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Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

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Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

Memorandum

From: Paul Craffey, BWSC

To: File

Subject: TSCA Determination and PCB Concentrations greater than 50 ppm in the Navigational CAD Cells

Date: May 25, 2012

As part of the state enhanced remedy for the New Bedford Harbor site, confined aquatic disposal (CAD) cells were to be constructed for the management of sediments that would be removed during the navigational dredging. In consideration that the dredged sediments potentially could contain PCB concentrations greater than or equal to (≥) 50 parts per million (ppm), it was concluded that a federal TSCA determination under 40 CFR Part 761 would be required for disposal of the dredged sediments into the CAD cells.

To date, two TSCA Determinations have been issued by EPA, dated January 12, 2005 and November 12, 2008 (see attached). The January 12, 2005 determination includes the filling of the Borrow Pit CAD cell and the construction and filling of CAD Cell #1, and various navigational dredging projects. The November 12, 2008 determination includes the construction and filling of CAD cell #2, and various navigational dredging projects.

The EPA TSCA determinations concluded that disposal of PCB contaminated sediments in the specified CAD cells would not pose an unreasonable risk to human health or the environment provided that certain conditions were met, which included but were not limited to, compliance with construction performance standards, and water quality and turbidity performance standards. Monitoring was performed during the navigational dredging and demonstrated compliance with performance standards, see summaries of monitoring results attached.

The following tables provide a summary of the PCB data associated with the Borrow Pit CAD cell and CAD cells #1 and #2.

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TDD# 1-866-539-7622 or 1-617-574-6868
MassDEP Website: www.mass.gov/dep
Printed on Recycled Paper

SDMS DocID 517914

PCB Concentration Ranges in Borrow Pit CAD Cell and Dredge Locations

Dredge Location	Est. Final Volume Dredged (cubic yards)	PCB Pre-Dredge Conc. Average [1,2] (ppm)	PCB Pre-Dredge Conc. Range (ppm)	Total Number of Samples / PCB Concentrations in Samples ≥ 50 ppm	Post-Dredge Conc.[3,4] (ppm)
Fish Island North	12,501	39	0.5 - 77	7 / 77, 71, 59, & 74 ppm	3
Top of CAD Cell #1	19,731	14	2 - 52	6 / 52 ppm	0
Total in Cell	32,232	22 (Avg. in Cell)	0.5 - 77	13	

PCB Concentration Ranges in CAD Cell #1 and Dredge Locations

Dredge Location	Est. Final Volume Dredged (cubic yards)	PCB Pre-Dredge Conc. Average [1,2] (ppm)	PCB Pre-Dredge Conc. Range (ppm)	Total Number of Samples / PCB Concentrations in Samples ≥ 50 ppm	Post-Dredge Conc.,[3,4] (ppm)
White Terminal	11,604	23	0.5 - 46	2	2
Marine Terminal	1,784	34	0.5 - 68	8 / 68 ppm	3
Federal Channel South of Route 6	5,430	41	0.5 - 81	10 / 54, 61, 70, 75, 81 ppm	2
Pease Park	5,038	1	0.2 - 3	2	1
Linberg Marine	4,297	1	0.6 - 2	2	1
Niemiec Marine	821	23	23	1	0.4
Kelly & Son	10,436	2	0.7 - 3	2	1
Warren Alexander	401	5	5	1	1
Top of CAD #2	34,210	26	26	1	0
Total in Cell #1	74,021	19 (Avg. in Cell)	0.2 - 81	29	

[1] Concentration averages were determined by averaging total number of samples at each location.

[2] Sediment PCB concentrations were obtained from EPA 2002 and Apex 2010 pre-dredge sampling data.

[3] Post-dredge conc. was not required. One sample was typically collected at each dredged location.

[4] The Top of CAD Cell post dredge conc. was determined from Suitability Determination sampling.

PCB Concentration Ranges in CAD Cell #2 and Dredge Locations

Dredge Location	Est. Final Volume Dredged (cubic yards)	PCB Pre-Dredge Conc. Average [1,2] (ppm)	PCB Pre-Dredge Conc. Range (ppm)	Total Number of Samples / PCB Concentrations in Samples ≥ 50 ppm	Post-Dredge Conc.[3] (ppm)
South Terminal	2,691	8	8	1	2
Union Warf	1,109	11	5 - 17	2	5
Tonnessen Park	1,266	22	22	1	0.03
Gifford St. Boat Ramp	10,880	7	7	1	2
Olde North Wharf	1,295	9	4 - 13	3	2
Warren Alexander	2,142	13	0.2 - 18	5	3
Olde North Wharf	108	5	4 - 13	3	2
Niemiec Marine	2,312	1	1	1	N/S
Fairhaven Shipyard	344	Not Sampled (N/S)	Not Sampled	Not Sampled	N/S
Linberg Marine	1,773	Not Sampled	Not Sampled	Not Sampled	N/S
Packer Marine	2,288	59	57 - 61	2 57 & 61 ppm	0.1
Sawyer St Rowing[2]	4,190	Estimated 27 (see Note)[2]	(see Note)[2]	(see Note)[2]	12
Steamship Authority	5,686	13	7 - 18	2	3
Steamship Authority	16,695	0.2	0.21 – 0.23	2	0.2
Total in Cell #2	52,779	8 (Avg. in Cell)	0.2 - 61	23	

[1] Concentration averages were determined by averaging total number of samples at each location.

[2] Sediment PCB concentrations were obtained from EPA 2002 and Apex 2010 pre-dredge sampling data, except for the Sawyer St. pre-dredge concentration. The Sawyer St. area actually dredged was smaller than the area in the original planned dredged footprint. As a result of this change in size of this area, there was no pre-dredge PCB concentration from the dredged area. An estimated pre-dredge average concentration was calculated using sediment concentrations (7 sample locations) currently next to the Sawyer St. dredged area using EPA 2010 data.

[3] Post-dredge conc. was not required. One sample was typically collected at each dredged location.

Appendix A - TSCA 761.61(c) Determination

Consistent with Section 761.61(c) of the Toxic Substances Control Act (TSCA), I have reviewed the pertinent documents regarding the state enhanced remedy for the New Bedford Harbor site and considered the proposed confined aquatic disposal cells (CAD cells) for the dredged PCB-contaminated sediments set out in the October 2004 Work Plan for New Bedford Harbor Dredge - Phase II, North Terminal Maintenance Dredge. I have also reviewed a map of the location of the CAD cells which is attached hereto as Attachment A. As required by that section of TSCA, I have determined that the Work Plan's proposed method of disposing of the PCB-contaminated sediments in CAD cells north of Route 6 in New Bedford Harbor does not pose an unreasonable risk to human health or the environment as long as the following conditions are met:

1. Compliance with the Work Plan's water quality and turbidity performance standards is maintained during all dredging and disposal activities;

2. The CAD cells are capped with clean, suitable material of sufficient thickness to isolate the PCB-contaminated sediments physically, chemically and biologically from the surrounding benthic environment. The placement of these underwater caps shall be timed such that sufficient consolidation of the underlying dredged material has taken place to physically support the cap material. A bathymetric survey shall be performed upon completion of the cap placement;

3. The CAD cell caps are monitored to demonstrate their physical, chemical and biological quality. This monitoring shall include bathymetric surveys, chemical sampling and sediment camera work (as an alternative to benthic faunal enumeration). The frequency of this cap monitoring shall be at least annually for the first three years after cap placement, unless otherwise directed by EPA New England. After three years, the Commonwealth may proposed a revised schedule for monitoring;

4. An annual report summarizing the CAD cell cap placement or CAD cell cap monitoring shall be submitted to EPA New England beginning with placement of the cap material. This report shall include a summary discussion of all activities associated with the cap placement or cap monitoring, and shall include if needed any recommendations for corrective action to maintain the physical, chemical or biological quality of the caps. A draft and final version of each such annual report shall be submitted, with the final version incorporating all comments received from EPA New England.

5. Corrective actions recommended in the annual reports, or alternatively, those required by EPA New England based on information in the annual reports, shall be implemented in a timely manner.

6. The City of New Bedford/Harbor Development Commission coordinates with the Department of Commerce through the National Oceanic and Atmospheric Administration, National Ocean Service and the U.S. Coast Guard to ensure that the as-built locations of the CAD cells become included in all future nautical charts of New Bedford Harbor.

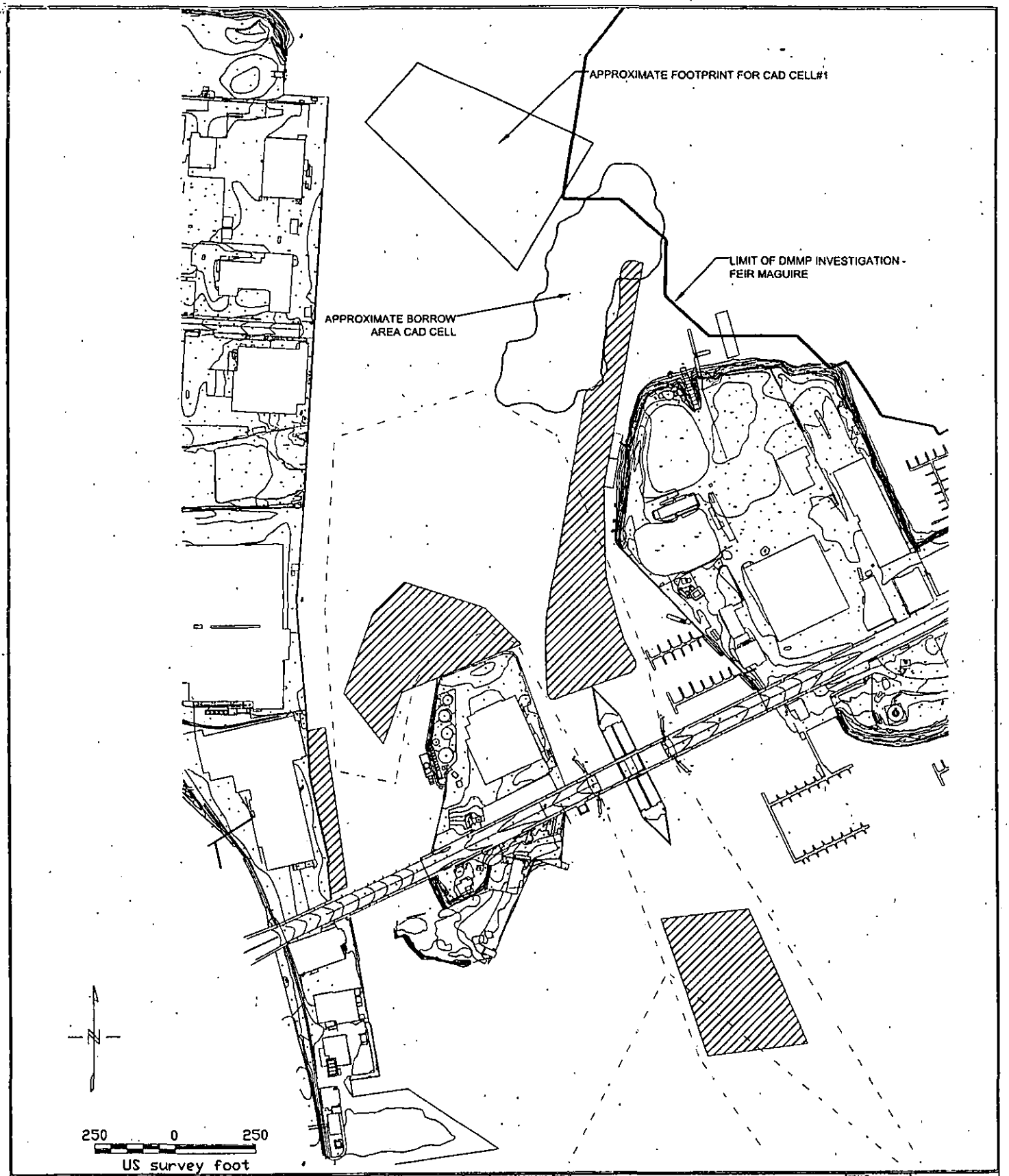
This determination is based on the information contained in the December 2004 Work Plan. Any

proposed change(s) to the 2004 Work Plan shall be provided to EPA. Upon review, EPA may find it necessary to revise this determination or issue a new TSCA determination based on the proposed change(s).

Robert W. Varney
Regional Administrator, EPA New England

1-12-05
Date

Attachment A - State Enhanced Remedy Initial CAD cells and dredging areas



PROPOSED DREDGE AREAS

REV	DATE	DESCRIPTION	BY	APP.
1	12/8	ENLARGED VIEW	TDM	JL

DRAWING TITLE: FIGURE 1 - PROPOSED CAD CELL LOCATIONS

PROJECT: NEW BEDFORD HARBOR DREDGE - PHASE II

CLIENT: NEW BEDFORD HDC, NEW BEDFORD, MASSACHUSETTS

Apex Environmental, 374 Congress St, Suite 306, Boston, MA, TEL: 617 720-0070, FAX: 617 720-0080

SCALE: AS SHOWN
DATE: 25 OCT 04
DRAWN BY: TDM
DESIGNED BY: KH
CHECKED BY: ST
APPROVED BY: ST
SHEET NO. 1
PROJECT NO. 6545.002

6542.003_FIG1-2_121404.DWG

Appendix A - TSCA 761.61(c) Determination

Consistent with Section 761.61(c) of the Toxic Substances Control Act (TSCA) I have reviewed the pertinent documents regarding the state enhanced remedy for the New Bedford Harbor site and considered the proposed confined aquatic disposal cells (CAD cells) for the dredged PCB-contaminated sediments set out in the draft April 2007 CAD Cell #2 Pre-Design Work Plan and Section 01135 of the November 2008 Phase III Contact Specifications for the New Bedford Harbor navigational dredging. I have also reviewed a map of the location of the CAD cells which is attached hereto as Attachment A. As required by that section of TSCA, I have determined that the proposed method of disposing of the PCB-contaminated sediments in a CAD cell(s) north of Route 6 in New Bedford Harbor does not pose an unreasonable risk to human health or the environment as long as the following conditions are met:

1. Compliance with the Work Plan's and Contract Specification's water quality and turbidity performance standards is maintained during all dredging and disposal activities;

2. Any dredged material that accidently comes to be located outside of CAD cell #1 or #2 during disposal (e.g., "missing" the cell during placement or from "surge" related overflow during placement) is removed and placed into the CAD cell(s);

3. The CAD cells are capped with clean, suitable material of sufficient thickness to isolate the PCB-contaminated sediments physically, chemically and biologically from the surrounding benthic environment. The placement of these underwater caps shall be timed such that sufficient consolidation of the underlying dredged material has taken place to physically support the cap material. A bathymetric survey shall be performed upon completion of the cap placement;

4. The CAD cell caps are monitored to demonstrate their physical, chemical and biological quality. This monitoring shall include bathymetric surveys, chemical sampling and sediment camera work (as an alternative to benthic faunal enumeration). The frequency of this cap monitoring shall be at least annually for the first three years after cap placement, unless otherwise directed by EPA New England. After three years, the Commonwealth may proposed a revised schedule for monitoring;

5. An annual report summarizing the CAD cell cap placement or CAD cell cap monitoring shall be submitted to EPA New England beginning with placement of the cap material. This report shall include a summary discussion of all activities associated with the cap placement or cap monitoring, and shall include if needed any recommendations for corrective action to maintain the physical, chemical or biological quality of the caps. A draft and final version of each such annual report shall be submitted, with the final version incorporating all comments received from EPA New England.

6. Corrective actions recommended in the annual reports, or alternatively, those required by EPA New England based on information in the annual reports, shall be implemented in a timely manner. Corrective actions could include, but not be limited to, installation of additional controls or excavation and disposal of dredged PCB-contaminated sediments from the CAD cells

if information indicates that the CAD cells are not effective in isolating and/or controlling migration of PCBs from the CAD cells into the harbor.

7. The City of New Bedford/Harbor Development Commission shall coordinate with the Department of Commerce through the National Oceanic and Atmospheric Administration, National Ocean Service and the U.S. Coast Guard to ensure that the as-built locations of the CAD cells become included in all future nautical charts of New Bedford Harbor.

This determination is based on the information contained in the April 2007 Work Plan and the November 2008 Contract Specifications. Any proposed change(s) to the Work Plan's or Contract Specifications shall be provided to EPA. Upon review, EPA may find it necessary to revised this determination or issue a new TSCA determination based on the proposed change(s).

James T. Owens, III
Director, Office of Site Remediation and Restoration

11·12·08
Date

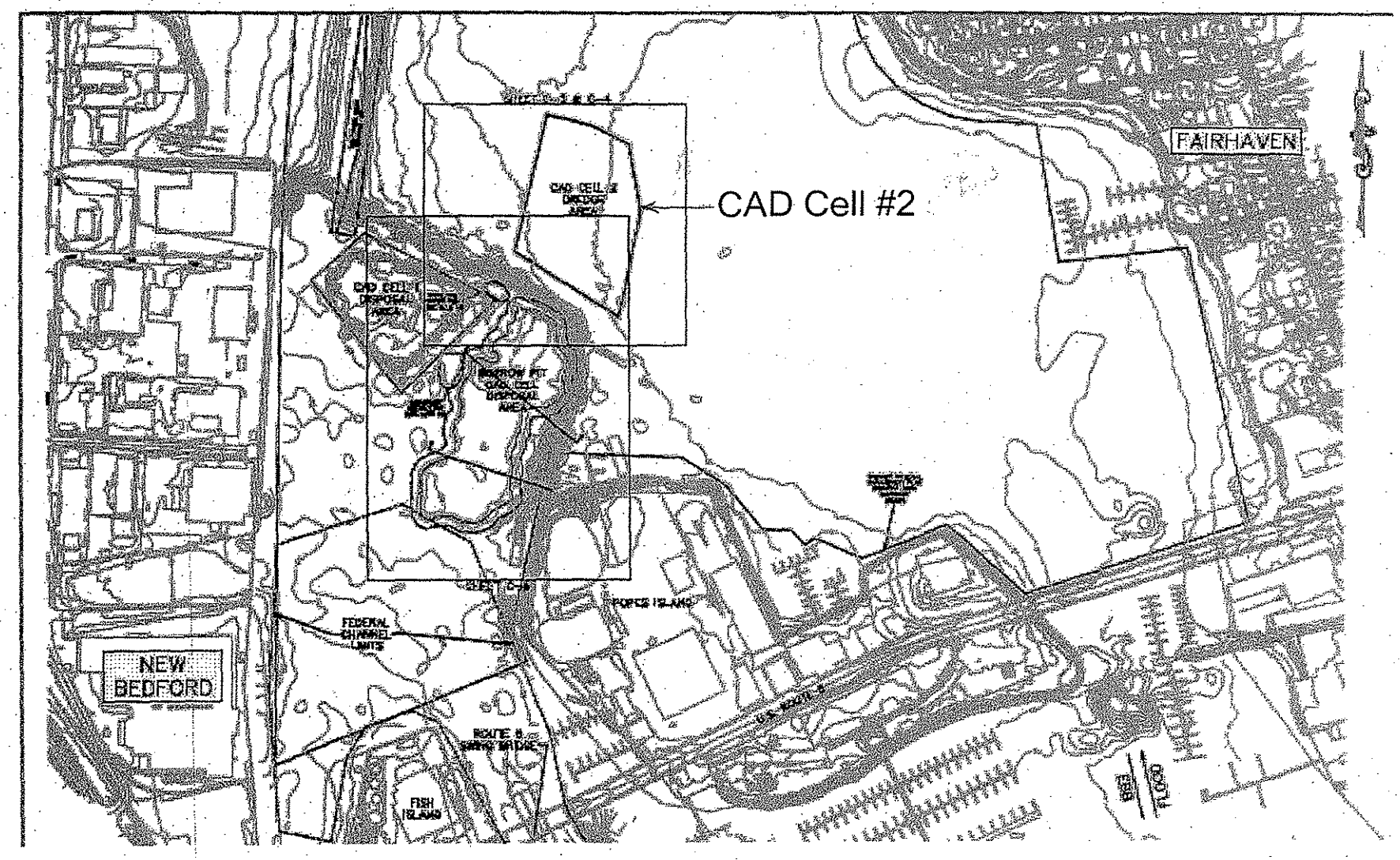


Figure 1: CAD #2 Location

New Bedford Harbor Dredge Project – Phase II

November 2006

4.0 Monitoring Results

The water quality was monitored during the dredging and material placement operations for the New Bedford Harbor Dredge – Phase II from January 13, 2005 through January 17, 2006. Water quality monitoring was performed in accordance with the Water Quality Monitoring Plan (WQMP) dated 01/05/05. Following the guidelines of the WQMP, monitoring locations for water turbidity recorded an average turbidity over various water depths, up and down-current from the dredge or material placement operations, depending on tide. The values recorded as the Reference Site Turbidity were taken from up-current monitoring locations, or from monitoring events which occurred before dredge or material placement operations began. The Reference Turbidity Value was then compared to down-current turbidity values measured at regular time intervals after operations had begun.

The monitoring results were broken up into 4 periods of dredging and material placement that Apex oversaw in New Bedford Harbor during Phase II of the State Enhanced Remedy Dredge Project. At each monitoring location, various samples around the area were taken in order to get a thorough indication of water quality.

The first period took place between 1/13/05 and 2/15/05 and included approximately 32,000 cubic yards of material being dredged from Fish Island Terminal and the "top" of CAD Cell #1. This was then placed in the "Borrow Pit" northwest of Pope's Island. In monitoring the water quality for the dredging, only one exceedance of the project turbidity occurred. A down-current turbidity of 40 NTUs was recorded, which was 9.8 NTUs over the permissible turbidity increase. Additional monitoring was performed at this location 15 and 30 minutes after the exceedance. 15 minutes after the exceedance, the average turbidity at the same location measured 20.0 NTUs (3.9 NTUs below the up-current reference turbidity value of 23.9 NTUs). 30 minutes after the exceedance event, the average turbidity down-current measured 15.0 NTUs (8.9 NTUs below the up-current reference turbidity value), well within the permissible limits set forth in the WQMP.

Water quality monitoring for placement operations also followed the guidelines set forth in the WQMP. Silt curtains were utilized during placement operations, bringing the down-current monitoring locations to within 15 feet of the curtains. Disposal events were monitored on four days, during which, there were no turbidity exceedances to report from any of the disposal events. All values recorded were below the down-current permissible turbidity increase of 40 NTUs.

The second period took place between 6/27/05 and 7/22/05 and involved the dredging of CAD Cell #1 and the capping of the PCB contaminated EPA Operable Unit #3 (OU#3). This portion of the project

involved dredging clean material from CAD Cell #1 northwest of Pope's Island and placing the material (approximately 84,000 cubic yards) over a 19 acre area south of the Hurricane Barrier. Apex monitored the water quality for both dredging (on ten days) and material placement (for fifteen events). None of these monitoring events yielded turbidity exceedances.

The third period involved the dredging of material from 6 sites around New Bedford Harbor. They include; Maritime and White's Terminals north of Route 6, a shoal south of the Route 6 Bridge, and Pease Park boat ramp, Linberg Marine, and D.N. Kelley and Sons Shipyard all located in Fairhaven. Approximately 35,000 cubic yards of material was dredged from these areas, and disposed of in CAD Cell #1, northwest of Pope's Island. This portion of dredging and placement occurred between 9/6/05 and 10/21/05. Monitoring of water quality during dredging operations was conducted on 12 days, and showed no turbidity exceedances. Water quality monitoring of the placement events occurred during 12 events, again with no turbidity exceedances to report.

The fourth and final period occurred between 12/19/05 and 1/19/06 and involved the dredging of material from three locations in New Bedford Harbor, including Niemiec Marine on the north side of Pope's Island, Warren Alexander's Property in Fairhaven, and the remainder of D.N. Kelley and Sons Shipyard. Approximately 5,000 cubic yards of material was dredged from these locations and placed in CAD Cell #1 northwest of Pope's Island. Dredging operations were monitored for water quality on 5 days at each dredging location, with no turbidity exceedances to report during the dredging events.

For this part of the project, dredged material was not immediately disposed of in the CAD Cell as it was in the previous portions of dredging. Instead, a scow transfer system was put in place. Water quality was closely monitored during these scow transfer events, similar to placement events. Four days of water quality monitoring for these transfer events showed no turbidity exceedances. After this middle step, placement did occur, and Apex monitored one of the two placement events for water quality. No turbidity exceedances were reported from this final event.

Of all the events that took place during this Dredge Project, only one exceedance was recorded at the very beginning. Immediately following the turbidity exceedance, the water quality was even more closely observed and tested, and within 30 minutes, the quality of the water was back to normal. Following that peak, proper measures were taken to ensure no repeat incidents would occur.

Post-Dredge/Existing Conditions Report

New Bedford Harbor Dredge Project – Phase III

March 2010

5.0 Monitoring Results

The water quality was monitored during CAD Cell construction, and during the dredging and material placement operations for the New Bedford Harbor Dredge – Phase III from June 13, 2008 through August 25, 2009. Water quality monitoring was performed in accordance with the following Water Quality Monitoring Plans (WQMP):

- Top of CAD Water Quality Monitoring Plan: May 2008
- Steamship Authority Water Quality Monitoring Plan: July 2008
- Bottom of CAD Water Quality Monitoring Plan: August 2008
- Navigational Dredging Water Quality Monitoring Plan: February 2009

Following the guidelines of the respective WQMP, monitoring locations for water turbidity recorded an average turbidity over various water depths, up and down-current from the dredge or material placement operations, depending on tide. The values recorded as the Reference Site Turbidity were taken from up-current monitoring locations, or from monitoring events which occurred before dredge or material placement operations began. The Reference Turbidity Value was then compared to down-current turbidity values measured at regular time intervals after operations had begun.

The monitoring results were broken up into 5 periods of dredging and material placement that Apex oversaw in New Bedford Harbor during Phase III of the State Enhanced Remedy Dredge Project (Top of CAD, Steamship Authority, Bottom of CAD, Part B of Navigational Dredging and Part A of Navigational Dredging). At each monitoring location, various samples around the area were taken in order to get a thorough indication of water quality.

The Top of CAD project took place between June 13, 2008 and July 13, 2008 and included approximately 34,210 cubic yards of material being dredged from the area in which CAD Cell #2 was to be constructed, and placed into CAD Cell #1. In monitoring the water quality, no exceedances of the WQMP turbidity guidelines were detected for either dredging or disposal operations.

The Steamship Authority navigational dredge project took place between July 31, 2008 and September 11, 2008 and involved the dredging areas north and south of the Steamship Authority pier and placement of that material within CAD Cell #1. This portion of the project involved dredging 22,381 cubic yards of material. In monitoring the water quality for the dredging, no exceedances of the WQMP turbidity guidelines were detected for either dredging or disposal operations. On 8/26/08, turbidity measurements at the Steamship Authority down-current location [18.47 NTU] were 18.17 NTU higher than the measurements at the up-current location [0.3 NTU]. This event represented the greatest difference between up-current and down-current turbidity monitoring detected during Phase III dredging; however, the difference was not greater than the WQMP turbidity guidelines [which

stipulates that if the reference site turbidity is less than 10 NTU, that the permissible turbidity increase is no more than the reference plus 20 NTU].

The Bottom of CAD project took place between August 26, 2008 and October 9, 2008 and involved the excavation of clean material from CAD Cell #2, and the use of that material either during the placement of a pilot cap at the Borrow Pit or the transportation and disposal of the material at the Cape Cod Bay Disposal Site (CCBDS). In monitoring the water quality, no exceedances of the WQMP turbidity guidelines was detected for Bottom of CAD operations.

The Navigational Dredge – Part B project took place between March 20, 2009 and April 14, 2009 and involved the dredging of 4,190 cubic yards from the New Bedford Rowing Facility area and the placement of that material within CAD Cell #2. In monitoring the water quality, exceedances of the WQMP turbidity guidelines were not detected for the Navigational Dredge – Part B operations.

The Navigational Dredge – Part A project took place between April 20, 2009 and September 24, 2009 and involved the dredging of 26,208 cubic yards from Packer Marine, Tonnesson Park, South Terminal, Gifford Street Boat Ramp, and Niemiec Marine in New Bedford and Linberg Marine, Olde North Wharf Fisheries, Fairhaven Shipyard, Union Wharf, and Warren Alexander (South) in Fairhaven and the placement of that material within CAD Cell #2. In monitoring the water quality, exceedances of the WQMP turbidity guidelines were not detected for the Navigational Dredge – Part A operations.

Copies of the water quality monitoring sheets completed in the field are attached as Appendix B. Water quality monitoring data is summarized within Table 7.

TABLE 7 - NEW BEDFORD HARBOR DREDGE - PHASE III

Water Quality Monitoring - Turbidity Measurements

June 12, 2008 -- August 25, 2009

Date	Time of Up Current	Average of Up Current	Time of Down Current	Average of Down Current	Difference (Down Current - Up Current)	Time of Disposal Location	Average of Disposal Location	Project Title	Project and/or Location
06/13/08	11:15	0.00	10:45	0.00	0.00	-	-	TOP of CAD II	TOP of CAD II
06/14/08	7:20	0.00	8:25	0.23	0.23	-	-	TOP of CAD II	TOP of CAD II
06/14/08	10:15	0.90	10:35	2.00	1.10	-	-	TOP of CAD II	TOP of CAD II
06/14/08	12:40	0.00	12:50	1.00	1.00	-	-	TOP of CAD II	TOP of CAD II
06/14/08	16:30	2.03	16:55	1.17	-0.87	-	-	TOP of CAD II	TOP of CAD II
06/16/08	16:45	14.63	16:30	0.00	-14.63	17:00	1.29	TOP of CAD II	CAD I (Disposal Only)
06/19/08	8:00	6.07	8:30	2.17	-3.90	-	-	TOP of CAD II	TOP of CAD II
06/19/08	12:00	23.43	12:30	4.23	-19.20	12:05	1.77	TOP of CAD II	CAD I (Disposal Only)
06/24/08	7:50	0.07	8:00	0.20	0.13	-	-	TOP of CAD II	TOP of CAD II
06/24/08	10:00	0.57	10:10	0.23	-0.33	-	-	TOP of CAD II	TOP of CAD II
06/26/08	10:05	1.67	10:10	0.47	-1.20	-	-	TOP of CAD II	TOP of CAD II
06/26/08	11:50	0.67	11:55	3.17	2.50	-	-	TOP of CAD II	TOP of CAD II
06/26/08	18:00	0.00	18:05	6.60	6.60	-	-	TOP of CAD II	TOP of CAD II
06/26/08	16:00	0.00	16:07	5.10	5.10	-	-	TOP of CAD II	TOP of CAD II
06/30/08	7:00	0.00	7:10	0.27	0.27	-	-	TOP of CAD II	TOP of CAD II
06/30/08	16:10	4.33	16:05	0.23	-4.10	-	-	TOP of CAD II	TOP of CAD II
06/30/08	14:25	2.87	14:20	2.73	-0.13	-	-	TOP of CAD II	TOP of CAD II
06/30/08	12:15	6.87	12:20	2.10	-4.77	-	-	TOP of CAD II	TOP of CAD II
06/30/08	10:00	0.63	10:04	1.70	1.07	-	-	TOP of CAD II	TOP of CAD II
07/03/08	15:40	4.17	15:55	6.13	1.97	-	-	TOP of CAD II	TOP of CAD II
07/03/08	13:30	5.50	13:35	4.93	-0.57	-	-	TOP of CAD II	TOP of CAD II
07/03/08	12:20	1.77	12:40	3.60	1.83	12:30	20.97	TOP of CAD II	CAD I (Disposal Only)
07/03/08	10:40	0.00	10:45	4.50	4.50	-	-	TOP of CAD II	TOP of CAD II
07/03/08	8:40	15.03	8:45	6.00	-9.03	-	-	TOP of CAD II	TOP of CAD II
07/03/08	6:46	0.83	6:55	0.97	0.13	6:50	6.77	TOP of CAD II	CAD I (Disposal Only)
07/08/08	12:00	0.30	12:10	1.53	1.23	12:25	7.17	TOP of CAD II	CAD I (Disposal Only)
07/08/08	10:05	14.33	10:23	7.60	-6.73	-	-	TOP of CAD II	TOP of CAD II
07/08/08	7:40	0.93	7:45	0.87	-0.07	-	-	TOP of CAD II	TOP of CAD II
07/08/08	7:05	3.10	7:25	2.10	-1.00	7:32	19.13	TOP of CAD II	CAD I (Disposal Only)
07/31/08	7:10	0.40	7:20	0.20	-0.20	-	-	Steamship	Steamship
07/31/08	9:10	8.86	9:25	0.10	-8.76	-	-	Steamship	Steamship
07/31/08	11:10	1.15	11:17	0.00	-1.15	-	-	Steamship	Steamship
07/31/08	14:18	0.30	14:25	5.26	4.96	-	-	Steamship	Steamship
07/31/08	16:45	2.43	16:35	0.43	-2.00	-	-	Steamship	Steamship
08/04/08	12:00	2.53	12:35	0.53	-2.00	12:25	-	Steamship	CAD I (Disposal Only)
08/05/08	7:40	0.26	7:50	0.00	-0.26	-	-	Steamship	Steamship
08/05/08	9:40	1.33	9:50	1.63	0.30	-	-	Steamship	Steamship

TABLE 7 - NEW BEDFORD HARBOR DREDGE - PHASE III

Water Quality Monitoring - Turbidity Measurements

June 12, 2008 -- August 25, 2009

Date	Time of Up Current	Average of Up Current	Time of Down Current	Average of Down Current	Difference (Down Current - Up Current)	Time of Disposal Location	Average of Disposal Location	Project Title	Project and/or Location
08/05/08	12:00	22.40	12:10	2.53	-19.87	-	-	Steamship	Steamship
08/05/08	14:05	1.17	14:20	16.20	15.03	-	-	Steamship	Steamship
08/05/08	16:46	2.53	16:55	0.66	-1.87	16:45	-	Steamship	CAD I (Disposal Only)
08/07/08	10:00	0.00	10:30	0.00	0.00	-	-	Steamship	Steamship
08/07/08	11:45	0.03	12:00	0.83	0.80	-	-	Steamship	Steamship
08/07/08	14:20	0.00	14:30	0.93	0.93	-	-	Steamship	Steamship
08/07/08	15:30	0.00	15:55	6.70	6.70	0.65	-	Steamship	CAD I (Disposal Only)
08/07/08	17:15	0.00	17:25	0.00	0.00	-	-	Steamship	Steamship
08/08/08	7:15	0.00	7:25	0.00	0.00	-	-	Steamship	Steamship
08/08/08	13:30	0.16	13:40	11.07	10.91	-	-	Steamship	Steamship
08/08/08	15:45	0.30	16:01	0.93	0.63		-	Steamship	Steamship
08/11/08	8:50	4.00	8:40	0.00	-4.00	-	-	Steamship	Steamship
08/11/08	16:30	1.23	16:50	2.00	0.77	-	-	Steamship	Steamship
08/12/08	11:20	0.00	11:30	1.40	1.40	-	-	Steamship	Steamship
08/12/08	13:40	0.00	13:30	2.93	2.93	-	-	Steamship	Steamship
08/12/08	15:30	0.00	15:40	4.26	4.26	-	-	Steamship	Steamship
08/18/08	8:30	0.00	8:40	0.96	0.96	-	-	Steamship	Steamship
08/18/08	10:30	8.53	10:44	0.00	-8.53			Steamship	Steamship
08/18/08	12:30	5.93	12:40	2.97	-2.96	-	-	Steamship	Steamship
08/18/08	15:28	5.90	15:32	2.70	-3.20			Steamship	Steamship
08/18/08	17:34	0.83	17:40	2.97	2.14		-	Steamship	Steamship
08/21/08	9:50	1.03	10:15	0.13	-0.90	-	-	Steamship	Steamship
08/21/08	12:45	3.90	12:50	0.00	-3.90	-	-	Steamship	Steamship
08/21/08	14:59	5.53	14:50	0.63	-4.90	-	-	Steamship	Steamship
08/21/08	17:22	5.60	17:26	0.83	-4.77	-	-	Steamship	Steamship
08/21/08	16:04	2.20	17:04	2.86	0.66	16:00	-	Steamship	CAD I (Disposal Only)
08/26/08	7:00	4.10	7:10	0.50	-3.60	-	-	Steamship	Steamship
08/26/08	8:55	0.30	9:02	18.47	18.17	-	-	Steamship	Steamship
08/26/08	11:05	4.97	11:15	5.43	0.46	-	-	Steamship	Steamship
08/26/08	13:00	2.77	13:12	9.73	6.96	-	-	Steamship	Steamship
08/28/08	7:30	3.77	7:40	3.37	-0.40	-	-	Steamship	Steamship
08/28/08	9:30	5.10	9:35	6.30	1.20	-	-	Steamship	Steamship
08/28/08	11:40	2.67	11:35	6.27	3.60	-	-	Steamship	Steamship
08/28/08	15:35	10.10	15:28	6.50	-3.60	-	-	Steamship	Steamship
08/28/08	8:50	24.10	8:57	9.63	-14.47	-	-	Steamship	Steamship
09/03/08	9:00	1.03	9:11	6.57	5.54	-	-	Steamship	Steamship
09/03/08	11:25	1.00	11:32	16.13	15.13	-	-	Steamship	Steamship

TABLE 7 - NEW BEDFORD HARBOR DREDGE - PHASE III

Water Quality Monitoring - Turbidity Measurements

June 12, 2008 -- August 25, 2009

Date	Time of Up Current	Average of Up Current	Time of Down Current	Average of Down Current	Difference (Down Current - Up Current)	Time of Disposal Location	Average of Disposal Location	Project Title	Project and/or Location
09/03/08	13:52	1.47	13:44	1.27	-0.20	-	-	Steamship	Steamship
08/27/08	13:47	2.83	13:40	8.57	5.74	N/A*[2]	N/A*[2]	BOC II	BOC II
08/27/08	15:42	2.10	15:35	4.23	2.13	N/A*[2]	N/A*[2]	BOC II	BOC II
08/27/08	17:30	2.23	17:42	3.16	0.93	N/A*[2]	N/A*[2]	BOC II	BOC II
08/28/08	8:00	1.90	8:10	1.53	-0.37	N/A*[2]	N/A*[2]	BOC II	BOC II
08/28/08	10:30	4.23	10:24	3.17	-1.06	N/A*[2]	N/A*[2]	BOC II	BOC II
08/28/08	12:22	3.73	12:27	2.23	-1.50	N/A*[2]	N/A*[2]	BOC II	BOC II
08/28/08	14:45	9.00	14:50	1.83	-7.17	N/A*[2]	N/A*[2]	BOC II	BOC II
08/28/08	16:40	1.60	16:50	4.13	2.53	N/A*[2]	N/A*[2]	BOC II	BOC II
09/03/08	8:10	3.33	8:05	19.23	15.90	N/A*[2]	N/A*[2]	BOC II	BOC II
09/03/08	10:54	4.10	11:02	1.93	-2.17	N/A*[2]	N/A*[2]	BOC II	BOC II
09/03/08	13:05	1.63	13:17	9.13	7.50	N/A*[2]	N/A*[2]	BOC II	BOC II
09/11/08	8:22	1.63	8:49	4.67	3.04	N/A*[2]	N/A*[2]	BOC II	BOC II
09/11/08	10:40	1.67	10:32	1.63	-0.04	N/A*[2]	N/A*[2]	BOC II	BOC II
09/11/08	13:00	1.30	13:05	1.73	0.43	N/A*[2]	N/A*[2]	BOC II	BOC II
09/11/08	16:42	2.33	17:00	3.80	1.47	N/A*[2]	N/A*[2]	BOC II	BOC II
09/16/08	9:50	1.50	10:00	2.37	0.87	N/A*[2]	N/A*[2]	BOC II	BOC II
09/16/08	11:50	3.50	11:56	1.67	-1.83	N/A*[2]	N/A*[2]	BOC II	BOC II
09/16/08	14:41	10.20	14:30	3.60	-6.60	N/A*[2]	N/A*[2]	BOC II	BOC II
09/16/08	16:20	5.33	16:16	4.73	-0.60	N/A*[2]	N/A*[2]	BOC II	BOC II
09/18/08	11:40	1.13	11:50	2.10	0.97	N/A*[2]	N/A*[2]	BOC II	BOC II
09/18/08	15:36	3.20	15:45	3.57	0.37	N/A*[2]	N/A*[2]	BOC II	BOC II
03/23/09	*[1]	1.45	*[1]	1.85	0.40	-	N/A*[3]	PH III PART B	NBRF
03/25/09	11:25	1.10	12:25	3.59	2.49	12:15	N/A*[3]	PH III PART B	NBRF (Disposal Only)
03/27/09	12:20	0.40	12:30	0.30	-0.10	12:14	N/A*[3]	PH III PART B	NBRF (Disposal Only)
04/05/09	11:40	1.55	13:00	1.73	0.18	11:55	N/A*[3]	PH III PART B	NBRF (Disposal Only)
04/08/09	13:20	2.94	13:35	2.43	-0.51	13:25	N/A*[3]	PH III PART B	NBRF (Disposal Only)
04/10/09	14:15	1.10	14:50	1.33	0.23	14:25	N/A*[3]	PH III PART B	NBRF (Disposal Only)
04/13/09	14:20	1.04	14:45	1.75	0.71	-	N/A*[3]	PH III PART B	NBRF
04/14/09	17:00	3.63	17:30	2.39	-1.24	17:15	N/A*[3]	PH III PART B	NBRF (Disposal Only)
04/21/09	10:14	2.21	11:00	5.05	2.84	10:50	N/A*[3]	PH III PART A	Gifford St.
04/22/09	8:15	1.70	8:28	4.07	2.37	8:20	N/A*[3]	PH III PART A	Gifford St.
04/22/09	13:50	1.60	14:10	2.17	0.57	-	N/A*[3]	PH III PART A	Gifford St.

TABLE 7 - NEW BEDFORD HARBOR DREDGE - PHASE III

Water Quality Monitoring - Turbidity Measurements

June 12, 2008 -- August 25, 2009

Date	Time of Up Current	Average of Up Current	Time of Down Current	Average of Down Current	Difference (Down Current - Up Current)	Time of Disposal Location	Average of Disposal Location	Project Title	Project and/or Location
04/23/09	* [1]	1.83	* [1]	2.00	0.17	7:35	N/A*[3]	PH III PART A	Gifford St., South Terminal
04/24/09	8:35	1.43	9:35	1.73	0.30	9:25	N/A*[3]	PH III PART A	CAD II (Disposal only)
04/26/09	12:25	0.85	13:05	1.37	0.52	12:45	N/A*[3]	PH III PART A	Gifford St., South Terminal
05/04/09	11:30	3.02	* [1]	1.22	-1.80	11:45	N/A*[3]	PH III PART A	CAD II (Disposal only)
05/06/09	11:45	1.70	12:00	1.80	0.10	11:50	N/A*[3]	PH III PART A	CAD II (Disposal only)
05/06/09	16:45	2.50	16:58	14.30	11.80	-	N/A*[3]	PH III PART A	Gifford St.
05/07/09	15:00	13.00	15:20	2.73	-10.27	-	N/A*[3]	PH III PART A	South Terminal
05/13/09	13:30	1.37	13:50	1.47	0.10	13:36	N/A*[3]	PH III PART A	CAD II (Disposal only)
05/14/09	8:20	0.60	8:45	2.27	1.67	8:35	N/A*[3]	PH III PART A	CAD II (Disposal only)
05/16/09	12:30	2.09	13:25	0.61	-1.48	-	N/A*[3]	PH III PART A	Union Wharf
05/20/09	14:00	21.60	14:20	3.19	-18.41	-	N/A*[3]	PH III PART A	Gifford St.
05/22/09	8:00	0.81	8:15	0.29	-0.52	8:05	N/A*[3]	PH III PART A	CAD II (Disposal only)
05/28/09	10:13	1.09	10:25	1.85	0.76	-	N/A*[3]	PH III PART A	Linberg Marine
05/28/09	14:00	1.06	14:45	1.71	0.65	14:20	N/A*[3]	PH III PART A	CAD II (Disposal only)
06/04/09	14:35	1.60	14:52	3.53	1.93	-	N/A*[3]	PH III PART A	Linberg Marine
06/04/09	16:20	1.90	16:55	3.13	1.23	16:35	N/A*[3]	PH III PART A	CAD II (Disposal only)
06/06/09	14:05	1.47	14:30	3.76	2.29	-	N/A*[3]	PH III PART A	Linberg Marine
06/14/09	8:40	3.07	9:15	3.17	0.10	8:50	N/A*[3]	PH III PART A	CAD II (Disposal only)
06/17/09	15:25	2.99	15:40	4.05	1.06	-	N/A*[3]	PH III PART A	WA-S
06/18/09	8:30	0.87	9:00	1.30	0.43	8:45	N/A*[3]	PH III PART A	CAD II (Disposal only)
06/22/09	11:15	1.66	11:35	1.04	-0.62	-	N/A*[3]	PH III PART A	ONWF
06/24/09	10:10	4.54	10:25	0.46	-4.08	-	N/A*[3]	PH III PART A	Gifford St.
07/01/09	14:40	2.88	15:17	3.83	0.95	-	N/A*[3]	PH III PART A	Gifford St.
07/02/09	16:45	2.28	17:15	5.23	2.95	-	N/A*[3]	PH III PART A	Gifford St.
07/08/09	11:55	1.93	12:15	1.83	-0.10	-	N/A*[3]	PH III PART A	NL
07/08/09	14:33	3.60	14:40	18.00	14.40	14:35	N/A*[3]	PH III PART A	CAD II (Disposal only)
07/10/09	9:30	0.73	10:15	1.05	0.32	-	N/A*[3]	PH III PART A	Packer Marine

TABLE 7 - NEW BEDFORD HARBOR DREDGE - PHASE III

Water Quality Monitoring - Turbidity Measurements

June 12, 2008 -- August 25, 2009

Date	Time of Up Current	Average of Up Current	Time of Down Current	Average of Down Current	Difference (Down Current - Up Current)	Time of Disposal Location	Average of Disposal Location	Project Title	Project and/or Location
07/15/09	13:58	1.97	14:05	5.57	3.60	-	N/A*[3]	PH III PART A	Gifford St.
07/17/09	13:48	2.13	14:05	1.59	-0.54	-	N/A*[3]	PH III PART A	WA-S
07/22/09	13:35	2.59	14:00	3.63	1.04	-	N/A*[3]	PH III PART A	South Terminal
07/23/09	15:30	4.22	15:40	2.70	-1.52	-	N/A*[3]	PH III PART A	South Terminal
07/28/09	8:55	4.62	9:10	4.35	-0.27	-	N/A*[3]	PH III PART A	South Terminal
08/12/09	13:40	2.90	14:10	4.51	1.61	-	N/A*[3]	PH III PART A	Gifford St.
08/13/09	17:48	1.90	18:05	2.60	0.70	-	N/A*[3]	PH III PART A	South Terminal
08/17/09	10:10	0.77	10:25	2.07	1.30	-	N/A*[3]	PH III PART A	Packer Marine
08/20/09	14:25	2.28	14:45	2.79	0.51	-	N/A*[3]	PH III PART A	Packer Marine
08/25/09	16:46	5.62	17:00	3.23	-2.39	-	N/A*[3]	PH III PART A	South Terminal

Comments:

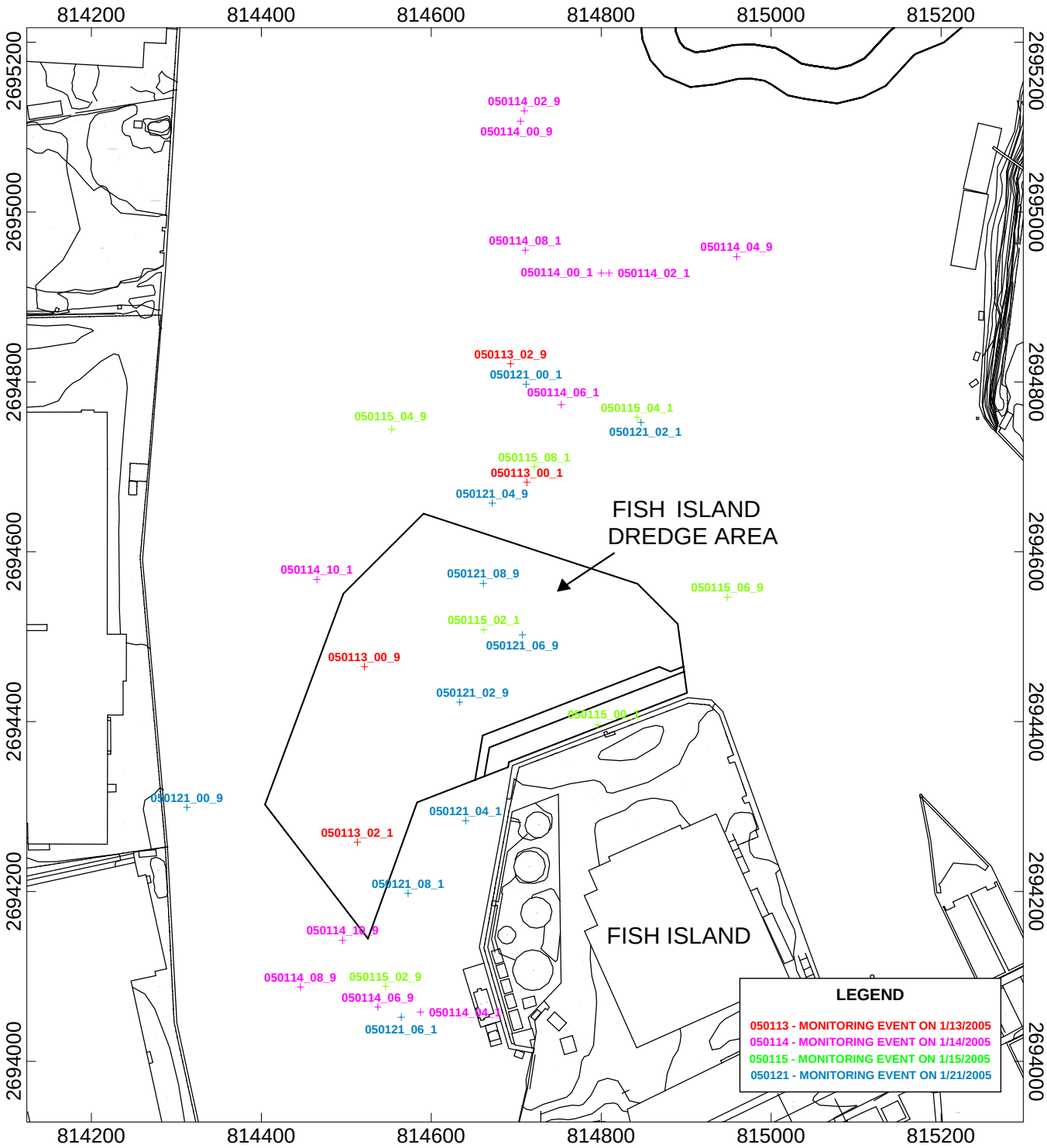
- Denotes a non-disposal event

*[1] Time field left blank on original field sheet/log-book

*[2] Bottom of CAD disposal events were off shore and water quality montitoring was not completed

*[3] PH III Part A and Part B Dredging were completed with a silt curtain around CAD II therefore no disposal location readings were taken (up-current and down-current measurements were taken outside the silt curtain.

Water Quality Monitoring Tables



N

Scale 1" = 175'

100 0 100

US survey foot

NEW BEDFORD HARBOR DREDGE - PHASE II

WATER QUALITY MONITORING LOCATIONS
1/13/05 - 1/21/05

APEX ENVIRONMENTAL, INC.

1/13/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 10:01				Current		(NTUs)	Increase (NTUs)		Traffic
	13:30	050113_00_1_05	N:2694684.583	Up	5	2.3		Foggy, Cold	None
	13:32	050113_00_1_15	E:814715.222	Up	10	1.9		Light N Wind	None
	13:34	050113_00_1_25		Up	25	1.9			None
					AVERAGE	**2.0**	**22.0**		
	13:42	050113_00_9_05	N:2694464.650	Down	5	2.4		Foggy, Cold	None
	13:45	050113_00_9_12	E:814525.369	Down	12	2.5		Light N Wind	None
	13:47	050113_00_9_20		Down	20	2.3			None
Low 15:56					**AVERAGE**	**2.4**	(19.6 Below Limit)		
	18:44	050113_02_1_05	N:2694258.072	Up	5	2.8		Cloudy, ~40F	None
	18:45	050113_02_1_14	E:814513.105	Up	14	2.7		Light SW Wind	None
	18:50	050113_02_1_22		Up	22	2.4			None
					AVERAGE	**2.6**	**22.6**		
	18:56	050113_02_9_05	N:2694824.140	Down	5	2.8		Cloudy, ~40F	None
	18:58	050113_02_9_14	E:814696.050	Down	14	2.8		Light SW Wind	None
	18:59	050113_02_9_25		Down	25	2.7			None
					AVERAGE	**2.7**	(19.9 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

1/15/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 4:59				Current		(NTUs)	Increase (NTUs)		Traffic
	6:31	050115_00_1_05	Fish Isl.	Up	5	3.8		Partly Cloudy, 30 Degrees	None
	6:31	050115_00_1_15		Up	10	3.5		E Wind ~5 Knots	None
	6:31	050115_00_1_25		Up	25	3.5			None
					AVERAGE	**3.6**	**23.6**		
	8:30	050115_02_1_05	N:2694508.091	Up	5	3.6		Sunny, ~30 Degrees	None
	8:32	050115_02_1_15	E:814661.751	Up	15	3.4		Light Wind	None
	8:33	050114_02_9_25		Up	25	3.1			None
					AVERAGE	**3.4**	**23.4**		
	8:35	050115_02_9_05	N:2694088.242	Down	5	6.0		Sunny, ~30 Degrees	None
	8:36	050115_02_9_15	E:814546.150	Down	15	3.8		Light Wind	None
	8:37	050115_02_9_25		Down	25	3.8			None
					AVERAGE	**4.5**	(18.9 Below Limit)		
	10:48	050115_04_1_05	N:2694758.328	Up	5	4.0		Sunny, ~35 Degrees	None
	10:49	050115_04_1_15	E:814842.285	Up	15	3.6		Light Wind	None
	10:49	050115_04_1_25		Up	25	3.6			None
					AVERAGE	**3.7**	**23.7**		
	10:57	050115_04_9_05	N:2694802.673	Down	5	7.5		Sunny, ~35 Degrees	None
	10:58	050115_04_9_15	E:814217.831	Down	25	4.2		Light Wind	None
	10:59	050115_04_9_25		Down	25	4.0			None
High 11:47					**AVERAGE**	**5.2**	(18.5 Below Limit)		
	12:30	050115_06_1_05	N:2693165.688	Up	5	3.9		Sunny, ~40 Degrees	None
	12:31	050115_06_1_15	E:814634.427	Up	15	4.8		Light Wind	None
	12:32	050115_06_1_25		Up	25	4.0			None
					AVERAGE	**4.2**	**24.2**		
	12:35	050115_06_9_05	N:2694546.483	Down	5	8.8		Sunny, ~40 Degrees	None
	12:36	050115_06_9_15	E:814948.512	Down	15	25.3		Light Wind	None
	12:37	050115_06_9_25		Down	25	25.3			None
					AVERAGE	**19.8**	(4.4 Below Limit)		
	14:30	050115_08_1_05	N:2694702.864	Up	5	3.0		Sunny, ~35 Degrees	None
	14:31	050115_08_1_15	E:814724.210	Up	15	4.0		Light Wind	None
	14:32	050115_08_1_25		Up	25	3.5			None
					AVERAGE	**3.5**	**23.5**		
	14:35	050115_08_9_05	N:2694282.427	Down	5	3.6		Sunny, ~35 Degrees	None
	14:36	050115_08_9_15	E:8145222.051	Down	15	6.0		Light Wind	None
	14:37	050115_08_9_25		Down	25	10.5			None
Low 17:20					**AVERAGE**	**6.7**	(16.8 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

1/14/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

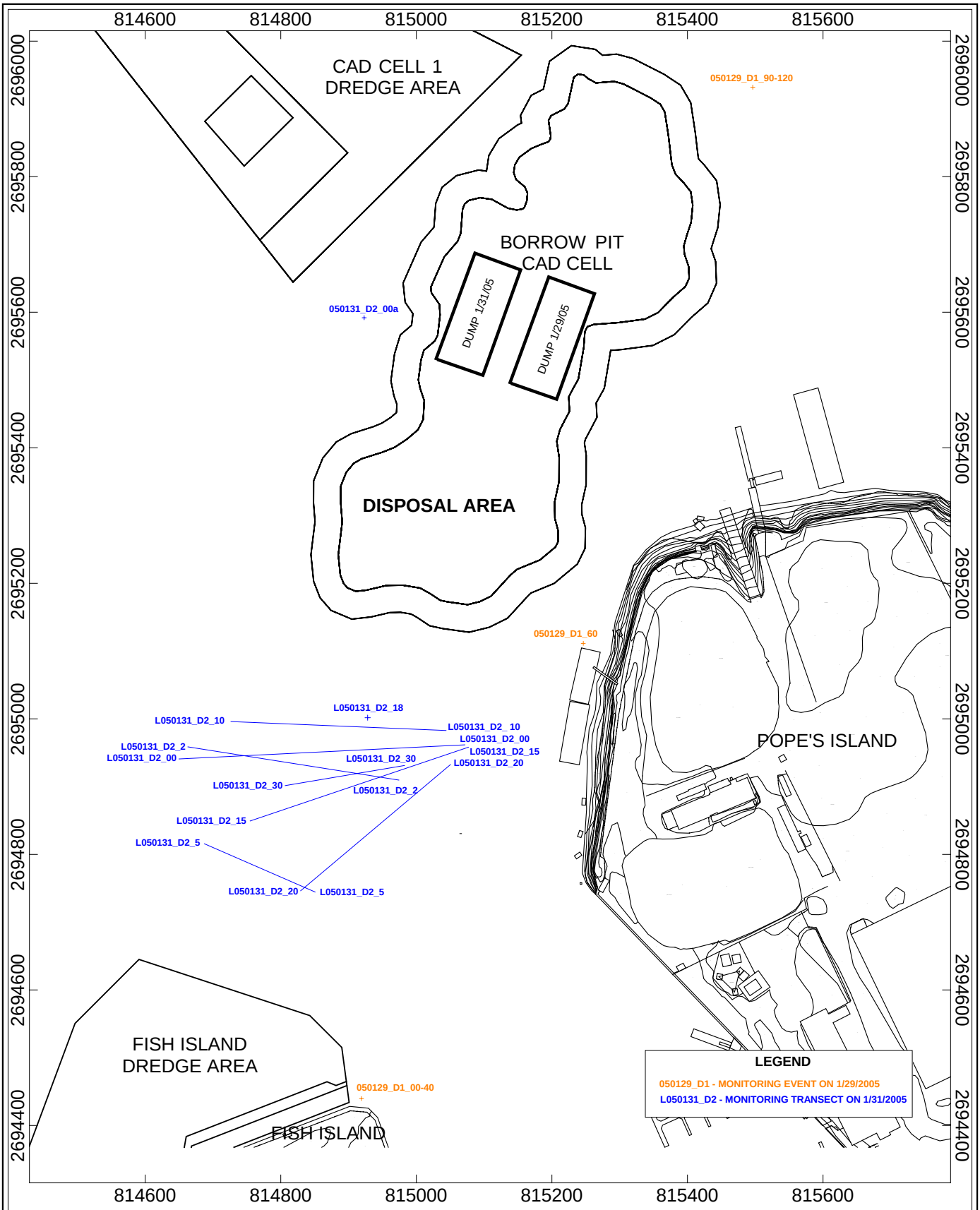
Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 4:03				Current		(NTUs)	Increase (NTUs)		Traffic
	7:02	050114_00_1_05	N:2694928.096	Up	5	2.0		Partly Cloudy, 35 Degrees	None
	7:03	050114_00_1_15	E:814800.127	Up	10	2.1		S Wind ~15 Knots	None
	7:04	050114_00_1_24		Up	24	2.0			None
					AVERAGE	**2.0**	**22.0**		
	6:52	050114_00_9_05	N:2695109.669	Down	5	2.5		Partly Cloudy, 35 Degrees	None
	6:53	050114_00_9_10	E:814707.776	Down	10	2.6		S Wind ~15 Knots	None
	6:54	050114_00_9_25		Down	25	2.8			None
					AVERAGE	**2.6**	(19.4 Below Limit)		
	8:55	050114_02_1_05	N:2694928.158	Up	5	2.4		Cloudy, 25 Degrees	None
	8:55	050114_02_1_15	E:814809.238	Up	15	2.5		Strong S Wind	None
	8:56	050114_02_9_25		Up	25	2.1			None
					AVERAGE	**2.3**	**22.3**		
	8:45	050114_02_9_05	N:2695121.846	Down	5	3.5		Cloudy, 25 Degrees	None
	8:46	050114_02_9_15	E:814712.249	Down	15	2.4		Strong S Wind	None
	8:47	050114_02_9_25		Down	25	2.4			None
High 10:54					**AVERAGE**	**2.8**	(19.5 Below Limit)		
	11:18	050114_04_1_05	N:2694058.155	Up	5	2.4		Cloudy, 35 Degrees	None
	11:19	050114_04_1_15	E:814587.358	Up	15	2.5		Strong W Wind	None
	11:19	050114_04_1_24		Up	24	2.6			None
					AVERAGE	**2.5**	**22.5**		
	11:30	050114_04_9_05	N:2694947.400	Down	5	3.4		Cloudy, 35 Degrees	None
	11:32	050114_04_9_18	E:814959.449	Down	18	3.7		Strong W Wind	None
	11:34	050114_04_9_30		Down	30	2.2			None
					AVERAGE	**3.1**	(19.4 Below Limit)		
	13:01	050114_06_1_05	N:2694775.958	Up	5	3.0		Rainy, 40 Degrees	None
	13:02	050114_06_1_15	E:814755.603	Up	15	3.1		N Wind ~ 15 Knots	None
	13:02	050114_06_1_25		Up	25	2.9			None
					AVERAGE	**3.0**	**23.0**		
	13:08	050114_06_9_05	N:2694063.888	Down	5	0.6		Rainy, 40 Degrees	None
	13:09	050114_06_9_15	E:814537.203	Down	15	4.0		N Wind ~ 15 Knots	None
	13:10	050114_06_9_25		Down	25	8.0			None
					AVERAGE	**4.2**	(18.8 Below Limit)		
	14:55	050114_08_1_05	N:2694957.872	Up	5	6.5		Rainy, 40 Degrees	None
	14:56	050114_08_1_15	E:814713.364	Up	15	4.0		N Wind ~25 Knots	None
	14:57	050114_08_1_25		Up	25	8.0			None
					AVERAGE	**6.2**	**26.2**		
	14:47	050114_08_9_05	N:2694087.562	Down	5	11.0		Rainy, 40 Degrees	None
	14:48	050114_08_9_15	E:814445.923	Down	15	10.0		N Wind ~25 Knots	None
	14:49	050114_08_9_25		Down	25	10.0			None
Low 15:56					**AVERAGE**	**10.3**	(15.9 Below Limit)		
	17:00	050114_10_1_05	N:2694567.491	Up	5	3.6		Rainy, 30 Degrees	None
	17:01	050114_10_1_15	E:814465.444	Up	15	5.8		N Wind ~25 Knots	None
	17:03	050114_10_1_25		Up	25	5.0			None
					AVERAGE	**4.8**	**24.8**		
	16:55	050114_10_9_05	N:2694142.560	Down	5	7.0		Rainy, 30 Degrees	None
	16:56	050114_10_9_15	E:814495.665	Down	15	7.1		N Wind ~25 Knots	None
	16:56	050114_10_9_25		Down	25	4.0			None
					AVERAGE	**6.0**	(18.8 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

1/21/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 5:05				Current		(NTUs)	Increase (NTUs)		Traffic
	6:50	050121_00_1_05	N:2694799.971	Up	5	3.1		Clear, ~5 Degrees	None
	6:50	050121_00_1_15	E:814714.437	Up	10	3.3		N Wind ~10 Knots	None
	6:51	050121_00_1_24		Up	24	3.1			None
					AVERAGE	**3.1**	**23.1**		
	7:01	050121_00_9_05	N:2694299.223	Down	5	3.0		Clear, ~5 Degrees	None
	7:02	050121_00_9_10	E:814312.363	Down	10	4.1		N Wind ~10 Knots	None
	7:03	050121_00_9_25		Down	25	3.2			None
					AVERAGE	**3.4**	(19.7 Below Limit)		
	10:08	050121_02_1_05	N:2694752.286	Up	5	1.3		Clear, ~5 Degrees	None
	10:09	050121_02_1_15	E:814846.881	Up	15	1.8		N Wind ~10 Knots	None
	10:10	050121_02_9_25		Up	25	11.5			None
					AVERAGE	**4.8**	**24.8**		
	10:15	050121_02_9_05	N:2694422.975	Down	5	3.7		Clear, ~5 Degrees	None
	10:16	050121_02_9_15	E:814648.662	Down	15	8.4		N Wind ~10 Knots	None
	10:17	050121_02_9_25		Down	25	6.8			None
Low 11:30					**AVERAGE**	**6.3**	(18.5 Below Limit)		
	12:02	050121_04_1_05	N:2694283.231	Up	5	5.5		Clear, ~10 Degrees	None
	12:03	050121_04_1_15	E:814640.500	Up	15	7.5		N Wind ~10 Knots	None
	12:03	050121_04_1_24		Up	24	5.0			None
					AVERAGE	**6.0**	**26.0**		
	12:10	050121_04_9_05	N:2694660.012	Down	5	0.4		Clear, ~10 Degrees	None
	12:11	050121_04_9_18	E:814674.386	Down	18	4.3		N Wind ~10 Knots	None
	12:12	050121_04_9_30		Down	30	9.0			None
					AVERAGE	**4.6**	(21.5 Below Limit)		
	14:27	050121_06_1_05	N:2694051.928	Up	5	0.9		Clear, ~5 Degrees	None
	14:29	050121_06_1_15	E:814564.621	Up	15	9.0		N Wind ~10 Knots	None
	14:30	050121_06_1_25		Up	25	20.0			None
					AVERAGE	**10.0**	**30.0**		
	15:39	050121_06_9_05	N:2694502.328	Down	5	12.5		Clear, ~5 Degrees	None
	15:40	050121_06_9_15	E:814707.350	Down	15	13.0		N Wind ~10 Knots	None
	15:41	050121_06_9_25		Down	25	20.5			None
					AVERAGE	**15.3**	(14.7 Below Limit)		
	16:22	050121_08_9_05	N:2694562.749	Up	5	3.0		Clear, ~5 Degrees	None
	16:22	050121_08_9_15	E:814661.380	Up	15	4.3		N Wind ~10 Knots	None
	16:23	050121_08_9_25		Up	25	4.5			None
					AVERAGE	**3.9**	**23.9**		
	16:14	050121_08_1_05	N:2694197.744	Down	5	7.5		Clear, ~5 Degrees	None
	16:15	050121_08_1_15	E:814572.742	Down	15	9.0		N Wind ~10 Knots	None
	16:16	050121_08_1_25		Down	25	14.0			None
					AVERAGE	**10.2**	(13.7 Below Limit)		
	16:27	050121_08_9a_05	N:2694197.744	Down	5	12.5		Clear, ~5 Degrees	None
	16:28	050121_08_9a_15	E:814572.742	Down	15	50.0		N Wind ~10 Knots	None
	16:29	050121_08_9a_25		Down	25	57.5			None
					AVERAGE	**40.0**	**(16.1 Above Limit)**		
	16:45	050121_08_9b	N:2694197.744	Down	15	20.0	(3.9 Below Limit)		None
High 17:24	17:00	050121_08_9b	E:814572.742	Down	15	15.0	(8.9 Below Limit)		None

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1" = 200'

100 0 100

US survey foot

NEW BEDFORD HARBOR DREDGE - PHASE II

WATER QUALITY MONITORING LOCATIONS - DISPOSAL 1/29/05 & 1/31/05

APEX ENVIRONMENTAL, INC.

1/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Disposal Operations

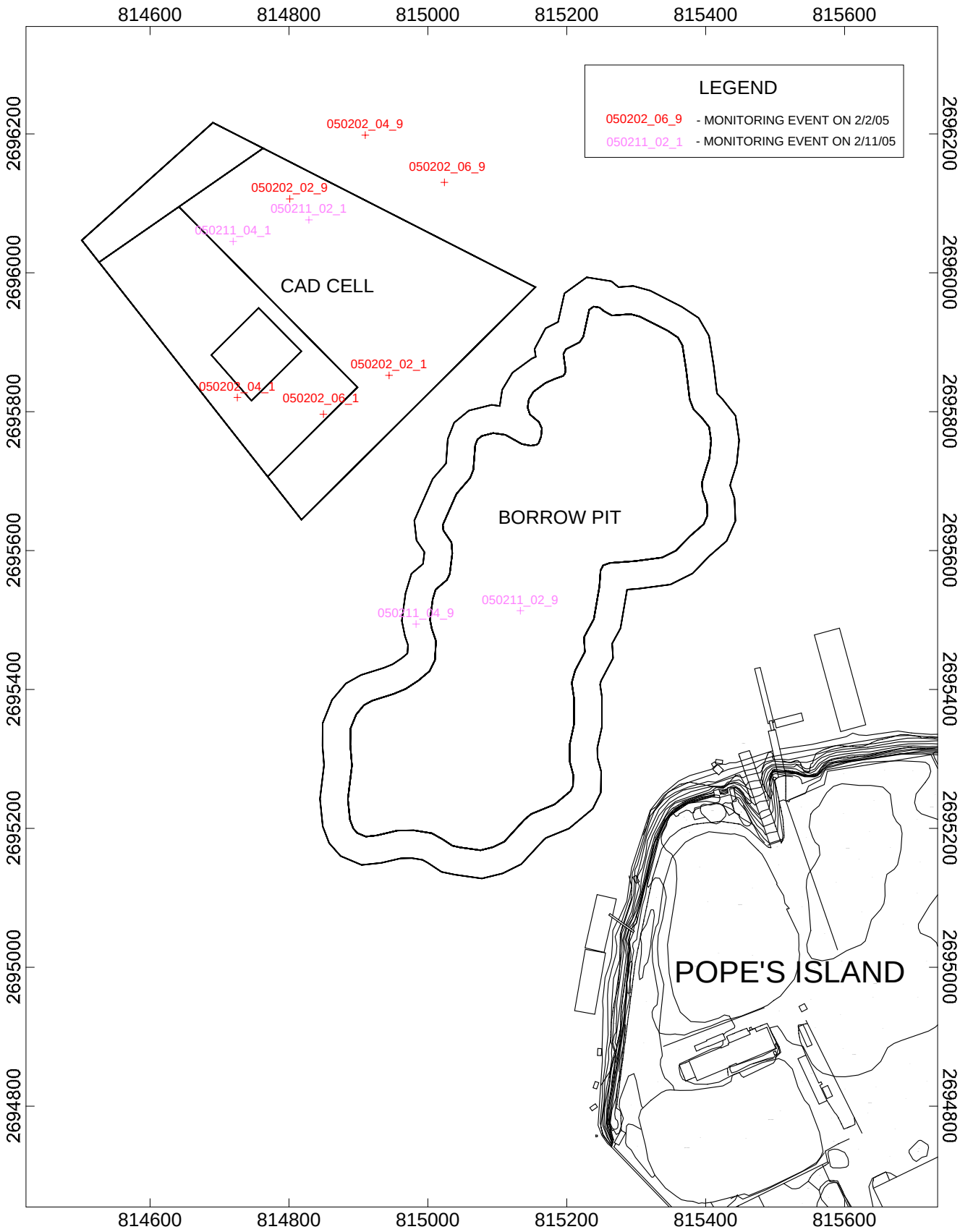
Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
10:10 High				Current		(NTUs)	Increase (NTUs)		Traffic
	14:55	050129_D1_00	Fish Island	Down	15	6.5		Clear, ~25 Degrees	None
	14:56	050129_D1_00_1	Fish Island	Down	15	6.8		N Wind ~5 Knots	
	15:10	**DISPOSAL**	**STARTED**						
					AVERAGE	**6.6**	**46.6**		
	15:20	050129_D1_10	Fish Island	Down	15	11.5		Clear, ~25 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**11.5**	(35.1 Below Limit)		
	15:23	050129_D1_20	Fish Island	Down	15	9.0		Clear, ~25 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**9.0**	(38.5 Below Limit)		
	15:35	050129_D1_30	Fish Island	Down	15	7.5		Clear, ~25 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**7.5**	(39.1 Below Limit)		
	15:41	050129_D1_40	Fish Island	Down	15	8.6		Clear, ~25 Degrees	None
								N Wind ~5 Knots	
15:51 Low					**AVERAGE**	**8.6**	(38.0 Below Limit)		
	16:15	050129_D1_60	Pope's Island	Down	10	7.8		Clear, ~20 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**7.8**	(38.8 Below Limit)		
	16:23	050129_D1_70	Pope's Island	Up	10	7.5		Clear, ~20 Degrees	None
								NW Wind ~10 Knots	
					AVERAGE	**7.5**	**47.5**		
	16:56	050129_D1_90	N:815431.19	Down	6	17.5		Clear, ~15 Degrees	X
			E:2695916.29					NW Wind ~10 Knots	
	17:00	**DISPOSAL**	**STOPPED**						
	17:02				10	17.5			None
	17:04				15	42.5			None
	17:06				18	17.5			None
					AVERAGE	**23.8**	(23.7 Below Limit)		
	17:11	050129_D1_120	N:815431.19	Down	10	22.5		Clear, ~15 Degrees	None
			E:2695916.29					NW Wind ~10 Knots	
	17:15	**DISPOSAL**	**CONTINUED**						
					AVERAGE	**22.5**	(25 Below Limit)		
	17:27	050129_D1_140	N:815431.19	Down	10	15.0		Clear, ~12 Degrees	X
	17:58		E:2695916.29	Down	10	25.0		NW Wind ~10 Knots	
					AVERAGE	**20.0**	(27.5 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

1/31/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Disposal Operations

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
15:51 Low				Current		(NTUs)	Increase (NTUs)		Traffic
	16:08	050131_D2_00	W-E Transect	Down	10	4.0		Clear, ~40 Degrees	None
	16:12				20	4.5		N Wind ~5 Knots	None
	16:16				20	3.9			None
					AVERAGE	**4.1**	**44.1**		
	16:20	050131_D2_00a	GPS Target 1621	Down	5	4.9		Clear, ~40 Degrees	None
					15	4.0		N Wind ~5 Knots	
	16:23	**DUMPING**	**STARTED**		25	3.6			
					AVERAGE	**4.2**	**44.2**		
	16:24	050131_D2_2	W-E Transect	Down	20	4.3		Clear, ~35 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**4.3**	(39.9 Below Limit)		
	16:28	050131_D2_5	E-W Transect	Down	25	3.8		Clear, ~35 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**3.8**	(40.4 Below Limit)		
	16:32	050131_D2_10	W-E Transect	Down	15	4.3		Clear, ~30 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**4.3**	(39.9 Below Limit)		
	16:35	050131_D2_15	E-W Transect	Down	5	3.8		Clear, ~30 Degrees	None
					15	4.1		N Wind ~5 Knots	
					25	3.6			
					AVERAGE	**3.8**	(40.4 Below Limit)		
	16:37	050131_D2_18	W-E Transect	In Sheen	5	5.0		Clear, ~30 Degrees	None
					15	4.2		N Wind ~5 Knots	
					25	3.8			
					AVERAGE	**4.3**	(39.9 Below Limit)		
	16:40	050131_D2_20	W-E Transect	Down	20	4.5		Clear, ~30 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**4.5**	(39.7 Below Limit)		
	16:47	050131_D2_30	E-W Transect	Down	35	3.8		Clear, ~30 Degrees	None
								N Wind ~5 Knots	
					AVERAGE	**3.8**	(40.4 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:2400

100 0 100

US survey foot

1" = 200'

NEW BEDFORD HARBOR DREDGE - PHASE II

WATER QUALITY MONITORING LOCATIONS
2/5/05 & 2/11/05

APEX ENVIRONMENTAL, INC.

2/2/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

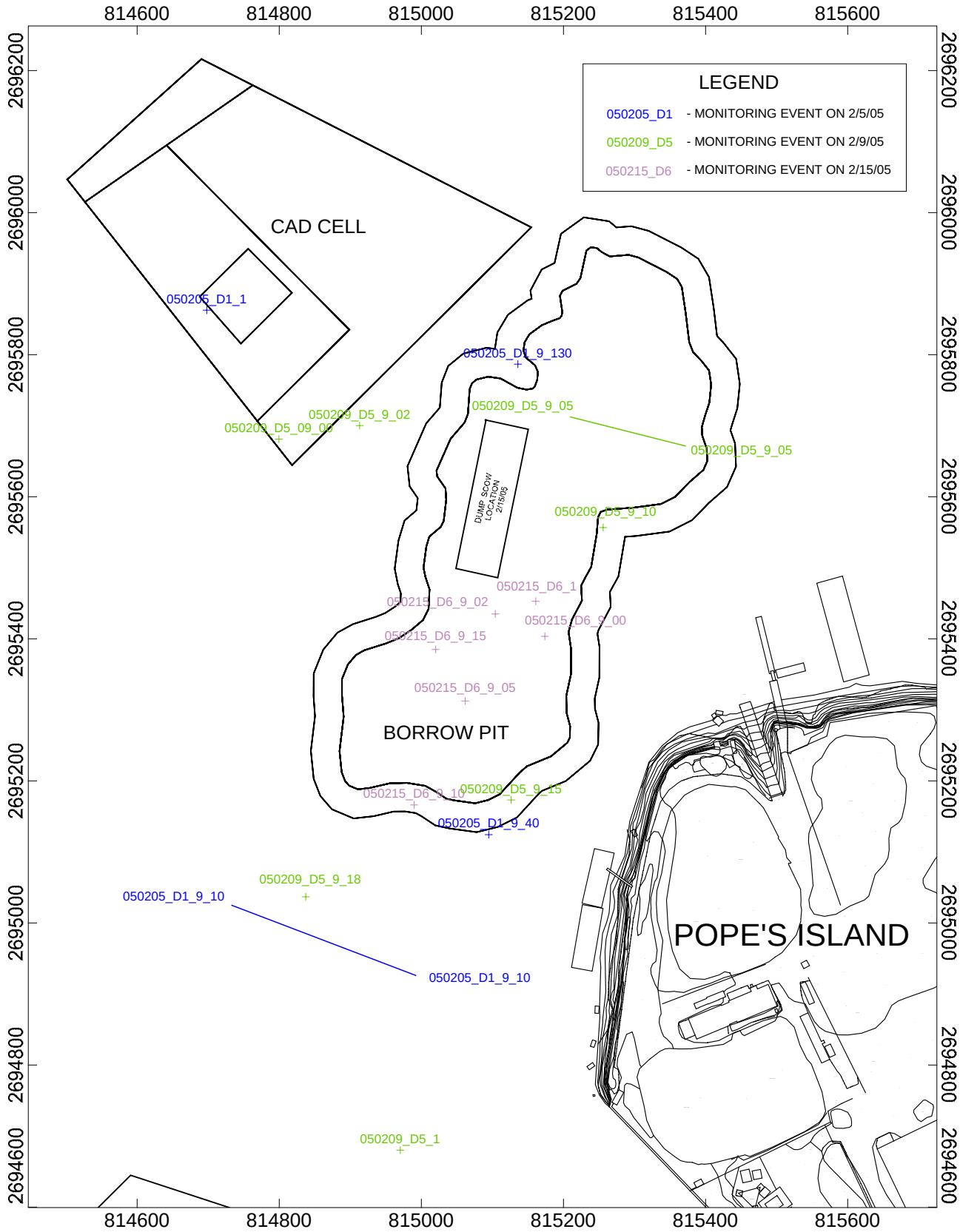
Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 5:41				Current		(NTUs)	Increase (NTUs)		Traffic
	10:27	050202_02_1	2695852.23	Up	5	5.8		Clear, ~38 Degrees	None
			814944.175		10	4.3		NE Wind ~10 Knots	
					25	3.3			
					AVERAGE	**4.4**	**24.4**		
	10:32	050202_02_9	2696106.339	Down	5	7.5		Clear, ~38 Degrees	None
			814801.221		10	11.3		NE Wind ~10 Knots	
					25	50.0			
					AVERAGE	**22.9**	(1.5 Below Limit)		
	12:42	050202_04_1	2695820.376	Up	5	2.0		Clear, ~40 Degrees	None
			814725.721		15	3.4		NE Wind ~10 Knots	
					25	3.0			
					AVERAGE	**2.8**	**22.8**		
	12:47	050202_04_9	2696198.18	Down	5	20.0		Clear, ~40 Degrees	None
			814909.93		15	15.0		NE Wind ~10 Knots	
					25	15.0			
High 13:23					**AVERAGE**	**16.7**	(6.1 Below Limit)		
	14:32	050202_06_1	2694283.231	Up	5	15.0		Clear, ~40 Degrees	None
			814925.126		15	30.0		NE Wind ~10 Knots	
					25	7.5			
					AVERAGE	**17.5**	**32.5**		
	14:27	050202_06_9	2694333.149	Down	5	3.8		Clear, ~40 Degrees	None
			814836.066		15	5.6		NE Wind ~10 Knots	
					25	7.5			
					AVERAGE	**5.6**	(26.9 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

2/11/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 9:38				Current		(NTUs)	Increase (NTUs)		Traffic
	9:39	050211_02_1	2696076.16	Up	5	6.5		Sunny, ~28 Degrees	None
			814828.76		10	11.0		NW Wind ~25 knots	None
					25	12.5			None
					AVERAGE	**10.0**	**30.0**		
	9:46	050211_02_9	2695513.409	Down	5	8.5		Sunny, ~28 Degrees	None
			815133.267		10	6.5		NW Wind ~25 knots	None
					25	14.0			None
					AVERAGE	**9.7**	(20.3 below limit)		
	12:03	050211_04_1	2696045.05	Up	5	5.3		Sunny, ~30 Degrees	None
			814719.637		15	5.5		NW Wind ~20 knots	None
					25	7.0			None
					AVERAGE	**5.9**	**25.9**		
	12:09	050211_04_9	2695494.165	Down	5	16.0		Sunny, ~30Degrees	None
			814983.059		15	19.0		NW Wind ~20 knots	None
					25	7.5			None
Low 15:21					**AVERAGE**	**14.2**	(11.7 below limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:2400

100 0 100

US survey foot

1" = 200'

NEW BEDFORD HARBOR DREDGE - PHASE II

WATER QUALITY MONITORING LOCATIONS - DISPOSAL 2/5/05, 2/9/05, 2/15/05

APEX ENVIRONMENTAL, INC.

2/5/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Disposal Operations

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 4:16				Current		(NTUs)	Increase (NTUs)		Traffic
	8:57	050205_D1_1	2695862.702	Up	5	2.7		Sunny, ~40 Deg. F	None
			814698.099		10	2.5		N Wind ~10 knots	
					22	4.0			
					AVERAGE	**3.1**	**43.1**		
	9:29	050205_D1_9_10	2694917.407	Down	5	4.0		Sunny, ~40 Deg. F	None
			815014.323		15	5.0		N Wind ~10 knots	
					25	4.0			
					AVERAGE	**4.3**	(38.8 below limit)		
	10:00	050205_D1_9_40	2695124.451	Down	20	4.0		Sunny, ~40 Deg. F	None
			815094.917		20	6.0		N Wind ~10 knots	
Low 10:41					**AVERAGE**	**5.0**	(38.1 below limit)		
	11:26	050205_D1_9_130	2695786.73	Down	10	35.0		Sunny, ~40 Deg. F	None
			815135.959					N Wind ~10 knots	
					AVERAGE	**35.0**	(8.1 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

2/9/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Disposal Operations

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 8:00				Current		(NTUs)	Increase (NTUs)		Traffic
	7:13	050209_D5_1	2694680.246	Up	5	2.8		Overcast, ~35 Deg.	None
			814970.38		10	2.5		Minimal wind	
					25	2.5			
	7:33	**DISPOSAL**	**STARTED**						
					AVERAGE	**2.6**	**42.6**		
	7:34	050209_D5_09_00	2695681.191	Down	5	3.4		Overcast, ~35 Deg.	None
			814799.558		10	3.3		Minimal wind	
					25	2.6			
					AVERAGE	**3.1**	(39.5 Below Limit)		
	7:36	050209_D5_9_02	2695700.186	Down	15	2.4		Overcast, ~35 Deg.	None
			814913.321		25	2.6		Minimal wind	
					AVERAGE	**2.5**	(40.1 Below Limit)		
	7:39	050209_D5_9_05	2695714.257	Down	15	3.1		Overcast, ~35 Deg.	None
			815195.677		25	3.3		Minimal wind	
					AVERAGE	**3.2**	(39.4 Below Limit)		
	7:42	050209_D5_9_10	2695556.76	Down	15	2.8		Overcast, ~35 Deg.	None
			815255.975		25	3.1		Minimal wind	
					AVERAGE	**2.9**	(39.7 Below Limit)		
	7:45	050209_D5_9_15	2695173.254	Down	5	3.8		Overcast, ~35 Deg.	None
			815126.475		15	7.0		Minimal wind	
					25	13.0			
					AVERAGE	**7.9**	(34.7 Below Limit)		
	7:48	050209_D5_9_18	2692864.793	Down	5	2.9		Overcast, ~35 Deg.	None
			815041.977		15	3.6		Minimal wind	
					25	2.8			
Low 14:03					**AVERAGE**	**3.1**	(39.5 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

2/15/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Disposal Operations

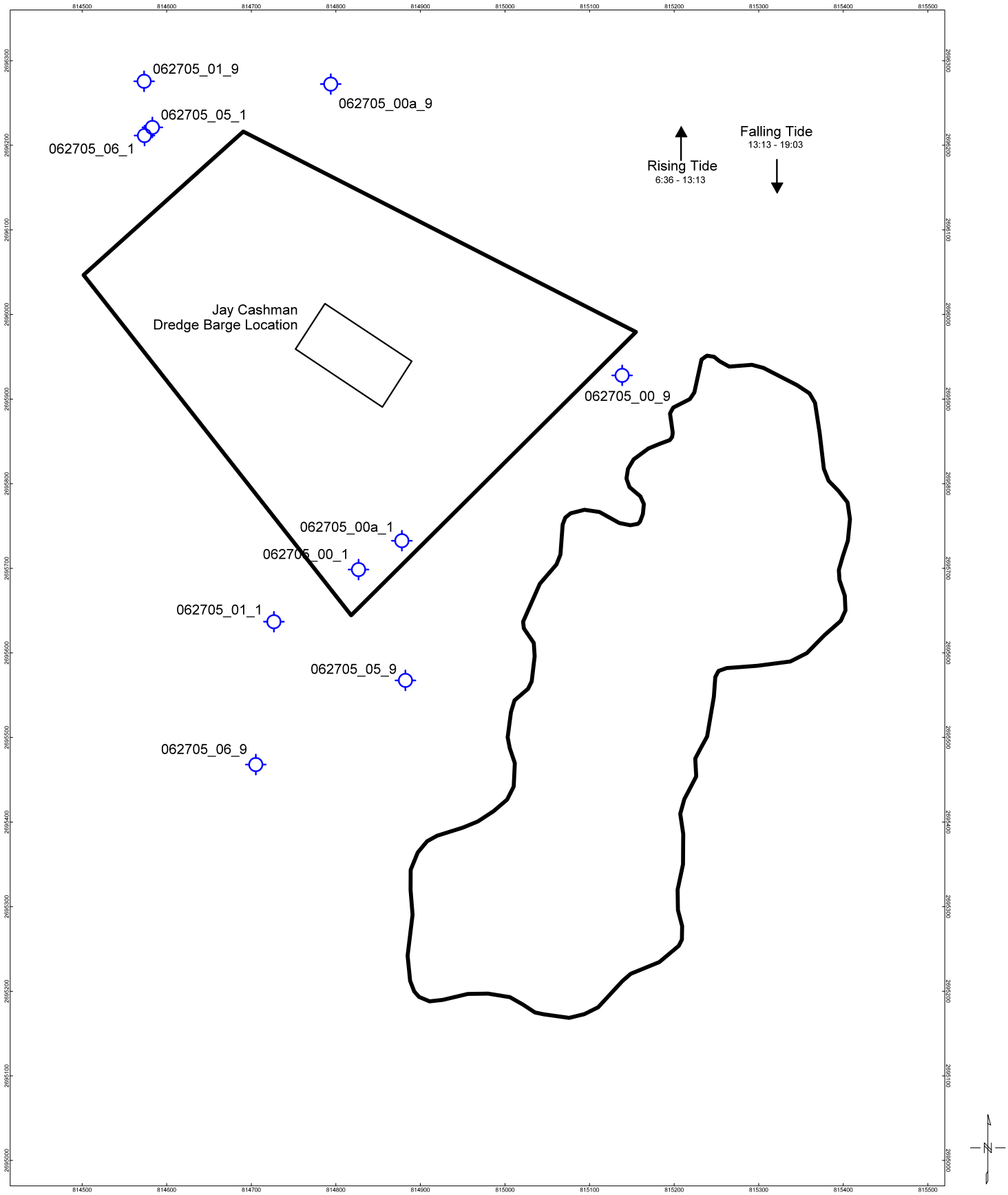
Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 13:54				Current		(NTUs)	Increase (NTUs)		Traffic
	15:42	050215_D6_1	2695452.865	Up	5	1.0		Clear, ~45 Degrees	None
			815161.014	Up	15	1.5		W Wind ~10 Knots	
				Up	25	2.8			
					AVERAGE	**1.8**	**41.8**		
	15:53	**DISPOSAL**	**STARTED**						
	15:53	050215_D6_9_00	2695440.594	Down	5	0.3		Clear, ~45 Degrees	None
			815142.875					W Wind ~10 Knots	
					AVERAGE	**0.3**	(41.5 Below Limit)		
	15:54	050215_D6_9_02	2695440.346	Down	5	0.7		Clear, ~45 Degrees	None
			815106.431		10	4.0		W Wind ~10 Knots	
					15	2.6			
					20	8.5			
					25	10.0			
					AVERAGE	**5.2**	(36.6 Below Limit)		
	15:59	050215_D6_9_05	2695312.5	Down	5	6.0		Clear, ~45 Degrees	None
			815061.745		10	8.0		W Wind ~10 Knots	
					15	9.0			
					20	11.5			
					25	10.5			
					30	10.0			
					15	11.5			
					10	9.0			
					5	7.0			
					AVERAGE	**9.2**	(32.6 Below Limit)		
	16:01	050215_D6_9_10	2695166.249	Down	5	6.5		Clear, ~45 Degrees	None
			814989.849		10	7.3		W Wind ~10 Knots	
					15	10.0			
					20	10.5			
					25	10.0			
					30	8.0			
					20	11.8			
					15	8.5			
					10	7.0			
					5	6.0			
					AVERAGE	**8.6**	(33.2 Below Limit)		
	16:05	050215_D6_9_15	2695385.098	Down	5	6.8		Clear, ~45 Degrees	None
			815020.248		10	7.0		W Wind ~5 Knots	
					15	7.5			
					20	6.5			
					25	10.5			
					30	11.9			
					25	13.0			
					20	6.5			
					15	27.5			
					10	7.3			
					5	6.3			
Low 18:54					**AVERAGE**	**10.1**	(31.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity

6/27/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 6:36				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	7:39	062705_00_1	814882.29	Up	5	2.3		Sunny, ~82 Degrees	None
		(Background)	2695567.46		10	2.8		W Wind 0-5 knots	
					15	2.8			
					20	2.3			
					25	2.2			
					30	2.5			
					AVERAGE	**2.5**	**22.5**		
	7:47	062705_00_9	814793.96	Down	5	7.0		Sunny, ~82 Degrees	None
			2696272.35		10	4.3		W Wind 0-5 knots	
					15	2.6			
					20	2.5			
					25	2.8			
					30	4.3			
					AVERAGE	**3.9**	(18.6 Below Limit)		
	12:13	062705_00a_1	814726.76	Up	5	2.8		Sunny, ~85 Degrees	None
		(Background)	2695636.82		10	3.5		W Wind 1-5 knots	
					15	2.4			
					20	2.1			
					25	2.2			
					30	8.5			
					AVERAGE	**3.6**	**23.6**		
	12:21	062705_00a_9	814573.74	Down	5	2.6		Sunny, ~85 Degrees	None
			2696211.51		10	2.1		W Wind 1-5 knots	
					15	5.6			
					20	4.9			
					25	5.0			
					30	5.0			
					AVERAGE	**4.2**	(19.4 Below Limit)		
	12:33	062705_01_1	814878.05	Up	5	2.9		Sunny, ~85 Degrees	None
		(Background)	2695732.56		10	2.8		W Wind 1-5 knots	
					15	2.6			
					20	2.4			
					25	2.6			
					30	4.0			
					AVERAGE	**2.9**	**22.9**		
	12:40	062705_01_9	814573.31	Down	5	2.7		Sunny, ~85 Degrees	None
			2696275.65		10	2.8		W Wind 1-5 knots	
					15	3.0			
					20	5.8			
					25	6.3			
					30	5.5			
High 13:13					**AVERAGE**	**4.3**	(18.6 Below Limit)		
Falling Tide	14:18	062705_05_1	814583.06	Up	5	3.1		Sunny, ~85 Degrees	None
		(Background)	2696221.14		10	3.3		W Wind 1-5 knots	
					15	3.2			
					20	4.8			
					25	6.8			
					30	6.3			
					AVERAGE	**4.6**	**24.6**		
	14:10	062705_05_9	814789.66	Down	5	2.5		Sunny, ~85 Degrees	None
			269578.51		10	5.5		W Wind 1-5 knots	
					15	10.0			
					20	24.0			
					25	6.5			
					30	5.0			
					AVERAGE	**8.9**	(15.7 Below Limit)		
	15:40	062705_06_1	814782.92	Up	5	3.2		Sunny, ~85 Degrees	None
		(Background)	269618.36		10	2.9		S Wind 5-10 knots	
					15	6.1			
					20	6.5			
					25	15.5			
					30	17.0			
					AVERAGE	**8.5**	**28.5**		
	15:48	062705_06_9	814705.34	Down	5	4.2		Sunny, ~85 Degrees	None
			2695467.98		10	6.3		S Wind 5-10 knots	
					15	8.0			
					20	8.5			
					25	7.8			
					30	10.0			
Low 19:03					**AVERAGE**	**7.5**	(21.0 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

US survey foot

06/27/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

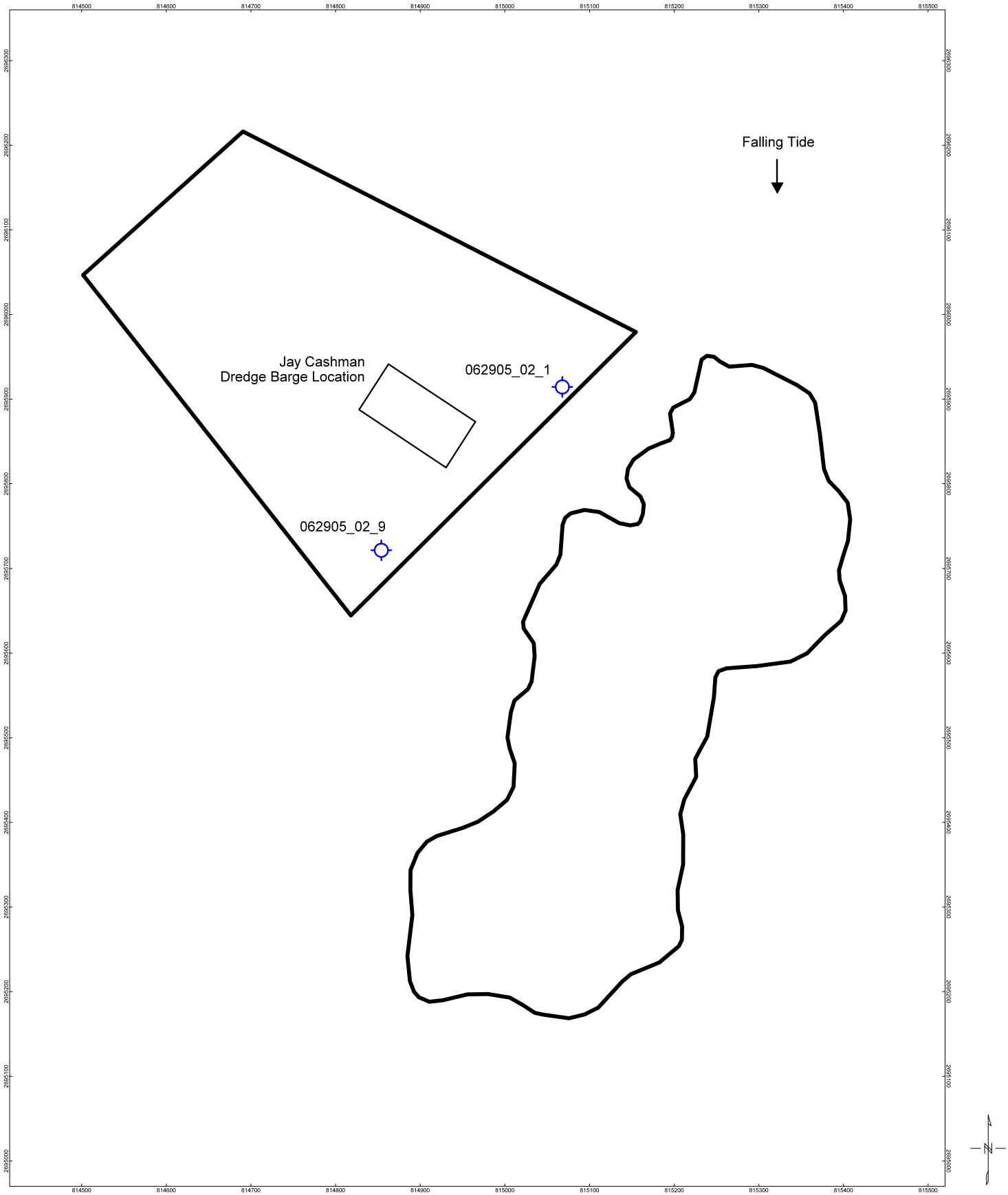
Water Quality Stations

Apex Environmental, Inc.

6/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 2:33				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	8:16	062905_02_1	814854.04	Up	5	4.9		Sunny, ~80 Degrees	None
		(Background)	2695721.48		10	4.8		W Wind 5-10 knots	
					15	6.3			
					20	11.0			
					25	4.7			
					30	4.3			
					AVERAGE	**6.0**	**26.0**		
	8:22	062905_02_9	815067.86	Down	5	14.0		Sunny, ~80 Degrees	None
			2695914.44		10	24.0		W Wind 5-10 knots	
					15	10.5			
					20	12.5			
					25	13.5			
					30	15.0			
Low 8:26					**AVERAGE**	**14.9**	11.1 NTUs		
							Below Permissible Turbidity Increase Limit		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

US survey foot

06/29/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

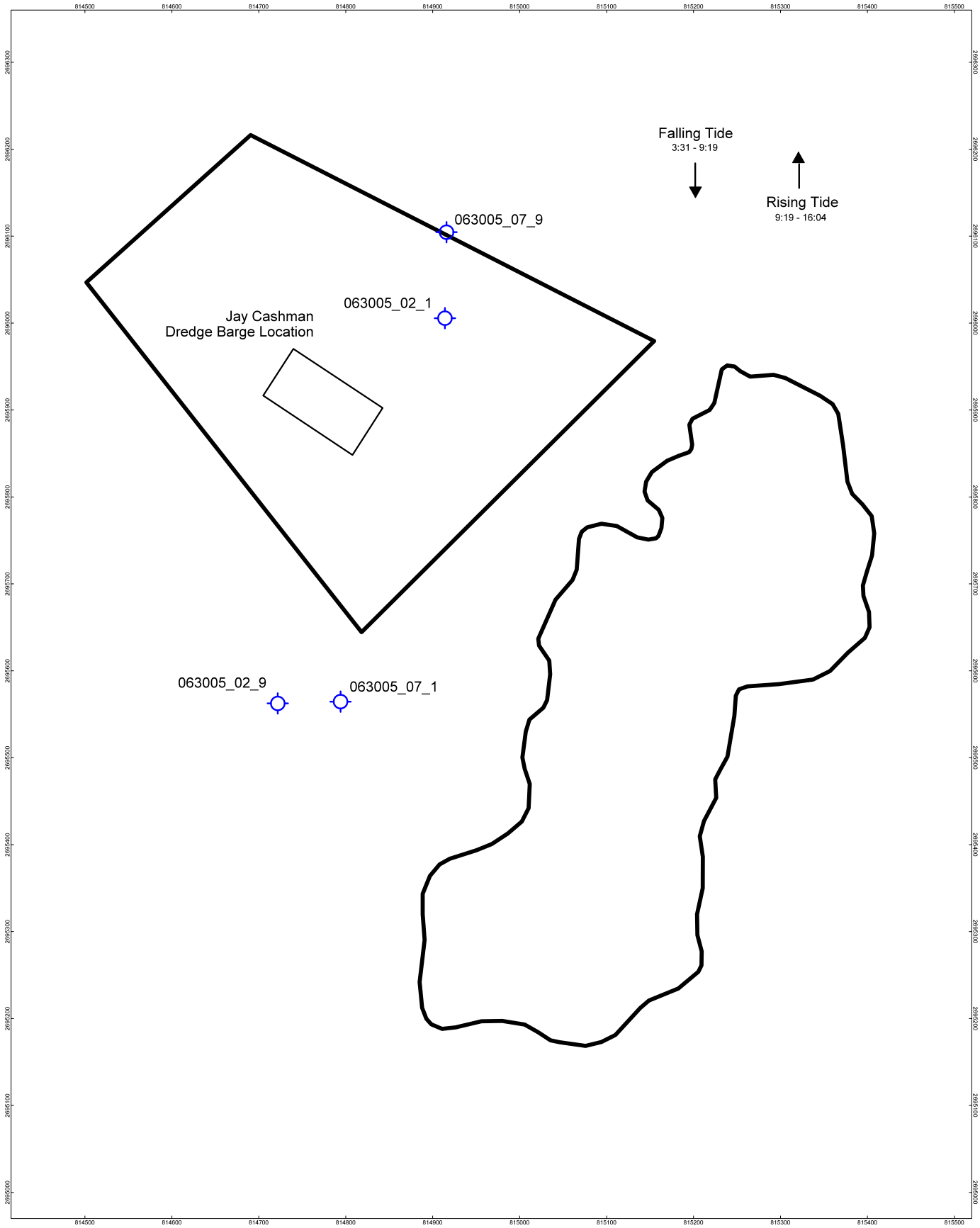
Water Quality Stations

Apex Environmental, Inc.

6/30/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 3:31				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	8:53	063005_02_1	814721.76	Up	5	5.5		Rainy, ~75 Degrees	None
		(Background)	2695562.44		10	10.0		W Wind 5-10 knots	
					15	7.0			
					20	12.0			
					25	12.5			
					30	8.5			
					AVERAGE	**9.3**	**29.3**		
	9:00	063005_02_9	814914.04	Down	5	5.0		Rainy, ~75 Degrees	None
			2696005.58		10	5.1		W Wind 5-10 knots	
					15	3.1			
					20	19.0			
					25	30.0			
					30	42.0			
Low 9:19					**AVERAGE**	**17.4**	11.9 NTUs		
Rising Tide	14:16	063005_07_1	814793.99	Up	5	1.5	Below Permissible	Rainy, ~75 Degrees	None
		(Background)	2695564.51		10	1.7	Turbidity Increase Limit	SW Wind 5-10 knots	
					15	1.6			
					20	1.7			
					25	2.1			
					30	2.0			
					AVERAGE	**1.8**	**21.8**		
	14:07	063005_07_9	814915.86	Down	5	6.0		Rainy, ~75 Degrees	None
			2696104.53		10	11.0		SW Wind 5-10 knots	
					15	9.0			
					20	12.0			
					25	9.5			
					30	9.0			
High 16:04					**AVERAGE**	**9.4**	(12.3 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

US survey feet

06/30/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

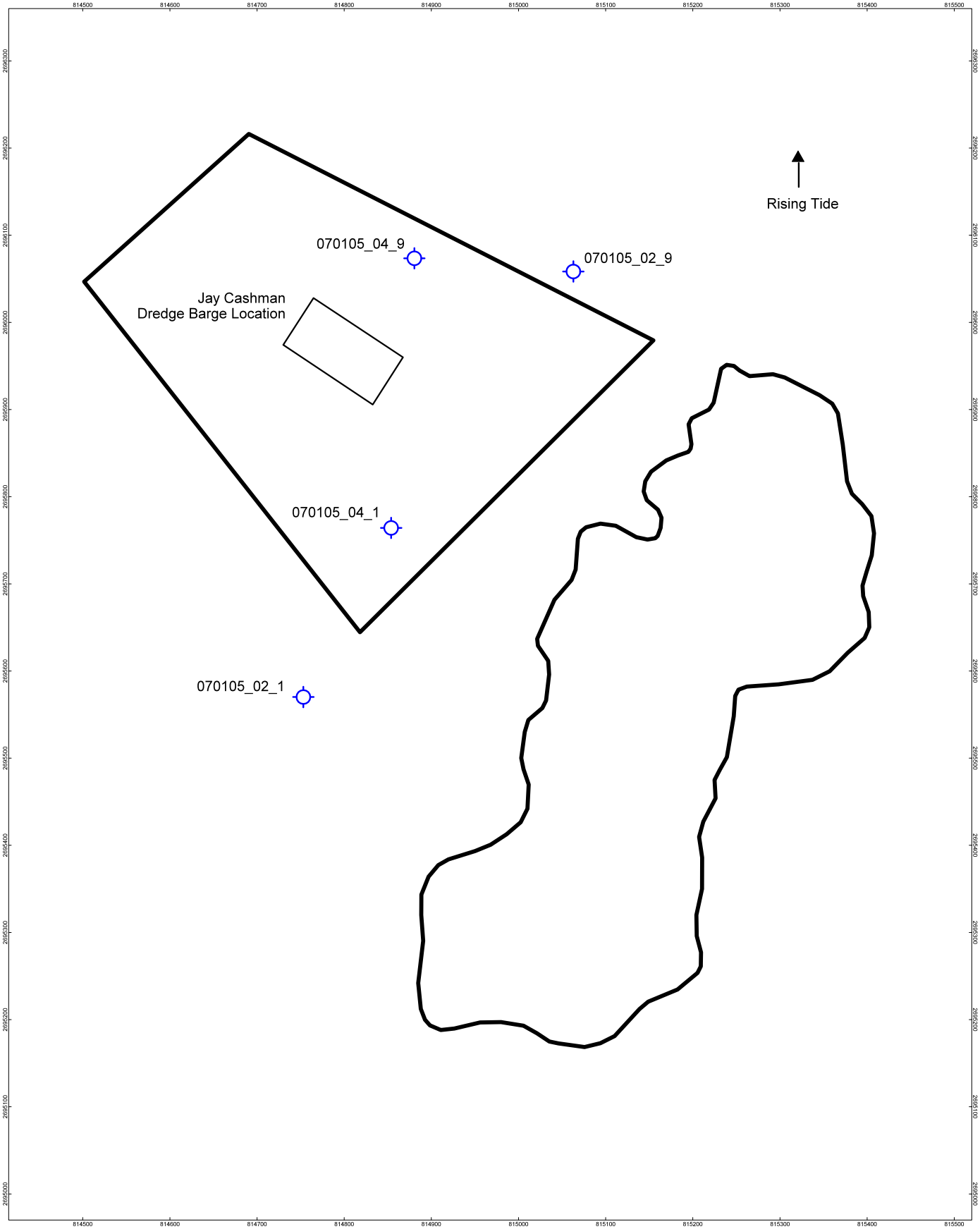
Water Quality Stations

Apex Environmental, Inc.

7/1/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 10:04				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	12:19	070105_02_1	814753.16	Up	5	3.8		Cloudy, ~72 Degrees	None
		(Background)	2695570.14		10	5.3		S Wind 5-10 knots	
					15	5.5			
					20	9.0			
					25	10.0			
					30	3.5			
					AVERAGE	6.2	26.2		
	12:28	070105_02_9	815062.91	Down	5	9.5		Cloudy, ~72 Degrees	None
			2696058.4		10	12.8		S Wind 5-10 knots	
					15	10.0			
					20	11.5			
					25	9.0			
					30	18.0			
					AVERAGE	11.8	14.4 NTUs		
	14:35	070105_04_1	814915.86	Up	5	1.9	Below Permissible	Cloudy, ~72 Degrees	None
		(Background)	2696104.53		10	2.0	Turbidity Increase Limit	S Wind 5-10 knots	
					15	2.0			
					20	1.9			
					25	5.5			
					30	12.0			
					AVERAGE	4.2	24.2		
	14:39	070105_04_9	814793.99	Down	5	22.5		Cloudy, ~72 Degrees	None
			2695564.51		10	5.7		S Wind 5-10 knots	
					15	8.0			
					20	10.2			
					25	10.0			
					30	8.7			
High 17:04					AVERAGE	10.9	(13.3 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/01/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

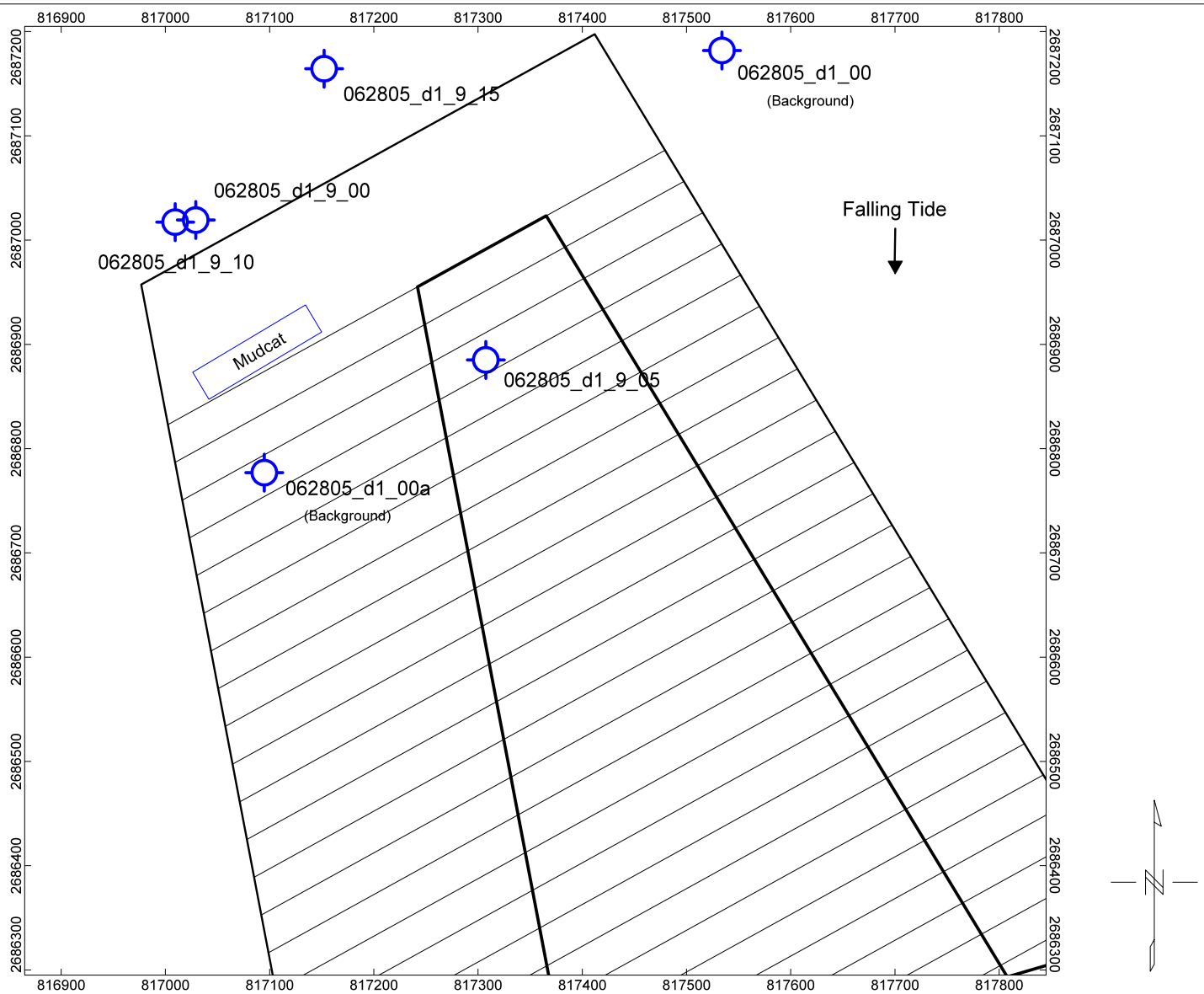
Water Quality Stations

Apex Environmental, Inc.

6/28/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 7:30				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	10:22	062805_d1_00	817780.5	Up	2	4.5		Sunny, ~85 Degrees	None
		(Background)	2687437.15		4	4.0		W Wind ~10 Knots	
					6	3.6			
					8	4.5			
					AVERAGE	4.1	44.1		
	10:46	062805_d1_00a	817159.23	Down	2	2.3		Sunny, ~85 Degrees	None
		(Background)	2686632.01		4	3.0		W Wind ~10 Knots	
					6	7.5			
					8	9.5			
					AVERAGE	2.3	42.3		
	11:30	PLACEMENT 1	STARTED						
	11:30	062805_d1_9_00	817014.81	Down	2	1.7		Sunny, ~85 Degrees	None
			2687052.69		4	3.5		W Wind ~10 Knots	
					6	5.0			
					8	6.0			
					6	4.5			
					8	2.5			
					10	3.8			
					AVERAGE	4.5	37.8 NTUs		
	11:35	062805_d1_9_05	817023.65		2	20.0	Below Permissible	Sunny, ~85 Degrees	None
			2687068.38		4	11.0	Turbidity Increase Limit	W Wind ~10 Knots	
					6	7.0			
					8	18.0			
					AVERAGE	7.3	(35.0 Below Limit)		
	11:39	062805_d1_9_10	817006.35	Down	10	6.0		Sunny, ~85 Degrees	None
			2687052.69		6	8.0		W Wind ~10 Knots	
					8	9.0			
					10	11.5			
					AVERAGE	8.6	(33.7 Below Limit)		
	11:43	062805_d1_9_15	817233.98	Down	10	5.5		Sunny, ~85 Degrees	None
			2687271.84		8	6.5		W Wind ~10 Knots	
					6	4.5			
					4	2.5			
					2	4.0			
High 14:09					AVERAGE	4.6	(37.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity



Scale 1:1200

50 0 50 100 150

US survey foot

06/28/05 Placement #1
OU#3 Area Water Quality Location Map

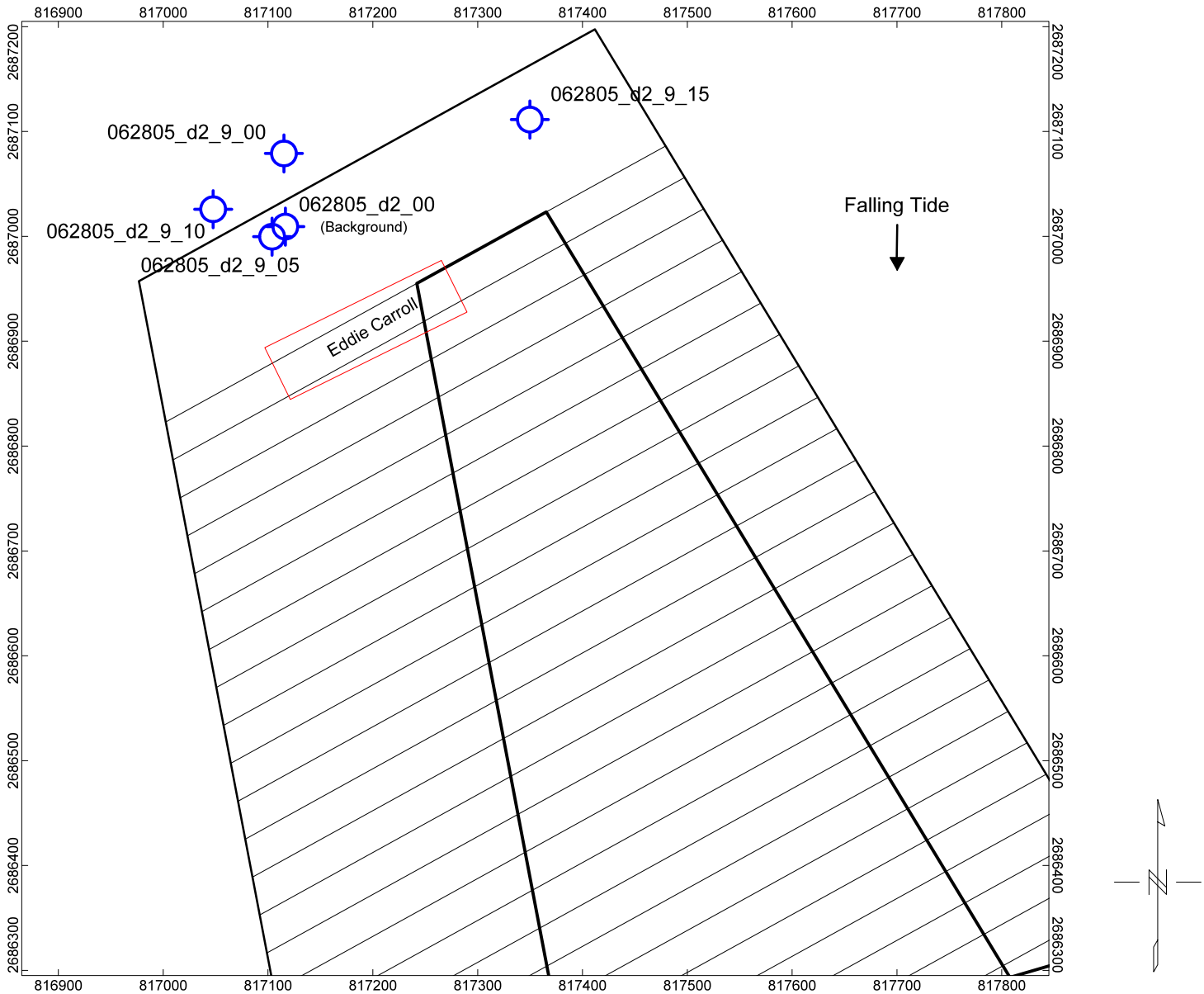
Water Quality Stations

Apex Environmental, Inc.

6/28/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OUI#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 14:09				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	14:42	062805_d2_00	817102.22	Down	2	3.5		Cloudy, ~80 Degrees	None
		(Background)	2687100.03		4	3.8		SW Wind ~10 Knots	
					6	3.9			
					8	3.7			
					AVERAGE	**3.7**	**43.7**		
	15:25	**PLACEMENT 2**	**STARTED**						
	15:25	062805_d2_9_00	817142.09	Down	2	3.4		Cloudy, ~80 Degrees	None
			2687139.84		4	3.5		SW Wind ~10 Knots	
					6	3.5			
					8	3.8			
					10	12.0			
					12	16.0			
					10	12.5			
					8	7.0			
					AVERAGE	**7.7**	36.0 NTUs		
	15:30	062805_d2_9_05	817142.2	Down	8	7.5	Below Permissible	Cloudy, ~80 Degrees	None
			2687080.87		6	13.0	Turbidity Increase Limit	SW Wind ~10 Knots	
					4	12.0			
					8	27.0			
					10	34.0			
					8	15.0			
					6	5.0			
					AVERAGE	**16.2**	(27.5 Below Limit)		
	15:35	062805_d2_9_10	817154.12	Down	10	27.0		Sunny, ~85 Degrees	None
			2687090.14		8	13.0		W Wind ~10 Knots	
					6	4.0			
					4	0.7			
					2	0.3			
					4	0.5			
					6	2.5			
					8	11.5			
					10	25.0			
					AVERAGE	**9.4**	(34.3 Below Limit)		
	15:40	062805_d2_9_15	817355.87	Down	2	0.4		Sunny, ~85 Degrees	None
			2687144.62		4	0.5		W Wind ~10 Knots	
					6	1.0			
					8	1.8			
					10	2.3			
Low 20:45					**AVERAGE**	**6.0**	(37.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity



Scale 1:1200

50 0 50 100 150

US survey foot

06/28/05 Placement #2
OU#3 Area Water Quality Location Map

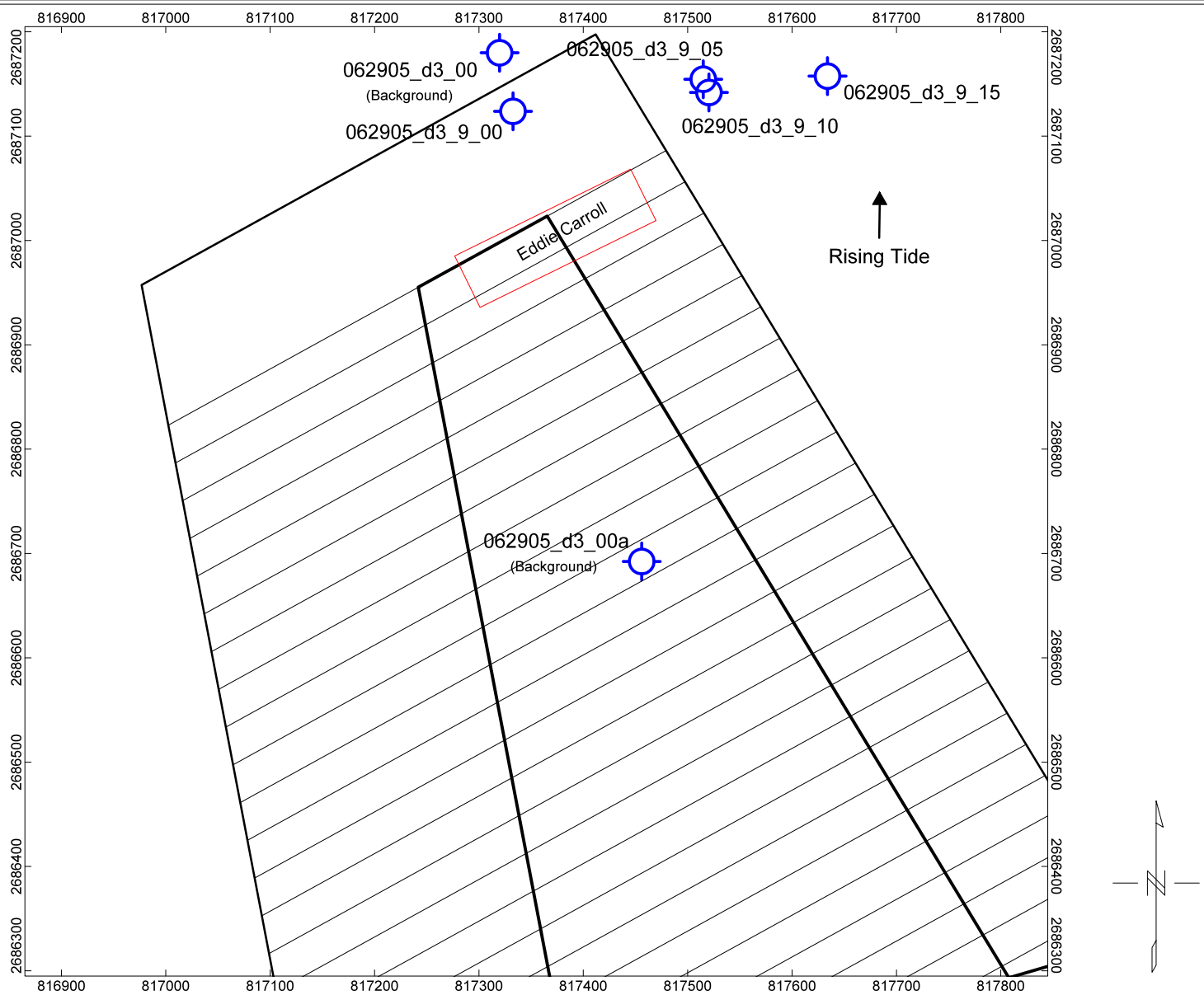
Water Quality Stations

Apex Environmental, Inc.

6/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:26				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	8:42	062905_d3_00	817378.02	Up	2	2.0		Hazy, ~80 Degrees	None
		(Background)	2687268.54		4	1.9		SW Wind ~10 Knots	
					6	2.0			
					8	2.3			
					AVERAGE	2.0	42.0		
	9:09	062905_d3_00a	817461.49	Down	2	1.8		Hazy, ~80 Degrees	None
		(Background)	2686770.79		4	2.1		SW Wind ~10 Knots	
					6	2.5			
					8	2.5			
					AVERAGE	2.2	42.2		
	9:12	PLACEMENT 3	STARTED						
	9:12	062905_d3_9_00	817382.95	Down	2	7.0		Hazy, ~80 Degrees	None
			2687227.96		4	2.0		SW Wind ~10 Knots	
					6	2.3			
					8	7.0			
					6	6.5			
					AVERAGE	5.0	37.0 NTUs		
	9:17	062905_d3_9_05	817549.98	Down	2	6.0	Below Permissible	Hazy, ~80 Degrees	None
			2687276.36		4	8.5	Turbidity Increase Limit	SW Wind ~10 Knots	
					6	7.0			
					8	10.5			
					6	11.0			
					4	4.5			
					AVERAGE	7.9	(34.1 Below Limit)		
	9:22	062905_d3_9_10	817558.03	Down	2	7.5		Hazy, ~80 Degrees	None
			2687268.82		4	9.0		SW Wind ~10 Knots	
					6	8.0			
					8	10.0			
					AVERAGE	8.5	(33.6 Below Limit)		
	9:26	062905_d3_9_15	817608.51	Down	2	6.0		Hazy, ~80 Degrees	None
			2687283.65		4	8.5		SW Wind ~10 Knots	
					6	9.0			
					8	10.0			
High 4:14					AVERAGE	8.4	(33.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidit



Scale 1:1200

50 0 50 100 150

US survey foot

06/29/05 Placement #3
OU#3 Area Water Quality Location Map

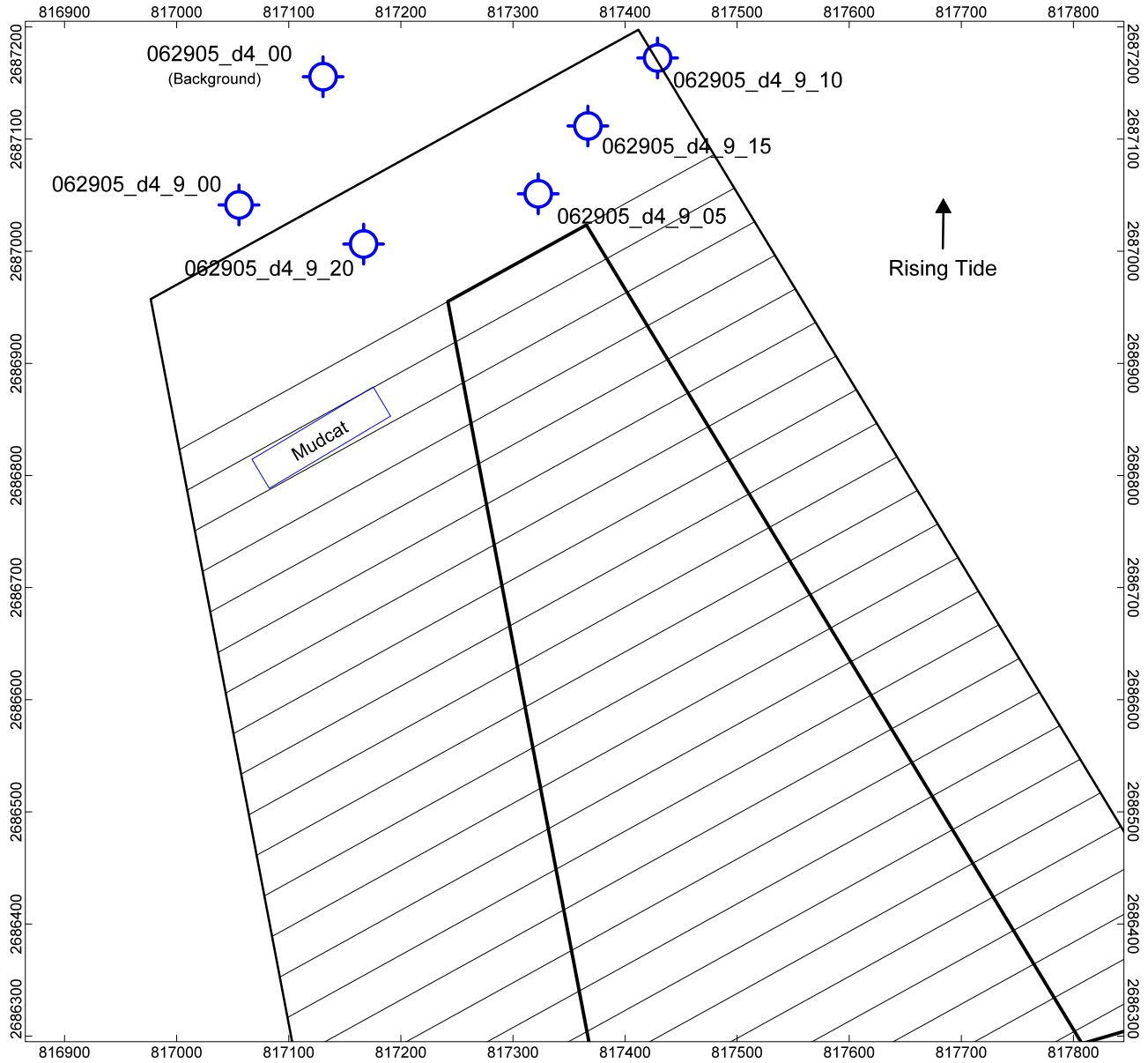
Water Quality Stations

Apex Environmental, Inc.

6/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:26				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	11:38	062905_d4_00	817169.09	Up	2	11.0		Sunny, ~80 Degrees	None
		(Background)	2687165.38		4	12.0		SW Wind ~10 Knots	
					6	12.5			
					8	11.9			
					AVERAGE	11.9	51.9		
	12:09	PLACEMENT 4	STARTED						
	12:09	062905_d4_9_00	817196.47	Down	2	1.8		Sunny, ~80 Degrees	None
			2687034.69		4	2.1		SW Wind ~10 Knots	
					6	2.5			
					8	2.5			
					AVERAGE	2.2	49.7 NTUs		
	12:14	062905_d4_9_05	817328.15	Down	2	16.0	Below Permissible	Sunny, ~80 Degrees	None
			2687051.98		4	17.0	Turbidity Increase Limit	SW Wind ~10 Knots	
					6	12.0			
					8	11.0			
					6	7.6			
					8	14.0			
					AVERAGE	12.9	(39.0 Below Limit)		
	12:19	062905_d4_9_10	817441.07	Down	2	14.0		Sunny, ~80 Degrees	None
			2687198.78		4	16.0		SW Wind ~10 Knots	
					6	23.0			
					8	28.0			
					6	30.0			
					AVERAGE	22.2	(29.7 Below Limit)		
	12:24	062905_d4_9_15	817386.58	Down	2	12.5		Sunny, ~80 Degrees	None
			2687114.23		4	8.0		SW Wind ~10 Knots	
					6	7.0			
					8	30.0			
					6	11.0			
					8	35.0			
					AVERAGE	18.0	(33.9 Below Limit)		
	12:29	062905_d4_9_20	817401.1	Down	2	12.0		Sunny, ~80 Degrees	None
			268147.32		4	13.0		SW Wind ~10 Knots	
					6	10.0			
					8	20.0			
					6	16.0			
					4	8.0			
					6	7.5			
					8	5.0			
High 4:14					AVERAGE	12.2	(39.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity



Scale 1:1200

50 0 50 100 150

US survey foot

06/29/05 Placement #4
OU#3 Area Water Quality Location Map

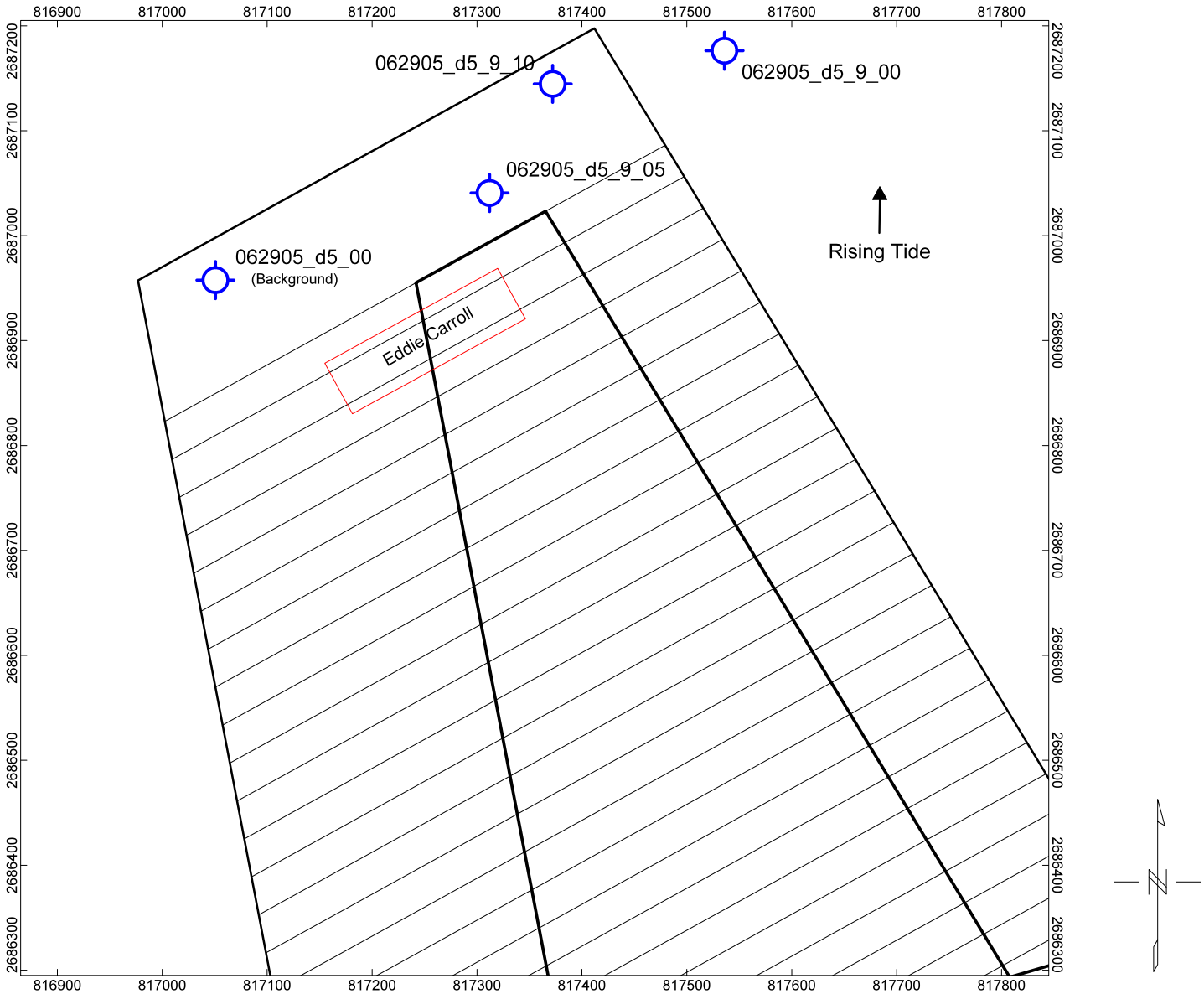
Water Quality Stations

Apex Environmental, Inc.

6/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:26				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	14:45	062905_d5_00	817088.64	Down	2	2.9		Sunny, ~80 Degrees	None
		(Background)	2687018.04		4	2.8		W Wind ~10 Knots	
					6	3.0			
					8	2.9			
					10	4.0			
					AVERAGE	**3.1**	**43.1**		
	15:13	**PLACEMENT 5**	**STARTED**						
	15:13	062905_d5_9_00	817556.14	Down	2	13.0		Sunny, ~80 Degrees	None
			2687248.75		4	10.0		W Wind ~10 Knots	
					6	11.0			
					8	21.0			
					10	35.0			
					AVERAGE	**18.0**	25.1 NTUs		
	15:18	062905_d5_9_05	817328.15	Down	2	16.0	Below Permissible	Sunny, ~80 Degrees	None
			2687051.98		4	17.0	Turbidity Increase Limit	W Wind ~10 Knots	
					6	12.0			
					8	11.0			
					6	7.6			
					8	14.0			
					AVERAGE	**12.9**	(30.2 Below Limit)		
	15:23	062905_d4_9_10	817441.07	Down	2	9.0		Sunny, ~80 Degrees	None
			2687198.78		4	12.3		W Wind ~10 Knots	
					6	14.0			
					8	55.0			
High 4:14					**AVERAGE**	**22.6**	(20.5 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity



Scale 1:1200

50 0 50 100 150

US survey foot

06/29/05 Placement #5
OU#3 Area Water Quality Location Map

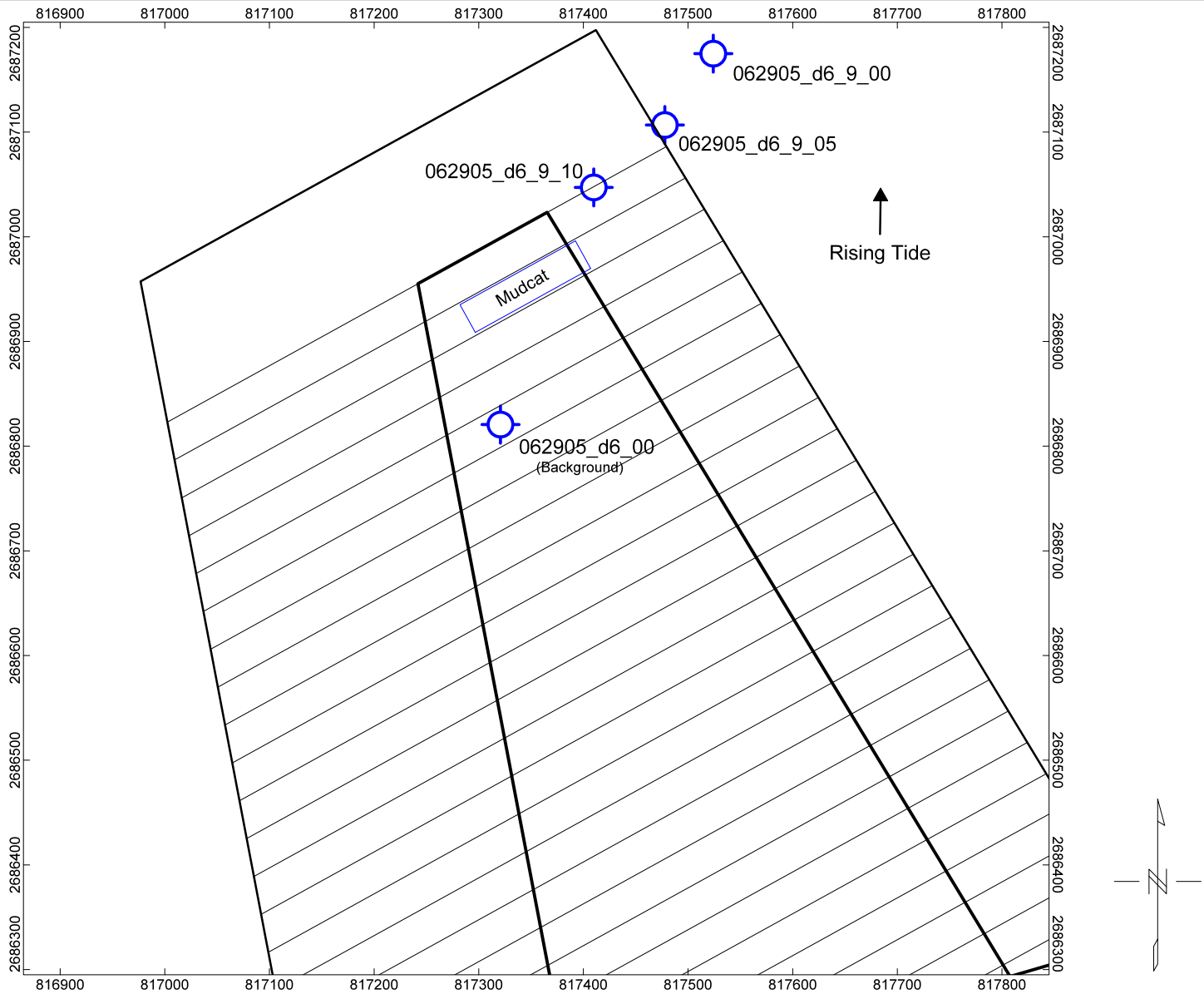
Water Quality Stations

Apex Environmental, Inc.

6/29/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:26				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	17:04	062905_d6_00	817140.14	Up	2	4.8		Sunny, ~80 Degrees	None
		(Background)	2682753.9		4	4.5		W Wind ~10 Knots	
					6	5.0			
					8	4.8			
					AVERAGE	4.8	44.8		
	17:09	PLACEMENT 6	STARTED						
	17:09	062905_d6_9_00	817504.71	Down	2	4.1		Sunny, ~80 Degrees	None
			2687251.9		4	6.1		W Wind ~10 Knots	
					6	4.4			
					8	5.8			
					6	5.3			
					4	5.6			
					AVERAGE	5.2	39.6 NTUs		
	17:14	062905_d6_9_05	817498.04	Down	2	16.0	Below Permissible	Sunny, ~80 Degrees	None
			2687155.56		4	17.0	Turbidity Increase Limit	W Wind ~10 Knots	
					6	12.0			
					8	11.0			
					6	7.6			
					4	14.0			
					AVERAGE	12.9	(31.9 Below Limit)		
	15:23	062905_d6_9_10	817402.84	Down	2	5.8		Sunny, ~80 Degrees	None
			2687051.81		4	6.2		W Wind ~10 Knots	
					6	9.5			
					8	10.0			
High 4:14					AVERAGE	7.9	(36.9 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity



Scale 1:1200

50 0 50 100 150

US survey foot

06/29/05 Placement #6
OU#3 Area Water Quality Location Map

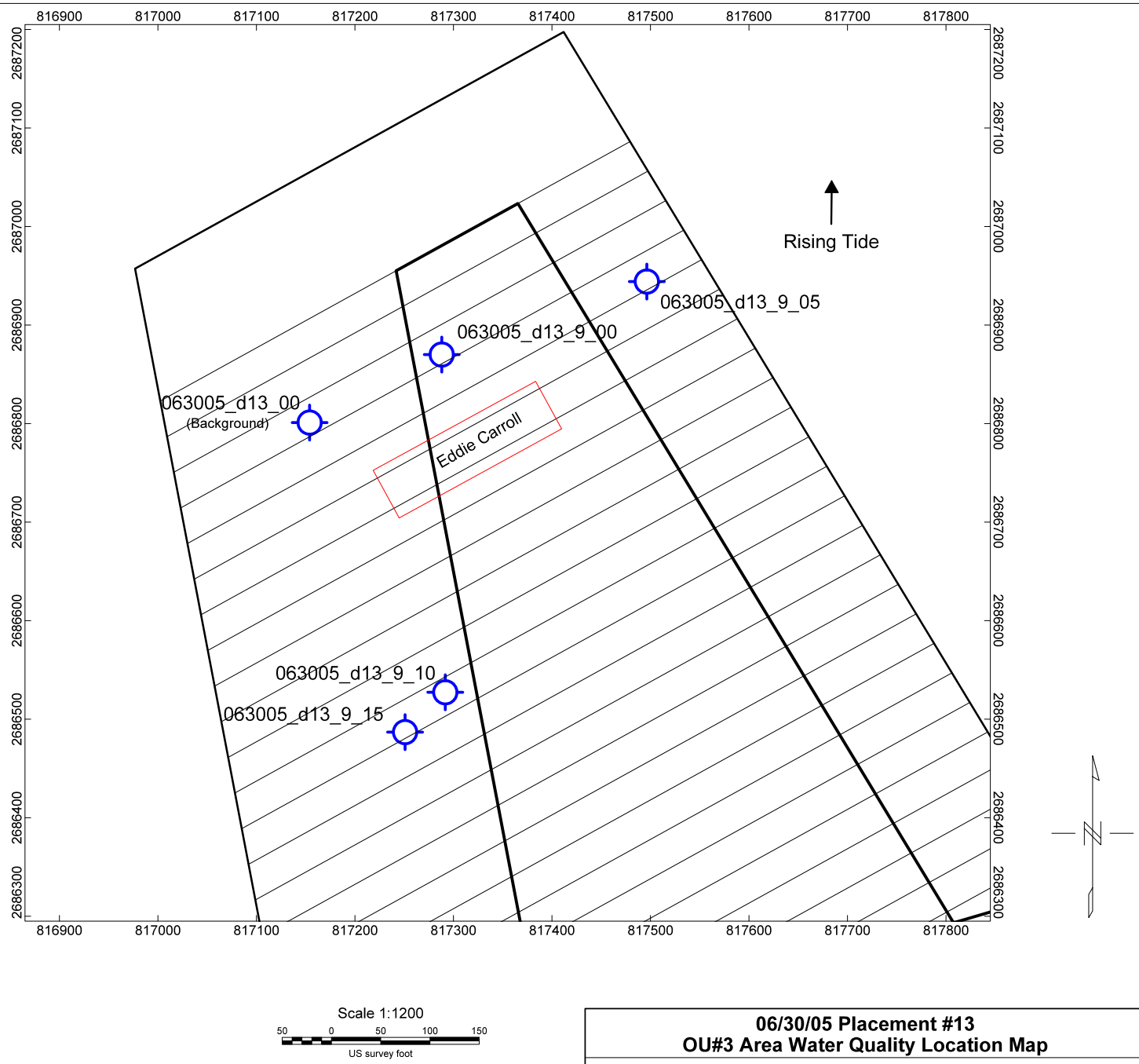
Water Quality Stations

Apex Environmental, Inc.

6/30/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:26				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	12:56	063005_d13_00	817140.14	Down	2	3.3		Cloudy, ~70 Degrees	None
		(Background)	2682753.9		4	3.5		W Wind ~10 Knots	
					6	7.5			
					8	8.0			
					AVERAGE	**5.6**	**45.6**		
	13:05	**PLACEMENT 13**	**STARTED**						
	13:05	063005_d13_9_00	817504.71	Down	2	6.5		Cloudy, ~70 Degrees	None
			2687251.9		4	6.9		W Wind ~10 Knots	
					6	8.0			
					8	8.5			
					6	15.0			
					4	9.5			
					2	8.5			
					AVERAGE	**9.0**	36.6 NTUs		
	13:09	063005_d13_9_05	817498.04	Down	2	8.5	Below Permissible	Cloudy, ~70 Degrees	None
			2687155.56		4	7.5	Turbidity Increase Limit	W Wind ~10 Knots	
					6	7.0			
					8	10.1			
					6	13.3			
					4	12.0			
					2	5.0			
					AVERAGE	**9.0**	(36.6 Below Limit)		
	13:20	063005_d13_9_10	817402.84	Up	2	4.0		Cloudy, ~70 Degrees	None
			2687051.81		4	3.8		W Wind ~10 Knots	
					6	4.5			
					8	6.0			
					AVERAGE	**4.6**	(41.0 Below Limit)		
	13:25	063005_d13_9_15		Up	2	10		Cloudy, ~70 Degrees	None
					4	12.5		W Wind ~10 Knots	
					6	16.75			
					8	6.5			
					6	5.9			
					8	5.7			
High 15:06					**AVERAGE**	**8.7**	(36.9 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



06/30/05 Placement #13
OU#3 Area Water Quality Location Map

Water Quality Stations

Apex Environmental, Inc.

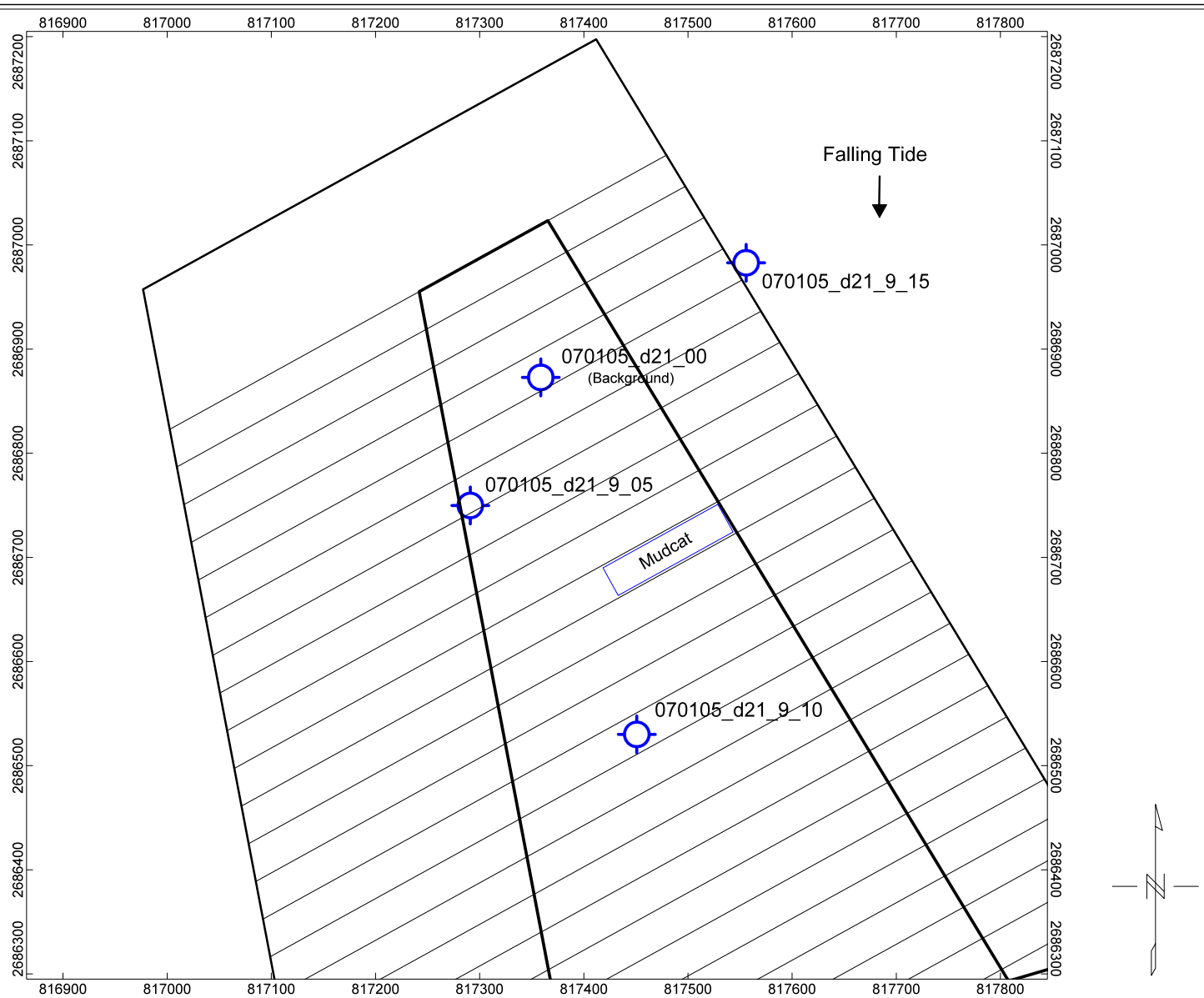
7/1/2005

New Bedford Harbor Dredge Project - Phase II

Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 10:04				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	10:36	070105_d21_00	817562.15	Up	2	3.5		Cloudy, ~72 Degrees	None
		(Background)	2686529.48		4	3.0		S Wind ~10 Knots	
					6	3.5			
					8	4.0			
					10	7.5			
					AVERAGE	**4.3**	**44.3**		
	10:37	**PLACEMENT 21**	**STARTED**						
	10:39	070105_d21_9_05	817284.95	Up	2	14.3		Cloudy, ~72 Degrees	None
			2686765.33		4	19.0		S Wind ~10 Knots	
					6	21.0			
					8	6.0			
					AVERAGE	**15.1**	29.2 NTUs		
	10:45	070105_d21_9_10	817348.66	Down	2	22.5	Below Permissible	Cloudy, ~72 Degrees	None
			2686862.68		4	24.5	Turbidity Increase Limit	S Wind ~10 Knots	
					6	8.1			
					7	6.0			
					AVERAGE	**15.3**	(29.0 Below Limit)		
	10:49	070105_d21_9_15	817578.57	Up	2	6.8		Cloudy, ~72 Degrees	None
			2686934.87		4	11.0		S Wind ~10 Knots	
					6	24.0			
					8	30.0			
Low 17:03					**AVERAGE**	**18.0**	(26.3 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:1200

50 0 50 100 150

US survey foot

07/01/05 Placement #21
OU#3 Area Water Quality Location Map

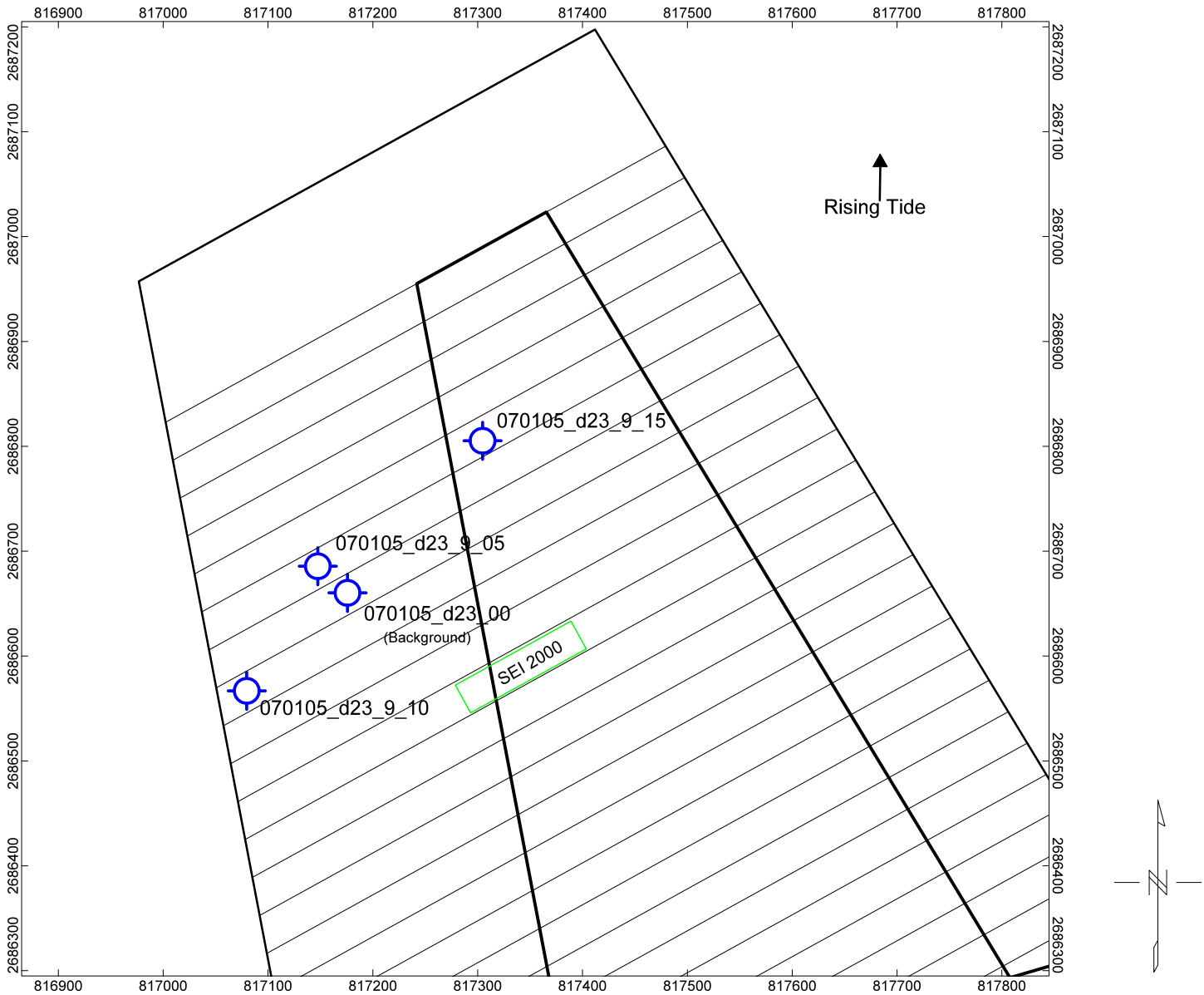
Water Quality Stations

Apex Environmental, Inc.

7/1/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 10:04				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	12:42	070105_d23_00	817329.23	Down	2	3.8		Cloudy, ~75 Degrees	None
		(Background)	2686350.62		4	4.0		S Wind ~10 Knots	
					6	3.5			
					8	4.3			
					AVERAGE	3.9	43.9		
	13:18	PLACEMENT 23	STARTED						
	13:18	070105_d23_9_05	817190.63	Down	2	9.0		Cloudy, ~75 Degrees	None
			2686732.17		4	8.5		S Wind ~10 Knots	
					6	10.0			
					8	7.5			
					AVERAGE	8.8	35.1 NTUs		
	13:22	070105_d23_9_10	817087.58	Down	2	12.0	Below Permissible	Cloudy, ~75 Degrees	None
			2686622.32		4	15.5	Turbidity Increase Limit	S Wind ~10 Knots	
					6	14.0			
					8	16.3			
					AVERAGE	14.4	(29.5 Below Limit)		
	13:32	070105_d23_9_15	817348.05	Down	2	9.3		Cloudy, ~75 Degrees	None
			2686808.55		4	9.8		S Wind ~10 Knots	
					6	10.0			
					8	11.5			
High 17:03					AVERAGE	10.1	(33.8 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:1200

50 0 50 100 150

US survey foot

07/01/05 Placement #23
OU#3 Area Water Quality Location Map

Water Quality Stations

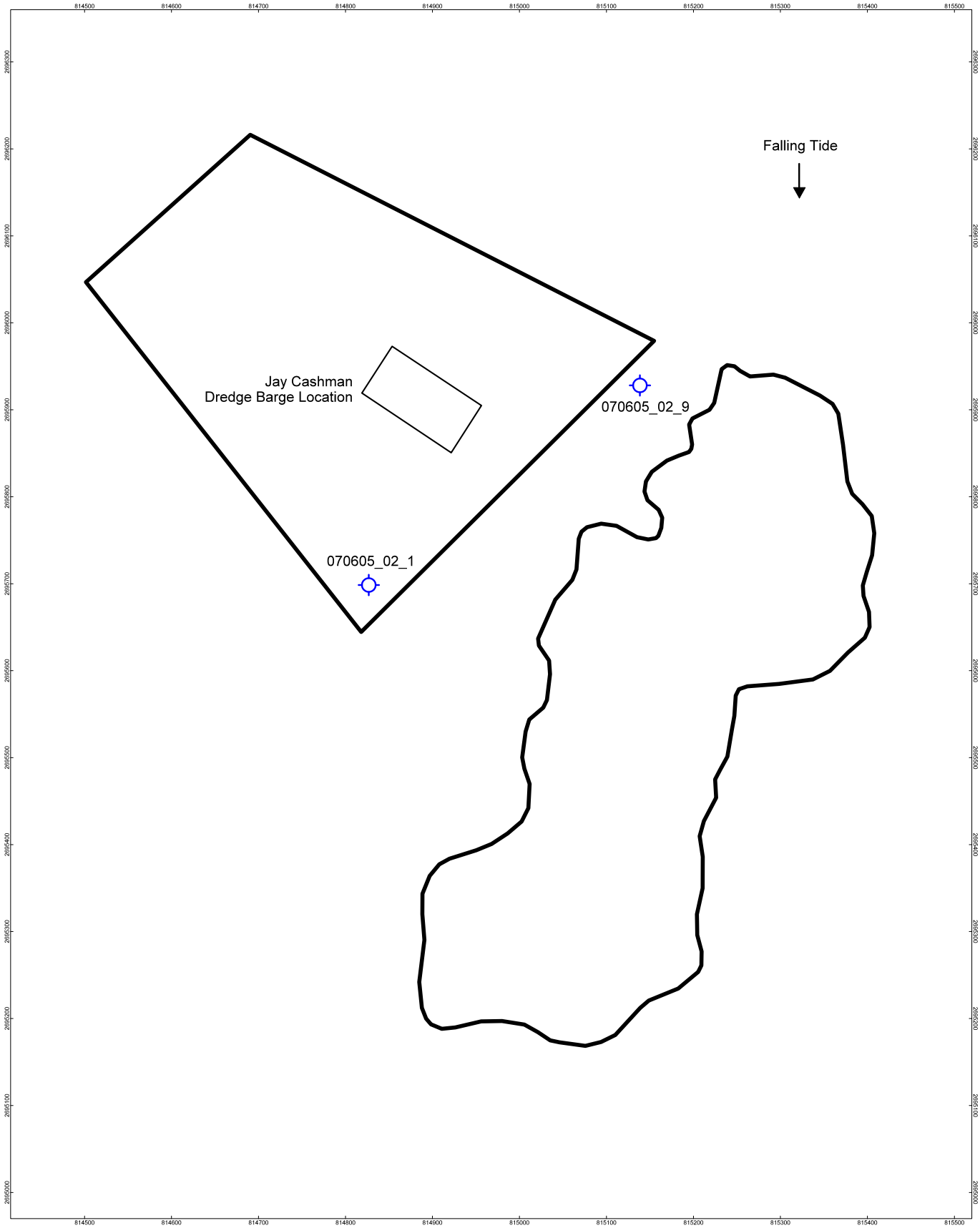
Apex Environmental, Inc.

7/6/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 8:40				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	12:00	070605_02_1	814826.81	Up	5	2.8		Cloudy, ~80 Degrees	None
		(Background)	2695698.48		10	2.5		S Wind 1-5 knots	
					15	4.7			
					20	6.0			
					25	6.0			
					30	3.5			
					AVERAGE	4.3	24.3		
	11:50	070605_02_9	815138.52	Down	5	9.5		Cloudy, ~80 Degrees	None
			2695928.02		10	10.0		S Wind 1-5 knots	
					15	14.5			
					20	21.5			
					25	10.5			
					30	9.0			
Low 13:40					AVERAGE	12.5	11.8 NTUs		

Below Permissible
Turbidity Increase Limit

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

US survey foot

07/06/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

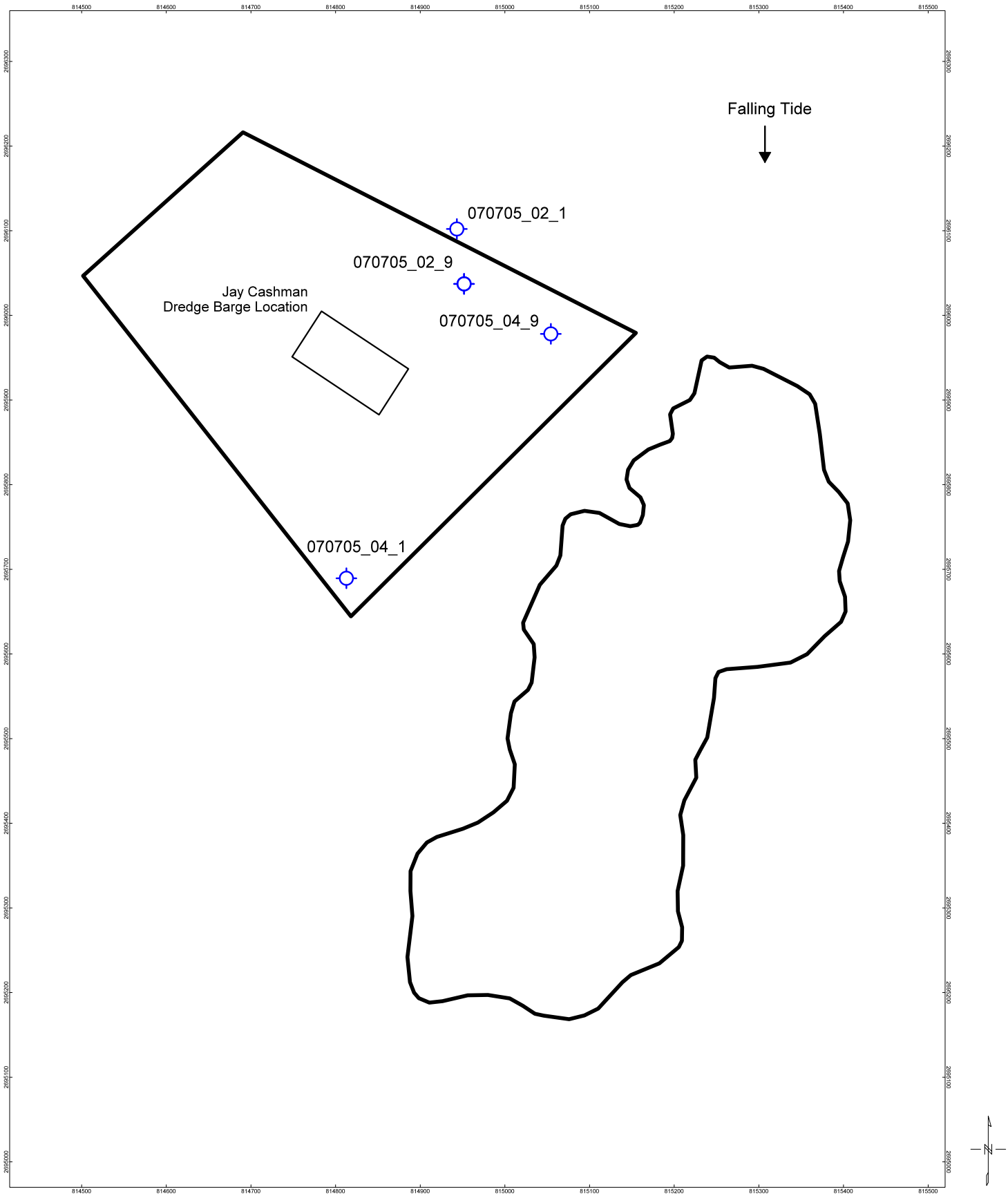
Water Quality Stations

Apex Environmental, Inc.

7/7/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 9:21				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	11:56	070705_02_1	814943.23	Up	5	5.5		Cloudy, ~70 Degrees	None
		(Background)	2696102.07		10	6.0		N Wind 5-15 knots	
					15	6.3			
					20	11.0			
					25	17.0			
					30	22.5			
					AVERAGE	**11.4**	**31.4**		
	12:05	070705_02_9	815780.97	Down	5	6.5		Cloudy, ~70 Degrees	None
			2695561.53		10	8.0		N Wind 5-15 knots	
					15	7.5			
					20	9.5			
					25	13.5			
					30	7.5			
					AVERAGE	**8.8**	22.6 NTUs		
	13:17	070705_04_1	814951.76	Up	5	6.5	Below Permissible	Cloudy, ~70 Degrees	None
		(Background)	2696037.2		10	6.5	Turbidity Increase Limit	N Wind 5-15 knots	
					15	22.0			
					20	11.7			
					25	16.0			
					30	16.0			
					AVERAGE	**13.1**	**33.1**		
	13:23	070705_04_9	814812.74	Down	5	2.2		Cloudy, ~70 Degrees	None
			2695689.43		10	2.6		N Wind 5-15 knots	
					15	2.3			
					20	3.6			
					25	4.8			
					30	10			
Low 14:47					**AVERAGE**	**4.3**	(28.8 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

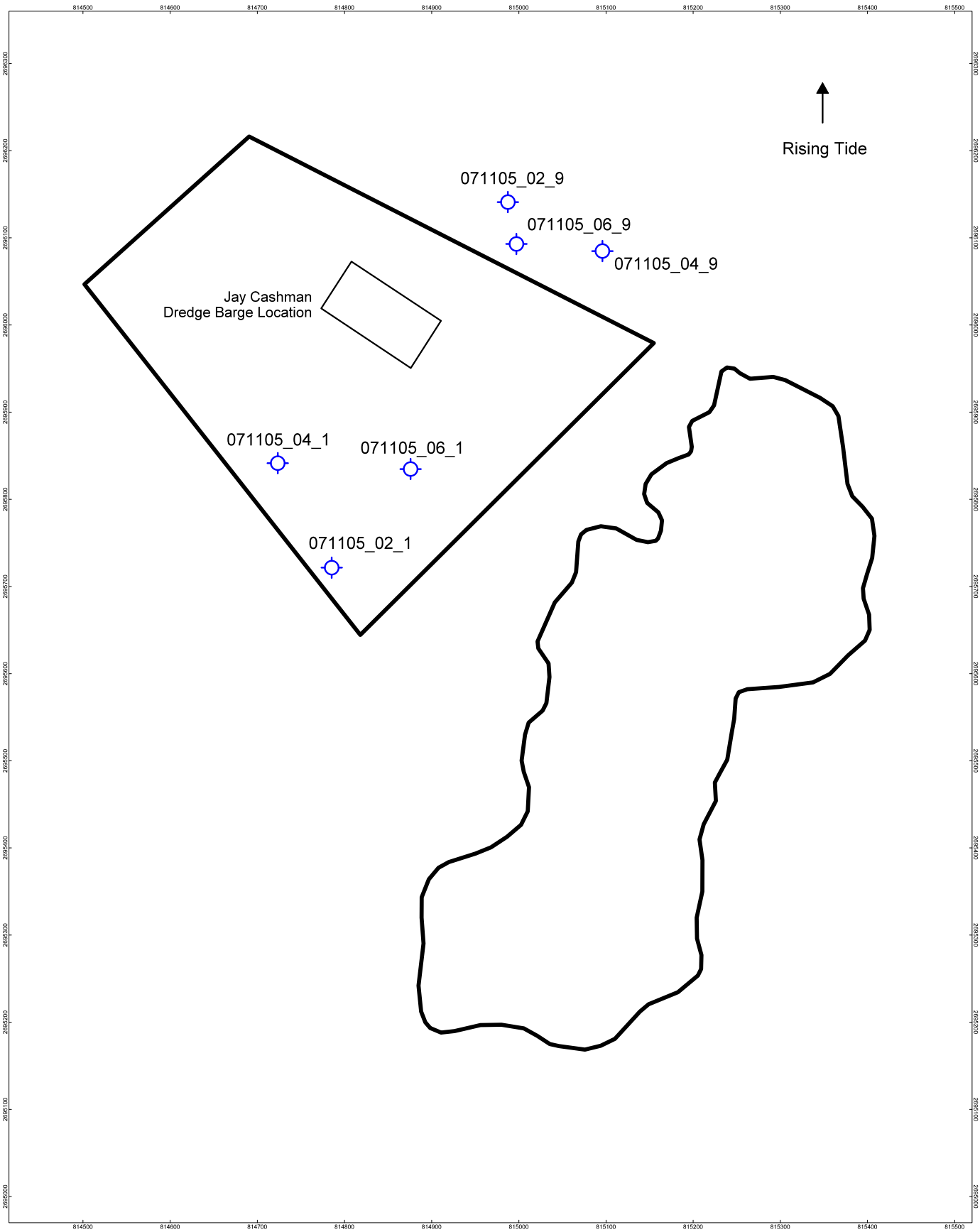
US survey foot

07/07/05 Dredge Operations Water Quality
CAD Cell Area Water Quality Monitoring Locations
Water Quality Stations
Apex Environmental, Inc.

7/11/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 5:14				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	8:43	071105_02_1	814739.92	Up	5	4.8		Sunny, ~80 Degrees	None
		(Background)	2695456.99		10	4.8		NE Wind 5-10 knots	
					15	5.0			
					20	4.2			
					25	4.4			
					30	5.5			
					AVERAGE	4.8	24.8		
	8:53	071105_02_9	814987.43	Down	5	10.5		Sunny, ~80 Degrees	None
			2696141.02		10	15.0		NE Wind 5-10 knots	
					15	7.1			
					20	35.0			
					25	11.0			
					30	22.0			
					AVERAGE	16.8	8.0 NTUs		
	10:04	071105_04_1	814982.98	Up	5	2.6	Below Permissible	Sunny, ~80 Degrees	None
		(Background)	2695576.6		10	3.0	Turbidity Increase Limit	NE Wind 5-10 knots	
					15	3.0			
					20	2.4			
					25	1.6			
					30	1.8			
					AVERAGE	2.4	22.4		
	10:15	071105_04_9	815095.87	Down	5	5.7		Sunny, ~80 Degrees	None
			2696084.83		10	5.5		NE Wind 5-10 knots	
					15	4.8			
					20	5			
					25	8.5			
					AVERAGE	5.9	(16.5 Below Limit)		
	10:46	071105_06_1	815116.14	Up	5	2.3		Sunny, ~80 Degrees	None
		(Background)	2695747.5		10	3.0		NE Wind 5-10 knots	
					15	6.0			
					20	6.5			
					25	6.5			
					30	3.5			
					AVERAGE	4.6	24.6		
	10:54	071105_06_9	814997.22	Down	5	2.8		Sunny, ~80 Degrees	None
			2696092.99		10	4.3		NE Wind 5-10 knots	
					15	5			
					20	10			
High 12:04					AVERAGE	5.5	(19.1 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

US survey foot

07/11/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

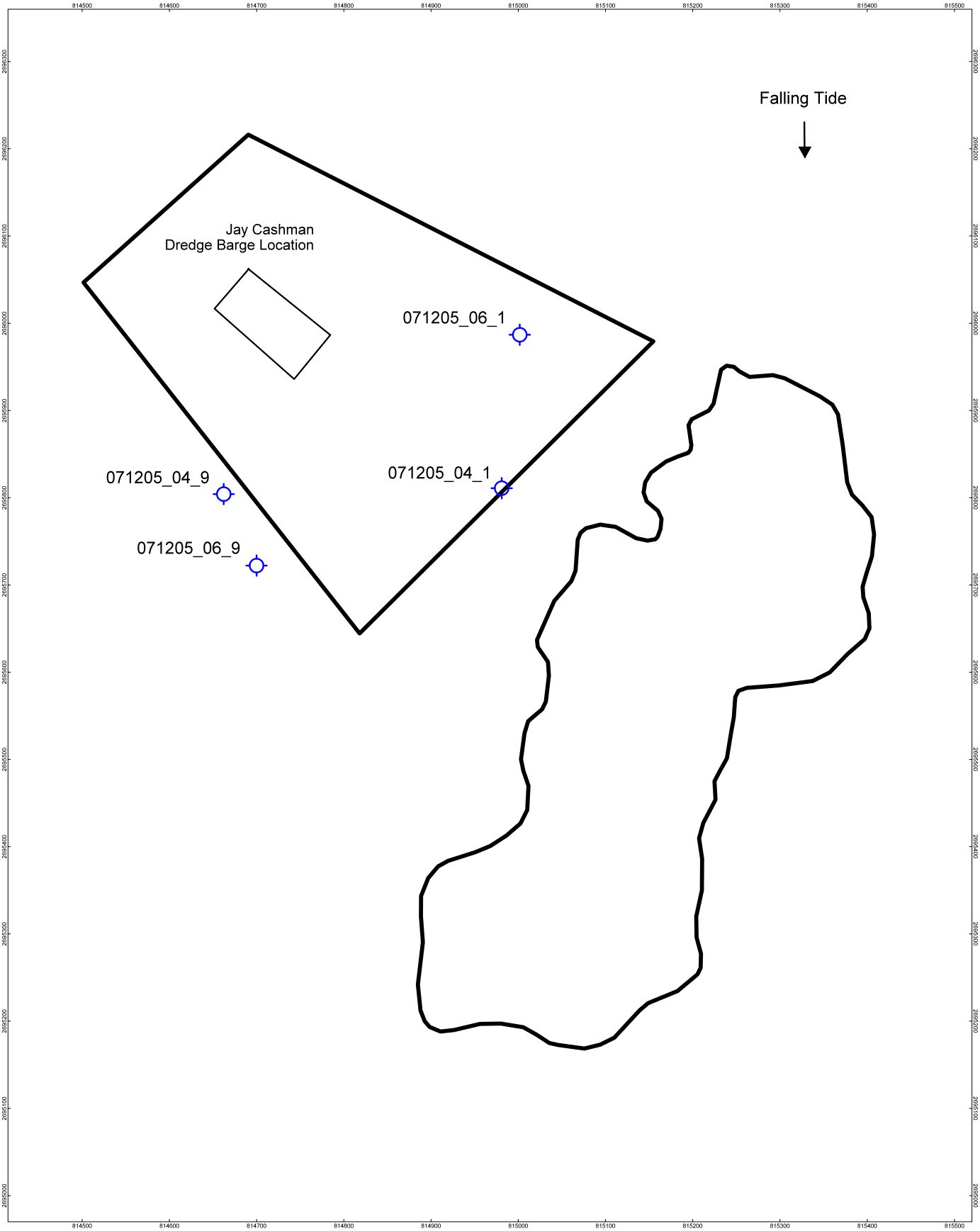
Water Quality Stations

Apex Environmental, Inc.

7/12/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 12:44				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	15:22	071205_04_1	814980..58	Up	5	1.8		Sunny, ~80 Degrees	None
		(Background)	2695810.92		10	1.9		NE Wind 5-10 knots	
					15	3.0			
					20	4.1			
					25	5.5			
					30	12.0			
					AVERAGE	4.7	24.7		
	15:30	071205_04_9	814662.38	Down	5	1.9		Sunny, ~80 Degrees	None
			2695804.14		10	2.6		NE Wind 5-10 knots	
					15	4.9			
					20	4.8			
					25	5.4			
					30	3.5			
					AVERAGE	3.9	20.8 NTUs		
	15:52	071205_06_1	815001.71	Up	5	2.0	Below Permissible	Sunny, ~80 Degrees	None
		(Background)	2695986.79		10	2.8	Turbidity Increase Limit	NE Wind 5-10 knots	
					15	2.1			
					20	3.0			
					25	11.0			
					30	13.5			
					AVERAGE	5.7	25.7		
	15:58	071205_06_9	814699.98	Down	5	2		Sunny, ~80 Degrees	None
			2695722.2		10	3.3		NE Wind 5-10 knots	
					15	5.5			
					20	2.6			
					25	6.2			
					30	6			
Low 17:47					AVERAGE	4.3	(21.4 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

US survey foot

07/12/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

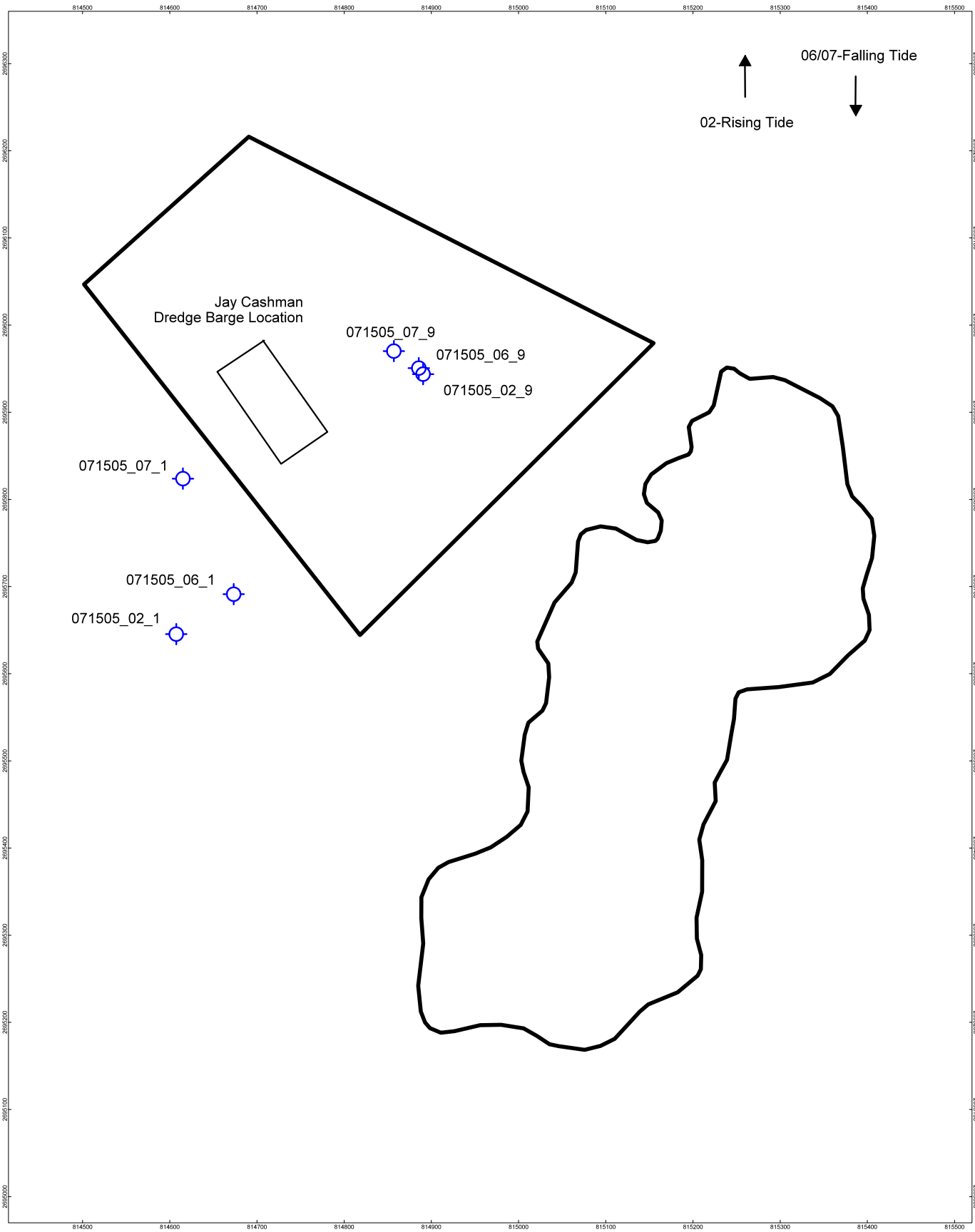
Water Quality Stations

Apex Environmental, Inc.

7/15/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 8:01				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	12:03	071505_02_1	814607.4	Up	5	2.5		Cloudy, ~80 Degrees	None
		(Background)	2695645.46		10	3.2		NE Wind 0-5 knots	
					15	3.2			
					20	3.0			
					25	2.0			
					30	3.5			
					AVERAGE	**2.9**	**22.9**		
	12:09	071505_02_9	814890.48	Down	5	3.0		Cloudy, ~80 Degrees	None
			2695943.76		10	2.3		NE Wind 0-5 knots	
					15	1.9			
					20	2.0			
					25	2.1			
					30	3.2			
High 15:08					**AVERAGE**	**2.4**	20.5 NTUs		
Falling Tide	17:18	071505_06_1	814673.28	Up	5	2.8	Below Permissible	Sunny, ~85 Degrees	None
		(Background)	2695691.25		10	3.6	Turbidity Increase Limit	NE Wind 0-5 knots	
					15	3.1			
					20	3.4			
					25	2.6			
					30	2.5			
					AVERAGE	**3.0**	**23.0**		
	17:23	071505_06_9	814885.59	Down	5	3.8		Sunny, ~85 Degrees	None
			2695950.67		10	6.3		NE Wind 0-5 knots	
					15	9.0			
					20	7.8			
					25	1.3			
					30	1.7			
					AVERAGE	**5.0**	(18.0 Below Limit)		
	17:33	071505_07_1	814615.08	Up	5	2.9		Sunny, ~85 Degrees	None
		(Background)	2695823.84		10	4.0		NE Wind 0-5 knots	
					15	4.2			
					20	4.6			
					25	5.0			
					30	3.8			
					AVERAGE	**4.1**	**24.1**		
	17:38	071505_07_9	814856.96	Down	5	4.8		Sunny, ~85 Degrees	None
			2695970.18		10	5.8		NE Wind 0-5 knots	
					15	6.4			
					20	11.0			
					25	10.0			
					30	14.0			
Low 21:18					**AVERAGE**	**8.7**	(15.4 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

US survey foot

07/15/05 Dredge Operations Water Quality

CAD Cell Area Water Quality Monitoring Locations

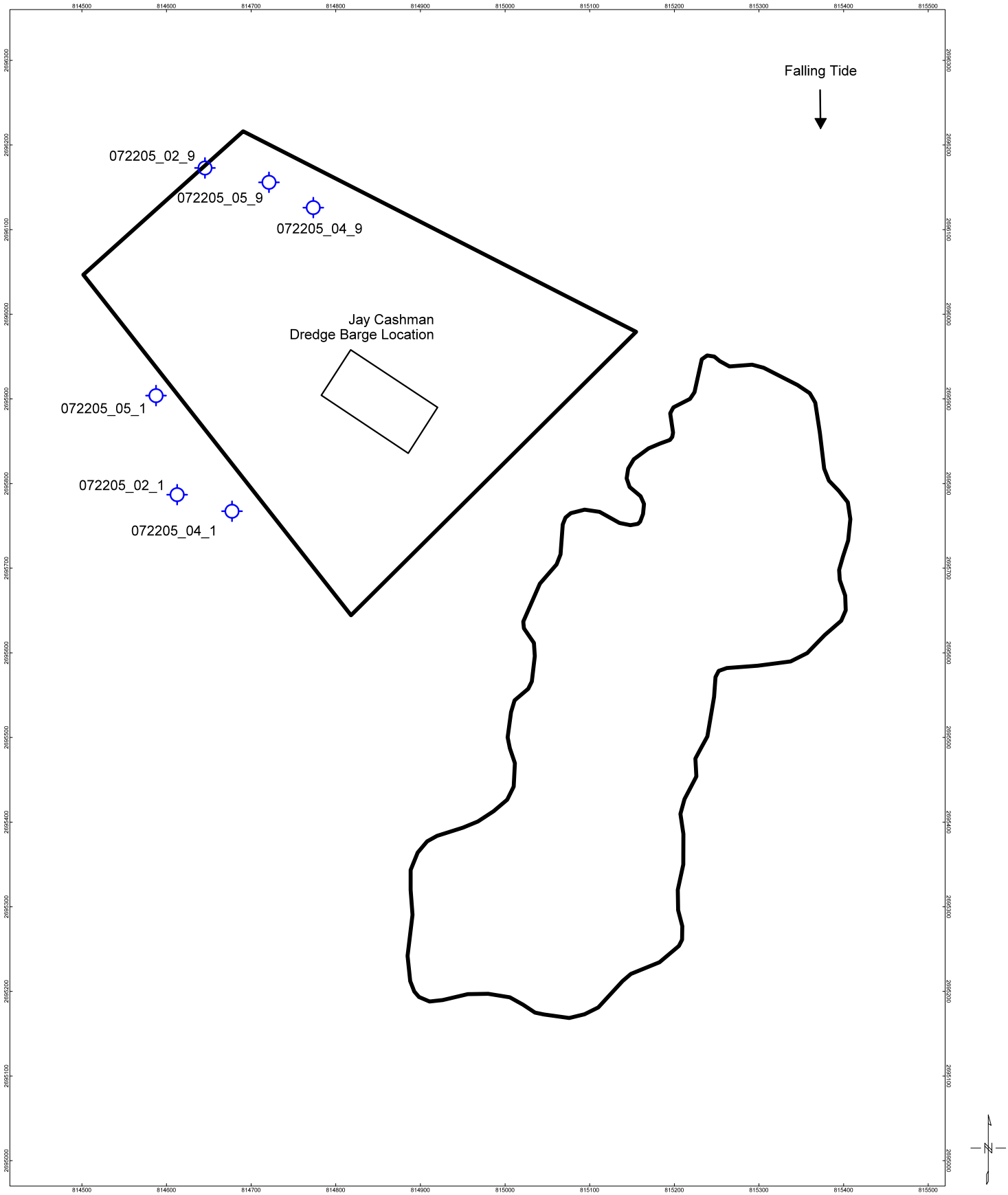
Water Quality Stations

Apex Environmental, Inc.

7/22/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - CAD Cell Excavation Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 9:13				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	10:10	072205_02_1	814612.57	Up	5	0.2		Sunny, ~80 Degrees	None
		(Background)	2695786.89		10	2.4		SE Wind 5-10 knots	
					15	2.6			
					20	2.6			
					25	2.7			
					30	2.6			
					AVERAGE	2.2	22.2		
	10:17	072205_02_9	814645.5	Down	5	1.1		Sunny, ~80 Degrees	None
			2696172.85		10	1.4		SE Wind 5-10 knots	
					15	2.0			
					20	2.6			
					25	2.2			
					30	8.0			
					AVERAGE	2.9	19.3 NTUs		
	12:43	072205_04_1	814677.39	Up	5	2.6	Below Permissible	Sunny, ~80 Degrees	None
		(Background)	2695767.28		10	2.7	Turbidity Increase Limit	SE Wind 5-10 knots	
					15	2.6			
					20	2.8			
					25	3.4			
					30	5.0			
					AVERAGE	3.2	23.2		
	12:48	072205_04_9	814644.69	Down	5	5.2		Sunny, ~80 Degrees	None
			2696093.75		10	9.5		SE Wind 5-10 knots	
					15	11.0			
					20	12.0			
					25	19.0			
					30	17.0			
					AVERAGE	12.3	(10.9 Below Limit)		
	12:54	072205_05_1	814773.41	Up	5	2.8		Sunny, ~80 Degrees	None
		(Background)	2696126.03		10	2.9		SE Wind 5-10 knots	
					15	2.6			
					20	2.7			
					25	2.6			
					30	2.8			
					AVERAGE	2.7	22.7		
	12:57	072205_05_9	814808	Down	5	3.4		Sunny, ~80 Degrees	None
			2605789.33		10	4.7		SE Wind 5-10 knots	
					15	10.5			
					20	7.4			
					25	16.0			
					30	19.0			
Low 14:47					AVERAGE	10.2	(12.6 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

25 0 25 50 75 100 125 150

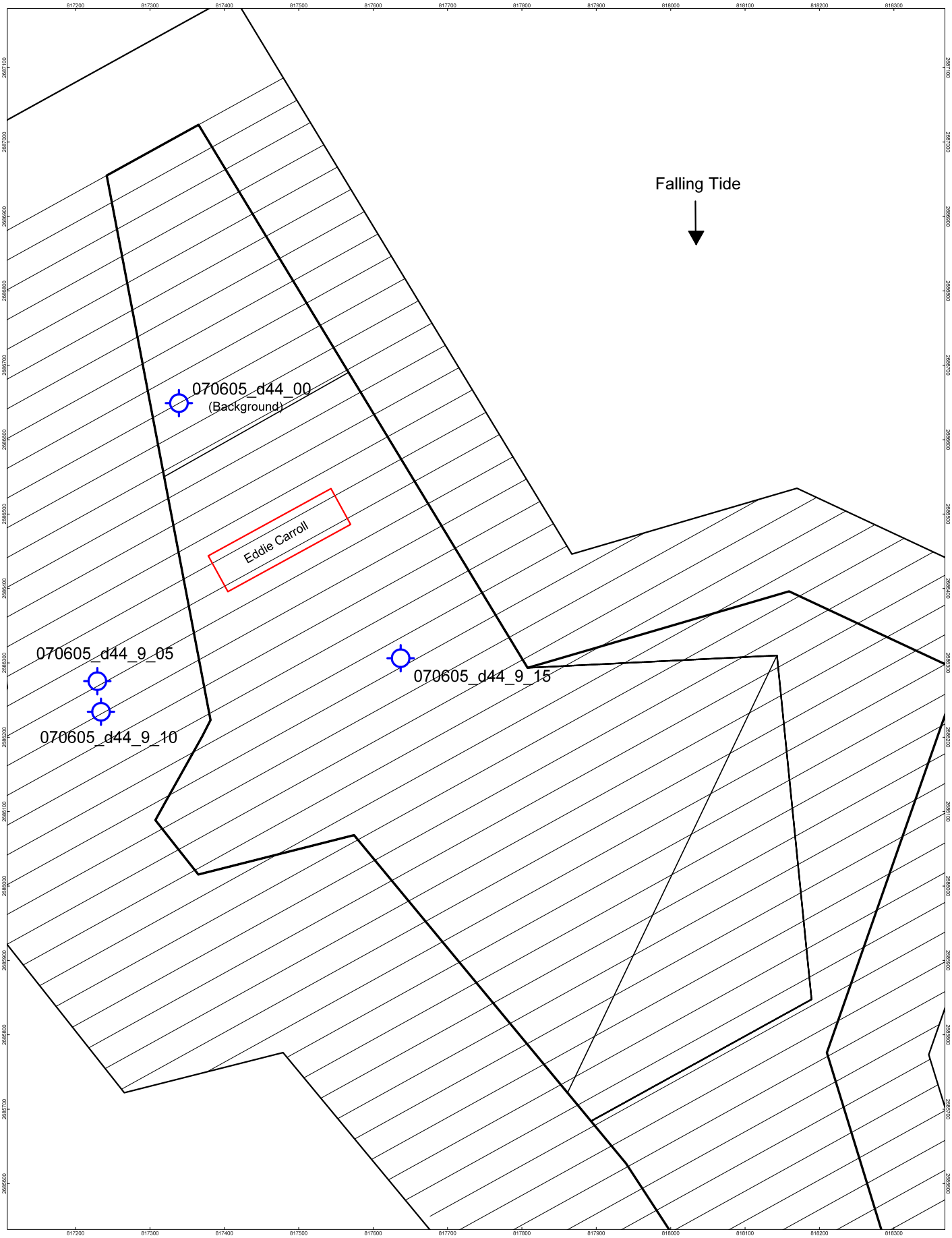
US survey foot

07/22/05 Dredge Operations Water Quality
CAD Cell Area Water Quality Monitoring Locations
Water Quality Stations
Apex Environmental, Inc.

7/6/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 8:40				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	12:33	070605_d44_00	817338.98	Up	2	7.8		Cloudy, ~80 Degrees	None
		(Background)	2686649.09		4	9.5		S Wind 1-5 Knots	
					6	11.5			
					7	9.5			
					AVERAGE	9.6	49.6		
	12:55	PLACEMENT 44	STARTED						
	13:00	070605_d44_9_05	817229.27	Down	2	2.9		Cloudy, ~80 Degrees	None
			2686275.37		4	3.5		S Wind 1-5 Knots	
					6	3.1			
					8	2.8			
					AVERAGE	3.1	46.5 NTUs		
	13:06	070605_d44_9_10	817234.23	Down	2	13.0	Below Permissible	Cloudy, ~80 Degrees	None
			2686234.23		4	12.5	Turbidity Increase Limit	S Wind 1-5 Knots	
					6	10.5			
					8	16.3			
					AVERAGE	13.1	(36.5 Below Limit)		
	13:12	070605_d44_9_15	817636.99	Down	2	8.5		Cloudy, ~80 Degrees	None
			2686306.24		4	6.8		S Wind 1-5 Knots	
					6	7.5			
					8	10.0			
Low 13:40					AVERAGE	8.2	(41.4 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/06/05 Placement #44
OU#3 Area Water Quality Location Map

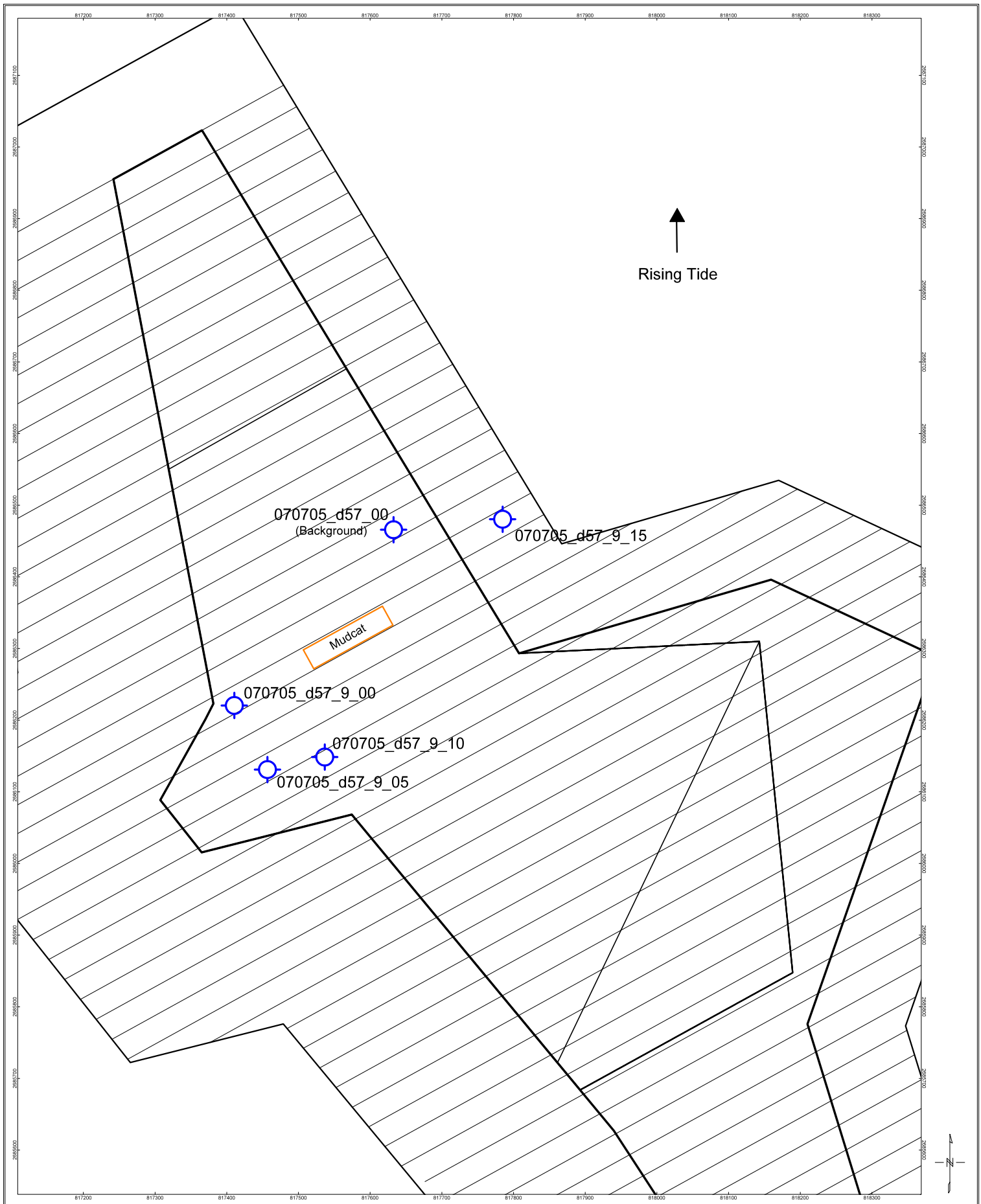
Water Quality Stations

Apex Environmental, Inc.

7/7/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 14:59				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	15:54	070705_d57_00	817632.68	Down	2	6.0		Cloudy, ~70 Degrees	None
		(Background)	2686465.82		4	7.0		N Wind 5-15 Knots	
					6	9.0			
					8	10.0			
					AVERAGE	8.0	48.0		
	15:59	PLACEMENT 57	STARTED						
	16:00	070705_d57_9_00	817410.56	Down	2	7.0		Cloudy, ~70 Degrees	None
			2686220.56		4	9.0		N Wind 5-15 Knots	
					6	13.0			
					8	16.5			
					AVERAGE	11.4	36.6 NTUs		
	16:05	070705_d57_9_05	817456.77	Up	2	11.0	Below Permissible	Cloudy, ~70 Degrees	None
			2686131.07		4	12.0	Turbidity Increase Limit	N Wind 5-15 Knots	
					6	12.0			
					8	18.0			
					AVERAGE	13.3	(34.7 Below Limit)		
	16:08	070705_d57_9_10	817536.68	Up	2	12.0		Cloudy, ~70 Degrees	None
			2686148.56		4	14.0		N Wind 5-15 Knots	
					6	16.0			
					8	17.0			
					AVERAGE	14.8	(33.2 Below Limit)		
	16:15	070705_d57_9_15	817784.8	Up	2	2.0		Cloudy, ~70 Degrees	None
			2686480.46		4	2.1		N Wind 5-15 Knots	
					6	2.2			
					8	2.8			
High 21:36					AVERAGE	2.3	(45.7 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/07/05 Placement #57
OU#3 Area Water Quality Location Map

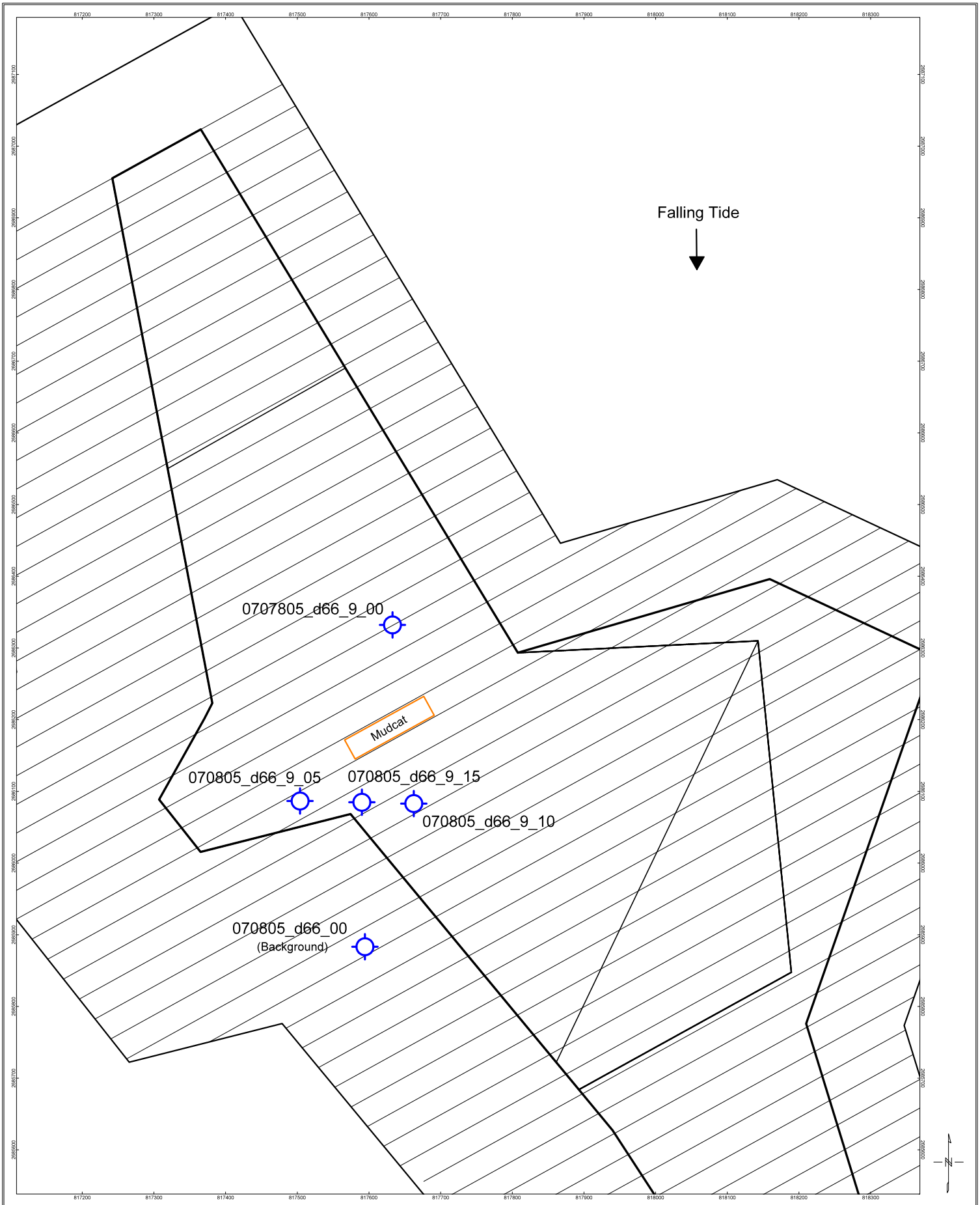
Water Quality Stations

Apex Environmental, Inc.

7/8/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High10:02				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	9:33	070805_d66_00	817594.42	Down	2	4.0		Cloudy,~65 Degrees	None
		(Background)	2685883.24		4	4.2		E,SE Wind 5-10 Knots	
					6	4.5			
					8	4.5			
					10	4.4			
					AVERAGE	4.3	44.3		
	9:38	PLACEMENT 66	STARTED					Cloudy,~65 Degrees	
	9:39	0707805_d66_9_00	817632.84	Up	2	2.3		E,SE Wind 5-10 Knots	None
			2686332.16		4	2.6			
					6	2.6			
					8	2.7			
					10	2.5			
					AVERAGE	2.5	41.8 NTUs		
	9:44	070805_d66_9_05	817503.9	Down	2	5.0	Below Permissible	Cloudy,~65 Degrees	None
			2686086.51		4	4.4	Tubidity Increase Limit	E,SE Wind 5-10 Knots	
					6	5.0			
					8	4.5			
					AVERAGE	4.7	(37.1 Below Limit)		
	9:49	070805_d66_9_10	817662.58	Down	2	2.6		Cloudy,~65 Degrees	None
			2686082.98		4	2.4		E,SE Wind 5-10 Knots	
					6	2.9			
					8	2.7			
					10	2.7			
					AVERAGE	2.7	(34.4 Below Limit)		
	9:53	070805_d66_9_15	817590.14	Down	2	4.2		Cloudy,~65 Degrees	None
			2686084.76		4	4.4		E,SE Wind 5-10 Knots	
					6	4.5			
					8	4.7			
					10	4.6			
Low 15:13					AVERAGE	4.5	(29.9 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/08/05 Placement #66
OU#3 Area Water Quality Location Map

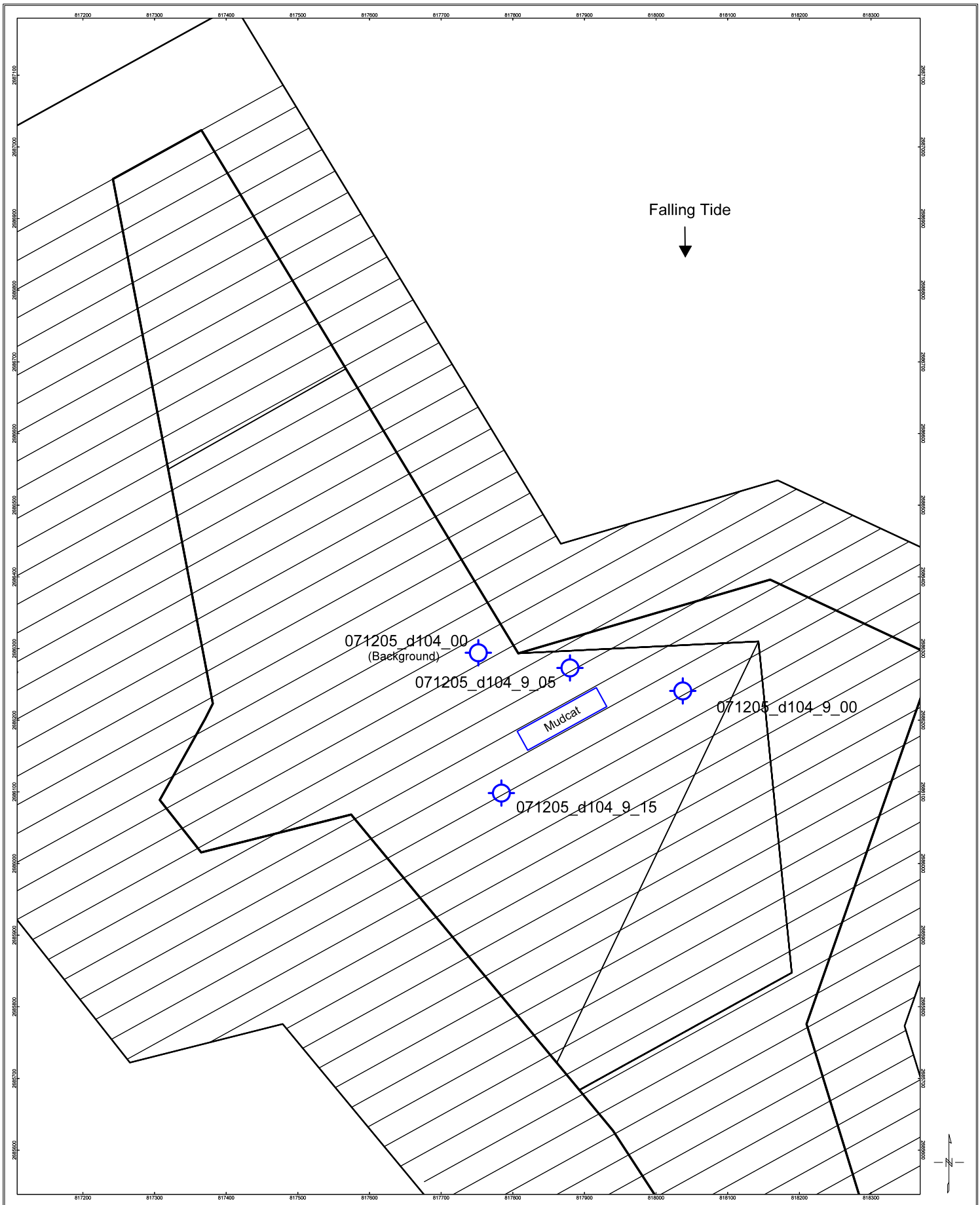
Water Quality Stations

Apex Environmental, Inc.

7/12/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 12:44				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	16:10	071205_d104_00	818012.77	Up	2	5.0		Cloudy,~65 Degrees	None
		(Background)	2696359.72		4	4.0		E,SE Wind 5-10 Knots	
					6	4.4			
					8	6.0			
					AVERAGE	**4.9**	**44.9**		
	16:15	**PLACEMENT 104**	**STARTED**					Cloudy,~65 Degrees	
	16:20	071205_d104_9_05	817879.82	Up	2	37.0		E,SE Wind 5-10 Knots	None
			2686272.97		4	36.0			
					6	34.0			
					8	40.0			
					AVERAGE	**36.8**	8.1 NTUs		
	16:25	071205_d104_9_10	817751.93	Down	2	12.0	Below Permissible	Cloudy,~65 Degrees	None
			2686294.06		4	11.8	Turbidity Increase Limit	E,SE Wind 5-10 Knots	
					6	18.0			
					8	4.0			
					AVERAGE	**11.5**	(33.4 Below Limit)		
	16:28	071205_d104_9_15	827729.61	Down	2	12.0		Cloudy,~65 Degrees	None
			2686205.92		4	14.0		E,SE Wind 5-10 Knots	
					6	20.0			
					8	19.5			
Low 17:22					**AVERAGE**	**16.4**	(28.5 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/12/05 Placement #104
OU#3 Area Water Quality Location Map

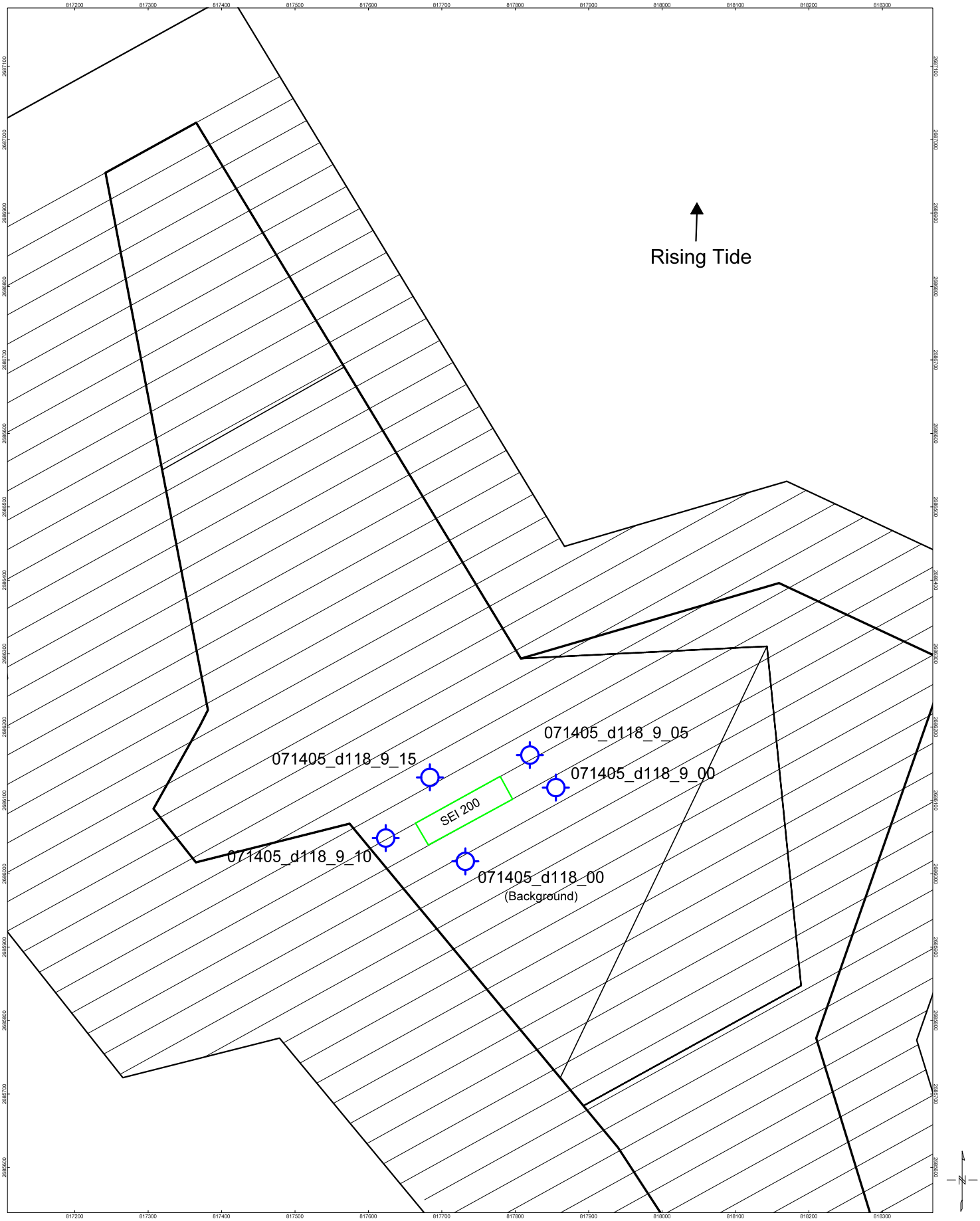
Water Quality Stations

Apex Environmental, Inc.

7/14/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
Low 7:08				Current		(NTUs)	Increase (NTUs)		Traffic
Rising Tide	9:20	071405_d118_00	817819.92	Up	2	1.3		Cloudy,~75 Degrees	None
		(Background)	2686161.75		4	1.5		SW Wind 5-10 Knots	
					6	1.6			
					8	1.8			
					AVERAGE	**1.6**	**41.6**		
	9:42	**PLACEMENT 118**	**STARTED**					Cloudy,~75 Degrees	
	9:42	071405_d118_9_00	817855.33	Down	2	1.2		SW Wind 5-10 Knots	None
			2686117.46		4	2.5			
					6	4.2			
					8	5.0			
					AVERAGE	**3.2**	38.3 NTUs		
	9:46	071405_d118_9_05	817732.02	Down	2	1.4	Below Permissible	Cloudy,~75 Degrees	None
			2686016.99		4	2.5	Turbidity Increase Limit	SW Wind 5-10 Knots	
					6	2.2			
					8	2.1			
					AVERAGE	**2.1**	(39.5 Below Limit)		
	9:51	071405_d118_9_10	817692.5	Down	2	1.8		Cloudy,~75 Degrees	None
			2685808.39		4	2.5		SW Wind 5-10 Knots	
					6	2.2			
					8	10.0			
					AVERAGE	**4.1**	(37.4 Below Limit)		
	9:56	071405_d118_9_15	818008.59	Down	2	12.0		Cloudy,~75 Degrees	Yes
			2685744.23		4	14.0		SW Wind 5-10 Knots	
					6	10.0			
					8	11.0			
High 14:11					**AVERAGE**	**11.8**	(29.8 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.



Scale 1:600

07/18/05 Placement #118
OU#3 Area Water Quality Location Map

Water Quality Stations

Apex Environmental, Inc.

7/22/2005
New Bedford Harbor Dredge Project - Phase II
Water Quality Monitoring - Placement Operations - OU#3 Cap Area

Tide Time	Time	ID	Coordinates	Up/Down	Depth (ft.)	Ave. Turbidity	Permissible Turbidity	Weather Conditions	Vessel
High 9:13				Current		(NTUs)	Increase (NTUs)		Traffic
Falling Tide	11:23	071405_d154_00	818247.33	Down	2	1.2		Sunny,~80 Degrees	None
		(Background)	2685861.26		4	1.0		SE Wind 5-10 Knots	
					6	1.1			
					8	1.0			
					10	1.0			
					AVERAGE	1.1	41.1		
	12:00	PLACEMENT 154	STARTED					Sunny,~80 Degrees	
	12:03	071405_d154_9_05	818111.32	Up	2	14.0		SE Wind 5-10 Knots	Yes
			2686176.54		4	22.0			
					6	24.0			
					8	20.0			
					10	12.0			
					AVERAGE	18.4	22.7 NTUs		
	12:08	071405_d154_9_10	818263.87	Up	2	1.0	Below Permissible	Sunny,~80 Degrees	None
			2686220.39		4	1.5	Turbidity Increase Limit	SE Wind 5-10 Knots	
					6	1.2			
					8	3.9			
					10	5.0			
					12	13.0			
					AVERAGE	4.3	(36.8 Below Limit)		
	12:15	071405_d154_9_15	818080.84	Up	2	1.3		Sunny,~80 Degrees	None
			2686040.82		4	15.0		SE Wind 5-10 Knots	
					6	10.0			
					8	31.0			
					10	18.0			
					12	20.0			
Low 14:47					AVERAGE	15.9	(25.2 Below Limit)		

Notes: An X in the vessel traffic column indicates that either a vessel had passed or there was a movement of spuds that may have had an effect on turbidity.

APPENDIX B
WATER QUALITY MONITORING SHEETS

Dredge Water Quality Monitoring Form

Apex

PROJECT: 0615.005 NBH
JOB NUMBER:
DATE: 06/13/2008
MONITORS: MB JM
WEATHER CONDITIONS: Sunny 75°
WIND: Calm
PRIOR STORM EVENTS: None
DREDGE UPDATE: Not Begun
TYPE OF WATER QUALITY MONITORING:

UP-CURRENT

TIME: 1115
GPS FILE NAME: 06132008-00-1
NORTHING:
TIDAL STAGE:

NUMBER OF HOURS OF DREDGING: 0
DISTANCE FROM DREDGE/SILT CURTAIN:
EASTING:
WATER DEPTH: 7.6'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
06132008-00-1-5.5	1115	5.5	0.06	DO 3.91 / pH 7.71 / ORP 289.2
06132008-00-1-2.0	1115	2.0	0.1	DO 3.51 / pH 7.73 / ORP 292.2
-00-1-3.25	1115	3.25	-0.2	DO 3.31 / pH 7.72 / ORP 299.2

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1045
GPS FILE NAME: 06132008-00
NORTHING: -
TIDAL STAGE: Low Tide was @ 10:11

NUMBER OF HOURS OF DREDGING: Ø
DISTANCE FROM DREDGE/SILT CURTAIN:
EASTING:
WATER DEPTH: 7.0'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
06132008-00-9-5	1045	5	-0.1	Temp 20.7°C / 46.39 mS/cm³ / 42.44 ns/m / 70.5% DO 5.29 pH 7.8 137.2 ORP
06132008-00-9-2	1047	2	-0.5	DO 6.09 / pH 7.81 / ORP 1.511
06132008-00-9-3	1049	3	0.0	DO 5.24 / pH 7.811 / ORP 1.594

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

NOT DISPOSAL DREDGE MONITORING
KJN 6/15/08

Apex

PROJECT: NBH-CAD II
JOB NUMBER: 6615.005.01
DATE: 6/14/08
DISPOSAL EVENT:
MONITORS: Jen Martino / Chris Morris
WEATHER CONDITIONS: Clear, Calm, 70°F
WIND: Cool Breeze
PRIOR STORM EVENTS: None

UP-CURRENT

TIME: 07:15am
GPS FILE NAME: 061408
NORTHING: 269640.99
TIDAL STAGE: High to Low

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 815208.62
WATER DEPTH: 7.8

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	Temp	Spc. Cond.	NOTES pH	ORP	DO	Turb
061408-00-1-5.5	0719	5.5	0	20.58°C	42.85 uS/cm	7.84 pH	111.2 ORP	4.26 DO	0
061408-00-1-2.0	0720	2.0	0	20.84	42.79 uS/cm	7.82 pH	122.5	4.93	0
061408-00-1-3.25	0721	3.25	0	20.84	42.77	7.84 pH	13.2	4.74	0
061408-01-9-2.0	0825	2	0	20.93	42.83	7.78	242.2	2.86	0
061408-01-9-4.0	0826	4	0.3	20.86	42.76	7.77	252.9	2.78	.3
061408-01-9-3.0	0829	3	.4	20.83	42.82	7.76	258.1	2.88	.4
061408-03-1-3.0	1017	3	.9	21.45	43.34	7.81	108.5	7.79	1.0
061408-03-1-2.5	1019	2.5	.9	21.48	43.34	7.79	132.4	7.79	.9
061408-03-1-2.0	1021	2	.9	21.52	43.37	7.79	150.1	7.78	.9
061408-03-9-5	1032	5	2	20.78	42.84	7.78	253	2.49	2
061408-03-9-2	1035	2	2	21.52	43.38	7.79	262.1	2.69	2
061408-03-9-2.5	1037	3.5	2	21.51	43.35	7.79	271.0	2.81	2

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME:
GPS FILE NAME:
NORTHING:
TIDAL STAGE:

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION:
EASTING:
WATER DEPTH:

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

Apex

DOWN-CURRENT

TIME:

GPS FILE NAME:

NORTHING:

TIDAL STAGE:

TIME OF DISPOSAL:

DISTANCE FROM DISPOSAL LOCATION:

EASTING:

WATER DEPTH:

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES pH	Tem	SpCn	ORP	DO	Turb
061408-05-1-2	1240	2	0	6.82	22.17	43.97	444.5	3.81	0
061408-05-1-3	1242	3	0	6.84	22.10	43.90	461.5	3.69	0
061408-05-1-2.5	1244	2.5	0	6.89	22.16	44.00	469.5	3.73	0
061408-05-9-6	1252	6	1	7.19	21.06	43.02	484.4	2.68	1
061408-05-9-2	1253	2	1	7.25	21.67	43.54	485.1	3.30	1
061408-05-9-4	1254	4	1	7.34	21.60	43.42	489.1	3.18	1
061408-07-1-2	1631	2		7.75	22.36	44.27	203.7	8.05	2.7
061408-07-1-4	1633	4		7.69	22.25	44.20	238.1	6.47	2.3
061408-07-1-6	1634	6		7.62	21.53	46.74	268.1	6.14	1.1
061808-07-9-8	1649	8		7.87	21.23	43.47	362.2	2.63	0
061808-07-9-2	1651	2		7.87	22.24	46.16	365.4	2.38	3.5
061808-07-9-5	1653	5		7.87	21.73	43.84	369.2	2.37	0

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NB H
JOB NUMBER: 66152005.01
DATE: 6/16/08
MONITORS: MB JK
WEATHER CONDITIONS: Cold 60°
WIND: 5 knts
PRIOR STORM EVENTS: None
DREDGE UPDATE: Pre
TYPE OF WATER QUALITY MONITORING: Pre Dredge

UP-CURRENT

TIME: 1645
GPS FILE NAME: 061608-1
NORTHING:
TIDAL STAGE: Low → High

NUMBER OF HOURS OF DREDGING: Ø
DISTANCE FROM DREDGE/SILT CURTAIN:
EASTING:
WATER DEPTH: 46.0

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	DO	pH	ORP	NOTES
061808-32-1	1645	32	44.1	2.03	7.86	207.1	
061808-2-1	1648	2	0.1	8.18	7.86	210.0	
061808-15-1	1653	15	-0.3	2.25	7.87	214.8	

AVERAGE TURBIDITY:

Pre-Dump

DOWN-CURRENT

TIME: 1630
GPS FILE NAME: 061608-9
NORTHING:
TIDAL STAGE: Low → High

NUMBER OF HOURS OF DREDGING: Ø
DISTANCE FROM DREDGE/SILT CURTAIN:
EASTING:
WATER DEPTH: 20'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	DO	Ph	ORP	NOTES
061608_18_9	1629	18	-0.2	5.21	7.8	129.5	
061608_02_9	1632	2	-0.2	7.28	7.88	131.6	
061608_08_9	1635	8	-0.1	3.41	7.87	134.2	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH - Top of CAD Cell 2

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 6/19/08

MONITORS: Jen Martino & Chris Morris

WEATHER CONDITIONS: Sunny, cool, 70°F

WIND: Slight breeze

PRIOR STORM EVENTS: N/A

DREDGE UPDATE: Pre-Dredge WQ Monitoring

TYPE OF WATER QUALITY MONITORING: Pre-Dredge WQ Monitoring (up-current) (down-current)

UP-CURRENT

TIME: 0800 hrs

GPS FILE NAME: 061908-00-1

NORTHING: 2695782.23

TIDAL STAGE: Flood (low to high)

NUMBER OF HOURS OF DREDGING: 00

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815597.93

WATER DEPTH: 8.0 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
061908-00-1-2	0810	2.0	5.2	
061908-00-1-4	0815	4.0	6.3	
061908-00-1-6	0820	6.0	6.7	
		Total:	18.2/3	= 6.06

AVERAGE TURBIDITY: 6.0 NTU

DOWN-CURRENT

TIME: 0830 hrs.

GPS FILE NAME: 061908-00-9

NORTHING: 2698242.76 N

TIDAL STAGE: Flood (low to high)

NUMBER OF HOURS OF DREDGING: 00

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815579.98 E

WATER DEPTH: 8.4 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
061908-00-9-2	0835	2.0	1.3	
061908-00-9-4	0840	4.0	1.1	
061908-00-9-6	0845	6.0	4.1	
		Total:	6.5/3	= 2.16

AVERAGE TURBIDITY: 2.2 NTU

TURBIDITY INCREASE*: 2.2 NTU - 6.0 NTU = -3.8 NTU

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

6/19/08

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH - Top of CAD
JOB NUMBER: 6615.005.01
DATE: 6/19/08
DISPOSAL EVENT: D2 of day - dumping SE-103
MONITORS: Jen Martino + Chris Morris
WEATHER CONDITIONS: Cloudy/Sunny, warm ~ 75°F
WIND: Light breeze
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 1200 hrs.
GPS FILE NAME: 061908-05-1
NORTHING: 2696029.4
TIDAL STAGE: Ebb (High to low)

TIME OF DISPOSAL: 1200 hrs
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 814946.07
WATER DEPTH: 40 Feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061908-05-1-2	1150	2.0	27.9	
061908-05-1-16	1155	16.0	31.0	
061908-05-1-38	1200	38.0	11.4	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 1205 hrs
GPS FILE NAME: 061908-D2-05m.
NORTHING: 2695906
TIDAL STAGE: Ebb (High to low)

TIME OF DISPOSAL: 1200 hrs
DISTANCE FROM DISPOSAL LOCATION: ~~[illegible]~~ @location
EASTING: 814821
WATER DEPTH: 43 Feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061908-D2-05-2	1215	2.0	1	
061908-D2-05-20	1220	20.0	2.1	
061908-D2-05-40	1225	40.0	2.2	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 1230 hrs

GPS FILE NAME: 061908-05-9

NORTHING: 2695752

TIDAL STAGE: Ebb (High to low)

TIME OF DISPOSAL: 1200 hrs

DISTANCE FROM DISPOSAL LOCATION: 300 feet

EASTING: 814857

WATER DEPTH: 43 ft.

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061908-05-9-2	1230	2.0	0.5	
061908-05-9-20	1235	20.0	0.6	
061908-05-9-40	1240	40.0	11.6	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH - Top of CAP

Dredge Water Quality Monitoring Form

JOB NUMBER: 6645.005.01

DATE: 6/24/08

MONITORS: Jen Martino + Josh Ray

WEATHER CONDITIONS: Clear, overcast, cool ~ 65°F

WIND: cool breeze

PRIOR STORM EVENTS: rain

DREDGE UPDATE: started at 0800 hrs

TYPE OF WATER QUALITY MONITORING: 00 hr upcurrent / downcurrent turbidity

UP-CURRENT

TIME: 0750 hrs

GPS FILE NAME: 062408-00-1 (dredge)

NORTHING: 2695793

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 00

DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft

EASTING: 815466

WATER DEPTH: 10 ft.

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062408-00-1-2	0750	2.0	0.0	
062408-00-1-5	0755	5.0	0.2	
062408-00-1-8	0800	8.0	0.0	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 0800 hrs

GPS FILE NAME: 062408-00-9

NORTHING: 2696375

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 00

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815344

WATER DEPTH: 6 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062408-00-9-2	0800	2.0	0.2	
062408-00-9-3	0805	3.0	0.2	
062408-00-9-4	0810	4.0	0.2	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH-Dredge Top of CAD
JOB NUMBER: 6615.005.01
DATE: 6/24/08
MONITORS: Jen Martino + Josh Ray
WEATHER CONDITIONS: Sunny, hot, clear skies
WIND: slight breeze
PRIOR STORM EVENTS: rain
DREDGE UPDATE: 02 hours of dredge
TYPE OF WATER QUALITY MONITORING: turbidity dredge WQ - upcurrent + downcurrent

UP-CURRENT

TIME: 1000 hrs
GPS FILE NAME: 062408-02-1
NORTHING: 2695844
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft.
EASTING: 815382
WATER DEPTH: 31 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062408-02-1-2	1000	2.0	-0.2	
062408-02-1-13	1005	13.0	-0.2	
062408-02-1-29	1010	29.0	2.1	
		total:	1.7/3 = 0.~~12~~5	

AVERAGE TURBIDITY: 0.~~12~~5 NTU

DOWN-CURRENT

TIME: 1010 hrs.
GPS FILE NAME: 062408-02-9
NORTHING: 2696493
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft.
EASTING: 815278
WATER DEPTH: 7.5 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062408-02-9-2.0	1010	2.0	1.1	
062408-02-9-4.0	1015	4.0	-0.2	
062408-02-9-5.0	1020	5.0	-0.2	
		total:	0.7/3 = ~~0.12~~ 0.2 NTU	

AVERAGE TURBIDITY: 0.~~12~~2 NTU

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NCH
JOB NUMBER: 6615.005.001
DATE: 6/26/08
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING:

UP-CURRENT

TIME: 10:05
GPS FILE NAME: 62608-00-1
NORTHING: 2695861
TIDAL STAGE: flood

NUMBER OF HOURS OF DREDGING: 00
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 915596
WATER DEPTH: 6.7'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-00-1-2	1005	2	0.3	
062608-00-1-3	1005	3	1.5	
062608-00-1-4	1006	4	3.2	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 10:17
GPS FILE NAME: 062608-00-9
NORTHING: 2694325
TIDAL STAGE: flood

NUMBER OF HOURS OF DREDGING: 00
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 915684
WATER DEPTH: 8

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-00-9-2	10:17	2	.5	
062608-00-9-4	10:17	4	.5	
062608-00-9-6	10:17	6	.4	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - TOP OF CAP
JOB NUMBER: 6615.005.01
DATE: 6/26/08
MONITORS: Jen Martino + Warren B.
WEATHER CONDITIONS: Cloudy n 66°F
WIND: Slightly breezy
PRIOR STORM EVENTS: rain
DREDGE UPDATE: 02 hrs - dumping into Slow SE-104
TYPE OF WATER QUALITY MONITORING: Turbidity - up + down current

UP-CURRENT

TIME: 1150
GPS FILE NAME: 062608 - 02 - 1
NORTHING: 2695847
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet
EASTING: 815400
WATER DEPTH: 31 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-02-1-2	11.52	2	-0.3	
062608-02-1-14	11:55	14	0.6	
062608-02-1-28	1157	28	1.7	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1155
GPS FILE NAME:
NORTHING: 2696567 (1)
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft
EASTING: 815755 (1)
WATER DEPTH: 9

2696556 (2)

815503 (2)

WD 7.5 (2)

	Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
(1)	062608-02-9-2	1155	2	0.5	
	062608-02-9-5	1157	5	9.7	
	062608-02-9-8	1200	8	6.4	
(2)	062608-02-9-2	1202	2	1.3	
	062608-02-9-4	1205	4	0.5	
	062608-02-9-5	1207	5	0.6	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBM - Top of CAD

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 6/26/08

MONITORS: Jen Martino + Warren B.

WEATHER CONDITIONS: Overcast, rain, ~70°F humid

WIND: cool/humid breeze

PRIOR STORM EVENTS: Rain

DREDGE UPDATE: 06 hour. DI of mudcat, up-current/down current readings

TYPE OF WATER QUALITY MONITORING: Turbidity - WQ

Apex

UP-CURRENT

TIME: 1600

GPS FILE NAME:

NORTHING: 2696430

TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 06

DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft.

EASTING: 815768

WATER DEPTH: 10 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-06-1-2	1600	2	-0.5	
062608-06-1-5	1603	5	-0.6	
	1605	8	-0.7	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1607

GPS FILE NAME: 062608-06-9

NORTHING: 2695861

TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 06

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815574

WATER DEPTH: 8 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-06-9-2	1607	2	1.8	
062608-06-9-4	1610	4	6.6	
062608-06-9-6	1611	6	6.9	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Top of CAD
JOB NUMBER: 6615.005.01
DATE: 6/26/08
MONITORS: Jennartino + Warren B.
WEATHER CONDITIONS: Cloudy, some rain, humid ~ 75°F
WIND: no wind / slight breeze
PRIOR STORM EVENTS: Rain
DREDGE UPDATE: 08 hr dredging
TYPE OF WATER QUALITY MONITORING: turbidity up/down current

UP-CURRENT

TIME: 1800
GPS FILE NAME: 062608-08-1
NORTHING: 2696590
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 08
DISTANCE FROM DREDGE/SILT CURTAIN: 200 ft.
EASTING: 815503
WATER DEPTH: 7.5'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-08-1-2	1800	2	0.0	
062608-08-1-4	1802	4	0.0	
062608-08-1-6	1803	6	-0.4	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1805
GPS FILE NAME: ~~062608~~ 062608-08-9
NORTHING: 2695842
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 08
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815579
WATER DEPTH: 6'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
062608-08-9-2	1805	2	5.4	
062608-08-9-3	1807	3	7.3	
062608-08-9-4	1808	4	7.1	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

PROJECT: 6615.005.01 NBH Top of CAD Phase III
JOB NUMBER: 6615.005.01
DATE: 6/30/08
MONITORS: JLC, JER
WEATHER CONDITIONS: 72°F
WIND: approx 0-5 kts.
PRIOR STORM EVENTS: Heavy rain yesterday evening
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: Dredge Monitoring

UP-CURRENT

TIME: 07:00
GPS FILE NAME:
NORTHING: ~~2696678~~ 2696588
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 0
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: ~~815342~~ 815379
WATER DEPTH: 7

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-00.1.2	07:05	2	-0.1	
063008.00-1-4	07:05	4	0.0	
063008-00.1-5	07:06	5	-0.1	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 07:10
GPS FILE NAME:
NORTHING: 2696093
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 0
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: 815613
WATER DEPTH: 10

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-00-9-2	07:12	2	0.2	
063008.00-9-~~85~~	07:12	5	0.3	
063008-00-9-8	07:12	8	0.3	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

PROJECT:
JOB NUMBER:
DATE: 6/30/08
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING:

UP-CURRENT

TIME: 10:00
GPS FILE NAME:
NORTHING: 2696551
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 2
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: 815310
WATER DEPTH: 6

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-02-1-2	10:01	2	0.3	
063008-02-1-3	10:01	3	0.3	
063008-02-1-4	10:01	4	1.3	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 10:04
GPS FILE NAME:
NORTHING: 2696111
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 2
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: 815468
WATER DEPTH: 8

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-02-9-2	10:04	2	3.0	
063008-02-9-4	10:04	4	1.1	
063008-02-9-6	10:04	6	1.0	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH Top of CAD 2 Phase III
JOB NUMBER: 6615.005.01
DATE: 6/30/08
MONITORS: JK, JER
WEATHER CONDITIONS: HOT 80°F
WIND: 5 kts.
PRIOR STORM EVENTS: Yesterday morning rain
DREDGE UPDATE: on 4th 75ft. cut. on western side
TYPE OF WATER QUALITY MONITORING: Dredge Monitoring for Turbidity.

* GPS down *

UP-CURRENT

TIME: 12:15
GPS FILE NAME: /
NORTHING: /
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 4
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: 30-40 ft. off 2626 stem
WATER DEPTH: 9

Soft dredge length of SAMSON + 26. North of Natick Marine moorings 100 ft.

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-4-1-2	12:15	2	6.7	GPS Trimble down
063008-4-1-4	12:15	4	6.7	" "
063008-4-1-7	12:15	7	7.2	" "

AVERAGE TURBIDITY:

* GPS down *

DOWN-CURRENT

TIME: 12:20
GPS FILE NAME:
NORTHING: /
TIDAL STAGE: Flood.

NUMBER OF HOURS OF DREDGING: 4
DISTANCE FROM DREDGE/SILT CURTAIN: N/A
EASTING: /
WATER DEPTH: 4.5

Location: 150 feet N. of 88 dredge. Directly N of swing bridge.

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-4-9-2	12:20	2	1.6	GPS Trimble down
063008-4-9-2.5	12:20	2.5	2.3	" "
063008-4-9-3	12:20	3	2.4	" "

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor Phase III dredging Top of CAD

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 6/30/08

MONITORS: JK, JER, GCD

WEATHER CONDITIONS: South wind - 10 Knots clear 80's

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING:

UP-CURRENT

TIME: ~~14:25~~ 14:25

GPS FILE NAME: NA

NORTHING: GPS Not working

TIDAL STAGE:

NUMBER OF HOURS OF DREDGING: 6

DISTANCE FROM DREDGE/SILT CURTAIN: 100'

EASTING: Sample taken Directly south of Dredge

WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-06-1-2	14:25	2	2.7	
063008-06-1-5	14:25	5	2.8	
063008-06-1-8	14:25	8	3.1	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 2:20 or 14:20

GPS FILE NAME: NA

NORTHING: GPS Not working

TIDAL STAGE:

NUMBER OF HOURS OF DREDGING: ~~195~~ GCD, 6 hrs

DISTANCE FROM DREDGE/SILT CURTAIN: 175' ±

EASTING: Sample taken N W of Dredge site

WATER DEPTH: 7

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
~~063008-06-9-~~	~~14:20~~	~~2~~	~~3.0~~	
063008-06-9-2	14:20	2'	1.5	
063008-06-9-4	14:20	4'	3.0	
063008-06-9-5	14:20	5	3.7	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: Top of Cod

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 6/30/08

MONITORS: Jray + JKline

WEATHER CONDITIONS: overcast + muggy, then hot + sunny

WIND: 10 MPH

PRIOR STORM EVENTS: rain last night

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING:

Apex

* GPS down * **UP-CURRENT**

TIME: 16:10

GPS FILE NAME: N/A

NORTHING: N/A

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 8

DISTANCE FROM DREDGE/SILT CURTAIN: N/A

EASTING: N/A

WATER DEPTH: ~~8~~ 10

South of Dredge. North of Nelick Marine

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008.08.1-2	16:10	2	~~[illegible]~~ 3.0	
063008-08-1-5	16 10	5	4.5	
063008.08.1-8	16 10	8	5.5	

AVERAGE TURBIDITY:

* GPS down * **DOWN-CURRENT**

TIME: 16:05

GPS FILE NAME:

NORTHING:

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 8

DISTANCE FROM DREDGE/SILT CURTAIN:

EASTING:

WATER DEPTH: 8

N of SAMSON III. ~~SW~~ SE of overloaded scow w/ grass 400 yds.

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
063008-08-9-2	1600	2	-0.2	
063008.08.9-4	1602	4	0.5	
063008.08-9-6	1605	6	0.4	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH Phase III Dredging
JOB NUMBER: 6615.005.001
DATE: 7/3/08
DISPOSAL EVENT:
MONITORS: GCD JM WB
WEATHER CONDITIONS: Clear Breezy, 70s
WIND: SSW ±
PRIOR STORM EVENTS: None

Apex

UP-CURRENT

TIME: 0646
GPS FILE NAME: N/A
NORTHING: 2695870
TIDAL STAGE: Flooding

TIME OF DISPOSAL: 0642
DISTANCE FROM DISPOSAL LOCATION: 200 ft
EASTING: 814901
WATER DEPTH: 40'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-DD-1-2	0645	2	0.0	
070308-DD-1-20	0646	20	0.3	
070308-DD-1-38	0647	38	2.2	
			2.5/3 = 0.83 NTU	

AVERAGE TURBIDITY: 0.83 NTU

DISPOSAL LOCATION

TIME: 0650
GPS FILE NAME: 070308-dl-00
NORTHING: 2696130
TIDAL STAGE: Flood

TIME OF DISPOSAL: 0642
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING: 814856
WATER DEPTH: 41 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-dl-00-2	0650	2.0	15.0	
070308-dl-00-20	0651	20.0	0.6	
070308-dl-00-38	0653	38.0	4.7	
			20.3/3 = 6.7	

AVERAGE TURBIDITY: 6.7 NTU

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 0655
GPS FILE NAME: 070308
NORTHING: 2696381
TIDAL STAGE: Flood

TIME OF DISPOSAL: 0642
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING: 814907
WATER DEPTH: 12'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-00-9-2	0655	2.0	1.4	
070308-00-9-6	0656	6.0	0.7	
070308-00-9-10	0657	10.0	0.8	
			2.9/3 = 0.96	

AVERAGE TURBIDITY: 0.96

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Dredge CAD II
JOB NUMBER: 6615.005.01
DATE: 7/3/08
MONITORS: Jen Martino + Warren B.
WEATHER CONDITIONS: Sunny, warm, ~75°F
WIND: Slight breeze
PRIOR STORM EVENTS: Rain
DREDGE UPDATE: ~~[illegible]~~
TYPE OF WATER QUALITY MONITORING: Turbidity - up/down current + disposal

UP-CURRENT

TIME: 0840
GPS FILE NAME: 070308-02-1
NORTHING: 2696088
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815597
WATER DEPTH: 11'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-02-1-2	0840	2.0	3.2	
070308-02-1-6	0842	6.0	2.9	
070308-02-1-10	0843	10.0	37.0	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 0845
GPS FILE NAME: 070308-02-9
NORTHING: 2696618
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815759
WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-02-9-2	0845	2.0	6.4	
070308-02-9-5	0846	5.0	5.8	
070308-02-9-8	0847	8.0	5.8	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Dredge CAD II
JOB NUMBER: 6615.005.01
DATE: 07/03/08
MONITORS: JM + WB
WEATHER CONDITIONS: Sunny, warm, 75°F ~ 80°F
WIND: Cool Breeze
PRIOR STORM EVENTS: Rain
DREDGE UPDATE: ~~[illegible]~~ 04 hrs.
TYPE OF WATER QUALITY MONITORING: Turbidity WQ - up + down current

UP-CURRENT

TIME: 1040
GPS FILE NAME: 070308-04-1
NORTHING: 2696628
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 04
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815770
WATER DEPTH: 8.5'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-04-1-2	1040	2.0	0.0	
070308-04-1-4	1041	4.0	0.0	
070308-04-1-6	1043	6.0	-0.1	

AVERAGE TURBIDITY: 0.0 NTU

DOWN-CURRENT

TIME: 1045
GPS FILE NAME: 070308-04-9
NORTHING: 2696128
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 04
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815446
WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-04-9-2	1045	2.0	5.1	
070308-04-9-5	1046	5.0	4.2	
070308-04-9-8	1048	8.0	4.2	
			13.5/3	= 4.5

AVERAGE TURBIDITY: 4.5 NTU

TURBIDITY INCREASE*: 4.5 - 0 = 4.5 NTU

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH - Dredge CAD II Top of CAD
JOB NUMBER: 6615.005.01
DATE: 7/3/08
DISPOSAL EVENT: D2 - mud cat
MONITORS: JM + WB
WEATHER CONDITIONS: Gusty winds! warm, sunny 80°F
WIND: Gusty, strong
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 1220
GPS FILE NAME: 070308-d2-06-1
NORTHING: 2696303
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1220
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING: 814738
WATER DEPTH: 18'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-06-1-2	1220	2.0	1.5	extremely high winds
070308-06-1-8	1222	8.0	1.8	
070308-06-1-16	1223	16.0	2.0	

AVERAGE TURBIDITY:

DISPOSAL LOCATION (mud cat)

TIME: 1230
GPS FILE NAME: 070308-d2-06u
NORTHING: 2696210
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1220
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING: 814762
WATER DEPTH: 40'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-d2-06-2	1230	2.0	11.0	extremely high winds / current
070308-d2-06-18	1231	18.0	46.5	
070308-d2-06-36	1232	36.0	5.4	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 1240
GPS FILE NAME: 070308-06-9r
NORTHING: 2695838
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1220
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING: 814716
WATER DEPTH: 38'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070308-06-9-2	1240	2.0	1.6	extremely windy
070308-06-9-17	1241	17.0	3.1	
070308-06-9-33	1242	33.0	6.1	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Dredge CAD II - Top of CAD
JOB NUMBER: 6615.005.01
DATE: 7/3/08
MONITORS: JM + WB
WEATHER CONDITIONS: Gusty winds! Sunny, warm ~ 80°F
WIND: GUSTY! very strong
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: 06 hr. (dumped mud cat, 3E-104)
TYPE OF WATER QUALITY MONITORING: WQ + turbidity - up + down current

UP-CURRENT

TIME: 1330
GPS FILE NAME: 070308-06-1
NORTHING: 2696672
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 07
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815716
WATER DEPTH: 10'

Monitoring ID #	TIME 1330	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-06-1-2		2.0	6.3	
070308-06-1-	1332	5.0	5.3	
070308-06-1-	1333	8.0	4.3	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1335
GPS FILE NAME: 070308-07-9
NORTHING: 2696140
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 07
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING: 815381
WATER DEPTH: 8'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-07-9-2	1335	2.0	4.6	
070308-07-9-	1336	4.0	5.1	
070308-07-9-	1337	6.0	5.1	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Dredge - Top of CAD Cell II
JOB NUMBER: 6615.005.01
DATE: 07/03/08
MONITORS: JM + WB
WEATHER CONDITIONS: Sunny / windy / 80°F
WIND: Windy
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: 09 hr of dredge (using small bucket - filling mud cat)
TYPE OF WATER QUALITY MONITORING: turbidity WQ

UP-CURRENT

TIME: 1540
GPS FILE NAME: 070308-09-1
NORTHING:
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 09
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-09-1-2	1545	2	1.9	
070308-09-1-5	1546	5	1.6	
070308-09-1-8	1547	8	9.0	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1555
GPS FILE NAME: 070308-09-9
NORTHING:
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 09
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070308-09-9-2	0555	2	0.5	
070308-09-9-5	0556	5	7.5	
070308-09-9-8	0557	8	8.4	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

1/2

Apex

PROJECT: NBHDC Top of CAD
JOB NUMBER: 6615.005.01
DATE: 7/8/08
DISPOSAL EVENT: 1
MONITORS: J. Ray + M. Bruno
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:

UP-CURRENT

TIME: 0705
GPS FILE NAME: N/A
NORTHING: 2695803
TIDAL STAGE: Flood

TIME OF DISPOSAL: 07:02
DISTANCE FROM DISPOSAL LOCATION: 75 ft.
EASTING: 815017
WATER DEPTH: 29 ft

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808.00-X-2	07:10	2	0.5	
" -X-13	07:15	13	0.6	
" -X-27	07:15	27	8.2	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: ~~07:25~~ 07:32
GPS FILE NAME: ~~N/A~~ N/A
NORTHING: ~~2696278~~ 2696198
TIDAL STAGE: ~~Flood~~ Flood

TIME OF DISPOSAL: 07:02 07:02
DISTANCE FROM DISPOSAL LOCATION: 100 ft.
EASTING: ~~815041~~ 815040
WATER DEPTH: ~~8 ft~~ 27

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808.0737-2 07/37	0725	~~2~~	~~2.8~~	6.1 @ 2 ft
070808.0737.12 "	0726	~~4~~	~~2.7~~	4.5 @ 12 ft
070808.0737.25 "	~~0726~~	~~6~~	~~2.0~~	~~10.0~~ 46.8 @ 25 ft.

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

2/2

DOWN-CURRENT

TIME: 07:25

GPS FILE NAME: N/A

NORTHING: 2696298

TIDAL STAGE: Flood

TIME OF DISPOSAL: 07:07

DISTANCE FROM DISPOSAL LOCATION: 100 ft.

EASTING: 815041

WATER DEPTH: 8

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808.0725.2	0725	2	2.2	
070808.0725.4	0726	4	2.1	
070808.0725.6	0726	6	2.0	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH Dredge - CAD Cell II Top of CAD

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 7/8/08

MONITORS: J. Ray + M. Bruno

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING:

Apex

UP-CURRENT

TIME: 07:40

GPS FILE NAME: N/A

NORTHING: 2696275

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 0

DISTANCE FROM DREDGE/SILT CURTAIN: N/A

EASTING: 815505

WATER DEPTH: 8

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070808.0740.2	07:40	2	0.8	
" " .4	07:40	4	1.0	
" " .6	07:40	6	1.0	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 07:45

GPS FILE NAME: N/A

NORTHING: -2696521

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 0

DISTANCE FROM DREDGE/SILT CURTAIN:

EASTING: 815345

WATER DEPTH: 4

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070808.0745.2	07:45	2	.2	
" " .2.5	07:45	2.5	.2	
" " .3	07:45	3	2.2	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH Dredge - CAD Cell II Top of CAD

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 7/8/08

MONITORS: J. Ray & M. Bruno

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING:

Apex

UP-CURRENT

TIME: 10:05

GPS FILE NAME:

NORTHING: 2696218

TIDAL STAGE:

NUMBER OF HOURS OF DREDGING: 2

DISTANCE FROM DREDGE/SILT CURTAIN:

EASTING: 815814

WATER DEPTH: 8

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070808.1005.2	10:05	2	14.4	
070808.1005.4	10:05	4	14.3	
" " .6	10:05	6	14.3	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 10:23

GPS FILE NAME:

NORTHING: 2696887

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 2

DISTANCE FROM DREDGE/SILT CURTAIN:

EASTING: 815423

WATER DEPTH: 6

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
070808.1023.2	10:23	2	9.2	
" " .3	10:23	3	8.5	
" " .4	10:23	4	9.1	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Top of CAD2
JOB NUMBER: C615.005.01
DATE: 7/11/08
MONITORS: JM + GCD
WEATHER CONDITIONS: Sunny + Hot ~ 80°F
WIND: Cool breeze
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: 00 hr
TYPE OF WATER QUALITY MONITORING: up/down turbidity

UP-CURRENT

TIME: 0750
GPS FILE NAME: 071108-00-1
NORTHING:
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 00 hrs
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 5'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-00-1-2	0750	2.0	1.5	
071108-00-1-3	0751	3.0	1.3	
071108-00-1-4	0752	4.0	1.5	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 0753
GPS FILE NAME: 071108-00
NORTHING:
TIDAL STAGE: Ebb

NUMBER OF HOURS OF DREDGING: 00 hrs
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 9'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-00-9-2	0753	2.0	3.5	
071108-00-9-5	0754	5.0	3.9	
071108-00-9-7	0755	7.0	6.8	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Top of CAD2 Dredge
JOB NUMBER: 6615.005.01
DATE: 7/11/08
MONITORS: JM + GCD
WEATHER CONDITIONS: Sunny + warm 85°F
WIND: Slight breeze
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: 02 hour of dredge
TYPE OF WATER QUALITY MONITORING: up/down current turbidity monitoring

UP-CURRENT

TIME: 1015 hrs
GPS FILE NAME: 071108-02-1
NORTHING:
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02 hr
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 9.5'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-02-1-2	1015	2.0	0.0	
071108-02-1-4	1016	4.0	0.2	
071108-02-1-	1017	7.0	0.7	
			0.9/3 = 0.3	

AVERAGE TURBIDITY: 0.3 NTU

DOWN-CURRENT

TIME: 1018 hrs
GPS FILE NAME: 071108-
NORTHING:
TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 02 hr
DISTANCE FROM DREDGE/SILT CURTAIN: 200'
EASTING:
WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-02-9-2	1018	2.0	4.0	
071108-02-9-	1019	5.0	21.5	
071108-02-9-	1020	8.0	27.7	
			53.2/3 = 17.73	

AVERAGE TURBIDITY: 17.73 NTU

TURBIDITY INCREASE*: 17.73 - 0.3 = 17.43 NTU

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH - Top of CAD 2

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: 7/11/08

MONITORS: JM + GCD

WEATHER CONDITIONS: Sunny, HOT! 85°F

WIND: Hardly any wind. LIGHT Breeze

PRIOR STORM EVENTS: N/A

DREDGE UPDATE: 04 hr - cleaning dredge

TYPE OF WATER QUALITY MONITORING: up-current + down-current turbidity

Apex

UP-CURRENT

TIME: 1240 hrs

GPS FILE NAME: 071108-04-1

NORTHING:

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 04 hrs

DISTANCE FROM DREDGE/SILT CURTAIN: 200'

EASTING:

WATER DEPTH: 29'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-04-1-2	1240	2.0	0.4	
071108-04-1-	1241	14.0	0.6	
071108-04-1-	1242	27.0	9.7	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 1230 hrs

GPS FILE NAME: 071108-04-9

NORTHING: -

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: 04 hrs

DISTANCE FROM DREDGE/SILT CURTAIN: 200'

EASTING:

WATER DEPTH: 10'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
071108-04-9-2	12:18	2.0	21.2	
071108-04-9-5	12:18	5.0	23.5	
071108-04-9-8	12:18	8.0	4.5	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH - Cad Cell 2 Top of CAD

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.005.01

DATE: June 17, 2008

MONITORS: Josh Ray + Jen Martino

WEATHER CONDITIONS: Clear, possibility of rain (damp) ~ 60°F to 70°F

WIND: Cool breeze

PRIOR STORM EVENTS: rain, thunder, lightening last night 6/16 - 6/17

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: Dredging → up-current & down current monitoring

UP-CURRENT

TIME: 0700 hrs

GPS FILE NAME: 061708

NORTHING: 2696628.4

TIDAL STAGE: Ebbing

NUMBER OF HOURS OF DREDGING: 06 hrs.

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815259.8

WATER DEPTH: 5.5 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES 49.2 DO% 41.20 ms/cm
061708-02-1-2	0800	2ft	0.1	2.65 = DO 7.89 pH 124.3 ORP 45.42 mS/cm
061708-02-1-4	0800	4ft	3.7	3.50 DO, 7.86 PH, 132.8 ORP, 45.69 41.72 cm 45.0
061708-02-1-6	0800	6ft	10.3	3.22 DO, 7.83 pH, 140.8 ORP, 46.33, 42.12 42.2 DO%
061708-06-1-2	1300	2ft	-0.1	4.27 DO, 7.80 pH, 120.7 ORP, 45.41 ms/cm, 41.98 ms/cm, 55.0% DO
061708-06-1-2.5	1300	2.5ft	0.1	4.00 DO, 7.75 pH, 151.8 ORP, " " 54.3% DO
061708-06-1-	1300	3.0ft	-0.1	3.54 DO, 7.70 pH, 191.4 ORP, ", ", 47.6% DO

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 0830 hrs.

GPS FILE NAME: 061708

NORTHING: 2695753.3

TIDAL STAGE: Ebbing

NUMBER OF HOURS OF DREDGING: 06 hrs.

DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet

EASTING: 815300.1

WATER DEPTH: 34 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
061708-02-9-2	0850	2ft	13.9	1.74 DO, 7.82 PH, 179.4 ORP, 45.98 mS/cm, 41.75 ms/cm 24.7 DO
061708-02-9-5	0850	5ft.	22.3	2.30 DO, 7.80 pH, 183.4 ORP, 46.03 mS/cm, 41.8 ms/cm 31.9 DO%
061708-02-9-9	0850	9ft.	36.5	2.20 DO, 7.79 pH, 185.1 ORP, 46.24 ms/cm, 41.97 ms/cm, 29.7 DO
061708-02-9-2	0900	2ft.	0.6	2.82 DO, 7.82 pH, 197.9 ORP, 45.72 ms/cm, 41.65 ms/cm 42.9 DO
061708-02-9-3.5	0900	3.5ft.	0.6	2.58 DO, 7.81 pH, 205.1 ORP, 45.89 ms/cm, 41.76 ms/cm, 34.7 DO%
061708-02-9-5	0900	5ft.	0.6	2.80 DO, 7.81 pH 211.9 ORP, 45.91 ms/cm, 41.78 ms/cm, 37.0 DO%
061708-06-9-2	1300	2ft.	1.4	1.79 DO, 7.75 pH, 257.8 ORP, ", " 25.7 DO%
061708-06-9-15	1300	15ft.	0.1	2.08 DO, 7.66 pH, 297.5 ORP, ", " 28.0 DO%
061708-06-9-32	1300	32ft.	1.5	2.24 DO, 7.64 pH, 314.8 ORP, 27.5 DO%

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: NBH - Top of CAD Cell 2
JOB NUMBER: 66615.005.01
DATE: June 17, 2008
MONITORS: Jen Martino & Josh Ray
WEATHER CONDITIONS: Sunny and 70°F - Cool Breeze
WIND: Cool Breeze
PRIOR STORM EVENTS: Rain/thunder & lightening the night before
DREDGE UPDATE: 08 hr. Now using "SCOW" "SC103"
TYPE OF WATER QUALITY MONITORING: Up-current & downcurrent readings - turbidity ~200' from barge

UP-CURRENT

TIME: 15:58p ~ 1600 hrs
GPS FILE NAME: 061708-08-1
NORTHING: 2695760.15
TIDAL STAGE: Flood (low to high)
NUMBER OF HOURS OF DREDGING: 08 hrs.
DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet
EASTING: 815312.86
WATER DEPTH: 36 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
061708-08-1-02	1600	2ft.	0.0	5.14 DO, 7.79 pH 111.5 ORP, 68.1 DO%
061708-08-1-16	1600	16 ft.	0.1	3.41 DO, 7.66 pH, 207.8 ORP, 39.9 DO%
061708-08-1-34	1600	34 ft.	0.7	2.53 DO, 7.56 pH, 253.9 ORP, 31.9 DO%

AVERAGE TURBIDITY: 0.26

DOWN-CURRENT

TIME: 1600 hrs.
GPS FILE NAME: 061708-08-9
NORTHING: 2696535.8
TIDAL STAGE: Flood (low to high)
NUMBER OF HOURS OF DREDGING: 08 hrs.
DISTANCE FROM DREDGE/SILT CURTAIN: 200 feet
EASTING: 815236.7
WATER DEPTH: 8.0 feet

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	NOTES
061708-08-9-2.0	1600	2.0	1.5	1.64 DO, 7.76 pH, 266.9 ORP, 20.6 DO%
061708-08-9-4.0	1600	4	1.8	1.65 DO, 7.78 pH, 275.4 ORP, 23.4 DO%
061708-08-9-6.0	1600	6.0	0.7	1.96 DO, 7.79 pH, 280.4 ORP, 26.3 DO%

AVERAGE TURBIDITY: 1.3

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH-CAD Cell 2 - Top of CAD
JOB NUMBER: 6615.005.01
DATE: 6/18/08
DISPOSAL EVENT: Dumping of "Mudcat" into CAD Cell I
MONITORS: Jen Martino & Josh Ray
WEATHER CONDITIONS: Sunny, clear, 70°F
WIND: None
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 0700 hrs.
GPS FILE NAME: 061808-00-1
NORTHING: 2695527.8
TIDAL STAGE: Flood (High to low)

TIME OF DISPOSAL: 0730 hrs.
DISTANCE FROM DISPOSAL LOCATION: 200 feet
EASTING: 814873.8
WATER DEPTH: 33 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-00-1-2.0	0700	2.0	-0.2	3.3 DO, 7.82 pH, 127.2 ORP, 20.38°C, 42.6 DO%
061808-00-1-16.0	0710	16.0	0.0	2.65 DO, 7.8 pH, 136.2 ORP, 33.8 DO%, 19.84°C
061808-00-1-31.0	0720	31.0	0.5	2.3 DO, 7.78 pH, 141.9 ORP, 19.47°C, 28.4 DO%

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 0800 hrs.
GPS FILE NAME: 061808-D1-00
NORTHING: 2695922.1
TIDAL STAGE: Flood (low to high)

TIME OF DISPOSAL: 0730 hrs.
DISTANCE FROM DISPOSAL LOCATION: @location
EASTING: 814916.8
WATER DEPTH: 48 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-D1-00-2.0	0800	2.0	-0.5	1.21 DO, 7.86 pH, 150.8 ORP, 20.47°C, 20.3 DO%
061808-D1-00-23.0	0810	23.0	0.0	1.64 DO, 7.81 pH, 173.5 ORP, 20.05°C, 26.3 DO%
061808-D1-00-46.0	0820	46.0	48.7	1.8 DO, 7.76 pH, 180.0 ORP, 19.56°C, 20.4 DO%

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 0730 hrs.
GPS FILE NAME: 061808-DI-00-9
NORTHING: 2696283.6
TIDAL STAGE: Flood (low to high)

TIME OF DISPOSAL: 0730 hrs.
DISTANCE FROM DISPOSAL LOCATION: 200 feet
EASTING: 814982.7
WATER DEPTH: 12 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-DI-00-9-2	0730	2.0	-0.2	1.89 DO, 7.82 pH, 153.7 ORP, 20.46°C, 25.8 DO%
061808-DI-00-9-6	0740	6.0	-0.2	1.94 DO, 7.81 pH, 161.8 ORP, 20.44°C, 21.4 DO%
061808-DI-00-9-9	0745	9.0	0.0	2.05 DO, 7.82 pH, 168.4 ORP, 20.23°C, 27.2 DO%

AVERAGE TURBIDITY: -0.2 NTU

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH-CAD Cell 2-Top of CAD
JOB NUMBER: 6615.005.01
DATE: June 18, 2008
DISPOSAL EVENT: D2 of day - Dumping of mud cat
MONITORS: Jen Martino + Josh Ray
WEATHER CONDITIONS: Sunny, Breezy, 70°F
WIND: Cool, Breezy
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 1130 hrs
GPS FILE NAME: 061808-04-1
NORTHING: 2696228.0
TIDAL STAGE: Ebb (High to low)

TIME OF DISPOSAL: 1130 hrs
DISTANCE FROM DISPOSAL LOCATION: 100 feet
EASTING: 814971.4
WATER DEPTH: 13 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-04-1-2	1130	2.0	-0.4	1.45 DO, 7.34 pH, 245.6 ORP, 21.16 °C, 20.4 DO%
061808-04-1-7	1140	7.0	0.5	
061808-04-1-11	1145	11.0	11.3	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 1145 hrs
GPS FILE NAME: 061808-D2-04
NORTHING: 2695948.0
TIDAL STAGE: Ebb (High to low)

TIME OF DISPOSAL: 1130 hrs
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING: 814912.2
WATER DEPTH: 44 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-D2-04-2	1150	2.0 ft.	1.0	
061808-D2-04-20	1155	20.0 ft	0.1	
061808-D2-04-40	1200	40.0 ft	25.5	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 1205 hrs.
GPS FILE NAME: 061808-04-9
NORTHING: 2695393.7
TIDAL STAGE: ~~[illegible]~~ Ebb (High to low)

TIME OF DISPOSAL: 1130 hrs.
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 814951.a
WATER DEPTH: 32 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
061808-04-9-2	1205	2	1.2	
061808-04-9-15	1210	15	3.2	
061808-04-9-30	1215	30	~~[illegible]~~ 33.0	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH
JOB NUMBER: 16615.005
DATE: 6/23/2008
DISPOSAL EVENT: 1
MONITORS: JK MB
WEATHER CONDITIONS: cloudy 70°
WIND: calm
PRIOR STORM EVENTS:

Apex

UP-CURRENT

TIME:
GPS FILE NAME:
NORTHING:
TIDAL STAGE:

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION:
EASTING:
WATER DEPTH:

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES

AVERAGE TURBIDITY:

DISPOSAL LOCATION 0725 - Trouble w/ dump

TIME: 0740
GPS FILE NAME: 062308_1-10-5
NORTHING: 2676126.47
TIDAL STAGE: Flood

TIME OF DISPOSAL: 0730
DISTANCE FROM DISPOSAL LOCATION: on location
EASTING: 814784.85
WATER DEPTH: 42

Trouble w/ pocket for dump for 1 hr.

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	DO	pH	ORP	NOTES
062308-1-10-5	0840	40	30.2	1.42	7.77	298.2	
062308-1-10-5	0842	2	-0.4	1.89	7.78	298.8	
062308-1-10-5	0844	20	8.2	1.79	7.78	300.5	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: NBH

Dredge Water Quality Monitoring Form

JOB NUMBER: 16615.005

DATE: 6/23/2008

MONITORS: MB JK

WEATHER CONDITIONS: Cloudy

WIND: calm

Low 5:10
High 11:52
Low 17:07

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING:

Apex

UP-CURRENT

TIME: 0730

GPS FILE NAME: 062308_D-1-0

NORTHING: 269893.32

TIDAL STAGE: Flood

NUMBER OF HOURS OF DREDGING: During

DISTANCE FROM DREDGE/SILT CURTAIN: —

EASTING: 814760.18

WATER DEPTH: 40

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)				NOTES
062308-D-1-9.38	0730	38	0.2	2.01	7.79	224.3	
062308-D-1-92	0732	2	-0.4	2.19	7.80	225.1	
062308-D-1-920	0734	20	-0.5	2.46	7.79	228.4	

AVERAGE TURBIDITY:

DOWN-CURRENT

TIME: 0725

GPS FILE NAME: 062308_D-1-0

NORTHING: 269653655.88

TIDAL STAGE: Low > High

NUMBER OF HOURS OF DREDGING: During

DISTANCE FROM DREDGE/SILT CURTAIN: —

EASTING: 814815.11

WATER DEPTH: 11'

Monitoring ID #	TIME	DEPTH (ft)	AVE TURBIDITY (NTUs)	DO	pH	ORP	NOTES
062308-D-1-0-9	0725	9	-0.3	3.29	7.87	169.9	
062308-D-1-0-2	0726	2	-0.2	2.96	7.85	171.8	
062308-D-1-05.5	0727	5.5	-0.2	2.95	7.84	175.6	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: 6615.005
JOB NUMBER:
DATE: 6/23/08
DISPOSAL EVENT:
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:

Apex

UP-CURRENT

TIME: 1330
GPS FILE NAME:
NORTHING: 2696245
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1335
DISTANCE FROM DISPOSAL LOCATION: Approx. 200ft up current
EASTING: 814859
WATER DEPTH: 16

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062308-DZ01	13:33	19	2.2	ORP 226.5 pH 7.77 21.96°C 2.60 DO
062308DZ01 - 10	13:34	10	2.5	ORP 235.2 pH 7.76 22.48°C 2.88 DO
062308DZ01 - 2	13:36	2	1.5	ORP 239.4 pH 7.78 23.13°C 3.68 DO

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 13:48
GPS FILE NAME:
NORTHING: 2696072
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1335
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 814766
WATER DEPTH: 46

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062308DZ-15.5 - 44	1:48	44	104.6	
062308DZ15.5 - 21	1:50	21	1.3	ORP 301.8 pH 7.76 22.01°C 2.31 DO
062308DZ155 - 2	1:53	2	1.1	ORP 304.6 pH 7.77 22.95°C 2.69 DO

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 1338

GPS FILE NAME:

NORTHING: 2695796

TIDAL STAGE: Ebb

TIME OF DISPOSAL: 13:35

DISTANCE FROM DISPOSAL LOCATION: Approx. 200ft.

EASTING: 814717

WATER DEPTH: 36ft

Monitoring ID # (DWA)	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062308D239-34	1:40	34	0.5	ORP 264.8 pH 7.76 21.68°C 2.26 DO
062308D239-16	1:41	16	0.1	ORP 271.8 pH 7.76 22.48°C 2.63 DO
062308D239-2	1:43	2	0.2	ORP 275.0 pH 7.76 22.79°C 3.10 DO

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH - Top of CAD
JOB NUMBER: 6613.005.01
DATE: 6/24/08
DISPOSAL EVENT: D1 of Mud cat
MONITORS: Jen Martino + Josh Ray
WEATHER CONDITIONS: Clear, Cool, Overcast ~ 65°F
WIND: cool breeze
PRIOR STORM EVENTS: rain

Apex

UP-CURRENT

TIME: 0728 hrs
GPS FILE NAME: 062408-00-1
NORTHING: 2695778
TIDAL STAGE: Flood

TIME OF DISPOSAL: 07:28
DISTANCE FROM DISPOSAL LOCATION: 200 ft.
EASTING: 814772
WATER DEPTH: 42

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062408-00-1-02	07:28	2	0.0	
062408-00-1-20	07:30	20	0.2	
062408-00-1-40	07:32	40	0.7	
		Total:	0.9/3 = 0.3	

AVERAGE TURBIDITY: 0.3 NTU

DISPOSAL LOCATION

TIME: 0745 hrs
GPS FILE NAME: 062408-D1-00
NORTHING: 2696154.8
TIDAL STAGE: Flood

TIME OF DISPOSAL: 0728 hrs
DISTANCE FROM DISPOSAL LOCATION: (1) location
EASTING: 814778
WATER DEPTH: 31 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062408-D1-00-2	0745	2.0	2.6	
062408-D1-00-16	0750	16.0	3.4	
062408-D1-00-29	0755	29.0	58.7	
		Total:	64.7/3 = 21.4	

AVERAGE TURBIDITY: 21.4 NTU

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 0730 hrs

GPS FILE NAME:

NORTHING: 2696235.02

TIDAL STAGE: Flood

TIME OF DISPOSAL: 0728 hrs.

DISTANCE FROM DISPOSAL LOCATION:

EASTING: 814815.17

WATER DEPTH: ~~22~~ 11 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062408-00-9-2	0730	2.0	0.2	
062408-00-9-4	0735	4.0	0.3	
062408-00-9-9	0740	9.0	0.3	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

Apex

PROJECT: NBH - Top of CAD (Dredge + Disposal)
JOB NUMBER: 6615.005.01
DATE: 6/26/08
DISPOSAL EVENT: D1 of MudCat (05 hrs of dredging)
MONITORS: Jen Martino + Warren B.
WEATHER CONDITIONS: overcast, muggy, ~75°F
WIND: slight breeze
PRIOR STORM EVENTS: N/A - rain

UP-CURRENT

TIME: 1500
GPS FILE NAME: 062608-05-1
NORTHING: 2696215
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1505
DISTANCE FROM DISPOSAL LOCATION: 200 feet
EASTING: 814863
WATER DEPTH: 20 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062608-05-1-2	1500	2	0.1	
062608-05-1-9	1501	9	0.2	
062608-05-1-18	1503	18	7.1	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 1515
GPS FILE NAME: 062608-D1-05m
NORTHING: 2696109
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1510
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING: 814692
WATER DEPTH: 47 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062608-D1-05-2	1515	2	2.0	
062608-D1-05-	1517	17	0.9	
	1520	45	119.5	
		23	2.3	

total = 124.7/4 = 31.1 NTU

119.5
2.0
2.3
3) 123.8

AVERAGE TURBIDITY: 41.2 NTU

TURBIDITY INCREASE:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 1510

GPS FILE NAME: 062608-05-9

NORTHING: 2695788

TIDAL STAGE: Ebb

TIME OF DISPOSAL: 1510

DISTANCE FROM DISPOSAL LOCATION: 200 feet

EASTING: 814771

WATER DEPTH: 30 feet

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
062608-05-9-2	1510	2	1.0	
062608-05-9-14	1511	14	0.9	
062608-05-9-28	1513	28	2.2	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

Apex

PROJECT: 6615.005.01
JOB NUMBER:
DATE: 6/30/08
DISPOSAL EVENT: 1
MONITORS: JK, JER
WEATHER CONDITIONS: 65°
WIND: 5-10 kts
PRIOR STORM EVENTS: Rain yesterday evening/night

UP-CURRENT

TIME: 08:36
GPS FILE NAME:
NORTHING: 2696492
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 08:45
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 814732
WATER DEPTH: 10.5

Monitoring ID # (date # mins place depth)	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
063008-1-0-1-2	08:36	2	1.1	
063008-1-0-1-6	08:36	6	1.2	
063008-1-0-1-8	08:36	8	1.4	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 09:15
GPS FILE NAME:
NORTHING: 2696037
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 08:45
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 814777
WATER DEPTH: 39

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
063008-1-30-5-2	09:15	2	1.2	
063008-1-30-5-20	09:15	20	6.0	
063008-1-30-5-37	09:15	37	69.0	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 08:50

GPS FILE NAME:

NORTHING: 2695751

TIDAL STAGE: Ebb

TIME OF DISPOSAL: 08:45

DISTANCE FROM DISPOSAL LOCATION: 150 ft.

EASTING: 814695

WATER DEPTH: 32

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
063008-1-5-9 - 2	08:50	2	.3	
063008-1-5-9 - 16	08:50	16	3.2	
063008-1-5-9 - 30	08:50	30	2.9	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

1/2

Apex

PROJECT: NBH Dredge CAD Cell II - Top of CAD
JOB NUMBER: 6615.005.01
DATE: 7/8/08
DISPOSAL EVENT:
MONITORS: J. Ray + M. Bruno
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:

UP-CURRENT

TIME: 12:00
GPS FILE NAME: N/A
NORTHING: 269573 51
TIDAL STAGE:

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION: 75
EASTING: 814 999
WATER DEPTH: 16

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808 - 1200 - 2	12:00	2	0.5	
" " - 7	12:00	7	0.2	
" " - 14	12:00	14	0.2	

AVERAGE TURBIDITY:

~~DISPOSAL LOCATION~~ DOWN CURRENT

TIME: 12:10
GPS FILE NAME: N/A
NORTHING: 814930
TIDAL STAGE:

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION: 150
EASTING: 269333
WATER DEPTH: 2

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808 - 1210 - 2	12:10	2	1.2	
" " - 6	12:10	6	1.5	
" " - 10	12:10	10	1.9	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex 2/2

~~DOWN-CURRENT~~ Disposal Location

TIME: 12:25
GPS FILE NAME: N/A
NORTHING: 2696021
TIDAL STAGE:

TIME OF DISPOSAL:
DISTANCE FROM DISPOSAL LOCATION:
EASTING: 815005
WATER DEPTH: 42

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
070808.1225.2	12:25	2	1.3	
" " .3	12:25	30	6.7	
" " .4	12:25	40	13.5	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH - Top of CAD 2
JOB NUMBER: 6615.005.01
DATE: 7/11/08
DISPOSAL EVENT: D1 of SE-103 (00 hr of dredge)
MONITORS: JM + GCD
WEATHER CONDITIONS: Sunny, Hot ~ 75°F
WIND: Cool breeze
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 0650 hrs
GPS FILE NAME: 071108-00-1
NORTHING:
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0650 hrs
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING:
WATER DEPTH: 30'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071108-00-1-2	0650	2.0	0.6	
071108-00-1-14	0651	14.0	1.3	
071108-00-1-28	0653	28.0	6.8	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 0657
GPS FILE NAME: 071108-d1-00 (SE-103)
NORTHING:
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0650
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING:
WATER DEPTH: 32'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071108-d1-00-2	0657	2.0	9.0	
071108-d1-00-15	0658	15.0	10.6	
071108-d1-00-30	0659	30.0	45.9	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 0655 hrs

GPS FILE NAME: 071108-00-9

NORTHING:

TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0850 hrs

DISTANCE FROM DISPOSAL LOCATION: 200'

EASTING:

WATER DEPTH: 31'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071108-00-9-2	0655	2.0	0.0	
071108-00-9-15	0656	15.0	0.0	
071108-00-9-29	0657	29.0	0.3	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Disposal Water Quality Monitoring Form

PROJECT: NBH- Top of CAD 2
JOB NUMBER: 6615.005.01
DATE: 7/15/08
DISPOSAL EVENT: D1 of SE-103, SE-104, mud cat
MONITORS: JM+JR + GCD
WEATHER CONDITIONS: Sunny, warm, 80°F
WIND: Slight breeze
PRIOR STORM EVENTS: N/A

Apex

UP-CURRENT

TIME: 0945 hrs
GPS FILE NAME: 071508-00-1
NORTHING: 2696380
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0700 - 0915 hrs
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING: 814731
WATER DEPTH: 13.0'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071508-00-1-2	0945	2.0	-0.2	
071508-00-1-5	0946	5.0	0.0	
071508-00-1-11	0947	11.0	0.5	

AVERAGE TURBIDITY:

DISPOSAL LOCATION

TIME: 0925 hrs
GPS FILE NAME: 071508-d01-00
NORTHING: 2695980
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0700 - 0915 hrs
DISTANCE FROM DISPOSAL LOCATION: @ location
EASTING: 814698
WATER DEPTH: 40'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071508-d1-00-2	0925	2.0	-0.4	
071508-d1-00-	0926	18.0	0.3	
071508-d1-00-	0927	38.0	109.7	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Apex

DOWN-CURRENT

TIME: 0935 hrs.
GPS FILE NAME: 071508-00-9
NORTHING: 2695806
TIDAL STAGE: Ebb

TIME OF DISPOSAL: 0700 - 0915 hrs
DISTANCE FROM DISPOSAL LOCATION: 200'
EASTING: 814639
WATER DEPTH: 30'

Monitoring ID #	TIME	DEPTH (ft)	AVG TURBIDITY (NTUs)	NOTES
071508-00-9-2	0925	2.0	-0.4	
071508-00-9-14	0936	14.0	-0.3	
071508-00-9-28	0937	28.0	0.5	

AVERAGE TURBIDITY:

TURBIDITY INCREASE*:

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 7/31/08
MONITORS: EL/
WEATHER CONDITIONS: 75°F Foggy Hazy
WIND: Calm
PRIOR STORM EVENTS:
DREDGE UPDATE: Steamship barge yesterday 7/30/08
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2691677	0710	14	2	-0.4	N/A	Flood	200ft	0
	818167	0710	14	6	-0.4				
		0710	14	12	-0.3				
			AVERAGE TURBIDITY:		-.36				
	2691970	0915	20	2	0.1	N/A	Ebb	200 ft.	2
	818834	0915	20	9	0.7				
		0915	20	18	25.8				
			AVERAGE TURBIDITY:		8.36				
	2691903	11:10	18	2	0.1	N/A	Ebb	125ft	4
	817873	11:11	18	9	0.5				
		11:12	18	16	1.1				
			AVERAGE TURBIDITY:						
	2691598	1416	8	2	0.1	N/A	Flood ~~Ebb~~ ~~Open~~	100 ft.	7
	818281	1420	8	4	-0.2				
		1421	8	6	0.7				
			AVERAGE TURBIDITY:						
	2691666	16:45	8	2	3.4	N/A	Flood	175ft.	9
	818223	16:45	8	4	3.2				
		16:45	8	6	0.7				
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2691944	0720	21	2	0.0	N/A	Flood	175ft	0
	817885	0720	21	9	0.2				
		0720	21	18	0.4				
			TURBIDITY INCREASE:		0.36				
	2691605	0925	8	2	-0.2	N/A	Ebb	200 ft.	2
	818368	0925	8	4	-0.4				
		0925	8	6	0.0				
			TURBIDITY INCREASE:						
	2691606	11:18	6	-0.3	2ft	N/A	Ebb	200ft	4
	818368	11:20	6	-0.5	3ft				
		11:21	6	0.0	4ft				
			TURBIDITY INCREASE:						
	2691944	1425	17	2	4.5	N/A	Flood ~~Ebb~~ ~~Open~~	200ft.	7
	817885	1427	17	8	4.7				
		1428	17	15	6.6				
			TURBIDITY INCREASE:						
	2692021	1635	17	2	0.1	N/A	Flood	150ft	9
	817961	1635	17	8	0.9				
		1635	17	15	0.8				
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/4/08
MONITORS: JER/EWP
WEATHER CONDITIONS: 78° F
WIND: 10mph NW
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696189, 814743	12:00	40	2	-0.7	N/A	Ebb	75 ft	0
		12:02	40	21	0.1				
		12:08	40	39	6.8				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2695600, 814733	12:35	34	2	-0.2	N/A	Ebb	150 ft	0
		12:37	34	16	-0.4				
		12:40	34	32	2.2				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/5/08
MONITORS: JER/MB
WEATHER CONDITIONS: Sunny
WIND: 1-2 knots from N
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
080508-00-1-2	GPS not working	0725	6'	2'	0.0	N/A	Flood	200ft.	0
080508-00-1-8		0725	6'	8'	0.0				
080508-00-1-4		0725	6'	4'	0.8				
			AVERAGE TURBIDITY:		0.233				
080508-02-1-2	2691581 818266	09:40	11'	2'	3.2	N/A	Flood	150ft.	2
080508-02-1-8		09:42	11'	5'	0.4				
080508-02-1-9		09:44	11'	9'	-0.4				
			AVERAGE TURBIDITY:		1.07				
080508-04-1-2	2691935 818056	12:00	19'	2'	0.0	N/A	Ebb	200ft	4
080508-04-1-8		12:04	19'	8'	1.2				
080508-04-1-17		12:06	19'	17'	66.0				
			AVERAGE TURBIDITY:		22.4				
080508-06-1-2	2691936 818019	14:20	21'	2'	1.9	N/A	Ebb	200ft	4
080508-06-1-9		14:23	21'	9'	20.2				
080508-06-1-19		14:25	21'	19'	24.8				
			AVERAGE TURBIDITY:		16.23				
080508-D1-0-1-2	2696476 814665	16:46	17'	2'	0.9	N/A	Ebb	200ft	Disposal
080508-D1-2-1-8		16:48	17'	8'	0.7				
080508-D1-4-1-15		16:50	17'	15'	6.0				
			AVERAGE TURBIDITY:		2.5				

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
080508-00-9-2	Gps not working	07:40	20'	2'	0.0	N/A	Flood	200ft	0
080508-00-9-10		07:40	20'	10'	0.0				
080508-00-9-18		07:40	20'	18'	0.0				
			TURBIDITY INCREASE:		0				
080508-02-9-2	2691935 818055	0950	19'	2'	2.7	N/A	Flood	200ft	2
080508-02-9-8		0952	19'	8'	1.0				
080508-02-9-17		0954	19'	17'	1.2				
			TURBIDITY INCREASE:		.843				
080508-04-9-2	2691662 818397	12:10	8'	2	2.9	N/A	Ebb	150ft	4
080508-04-9-4		12:15	8'	4	0.4				
080508-04-9-6		12:17	8'	6	4.5				
			TURBIDITY INCREASE:		-19.86				
080508-06-9-2	2691661 818403	14:05	6'	2'	-0.4	N/A	Ebb	200ft	6
080508-06-9-8		14:07	6'	3'	1.2				
080508-06-9-4		14:10	6'	4'	1.9				
			TURBIDITY INCREASE:		-15.33				
080508-D1-9-9-2	2695612 814658	16:55	28'	2'	0.9	N/A	Ebb	150ft	Disposal
080508-D1-11-9-14		16:57	28'	14'	0.4				
080508-D1-13-9-26		16:59	28'	26'	0.7				
			TURBIDITY INCREASE:		-1.83				

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/5/08
MONITORS: JER/MB
WEATHER CONDITIONS: Sunny
WIND: 1-2 knots from N
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
080508-00-1-2	GPS not working	0725	6'	2'	0.0	N/A	Flood	200ft.	0
080508-00-1-5		0725	6'	5'	0.0				
080508-00-1-4		0725	6'	4'	0.8				
			AVERAGE TURBIDITY:		0.233				
080508-02-1-2	2691581	09:40	11'	2'	3.2	N/A	Flood	150ft.	2
080508-02-1-5	818266	09:42	11'	5'	0.4				
080508-02-1-9		09:44	11'	9'	-0.4				
			AVERAGE TURBIDITY:		1.07				
080508-04-1-2	2691995	12:00	19'	2'	0.0	N/A	Ebb	200ft	4
080508-04-1-8	818056	12:04	19'	8'	1.2				
080508-04-1-17		12:06	19'	17'	66.0				
			AVERAGE TURBIDITY:		22.4				
080508-06-1-2	2691936	14:20	21'	2'	1.7	N/A	Ebb	200ft	4
080508-06-1-9	818019	14:23	21'	9'	20.2				
080508-06-1-19		14:25	21'	19'	24.8				
			AVERAGE TURBIDITY:		16.28				
080508-D1-0-1-2	2696476	16:46	17'	2'	0.9	N/A	Ebb	200ft	Disposal
080508-D1-2-1-8	814665	16:48	17'	8'	0.7				
080508-D1-4-1-15		16:50	17'	15'	6.0				
			AVERAGE TURBIDITY:		2.5				

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
080508-00-9-2	Gps not working	07:40	20'	2'	0.0	N/A	Flood	200ft	0
080508-00-9-10		07:40	20'	10'	0.0				
080508-00-9-18		07:40	20'	18'	0.0				
			TURBIDITY INCREASE:		0				
080508-02-9-2	2691935	0950	19'	2'	2.7	N/A	Flood	200ft	2
080508-02-9-8	818055	0952	19'	8'	1.0				
080508-02-9-17		0954	19'	17'	1.2				
			TURBIDITY INCREASE:		.563				
080508-04-9-2	2691662	12:10	8'	2	2.7	N/A	Ebb	150ft	4
080508-04-9-4	818397	12:15	8'	4	0.4				
080508-04-9-6		12:17	8'	6	4.5				
			TURBIDITY INCREASE:		-19.86				
080508-06-9-2	2691661	14:05	6'	2'	-0.4	N/A	Ebb	200ft	6
080508-06-9-3	818403	14:07	6'	3'	1.2				
080508-06-9-4		14:10	6'	4'	1.4				
			TURBIDITY INCREASE:		-15.33				
080508-D1-9-2	2695612	16:55	28'	2'	0.9	N/A	Ebb	150ft	Disposal
080508-D1-11-9-14	814658	16:57	28'	14'	0.4				
080508-D1-13-9-26		16:59	28'	26'	0.7				
			TURBIDITY INCREASE:		-1.83				

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/7/08
MONITORS: Jen Martino + Warren B.
WEATHER CONDITIONS: Cloudy, Cold, light sprinkles - dark clouds
WIND: 15mph - cool
PRIOR STORM EVENTS: Rain
DREDGE UPDATE: 00 hr.
TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
080708-00-1-2	2691582 N	1001	19'	2.0'	-0.1	080708-00-1-dredge	Flood	200'	00
080708-00-1-9	818083 E	1003	19'	9.0'	-0.3				
080708-00-1-17		1005	19'	17.0'	-0.9				
			AVERAGE TURBIDITY:						
080708-02-1-2	2691574 N	1144	11'	2'	0.7	080708	Flood	200'	02
080708-02-1-5	818255 E	1145	11'	5'	-0.8				
080708-02-1-9		1145	11'	9'	0.2				
			AVERAGE TURBIDITY:						
080708-04-1-2	2692061 N	1420	20'	2'	~~-24.8~~ 0.1	080708	Ebb	200'	04
080708-04-1-10	817789 E	1422	20'	10'	0.9				
080708-04-1-18		1424	20'		-1.4				
			AVERAGE TURBIDITY:						
080708-08-1-2	2691980	1710	20'	2.0	0.0	080708	Ebb	200'	08
080708-08-1-10	817844	1712	20'	10.0	-0.5				
080708-08-1-18		1713	20'	18.0	-1.4				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
080708-00-9-2	2691590 N	10:20	15'	2.0'	0.1		Flood	200'	00
080708-00-9-9	817763 E	12:00	15	9.0'	0.7				
080708-00-9-17			15'	17.0'	-1.0				
			TURBIDITY INCREASE:						
080708-02-9-2	2692017 N	12:00	20'	2'	~~-0.9~~	.7	Flood	200'	02
080708-02-9-10	817825 E	12:00	20'	10'	~~-0.8~~	~~37.7~~ 1.0			
080708-02-9-18		12:01	20'	18'					
			TURBIDITY INCREASE:						
080708-04-9-2	2691670 N		24'	2'	-0.3	3.1	Ebb	200'	04
080708-04-9-12	817959 E		24'	12'	~~-2.6~~				
080708-04-9-22			24'	22'	0				
			TURBIDITY INCREASE:						
080708-08-9-2	2691626	1715	18'	2'	-0.9	080708	Ebb	200'	08
080708-08-9-9	818055	1718	18'	9'	0.0				
080708-08-9-16		1720	18'	16'	-1.0				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

31 caps Freezing

calibrated YSI pio 080708-08-9-2 to sample

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 08/07/08
MONITORS: JM + WB
WEATHER CONDITIONS: Sunny (60s) 70°F - 75-
WIND: 15mph or less
PRIOR STORM EVENTS: rain
DREDGE UPDATE: dump of SEI-2000
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
080708-dl-06-1-2	2696347 N	1530	18'	2'	-0.4	080708	Ebb	200'	06
080708-dl-06-1-	814699 E	1533	18'	9'	-0.4				
080708-dl-06-1-		1535	18'	16'	0.0				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

Disposal of SEI-2000

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
one pocket missing from dump 080708-dl-06-9-2	2695733	1536	33'	2.0	-0.9	080708	Ebb	200'	06
080708-dl-06-9-15	814681	1538		19.0	-1.3				
080708-dl-06-9-30		1540		30.0	-1.2				
			TURBIDITY INCREASE:						
and casing all pockets dumped 080708-dl-06-9-2	2695784	1555	33	2.0	0.5	080708	Ebb	150'	06
080708-dl-06-9-16	814644	1600	33	16.0	5.9				
080708-dl-06-9-30		1602	33	30'	N/				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

APEX

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/8/08
MONITORS: JM & MB
WEATHER CONDITIONS: Sunny, clear, No wind ~70°F Mid-day-cool/wind cloudy w/some sun
WIND: No wind, clear skies
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: 00 hr of dredge
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
080808-00-1-2	2691689	0715	9'	2'	-1.6	080808	Flood	200'	00
080808-00-1-5	818	0717	9'	5'	-1.4				
080808-00-1-7		0720	9'	7'	-1.4				
			AVERAGE TURBIDITY:						
080808-06-1-2	2691911	1330	7'	2'	0.4	080808	Ebb	200'	06
080808-06-1-4	817688	1333	7'	4'	0.1				
080808-06-1-5		1335	7'	5'	0.0				
			AVERAGE TURBIDITY:						
080808-08-1-2	2691929	1545	22'	2'	0.3	080808	Ebb	200'	08
080808-08-1-10	817964	1547	22'	10'	0.4				
080808-08-1-20		1549	22'	20'	0.2				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

Dredge stopped - just restarted up

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
080808-00-9-2	2691973	0726	20'	2'	-1.7	080808	Flood	200'	00
080808-00-9-10	817648	0728	20'	10'	-1.5				
080808-00-9-18		0730	20'	18'	-0.8				
			TURBIDITY INCREASE:						
080808-06-9-2	2691682	1345	8'	2'	0.6	080808	Ebb	200'	06
080808-06-9-	818398	1347	8'	4'	9.8				
080808-06-9-		1350	8'	6'	22.8				
			TURBIDITY INCREASE:						
080808-08-9-2	2691683	1601	6'	2'	1.0	080808	Ebb	200'	08
080808-08-9-3	818399	1603	6'	3'	0.9				
080808-08-9-4		1605	6'	4	0.9				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

Dredge was on hold

ity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

ring Form jer

Dredge Water Quality Monitoring Form

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/11/08
MONITORS: JM + JR
WEATHER CONDITIONS: RAIN!! Thunder + Lightening – Late afternoon skies cleared – sun
WIND: 10-15mph
PRIOR STORM EVENTS: Rain
DREDGE UPDATE: Filling Eddie Current
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
081108-00-1-2		0850	18'	2'	3.0	081108	Ebb	200'	00
081108-00-1-10		0853	18'	10'	4.0				
081108-00-1-16		0855	18'	16'	4.5				
			AVERAGE TURBIDITY:						

* Dredging continued between hrs. 02-06 however storm too strong for WQM.

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
081108-08-1-2	3 pilings from SW corner of steamship pier (GPS not connecting)	1715	20'	2'	7.3	081108	Ebb	150'	08
081108-08-1-		1716	20'	9'	0.6				
081108-08-1-		1717	20'	18'	-1.2				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
081108-00-9-2	2691579	0835	9'	2'	0.3	081108	Ebb	200'	00
081108-00-9-5	818353	0837	9'	5'	-0.1				
081108-00-9-7		0840	9'	7'	-0.9				
			TURBIDITY INCREASE:						
081108-08-9-2	Even w/ dock of steamship (100' S)	1725	7'	2'	3.2	081108	Ebb	150'	08
081108-08-9-4		1727	7'	4'	17.2				
081108-08-9-5		1729	7'	5'	24.2				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/11/08
MONITORS: JM + JR
WEATHER CONDITIONS: Rainy + Stormy - Second half of day was Sunny + few clouds - 7
WIND: 5-10 mph
PRIOR STORM EVENTS: Rain / thunder & lightening
DREDGE UPDATE: Disposal of Scow SEI-2000
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
081108-dl-00-1-2	S of scow SEI-2000	1630	34'	2'	4.3	081108	Flood	75' South of Scow	00 hr of disposal
081108-dl-00-1-16		1632	34'	16'	-1.7				
081108-dl-00-1-22		1633	34'	32'	1.1				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
081108-dl-00-9-2		1650	24'	2'	1.3	081108	Flood	100' N of scow toward I95 highway	00 hr of disposal
081108-dl-00-9-12		1651	24'	12'	-0.6				
081108-dl-00-9-22		1653	24'	22'	5.3				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT:	Steamship Authority
JOB NUMBER:	6588.006
DATE:	~~8/12/08~~ 8/12/08
MONITORS:	JER, ~~[illegible]~~ MB
WEATHER CONDITIONS:	Mid 50's in AM light rain, High 60's PM cleared up
WIND:	5-15 mph
PRIOR STORM EVENTS:	8/11/08 2.66 inches of rain, rain all night
DREDGE UPDATE:	
TYPE OF WATER QUALITY MONITORING:	DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2691661, 818403	11:20	5	2	-0.8	N/A	Flood	200ft	02
		11:22	5	3	-0.6				
		11:24	5	4	-0.6				
			AVERAGE TURBIDITY:						
	2691661, 818403	1345	6	2	-0.6	N/A	Flood	200ft	04
		1345	6	3	-0.2				
		1348	6	4	-0.5				
			AVERAGE TURBIDITY:						
	2691661, 818403	1530	7	2	-0.7	N/A	Flood	200ft	06
		1531	7	4	-0.5				
		1533	7	5	-0.7				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2691933, 818091	1130	18	2	0.2	N/A	Flood	200ft	02
		1132	18	9	2.8				
		1134	18	16	1.2				
			TURBIDITY INCREASE:						
	2691938, 818094	13:30	20	2	0.7	N/A	Flood	200ft	04
		13:31	20	10	3.2				
		13:35	20	18	4.9				
			TURBIDITY INCREASE:						
	2691938, 818094	1540	20	2	3.0	N/A	Flood	200ft	06
		1541	20	9	9.6				
		1544	20	18	0.2				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 081808
MONITORS: RB, JM
WEATHER CONDITIONS: Sunny, 75°
WIND: 5 mph
PRIOR STORM EVENTS: NA
DREDGE UPDATE: Morning (1) side of dock / Afternoon (2) side of dock.
TYPE OF WATER QUALITY MONITORING: (DREDGE) / /DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
081808-00-1-2	2691639	0840	20	2	1.0	081808	Flood	100'	00
081808-00-1-9	818432	0842	↓	9	-1.3				
081808-00-1-19		0844		19	-1.2				
			AVERAGE TURBIDITY:						
081808-02-1-2	2692192.89	1050	22	2	-1.6	081808	ebb	150'	02
081808-02-1-10	817720.89	1052	↓	10	23.6				
081808-02-1-20		1054		20	3.6				
			AVERAGE TURBIDITY:						
081808-04-1-2	2692143	1235	20'	2	3.1	081808	Ebb	200'	04
081808-04-1-10	817801	1237	↓	10'	7.5				
081808-04-1-18		1238		18'	7.2				
			AVERAGE TURBIDITY:						
081808-07-1-2	2691690	1528	8'	2'	4.2	081808	Flood	150'	07
081808-07-1-4	818406	1529	↓	4'	5.0				
081808-07-1-6		1530		6'	8.5				
			AVERAGE TURBIDITY:						
081808-09-1-2	2691690	1734	6'	2'	0.8	081808	Flood	150'	09
081808-09-1-3	818410	1736	↓	3'	1.0				
081808-09-1-4		1737		4'	0.7				
			AVERAGE TURBIDITY:						

* Dredging halted - changed side of dock + moved crew.

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
081808-00-9-2	269	0820	21	2	-1.4	081808	Flood	200'	00
081808-00-9-9	810	0825	↓	9	-1.1				
081808-00-9-19		0830		19	5.4				
			TURBIDITY INCREASE:						
081808-02-9-2	269	1049	22	2	-1.6	081808	ebb	100'	02
081808-02-9-10		1046	↓	10	-1.5				
081808-02-9-20		1048		20	0.3				
			TURBIDITY INCREASE:						
081808-04-9-2	269	1240	19'	2'	0.3	081808	Ebb	150'	04
081808-04-9-10		1242	↓	10'	6.7				
081808-04-9-16		1244		16'	1.9				
			TURBIDITY INCREASE:						
081808-07-9-2	2691945	1532	15'	2'	1.4	081808	Flood	200'	07
081808-07-9-	818152	1534	↓	9'	1.0				
081808-07-9-		1536		13	5.8				
			TURBIDITY INCREASE:						
081808-09-9-2	2691950	1740	14'	2'	3.4	081808	Flood	200'	09
081808-09-9-6	2818153	1742	↓	6'	4.2				
081808-09-9-12		1743		12'	1.3				
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Monitoring Form.jpg

Turb. for 081808-02-1-10 = 23.6 NTU

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 08/21/08
MONITORS: RB and JER
WEATHER CONDITIONS: Sunny, calm, no precip.
WIND: Calm
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
082108-00-	2691654	0950	7	2	1.3	NA	flood	150	0
082108-00-	818408	0952		4	0.9				
082108-00-		0955	↓	6	0.9				
			AVERAGE TURBIDITY:						
	2691988	12:45	22	2	2.8	NA	Ebb	175ft	3 *
	817915	12:45	22	10	5.0				
		12:49	22	20	3.8				
			AVERAGE TURBIDITY:						
	2691892	14:54	18	2	1.6	N/A	Ebb	175ft	5
	818221	15:00	18	8	7.5				
		15:01	18	16	11.5				
			AVERAGE TURBIDITY:						
	2691911	1733	21	2	9.4	N/A	Ebb	175'	7
	818023	1723		10	0.8				
		1733	↓	19	6.6				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

* Dredging stopped for GPS problem

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2691940	1017	16	2	0.1	N/A	Flood	175ft	0
	818101	17	16	8	0.1				
		20	16	14	0.2				
			TURBIDITY INCREASE:						
	2691755	1250	7	2	0.0	N/A	Ebb	100ft	3 *
	818353	52	7	4	0.0				
		55	7	6	1.1				
			TURBIDITY INCREASE:						
	2691765	14:50	~~8~~ 10	~~8~~ 2	0.3	N/A	Ebb	75ft	5
	818443	14:52	~~8~~ 10	~~8~~ 5	1.4				
		14:56	~~8~~ 10	~~8~~ 8	0.2				
			TURBIDITY INCREASE:						
	2691701	1726	7	2	0.7	N/A	Ebb	75'	7
	818275	1730	7	4	0.8				
		1737	7	6	1.0				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 8/21/08
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	269630	16:15	22	2	1.8	NA	Ebb	200'	6
	814622	16:19	↓	10	2.3				
				20	2.8				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	269722	1704	33	2	2.2	NA	Ebb	150'	6
	814552		↓	16	1.9				
				31	4.5				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

DATE: 8/26

6588.006

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

Tides: Low @ 09:44, 23:47
High @ 04:13, 16:51

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2691931	0700	18	2	0.6	N/A	Ebb	180ft	00
	818054	0702	13	9	0.5				
		0704	18	16	11.2				
			AVERAGE TURBIDITY:						
	2691947	0902	17	2	16.6	N/A	Ebb	180ft	02
	818157	0902	17	8	19.5				
		0904	17	15	19.3				
			AVERAGE TURBIDITY:						
	2691654	11:05	5	2	5.6	N/A	Flood	150ft	04
	818416	11:08	5	3	5.8				
		11:10	5	4	3.5				
			AVERAGE TURBIDITY:						
*	GPS down	13:00	6	2	2.7	N/A	flood	180ft	06
		13:02	↓	3	2.9				
		13:04		4	2.9				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2691656	0710	6	2	0.4	N/A	Ebb	150ft	00
	818413	0711	6	3	0.5				
		0713	6	4	0.6				
			TURBIDITY INCREASE:						
	2691667	0855	5	2	0.3	N/A	Ebb	175ft	02
	818672	0858	5	3	0.3				
		0900	5	4	0.3				
			TURBIDITY INCREASE:						
	2691950	11:15	18	2	5.3	N/A	Flood	175ft	04
	818021	11:16	18	9	4.2				
		11:19	18	16	6.8				
			TURBIDITY INCREASE:						
*	GPS down	13:12	17	2	12.5	N/A	flood	100	06
		13:14	↓	8	10.7				
		13:16		15	6.0				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

* 13:00 sample (up-current) taken at blue and white mooring ball on S. side of pier. GPS battery dead

* 13:20 sample (down-current) taken at South corner of S. side of pier

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: [redacted] SS Authority
JOB NUMBER: [redacted] 6588.006.03
DATE: 8/28/08
MONITORS: JM + RB
WEATHER CONDITIONS: Sunny, trace clouds, clear
WIND: Clear calm w 5mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: (A) side of pier in morning and (S) side of pier in afternoon
TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL

re-dredge WQM

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
082808-00-1-2	2692056	0730	18'	2'	3.4	N/A	Ebb	200'	00hrs
" -00-1-8	817802	0731	↓	8'	2.8				
" -00-1-16		0732		16'	5.1				
			AVERAGE TURBIDITY:						
082808-02-1-2	2692034	0930	19'	2'	5.0	N/A	Ebb	200'	02 hrs
" -02-1-8	817757	0931	↓	8'	5.6				
" -02-1-17		0932	↓	17'	4.7				
			AVERAGE TURBIDITY:						
082808-04-1-2	2692088	11:40	20'	2'	2.2	N/A	Ebb	200'	04 hrs
" -04-1-8	817849	11:41	↓	8'	2.6				
" -04-1-15		11:42	↓	15'	3.2				
			AVERAGE TURBIDITY:						
082808-08-1-2	2691717	1535	20'	2'	8.3	N/A	Flood	200'	08 hrs
" -08-1-10	817941	1536	↓	10'	10.5				
" -08-1-18		1537	↓	18'	11.5				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

re-dredge WQM

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
082808-00-9-2	2691882	0740	17'	2'	4.2	N/A	Ebb	200'	00 hrs
" -00-9-8	818010	0741	↓	8'	3.1				
" -00-9-15		0742	↓	15'	2.8				
			TURBIDITY INCREASE:						
082808-02-9-2	2691830	0935	21'	2'	5.6	N/A	Ebb	200'	02 hrs
" -02-9-10	817921	0936	↓	10'	6.3				
" -02-9-19		0937	↓	19'	7.0				
			TURBIDITY INCREASE:						
082808-04-9-2	2691947	11:35	18'	2'	4.9	N/A	Ebb	100'	04 hrs
" -04-9-8	818022	11:36	↓	8'	5.7				
" -04-9-16		11:37	↓	16'	8.2				
			TURBIDITY INCREASE:						
082808-08-9-2	2691985	15:28	19	2'	4.3	N/A	Flood	200'	08 hrs
" -08-9-8	816016	15:29	↓	8'	7.3				
" -08-9-17		15:30	↓	17'	7.9				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: ~~New Bedford Harbor, Bottom of Cove~~ Steamship Authority
JOB NUMBER: ~~0010-006.01~~ 6588.006.03
DATE: 8/28/08
MONITORS: JM + RB
WEATHER CONDITIONS: Sunny trace white clouds, calm, clear
WIND: Calm - 5mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Disposal of Eddie Carroll
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
082808-D1-00-1-2	2696054	0850	30'	2'	1.5	N/A	Ebb	200'	00 hrs
" - 14	815005	0851	↓	14'	9.9				
" - 28		0852	↓	28'	61.1				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
082808-D1-00-9-2	2695704	0857	32'	2'	2.9	N/A	Ebb	200'	00hrs
" - 15	814961	0858		15'	2.6				
" - 30		0859	↓	30'	23.4				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: Steamship Authority
JOB NUMBER: 6588.006
DATE: 9/3/08
MONITORS: JM + MB
WEATHER CONDITIONS: Sunny, cool, clear skies ~70°F
WIND: ~5mph, cool breeze
PRIOR STORM EVENTS: N/A - dew in morning
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDES: Hi: 1130s
Lo:

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
090308-00-1-2	2691648	0900	7'	2'	0.9	090308	Flood	200'	00 hrs
090308-00-1-4	818412	0901	↓	4'	1.0				
090308-00-1-6		0902	↓	6'	1.2				
			AVERAGE TURBIDITY:						
090308-02-1-2	2691608	1125	9'	2'	0.8	090308	Flood	200'	02 hrs
090308-02-1-4	818439	1126	↓	4'	0.9				
090308-02-1-7		1127	↓	7'	1.3				
			AVERAGE TURBIDITY:						
090308-04-1-2	2691955	1352	18'	2'	1.8	N/A	Ebb	200'	04 hrs
090308-04-1-	818068	1353	↓	9'	1.7				
090308-04-1-		1354	↓	16'	0.9				
			AVERAGE TURBIDITY:						
090308-07-1-2	269	17				N/A	Ebb	200'	07 hrs
090308-07-1-	818								
090308-07-1-									
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
090308-00-9-2	2691933	0911	20'	2'	5.3	090308	Flood	200'	00 hrs
090308-00-9-10	818059	0912	↓	10'	6.9				
090308-00-9-18		0913	↓	18'	8.0				
			TURBIDITY INCREASE:						
090308-02-9-2	2691982	1132	12'	2'	21.0	090308	Flood	200'	02 hrs
090308-02-9-	818044	1133	↓	5'	11.8				
090308-02-9-		1134	↓	10'	15.6				
			TURBIDITY INCREASE:						
090308-04-9-2	2691644	1344	9'	2'	1.1	N/A	Ebb	200'	04 hrs
090308-04-9-4	818404	1345	↓	4'	1.2				
090308-04-9-6		1346	↓	6'	1.5				
			TURBIDITY INCREASE:						
090308-07-9-2	269					N/A	Ebb	200'	07 hrs
090308-07-9-	818								
090308-07-9-									
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: ~~Steamship Authority~~ Bottom of CAD 2 - NBH
JOB NUMBER: 6615.006.01 ~~6509.000~~
DATE: 8/27/08
MONITORS: JM + RB
WEATHER CONDITIONS: Sunny, Hot, 10mph winds
WIND: 10 mph - cool/calm
PRIOR STORM EVENTS: None
DREDGE UPDATE: Disposal of Joe Verrochi
TYPE OF WATER QUALITY MONITORING: ~~DREDGE~~ / DISPOSAL DISPOSAL

TIDES: High = 0521, 17:56
Low = 10:57

UP-CURRENT

	Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
re-dump WQM	082708-D1-1-2	2695659	13:30	32'	2'	2.3	N/A	Flood	200'	00 hrs - D1 of J.V.
	082708-D1-1-15	814914.6	13:31	↓	15'	2.3				
	082708-D1-1-30		13:32		30'	2.1				
				AVERAGE TURBIDITY:						
st-dump WQM	082708-D1-1-2	2695836	13:47	38'	2'	2.8	N/A	Flood	150'	Post dump WQM - J.V.
	082708-D1-1-19	814918	13:48		19'	2.3				
	082708-D1-1-36		13:50	↓	36'	3.4				
				AVERAGE TURBIDITY:						
				AVERAGE TURBIDITY:						
				AVERAGE TURBIDITY:						
				AVERAGE TURBIDITY:						

DOWN-CURRENT

	Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
e-dump WQM	082708-D1-9-2	2696320	13:33	12'	2'	3.2	N/A	Flood	200'	D1 - ~~Post~~ Pre-dump of J.V.
	082708-D1-9-5	814870	13:35	↓	5'	4.0				
	082708-D1-9-10		13:37		10'	4.8				
				TURBIDITY INCREASE:						
st-mp WQM	082708-D1-9-2	2696194	13:40	19'	2'	9.8	N/A	Flood	100'	post dump of JV
	082708-D1-9-9	814934	13:42	↓	9'	7.8				
	082708-D1-9-17		13:45		17'	8.1				
				TURBIDITY INCREASE:						
				TURBIDITY INCREASE:						
				TURBIDITY INCREASE:						
				TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: ~~Steamship Authority~~ Bottom of CAD2 - NBH
JOB NUMBER: 6615.006 ~~6598.000~~
DATE: 8/27/08
MONITORS: JM + RB
WEATHER CONDITIONS: Sunny Warm, 80°F
WIND: ~~[illegible]~~ Cool ~ 10mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Afternoon
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

tides - high: 0521, 1756
low: 1057

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
082708-02-1-2	2695800	1542	36'	2'	2.4	N/A	Flood	150'	02 hrs ~~after 1st~~ WQM
" - " - 1-17	815170	1543	↓	17'	1.9				
" - " - 1-34		1545		34'	2.0				
			AVERAGE TURBIDITY:						
082708-04-1-2	2695841	1720	39'	2'	1.4	N/A	Flood	200'	04 hrs after 1st WQM
082708-04-1-18	815089	1733		18'	2.3				
082708-04-1-37		1735	↓	37'	3.0				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
082708-04-9-2	2696257	1535	11'	2'	4.3	N/A	Flood	150'	02 after 1st WQM
082708-04-9-5	815277	1537	↓	5'	3.4				
082708-04-9-9		1540		9'	5.0				
			TURBIDITY INCREASE:						
082708-04-9-2	2696287	1742	13'	2'	1.5	N/A	Flood	200'	04 after 1st WQM
082708-04-9-6	815429	1744		6'	1.4				
082708-04-9-11		1747	↓	11'	9.5				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor: Bottom of CAD #2
JOB NUMBER: 6615.006.01
DATE: 8/28/08
MONITORS: JM + RB
WEATHER CONDITIONS: Sunny, trace clouds; some wind
WIND: Calm w 5 mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Dredge on pause throughout morning - started up @ 1:00pm
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

Dredge Water Quality Monitoring Form

Apex Companies, LLC

TIDE: High = 0620; 1852
Low = 1159

* Dredge paused in morning for survey + mechanical issues aboard A.S.

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
re-edge AM									
082808-00-1-2	2695826	0800	34'	2'	1.6	082808	Ebb	200'	00hrs 1st wqm of the day
082808-00-1-18	815241.4	0803	↓	18'	2.2				
082808-00-1-37		0805	↓	37'	1.9				
			AVERAGE TURBIDITY:						
082808-02-1-2	2696048	1030	31'	2'	2.4	082808	Ebb	200'	02 hrs
082808-02-1-15	815116.8	1031	↓	15'	3.2				
082808-02-1-29		1032	↓	29'	7.1				
			AVERAGE TURBIDITY:						
082808-04-1-2	2695766	1222	33'	2'	1.6	082808	Flood	100'	04 hrs
082808-04-1-15	815122	1223	↓	15'	3.8				
082808-04-1-31		1224	↓	31'	5.8				
			AVERAGE TURBIDITY:						
down-current 082808-06-1-2	2696418	1445	10'	2'	4.2	N/A	Flood	150'	06 hrs
082808-06-1-5	815459	1447	↓	5'	7.3				
082808-06-1-8		1449	↓	8'	15.5				
			AVERAGE TURBIDITY:						
082808-08-1-2	2695910	1640	34'	2'	1.6	N/A	Flood	200'	08hrs
082808-08-1-16	815205	1641	↓	16'	1.4				
082808-08-1-32		1642	↓	32'	1.8				
			AVERAGE TURBIDITY:						

range on hold

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
re-edge AM									
082808-00-9-2	2695672	0810	40'	2'	2.1	N/A	Ebb	200'	00hrs
" -00-9-20	815136	0811	↓	20'	1.3				
" -00-9-38		0813	↓	38'	1.2				
			TURBIDITY INCREASE:						
082808-02-9-2	2695593	1024	32'	2'	2.5	N/A	Ebb	200'	02 hrs
" -02-9-15	814981	1025	↓	15'	2.6				
" -02-9-30		1026	↓	30'	4.4				
			TURBIDITY INCREASE:						
082808-04-9-2	2696055	1227	21'	2'	2.0	N/A	Flood	200'	04 hrs
" -04-9-10	815196	1228	↓	10'	2.5				
" -04-9-19		1229	↓	19'	2.2				
			TURBIDITY INCREASE:						
current 082808-06-9-2	2695983	1450	11'	2'	1.8	N/A	Flood	200'	06 hrs
" -06-9-5	815301	1451	↓	5'	1.8				
" -06-9-9		1452	↓	9'	1.9				
			TURBIDITY INCREASE:						
082808-08-9-2	2696339	1650	12'	2'	7.0	N/A	Flood	200'	08 hrs
" -08-9-5	815423	1651	↓	5'	3.0				
" -08-9-10		1652	↓	10'	2.4				
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor: Bottom of CAD #2
JOB NUMBER: 6615.006.01
DATE: 9/3/08
MONITORS: TM
WEATHER CONDITIONS: Sunny, clear skies, warm ~ 70°F - 75°F
WIND: cool breeze ~ 5mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Dredging started @ 800 am - disposal of material into scow "Mighty Quinn"
TYPE OF WATER QUALITY MONITORING: DREDGE DISPOSAL

Dredge Water Quality Monitoring Form

Apex Companies, LLC

re-dredge warm

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
090308-00-1-2	2695930	0810	10'	2'	2.5	N/A	Flood	100'	00
090308-00-1-5	815628	0812	↓	5'	3.3				
090308-00-1-8		0813		8'	4.8				
			AVERAGE TURBIDITY:						
090308-02-1-2	2695618	1054	15'	2'	4.1	N/A	Flood	200'	02
090308-02-1-6	815603	1055	↓	6'	4.2				
090308-02-1-13		1056		13'	4.0				
			AVERAGE TURBIDITY:						
090308-04-1-2	2696258	1305	10'	2'	1.7	N/A	Ebb	200'	04
090308-04-1-4	815241	1306	↓	4'	2.0				
090308-04-1-8		1307		8'	1.2				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
* 090308-00-9-2	2696257	0805	30'	2'	1.8	N/A	Flood	100'	00
090308-00-9-15	815472	0806	↓	15'	7.8				
090308-00-9-28		0807		28	48.2				
			TURBIDITY INCREASE:						
090308-02-9-2	2696430	1102	13'	2'	1.2	N/A	Flood	200'	02
090308-02-9-6	818244	1103	↓	6'	1.8				
090308-02-9-11		1104		11'	2.8				
			TURBIDITY INCREASE:						
090308-04-9-2	2695797	1317	39'	2'	10.2	N/A	Ebb	200'	04
090308-04-9-18	815299	1318		18'	4.7				
090308-04-9-37		1319	↓	37'	7.5				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor: Bottom of CAD #2
JOB NUMBER: 6615.006.01
DATE: 9/11/09
MONITORS: SM & BB
WEATHER CONDITIONS: Sunny, cool, trace clouds ~ 60°F / 70's in afternoon
WIND: Cool, slight breeze
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Dredging
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

Tides - Hi: 0530; 1754
Lo: 11:12; N/A

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
091108-00-1-2		0822	11'	2'	1.2	N/A	Ebb	150'	00
091108-00-1-5		0824	↓	5'	1.1				
091108-00-1-9		0825	↓	9'	2.6				
			AVERAGE TURBIDITY:						
091108-02-1-2		1040	7'	2'	1.8	N/A	Ebb	200'	02
091108-02-1-4		1042	↓	4'	1.2				
091108-02-1-6		1043	↓	6'	2.0				
			AVERAGE TURBIDITY:						
091108-04-1-2		1300	30'	2'	1.9	N/A	Flood	200'	04
091108-04-1-15		1301	↓	15'	1.2				
091108-04-1-28		1302	↓	28'	0.9				
			AVERAGE TURBIDITY:						
091108-07-1-2		1642	32'	2'	1.7	N/A	Flood	200'	07
091108-07-1-15		1643	↓	15'	1.3				
091108-07-1-30		1644	↓	30'	4.0				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
091108-00-9-2		0849	35'	2'	8.2	N/A	Ebb	200'	00
091108-00-9-17		0851	↓	17'	3.9				
091108-00-9-33		0853	↓	33'	1.9				
			TURBIDITY INCREASE:						
091108-02-9-2		1032	36'	2'	1.8	N/A	Ebb	200'	02
091108-02-9-18		1033	↓	18'	2.0				
091108-02-9-34		1034	↓	34'	1.1				
			TURBIDITY INCREASE:						
091108-04-9-2		1305	7'	2'	2.3	N/A	Flood	200'	04
091108-04-9-4		1306	↓	4'	1.5				
091108-04-9-6		1307	↓	6'	1.4				
			TURBIDITY INCREASE:						
091108-07-9-2		1650	10'	2'	1.2	N/A	Flood	200'	07
091108-07-9-4		1651	↓	4'	1.5				
091108-07-9-8		1652	↓	8'	0.7				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor: Bottom of CAD #2
JOB NUMBER: 6615.006.01
DATE: 9/16/08
MONITORS: JM + MB
WEATHER CONDITIONS: Cool, cloudy, 65°F
WIND: light breeze
PRIOR STORM EVENTS: N/A
DREDGE UPDATE: Disposal into CAD @ 1000 hrs
TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL

TIDES: Hi = 0901; 2125
Lo = 0224; 1454

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
091608-00-1-2	2695820	0950	35'	2'	1.8	N/A	Ebb	200'	00
091608-00-1-17	815384	0951	↓	17'	1.5				
091608-00-1-33		0952		33'	1.2				
			AVERAGE TURBIDITY:		1.5 NTU				
091608-02-1-2	2695930	1150	23'	2'	8.1	N/A	Ebb	200'	02
091608-02-1-11	816365	1151	↓	11'	9.2				
091608-02-1-21		1152		21'	9.1				
			AVERAGE TURBIDITY:		3.5 NTU				
091608-04-1-2	2695873	1441	6'	2'	10.9	N/A	Ebb	200'	04
091608-04-1-4	815402	1442	↓	4'	10.3				
091608-04-1-5		1443		5'	9.4				
			AVERAGE TURBIDITY:						
091608-06-1-2	2696074	16:20 ~~16:00~~	10'	2	3.0	N/A	Flood	200'	06
091608-06-1-	815433	16:21 ~~16:01~~	10'	5	6.3				
091608-06-1-		16:22 ~~16:02~~	10'	8	6.7				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
091608-00-9-2	2696556	1000	9'	2'	2.4	N/A	Ebb	200'	00
091608-00-9-4	815253	1000	↓	4'	2.2				
091608-00-9-6		1003		6'	2.2				
			TURBIDITY INCREASE:		2.3 NTU				
091608-02-9-2	2696552	1156	10'	2'	1.5	N/A	Ebb	200'	02
091608-02-9-4	815366	1157		4'	1.7				
091608-02-9-8		1158	↓	8'	1.8				
			TURBIDITY INCREASE:		1.7 NTU				
091608-04-9-2	2696548	1430	9'	2'	2.3	N/A	Ebb	200'	04
091608-04-9-4	815311	1431		4'	4.4				
091608-04-9-7		1432	↓	7'	4.1				
			TURBIDITY INCREASE:						
091608-06-9-2	2696485	1616	8'	2'	2.3	N/A	Flood	200'	06
091608-06-9-	815432	1618		4'	5.4				
091608-06-9-		1619	↓	6'	6.5				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor: Bottom of CAD #2
JOB NUMBER: 6615.006.01
DATE: 9/18/08
MONITORS: JM + MB
WEATHER CONDITIONS: Windy, cloudy ~ 60°F
WIND: Windy - 10mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

Down-current

~~UP-CURRENT~~

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
091808-00-1-2	2695789	1140	38'	2'	1.3	N/A	Ebb	200'	00
091808-00-1-16	815295	1141	↓	16'	0.9				
091808-00-1-36		1142	↓	36'	1.2				
			AVERAGE TURBIDITY:						
09180804-1-2	2695792	1536	32'	2'	4.3	N/A	Ebb	200'	04
091808-04-1-16	815361	1537	↓	16'	3.1				
091808-04-1-30		1538	↓	30'	2.2				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

up-current

~~DOWN-CURRENT~~

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
091808-00-9-2	2695342	1150	10'	2'	2.2	N/A	Ebb	200'	00
091808-00-9-4	815058	1152	↓	4'	1.8				
091808-00-9-8		1153	↓	8'	2.3				
			TURBIDITY INCREASE:						
091808-04-9-2	2696291	1545	30'	2'	2.7	N/A	Ebb	200'	04
091808-04-9-	815359	1546	↓	15'	4.1				
091808-04-9-		1547	↓	28'	3.9				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex

PROJECT: 6615.007 New Bedford Harbor - Navigational Dredging @ NBRF
JOB NUMBER: 6615.007.01
DATE: 3/25/09
MONITORS: JER
WEATHER CONDITIONS: SUNNY 40°F Clear, 10-15 Mph winds from NE
WIND: 10-15 mph
PRIOR STORM EVENTS: Gusty winds yesterday
DREDGE UPDATE: First scow filled yesterday First dump today.
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 07:49, 20:02 Low: 01:23, 13:30

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
032509_DI_000_1_03	2696591, 815343	11:25	10ft	2ft	1.38	N/A	Ebb	15ft N of silt curtain	0
032509_DI_000_1_05		11:25		5ft	0.70				
032509_DI_000_1_08		11:25		8ft	1.21				
			AVERAGE TURBIDITY:		1.10				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
032509_DI_010_9_02	2695978, 815546	12:25	8ft	2ft	1.00	N/A	Ebb	15ft S of silt curtain	0
032509_DI_010_9_04		12:25		4ft	0.64				
032509_DI_010_9_06		12:25		6ft	9.12				
			TURBIDITY INCREASE:		NTU AVG. 3.59 → 2.49				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @ NBRF
JOB NUMBER: 6615.007.01
DATE: 3/27/09
MONITORS: JER / JM
WEATHER CONDITIONS: RAIN last night, overcast today
WIND: Very strong 20-25 gusts
PRIOR STORM EVENTS:
DREDGE UPDATE: Continuing Cut 1 @ NBRF
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 0907 21:20 Low: 02:42 14:39

* Comments: After observing above normal readings up-current + predisposal, Apex re-calibrated YSI 6920. Readings appeared normal thereafter.

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
* 032709_DI_000_1_02	2696587, 815334	12:00	7ft	2ft	54.9	N/A	Ebb	15ft N of silt curtain	0
032709_DI_000_1_04		12:03		4ft	55.3				
032709_DI_000_1_05		12:05		5ft	59.1				
			AVERAGE TURBIDITY:						
032709_DI_000_1_02	2696580, 815326	12:20	10ft	2ft	0.2	N/A	Ebb	15ft N of silt curtain	0
032709_DI_000_1_05		12:21		5ft	0.3				
032709_DI_000_1_08		12:23		8ft	0.8				
			AVERAGE TURBIDITY:		0.4				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
032709_DI_000_9_02	2695981, 815346	12:15	9ft	2ft	0.0	N/A	Ebb	15ft S. of silt curtain	0
032709_DI_000_9_04		12:17		4ft	0.1				
032709_DI_000_9_07		12:18		7ft	0.2				
			TURBIDITY INCREASE:		0.1				
032709_DI_000_9_02	2695995, 815380	12:31	9ft	2ft	0.1	N/A	Ebb	15ft S of silt curtain	0
032709_DI_000_9_04		12:33		4ft	0.2				
032709_DI_000_9_07		12:35		7ft	0.7				
			TURBIDITY INCREASE:		0.3				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ upper harbor cc boat house

JOB NUMBER: 6615.007.01

DATE: 4/5/09

MONITORS: JM/JR

WEATHER CONDITIONS: sunny, windy trace clouds ~ 40°F

WIND: 10-15 mph east

PRIOR STORM EVENTS: N/A

DREDGE UPDATE: No dredging today (dump sat for a week)

TYPE OF WATER QUALITY MONITORING: DREDGE / (DISPOSAL)

TIDE: (Slack) (Flood) High: 5:02; 17:32 Low: 11:56; 23:41

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT (Pre-disposal)

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
040509-D1-1-2	2695847	11:40	10'	2	1.59	N/A	slack/flood	15' from silt curtain	No dredge today
040509-D1-1-4	815652	11:47		4	1.71				
040509-D1-1-8		11:52		8	1.35				
			AVERAGE TURBIDITY:		1.55 NTU				
040509-D1-1-2	2695847	11:42	10'	2	0.2	N/A	slack/flood	15'	N/A
040509-D1-1-4	815652	11:43		4	0.5				
040509-D1-1-8		11:44		8	0.6				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

Disposal @ 11:55 AM into CAD 2

DOWN-CURRENT (post-disposal)

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
040509-D1-9-2	2696576	13:00	11'	2	1.32	N/A	Flood	15' from silt curtain	No dredge today
040509-D1-9-5	815416	13:10		5	2.82				
040509-D1-9-9		13:20		9	1.06				
			TURBIDITY INCREASE:		1.93 NTU (Avg)				
(Turbidity increase = 1.93 - 1.55 = 0.18 NTU increase)									
040509-D1-9-2	2696576	13:02	11'	2	0.2	N/A	Flood	15'	N/A
040509-D1-9-5	815416	13:11		5	2.3				
040509-D1-9-9		13:21		9	3.8				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @
JOB NUMBER: 6615.007.01
DATE: 4/8/09
MONITORS: JFR / JM / CM
WEATHER CONDITIONS: 40°F
WIND: 20-25 from the SW
PRIOR STORM EVENTS: RAIN Delivery 2 days
DREDGE UPDATE: No dredging 4/9/09, to resume 4/10/09
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

upstream

UP-CURRENT

Monitoring ID #	~~NORTHING/EASTING~~ LAT LONG	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	41 38 46.1	13:20	9ft	2 ft	3.42	N/A	Slack/ Flood	Disposal 15 ft	0
	070 55 02.9	13:20		5 ft	3.01				
		13:20		7 ft	2.39				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

downstream
turned direction
uncurrent

DOWN-CURRENT

Monitoring ID #	~~NORTHING/EASTING~~ LAT LONG	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	41 38 45.3	1335	10ft.	2 ft	2.05	N/A	Slack/ Flood	At silt curtain	0
	070 55 0.4	1335		5 ft	2.38				
		1335		8 ft	2.88				
			TURBIDITY INCREASE:						
	41 38 40	1358	10 ft	2 ft	1.54	N/A	Slack/ Flood	At silt curtain	0
	070 54 60	1358		5 ft	1.71				
		1358		8 ft	2.69				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ New Bedford Plowing Facility

JOB NUMBER: 6615.007.01

DATE: 4/10/09

MONITORS: JEK / JEK

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696590, 815416	14:15	8ft	2 ft	1.01	N/A	Ebb	15 ft	N/A
		14:15		4 ft	0.95				
		14:15		6 ft	1.34				
			AVERAGE TURBIDITY:		1.1				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	41,38,40, 070,54,60	14:35	6ft	2 ft	0.95	N/A	Ebb	15 ft	N/A
		14:35		3 ft	0.87				
		14:35		4 ft	1.31				
			TURBIDITY INCREASE:		1.04				
	2696530, 815550	14:50	11ft	2ft	0.76	N/A	Ebb	15 ft	N/A
		14:50		5.5ft	1.89				
		14:50		9ft	1.38				
			TURBIDITY INCREASE:		1.33				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ NBRF

JOB NUMBER: 6616.007.01

DATE: 4/13/09

MONITORS: JER

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / ~~[illegible]~~

TIDE High: 11:16, 23:36 Low: 04:28, 16:18

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2701537 815055	14:20	5ft	2ft	0.67	N/A	Ebb	200ft	4
		14:20		3ft	0.97				
		14:20		4ft	1.49				
			AVERAGE TURBIDITY:		1.04				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2700876 815165	14:45	6ft	2ft	1.46	N/A	Ebb	200ft	4
		14:45		3ft	2.27				
		14:45		4ft	1.51				
			TURBIDITY INCREASE:		1.75				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ NBRF

JOB NUMBER: 6616.007.01

DATE: 4/14/09

MONITORS: JER/JEK

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696002, 815431	17:00	6ft	2 ft	1.84	NA	Flood	15 ft	N/A
		17:00		3 ft	7.60				
		17:00		4 ft	1.46				
			AVERAGE TURBIDITY:		3.63				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696590, 815416	17:30	9ft	2 ft	3.11	NA	Flood	15ft	N/A
		17:30		5 ft	2.09				
		17:30		7 ft	1.96				
			TURBIDITY INCREASE:		2.39				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ ~~NB~~ Gifford St.

JOB NUMBER: 6615.007.01

DATE: 4/21/09

MONITORS: EJR

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dredge Water Quality Monitoring Form

Apex Companies, LLC

Dump Time 10:50AM

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696496, 815561	10:14	11ft	2ft	2.38	N/A	Ebb	15ft	0
		10:14		6ft	2.33				
		10:14		9ft	1.93				
			AVERAGE TURBIDITY:		2.21				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2695981, 815438	11:00	7ft	2ft	6.51	N/A	Ebb	15ft	0
		11:00		3.5ft	3.07				
		11:00		5ft	5.54				
			TURBIDITY INCREASE:		5.05				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @ Gifford St
JOB NUMBER: 8615.007.01
DATE: 4/22/09
MONITORS: JER
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: (DREDGE) / (DISPOSAL)
TIDE High: Low:

Dump Time @ 08:20

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696534 815509	0815	12ft	2	1.7	N/A	Ebb	Disposal 15ft	0
		0815		6	2.0				
		0815		10	1.4				
			AVERAGE TURBIDITY:		1.7				
	2688216, 816526	1335	8ft	2	2.2	N/A	Flood	Dredging 200ft	2
		1335		4	1.7				
		1335		6	2.8				
			AVERAGE TURBIDITY:		2.23				
	2688264, 816760	13:50	7ft	2	2.1	N/A	Flood	Dredging 200ft	2
		13:50		4	1.3				
		13:50		5	1.4				
			AVERAGE TURBIDITY:		1.6				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

additional up-current location

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2695979, 815541	0828	12ft	2	4.3	N/A	Ebb	Disposal 15ft	0
		0828		6	4.5				
		0828		10	3.7				
			TURBIDITY INCREASE:		4.07				
	2687447, 816561	14:10	6ft	2	1.4	N/A	Flood	Dredging 200ft	2
		14:10		3	2.0				
		14:10		4	3.1				
			TURBIDITY INCREASE:		2.17				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Gifford St/South Terminal

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @

JOB NUMBER: 8615.007.01

DATE: 4/23/09

MONITORS: CMD

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dump C 07:35

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	41°38' 45.5" 70° 55' 03.2"		12ft	2	3.2	N/A			0
				6	1.8				
				10	1.5				
			AVERAGE TURBIDITY:		1.83				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	41° 38' 39.9" 070° 55' 02.6"		12ft	2	1.8	N/A			0
				6	2.0				
				10	2.2				
			TURBIDITY INCREASE:		2.0				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @ Gifford St / South Terminal
JOB NUMBER: 6616.007.01
DATE: 4/24/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

Dump Time @ 09:25

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696565, 815460	0835	12ft	2	1.6	N/A	Ebb	15ft	0
		0835		6	1.6				
		0835		10	1.1				
			AVERAGE TURBIDITY:		1.43				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2695951, 815514	0935	8ft	2	1.5	N/A	Ebb	15ft	0
		0935		4	1.8				
		0935		6	1.9				
			TURBIDITY INCREASE:		1.73				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ Gifford St / South Terminal

Dredge Water Quality Monitoring Form

JOB NUMBER: 8615.007.01

DATE: 4/26/09

MONITORS: JER

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dump Time @ 12:45

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696555, 815424	1225	8ft	2	0.85	N/A	Ebb	15ft	N/A
		1225		4	0.80				
		1225		6	0.85				
			AVERAGE TURBIDITY:		0.833				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696112, 815663	1305	6ft	2	1.0	N/A	Ebb	15ft	N/A
		1305		3	1.5				
		1305		4	1.6				
			TURBIDITY INCREASE:		1.37				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @
JOB NUMBER: 6615.007.01
DATE: 5/4/09
MONITORS: CMD
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
		1130	10ft	1.5	7.1	N/A			N.A
		1130		4	0.97				
		1130		9	1.0				
			AVERAGE TURBIDITY:		3.02				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
			11ft	3	2.7	NA			NA
				6	0.1				
				9	0.87				
			TURBIDITY INCREASE:		1.22				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @ Gifford St
JOB NUMBER: 9615.007.01
DATE:
MONITORS: SEP
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

Dump Time 11:50

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696505, 815523	11:45	9ft	2	2.3	NA	Ebb	Disposal 75ft	N/A
		11:45		5	1.5				
		11:45		7	1.3				
			AVERAGE TURBIDITY:		1.7				
	2687140, 816400	16:45	5ft	2	2.5	N/A		Dredge 200ft	4
		16:45		3	2.7				
		16:45		4	2.3				
			AVERAGE TURBIDITY:		2.5				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696001, 815563	12:01	10ft	2	1.4	NA	Ebb	Disposal 75ft	NA
		12:01		5	1.2				
		12:01		8	2.5				
			TURBIDITY INCREASE:		1.8				
	2686910, 816474	16:58	6ft	2	13	NA		Dredge 200ft	4
		16:58		3	14				
		16:58		4	16				
			TURBIDITY INCREASE:		14.3				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ South Terminal

JOB NUMBER: 6616.007.01

DATE: [illegible]

MONITORS: JEG.

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	3rd piling South of Apex pk nail at South boundary of Schuster prop.	1500	10ft	2	11	N/A	Flood	200ft	
		1500		5	13				
		1500		8	15				
			AVERAGE TURBIDITY:		13				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	Third Cleat North of Schuster prop. boundary fence.	1520	18ft	2	1.9	N/A	Flood	200ft	
		1520		9	1.8				
		1520		16	4.5				
			TURBIDITY INCREASE:		2.73				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Tonnesson Park

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @

JOB NUMBER: 6615.007.01

DATE: 5/13/09

MONITORS: JER / GXD

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: Low:

Up & Down Same Position (No other outlet) during dredging

Dump Time @ 13:36

UP-CURRENT / Down-Current (SAME)

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2692827, 814866	1037	31'	2	1.7	N/A	Flood	200ft	1
		1037		16	1.2				
		1037		29	1.1				
			AVERAGE TURBIDITY:		1.33				
			AVERAGE TURBIDITY:						
	2696532, 815465	1330	10ft	2	1.8	N/A	Ebb	15 ft Disposal	N/A
		1330		5	1.3				
		1330		8	1.0				
			AVERAGE TURBIDITY:		1.37				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
	2696040, 815593	1350	13ft	2	1.4	N/A	Ebb	15ft Disposal	N/A
		1350		7	1.4				
		1350		11	1.6				
			TURBIDITY INCREASE:		1.47				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

PROJECT:	New Bedford Harbor - Navigational Dredging @
JOB NUMBER:	6615.007.01
DATE:	5/14/09
MONITORS:	EIC
WEATHER CONDITIONS:	
WIND:	
PRIOR STORM EVENTS:	
DREDGE UPDATE:	
TYPE OF WATER QUALITY MONITORING:	DREDGE / DISPOSAL
TIDE High:	Low:

Dump Time @ 08:35

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2695994, 815492	0820	10 ft	2	0.20	N/A	Flood	25 ft	N/A
		0820		5	1.0				
		0820		8	0.60				
			AVERAGE TURBIDITY:		0.60				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696544, 815417	0845	10 ft	2	0.5	N/A	Flood	15 ft	N/A
		0845		5	2.5				
		0845		8	3.8				
			TURBIDITY INCREASE:		2.27				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

PROJECT: New Bedford Harbor - Navigational Dredging @ Union Wharf
JOB NUMBER: 8615.007.01
DATE: 5/16/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE DISPOSAL
TIDE High: Low:

Two Down Current locations Taken

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2692082, 817859	12:30	20ft	2	0.52	N/A	Flood	Dredge 200 ft	2
		12:30		9	1.65				
		12:30		18	4.09				
			AVERAGE TURBIDITY:		2.09				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
		13:15	6ft	2	0.27	N/A	Flood	200 ft	2
		13:15		4	0.81				
		13:15		5	0.75				
			TURBIDITY INCREASE:		0.61				
	2692385, 817660	1325	23ft	2	0.48	N/A	Flood	200 ft	2
		1325		10	0.65				
		1325		21	0.70				
			TURBIDITY INCREASE:		0.61				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor - Navigational Dredging @ Gifford St. (G1)
JOB NUMBER: 6615.007.01
DATE: 5/20/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2687551, 816571	1400	6ft	2	5.95	N/A	Flood	200ft	6
		1400		3	6.95				
		1400		4	52.0				
			AVERAGE TURBIDITY:		21.6				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2688188, 816578	1420	9ft	2	4.38	N/A	Flood	200ft	6
		1420		5	1.23				
		1420		7	3.55				
			TURBIDITY INCREASE:		3.19				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

Apex Companies, LLC

PROJECT: New Bedford Harbor - Navigational Dredging @
JOB NUMBER: 6615.007.01
DATE: 5/22/09
MONITORS: JR and JM
WEATHER CONDITIONS: Sunny, 70°F, clear
WIND: 5mph
PRIOR STORM EVENTS: N/A
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 06:50 Low:

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
052209-D1-1-2	2696530	0800	11'	2'	1.25	N/A	Ebb	5'	00
052209-D1-1-5	815461	0801		5'	6.73				
052209-D1-1-9		0802		9'	8.44				
			AVERAGE TURBIDITY:						
Disposal @ 8:05 AM									
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
052209-D1-9-2	2696007	08:15	12'	2'	0.60	N/A	Ebb	5'	00
052209-D1-9-	815544	08:17		6'	0.05				
052209-D1-9-		08:18		10'	0.29				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ LINBERG MARINE

JOB NUMBER: 6615.007.01

DATE: 3/28/07

MONITORS: JK / MB

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 11:55, — Low: 0550 : 1449 (7:11)

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	818006, 2693407	1013	18ft	2 ft	0.80	N/A	Flood	< 200 ft from dredge	< 1
		1013		9 ft	0.64				
		1013		16 ft	7.84				
			AVERAGE TURBIDITY:						
	2696681 815506	1400	12ft	2 ft	0.32	N/A	Ebb	Tied to silt curtain	N/A Disposal
		1400		6 ft	1.55				
		1400		10 ft	1.10				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2693690 817838	1025	16ft	2 ft	1.60	N/A	Flood	<200 ft from dredge	< 1
		1025		8 ft	2.11				
		1025		14 ft	1.85				
			TURBIDITY INCREASE:						
	2695489, 815375	1445	10ft	2 ft	1.22	N/A	Ebb	Tied to silt curtain	N/A Disposal
		1445		5 ft	0.65				
		1445		8 ft	3.27				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: [illegible] New Bedford Harbor - Navigational Dredging @ Lindberg Marine
JOB NUMBER: 5615.007.01
DATE: [illegible]
MONITORS: JSE
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: Low:

Dredge Water Quality Monitoring Form

Atlantic dredging @ Lindberg Marine

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2695965, 817998	1435 1435 1435	18ft	2 7 16	1.4 1.8 1.6	N/A	Flood	←	<15ft from silt curtain ← 4
			AVERAGE TURBIDITY:		1.6				
	2695984, 815501	1620 1620 1620	12ft	2 6 10	2.2 1.4 2.1	N/A	Flood	<15 from curtain	Disposal
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGER/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2693747, 817884	1452 1452 1452	12ft	2 6 10	1.4 2.1 6.1	N/A	Flood	<15 ft	4
			TURBIDITY INCREASE:						
	2696542, 816460	1655 1655 1655	13ft	2 7 11	4.2 1.8 3.4	N/A	Flood	<15 ft from curtain	Disposal
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6605 New Bedford Harbor - Navigational Dredging @ LINBERG MARINE

JOB NUMBER: 0615.007.01

DATE: 6/16/09

MONITORS: JER

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL

TIDE High: 07:41, 2003 Low: 01:20, 12:42

Omega Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2693349 818016	1405	19ft	2	1.5	N/A	Flood	<15 ft from curtain	<1
		1405		10	1.1				
		1405		17	1.8				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2693626, 817905	1430	13ft	2 ft	2.4	N/A	Flood	<15 ft from silt curtain	<1
		1430		6 ft	6.9				
		1430		11 ft	2.0				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Disposal
JOB NUMBER: 6615.007.01
DATE: 6/12
MONITORS: JER
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 11:48, 23:59 Low: 05:03, 17:02

Dredge Water Quality Monitoring Form

Apex Companies, LLC

Disposal

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2695988, 815498	8:40	11ft	2 ft	2.2	N/A	Flood	Tied to silt curtain	N/A
		8:40		5 ft	2.0				
		8:40		9 ft	5.0				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696518, 815512	0915	12ft	2 ft	2.5	N/A	Flood	Tied to silt curtain	N/A
		0915		6 ft	2.1				
		0915		10 ft	4.9				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Warren Alexander - South

JOB NUMBER: 6615.007.01

DATE: 6/17/09

MONITORS: MB

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 2:14, 14:46 Low: 9:58, 21:00

Dredging @ Warren Alexander South

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2692093, 818052	15:25	20ft	2 ft	2.68	N/A	Ebb	< 200 ft from dredge	2
		14:25		10 ft	2.90				
		15:25		18 ft	2.92				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2692020, 818005	15:40	20ft	2 ft	5.60	N/A	Ebb	< 200 ft from dredge	2
		15:40		10 ft	2.74				
		15:40		18 ft	3.80				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Dredge Water Quality Monitoring Form

PROJECT:	New Bedford Harbor - Navigational Dredging @
JOB NUMBER:	6615.007.01
DATE:	061809
MONITORS:	MLG
WEATHER CONDITIONS:	COOL CLOUDY 60°
WIND:	5-10 Knots southwest
PRIOR STORM EVENTS:	
DREDGE UPDATE:	
TYPE OF WATER QUALITY MONITORING:	DREDGE / (DISPOSAL)
TIDE High:	Low:

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION (NOSC)	NUMBER OF HOURS DREDGING
061809-20'	2692082	0830	20'	2	.68			50'	
061809-10'		0835		9	1.22				
061809-20'	817869	0840		18	.71				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN (NOSC)	NUMBER OF HOURS DREDGING
061809-DC	2692261	0910	23'	2'	.58			50'	
061809-DC		0915		12.5'	1.61				
061809-DC	817632	0925		21'	1.72				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Old North Wharf (North Bridge)

Dredge Water Quality Monitoring Form

JOB NUMBER: 6615.007.01

DATE: 6/22

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 8:01, 16:24 Low: 01:50, 13:20

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2693532, 818082	11:19	17ft	2ft	2.29	N/A	Ebb	~200 ft from dredge	1
		11:15		9ft	0.32				
		11:16		15ft	1.80				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2693488, 818090	11:35	18ft	2ft	0.90	N/A	Ebb	~200 ft from dredge	1
		11:35		9ft	1.26				
		11:35		16ft	0.85				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Clifford St. (G2)
JOB NUMBER: 6615.007.01
DATE: 6/24
MONITORS: JEP
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 9:47, 22:09 Low: 03:36, 15:13

Dredge Water Quality Monitoring Form

APEX Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2687124, 816392	1010	5ft	2 ft	4.23	N/A	Ebb	< 200 ft from dredge	
		1010		3 ft	2.85				
		1010		4 ft	6.55				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2687451, 816412	1025	7ft	2 ft	10.94	N/A	Ebb	< 200 ft from dredge	
		1025		4 ft	8.72				
		1025		5 ft	12.33				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 0015 New Bedford Harbor - Navigational Dredging @ Gifford St. (G1)
JOB NUMBER: 8616.007.01
DATE: 7/1
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 03:40, 16:12 Low: 09:23, 23:05

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2687826, 816517	1440	10ft	2ft	1.60	N/A	Flood	~200 ft from dredge	
		1440		5ft	2.90				
		1440		8ft	4.15				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2687296, 816515	1517	11ft	2ft	3.80	N/A	Flood	~200 ft from dredge	
		1517		5ft	3.65				
		1517		9ft	4.05				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 605 New Bedford Harbor - Navigational Dredging @ Coffin St (G-1)
JOB NUMBER: 6616.007.01
DATE: 7/2/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 04:40, 17:10 Low: 10:09, 23:49

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2087527, 816470	16:45	12ft	2ft	0.65	N/A	Flood	<200 ft from bridge	1
		16:45		6ft	1.88				
		16:45		10ft	4.30				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2087121, 816415	17:15	11ft	2ft	5.58	N/A	Flood	<200 ft from bridge	1
		17:15		6ft	4.89				
		17:15		9ft	5.23				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @
JOB NUMBER: 6615.007.01
DATE: 7/8/07
MONITORS: JER
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 9:20, 21:59 Low: 02:52, 14:37

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2696529, 815466	11:55 11:55 11:55	12ft	2 ft 6 ft 10 ft	2.2 1.8 1.8	N/A	Ebb	< 200 ft	N/A - Disposal
			AVERAGE TURBIDITY:						
	2697848, 814584	14:33 14:33 14:33	9ft	2 ft 5 ft 9 ft	3.9 3.2 3.7	N/A	Ebb	< 200 ft	2
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2696040, 815316	12:15 12:15 12:15	14ft	2 ft 7 ft 12 ft	2.0 1.6 1.9	N/A	Ebb	< 200 ft	N/A Disposal
			TURBIDITY INCREASE:						
	2697225, 814583	14:40 14:40 14:40	12ft	2 ft 6 ft 10 ft	16 NTU 20 NTU 18 NTU	N/A	Ebb	< 200 ft	2
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Packer Marine
JOB NUMBER: 6615.007.01
DATE: 7/10/09
MONITORS: JCL
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 1036, 22:49 Low: 04:02, 16:01

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2697438, 814452	0930	18ft	2 ft	0.30	N/A	Flood	<200 ft from dredge	1
		0930		9 ft	1.22				
		0930		16 ft	0.68				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2697663 814524	1015	16ft	2 ft	1.02	N/A	Flood	≈200 ft from dredge	1
		1015		8 ft	1.15				
		1015		14 ft	0.98				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ C-1 Gifford St.
JOB NUMBER: 6615.007.01
DATE: 7/15/09
MONITORS: JFR
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL
TIDE High: 1:42, 15:24 Low: 07:06, 20:08

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	816454, 2687223	1358	6ft	2 ft	1.6	N/A	Flood	<200 ft from dredge	<1
		1358		3 ft	2.0				
		1358		4 ft	2.3				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	816413, 2687594	1405	8ft	2 ft	4.7	N/A	Flood	<200 ft from dredge	<1
		1405		4 ft	5.2				
		1405		6 ft	6.8				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Warren Alexander South

JOB NUMBER: 6615.007.01

DATE: 7/17/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 03:36, 16:07 Low: 09:07, 22:44

Dredge Water Quality Monitoring Form

APEX

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2697401, 814498	1346	19ft	2ft	1.46	N/A	Flood	<200ft from dredge	2
		1346		9ft	1.82				
		1346		17ft	3.11				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2697641, 814482	1405	17ft	2ft	2.61	NA	Flood	~200 ft from dredge	2
		1405		8ft	0.96				
		1405		15ft	1.21				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ South Terminal
JOB NUMBER: 6615.007.01
DATE: 7/22/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL
TIDE High: 0836, 2100 Low: 0227, 1407

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME (1335)	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2689034, 816181	1335	19ft	2ft	0.62	N/A	Ebb	≤200 ft from dredge	< 1
		1335		9ft	1.89				
		1335		17ft	5.27				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME (1400)	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2688796, 816234	1400	21ft	2ft	2.84	NA	Ebb	≤200 ft from dredge	< 1
		1400		10ft	2.35				
		1400		19ft	3.71				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6015 New Bedford Harbor - Navigational Dredging @ South Terminal

JOB NUMBER: 6615.007.01

DATE: 7/23/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL

TIDE High: 9:28, [redacted] 21:51 Low: 03:14, 15:05

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	2688892, 876242	1530	22ft	2ft	2.16	NA	Ebb SLACK?	<200ft	<1
		1530		11ft	3.40				
		1530		20ft	6.89				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	2688596, 876326	1540	21ft	2ft	3.09	N/A	Ebb SLACK?	<200ft	<1
		1540		10ft	2.53				
		1540		19ft	3.48				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ South Terminal

JOB NUMBER: 5615.007.01

DATE: 7/28/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 1:18, 13:53 Low: 6:38, 20:01

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	816145, 2688807	0855	22ft	2ft	4.55	N/A	Flood	<200ft	<1
		0855		10ft	4.28				
		0855		20ft	5.03				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	816399, 2688456	0910	14ft	2 ft	5.61	N/A	Flood	<200ft	<1
		0910		7ft	3.28				
		0910		12ft	4.23				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ Gifford ST Cal

JOB NUMBER: 6615.007.01

DATE: 8/12/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 11:27, 12:24 Low: 5:42, 18:25

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	816380, 2687522	13:40	11 ft	2 ft	2.73	N/A	Flood	<200	<1
		13:40		5 ft	2.94				
		13:40		9 ft	3.03				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	816373, 2687136	14:30	8 ft	2 ft	4.30	N/A	Flood	<200	<1
		14:30		4 ft	4.36				
		14:30		6 ft	4.87				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ SOUTH TERMINAL

JOB NUMBER: 6615.007.01

DATE: 8/13/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 1:17, 13:47 Low: 6:28, 19:31

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	816152, 2688962	17:48	21ft	2ft	0.75	N/A	Ebb	~200 ft from dredge	2
		17:48		10ft	0.84				
		17:48		19ft	2.11				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	816253, 2688671	18:05	20ft	2ft	1.84	N/A	Ebb	~200 ft from dredge	2
		18:05		10ft	2.02				
		18:05		18ft	2.84				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ PARCEL

JOB NUMBER: 6615.007.01

DATE: 8/17/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: 05:31, 18:02 Low: 11:00,

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	814459, 2697627	10:10	12ft	2ft	0.37	N/A	Ebb	<200ft	2
		10:10		6ft	0.67				
		10:10		10ft	1.25				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	814482, 2697425	10:25	18ft	2ft	2.01	N/A	Ebb	<200f	2
		10:25		9ft	1.87				
		10:25		16ft	2.32				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PACKER MARINE

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ ~~[illegible]~~

JOB NUMBER: 9615.007.01

DATE: 8/20/09

MONITORS:

WEATHER CONDITIONS:

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING: DREDGE / DISPOSAL

TIDE High: ~~[illegible]~~ Low:

8:18, 20142 2:01, 18:59

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	814583, 2697355	1425	18ft	2ft	3.15	N/A	Flood	<200 ft from dredge	4
		1425		9ft	2.47				
		1425		16ft	1.21				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	814529, 2697589	1445	16ft	2ft	2.26	N/A	Flood	<200 ft from dredge	4
		1445		8ft	2.89				
		1445		14ft	3.21				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: 6615 New Bedford Harbor - Navigational Dredging @ SOUTH TERMINAL
JOB NUMBER: 6815.007.01
DATE: 8/25/09
MONITORS:
WEATHER CONDITIONS:
WIND:
PRIOR STORM EVENTS:
DREDGE UPDATE:
TYPE OF WATER QUALITY MONITORING: (DREDGE) / DISPOSAL
TIDE High: 12:28, Low: 5:12, 18:02

Dredge Water Quality Monitoring Form

Apex Companies, LLC

UP-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
	~~816219~~, 816308, 2688520	~~16:46~~ 16:46	17ft	2ft	6.01	N/A	Ebb	~200. ft from dredge	<1
				8ft	5.26				
				15ft	5.58				
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						
			AVERAGE TURBIDITY:						

DOWN-CURRENT

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
	816219, 2688795	17:00	21ft	2ft	2.89	N/A	Ebb	~200 ft from dredge	< 1
		17:00		10ft	3.14				
		17:00		19ft	3.67				
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						
			TURBIDITY INCREASE:						

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity