## Weekly Field Report Week: 03-09-14 through 03-15-14 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 nineteenth 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 19th Report for the LHCC dredging activities includes:

- Daily Inspection Reports from the dredging oversight performed during the week of March 9<sup>th</sup> through March 15<sup>th</sup>, 2014. These reports include notes on the equipment used on site, and a summary of contractor activities. (See Attachment 1);
- Water Quality Monitoring Forms completed for the week of March 9<sup>th</sup> through March 15<sup>th</sup>, 2014, (Attachment 2) summarizing monitoring survey data recorded during active dredging. 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 a minimum of one day per week
  - Performed visual inspections of dredged materials before the disposal of a scow for any visible debris or other items that could potentially become a hazard to navigation prior to the scow's departure for the offshore disposal site.

#### **Summary:**

The Contractor, Cashman Dredging and Marine Contracting, Co. LLC (Cashman) conducted dredging at the LHCC on March 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup>. Dredging operations focused on the removal of Phase I Bottom of CAD Cell sediments. During this reporting period, dredging operations were conducted using a conventional digging bucket, with dredged materials being disposed offshore at the Rhode Island Sound Disposal Site (RISDS). Cashman was observed conducting these activities during the authorized operational window of 7AM until sunset, utilizing a single dredge plant – the Bobby D; two tugs – Ellsea and Lucinda Smith; a 2800 cubic yard split Eddie scow Carroll; and two small utility boats. A 1500 cubic yard pocket scow, SEI 2000, was used in a trial period from March 14th to March 15th as part of its Dredging Quality Management (DQM) certification process. The pocket scow was cleared on March 14th for dredging of Bottom of CAD material at the LHCC following its Disposal Quality inspection for offshore disposal at the RISDS. Apex is still waiting on the DQM Certification of the SEI 2000. With time of year restrictions now in place (January 15th through June 15th) all dredging activities were conducted within a silt curtained perimeter surrounding the LHCC.

#### 2. Operational Notes:

#### **Dredging:**

Dredging of LHCC Phase I Bottom of CAD sediments continued during the week. Apex conducted one day of water quality monitoring on March 11<sup>th</sup> while dredging was being performed to ensure that this activity did not result in an exceedance of any project-specific water quality standards.

#### Offshore Disposal:

Offshore disposal for LHCC Phase I Bottom of CAD sediments is scheduled and permitted for the Rhode Island Sound Disposal Site. Three offshore disposal events, using the split scow Eddie Carroll, were recorded during the week and occurred on March 11<sup>th</sup>, 12<sup>th</sup>, and 14<sup>th</sup>.

Table 1 – Cumulative Dredging Progress

Period of Activity	Volume (cy)
Approximate Top of CAD Volume Dredged to Date*	24,890
Approximate Bottom of CAD Volume Dredged this Reporting Period	4,800
Approximate Bottom of CAD Volume Dredged to Date*	19,900

<sup>\*</sup> Dredge volume quantities are estimated based on observed scow draft marks and an assumed density of the materials dredged. Given the uncertainty in the density of a composite mix of sediments being dredged, all volumes are confirmed and adjusted as necessary using bathymetric survey data.

#### 3. Monitoring Summary

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

Prepared by:

Apex Companies, LLC

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

# Attachment 1 Daily Inspection Reports



				ispeci	ion Keport			
Inspector:	Kaios Ryan	, Adam H	lart		-	Dat	<b>e</b> : 03/09/20	14
Contractor:	Cashman				Foreman/Supt:		No Captain	
Weather Tides	AM: PM: High	Cloudy Clear	0158	AM	Temperature .	AM: PM:	39 25	
rides	Low		0954	— AM	2029	PM		
•	Engineer Operators Mate Deckhand Captains  tivities: (Att on site. 071 ea. 0900 no	0 0 0 o ach Addi 2 no activ	vity on site; on site. 113	Hrs Hrs Hrs Hrs Hrs Brs Us as Ne	D. is in dredge a	Bobby D Eddie Ca Lucinda S area and	rroll Smith the Eddie Ca arroll makes	Hrs0 Hrs1 Hrs1_ Hrs Hrs Hrs trroll is located at the
Problems/Issu	ies or Action	n Items:						
Visitors:								
Signature: Title: Copy to:	Environme File	ntal Tech	nician		·	Pag	te: 03/09/20 te:1of le: DIR_LHC0	·1



			Inspect	ion Report				
Inspector:	Kaid	os Ryan, Adam I	Hart		Date	: 03/10/20	)14	
Contractor:	Cash	nman Dredging a	nd Marine Co	ntracting	Foreman/	Supt:	Mic	ah Bowes
Weather	AM: PM:	Snow Cloudy		Temperature	AM: PM:	43		
Tides	High Low	0359 1047	AM AM	1627 2141	PM PM			
Manpower O	nsite			Equipment Or	nsite			
Other:	Engineer Operators Mate Deckhand Captains	1@	10 Hrs 10 Hrs 10 Hrs 10 Hrs 10 Hrs Hrs Hrs	Description:	Bobby D. Eddie Carr Ellsea Lucinda Sr Red Skiff		Hrs Hrs Hrs Hrs Hrs	10 10 3 2 10
Contractor Ac	tivities: (Atta	ach Additional S	Sheets as Ne	cessarv)				
0707 Bobby D. b 0812 mechanic of the Bobby D. 09- are driving pin b into the Eddie Ca Bobby D. resume 4+03. 1428 Tug l Bobby D. resume through the brid D. stops dredgin disposal off of R Smith has room Eddie Carroll. 17 to repostion for 1720- Tug boat I offshore dipsoal	legins to dred on board the 46 Bobby D. ack into buck arroll. 1153 E es dredging i boat Elsea m es dredging. Ige north bou g, scow eddi hode Island. to manuver. 107 Lucinda S tomorrow. 1 Lucinda Smit	dge into trhe Ed Bobby D. to loo stops dredging ket. 1028 the pi Bobby D. stops on to the Eddie Coves the Dredg 1525 Bobby D.' und. 1626 Tug be e Carroll is full of 1655 Tug boat 1700 The red somith and Elsea 1715 Tug boat Lo	Idie Carroll, on the control of the	drafting at 3.5'. ud, it is operati had started to ack into the bu he crew can mo middle of the so by D. and scow reasing the spu Smith ties to the and 10.5. 1653 s the Bobby D. a he silt curtain. 1 ddie Carroll from and scow Edd	ing fine at a come out cket of the ove the Edd cow. They Eddie Carr ds. 1620 To ne Richie B Eddie Carr and Eddie ( 703 Tug Bo m the silt co ie Carroll h	the momer of bucket. In the Bobby D. It is are now drawing boat Lucarber. 1650 Carroll sour cart Lucinda curtain. 1700 nead south	nt. 0817 E 0956 crev and resur to the we redging in vest. 1454 cinda Smi 0 Dredge cted and th so the a Smith tie 08 Bobby toward the	Ellsea is tied to w members me dredging st. 1204 cut 1, station 1 Dredge Plant th passes plant Bobby cleared for Lucinda es to the D. lifts spuds he bridge.

 Signature:
 Date:
 03/10/2014

 Title:
 Environmental Technician
 Page:
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Inspector:	Kaios Ryan	, Brett Young			Date:	03/11/201	L4	_
Contractor:	Cashman			Foreman/Supt:	Michah Bo	wers		_
Weather	AM: PM:	Cloudy Clear		Temperature	AM: PM:	57 36		
Tides	High Low	0503 1127	AM AM	1726 2245	PM PM			
Manpower O	nsite			Equipment Onsite	<b>e</b>			
Other:	Engineer Operators Mate Deckhand Captains	1@_		Description:			Hrs.	10 12
	tivities: (Att	ach Additional S		ressary)			1113	
Lucinda Smith tie The Bobby D. stil a little to the we Bobby D. stops dresumes dredgin 1439- The Bobby and begins dredginto the Eddie Cathe Ellsea assists The Bobby D. stod drafting; bow-9.	es up by Cad Il dredging in st at cut 6 st Iredging; Ells ig into the E / D. moves a ging into the arroll at cut ( s in pushing ops dredging 5' stern- 11'.	cell # 3. 0718- nto the Eddie Cation 5 + 82. 10 sea helps with riddie Carroll at cand begins dred Eddie Carroll at 6 station 5+36. the Eddie Carrol g. 1725- The Edd.	The Bobby Darroll at cut 6 024- The Bob moving the Bob cut 6 station 4 ging into the at cuts 6&7 st 1645- The Bob oll back up ag die Carroll is i ain is opened	redge area and ties of begins dredging is station 6 + 09. 102 by D. resumes dredobby D. and the Ed 4 + 82. 1400- The Eddie Carroll at cutation 4+95. 1619- The Bobby D. stops dredginst the Bobby D. inspected and clear and the Lucinda State 1815 bridge of the 1815 bridge of	nto the Edd 18- The Bob dging into th die Carroll t Eddie Carrol t 6 station 5 The Bobby I ging to move 1705- The E red for offsh mith enters	ie Carroll d by D. stops he Eddie Ca o the west. Il is drafting s+12. 1523 D. moves ar e and snaps Bobby D. re nore dispos	rafting and dredging rroll. 12: 1330- But a light a li	t 4'. 0836- g and moves 50- The obby D. . stern 8.5'. oby D. moves dredging v line. 1650- redging. 1722- Carroll
	miscommur ff opens the	nication betwee silt curtain gat	e while the B	e captain and tug ca obby D. is dredging close the gate.				
Visitors:								
Signature: Title: Copy to:	Environme File	ntal Scientist			Page:	3/11/2014 1of_ DIR_LHCC	_1	_ _



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Inspector:	Kaios Ryan, Adar	n Hart	_	Date: 03/12/20	14
Contractor:	Cashman/Week	S	Foreman/Supt:	Micah Bowers	
Weather	AM: PM:	Cloudy Cloudy	Temperature	AM: 52 PM: 22	
Tides	High Low	558 AI 1201 AI		PM PM	
Manpower O	nsite		Equipment On	site	
İ	Engineer	_1 @8.5 Hr	s Description:	Bobby D.	Hrs. 9.5
	Operators	 _1 @8.5 Hr		Eddie Carroll	Hrs. 9.5
İ	Mate	_1@ <u>5.5</u> Hr _1 @8.5 Hr	-	Ellsea	Hrs. 1
	Deckhand	_1 @ <u>5.5</u> _1 @8.5 Hr	-	Lucinda Smith	Hrs. 2
	Captains	_1 @8 <u>.5</u> /// _1 @8 <u>.5</u> Hr	-	Survey 4	Hrs. 3.5
Other:	Captains			Jul vey 4	Hrs
Other		@ Hr	٠ -		1113.
Contractor Ac	tivities: (Attach A	dditional Sheets as	Necessary)		
0620 Lucinda Sm	nith brings the Edo	lie Carroll into dred	dge area and ties ເ	up to the Bobby D. 07	14 Bobby D. begins
dredging into the	e Eddie Carroll dra	ifting at 3.5'. 0815 I	Bobby D. stops dre	edging to allow fuel b	arge into dredge area.
0822 survey 4 bo	oat on site to perfo	orm survey. 0853 si	It fence is closed. (	0855 Bobby D. resum	es dredging into the
Eddie Carroll. 09	37 Bobby D. stops	dredging and mov	es to the east. 094	18 Bobby D. resumes	dredging into the
Eddie Carroll at	station 5 + 68 cut	10. 1118 Bobby D.	stops dredging an	d moves 30' northwe	est, Ellsea assists in the
					Sobby D still dredging
					excavator, the whole
	-		=	the excavator with th	
	= :			y D. resumes dredgin	•
	-			ugh the bridge north	=
		-	•	t of 9.5' - 8'. 1636 Sco	_
-					
-		· · · · · · · · · · · · · · · · · · ·	-		ies to the scow Eddie
	=				oound. 1729 Tug boat
			ne nurricane barri	er south bound for of	ffshore disposal. 1800
Dredge plant Bo	bby D. crew offsite	e, no site activity.			
Visitors:					
	_				
Signature:	p Admin			Date: 03/12/20	14
Title:	Environmental To	echnician	<u> </u>	Page:1of	
	-	Conflictori	<del>_</del>		
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Weather   AM: Snow   Temperature   AM: 21   PM: 23	Inspector:	Mark Martin	ho, Brett Young			Date:	03/13/201	14			
Tides High 0626 AM 1846 PM 1256 PM  Manpower Onsite Equipment Onsite  Engineer 1 @ 12 Hrs Description: Bobby D Hrs. 12 Deckhand 1 @ 12 Hrs Description: Bobby D Hrs. 12 Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Lucinda Smith Hrs. 6 Captains 2 @ 12 Hrs Red Skiff Hrs. 12 Deckhand 1 @ 12 Hrs Red Skiff Hrs. 12 Deckhand 1 @ 12 Hrs Red Skiff Hrs. 12 Hrs Red Skiff Hrs. 15 Deckhand 1 @ 17 Hrs Red Skiff Hrs. 15 Deckhand 1 @ 18 Hrs Red Skiff Hrs. 16 Red Skiff Hrs. 16 Deckhand 1 @ 18 Hrs Red Skiff Hrs. 16 Red Skiff Hrs. 16 Deckhand 1 @ 19 Hrs Red Skiff Hrs. 10 Deckhand 1 & 10 Deckh	Contractor:	Cashman		F	oreman/Supt:		Steve B	aynes, I	Micah Bower	rs	
Manpower Onsite  Equipment Onsite  Equipment Onsite  Equipment Onsite  Engineer  1 @ 12 Hrs Operators 1 @ 12 Hrs Mate 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 @ 12 Hrs Deckhand 1 W Hrs Deckhand	Weather	<del></del>			Temperature	•					
Engineer 1 @ 12 Hrs Description: Bobby D Hrs. 12 Operators 1 @ 12 Hrs S Eddie Carroll Hrs. 12 Deckhand 1 @ 12 Hrs Ellsea Hrs. 12 Deckhand 1 @ 12 Hrs Ellsea Hrs. 12 Deckhand 1 @ 12 Hrs S Ellsea Hrs. 12 Deckhand 1 Whrs. 2 @ 12 Hrs S Eddie Carroll Hrs. 12 Deckhand 1 Whrs. 2 @ 12 Hrs S Eddie Carroll Hrs. 12 Deckhand 1 Whrs. 2 @ 12 Hrs Hrs. 12 Deckhand 1 Whrs. 2 @ 12 Hrs Hrs. 12 Deckhand 1 Whrs. 2 @ 14 Hrs Hrs. 15 Deckhand 1 Whrs. 2 @ 15 Hrs Hrs. 15 Deckhand 1 Whrs. 2 @ 16 Hrs. 15 Deckhand 1 Whrs. 2 @ 17 Hrs Hrs. 15 Deckhand 1 Whrs. 2 Whrs.	Tides	_		_							
Deckhand 1 @ 12 Hrs Lucinda Smith Hrs. 6 Red Skiff Hrs. 12 Hrs. 2 Wrs. 2 @ 12 Hrs Red Skiff Hrs. 12 Hrs. 12 Hrs. 2 Wrs. 2	Manpower O	Engineer _		Hrs		Bobby D	oll				
0714- Bobby D begins dredging into the Eddie Carroll. 0830- Bobby D continues to dredge into the Eddie Carroll drafting; bow-6.5' silc curtain fully closed. 0840-Bobby D dredging 1/2 to 3/4 full buckets. 0850- Bobby D stops dredging. 0908- Bobby D resumes dredging. Location 815231, 2696867. 1005- Eddie Carroll is drafting; bow-7.5' stern 7.5'. 1015- Spuds up, Bobby D moves 60' west. 1 Bobby D is dredging in a new location: 815231, 2696928. 1040- Eddie Carroll is hard aground, tide ebbing. 1535- Bobby D and Eddie Carroll completely freed with assistance from Lucinda Smith and Ellsea. 1547- Eddie Carroll is drafting; bow-6.5' stern-8'. 1602- Silt curtain gate is closed. 1605-Bobby D resumes into the Eddie Carroll at cut 6 station 6+26. 1615- Lucinda Smith tied up to the Richie Barber. 1625- Bobby D dredging in a new location, cut 6 station 6+04. 1652- Bobby D stops dredging. 1700- Bobby D resumes dredgi cut 6 station 5+92. 1740-Bobby D stops dredging. 1800- The silt curtain gate is opened. 1815- The Lucinda Smith enters and takes the Eddie Carroll and ties it to the Richie Barber. 1820- The Ellsea repositions the Bobby D 20' west of the eastern side of the silt curtain.  Problems/Issues or Action Items:  Visitors:	Other:	Deckhand _	1@12 2 @12	Hrs Hrs		Lucinda Sm	iith	Hrs Hrs	6 12		
Visitors:	0714- Bobby D b 6.5'. Silt curtain a dredging. Location Bobby D is dredge Carroll complete curtain gate is cl Barber. 1625- Bo cut 6 station 5+9 Eddie Carroll and	pegins dredging fully closed. (on 815231, 26 ging in a new lely freed with losed. 1605-Bobby D dredging 2. 1740-Bobby D ties it to the	ng into the Eddie Carr 0840-Bobby D dredgio 596867. 1005- Eddie location: 815231, 269 assistance from Lucir obby D resumes into ng in a new location, by D stops dredging. 1 Richie Barber. 1820-	roll. 08 ng 1/2 Carroll 96928. nda Sm the Ed cut 6 s	to 3/4 full but to 3/4 full but is drafting; but 1040- Eddie nith and Ellsea idie Carroll at station 6+04. 2	ckets. 0850 ow-7.5' ster Carroll is ha . 1547- Edd cut 6 station 1652- Bobby I gate is ope	n- Bobby D rn 7.5'. 101 ard aground ie Carroll is n 6+26. 163 y D stops d ened. 1815	stops d .5- Spud d, tide e s draftir 15- Luci lredging - The Lu	redging. 090 ds up, Bobby ebbing. 1535- ng; bow-6.5' inda Smith ti- g. 1700- Bobb ucinda Smith	D8- Bobby D moves (6) Bobby D stern- 8'. 1 ed up to thoy D resum enters an	D resumes 60' west. 1032- and Eddie 1602- Silt ne Richie nes dredging at d takes the
-R	Problems/Issu	ies or Action	tems:								
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					- Roport				
Inspector:	Chris Stillma	an, Brett Young			Date:	3/14/	/2014		
Contractor:	Cashman			Foreman/Supt:	Mica	h Bowers	s, Junio	r Mitchel, Dave Norton	
Weather	AM: PM:	Clear Clear	-	Temperature	AM: PM:	35 34			
Tides	High Low	0722 1232	_AM _AM		PM PM				
Manpower O	nsite			Equipment Ons	ite				
Foreman	Micah Dave	@ 12 @ 12	Hrs Hrs	Description:	Bobby D Eddie Carr	oll		Hrs. Hrs.	10 3
Operators Deck Hands	Junior Tommy Davey	@ 6 @ 12 @ 12	Hrs Hrs Hrs	-	Ellsea Lucinda Sr SEI 2000	nith		Hrs. Hrs. Hrs.	10 3 8
Engineer	Josh Dwight	@ <u>12</u> @ <u>12</u>	Hrs Hrs	-				Hrs.	
D848- Split scow Carroll from the to the Bobby D. surficial New Be plant, silt curtain inspection and control following it's recties its stern to to Quality inspection and control following it's recties and tools control following to adjustation 6+89. 18	dewatering and dewatering and dewatering and dewatering and decapsular documented and developmented an	oll cleared for inspection area and out of the hisel 2000 failed pre-instruction sediment from the hisel the cleaning operation the complete removals and Quality inspection 1458- The Ellsea begins sea unties from the book inspection. Ellsea begins into the SEI 2000. 162000. 1632- Bobby Dresum repositions and begins is on deck. Scow is not seen and segment of the second s	ion for a spect North ration al of properties to the spect of the spec	or Rhode Island of r in transit for Rh tion for Lower Ha nern Mooring Mit n. 1140- Dewater previous material offshore disposal take the SEI 2000 f the SEI 2000 and take the SEI 2000 The SEI 2000 is dress dredging. 165 redging into the SEI 20ging cut 7 stati	ffshore Distribor Cad Catigation Arcting operated at Rhode to around the Borafting; boy 55- Bobby 5EI 2000. 1 fon 6+60. 1	posal Are disposal cell, Botto ea. 1020- ion comn s cleared disland Sou the north to the steri bby D. 15 w-4.5' ste D dredgir 747- Bobl 835- The	ea. 093a. . 0949- om of D Ellsea nenced for dre und Dis section n. 1518 638- The ern-4.5' ng cut 7 by D re SEI 200	o avoid late night predicted 8-Tug Lucinda Smith takes the Tug Ellsea brings the pocket bredge activity due to the predict of the SEI 2000 to the delta 1330-Apex performed a second of CAD on page 1330-Apex performed a specific of the harbor for unloaded 13-The SEI 2000 completes and ESEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bob 1627-Bobby D stops dredged 15-The SEI 2000 ties up to the Bobby D stops dredged 15-The SEI 2000 ti	the Eddie a scow SEI 2000 desence of dewatering decond pre- decond pre- decond and decond Disposal decond passes decond passes decond passes decond pre- decond pr
1555- Apex cont	tacted Micah	Bowers and informe						tivities were immediately sto	
the curtain was	closed. Curta	in was open for 10 m	ninut	es while dreaging	; occurea.	No visibie	e turbio	dity was seen exiting the silt	curtain.
Visitors:									
Signature: Title:	Bufj_ Environmer	ntal Scientist		-		03/14/2			-
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			Inspect	ion Report			
Inspector:	Mike Tumol	o, Adam Hart			Date	: 03/15/20	14
Contractor:	Cashman/V	Veeks		Foreman/Supt:	: Dave Nort	ton	
Weather	AM: PM:	Partly Cloudy Clear	<u> </u>	Temperature	AM: PM:	32 57	
Tides	High _ Low _	756 113	AM AM	2013 1339	PM PM		
Manpower O Other:	Engineer Operators Mate	1 @ <u>1</u> ( 1 @ 9	0 Hrs 0 Hrs 0 Hrs	Equipment Or Description:			Hrs10 Hrs6 Hrs1 Hrs2 Hrs4 Hrs10
Dredging Start Time 815 Dredging stops Scow SEI 2000 is fille Richie Barber. 1155 repositions and beg Dredge Plant Bobby Bobby D. resumes d along side the Bobb Dredge plant Bobby Ellsea pushes the dr 2000 to make repair Norton and deckhar 2000 to finish repair and cleared for offsigo for a disposal too the scow Eddie Carrout of the silt curtai Eddie Carroll to the activity stopped, all	to clean up a miled, draft of 9' -1 Tug boat Lucinc ins dredging int D. tries raising redging. 1345 E y D. so the crew D.'s spud moto redge plant Bobles. 1640 Oil leak and. 1712 Dredgers. 1755 Tug boathore disposal. 1 day, decision will soll. 1842 Scow En, tug boat Luciscow Winslow a miled, and the coll. 1842 Scow En, tug boat Luciscow Winslow a miled.	nor oil leak on deck 1'. Compartments 3, la Smith brings the so the scow Eddie Car spuds, but port spud ecavator on the Bobl can use the torch. 1 r is over heating, can by D. south. 1604 Dre from the Bobby D. so plant Bobby D. resu t Ellsea ties to the dre 830 Bobby D. fills the I be made on 3/16/1 cddie Carroll is untied	of the dredge P of the dredge 4, and 5 are cow Eddie C croll, draft o is having m by D. places 435 Dredge anot lift spuce edging resur pud motor, mes dredgin redge plant e scow Eddie d from the c cow Eddie (	lant Bobby D. beging plant Bobby D. 8 empty. 1125- Tugarroll to the dredge of 3.5'-4'. 1251 Scove chanical issues. 1 bucket on deck, or Plant Bobby D. redd. 1546 Dredge planes. 1605 Red skiff crew is working or ang. 1727 The red sleep by D. to bring the Carroll, draft of 7 ered skiff opens the laredge plant Bobby Carroll from the silfore process.	820 Dredging g boat Lucindage plant Bobb w SEI 2000 water and beings resumes dredgent Bobby D. at fibrings Caption repairing it. kiff brings Caption deeper v 7.5' -6'. (Cashing D. Tug boat t curtain. 190	resumes into a Smith brings by D. 1233 Dre as cleared for ad begins lifting epairing pin. 1 ing into the so attempts at lift ain Norton an 1650 Red skift ptain Norton a water. 1815 So man is not sur a. 1640 Tug bo Ellsea pushec 00 Tug boat Lu	offshore disposal. 1325 ag. 1337 Dredge Plant 350 Tug boat Ellsea pulls cow Eddie Carroll. 1512 fting port spud, tug boat ad a deckhand to the SEI ff returns with Captain and deckhand to the SEI cow SEI 2000 is inspected re if the Eddie Carroll will at Lucinda Smith ties to d the scow Eddie Carroll ucinda Smith ties the scow
Visitors:							
Signature: Title: Copy to:	Environmer File	tal Technician			Page	: 03/15/20 :1of	1

# Attachment 2 Water Quality Monitoring Forms

PROJECT: New Bedford Harbor Lower Harbor CAD Ce	PROJECT:	New	Bedford Harbor	Lower	Harbor	CAD	Ce
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JOB NUMBER: 6724

DATE: 3/11/2014

MONITORS: Kyle Miller, Mark Martinho

WEATHER CONDITIONS: High: 57 Low: 36

WIND:

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal

TIDE High:0503/1726 Low: 1127/2245



					UP-CURRE	NT			
						<del></del> -			
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
031114-00-1-1		752		1	1.76				
031114-00-1-4.5	┥	754	9.6	4.5	1.97	apex wqm			
031114-00-1-9	814979, 2696570	756	AVERAGE T	1 IDDIDITY:	2.76 2.16	031114	Ebbing	200' S of Dredge	00
			AVERAGE	OKBIDITT.	2.10				
031114-02-1-1		930		1	1.31				
031114-02-1-3		932	7.3	3	1.71	apex wqm			
031114-02-1-6	815057, 2697225	934		6	2.92	031114	Ebbing	200' N of Dredge	02
			AVERAGE T	URBIDITY:	1.98				
031114-04-1-1		1100		1	1.68				
031114-04-1-4		1102	9.3	4	1.89	apex wqm			
031114-04-1-8	814915, 2697142	1104		8	1.97	031114	Ebbing	200' N of Dredge	04
		_	AVERAGE T	URBIDITY:	1.85				
031114-06-1-1	1	1310		1	3.49			<u> </u>	
031114-06-1-1	1	1310	11.8	5	2.91	apex wqm			
031114-06-1-10	815070, 2696153	1314		10	3.59	031114	Flooding	200' S of Dredge	06
			AVERAGE T	URBIDITY:	3.33	•	-		
024444 09 4 4	1	1520		1	3.52				
031114-08-1-1 031114-08-1-5		1520 1522	11	5	2.88	apex wqm			
031114-08-1-10		1524		10	6.02	031114	Flooding	200' S of Dredge	08
031114-08-1-10	7		AVERAGE T	10		031114	Flooding	200' S of Dredge	08
031114-08-1-10  Monitoring ID #	NORTHING/ EASTING			10	6.02 4.14	031114	Flooding TIDAL STAGE	DISTANCE FROM DREDGE/SILT	08  NUMBER OF HOURS DREDGING
031114-08-1-10  Monitoring ID #  031114-00-9-1	NORTHING/ EASTING	1524 TIME 745	AVERAGE T	10 URBIDITY:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55	031114 ent		DISTANCE FROM	NUMBER OF HOURS
Monitoring ID # 031114-00-9-1 031114-00-9-3.5	-	TIME  745 747	AVERAGE T	10 URBIDITY:	Down-Curre TURBIDITY (NTUs) 1.55 2.24	031114  ent  GPS FILE NAME  apex wqm	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
Monitoring ID # 031114-00-9-1 031114-00-9-3.5	NORTHING/ EASTING 815269, 2697185	1524 TIME 745	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2	SAMPLE DEPTH (tt)  1 3.5	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27	031114  ent  GPS FILE NAME		DISTANCE FROM DREDGE/SILT	NUMBER OF HOURS
Monitoring ID # 031114-00-9-1 031114-00-9-3.5	-	TIME  745 747	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2  AVERAGE T	SAMPLE DEPTH (tt)  1 3.5 7 URBIDITY:	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02	031114  ent  GPS FILE NAME  apex wqm	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
Monitoring ID # 031114-00-9-1 031114-00-9-3.5	-	TIME  745 747	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2	SAMPLE DEPTH (tt)  1 3.5 7 URBIDITY:	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27	031114  ent  GPS FILE NAME  apex wqm	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
Monitoring ID # 031114-00-9-1 031114-00-9-3.5 031114-00-9-7	-	TIME 745 747 749	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY:  URBIDITY:  1 1 1 1 1 1 1 1 1	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86	031114  ent  GPS FILE NAME  apex wqm	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
Monitoring ID # 031114-00-9-1 031114-00-9-3.5 031114-00-9-7 031114-02-9-1 031114-02-9-3	815269, 2697185	TIME  745 747 749  940 942	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2  AVERAGE T	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE:	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28	O31114  Pent  GPS FILE NAME  apex wqm O31114  apex wqm	TIDAL STAGE Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN 200' N of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID # 031114-00-9-1 031114-00-9-3.5 031114-00-9-7 031114-02-9-1 031114-02-9-3	-	TIME 745 747 749	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY 1	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 3 66	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61	O31114  ent  GPS FILE NAME  apex wqm O31114	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
Monitoring ID # 031114-00-9-1 031114-00-9-3.5 031114-00-9-7 031114-02-9-1 031114-02-9-3	815269, 2697185	TIME  745 747 749  940 942	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I	SAMPLE DEPTH (tt)  1 3.5 7 URBIDITY: NCREASE: 1 3 66 URBIDITY:	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28	O31114  Pent  GPS FILE NAME  apex wqm O31114  apex wqm	TIDAL STAGE Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN 200' N of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-3 031114-02-9-66	815269, 2697185	TIME 745 747 749 940 942 944	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T  TURBIDITY I  6.5  AVERAGE T  TURBIDITY I	SAMPLE DEPTH (tt)  1 3.5 7 URBIDITY: NCREASE: 1 3 66 URBIDITY:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31	O31114  Pent  GPS FILE NAME  apex wqm O31114  apex wqm	TIDAL STAGE Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN 200' N of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1	815269, 2697185	TIME 745 747 749  940 942 944	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY:  URBIDITY:  1 3.6 66 URBIDITY: NCREASE:  1 3 66 URBIDITY: 1	6.02 4.14 Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31	o31114  ent  GPS FILE NAME  apex wqm 031114  apex wqm 031114	TIDAL STAGE Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN 200' N of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3	815269, 2697185 815177, 2696554	TIME  745 747 749  940 944 944  1110 1112	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE: 1 3 3	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86  7.97 6.28 4.61 6.29 4.31	O31114  PINT   TIDAL STAGE  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00	
Monitoring ID # 031114-00-9-1 031114-00-9-3.5 031114-00-9-7 031114-02-9-1 031114-02-9-3	815269, 2697185	TIME 745 747 749  940 942 944	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7	SAMPLE DEPTH (tt)  11 3.55 7 URBIDITY: NCREASE: 13 66 URBIDITY: NCREASE: 1 1 3 66 1 3 66 0 1 3 66 0 1 3 66 0 1 3 66 0 1 3 66 0 1 3 66 0 1 3 66 66 0 1 3 66 0 1 3 66 66 0 1 3 66 0 1 3 66 66 0 1 3 66 66 0 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4 4.3 3.68	o31114  ent  GPS FILE NAME  apex wqm 031114  apex wqm 031114	TIDAL STAGE Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN 200' N of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3	815269, 2697185 815177, 2696554	TIME  745 747 749  940 944 944  1110 1112	TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 66 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86  7.97 6.28 4.61 6.29 4.31	o31114  ent  GPS FILE NAME  apex wqm 031114  apex wqm 031114	TIDAL STAGE  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6	815269, 2697185 815177, 2696554	TIME 745 747 749  940 942 944  1110 1112 1114	AVERAGE T  TOTAL WATER DEPTH (th)  7.2  AVERAGE T  TURBIDITY I  6.5  AVERAGE T  TURBIDITY I  7.7	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 66 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15	o31114  ent  GPS FILE NAME  apex wqm 031114  apex wqm 031114	TIDAL STAGE  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6	815269, 2697185 815177, 2696554	TIME 745 747 749  940 944 944  1110 1112 1114	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE: 1 3 6 URBIDITY: NCREASE: 1 1 3 6 URBIDITY: NCREASE: 1 1 3 1 6	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15	apex wqm 031114  apex wqm 031114  apex wqm 031114	TIDAL STAGE  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6  031114-06-9-1 031114-06-9-2	815269, 2697185 815177, 2696554 815026, 2696555	TIME  745 747 749  940 944  1110 1112 1114	AVERAGE T  TOTAL WATER DEPTH (th)  7.2  AVERAGE T  TURBIDITY I  6.5  AVERAGE T  TURBIDITY I  7.7	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 66 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86  7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15	apex wqm 031114  apex wqm 031114  apex wqm 031114  apex wqm 031114	Ebbing  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00  02
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6  031114-06-9-1 031114-06-9-2	815269, 2697185 815177, 2696554	TIME 745 747 749  940 944 944  1110 1112 1114	AVERAGE T  TOTAL WATER DEPTH (th)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I	SAMPLE DEPTH (tt)  1 3.55 7 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE: 1 3 6 6 URBIDITY: NCREASE: 1 1 3 4 4	6.02 4.14  Down-Curre TURBIDITY (NTUS) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4.3 3.68 3.99 2.15	apex wqm 031114  apex wqm 031114  apex wqm 031114	TIDAL STAGE  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING 00
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6  031114-06-9-1 031114-06-9-2	815269, 2697185 815177, 2696554 815026, 2696555	TIME  745 747 749  940 944  1110 1112 1114  1320 1322	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE: 1 3 66 URBIDITY: NCREASE: 1 3 4 URBIDITY: NCREASE: 1 4 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86  7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15	ositita  gent  gent  gent  gent  apex wqm	Ebbing  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00  02
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6  031114-06-9-1 031114-06-9-2 031114-06-9-4	815269, 2697185 815177, 2696554 815026, 2696555	1524  TIME  745 747 749  940 942 944  1110 1112 1114  1320 1322 1324	AVERAGE T  TOTAL WATER DEPTH (th)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I  AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE:  1 3 66 URBIDITY: NCREASE:  1 2 4 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15 2.97 3.82 4.7 3.83 0.5	ositita  gent  gent  gent  gent  apex wqm	Ebbing  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00  02
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3 031114-04-9-6  031114-06-9-1 031114-06-9-2 031114-06-9-4	815269, 2697185 815177, 2696554 815026, 2696555	TIME  745 747 749  940 944  91110 1112 1114  1320 1322 1324	AVERAGE T  TOTAL WATER DEPTH (ft)  7.2  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I  5.1  AVERAGE T TURBIDITY I	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE:  1 3 66 URBIDITY: NCREASE:  1 2 4 URBIDITY: NCREASE: 1 4 2 4 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86  7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15 2.97 3.82 4.7 3.83 0.5	apex wqm 031114  apex wqm 031114  apex wqm 031114  apex wqm 031114	Ebbing  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00  02
Monitoring ID #  031114-00-9-1 031114-00-9-3.5 031114-00-9-7  031114-02-9-1 031114-02-9-66  031114-04-9-1 031114-04-9-3	815269, 2697185 815177, 2696554 815026, 2696555	1524  TIME  745 747 749  940 942 944  1110 1112 1114  1320 1322 1324	AVERAGE T  TOTAL WATER DEPTH (th)  7.2  AVERAGE T TURBIDITY I  6.5  AVERAGE T TURBIDITY I  7.7  AVERAGE T TURBIDITY I  AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T AVERAGE T	SAMPLE DEPTH (ft)  1 3.5 7 URBIDITY: NCREASE:  1 3 66 URBIDITY: NCREASE:  1 2 4 URBIDITY: NCREASE:	6.02 4.14  Down-Curre TURBIDITY (NTUs) 1.55 2.24 5.27 3.02 0.86 7.97 6.28 4.61 6.29 4.31 4 4.3 3.68 3.99 2.15 2.97 3.82 4.7 3.83 0.5	ositita  gent  gent  gent  gent  apex wqm	Ebbing  Ebbing  Ebbing	DISTANCE FROM DREDGE/SILT CURTAIN  200' N of Dredge  200' S of Dredge	NUMBER OF HOURS DREDGING  00  02

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

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

