Weekly Field Report Week: 12-22-13 through 12-28-13 New Bedford Harbor Lower Harbor CAD Cell (LHCC)

This Weekly Field Report was prepared to serve as a summary of field activities conducted throughout the week for Phase I dredging of the New Bedford Harbor Lower Harbor CAD Cell (LHCC) in New Bedford, Massachusetts.

1. Introduction:

The weekly field report describes the activities carried out by the Contractor (Cashman/Tripp Marine), the Owner's Representative (Apex Companies, LLC), and any subcontractors completing work within the scope of the project requirements.

This Weekly Field Report represents the eighth Report associated with Phase I dredging of the LHCC in New Bedford Harbor, and the associated handling and disposal of dredged materials at CAD cells within the Harbor, and at designated open-water disposal sites approved for this Project.

This Eighth Report for the LHCC dredging activities includes:

- Daily Inspection Reports from the dredging oversight performed during the week of December 22nd through December 28th. Daily contractor activities are included in the form of Daily Inspection Reports noting equipment observed on site and a summary of contractor activities. (See Attachment 1);
- Water Quality Monitoring Forms completed for the week of December 22nd through December 28th are attached (Attachment 2). Included with the attached forms is Figure 1 *Lower Harbor CAD Cell Phase I Water Quality Monitoring Plan*, which shows the locations of the water quality monitoring events conducted during this reporting period. Per the approved Water Quality Monitoring Plan and associated performance standards for the dredging efforts being conducted during this reporting period Apex has;
 - Conducted water quality monitoring events a minimum of two days per week.
 - Conducted water quality monitoring for disposal events into either the existing CAD Cell #2 or CAD Cell #3 of Top of LHCC sediments removed by this Project.
 - Performed visual inspections of dredged materials in the disposal scow prior to disposal to ascertain the effectiveness of dewatering. If deemed necessary by the visual inspection, Apex will monitor the water quality of the effluent discharge from the carbon filtration system.

2. Summary:

The Contractor, through its subcontractor, Tripp Marine, conducted dredging at the LHCC daily December 23^{rd} through the 28^{th} . Dredging operations focused on the removal of Phase I Top of CAD cell sediments and the disposal of these sediments into CAD Cell #3. During this reporting period, dredging operations were conducted using a conventional digging bucket in certain areas of the dredge footprint where dense sandy materials were known to exist, per verbal approval discussed at the November 13^{th} project meeting and the subsequent formal letters provided on November 21^{st} and December 23^{rd} . Tripp Marine was observed conducting these activities during the authorized operational window of 7AM until sunset, utilizing a single dredge plant; the tug *Sand Pebble;* a 900 cubic yard dump scow – *TMC 140*; a 3000 cubic yard pocket scow SEI-2000, and a small utility boat. Tripp Marine was utilizing the Cashman dewatering barge as a staging area for dewatering operations and as an aid in accurately positioning the dump scow for disposal

operations into CAD Cell #3. Dredging operations were conducted without the use of silt curtains because these activities lie outside the time of year restrictions noted in the Project Specifications.

3. Operational Notes:

Dredging:

Dredging at the LHCC continued through the week of December 22nd utilizing an open conventional digging bucket, per the terms outlined in the letters issued on November 21st and December 23rd. Apex conducted four days of water quality monitoring while the open conventional bucket was being used to ensure that the use of the conventional bucket did not result in an exceedance of any project-specific water quality standards. Water quality monitoring was completed on the 23rd, 24th, 26th, and 28th of December. Monitoring of dredging activities will continue on a schedule of a minimum of two events per week as required by the project performance standards.

Disposal:

Disposal of "Top of LHCC" sediments was conducted daily December 23rd through the 28th. Based on scow logs, approximately 500 and 800 cubic yards of material (assuming 120 pounds/ft³ for dredged materials) was placed into CAD Cell #3 during each disposal event for scow TMC-140 and SEI-2000, respectively. Sediments contained in the scow were inspected prior to each disposal to assess the effectiveness of dewatering. Water quality monitoring, required for each CAD Cell disposal event, was completed for each day of disposal activity.

Table 1 – Cumulative Dredging Progress

Period of Activity	Volume (cy)
Approximate Vol. Dredged this Reporting Period	3,000
Approximate Volume Dredged to Date	18,400

4. Monitoring Summary

There were no water quality exceedances observed during this reporting period related to either dredging or disposal operations. No water quality samples were collected.

Prepared by: Apex Companies, LLC

John B. McAllister, P.E. Senior Project Engineer

Don Boyé Senior Project Manager

Attachment 1 Daily Inspection Reports

	City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report												
Inspector:	K. Ryan, J.	Poirier				Date	: 23 Decen	nber 2013					
Contractor:	Tripp Mar	ine		Foreman/Sup	t: Py	ne Tripp							
Weather	AM: PM:	Overcast/Rain Overcast/Rain	. Winds 5-10	Temperatu 0k N	ıre	AM: PM:	36 48						
Tides	High Low	1123 0433	AMAM	1701	PI PI	M M							
Manpower O	nsite Foreman Operators Laborers Drivers	1@ 1@ @	_8 Hrs _8 Hrs _8 Hrs Hrs Hrs	Equipment O Description:	Push	P Dredg Scov boat Sa Su Scov	e Tripp 47 v TMC 140 nd Pebble pport boat w SEI 2000	Hrs8 Hrs8 Hrs8 Hrs8 Hrs8	L L L				
Contractor Ad	tivities: (At	tach Additional	Sheets as N	ecessary)									
Apex on-site at 0 disposal authori which scow was bucket in Dredg 1336, at which p scow were 10' F	2730 to con- zation. Dre maneuvere e Area T-6, v point scow T WD / AFT. A	duct oversight o dged materials ed alongside dro with dredged m MC-140 is man Apex inspected	of dredging a held in scow edge plant. naterials bein euvered ove materials in	activities and to v TMC-140 wer Dredging begin ng placed into s er to the dewat scow TMC-140	o insp re dis ns at (scow tering 0 for	pect dree posed ir 0820 usi TMC-14 g barge. disposal	dged mater nto CAD Ce ng the ope 0. Dredgin End-of-day authorizat	rials in scow II #3 at 0800, n conventior ng continued draft marks ion.	for after nal digging until on the				
	y issues wei	e observed dui	ing the day.										
Problems/Iss None / N/A	ues or Actio	n Items:											
Visitors:													
Signature: Title:	D. Boye					Date Page	e: <u>23 Decen</u> e:1of_	nber 2013 1					
Copy to:	file					File	: DIR_LHC	C_122313					

City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report												
Inspector:	M. Tumolo	o, J. Poirier		-	Dat	e: 24 Decem	ber 2013					
Contractor: Tripp Marine Foreman/Supt: Pyne Tripp												
Weather	AM: PM:	Overcast/Rain. Overcast/Rain. W	inds 10k	Temperature	e AM: PM:	28 39						
Tides	High Low	0001	AM AM	1209 1745	PM PM							
Manpower Onsite Equipment Onsite Foreman 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Operators 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push boat Sand Pebble Hrs. 8 Drivers @ Hrs Hrs Support boat Hrs. 8 Other: @ Hrs Scow SEI 2000 Hrs. 8												
Contractor Activities: (Attach Additional Sheets as Necessary) Apex on-site at 0730 to conduct oversight of dredging activities and to inspect dredged materials in scow for disposal authorization. Dredged materials held in scow TMC-140 were disposed into CAD Cell #3 at 0825, after which scow was maneuvered alongside dredge plant. Dredging begins at 0930 using the open conventional digging bucket, with dredged materials being placed into scow TMC-140. Dredging continued until 1421, at which point scow TMC-140 is maneuvered over to the dewatering barge. End-of-day draft marks on the scow were 9' FWD and 10' AFT. No water quality issues were observed during the day.												
Problems/Iss None / N/A	ues or Actic	n Items:										
Visitors: Signature: Title: Copy to:	D. Boye file			-	Dat Pag Fil	e: <u>24 Decem</u> e:1of_ e: <u>DIR_LHCC</u>	ber 2013 _1 2_122413					

City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report												
Inspector:	A. Hart				_		Date	: 25 Decem	ber 2013	3		
Contractor: Tripp Marine Foreman/Supt: Pyne Tripp												
Weather	AM: PM:	Ptly. Clo Ptly. Clo	oudy. oudy. W	inds 10-15	Tempera	ture	AM: PM:	16 28				
Tides	High Low		0047 0620	AM AM	1258 1839	P P	M M					
Manpower Onsite Equipment Onsite Foreman 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Operators 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push boat Sand Pebble Hrs. 8 Drivers @ Hrs Support boat Hrs. 8 Other: @ Hrs Scow SEI 2000 Hrs. 8												
Contractor Ad	tivities: (At	tach Add	itional S	Sheets as N	lecessary)							
Apex on-site at on Dredged matering maneuvered aloon No water quality Dredging was per placed into scov	Contractor Activities: (Attach Additional Sheets as Necessary) Apex on-site at 0705 to conduct oversight and to inspect dredged materials in scow for disposal authorization. Dredged materials held in scow TMC-140 were disposed into CAD Cell #3 at 0825, after which scow was maneuvered alongside dredge plant. Water quality monitoring was performed during the disposal event. No water quality issues were observed. Dredging was performed during the day using the open conventional digging bucket, with dredged materials being											
End-of-day draft marks on the scow were 8' FWD and 9.5' AFT.												
Problems/Iss None / N/A	ues or Actic	on Items:										
Visitors:												
Signature: D. Boye Date: 25 December 2013 Title: Page: _1_of_1_ Copy to: file File: DIR_LHCC_122513												

City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report												
Inspector:	J. Ray						Date	: 26 Decem	ber 2013	3		
Contractor: Tripp Marine Foreman/Supt: Pyne Tripp												
Weather	AM: PM:	Overcast, Rain. Wir	/Rain. nds 5-10k	SE shifti	Temperatu	ure	AM: PM:	18 41				
Tides	High Low	C	0138 0732	AM AM	1354 1941	PI PI	N N					
Manpower Onsite Equipment Onsite Foreman 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Operators 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push boat Sand Pebble Hrs. 8 Drivers @ Hrs Hrs Support boat Hrs. 8 Other: @ Hrs Scow SEI 2000 Hrs. 8												
Contractor A	ctivities: (At	tach Addit	tional She	ets as N	ecessary)							
Contractor Activities: (Attach Additional Sheets as Necessary) Apex on-site at 0745 to conduct oversight of dredging activities and to inspect dredged materials in scow for disposal authorization. Dredged materials held in scow TMC-140 were disposed into CAD Cell #3 at 1018, after which scow was maneuvered alongside dredge plant. Dredging begins at 1100 using the open conventional digging bucket, with dredged materials being placed into scow TMC-140. Dredging continued until 1613, at which point scow TMC-140 is maneuvered over to the dewatering barge. End-of-day draft marks on the scow were 9' FWD/AFT. No water quality issues were observed during the day.												
Problems/Iss None / N/A	ues or Actic	on Items:										
Visitors: Signature: Title: Copy to:	D. Boye file				- - -		Date Page File	e: <u>26 Decem</u> e:1of_ e: <u>DIR_LHCC</u>	ber 2013 _1 _122613	3		

	City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report Date: 27 December 2013												
Inspector:	K. Ryan, J.	Poirier				_		Date	: 27 Decem	ber 201	.3		
Contractor:	Tripp Mar	ine	ot: Py	ne Tripp)								
Weather	AM: PM:	Ptly. Clo Ptly. Clo	oudy oudy. \	Winds !	5k W	Temperat	ure	AM: PM:	21 36				
Tides	High Low		0234 0846		AM AM	1454 2043	P P	M M					
Low 0846 AM 2043 PM Manpower Onsite Equipment Onsite Foreman 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Operators 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Laborers 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push boat Sand Pebble Hrs. 8 Drivers @ Hrs Hrs Support boat Hrs. 8 Other: @ Hrs Scow SEI 2000 Hrs. 8 Contractor Activities: (Attach Additional Sheets as Necessary) Apex on-site at 0645 to conduct oversight of dredging activities and to inspect dredged materials in scow for disposal authorization. Dredged materials held in scow TMC-140 were disposed into CAD Cell #3 at 0838, after which scow was maneuvered alongside dredge plant Dredging begins at 1133 using the open conventional digging													
bucket, with dredged materials being placed into scow TMC-140. Dredging continued until 1609, at which point scow TMC-140 is left alongside dredge plant for the overnight. End-of-day draft marks on the scow were 9' FWD/AFT. No water quality issues were observed during the day.													
Problems/Iss None / N/A	ues or Actic	on Items:											
Visitors: Signature: Title: Copy to:	D. Boye file					- - -		Date Page File	e: <u>27 Decem</u> e:1of_ e: <u>DIR_LHCC</u>	ber 201 _1 2_12271	<u>.3</u> 3		

City of New Bedford Harbor Development Commission New Bedford Harbor USEPA Lower Harbor CAD Cell CFDA No.: 66.802 Inspection Report											
Inspector:	K. Ryan, J.	Poirier	_	Date: 28 December 2013							
Contractor: Tripp Marine Foreman/Supt: Pyne Tripp											
Weather	AM: PM:	Overcast. Overcast. Winds 10-15k S	Temperatu	AM: <u>21</u> PM: <u>50</u>							
Tides	High Low	0334 AN 0949 AN	1 <u>1558</u> 1 <u>2139</u>	PM PM							
Manpower Onsite Equipment Onsite Foreman 1 @ 8 Hrs Description: Dredge Tripp 47 Hrs. 8 Operators 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push boat Sand Pebble Hrs. 8 Drivers @ Hrs Support boat Hrs. 8 Other: @ Hrs Scow SEI 2000 Hrs. 8											
Contractor A	ctivities: (At	tach Additional Sheets as	Necessary)								
Apex on-site at disposal authori dewatering, sco 140 were dispos begins at 0925 u 140. Dredging	0730 to con ization. Upo w TMC-140 sed into CAI using the op continued u	duct oversight of dredging n arrival scow TMC-140 w was inspected at 0815 an O Cell #3 at 0826, after wh en conventional digging b ntil 1412, at which point s	g activities and to as being shifted d cleared for disp ich scow was ma ucket, with dred cow TMC-140 wa	o inspect dredged materials in scow for l over to the dewatering barge. After sposal. Dredged materials held in scow TMC- aneuvered alongside dredge plant. Dredging dged materials being placed into scow TMC- vas manuevered over to dewatering barge.							
End-of-day drafi No water qualit	t marks on t y issues wer	he scow were 9' FWD and re observed during the day	9.5 AFT. /.								
Problems/Iss None / N/A	ues or Actio	n ltems:									
Visitors:											
Signature: Title:	D. Boye		_	Date: <u>28 December 2013</u> Page:1of1							
Copy to:	file		_	File: <u>DIR_LHCC_122813</u>							

Attachment 2 Water Quality Monitoring Forms

PROJECT									
	6724	on or many						•	
SURVEY DATE:	23 December 2013								
MONITORS:	K. Ryan, J. Poirier								
WEATHER CONDITIONS:	Overcast and Rain.	Low	: 36	High:	48			-	
WIND CONDITIONS:	Speed:	5-10k	Direction:	N					
PRIOR STORM EVENTS:	N/A							_	
DREDGE / SCOW Position:	Northing/Easting:	2696942/8	315039						
TYPE OF WATER QUALITY	Y MONITORING EVENT	: TOP CAE	Dredging / BT	M CAD Dredgi	ing / Disposa	I			Л <u>–</u> Х
TIDE INFORMATION:	High:	1123	Low:	0433/1701					
WAS WATER QUALITY SA	MPLING PERFORMED?	? (YES/NO)	: N	IF YES, ATTA	CH COC FOR	MS			
GENERAL NOTES:	Dredging begins at 084	40 and ends	for the day at 1	427					
					UP-CURRE	NT			
					-				
		1							
					TURBURITY				
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING
			.,	.,	. ,				
122313-00-1-1		0843		1	4.9				
122313-00-1-17.5	2694995 / 814896	0845	36	17.5	4.8		Flooding tide	200' S of Dredge	0
122313-00-1-35		0847		35	4.1				
			AVERAGE	TURBIDITY:	4.60				
	-				-				
122313-02-1-1		1042		1	4.8				
122313-02-1-19	2694972 / 814919	1044	38.5	19	4.5		Flooding tide	200' S of Dredge	2
122313-02-1-38		1046		38	4				
			AVERAGE	TURBIDITY:	4.43	L			
100010 01 1 1	1	40.15	1		4.5	1			
122313-04-1-1	2607050 / 815110	1245	_	1	4.2		Ebbing	200' N of Dredge	4
122313-04-1-4	20370307013113	1247	9	4	5.0		Ebbilig	200 N OF Dredge	4
122313-04-1-7		1249			0.0 6.27				
			AVERAGE	TURBIDITT.	0.27	1			
122313-06-1-1		1536	1	1	5				
122313-06-1-4	2696905 / 815020	1538	83	4	6.5		Ebbing	200' N of Dredge	6
122313-06-1-8		1540		8	8.4		-	-	
						-			
			-			_			
			AVERAGE	TURBIDITY:		1			
					Denue Curr				
					Down-Curr	ent			
Manifesing ID #		TIME	TOTAL WATER	SAMPLE	Down-Curr	ent		DISTANCE FROM	NUMBER OF HOURS
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	Down-Curr TURBIDITY (NTUs)	ent GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
Monitoring ID # 122313-00-9-1	NORTHING / EASTING	TIME 0850	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft) 1	Down-Curr TURBIDITY (NTUs) 5.3	<u>ent</u> GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
Monitoring ID # 122313-00-9-1 122313-00-9-3.5	NORTHING / EASTING 2697248 / 815095	TIME 0850 0852	TOTAL WATER DEPTH (ft) 8	SAMPLE DEPTH (ft) 1 3.5	Down-Curr TURBIDITY (NTUs) 5.3 13.7	GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7	NORTHING / EASTING 2697248 / 815095	TIME 0850 0852 0854	TOTAL WATER DEPTH (ft) 8	SAMPLE DEPTH (ft) 1 3.5 7	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1	GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7	NORTHING / EASTING 2697248 / 815095	TIME 0850 0852 0854	TOTAL WATER DEPTH (ft) 8 AVERAGE	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03	ent GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7	NORTHING / EASTING 2697248 / 815095	TIME 0850 0852 0854	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43	GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7	NORTHING / EASTING 2697248 / 815095	TIME 0850 0852 0854	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43	GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-1	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854	TOTAL WATER DEPTH (ft) 8 AVERAGE T TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 2 5	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 45 7	GPS FILE NAME	TIDAL STAGE Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-3.5 122313-02-9-3.5	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854 1049 1051	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 15.7	GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854 1049 1051 1053	TOTAL WATER DEPTH (ft) 8 AVERAGE T TURBIDITY 7	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 1 UIDBIDITY:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47	ops file name	TIDAL STAGE Flooding tide Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-3.5 122313-02-9-6	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854 1049 1051 1053	TOTAL WATER DEPTH (h) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03	GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0 2
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854 1049 1051 1053	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03	GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0 2
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1	NORTHING / EASTING 2697248 / 815095 2697022 / 815027	TIME 0850 0852 0854 1049 1051 1053 1252	TOTAL WATER DEPTH (ft) 8 AVERAGE 7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0 2
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-3.5 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-5	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1254 1256	TOTAL WATER DEPTH (ft) 8 AVERAGE T TURBIDITY 7 AVERAGE T TURBIDITY 10.7	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-10	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256	TOTAL WATER DEPTH (h) 8 AVERAGE TURBIDITY 7 AVERAGE 10.7 AVERAGE	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-10	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE 10.7 10.7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-10	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256	TOTAL WATER DEPTH (tt) 8 AVERAGE TURBIDITY 7 AVERAGE 10.7 10.7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 IURBIDITY: INCREASE: 1 3.5 6 IURBIDITY: INCREASE: 1 1 5 10 IURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-1	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 4544	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE 10.7 10.7 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE: 1 1 5	Down-Curr TURBIDITY (NTVs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6 0	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-10 122313-06-9-1 122313-06-9-1 122313-06-9-1 122313-06-9-0 122313-06-9-0	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1544	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 1 4.5 9	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8 9.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-7 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-4 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (h) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-7 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-4.5 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge 200' S of Dredge	NUMBER OF HOURS 0 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (tt) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 IURBIDITY: INCREASE: 1 3.5 6 1 URBIDITY: INCREASE: 1 1 0 10 URBIDITY: INCREASE: 1 1 1 0 10 URBIDITY: INCREASE: 1 1 0 10 URBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-02-9-1 122313-02-9-3.5 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-10 122313-06-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE URBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTVs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-3.5 122313-02-9-1 122313-02-9-1 122313-02-9-3.5 122313-04-9-1 122313-04-9-1 122313-04-9-10 122313-06-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814985	TIME 0850 0852 0854 1051 1053 1252 1254 1256 1544 1546	TOTAL WATER DEPTH (ft) 8 AVERAGE T TURBIDITY 7 AVERAGE T TURBIDITY 10.7 AVERAGE T TURBIDITY 9.2 AVERAGE T TURBIDITY	SAMPLE DEPTH (#) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTVs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-1 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-10 122313-06-9-1 122313-06-9-4.5 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 26997022 / 815027 26996462 / 814998 26996246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (h) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (#) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 URBIDITY: INCREASE: 1 1 4.5 9 TURBIDITY: INCREASE: 1 1 1 1 1 1 1 1 1 1 1 1 1	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7 	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-1 122313-00-9-7 122313-02-9-1 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 26996462 / 814998 26996246 / 814985	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (h) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4 6
Monitoring ID # 122313-00-9-1 122313-00-9-7 122313-00-9-7 122313-02-9-1 122313-02-9-6 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-04-9-1 122313-06-9-1 122313-06-9-9	NORTHING / EASTING 2697248 / 815095 2697022 / 815027 2696462 / 814998 2696246 / 814998	TIME 0850 0852 0854 1049 1051 1053 1252 1254 1256 1542 1544 1546	TOTAL WATER DEPTH (ft) 8 AVERAGE TURBIDITY 7 AVERAGE TURBIDITY 10.7 10.7 AVERAGE TURBIDITY 9.2 AVERAGE TURBIDITY	SAMPLE DEPTH (ft) 1 3.5 7 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: 1 1 5 10 TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE:	Down-Curr TURBIDITY (NTUs) 5.3 13.7 17.1 12.03 7.43 5.2 15.7 16.5 12.47 8.03 4.8 7.5 8 6.77 0.50 7.3 6.3 8.7	ent GPS FILE NAME	TIDAL STAGE Flooding tide Flooding tide Ebbing Ebbing	DISTANCE FROM LOCATION 200' N of Dredge 200' N of Dredge 200' S of Dredge	NUMBER OF HOURS DREDGING 0 2 4 6

PRO JECT:	New Bedford Harbor I	ower Harbo										
	6724											
SUBVEY DATE:	0/24 22 December 2012							•				
SURVEY DATE:	23 December 2013											
MONITORS:	K. Ryan, J. Poirier											
WEATHER CONDITIONS:	Overcast and Rain.	Low:	36	High:	48			. 🔎				
WIND CONDITIONS:	Speed:	5-10k	Direction:	N								
PRIOR STORM EVENTS:	N/A											
DREDGE / SCOW Position:	Northing/Easting:	CAD Cell #	3									
TYPE OF WATER QUALITY		· TOP CAD	Dredging / BT	M CAD Dredgi	ing / Disposa				N = X			
TIDE INFORMATION:	Link:	1122	Low:	0422/1701	ing / Dispose							
		1125	LOW.	0433/1701		10						
WAS WATER QUALITY SA	MPLING PERFORMED	(TES/NO)	N	IF YES, ATTA	ACH COC FOR	MS						
GENERAL NOTES:	Disposal into CAD Cel	#3 occurre	d at 0800									
						NT						
	<u>or onnent</u>											
			TOTAL WATER	SAMPLE	TURBIDITY			RELATIVE POSITION	NUMBER OF HOURS			
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING			
			.,	.,	. ,							
100010 01 1 1		0010	I	4	4.4	I I						
122313-01-1-1		0810		- 1	4.1		Ele e die e tide	0001 0 - (Disessed				
122313-01-1-9.5		0812	19.8	9.5	9.8		Flooding tide	200°S of Disposal	post			
122313-01-1-19		0814		19	13.8							
			AVERAGE	TURBIDITY:	9.23							
						-						
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			AVERAGE	TURBIDITY:		J						
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			AVERAGE	TURBIDITY:								
			AVERAGE	TURBIDITY:]						
					Down-Curr	<u>ent</u>						
		1										
Menitering ID #		TIME	TOTAL WATER	SAMPLE	TURBIDITY		TIDAL STACE	DISTANCE FROM	NUMBER OF HOURS			
Wonitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	LOCATION	DREDGING			
100010 01 0 1			1			r - 1						
122313-01-9-1		0819		1	5.2							
122313-01-9-17		0821	8.8	17	9.1		Flooding tide	200' N of Disposal	post			
122313-01-9-34		0823		34	11.5							
			AVERAGE	TURBIDITY:	8.60							
				INCREASE	-0.63	1						
			токыртт	INOINE/IOE.	-0.03	1						
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			AVERAGE	TURBIDITY:	<u> </u>]						
			TURBIDITY	INCREASE:								
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			AVERAGE	TURBIDITY:]						
			TURBIDITY	INCREASE:								
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			AVERAGE	TURBIDITY:]						
			TURBIDITY	INCREASE:								

DDO IECT.	New Dedferd Herbert	awar Harke							
	New Beuloru Harbor L		I CAD Cell						
JOB NUMBER:	6/24								
SURVEY DATE:	24 December 2013								
MONITORS:	M. Tumolo, J. Poirier								
WEATHER CONDITIONS:	Overcast and Rain.	Low	28	High:	39				
WIND CONDITIONS:	Speed:	10k	Direction:	NNW					
PRIOR STORM EVENTS	N/Δ							_	
DREDGE / SCOW Position:	Northing/Easting:	2606042/8	15030						
DICEDGE / SCOW I OSILIOII:	Northing/Lasting.	203034270	15055		(5)				
TYPE OF WATER QUALITY		TOP CAD	Dreaging / BT	M CAD Dredgi	ng / Disposa			· / A -	
TIDE INFORMATION:	High:	0001/1209	Low:	0521/1745					
WAS WATER QUALITY SA	MPLING PERFORMED?	(YES/NO)	: N	IF YES, ATTA	CH COC FOR	MS			
GENERAL NOTES:	Dredging begins at 093	30 and ends	for the day at 14	421					
					UP-CURRE	<u>:NI</u>			
		1							
					TUDDIDITY				
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUS)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING
			52(.)	521 m(ii)	(1100)				DIEDONIO
100110 00 1 1		00.45	1						
122413-00-1-1	0000500 / 045450	0845		1	5.2	- 1	The endine of the	0001.0 - (D	•
122413-00-1-3	2696520 / 815158	0847	7	3	5.2		Flooding tide	200° S of Dredge	0
122413-00-1-6		0849		6	6.8				
			AVERAGE 1	FURBIDITY:	5.73				
122413-02-1-1		1025		1	10.9				
122413-02-1-6	2696476 / 815294	1027	13	6	11		Flooding tide	200' S of Dredge	2
122412 02 1 12		1020	10	12	6.5	1 1	5	Ŭ	
122413-02-1-12		1029	41/53405		0.5	+			
			AVERAGE	URBIDITY:	9.47	L			
122413-04-1-1		1224	1	1	5.3	_ I			
122413-04-1-11.5	2696903 / 814691	1226	24	11.5	4.6		Ebbing	200' N of Dredge	4
122413-04-1-23		1228		23	4				
					4.63				
			/WEIWOE		4.00	_			
100440.06.4.4		1400	I	4	E 1	<u>г г</u>			
122413-06-1-1	2000444 / 044004	1420		1	5.1	- 1	Ebbing	200' N of Drodge	6
122413-06-1-12	2090441/014001	1430	24.9	12	6.5	- 1	Ebbing	200 N OF Dredge	0
122413-06-1-24		1432		24	4.8				
						1 1			
			AVERAGE						
			AVERAGE	I UKBIDIT T.		_			
					Down-Curr	ent			
Manifestan ID #			TOTAL WATER	SAMPLE	TURBIDITY			DISTANCE FROM	NUMBER OF HOURS
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	LOCATION	DREDGING
100110 00 0 1		0000	r	4	0.0	г г			
122413-00-9-1	0007074 / 045477	0900		1	6.6	- 1	The endine of the	0001 NL + (Desider	•
122413-00-9-3	26972717815177	0902	7	3	6.4	- 1	Flooding tide	200 N of Dredge	0
122413-00-9-6		0904		6	6.3				
			AVERAGE 1	FURBIDITY:	6.43	1			
			TURBIDITY	INCREASE:	0.70				
122413-02-9-1		1030		1	5.8				
122413-02-9-3	2697121 / 815156	1032	6	3	5.9	ן ר	Flooding tide	200' N of Dredge	2
122413-02-9-5	1	1034	1 1	5	59	1	5	5.	
	1	1034			5.3	1			
			AVERAGE		5.87				
			TURBIDITY	INCREASE:	-3.60	L			
						· ·			
122413-04-9-1		1236		1	5.2	4 1			
122413-04-9-7.5	2696398 / 814823	1238	15.7	7.5	4.5	_ I	Ebbing	200' S of Dredge	4
122413-04-9-15		1240		15	4.8				
			AVERAGE 1	URBIDITY:	4.83				
			TURBIDITY	INCREASE:	0.20				
						-			
122/13-06-0-1		1440		4	E	<u> </u>			
122413-00-9-1	2696406 / 814819	1440	14.2	7	5	1 1	Ebbing	200' S of Dredge	e
122413-00-9-1	2000-007 014010	1442	14.3	1	5.1		Loong	200 D to Dieuge	0
122413-06-9-14		1444		14	5.3	ļ			
			AVERAGE	URBIDITY:	5.13	-			
			TURBIDITY	INCREASE:	-0.33	L			
			J I			J I			
	1		1			ן ך			
			AVERAGE 1	URBIDITY:		•			
					1	1			
			TURBIDITY	INCREASE					
			TURBIDITY	INCREASE:		J			
			TURBIDITY	INCREASE:]			

PROJECT: JOB NUMBER: SURVEY DATE: MONITORS: WEATHER CONDITIONS: WIND CONDITIONS: PRIOR STORM EVENTS: DREDGE / SCOW Position: TYPE OF WATER QUALITY TIDE INFORMATION: WAS WATER QUALITY SA GENERAL NOTES:	AF	PEX									
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING		
122413-01-1-1 122413-01-1-5 122413-01-1-9	2696128 / 815573	0825 0827 0829	10 AVERAGE	1 5 9 FURBIDITY:	5.7 5.9 6 5.87		Flooding tide	200' S of Disposal	post		
						-					
		-	AVERAGE	FURBIDITY:]						
			AVERAGE								
			MENNOL	OKBIDITT.							
			AV(50.405)								
			AVERAGE	URBIDITY:							
			AVERAGE	furbidity:							
					Down-Curr	ent					
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING		
122413-01-9-1 122413-01-9-3 122413-01-9-6	2696940 / 815241	0830 0832 0834	6.5	1 3 6	7.2 8.8 9.8	-	Flooding tide	200' N of Disposal	post		
			AVERAGE TURBIDITY	INCREASE:	8.60 2.73						
						-					
			AVERAGE TURBIDITY	INCREASE:							
						-					
			AVERAGE TURBIDITY	INCREASE:							
		•	AVERAGE TURBIDITY	INCREASE:]					
	1	I	AVERAGE TURBIDITY	TURBIDITY: INCREASE:		-					
* Turbidity Increase = Down-Curre	nt Average Turbidity - Up-Curr	rent Average Tu	ırbidity								

WQM_LHCC_122413

PRO JECT.	New Bedford Harbor I	ower Harbo										
	New Deuloiu Haiboi L	owernarbo	CAD Cell					1				
JOB NUMBER:	6/24											
SURVEY DATE:	25 December 2013											
MONITORS:	A. Hart											
WEATHER CONDITIONS:	Partly Cloudy. Temper	ratures 16F	early, increasing	to 28F PM								
WIND CONDITIONS:	Snood:	10 154	Direction	NINA/				·				
	opeed:	IN-ION	Direction:	1444								
PRIOR STORM EVENTS:	N/A											
DREDGE / SCOW Position:	Northing/Easting:	CAD Cell #	3									
TYPE OF WATER QUALITY	MONITORING EVENT	: TOP CAD	Dredging / BT	M CAD Dredgi	ing / Disposa				J = X			
TIDE INFORMATION.	High:	0047/1258	Low.	0620/1839	× ·							
WAS WATER OUT ITY SA		(VES/NO)		IF VES ATTA		MC						
WAS WATER QUALITY SA	WPLING PERFORINED	(TES/NO)	N	IF TES, ATTA		11/13						
GENERAL NOTES:	Disposal into CAD Cel	#3 occurre	d at 0825									
	ID-CIDDENT											
		1										
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER	SAMPLE	TURBIDITY	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION	NUMBER OF HOURS			
incriticating in a			DEPTH (ft)	DEPTH (ft)	(NTUs)			OF MEASUREMENT	DREDGING			
122513-01-1-1		0825		1	3.1							
122513-01-1-0	2696226 / 815369	0827	10.1	0	3.2		Flooding tide	200' S of Disposal	post			
122313-01-1-9	20002207010000	0827	19.1	9	3.2		r looding tao	200 0 01 2100000	poor			
122513-01-1-18		0829		18	3.2							
			AVERAGE	TURBIDITY:	3.17							
			1			1		1				
			-			4						
			AVERAGE	TURBIDITY:								
					•	-						
			1			r						
			-		ļ	4						
			1					1				
								, I				
			AVERAGE	I URBIDIT Y:		1						
			1									
			-									
					Down-Curr	ent						
		1										
			TOTAL WATER	SAMPLE	TURBIDITY			DISTANCE FROM	NUMBER OF HOURS			
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	LOCATION	DREDGING			
			.,		. ,							
122513-01-9-1		0832		1	4.3							
122513-01-9-3	2696947 / 815233	0834	7.1	3	6.2		Flooding tide	200' N of Disposal	post			
122513-01-9-6		0836		6	3.4							
		0000	AV/ED A OF		0.4	I		,I				
1			AVERAGE		4.63	1						
1			TURBIDITY	INCREASE:	1.47	J						
			1			1						
			1			1						
			l		ļ							
1			AVERAGE	TURBIDITY:		1						
			TURBIDITY	INCREASE:		J						
1						-						
		1	1			1		I				
			-			-						
			-			4		1				
								I				
			AVERAGE	TURBIDITY:								
			TIDDIDITY			1						
1				INGREASE:	1	J						
					L							
			1									
			1		1	1						
					1	· · · · · · · · · · · · · · · · · · ·		I				
1			AVERAGE	URBIDITY:		1						
1			TURBIDITY	INCREASE:]						
1						-						
			I			I		[]				
			-			-						
			-		ļ	4						
			<u> </u>		<u> </u>							
			AVERAGE	TURBIDITY:								
1				INCREASE	1	1						
1				ONLAGE.		1						
* Turbidity Increase - Down Curren	at Average Turbidity - Up-Curr	rent Average Ti	urbidity									

PROJECT:	New Bedford Harbor I	_ower Harbo	or CAD Cell						
JOB NUMBER:	6724								
SURVEY DATE:	26 December 2013								
SORVET DATE.	20 December 2015								
MONITORS:	J. Ray								
WEATHER CONDITIONS:	Overcast and Rain.	Low	: 18	High:	41				
WIND CONDITIONS	Sneed:	5-10k	Direction:	SE shifting to	WPM				
DRIOD STORM EVENTS.	N/A		Dirocaetin	on officially to					
PRIOR STORM EVENTS:	N/A		_						
DREDGE / SCOW Position:	Northing/Easting:	2696852 / 8	15280						
TYPE OF WATER QUALITY	Y MONITORING EVENT	TOP CAD	Dredaina / BT	M CAD Dredgi	ing / Disposa	1			71— X
TIDE INFORMATION:	High	0120/1254	Low	0722/10/1					
TIDE INFORMATION.	High.	0136/1334	LOW.	0/32/1941					
WAS WATER QUALITY SA	MPLING PERFORMED	? (YES/NO)	: N	IF YES, ATTA	ACH COC FOR	MS			
GENERAL NOTES:	Dredging begins at ap	proximately	1100 and ends f	or the day at 1	613				
				-					
					UP-CURRE	ENT			
		1							
				SAMDI E	TURPIDITY				
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (#)	DEPTH (#)	(NTIIe)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING
-			DEFIN(II)	DEFIN(II)	(1105)			OF WEASOREWENT	DREDGING
122613-00-1-2		1046		2	2.1				
100612 00 1 5	2696344 / 815097	1049	10	E	2.1		Elooding tide	200' S of Dredge	0
122013-00-1-5	20300447 010037	1046	10	5	Z. 1		Tibbding tide	200 0 01 Dicage	0
122613-00-1-8		1050		8	2.8				
			AVERAGE	FURBIDITY:	2.33				
						-			
	1		1	-					
122613-02-1-2		1252		2	2.4				_
122413-02-1-5	2696665 / 815183	1254	11	5	2.1		Flooding tide	200' S of Dredge	2
122413-02-1-9	1	1256		9	2				
122 110 02 1 0		1200							
			AVERAGE	I URBIDITY:	2.17				
122613-04-1-2		1449		2	2.5				
122010 01 1 2	2696999 / 81/897	1454	10	6	2.0		Ebbing	200' N of Dredge	4
122613-04-1-6	20909997814097	1451	12	6	2.6		Ebbling	200 N OF Dreuge	4
122613-04-1-10		1453		10	3.9				
			AVERAGE		3.00				
			//VEI///OE		0.00				
		1	1		1				
122613-06-1-2		1632		2	2				
122613-06-1-6	2696903 / 814899	1634	11	6	27		Ebbing	200' N of Dredge	6
122010 00 1 0	1	1601		10	2.0		0	Ū	
122013-00-1-10		1030		10	3.9				
			AVERAGE	FURBIDITY:	2.87				
	1	I	1		r	1			
	-					1			
			AVERAGE						
					Down-Curr	rent			
		_							
					TUDDIDITY			DISTANCE FROM	
Monitoring ID #	NORTHING / EASTING	TIME	IOTAL WATER	SAMPLE	TURBIDITY	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM	NUMBER OF HOURS
-			DEPTH (it)	DEPTH (III)	(NTUS)			LUCATION	DREDGING
122613-00-9-2	1	1051		2	2				
122010 00 0 2	2007196 / 915009	1001	_	-			Ele e dina tido	2001 N of Drodes	0
122613-00-9-4	20971007015090	1053	8	4	2.2		Flooding lide	200 N OF Dredge	0
122613-00-9-6		1055		6	4.3				
			AVERAGE		2.83				
			TURDIDUTY		2.00				
			TUKBIDITY	INGREASE:	0.50	1			
122613-02-9-2		1300		2	4.4				
122613-02-9-4	2697198 / 815137	1302	8	4	3.8	ן ך	Floodina tide	200' N of Dredge	2
100010 00 0 0	1	1002	1 Ŭ	-	5.0				-
122013-02-9-6		1304	1	6	4.2	1			
			AVERAGE	FURBIDITY:	4.13	_			
			TURBIDITY	INCREASE.	1 97	1			
1					1.57	-			
			1		r	· · · ·			
122613-04-9-2	J	1454	1	2	2.4	_ I			
122613-04-9-7	2696431 / 814920	1456	13	7	2.3		Ebbing	200' S of Dredge	4
122613-04-9-11	1	1/58	1	11	2.2	1	-	-	
		1400	A1/50			+			
1			AVERAGE	UKBIDITY:	2.30	4			
			TURBIDITY	INCREASE:	-0.70	1			
						-			
100010 00 0 0			1	^	07	1 1			
	1	4007		2	6.7	4 1			
122613-06-9-2		1637		-	6.9	J I	Ebbing	200' S of Dredge	6
122613-06-9-2 122613-06-9-5	2696376 / 814970	1637 1639	9	5					
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9	5	12.4				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9	5 8	12.4				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE	5 8 FURBIDITY:	12.4 8.67	_			
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80	j			
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE ⁻ TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE T TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-5 122613-06-9-5	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE: FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY	5 8 FURBIDITY: INCREASE: FURBIDITY: INCREASE:	12.4 8.67 5.80				
122613-06-9-2 122613-06-9-5 122613-06-9-8	2696376 / 814970	1637 1639 1641	9 AVERAGE TURBIDITY AVERAGE TURBIDITY	5 8 IURBIDITY: INCREASE: INCREASE:	12.4 8.67 5.80				

WQM_LHCC_122613

PROJECT: JOB NUMBER: SURVEY DATE: MONITORS: WEATHER CONDITIONS: WIND CONDITIONS: PRIOR STORM EVENTS: DREDGE / SCOW Position: TYPE OF WATER QUALITY TOPE INFORMATION: WAS WATER QUALITY SA GENERAL NOTES:	New Bedford Harbor L 6724 26 December 2013 J. Ray Overcast and Rain. Speed: N/A Northing/Easting: Y MONITORING EVENT High: MPLING PERFORMED Disposal into CAD Cell	Low: 5-10k CAD Cell #: TOP CAD 0138/1354 (YES/NO): #3 occurred	r CAD Cell 18 Direction: 3 Dredging / BT Low: N 1 at 1018	High: SE shifting to M CAD Dredgi 0732/1941 IF YES, ATTA	41 W PM ing / Disposa ACH COC FOR UP-CURRE	I MS : <u>NT</u>		AF	PEX
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
122613-01-1-2 122613-01-1-10 122613-01-1-18	2696260 / 815587	1021 1023 1025	20 AVERAGE	2 10 18 FURBIDITY:	1.9 3.8 4.2 3.30	•	Flooding tide	200' S of Disposal	post
			AVERAGE -	furbidity:					
			AVERAGE -	rurbidity:		-			
			AVERAGE	FURBIDITY:					
			AVERAGE	furbidity:					
					Down-Curr	ent			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
122613-01-9-2 122613-01-9-16 122613-01-9-30	2696920 / 815483	1034 1036 1038	30	2 16 30	2.6 14.2 38.1		Flooding tide	200' N of Disposal	post
			TURBIDITY	INCREASE:	18.30 15.00				
						ļ			
			TURBIDITY	INCREASE:					
			TURBIDITY	I URBIDITY: INCREASE:					
			AVERAGE TURBIDITY	IURBIDITY: INCREASE:] 			
			AVERAGE TURBIDITY	IURBIDITY:		}			
* Turbidity Increase = Down-Curren	nt Average Turbidity - Up-Curr	ent Average Tu	ırbidity						

PROJECT:	New Bedford Harbor L	ower Harbo	or CAD Cell					_	
JOB NUMBER:	6724								•
SURVEY DATE:	28 December 2013							-	
MONITORO:	K Deser L Deleter							-	
MONITORS:	K. Ryan, J. Poirier							_	
WEATHER CONDITIONS:	Cloudy	Low	21	High:	50			_	
WIND CONDITIONS:	Sneed:	10-15k	Direction:	SW				-	
	00000	10 100	Direction					-	
PRIOR STORM EVENTS:	N/A								
DREDGE / SCOW Position:	Northing/Easting:	2697221/8	15914						
TYPE OF WATER OUALITY			Dredging / BT		ing / Dienoea	1			I = X
THE OF WATER GOALI			Dieuging / Di	IN CAD Dieugi	ing / Disposa				
TIDE INFORMATION:	High:	0334/1558	Low:	0949/2139				. / \1	
WAS WATER QUALITY SA	MPLING PERFORMED	? (YES/NO)	: N	IF YES, ATTA	CH COC FOR	MS			
GENERAL NOTES:	Dredging begins at 09	25 and ends	for the day at 1	112				-	
CENERAE NOTED.	Dreaging begins at est	Lo ana chao	for the day at 1						
						NT			
		1							
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER	SAMPLE	TURBIDITY	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION	NUMBER OF HOURS
incriticating in a			DEPTH (ft)	DEPTH (ft)	(NTUs)			OF MEASUREMENT	DREDGING
122813-00-1-1		0845		1	6.2				
122010 00 1 1	2607244 / 914690	0040		10	0.2		Ebbing	200' N of Drodgo	0
122813-00-1-10	20972447014009	0847	20.2	10	7.2		Ebbing	200 N OI Diedge	0
122813-00-1-20		0849		20	7.1				
			AVERAGE 1		6.83				
			MERMOL	CREIDITT.	0.00	_			
		1	-		r				
122813-01-1-1		0933		1	4.9				
122813-01-1-2	2697480 / 815280	0935	44	2	5		Ebbing / Slack	200' N of Dredge	1
122010 01 1 4		0007		4	E 1	-		-	
122013-01-1-4	L	0937		4	ə.1	+		L	
			AVERAGE 1	URBIDITY:	5.00				
122812 02 1 1		1407		4	6.4	<u>г г</u>			
122013-02-1-1	0005007 / 04 4000	1127		1	0.1		- - - - - -		
122813-02-1-18	2695087 / 814800	1129	37	18	6.4		Flooding tide	200' S of Dredge	2
122813-02-1-36		1131		36	41				
122010 02 1 00					5.50	-			
			AVERAGE	URBIDITY:	5.53				
122813-04-1-1		1321		1	5.5				
100010 04 1 10	2694978 / 814747	1000	26.4	10	0.0		Flooding tide	200' S of Dredge	4
122013-04-1-10	20343107014141	1323	30.1	10	0.9		Tibboang tae	200 0 01 Dicage	-
122813-04-1-36		1325		36	3.4				
			AVERAGE 1	URBIDITY:	5.93				
				-		-			
		1	1			T T			
122813-05-1-1		1418		1	3.4				
122813-05-1-18.5	2694888 / 814878	1420	37.2	18.5	5.2		Flooding tide	200' S of Dredge	5
122813-05-1-36	1	1422		36	10.5	1			
122010 00 1 00		1422		00	10.0				
			AVERAGE	URBIDITY:	6.37				
-									
					Down-Cur	ont			
					Down-Cun	ent			
		1							
Monitoring ID #	NORTHING / FASTING	TIME	TOTAL WATER	SAMPLE	TURBIDITY	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM	NUMBER OF HOURS
monitoring ib #			DEPTH (ft)	DEPTH (ft)	(NTUs)		IIBAE OTAGE	LOCATION	DREDGING
			1			T T			
122813-00-9-1		0852		1	9.8				
122813-00-9-6	2696389/ 814768	0854	12.6	6	10		Ebbing	200' S of Dredge	0
122813-00-9-12	1	0856	1	12	14.9	ן ך			
		0000	AV/ED 105			<u> </u>		•	
1			AVERAGE	UKBIDITY:	11.57	4			
			TURBIDITY	INCREASE:	4.73				
122813-01-9-1		0030		1	16.7	<u>г г</u>			
100010 01 0 1	2606685 / 915210	0044	• • •		10.1		Ebbing / Slock	200' S of Drodge	4
122013-01-9-4	2030000/013219	0941	8.1	4	10.1	4 1	LUUIIIY / SIACK	200 3 01 Dieuge	1
122813-01-9-8		0943		8	22.2				
			AVERAGE 1		18.33				
1			TIIDDIDITY	NCDEACE.	10.00	1			
				INGREASE.	13.33	1			
122813-02-9-1		1138		1	8.4				
122813-02-9-10 5	2696979 / 814784	1140	217	10.5	84	ן ך	Floodina tide	200' N of Dredge	2
100010 02 0 10.0	1	4440			0.4	4			=
122813-02-9-21		1142		21	9.4				
1			AVERAGE 1	URBIDITY:	8.73	4			
			TURBIDITY	INCREASE:	3 20	1			
					0.20	-1			
		-			1	· ·		-	
122813-04-9-1		1332		1	10.9	_ I			
122813-04-9-3.5	2697092 / 815044	1334	7.6	3.5	11.1	1 1	Flooding tide	200' N of Dredge	4
122813-04-9-7	1	1326	1 1	7	10.0	1 1	-	Ŭ,	
122013-04-3-1	1	1330		/	12.3	+			
			AVERAGE 1	URBIDITY:	11.43	4			
			TURBIDITY	INCREASE:	5.50	1			
1					. 0.00				
100010.05.0.1		45.5	1			,			
122813-05-9-1	•	1512	-	1	12.9	4 1			
122813-05-9-5	2696995 / 814918	1514	11	5	14.8	J I	Flooding tide	200' N of Dredge	5
122813-05-9-10	1	1516	1	10	16.9	ו ך			
		1010	AV/ED 10-		10.3	+ · · · · ·			
			AVERAGE	UKBIDITY:	14.87	4			
			TURBIDITY	INCREASE:	8.50	_			
1									

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

PROJECT: JOB NUMBER: SURVEY DATE: MONITORS: WEATHER CONDITIONS: WIND CONDITIONS: PRIOR STORM EVENTS: DREDGE / SCOW Position: TYPE OF WATER QUALITY IDE INFORMATION: WAS WATER QUALITY SA GENERAL NOTES:	New Bedford Harbor I 6724 28 December 2013 K. Ryan, J. Poirier Cloudy Speed: N/A Northing/Easting: Y MONITORING EVENT High: MPLING PERFORMED Disposal into CAD Cel	Lower Harbo Low: 10-15k CAD Cell #: TOP CAD 0334/1558 ? (YES/NO)? Il #3 occurred	or CAD Cell 21 Direction: 3 Dredging / BT Low: N d at 0826	High: SW M CAD Dredgj 0949/2139 IF YES, ATT <i>A</i>	ing / Disposa	I MS : <u>NT</u>		AF	PEX
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
122813-01-1-1 122813-01-1-2.5 122813-01-1-4	2697342 / 816051	0828 0830 0832	5 AVERAGE	1 2.5 4 TURBIDITY:	5.5 5.4 6 5.63		Ebbing	200' N of Disposal	post
						-			
			AVERAGE	FURBIDITY:]			
			AVERAGE	furbidity:					
	-		AVERAGE 1	furbidity:	-				
		•	AVERAGE	furbidity:	1]			
					Down-Curr	ent			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
122813-01-9-1 122813-01-9-3.5 122813-01-9-8.8	2696382 / 815057	0835 0837 0839	9.8	1 3.5 8.8	7.1 8.3 11.1		Ebbing	200' S of Disposal	post
			AVERAGE T TURBIDITY	INCREASE:	8.83 3.20	}			
	ſ	1	AVERAGE TURBIDITY	INCREASE:] 			
	1	1	AVERAGE TURBIDITY	IURBIDITY: INCREASE:		<u> </u>			
		1	AVERAGE TURBIDITY	INCREASE:] 			
			TURBIDITY	INCREASE:]			
* Turbidity Ingrance - Down Curro	nt Average Turbidity I In Cur	rent Average T	urbidity						

Figure 1 Lower Harbor CAD Cell Phase I – Water Quality Monitoring



6	
	ROCKVILLE, MD SOUTH WINDSOR, CT - BOSTON, MA - 125 BROAD STREET, 5TH FLOOR DOTON MA 02210 58H CONNECTICUT AVENUE SOUTH WINDSOR, CT 15 BROAD STREET, 5TH FLOOR DOTON MA 02210
	PROJECT NEW BEDFORD HARBOR DEVELOPMENT COMMISSION LOWER HARBOR CAD CELL NOMEN OWNEN S2 FISHERMAN'S WHARF, NEW BEDFORD, MA 02740
	1 9/25/2012 EPA COMMENTS GCD 2 2/21/2013 DRAFT SUITABILITY MCK 2 2/21/2013 DRAFT SUITABILITY MCK 4 1 1 MCK 6 1 1 MCK 1 1 1 MCK 1 1 1 1 MCK 2 2/21/2013 DRAFT SUITABILITY MCK 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 25 50 100 1 1
	LOWER HARBOR CAD CELL PHASE I WATER QUALITY MONITORING 12/22/13-12/28/13 DRAWING NO.

PLOT SCALE 1/16"=1'-0"