/1/2006
Client Sample ID:	S-06D-0Q44-00-05		
AMS Sample ID:	25992		

Parameter	Result	Unit	Data Qualifier	LOD	LOQ	Method	Matrix	Date Analyzed
Total Organic Carbon	9.26	%		0.01	0.03	EPA 9060A	Sediment	12/12/2006

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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* TOC spike duplicate not analyzed every 10 samples

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Analyzed:	12/11/2006
Project Name:	New Bedford Harbor	Batch ID:	121106-03
Matrix:	Sediment		
Method:	EPA 9060A		

Method Blank (Batch Continuing Blank (CB)), Continuing Calibration Verification (CCV) and Independent Continuing Calibration Verification (ICCV) Results:

AMS Sample ID	Parameter	Result (%)	CCV Conc. (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits (%)
CB-03	TOC	0.01	0.01	--	**U**	0.01	0.03	≤ 0.03
CCV-03	TOC	4.82	4.80	0.42		0.01	0.03	≤ 5 RPD
ICCV-03	TOC	2.07	2.00	3.44		0.01	0.03	≤ 5 RPD

Sample Duplicate Results:

AMS Sample ID	Parameter	Result (%)	Duplicate Result (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits
25951	TOC	4.51	4.73	4.76		0.01	0.03	≤ 25 RPD

Samples in Batch (AMS ID):

25937	25940	25943	25946	25949
25938	25941	25944	25947	25950
25939	25942	25945	25948	25951

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

* TOC samples not analyzed in quadruplicate
* TOC spike duplicate not analyzed every 10 samples

Project-specific Quality Assurance requirements supersede those provided by the above quality systems and documents. Measurements of uncertainty are available upon request.

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Analyzed:	12/12/2006
Project Name:	New Bedford Harbor	Batch ID:	121206-01
Matrix:	Sediment		
Method:	EPA 9060A		

Method Blank (Batch Continuing Blank (CB)), Continuing Calibration Verification (CCV) and Independent Continuing Calibration Verification (ICCV) Results:

AMS Sample ID	Parameter	Result (%)	CCV Conc. (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits (%)
CB-01	TOC	0.01	0.01	--	**U**	0.01	0.03	≤ 0.03
CCV-01	TOC	4.97	4.80	3.48		0.01	0.03	≤ 5 RPD
ICCV-01	TOC	2.09	2.00	4.40		0.01	0.03	≤ 5 RPD

Sample Duplicate Results:

AMS Sample ID	Parameter	Result (%)	Duplicate Result (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits
25966	TOC	3.18	3.13	1.58		0.01	0.03	≤ 25 RPD

Samples in Batch (AMS ID):

25952	25955	25958	25961	25964
25953	25956	25959	25962	25965
25954	25957	25960	25963	25966

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Analyzed:	12/12/2006
Project Name:	New Bedford Harbor	Batch ID:	121206-02
Matrix:	Sediment		
Method:	EPA 9060A		

Method Blank (Batch Continuing Blank (CB)), Continuing Calibration Verification (CCV) and Independent Continuing Calibration Verification (ICCV) Results:

AMS Sample ID	Parameter	Result (%)	CCV Conc. (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits (%)
CB-02	TOC	0.01	0.01	--	**U**	0.01	0.03	≤ 0.03
CCV-02	TOC	4.77	4.80	0.63		0.01	0.03	≤ 5 RPD
ICCV-02	TOC	2.09	2.00	4.40		0.01	0.03	≤ 5 RPD

Sample Duplicate Results:

AMS Sample ID	Parameter	Result (%)	Duplicate Result (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits
25981	TOC	4.80	4.75	1.05		0.01	0.03	≤ 25 RPD

Samples in Batch (AMS ID):

25967	25970	25973	25976	25979
25968	25971	25974	25977	25980
25969	25972	25975	25978	25981

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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* TOC spike duplicate not analyzed every 10 samples

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Date Analyzed:	12/12/2006
Project Name:	New Bedford Harbor	Batch ID:	121206-03
Matrix:	Sediment		
Method:	EPA 9060A		

Method Blank (Batch Continuing Blank (CB)), Continuing Calibration Verification (CCV) and Independent Continuing Calibration Verification (ICCV) Results:

AMS Sample ID	Parameter	Result (%)	CCV Conc. (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits (%)
CB-03	TOC	0.01	0.01	--	**U**	0.01	0.03	≤ 0.03
CCV-03	TOC	4.95	4.80	3.08		0.01	0.03	≤ 5 RPD
ICCV-03	TOC	2.07	2.00	3.44		0.01	0.03	≤ 5 RPD

Sample Duplicate Results:

AMS Sample ID	Parameter	Result (%)	Duplicate Result (%)	Relative % Difference (%)	Data Qualifier	LOD (%)	LOQ (%)	QC Limits
25992	TOC	9.26	8.62	7.16		0.01	0.03	≤ 25 RPD

Samples in Batch (AMS ID):

25982	25985	25988	25991
25983	25986	25989	25992
25984	25987	25990	

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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QUALITY CONTROL RESULTS

Client:	Battelle	AMS Project Number:	2006-03-27
Project Number:	N/A	Dates Analyzed:	12/11/2006
Project Name:	New Bedford Harbor		12/12/2006
Matrix:	Sediment		
Method:	EPA 9060A		

Data Qualifiers:

- U — Undetected at the Limit of Detection (LOD): The associated value is the Limit of Detection, adjusted by any dilution factor used in the analysis.
- J — The analyte was positively identified, but was below the Limit of Quantitation (LOQ). The quantitation is an estimate.
- B — Blank contamination: The analyte was detected above one-half the LOD in an associated blank.
- Q — One or more Quality Control criteria failed. Data usability should be carefully assessed by the Project Team.
- I — Insufficient sample was provided to perform required Quality Control analyses and/or to meet method-specific sample volume recommendations.

Definitions:

- LOD — The Limit of Detection (LOD) is determined by quantitative establishment of the Method Detection Limit (MDL), as defined in 40 CFR 136(b).
- LOQ — The Limit of Quantitation (LOQ) is the minimum level, concentration or quantity of a target variable (target analyte) that can be quantitatively reported with a specified level of confidence. As defined in DoD QSM §D.1.2.2, the LOQ value must be a minimum of 3 times the LOD, although the specified level of confidence may have a lower quantitative value.

Quality Assurance: These analyses were performed in accordance with EPA guidelines, the 2006 DoD Quality Systems Manual for Environmental Laboratories (Version 3) and the 2003 NELAC Standard, with the following exceptions:

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