



**Environmental Monitoring and Audit
 for Contaminated Mud Pits to the
 South of The Brothers and at East
 Sha Chau (2012-2017) – Investigation
 Agreement No. CE 23/2012(EP)**

**24th Monthly Progress Report for Contaminated
 Mud Pits to the South of The Brothers and at
 East Sha Chau – August 2014**

Revision 0

15 September 2014

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24th Monthly Progress Report for Contaminated Mud Pits to the South of The Brothers and at East Sha Chau – August 2014

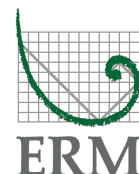
Revision 0

Document Code: 0175086 Monthly Aug_v0.doc

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Client:		Project No:			
Civil Engineering and Development Department (CEDD)		0175086			
Summary:		Date:			
This document presents the 24 th monthly progress report for Contaminated Mud Pits at the South of The Brothers and at East Sha Chau.		15 September 2014			
		Approved by:			
		 Craig A. Reid <i>Partner</i>			
v0	24 th Monthly Progress Report for ESC CMPs and SB CMPs	RC	JT	CAR	15/9/14
Revision	Description	By	Checked	Approved	Date
This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.		Distribution <input type="checkbox"/> Internal <input checked="" type="checkbox"/> Public <input type="checkbox"/> Confidential			
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Dredging, Management and Capping of Contaminated Sediment Disposal Facility to the South of The Brothers

Environmental Certification Sheet EP-427/2011/A

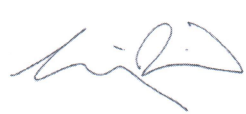
Reference Document/Plan

Document/ Plan to be Certified / Verified:	24 th Monthly Progress Report for Contaminated Mud Pits to the South of The Brothers and at East Sha Chau – August 2014
Date of Report:	15 September 2014
Date prepared by ET:	15 September 2014
Date received by IA:	15 September 2014

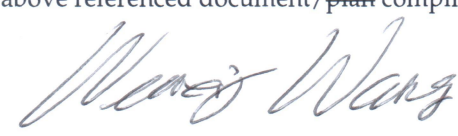
Reference EP Condition

Environmental Permit Condition:	Condition No.: 4.4
4 hard copies and 1 electronic copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of the reporting month. The EM&A Reports shall include a summary of all non-compliance (exceedances) of the environmental quality performance limits (Action and Limit Levels). The submissions shall be certified by the ET Leader and verified by the Independent Auditor. Additional copies of the submission shall be provided to the Director upon request by the Director.	

ET Certification

I hereby certify that the above referenced document/ plan complies with the above referenced condition of EP-427/2011/A	
Craig A. Reid, Environmental Team Leader:	 Date: 15/9/2014

IA Verification

I hereby verify that the above referenced document/ plan complies with the above referenced condition of EP-427/2011/A	
Dr Wang Wen Xiong, Independent Auditor:	 Date: 15/9/2014

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Agreement No. CE 23/2012 (EP)
Environmental Monitoring and Audit
for Contaminated Mud Pits to the South of The Brothers and at East Sha
Chau (2012-2017) - Investigation

24TH MONTHLY PROGRESS REPORT FOR AUGUST 2014

1.1 BACKGROUND

1.1.1 Since early 1990s, contaminated sediment ⁽¹⁾ arising from various construction works (e.g. dredging and reclamation projects) in Hong Kong has been disposed of at a series of seabed pits at East of Sha Chau (ESC). In late 2008, a review indicated that the existing and planned facilities at ESC would not be able to meet the disposal demand after 2012. In order to meet this demand, the Hong Kong Special Administrative Region Government (HKSARG) decided to implement a new contained aquatic disposal (CAD) ⁽²⁾ facility at the South of The Brothers (SB CMPs) which had been under consideration for a number of years.

1.1.2 The environmental acceptability of the construction and operation of the Project had been confirmed by findings of the associated Environmental Impact Assessment (EIA) study completed in 2005 under *Agreement No. CE 12/2002(EP)* ⁽³⁾. The Director of Environmental Protection (DEP) approved this EIA report under the *Environmental Impact Assessment Ordinance (Cap. 499) (EIAO)* in September 2005 (*EIA Register No.: AEIAR-089/2005*).

1.1.3 In accordance with the EIA recommendation, prior to commencement of construction works for the SB CMPs, the Civil Engineering and Development Department (CEDD) undertook a detailed review and update of the EIA findings for the SB site ⁽⁴⁾. Findings of the EIA review undertaken in 2009/2010 confirmed that the construction and operation of the SB site had been predicted to be environmentally acceptable.

- (1) According to the Management Framework of Dredged/ Excavated Sediment of ETWB TC(W) No. 34/2002, contaminated sediment in general shall mean those sediment requiring Type 2 – Confined Marine Disposal as determined according to this TC(W).
- (2) CAD options may involve use of excavated borrow pits, or may involve purpose-built excavated pits. CAD sites are those which involve filling a seabed pit with contaminated mud and capping it with uncontaminated material such that the original seabed level is restored and the contaminated material is isolated from the surrounding marine environment.⁷
- (3) Detailed Site Selection Study for a Proposed Contaminated Mud Disposal Facility within the Airport East/ East of Sha Chau Area (*Agreement No. CE 12/2002(EP)*)
- (4) Under the CEDD study *Contaminated Sediment Disposal Facility to the South of The Brothers (Agreement No. FM 2/2009)*

1.3.2 The following monitoring activities have been undertaken for SB CMPs in August 2014:

- *Impact Water Quality Monitoring during Dredging Operations* was undertaken for CMP 2 three times per week on 1, 4, 6, 8, 11, 13, 15, 18, 20, 22, 26, 28 and 30 August 2014;
- *Pit Specific Sediment Chemistry* for CMP 1 was undertaken on 5 August 2014;
- *Routine Water Quality Monitoring* for CMP 1 was undertaken on 7 August 2014;
- *Sediment Toxicity Tests* for CMP 1 was undertaken on 12 and 13 August 2014;
- *Water Column Profiling* for CMP 1 was undertaken on 14 August 2014;
- *Cumulative Impact Sediment Chemistry* for CMP 1 was undertaken from 19 to 21 August 2014; and
- *Demersal Trawling* for CMP 1 was undertaken on 20 and 21 August 2014.

1.4 **DETAILS OF OUTSTANDING SAMPLING AND/OR ANALYSIS**

1.4.1 No outstanding sampling remained for August 2014. The following laboratory analyses were still in progress during the preparation of this monthly report and hence are not presented in this monthly report:

- Laboratory analyses of sediment samples collected for *Benthic Recolonisation Studies of ESC CMPs* in August 2014;
- Laboratory analyses of sediment samples collected for *Cumulative Impact Sediment Chemistry of CMP 1* in August 2014;
- Laboratory analyses of sediment samples collected for *Sediment Toxicity Tests of CMP 1* in August 2014; and
- Identification of Catch from *Demersal Trawling* of CMP 1 and subsequent chemical analysis for the biota samples in July and August 2014.

1.4.2 A summary of field activities conducted are presented in *Annex A*.

1.5 BRIEF DISCUSSION OF THE MONITORING RESULTS FOR ESC CMPs

1.5.1 Brief discussion of the monitoring results of the *Water Quality Monitoring during Capping of ESC CMPs* conducted on 9 August 2014 is presented below.

1.5.2 *Water Quality Monitoring during Capping – August 2014*

1.5.3 The monitoring results obtained during August 2014 sampling in the wet season have been assessed for compliance with the Water Quality Objectives (WQOs) through a review of the Environmental Protection Department (EPD) routine water quality monitoring data for the wet season period (April to October) of 2003 – 2012 from stations in the North Western Water Control Zone (WCZ), where ESC CMPs are located. For Salinity, the average value obtained from the Reference stations was used for the basis as the WQO. A total of sixteen (16) monitoring stations were sampled in August 2014 as shown in *Figure 1.2*. Graphical presentation of the monitoring results is provided in *Annex B*.

In-situ Measurements

1.5.4 Graphical presentation of the monitoring results is shown in *Figures 1-6 of Annex B*. Levels of Dissolved Oxygen (DO), pH and Salinity at all stations in August 2014 complied with the WQO.

Laboratory Measurements for Suspended Solids (SS)

1.5.5 Concentrations of SS complied with the WQO at most stations in August 2014, except for the Impact stations (*Figure 7 of Annex B*). However, there did not appear to be any spatial trend of increasing SS levels towards the capping operations. Further statistical analysis will be undertaken in the quarterly report to investigate whether the capping operations at ESC CMPs is causing any unacceptable deterioration in water quality of the area.

1.6 BRIEF DISCUSSION OF THE MONITORING RESULTS FOR SB CMPs

1.6.1 Brief discussion of the monitoring results of the following activities for SB CMPs is presented in this 24th *Monthly Progress Report*:

- *Pit Specific Sediment Chemistry of CMP 1* conducted in July and August 2014;
- *Impact Water Quality Monitoring during Dredging Operations of CMP 2* conducted in August 2014;
- *Routine Water Quality Monitoring of CMP 1* conducted on 7 August 2014; and
- *Water Column Profiling of CMP 1* conducted on 14 August 2014.

1.6.2 *Pit Specific Sediment Chemistry of CMP 1 – July and August 2014*

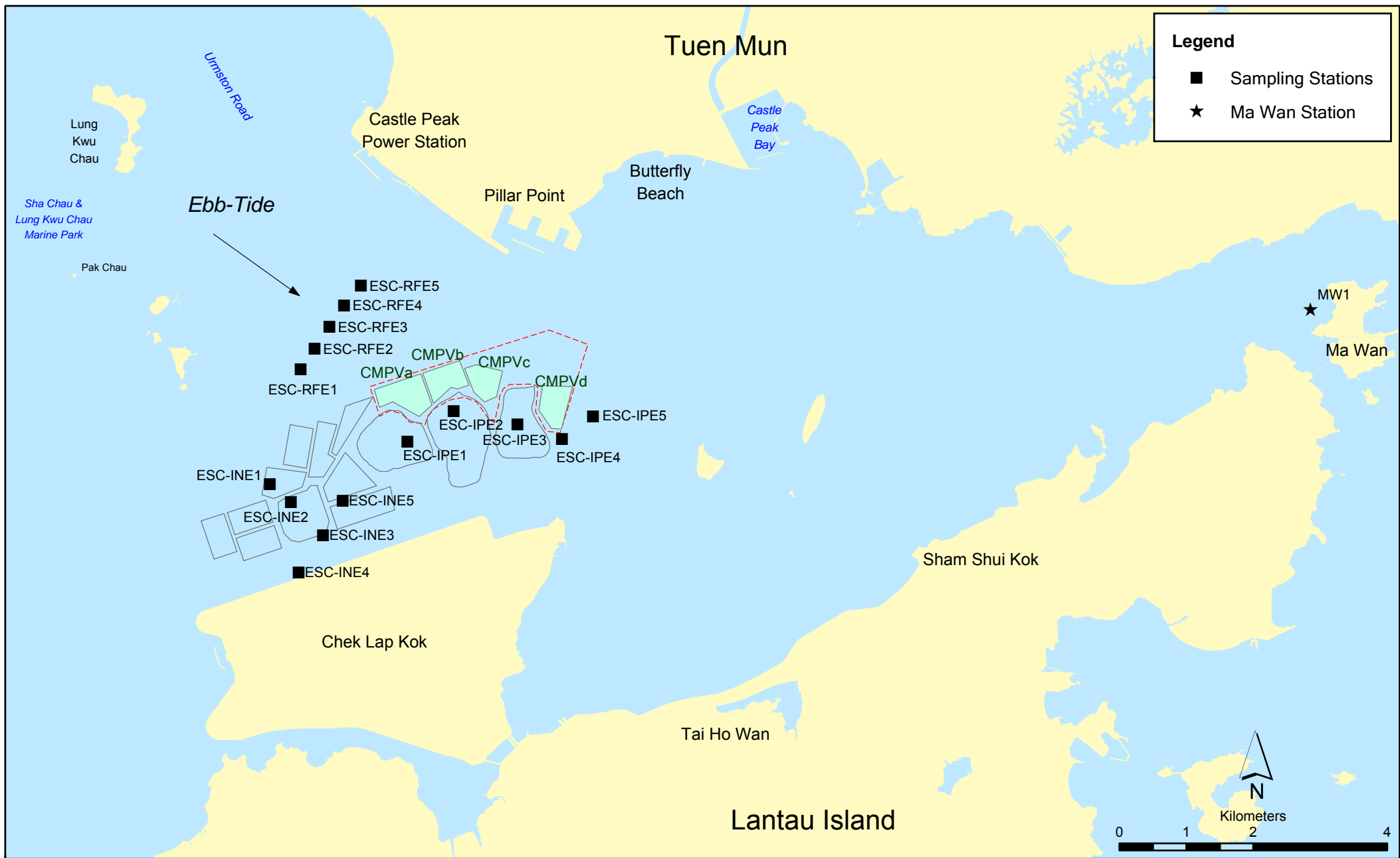


Figure 1.2

Routine & Capping Water Quality Sampling Stations (Ebb-Tide) for CMPV

- 1.6.3 Monitoring locations for *Pit Specific Sediment Chemistry for CMP 1* are shown in *Figure 1.3*. A total of six (6) monitoring stations were sampled in both July and August 2014.
- 1.6.4 The concentrations of all inorganic contaminants were lower than the Lower Chemical Exceedance Level (LCEL) at all stations in July and August 2014 (*Figures 8-9 and 12-13 of Annex B*).
- 1.6.5 For organic contaminants, the concentrations of Total Organic Carbon (TOC) and Tributyltin (TBTs) were observed to be higher at Active Pit stations (*Figures 10-11 and 14-15 of Annex B*). Low Molecular Weight Polycyclic Aromatic Hydrocarbons (Low MW PAHs), High MW PAHs, Total Dichloro-Diphenyl-Trichloroethane (DDT), 4,4'-Dichloro-Diphenyl-Dichloroethylene (4,4'-DDE) and Total Polychlorinated Biphenyls (PCBs) were recorded below the limit of reporting at all stations in both July and August 2014.
- 1.6.6 As higher TOC and TBTs concentrations were recorded within the Active Pit stations only which were receiving contaminated mud during the reporting month, there is no evidence indicating any dispersal of contaminants from the active pit.
- 1.6.7 Overall, there is no evidence indicating any unacceptable environmental impacts to sediment quality as a result of the contaminated mud disposal operations at CMP 1 in July and August 2014.
- 1.6.8 ***Impact Water Quality Monitoring during Dredging Operations of CMP 2 – August 2014***
- 1.6.9 *Impact Water Quality Monitoring during Dredging Operations of CMP 2* was conducted three times per week from 1 to 31 August 2014 during the reporting period. On each survey day, monitoring was conducted during both mid-ebb and mid-flood tides at two Reference (Upstream) stations and five Impact (Downstream) stations of the dredging operations at CMP 2. Monitoring was also conducted at five Sensitive Receiver Stations situated in Ma Wan, Shum Shui Kok, Tai Mo To and Tai Ho Bay. A total of twelve stations were monitored and locations of the sampling stations are shown in *Figure 1.4*. Monitoring at station THB2 during mid-ebb tide of 22 August 2014 and during both mid-flood and mid-ebb tides of 13 August 2014 were cancelled due to adverse weather condition.
- 1.6.10 Monitoring results are presented in *Table C1 of Annex C*. Daily dredging volume in August 2014 is reported in *Annex D*. Levels of DO, Turbidity and SS generally complied with the Action and Limit Levels (see *Table C2 of Annex C* for details) set in the *Baseline Monitoring Report* ⁽¹⁾, except for the following occasion of exceedances discussed in *Table 1.1* below.

(1) ERM (2012) Baseline Monitoring Report. Environmental Monitoring and Audit for Contaminated Mud Pits to the South of the Brothers and at East Sha Chau (2012-2017) – Investigation. Agreement No. CE 23/2012(EP). Submitted to EPD in October 2012.

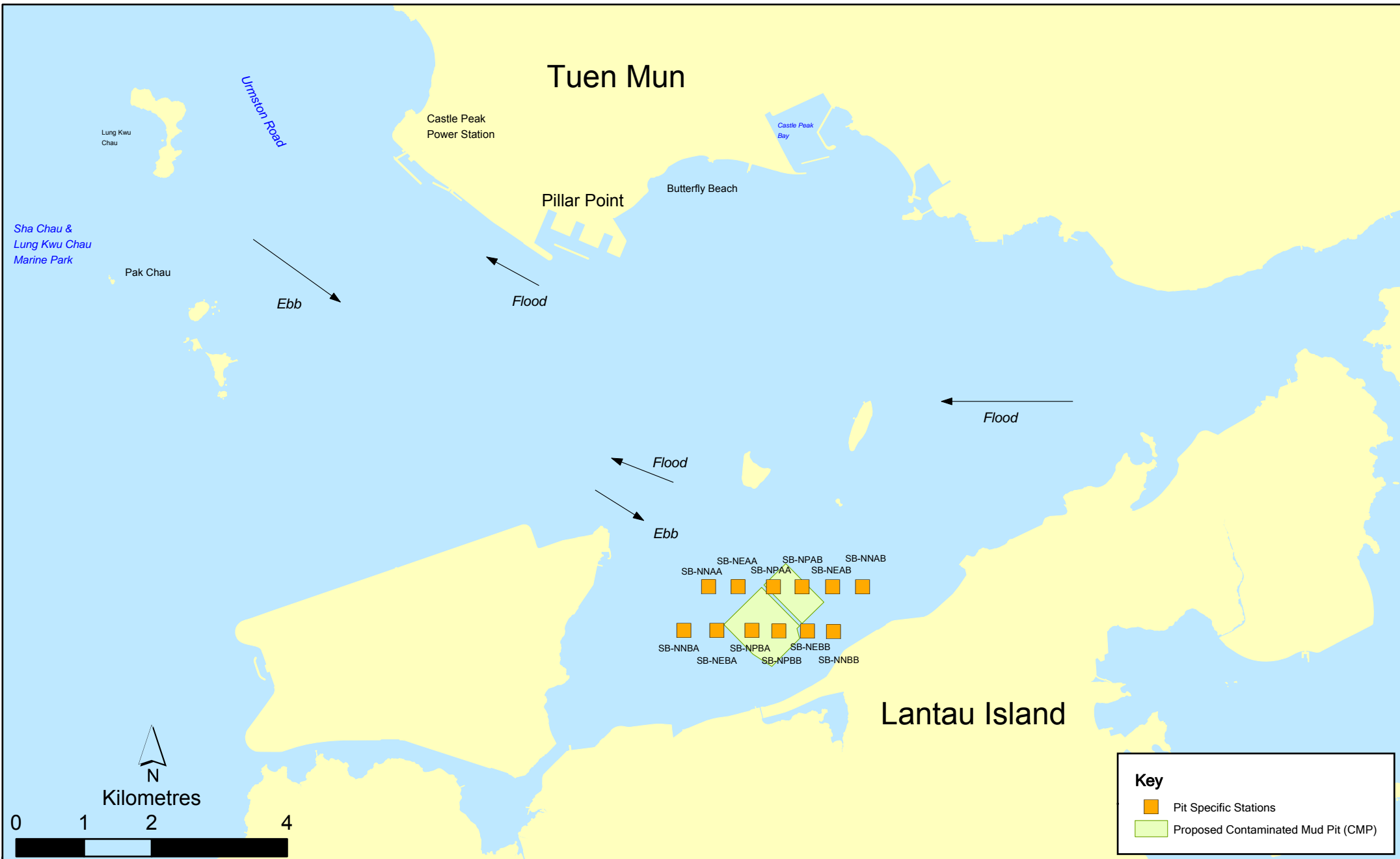


Figure 1.3

Pit Specific Sediment Quality Monitoring Stations for South Brothers Facility

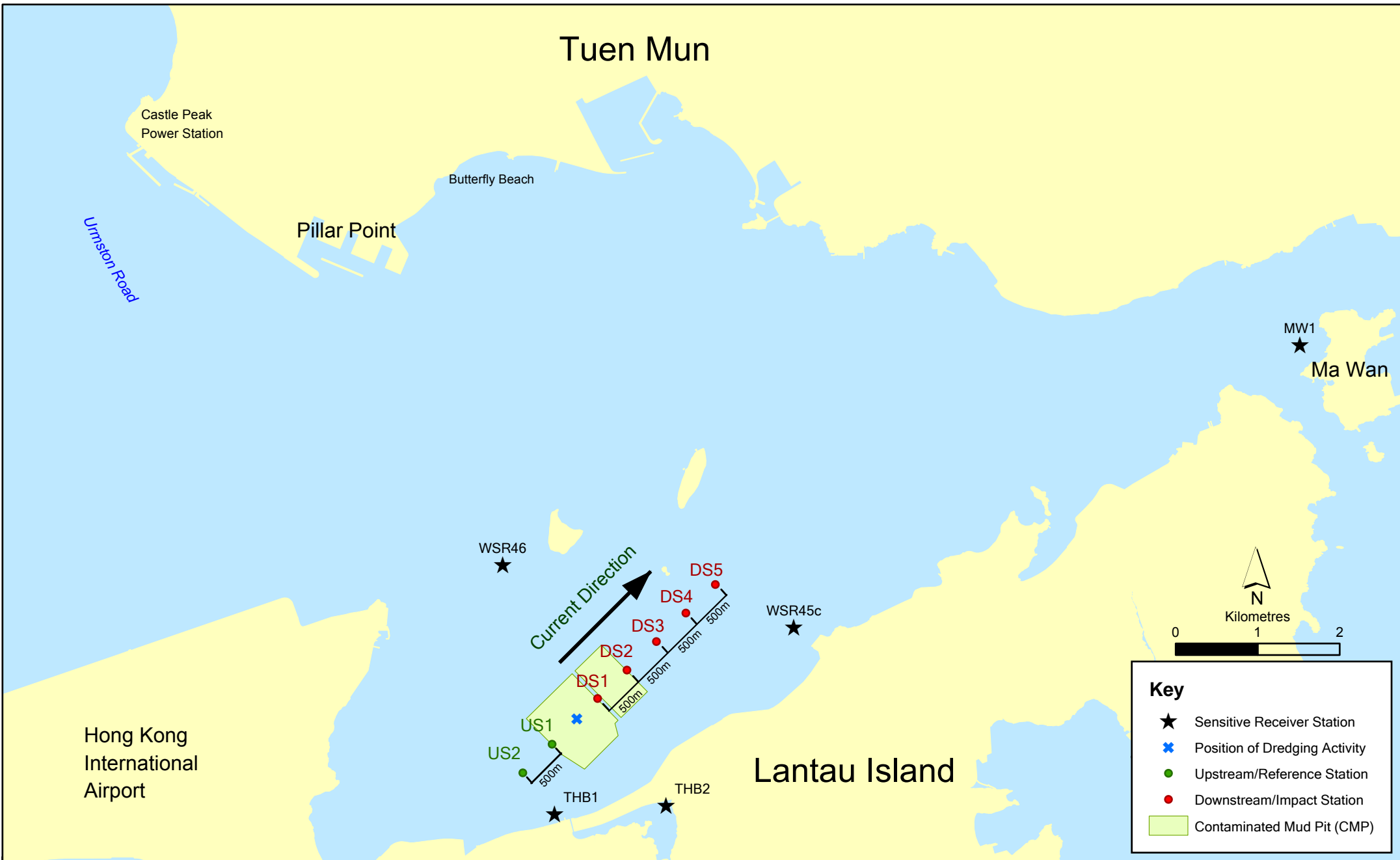


Figure 1.4

Indicative Dredging Impact Sampling Stations for South Brothers Facility

Note: The locations of sampling stations will be determined on site based on current direction and position of dredging activities.

1.6.11 As presented in *Table 1.1*, the results indicated that the dredging operations at CMP 2 did not appear to cause any unacceptable deterioration in water quality during this reporting period. Therefore, no further mitigation measures, except for those recommended in the Environmental Permit (EP-427/2011/A), are considered necessary for the dredging operations.

Table 1.1 Details of Exceedances Recorded at CMP 2 between 1 and 30 August 2014

Date	Tide	Parameter	Station	Type	Remarks
6 August 2014	Mid-Flood	Bottom DO	WSR45C	Action	<p>These exceedances were not considered as indicating any unacceptable impacts from the dredging operations to WSRs outside the works area due to the following reasons:</p> <ul style="list-style-type: none"> Stations DS5, WSR45C and WSR46 are located further away from the works area of CMP 2 when compared to station DS1 at which the levels of DOB did not exceed the Action and Limit Levels during the same tidal period. The lower DO levels recorded at stations DS5, WSR45C and WSR46 during this reporting period were possibly caused by the presence of thermocline within the water column, as indicated by the relatively larger drop in water temperature from the surface to the bottom water depths (see <i>Annex E</i> for the raw data). The thermocline would prevent mixing of surface layer water of higher DO with water underneath (ie at mid and bottom depths) and thus reducing DO levels at mid and bottom depths.
8 August 2014	Mid-Flood	Bottom DO	WSR45C	Action	
18 August 2014	Mid-Ebb	Bottom DO	WSR45C	Action	
18 August 2014	Mid-Flood	Bottom DO	WSR45C	Action	
20 August 2014	Mid-Ebb	Bottom DO	DS5	Action	
20 August 2014	Mid-Ebb	Bottom DO	WSR45C	Action	
20 August 2014	Mid-Ebb	Bottom DO	WSR46	Action	
20 August 2014	Mid-Flood	Bottom DO	WSR45C	Action	
22 August 2014	Mid-Ebb	Bottom DO	DS5	Action	
22 August 2014	Mid-Ebb	Bottom DO	WSR45C	Action	
22 August 2014	Mid-Flood	Bottom DO	WSR45C	Action	
11 August 2014	Mid-Ebb	Surf and Mid DO	DS4	Action	<p>These exceedances were not considered as indicating any unacceptable impacts from the dredging operations to WSRs outside the works area due to the following reason:</p> <ul style="list-style-type: none"> Stations DS3, DS4, DS5, WSR45C and WSR46 are located further away from the works area of CMP 2 when compared to station DS1 at which the levels of surface and mid-depth DO, Turbidity and SS did not exceed the Action and Limit Levels during the same tidal period.
11 August 2014	Mid-Ebb	Surf and Mid DO	DS5	Action	
11 August 2014	Mid-Ebb	Surf and Mid DO	WSR45C	Action	
11 August 2014	Mid-Flood	Turbidity	DS3	Action	
11 August 2014	Mid-Flood	Turbidity	DS5	Action	
13 August 2014	Mid-Ebb	Surf and Mid DO	DS3	Action	
13 August 2014	Mid-Ebb	Surf and Mid DO	DS4	Action	
13 August 2014	Mid-Ebb	Surf and Mid DO	DS5	Action	
13 August 2014	Mid-Ebb	Surf and Mid DO	WSR45C	Action	
13 August 2014	Mid-Ebb	Surf and Mid DO	WSR46	Action	
13 August 2014	Mid-Flood	SS	WSR45C	Action	
20 August 2014	Mid-Flood	Surf and Mid DO	WSR45C	Action	
28 August 2014	Mid-Ebb	SS	DS5	Action	

1.6.12 *Routine Water Quality Monitoring of SB CMP 1 – August 2014*

1.6.13 The water quality monitoring results have been assessed for compliance with the WQOs as discussed in *Section 1.5.3*. Levels of DO, Turbidity and SS were also assessed for compliance with the Action and Limit Levels (see *Table C2 of Annex C* for details). The monitoring results are shown in *Figures 16-25 of Annex B* and *Tables C4-C5 of Annex C*. Locations of monitoring stations are presented in *Figure 1.5*.

In-situ Measurements

1.6.14 Analyses of results for August 2014 indicated that the levels of pH complied with the WQOs at all stations (Impact, Intermediate, Reference and Water Sensitive Receiver stations) in August 2014 (*Figure 16 of Annex B*). Levels of DO were greater than WQO requirements of 4 mg/L at most stations except at Reference stations and Ma Wan station (*Figure 17 of Annex B*). As Reference stations and Ma Wan station are located further away from the works area of CMP 1, it is considered that the lower DO at Reference stations and Ma Wan station were possibly caused by natural background variation in water quality of the area. The levels of Salinity exceeded WQO at most stations except at Ma Wan and Shum Shui Kok stations (*Figure 19 of Annex B*). The lower salinities recorded at Impact, Intermediate, Tai Mo To and Tai Ho Bay stations are likely to be caused by the close proximity to the nearby streams, which release a large amount of freshwater runoff in the area during flooding, when compared to the Reference stations.

1.6.15 The levels of DO and Turbidity complied with the Action and Limit Levels at all Impact, Shum Shui Kok and Tai Mo To stations (*Figures 17 and 20 of Annex B; Table C4 of Annex C*).

Laboratory Measurements

1.6.16 Laboratory analysis of August 2014 results indicated that concentrations of Mercury and Silver were below their limit of reporting at all stations. Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc were detected in samples from most stations (*Figures 21-22 of Annex B*). Concentrations of Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc appeared to be higher at Shum Shui Kok station, but no clear spatial trend was observed. Detailed statistical analysis will be presented in the Quarterly Report to observe any spatial and temporal trends.

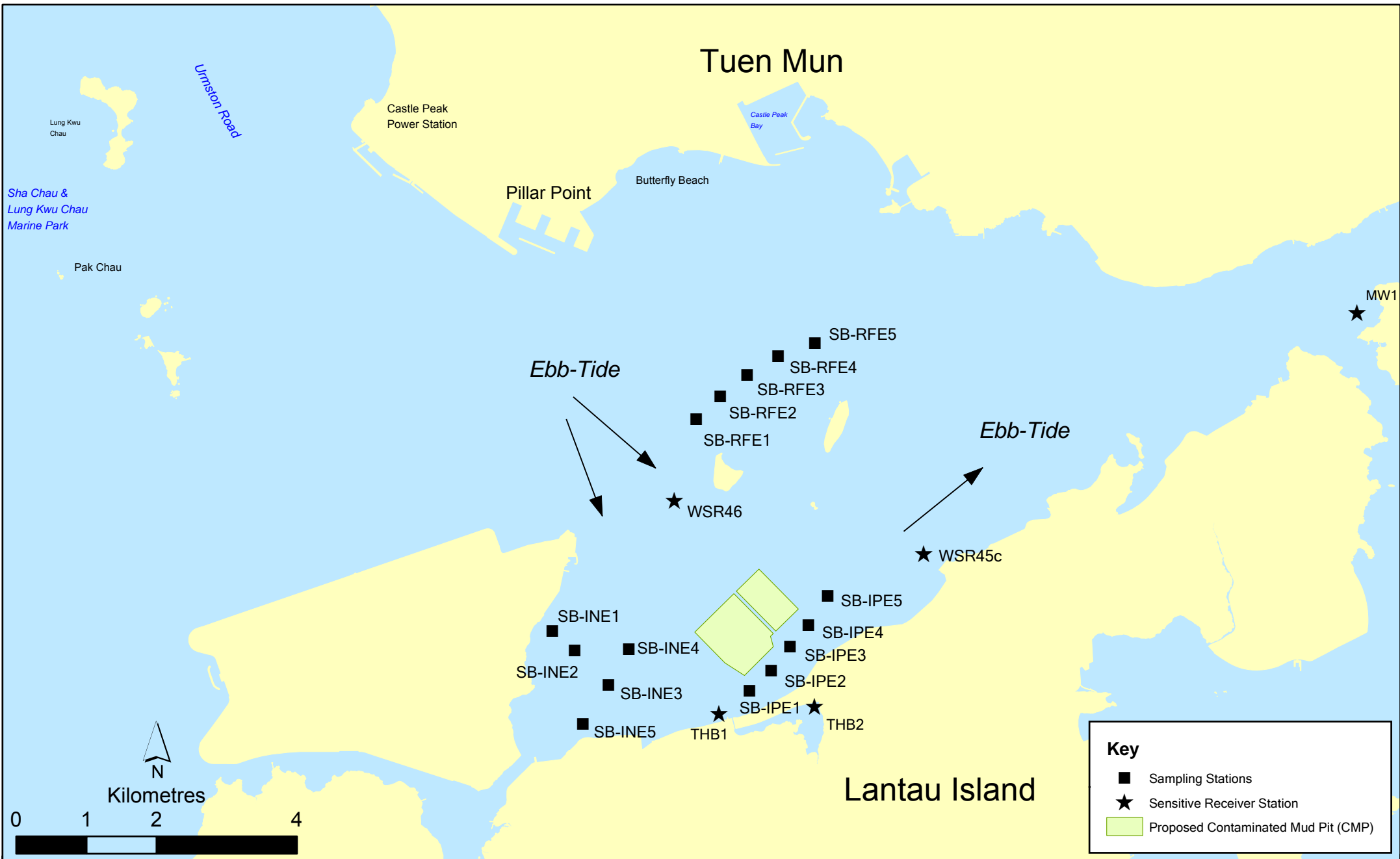


Figure 1.5

Routine Water Quality Sampling Stations (Ebb-Tide) for South Brothers Facility

- 1.6.17 For nutrients, concentrations of Total Inorganic Nitrogen (TIN) at all stations exceeded the WQO (0.5mg/L) (*Figure 23 of Annex B*). It is important to note that due to the effect of the Pearl River, the North Western WCZ has historically experienced higher levels of TIN ⁽¹⁾. Therefore, the exceedances of TIN WQO at all stations are unlikely to be caused by the disposal operation at CMP 1. Ammonia Nitrogen (NH₃-N) concentration was relatively similar amongst all stations (*Figure 23 of Annex B*). Level of 5-day Biochemical Oxygen Demand (BOD₅) was similar amongst stations (*Figure 24 of Annex B*).
- 1.6.18 Concentrations of SS exceeded the WQO (12.00 mg/L for wet season) at Reference and Tai Mo To stations. However, SS at all stations complied with the Action and Limit Levels during the reporting period (*Figure 25 of Annex B; Table C5 of Annex C*).
- 1.6.19 Overall, results of the *Routine Water Quality Monitoring* indicated that the disposal operation at CMP 1 did not appear to cause any unacceptable deterioration in water quality in August 2014.
- 1.6.20 ***Water Column Profiling of CMP 1 – August 2014***
- 1.6.21 *Water Column Profiling* was undertaken at a total of two sampling stations (Upstream and Downstream stations) on 14 August 2014. The water quality monitoring results have been assessed for compliance with the WQOs as discussed in *Section 1.5.3*. The monitoring results were also compared with the Action and Limit Levels set in *Baseline Monitoring Report* (see *Table C2 of Annex C* for details).
- In-situ Measurements*
- 1.6.22 Analyses of results for August 2014 indicated that levels of Salinity and pH complied with the WQOs at both Downstream and Upstream stations (*Table C6 of Annex C*). Levels of DO exceeded the WQO at Upstream stations and it is considered that the lower DO was possibly caused by natural background variation in water quality of the area. DO and Turbidity at Downstream stations complied with the Action and Limit Levels.
- Laboratory Measurements for SS*
- 1.6.23 Analyses of results for August 2014 indicated that the SS levels at Downstream and Upstream stations exceeded the WQO but all complied with the Action and Limit Levels (*Table C6 of Annex C*).
- 1.6.24 Overall, the monitoring results indicated that the mud disposal operation at CMP 1 did not appear to cause any deterioration in water quality during this reporting period.

(1) http://www.epd.gov.hk/epd/misc/marine_quality/1986-2005/textonly/eng/index.htm

1.7 **ACTIVITIES SCHEDULED FOR THE NEXT MONTH**

1.7.1 The following monitoring activities will be conducted in the next monthly period of September 2014 for SB CMPs:

- *Impact Water Quality Monitoring during Dredging Operations of CMP 2;*
- *Pit Specific Sediment Chemistry of CMP 1; and*
- *Water Column Profiling of CMP 1.*

1.7.2 The sampling schedule is presented in *Annex A*.

1.8 **STUDY PROGRAMME**

1.8.1 A summary of the Study programme is presented in *Annex F*.

Annex A

Sampling Schedule

Annex A1 - Environmental Monitoring and Audit Sampling Schedule for East of Sha Chau (September 2012 - February 2017)

		2012				2013					2014					2015					2016					2017																	
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F
Routine Water Quality Monitoring																																											
<i>Ebb Tide</i>																																											
Impact Station	ESC-IPE1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPE2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPE3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPE4	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPE5	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Intermediate Station	ESC-INE1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INE2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INE3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INE4	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INE5	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Reference Station	ESC-RFE1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFE2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFE3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFE4	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFE5	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Ma Wan Station	MW1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
<i>Flood Tide</i>																																											
Impact Station	ESC-IPF1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPF2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-IPF3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Intermediate Station	ESC-INF1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INF2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-INF3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Reference Station	ESC-RFF1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFF2	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
	ESC-RFF3	*	*			*	*			*	*																			*	*			*	*			*	*			*	*
Ma Wan Station	MW1	*	*			*	*			*	*																			*	*			*	*			*	*			*	*

Annex B

Graphical Presentations

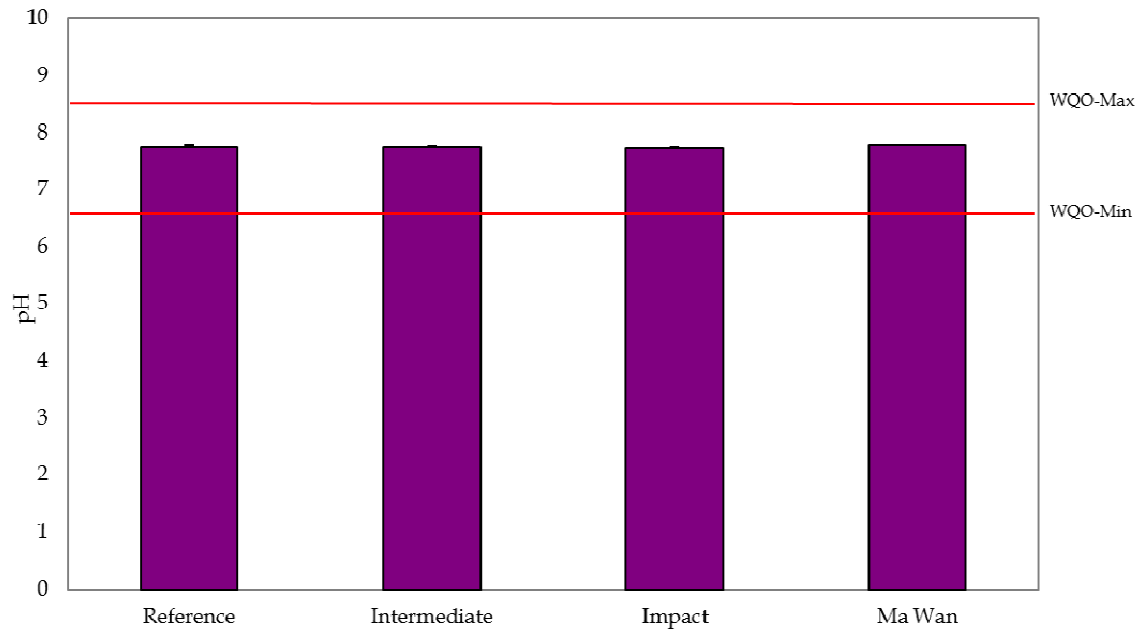


Figure 1: Levels of pH recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

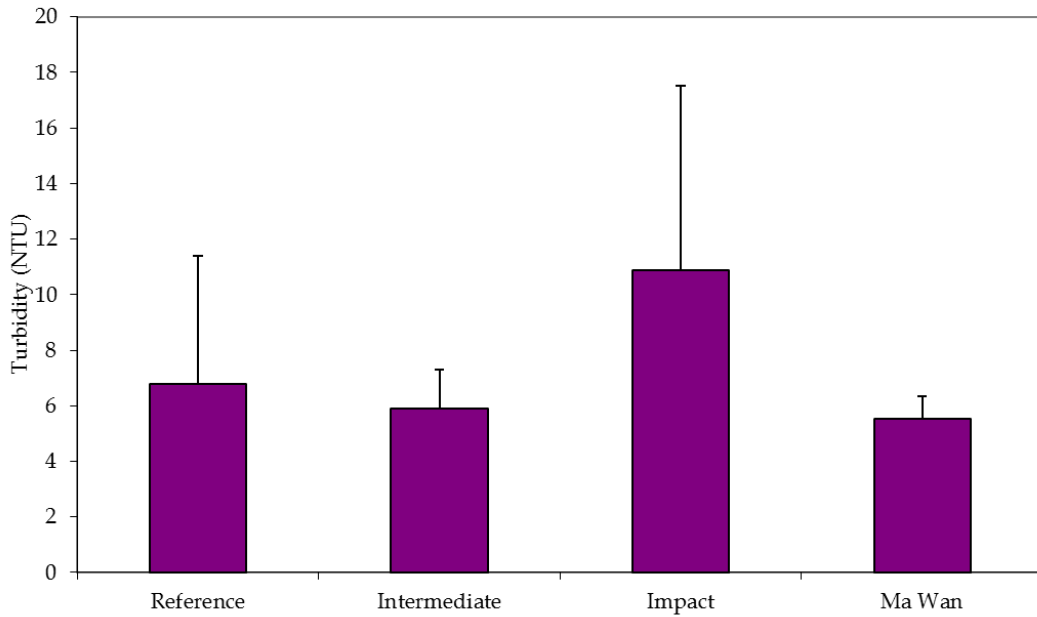


Figure 2: Levels of Turbidity recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

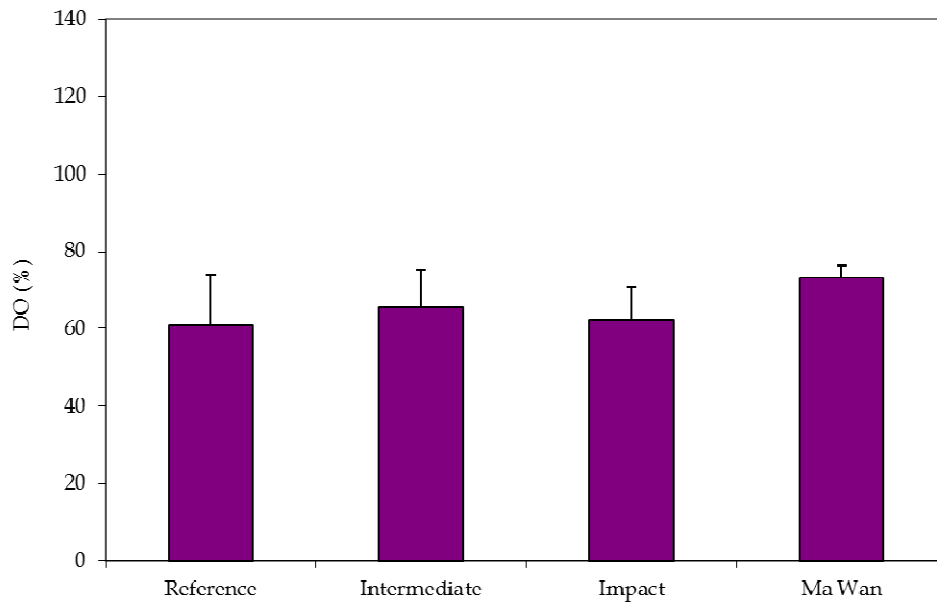


Figure 3: Level of Dissolved Oxygen (% saturation) recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

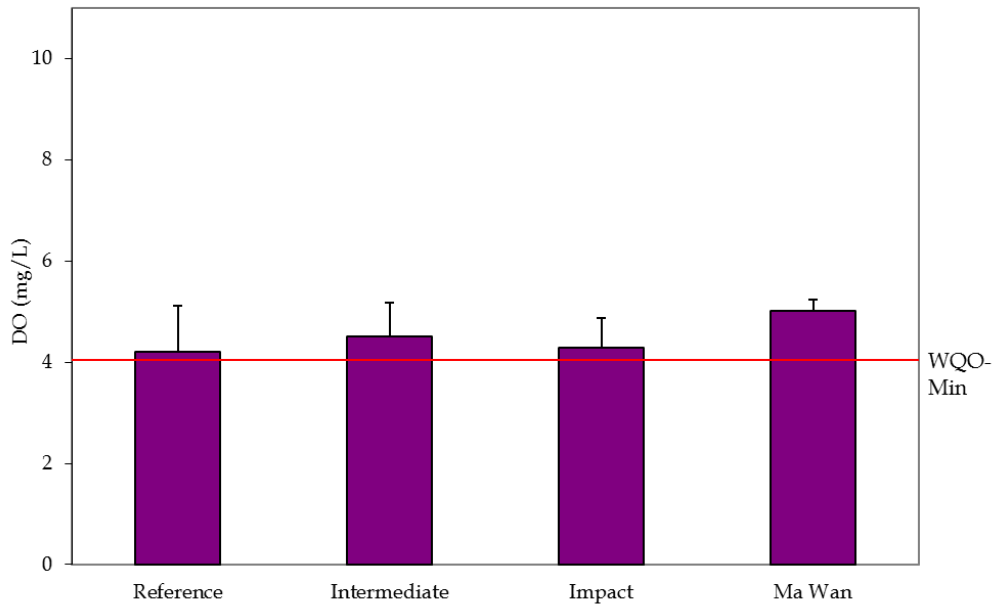


Figure 4: Concentration of Dissolved Oxygen (mg/L) recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

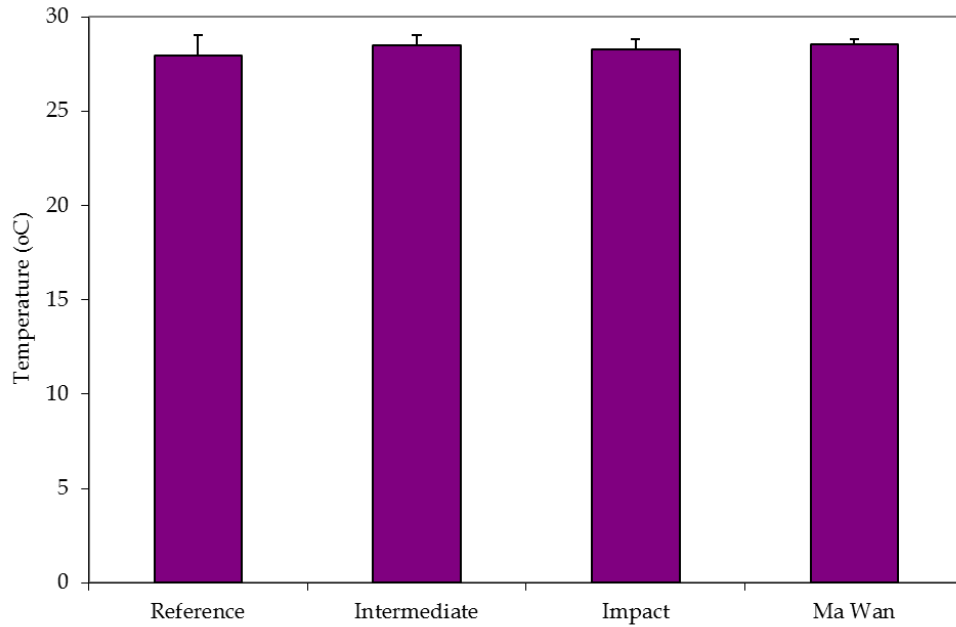


Figure 5: Levels of Temperature recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

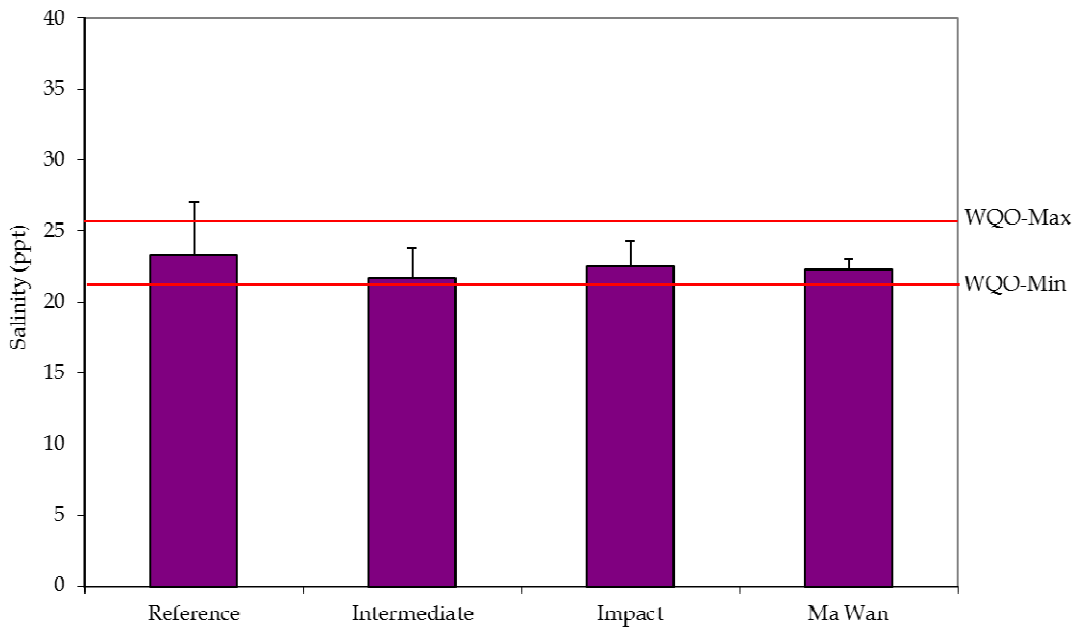


Figure 6: Levels of Salinity recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

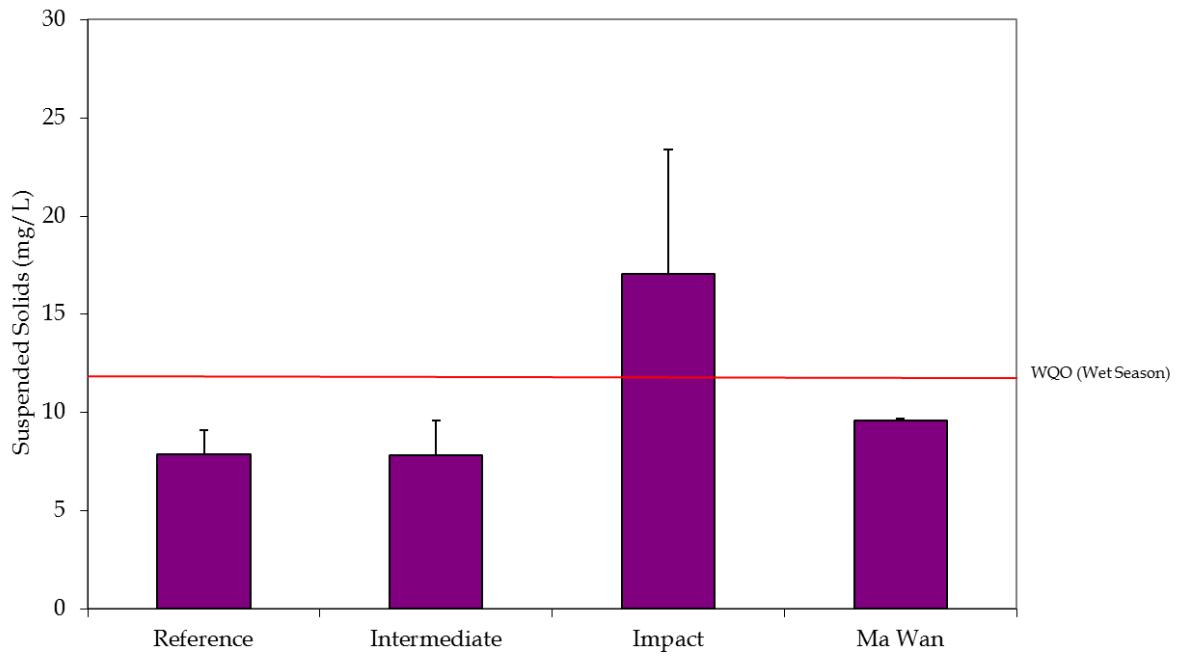


Figure 7: Concentrations of Suspended Solids recorded from Water Quality Monitoring during Capping of ESC CMPs in August 2014.

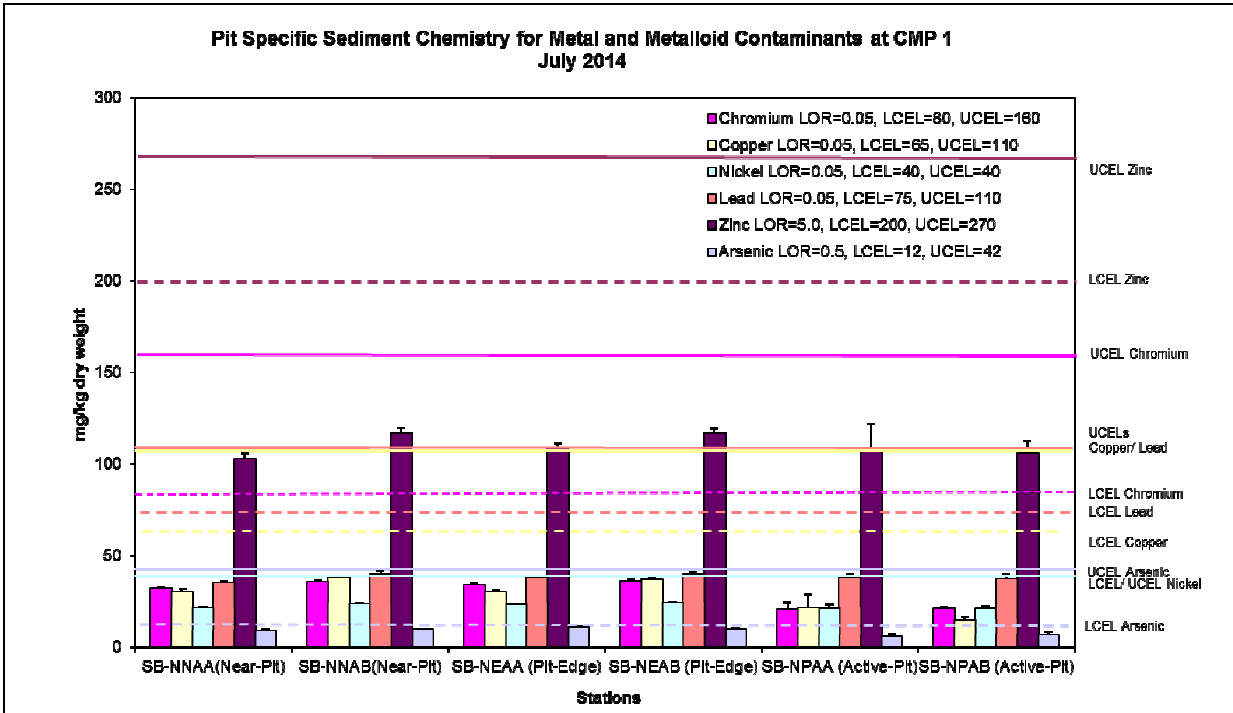


Figure 8: Concentration of Metals (Cr, Cu, Ni, Pb, Zn, As; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in July 2014.

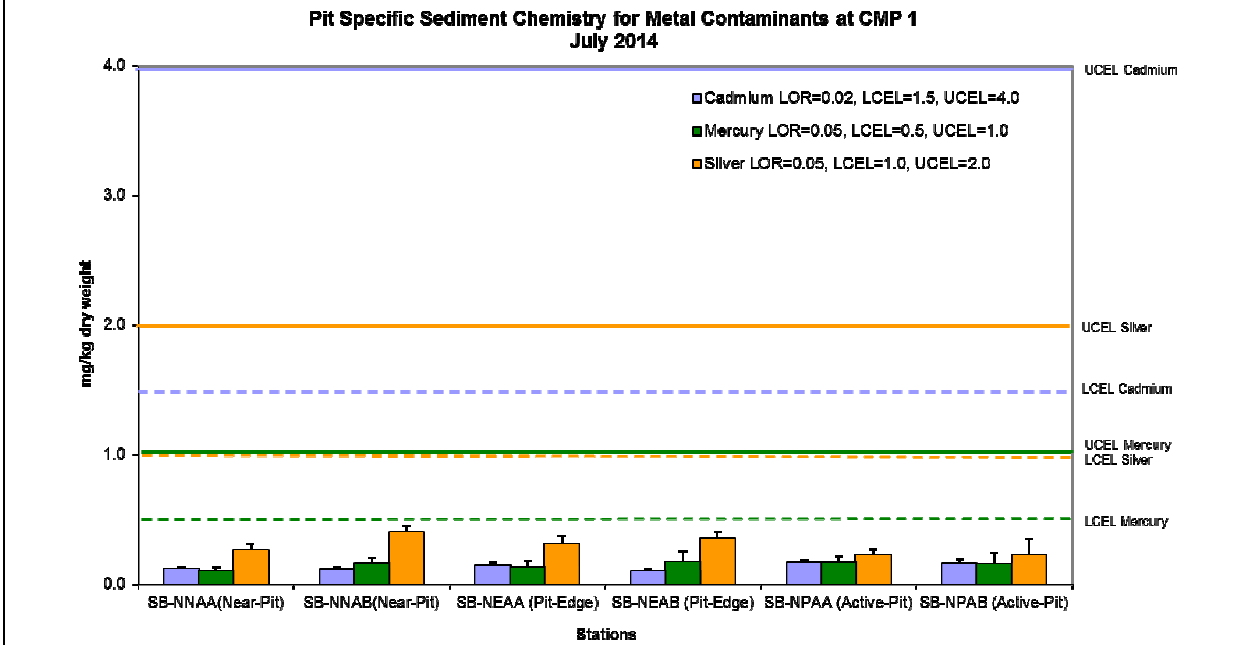


Figure 9: Concentration of Metals (Cd, Hg, Ag; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in July 2014.

**Pit Specific Sediment Chemistry for Total Organic Carbon (TOC) at CMP 1
July 2014**

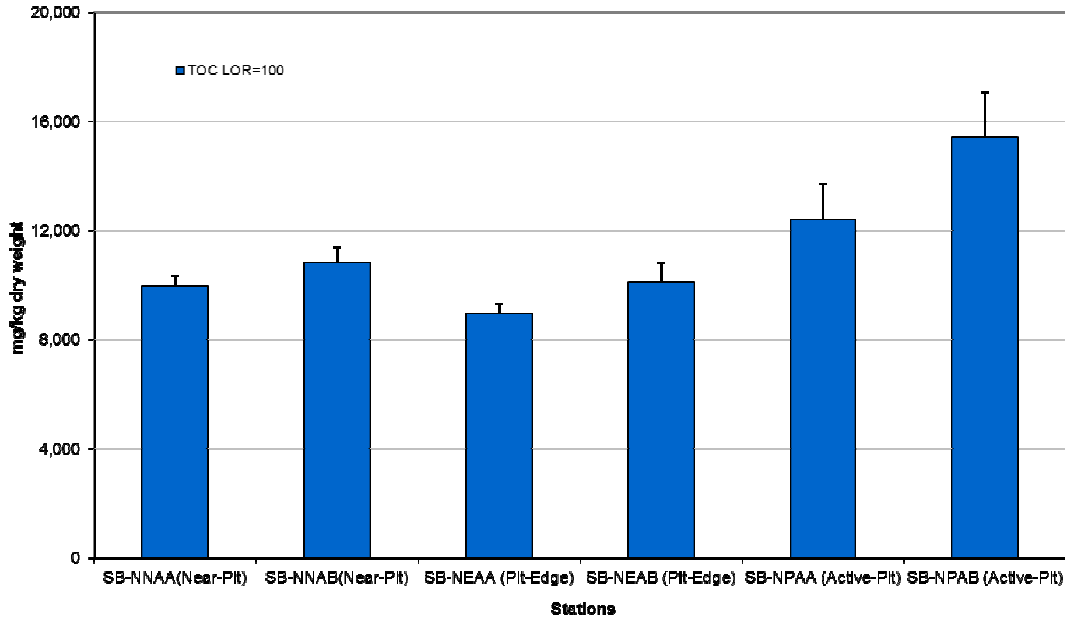


Figure 10: Concentration of Total Organic Carbon (mg/kg dry weight; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in July 2014.

**Pit Specific Sediment Chemistry for Tributyltin (TBT) at CMP 1
July 2014**

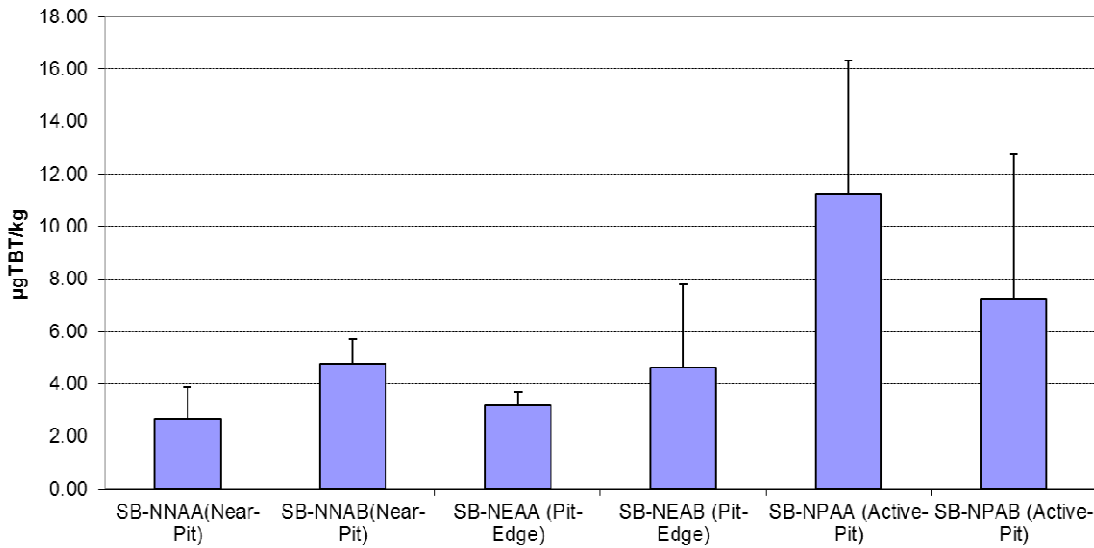


Figure 11: Concentration of Tributyltin (µg TBT/kg; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* of CMP 1 in July 2014.

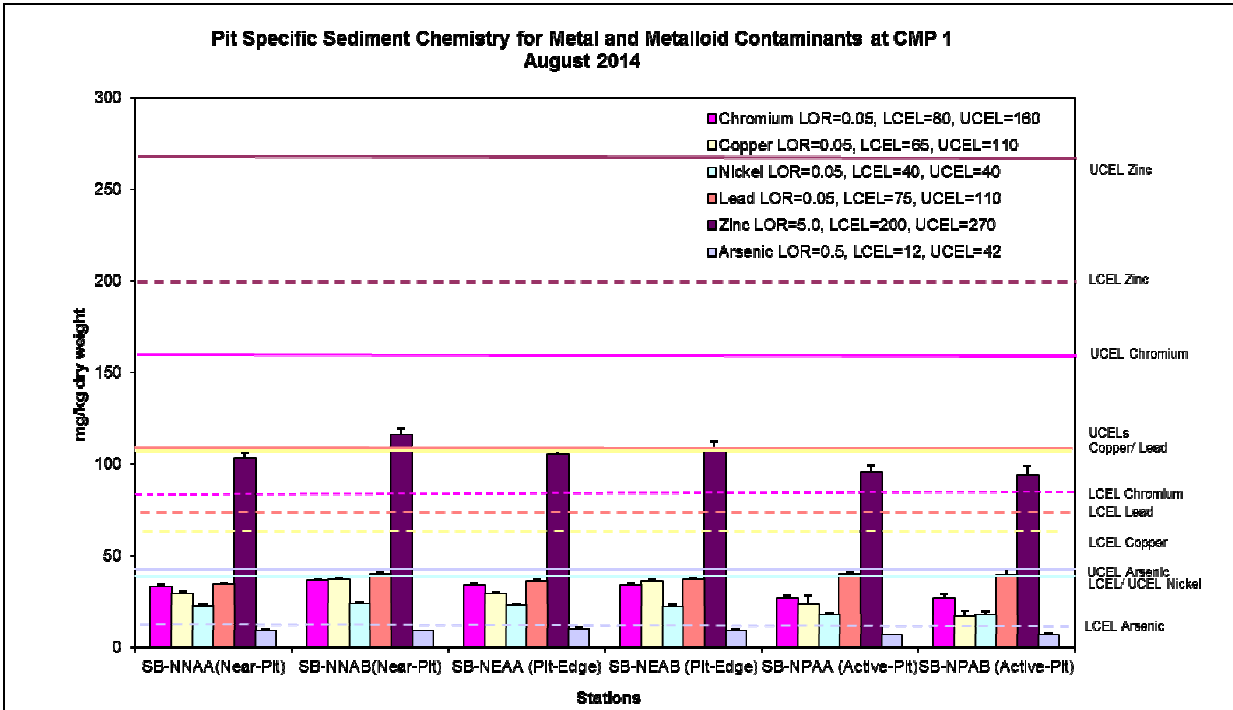


Figure 12: Concentration of Metals (Cr, Cu, Ni, Pb, Zn, As; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in August 2014.

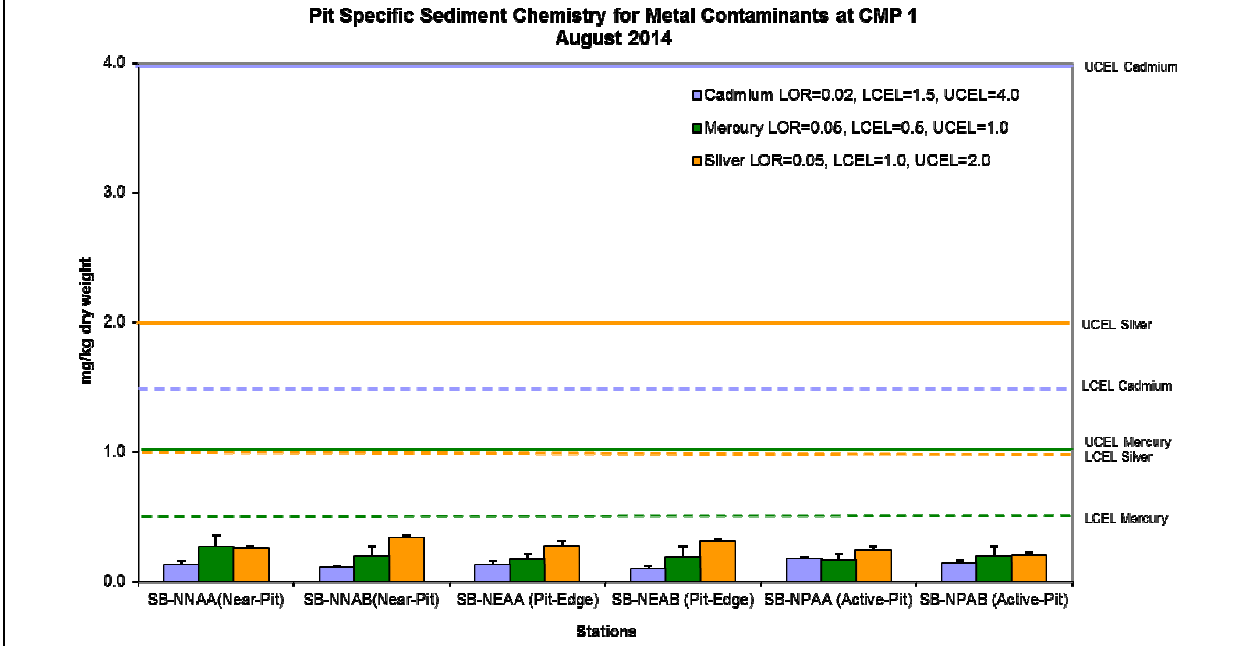


Figure 13: Concentration of Metals (Cd, Hg, Ag; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in August 2014.



**Pit Specific Sediment Chemistry for Total Organic Carbon (TOC) at CMP 1
August 2014**

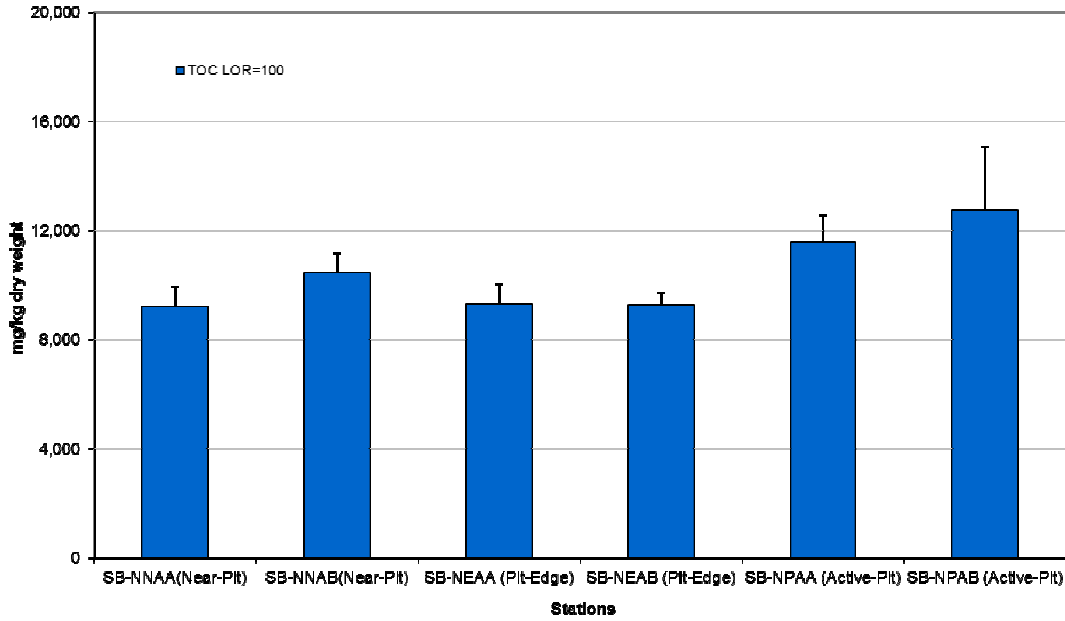


Figure 14: Concentration of Total Organic Carbon (mg/kg dry weight; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* for CMP 1 in August 2014.

**Pit Specific Sediment Chemistry for Tributyltin (TBT) at CMP 1
August 2014**

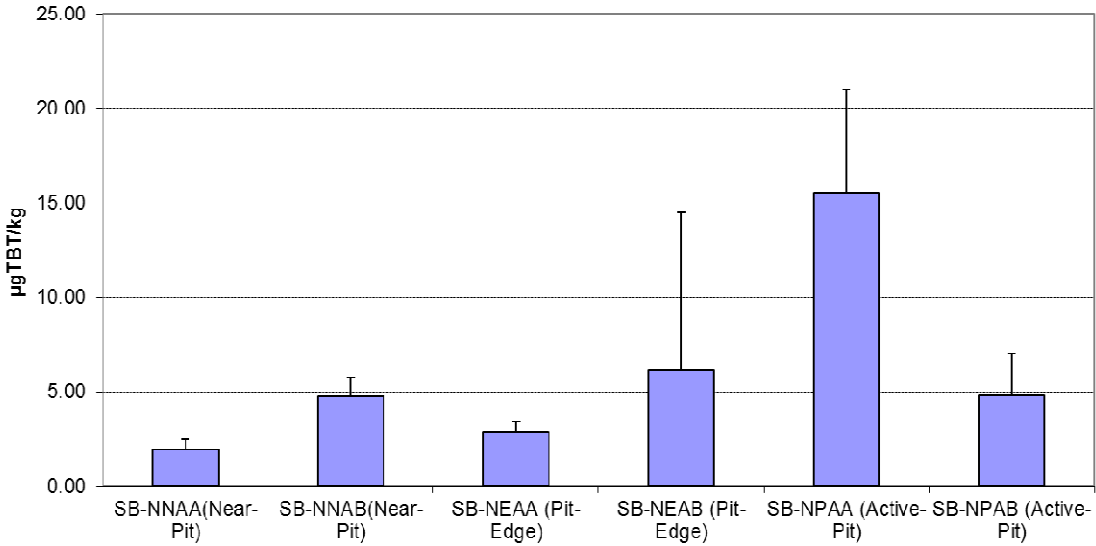


Figure 15: Concentration of Tributyltin (µg TBT/kg; mean +SD) in sediment samples collected from *Pit Specific Sediment Chemistry Monitoring* of CMP 1 in August 2014.

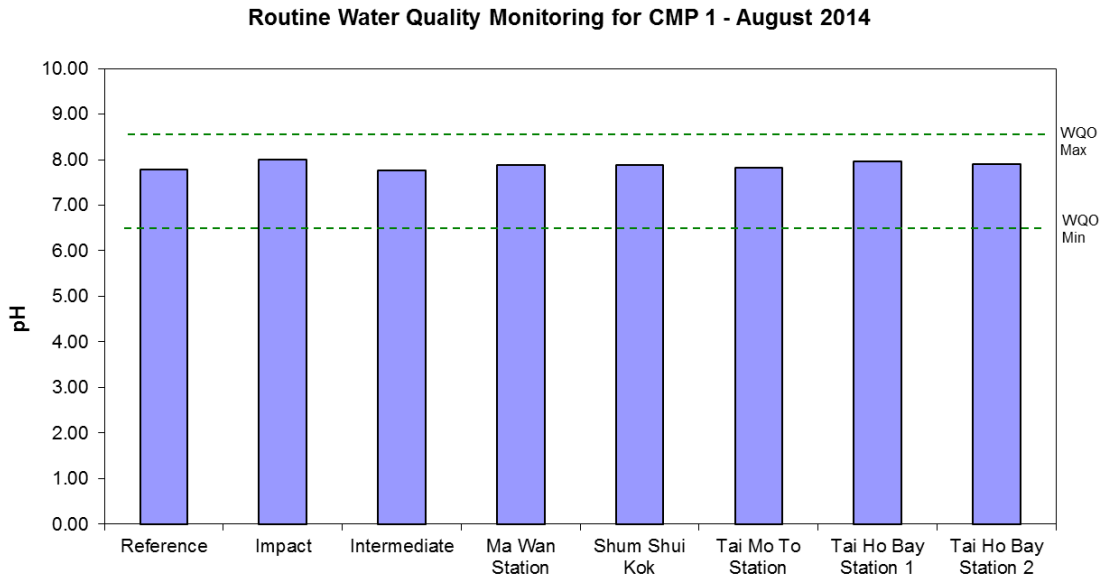


Figure 16: Level of pH recorded during Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

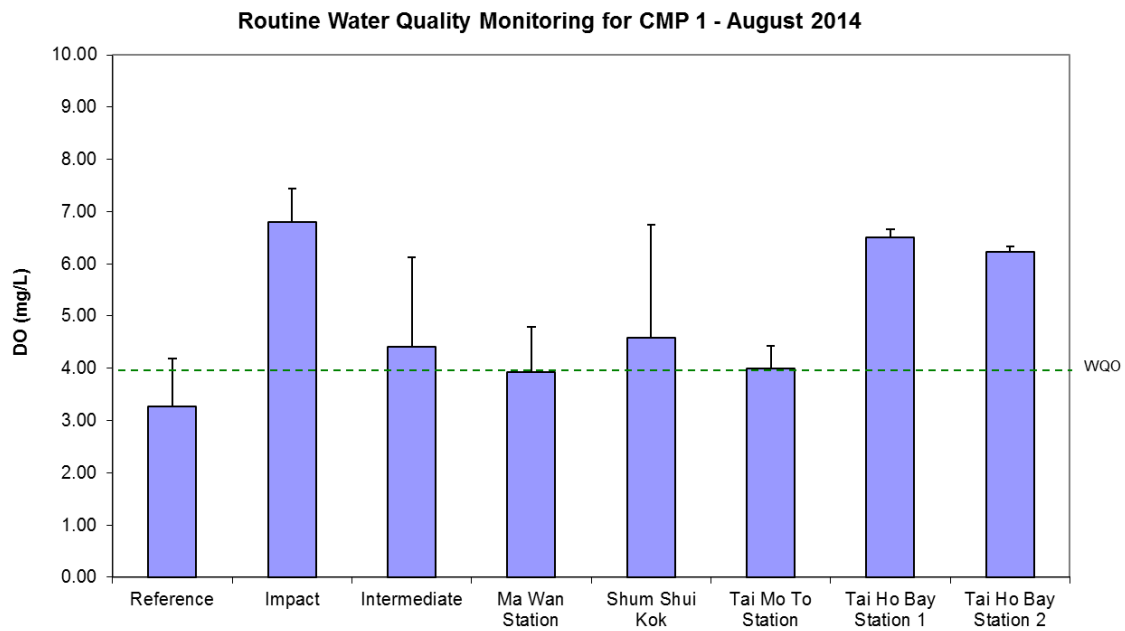


Figure 17: Concentration of Dissolved Oxygen (mg/L; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

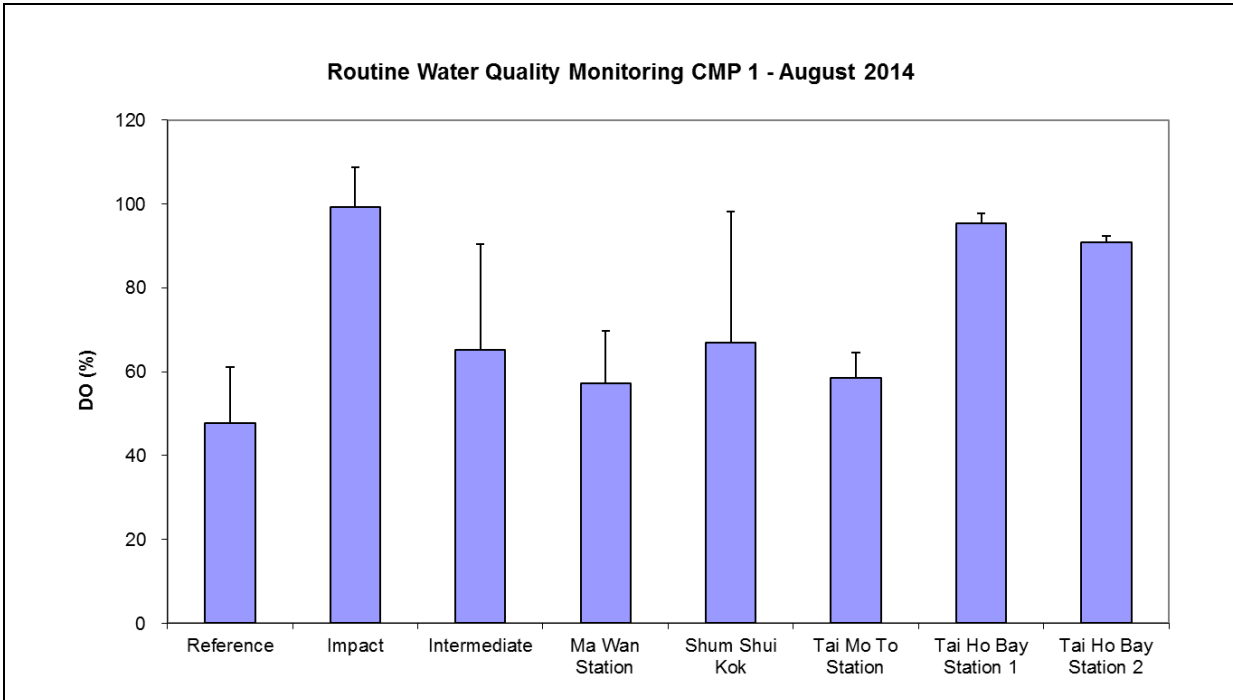


Figure 18: Level of Dissolved Oxygen (% saturation; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

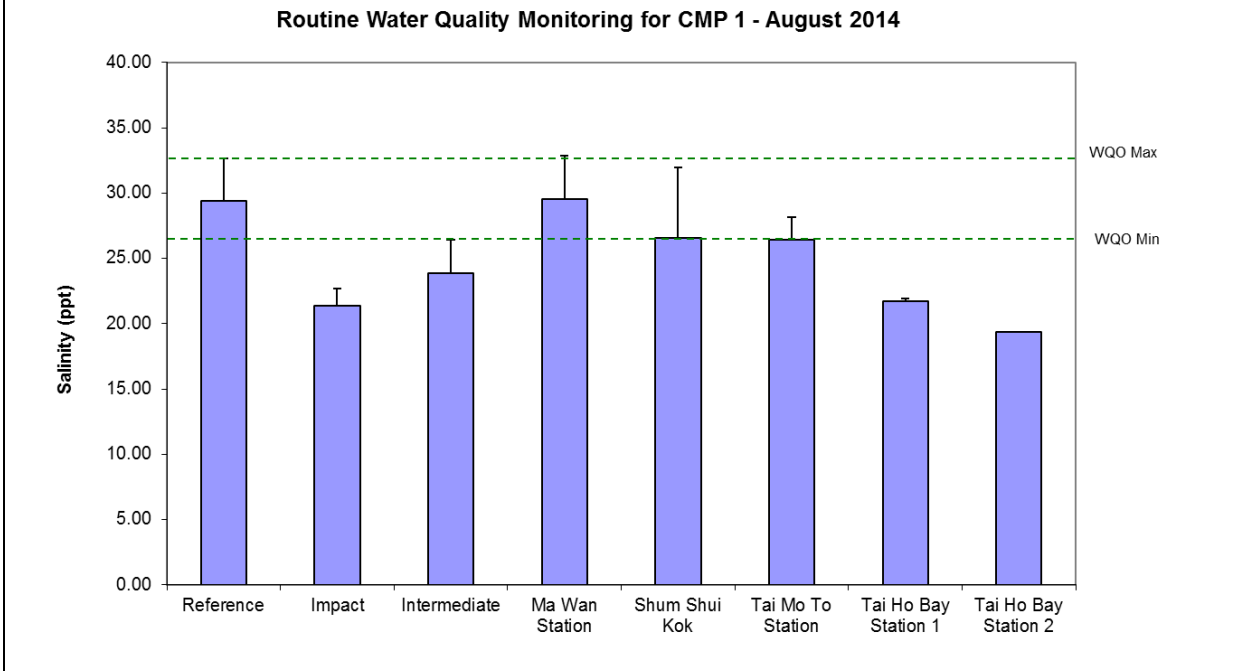


Figure 19: Level of Salinity (ppt; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

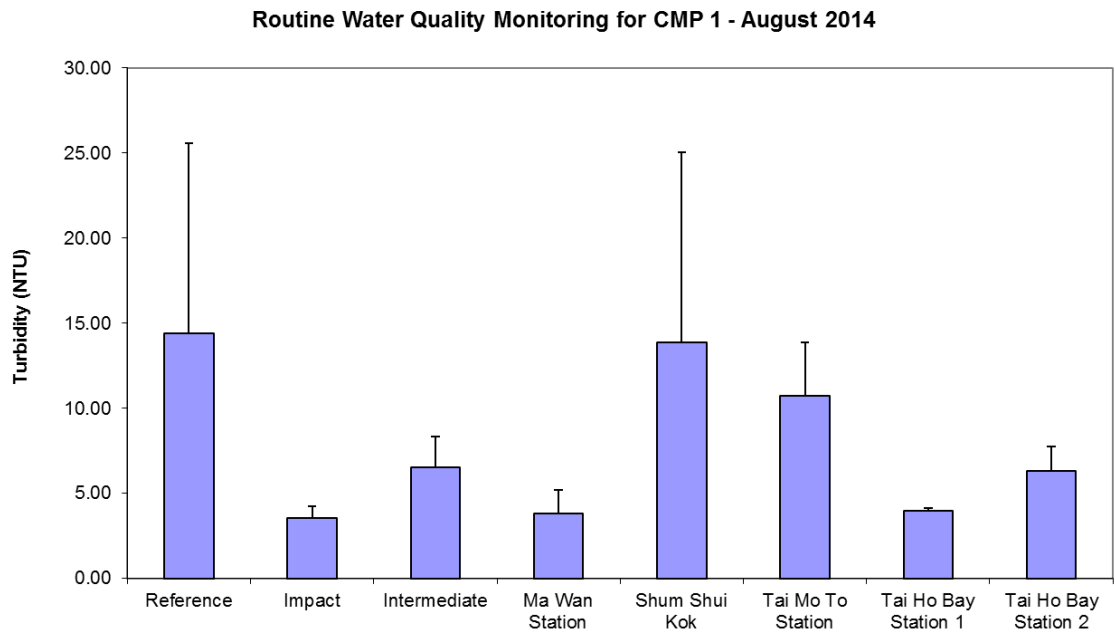


Figure 20: Level of Turbidity (NTU; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

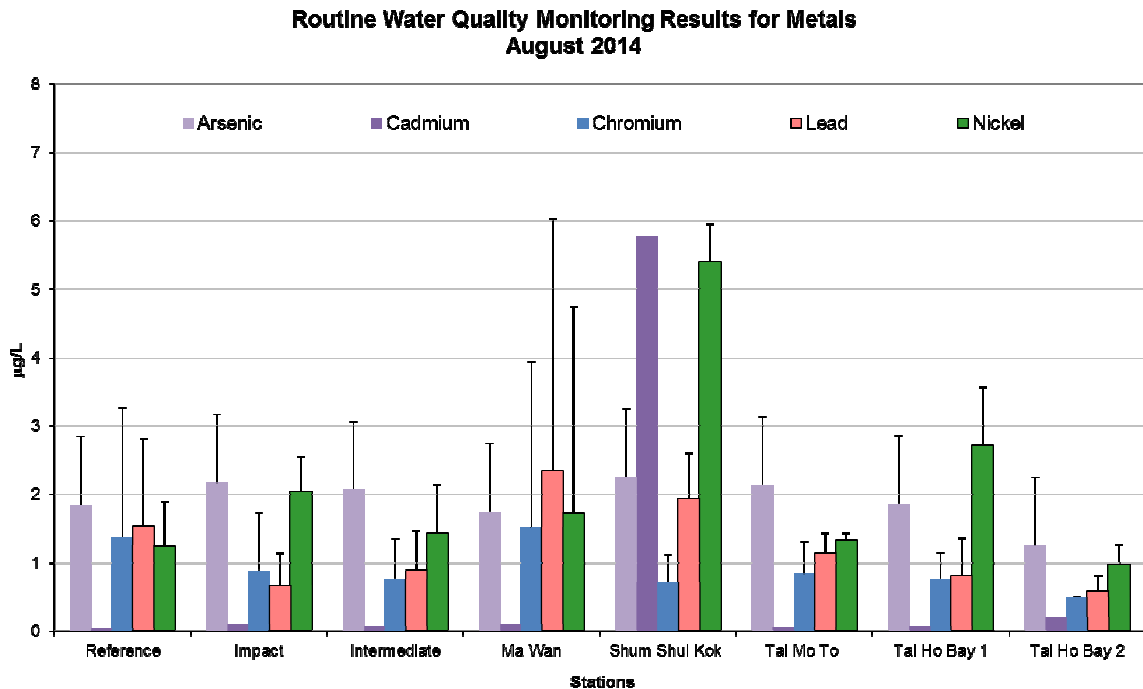


Figure 21: Concentration of Arsenic, Chromium, Lead, Nickel (mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

Source: H:\Team\EM\GMS Projects\0175086 CEDD EM&A for South Brothers\02 Deliverable\07 CMP Monthly Report\24th (August 2014)

Date: 15/9/2014

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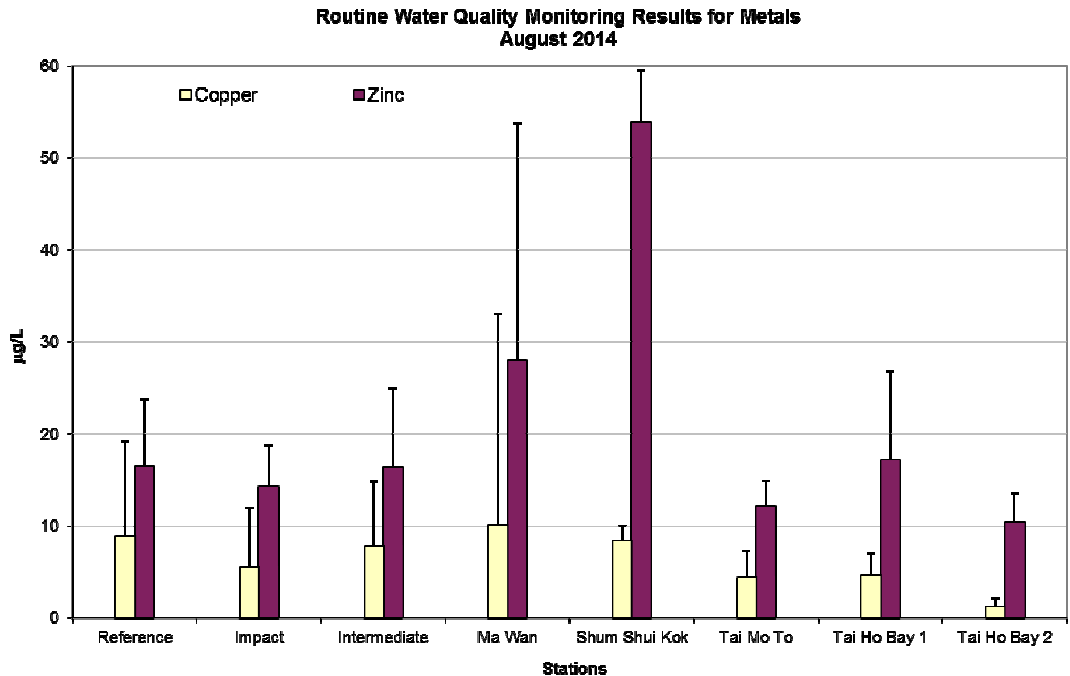


Figure 22: Concentration of Copper and Zinc (mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

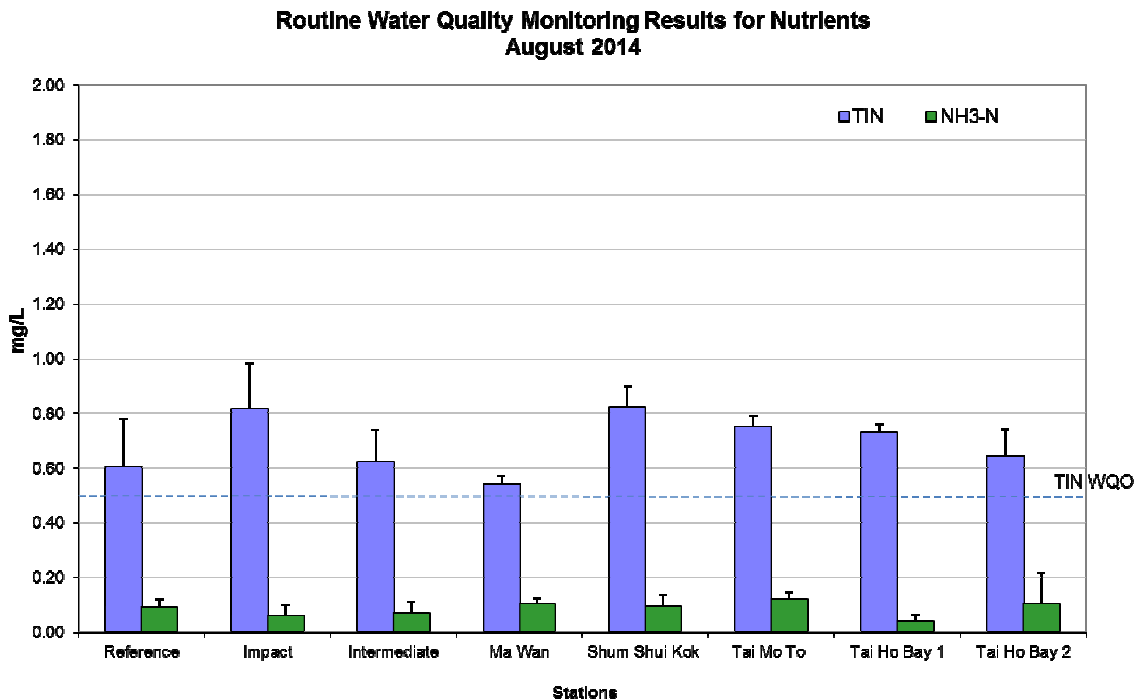


Figure 23: Concentration of Total Inorganic Nitrogen and NH₃-N (mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

Source: H:\Team\EM\GMS Projects\0175086 CEDD EM&A for South Brothers\02 Deliverable\07 CMP Monthly Report\24th (August 2014)

Date: 15/9/2014

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**Routine Water Quality Monitoring Results for Biochemical Oxygen Demand (BOD₅)
August 2014**

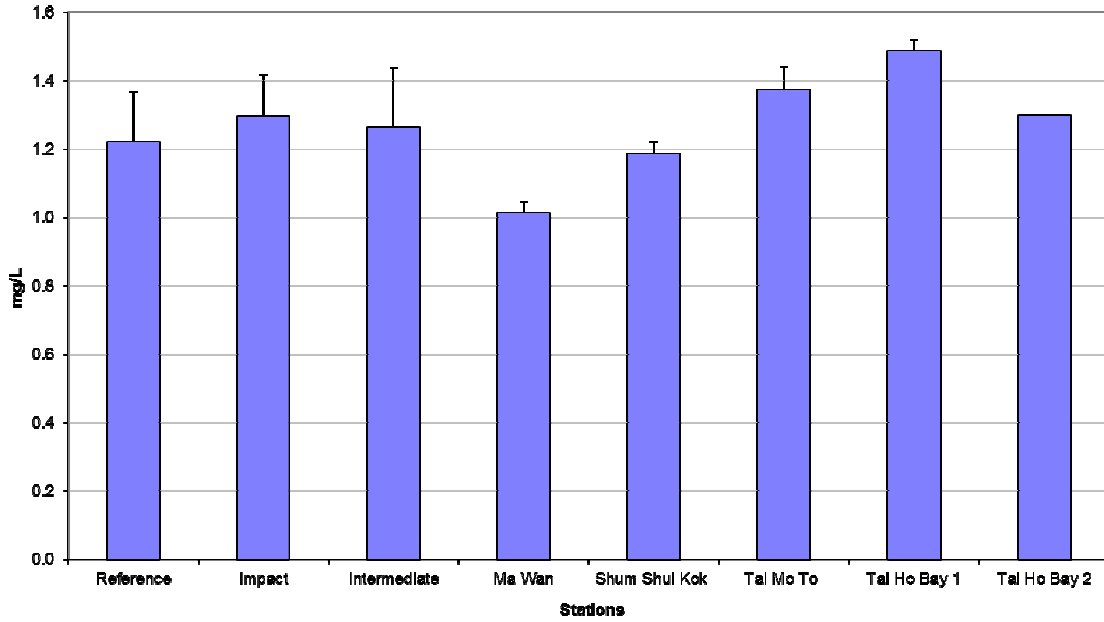


Figure 24: Level of Biochemical Oxygen Demand (BOD₅; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

**Routine Water Quality Monitoring for Suspended Solids
August 2014**

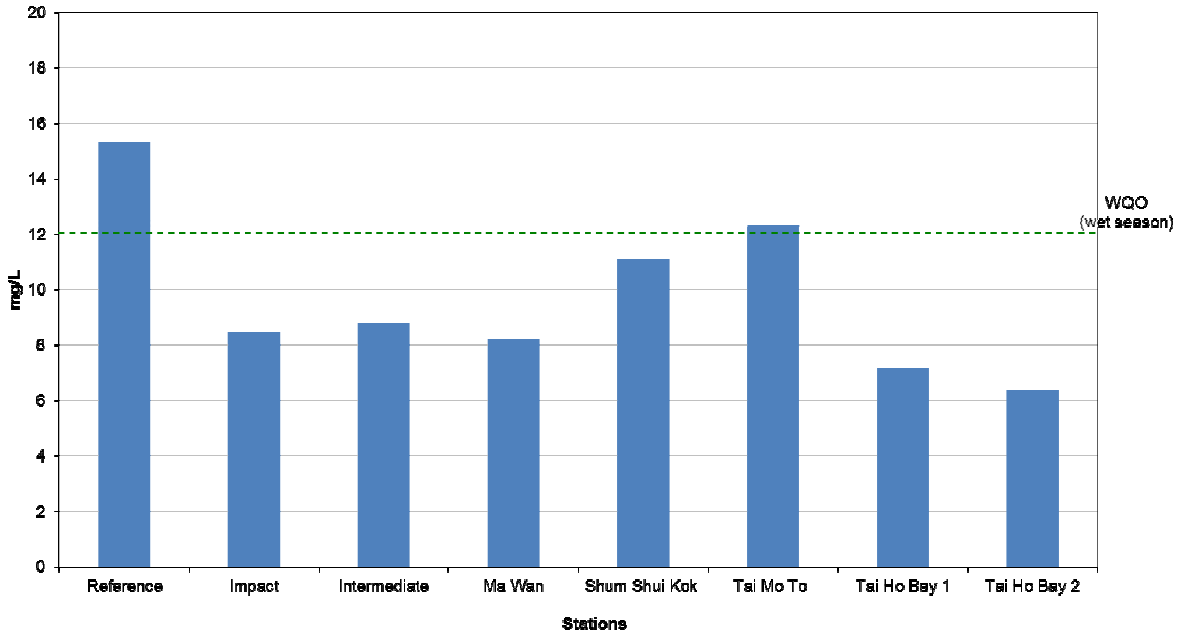


Figure 25: Concentration of Suspended Solids (mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at CMP 1 in August 2014.

Source: H:\Team\EM\GMS Projects\0175086 CEDD EM&A for South Brothers\02 Deliverable\07 CMP Monthly Report\24th (August 2014)

Date: 15/9/2014

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Annex C

Water Quality Monitoring Results

Table C1 *Summary Table of DO, Turbidity and SS Levels Recorded between 1 and 30 August 2014*

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)	
			Bottom	Surface and Mid Depth			
2014/08/01	Mid-Ebb	DS1	6.26	7.34	7.32	9.38	
		DS2	3.59	5.37	5.98	4.77	
		DS3	4.74	5.78	3.37	4.46	
		DS4	5.20	6.11	2.49	7.23	
		DS5	3.89	6.44	6.40	8.46	
		US1	5.44	7.15	5.02	8.14	
		US2	4.68	6.77	12.13	14.27	
		MW1	4.44	6.99	1.67	5.20	
		THB1	9.12	9.65	3.65	5.63	
		THB2	-	10.33	6.70	6.57	
		WSR45C	3.52	6.84	5.32	7.46	
		WSR46	4.69	6.34	3.63	4.44	
		Mid-Flood	DS1	5.84	6.25	4.05	4.43
			DS2	5.49	5.71	3.53	5.57
	DS3		5.20	5.88	5.19	4.93	
	DS4		6.06	6.68	4.74	6.13	
	DS5		7.64	7.79	3.17	4.25	
	US1		5.67	5.36	2.61	3.12	
	US2		4.26	5.11	5.01	3.74	
	MW1		3.52	4.63	3.57	20.73	
	THB1		6.04	6.07	4.13	7.77	
	THB2		-	6.49	7.63	4.17	
	WSR45C		4.04	4.79	4.24	5.81	
	WSR46		4.01	5.12	5.26	5.47	
	2014/08/04	Mid-Ebb	DS1	10.25	10.97	1.47	4.77
			DS2	7.73	9.50	1.50	4.54
DS3			5.34	7.28	2.19	4.37	
DS4			4.12	6.40	3.32	5.28	
DS5			3.33	7.01	3.29	5.64	
US1			7.78	9.79	6.10	9.02	
US2			8.00	10.06	11.07	7.95	
MW1			2.80	5.62	2.30	5.08	
THB1			7.73	9.21	6.03	8.22	
THB2			-	11.80	8.97	5.53	
WSR45C			3.17	6.09	4.74	6.34	
WSR46			3.28	6.14	5.60	9.18	
Mid-Flood			DS1	7.93	9.36	2.12	4.47
			DS2	9.35	9.44	3.50	6.55
		DS3	10.53	10.49	2.07	4.28	
		DS4	7.74	10.25	3.82	6.79	
		DS5	4.47	9.67	6.08	9.21	
		US1	7.41	8.70	2.48	5.40	
		US2	4.37	6.49	3.20	5.21	
		MW1	2.98	4.86	3.41	8.90	
		THB1	7.56	8.66	4.83	8.27	
		THB2	-	8.77	7.17	4.10	
		WSR45C	3.29	5.20	3.04	7.02	

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
		WSR46	3.51	5.45	5.14	8.79
2014/08/06	Mid-Ebb	DS1	7.70	7.85	2.77	5.05
		DS2	6.46	6.98	5.91	10.18
		DS3	5.21	6.36	3.40	5.81
		DS4	3.64	5.45	4.60	6.82
		DS5	3.56	5.28	3.98	5.20
		US1	5.09	6.50	4.43	6.38
		US2	6.03	6.67	4.82	5.70
		MW1	3.17	5.69	3.17	5.48
		THB1	4.10	7.17	6.50	12.90
		THB2	-	5.69	13.60	5.97
	WSR45C	3.32	6.33	5.04	6.22	
	WSR46	4.32	6.64	3.32	3.93	
	Mid-Flood	DS1	8.17	9.32	4.18	8.92
		DS2	9.10	9.45	3.70	7.43
		DS3	8.72	9.24	4.90	6.95
		DS4	3.75	6.14	9.26	9.66
		DS5	4.33	5.85	7.44	8.58
		US1	7.22	8.18	4.92	4.77
		US2	6.28	7.14	2.39	4.81
		MW1	3.53	5.14	4.26	7.89
THB1		8.38	8.82	13.13	14.40	
THB2		-	6.38	7.97	9.03	
WSR45C	3.06	4.68	9.96	8.99		
WSR46	3.60	6.63	7.08	6.72		
2014/08/08	Mid-Ebb	DS1	7.32	6.94	7.38	9.48
		DS2	6.54	6.53	3.72	4.75
		DS3	6.11	6.75	3.88	6.94
		DS4	4.45	5.85	6.10	9.52
		DS5	4.08	6.05	5.15	5.16
		US1	7.69	8.43	8.92	13.13
		US2	6.91	8.47	5.18	6.42
		MW1	2.89	6.01	3.58	6.11
		THB1	5.77	8.22	6.31	12.15
		THB2	-	6.47	9.22	3.73
	WSR45C	3.20	5.92	7.32	8.18	
	WSR46	4.02	5.81	6.42	6.47	
	Mid-Flood	DS1	6.83	7.19	11.75	5.68
		DS2	7.04	7.39	11.54	7.80
		DS3	7.31	7.43	8.85	7.98
		DS4	7.62	8.28	11.84	16.37
		DS5	5.15	8.36	11.28	10.97
		US1	5.92	6.15	4.83	11.80
		US2	5.25	5.92	4.65	9.03
		MW1	2.67	3.58	7.43	12.07
THB1		6.90	7.09	17.89	19.22	
THB2		-	8.15	14.56	21.37	
WSR45C	3.09	4.93	9.16	12.44		
WSR46	3.48	6.21	11.92	6.71		
2014/08/11	Mid-Ebb	DS1	4.34	4.95	8.25	9.59
		DS2	3.70	4.69	9.36	11.10

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
		DS3	3.78	4.45	10.39	8.93
		DS4	3.67	4.21	12.75	11.81
		DS5	3.56	4.26	17.82	11.40
		US1	4.89	5.64	18.61	15.60
		US2	5.58	5.81	11.43	11.68
		MW1	3.57	4.06	7.06	7.61
		THB1	5.03	5.83	10.06	10.82
		THB2	-	5.89	3.19	5.57
		WSR45C	3.94	4.30	12.17	12.01
		WSR46	4.27	5.01	14.10	14.32
	Mid-Flood	DS1	5.82	6.23	11.63	12.22
		DS2	6.01	6.26	9.73	15.63
		DS3	5.43	6.07	29.53	16.18
		DS4	5.49	6.37	18.23	15.44
		DS5	5.85	5.01	29.83	20.93
		US1	4.71	4.86	13.85	11.38
		US2	4.58	3.48	10.95	12.76
		MW1	3.13	5.73	17.11	20.03
		THB1	5.55	5.65	17.00	19.77
		THB2	-	4.51	16.72	15.13
		WSR45C	3.96	4.94	12.95	12.48
		WSR46	4.13	4.95	15.00	13.59
2014/08/13	Mid-Ebb	DS1	4.32	4.61	8.29	11.34
		DS2	3.60	4.34	10.38	13.53
		DS3	3.89	4.27	13.33	18.77
		DS4	3.76	4.14	24.33	21.49
		DS5	3.77	4.01	27.59	20.59
		US1	4.54	5.11	13.89	9.83
		US2	4.34	5.05	8.48	14.31
		MW1	4.14	4.48	11.73	9.41
		THB1	4.62	4.72	6.75	14.60
		THB2	-	-	-	-
		WSR45C	3.86	4.26	24.03	14.67
		WSR46	3.77	4.31	12.02	10.94
	Mid-Flood	DS1	4.66	4.75	11.44	10.92
		DS2	5.20	5.34	10.14	13.62
		DS3	4.68	4.82	10.16	11.13
		DS4	4.88	5.02	9.82	10.73
		DS5	4.96	5.09	9.26	10.23
		US1	4.01	4.28	10.91	13.19
		US2	3.69	4.16	11.38	12.52
		MW1	3.26	3.52	15.28	15.80
		THB1	4.32	4.46	13.62	15.50
		THB2	-	-	-	-
		WSR45C	3.33	3.94	24.73	22.04
		WSR46	3.84	4.27	14.60	14.49
2014/08/15	Mid-Ebb	DS1	4.48	4.88	8.91	10.50
		DS2	3.92	4.48	8.55	10.17
		DS3	3.99	4.53	12.07	16.08
		DS4	3.91	4.36	13.99	13.48
		DS5	3.91	4.42	12.47	9.62

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
		US1	4.52	4.79	19.08	22.32
		US2	4.80	5.31	8.66	8.45
		MW1	4.69	4.94	7.16	12.52
		THB1	4.67	4.88	8.00	9.27
		THB2	-	4.63	19.06	6.83
		WSR45C	4.32	4.60	9.60	11.99
		WSR46	4.05	4.72	8.02	10.43
	Mid-Flood	DS1	4.74	4.84	15.22	19.13
		DS2	4.81	4.85	13.90	18.80
		DS3	4.72	4.85	9.84	13.00
		DS4	4.44	4.58	10.85	12.18
		DS5	4.25	4.66	12.82	12.70
		US1	4.26	4.36	14.78	16.04
		US2	4.06	4.37	13.58	17.96
		MW1	3.70	4.32	8.06	9.02
		THB1	4.85	4.84	15.92	17.13
		THB2	-	3.50	10.56	4.80
		WSR45C	4.06	4.70	9.92	12.81
		WSR46	3.90	4.50	15.46	15.63
2014/08/18	Mid-Ebb	DS1	6.11	6.07	3.56	4.63
		DS2	3.18	4.82	5.87	7.92
		DS3	4.20	5.42	3.80	6.68
		DS4	3.74	5.15	5.93	6.70
		DS5	3.16	4.88	7.36	5.90
		US1	5.98	6.28	9.86	9.48
		US2	6.28	6.45	5.65	11.55
		MW1	3.00	4.87	3.42	5.52
		THB1	5.04	5.47	12.60	15.57
		THB2	-	5.62	4.22	3.80
		WSR45C	2.96	5.51	5.80	6.32
		WSR46	4.19	5.94	4.53	7.01
	Mid-Flood	DS1	6.32	6.78	5.74	8.72
		DS2	6.97	6.98	5.70	7.13
		DS3	7.65	7.65	6.01	8.90
		DS4	4.85	7.03	11.74	13.77
		DS5	5.04	7.27	7.27	9.66
		US1	6.53	7.32	7.75	6.38
		US2	3.40	5.43	7.72	8.57
		MW1	3.07	4.76	4.33	7.16
		THB1	6.24	6.51	6.20	11.98
		THB2	-	6.02	11.46	9.30
		WSR45C	3.03	5.00	12.06	7.69
		WSR46	3.98	6.32	5.45	8.06
2014/08/20	Mid-Ebb	DS1	5.66	6.24	5.96	6.50
		DS2	3.56	5.54	5.90	11.19
		DS3	3.55	5.23	4.10	5.78
		DS4	3.27	5.14	5.08	5.20
		DS5	2.89	5.10	7.77	7.59
		US1	5.54	6.34	5.62	5.23
		US2	6.46	6.70	6.14	5.87
		MW1	3.18	4.98	3.90	6.50

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)		
			Bottom	Surface and Mid Depth				
2014/08/22	Mid-Flood	THB1	6.57	6.79	5.35	6.23		
		THB2	-	6.12	2.26	6.43		
		WSR45C	2.81	5.00	5.76	6.10		
		WSR46	2.92	5.30	5.54	7.34		
		DS1	6.64	6.80	9.77	10.10		
		DS2	6.87	6.94	8.40	7.50		
		DS3	6.74	6.90	6.40	6.90		
		DS4	3.97	6.07	11.11	9.19		
		DS5	5.09	6.26	11.15	10.08		
		US1	6.20	6.89	3.53	4.05		
		US2	3.02	5.31	10.47	9.57		
		MW1	2.96	4.30	4.48	6.92		
		THB1	5.80	6.27	10.97	12.93		
		THB2	-	5.70	10.32	13.93		
		WSR45C	2.67	4.31	8.79	10.78		
		WSR46	4.05	6.21	5.40	8.27		
2014/08/22	Mid-Ebb	DS1	4.74	5.18	5.35	5.84		
		DS2	3.33	4.83	4.53	5.03		
		DS3	4.01	5.07	3.47	3.47		
		DS4	3.64	4.87	3.69	5.82		
		DS5	3.04	4.48	10.37	8.29		
		US1	5.27	5.73	7.20	6.52		
		US2	4.41	6.14	6.56	6.25		
		MW1	3.03	4.98	2.62	4.07		
		THB1	4.13	6.41	3.91	7.80		
		THB2	-	-	-	-		
	Mid-Flood	WSR45C	2.73	4.19	7.86	6.13		
		WSR46	3.17	4.44	4.48	8.72		
		DS1	6.36	6.46	3.43	3.38		
		DS2	6.43	6.53	11.27	13.45		
		DS3	5.55	6.14	12.29	11.71		
		DS4	4.84	6.04	23.53	18.02		
		DS5	5.96	6.65	11.60	12.11		
		US1	4.67	5.11	6.59	7.57		
		US2	3.71	4.74	7.40	8.44		
		MW1	3.22	3.96	6.29	9.23		
2014/08/22	Mid-Flood	THB1	5.46	6.09	10.91	11.37		
		THB2	-	4.43	15.98	5.23		
		WSR45C	3.00	4.57	10.35	12.97		
		WSR46	3.23	4.88	21.60	11.16		
		2014/08/26	Mid-Ebb	DS1	6.02	7.34	6.73	11.02
				DS2	3.75	6.19	6.97	8.66
				DS3	4.59	6.08	6.31	7.69
				DS4	4.61	5.90	5.17	6.41
				DS5	4.20	5.34	6.42	7.46
				US1	4.95	7.19	10.33	13.23
US2	4.97			6.59	10.62	11.43		
MW1	3.78			4.76	3.48	5.68		
THB1	5.54			7.23	6.95	10.17		
THB2	-			5.67	9.02	4.73		
WSR45C	4.43	5.25	5.48	6.48				

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
	Mid-Flood	WSR46	3.53	4.73	10.94	12.53
		DS1	6.05	5.96	8.09	11.07
		DS2	6.71	6.83	8.06	12.23
		DS3	4.81	6.16	10.52	13.12
		DS4	7.15	7.70	6.15	8.63
		DS5	4.08	7.27	16.71	14.17
		US1	4.68	4.75	9.13	10.98
		US2	3.59	5.48	4.98	7.01
		MW1	7.44	3.95	9.44	11.53
		THB1	4.43	7.50	9.78	14.38
		THB2	-	8.14	14.74	8.30
		WSR45C	3.68	4.46	11.28	13.51
		WSR46	4.16	5.14	5.76	6.70
		2014/08/28	Mid-Ebb	DS1	4.92	5.77
DS2	4.79			5.29	7.84	10.43
DS3	4.02			5.15	10.36	12.58
DS4	4.01			5.16	12.92	15.08
DS5	3.92			4.56	20.89	22.59
US1	4.76			5.85	7.65	10.33
US2	4.26			5.71	15.49	17.04
MW1	4.71			4.96	5.50	8.12
THB1	5.01			5.80	7.20	9.53
THB2	-			5.07	8.15	4.90
WSR45C	4.09			4.62	12.81	17.30
WSR46	4.13			4.60	10.75	12.89
Mid-Flood	DS1		4.81	5.13	6.81	7.93
	DS2		5.07	5.14	7.13	7.20
	DS3		4.96	5.36	6.63	7.31
	DS4		4.61	5.49	7.40	9.14
	DS5		5.10	5.57	9.40	10.93
	US1		3.89	4.26	15.38	20.39
	US2		4.14	4.47	5.88	6.06
	MW1		3.50	4.32	7.25	9.84
	THB1		4.75	4.92	5.95	9.30
	THB2		-	4.39	10.75	3.97
	WSR45C		4.13	4.79	7.39	8.21
	WSR46		4.04	4.38	16.29	14.77
2014/08/30	Mid-Ebb	DS1	4.91	5.78	8.01	7.78
		DS2	3.93	4.92	8.26	8.87
		DS3	4.17	5.12	8.45	8.90
		DS4	4.18	4.99	7.67	9.64
		DS5	4.15	5.00	7.50	7.88
		US1	4.53	5.64	11.03	12.70
		US2	5.34	6.15	8.79	10.78
		MW1	4.71	5.20	3.44	4.94
		THB1	5.18	5.36	9.31	10.05
	THB2	-	5.99	8.12	6.53	
	WSR45C	3.92	5.00	9.09	10.21	
	WSR46	4.08	5.08	7.76	9.19	
	Mid-Flood	DS1	5.02	5.14	9.22	11.23
		DS2	5.22	5.23	9.03	9.95

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
		DS3	5.10	5.26	10.71	12.18
		DS4	4.82	5.33	10.04	9.48
		DS5	5.41	5.58	5.51	5.00
		US1	4.78	4.94	7.72	12.57
		US2	4.23	4.73	12.83	14.41
		MW1	3.93	4.60	7.28	9.48
		THB1	5.05	5.19	8.05	9.83
		THB2	-	4.03	7.20	2.87
		WSR45C	4.29	4.92	9.96	9.72
		WSR46	4.32	4.97	12.07	12.20

Notes:

1. Please refer to Table C2 below for the Action and Limit Levels for dredging activities.
2. Cell shaded yellow indicated value exceeding the Action Level criteria.
3. Cell shaded red indicated value exceeding the Limit Level criteria.
4. Only mid-depth water was sampled at Station THB2 because water depth was less than 3m.
5. Sampling at Station THB2 on 13 August 2014 was cancelled due to adverse weather condition.
6. Sampling at Station THB2 during mid-ebb tide on 22 August 2014 was cancelled due to adverse weather condition.

Table C2 Action and Limit Levels of Water Quality for Dredging, Backfilling and Capping Activities

Parameter	Action Level	Limit Level
Dissolved Oxygen (DO) ⁽¹⁾	<u>Surface and Mid-depth</u> ⁽²⁾ The average of the impact, WSR 45C and WSR 46 station readings are < 5%-ile of baseline data for surface and middle layer = 4.32 mg L⁻¹ and Significantly less than the reference stations mean DO (at the same tide of the same day)	<u>Surface and Mid-depth</u> ⁽²⁾ The average of the impact, WSR 45C and WSR 46 station readings are < 4 mg L⁻¹ and Significantly less than the reference stations mean DO (at the same tide of the same day)
	<u>Bottom</u> The average of the impact, WSR 45C and WSR 46 station readings are < 5%-ile of baseline data for bottom layers = 3.12 mg L⁻¹ and Significantly less than the reference stations mean DO (at the same tide of the same day)	<u>Bottom</u> The average of the impact station, WSR 45C and WSR 46 readings are < 2 mg L⁻¹ and Significantly less than the reference stations mean DO (at the same tide of the same day)
Depth-averaged Suspended Solids (SS) ⁽³⁾⁽⁴⁾	The average of the impact, WSR 45C and WSR 46 station readings are > 95%-ile of baseline data for depth average = 21.60 mg L⁻¹ and 120% of control station's SS at the same tide of the same day	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data for depth average = 40.10 mg L⁻¹ and 130% of control station's SS at the same tide of the same day
Depth-averaged Turbidity (Tby) ⁽³⁾⁽⁴⁾	The average of the impact, WSR 45C and WSR 46 station readings are > 95%-ile of baseline data = 25.04 NTU and 120% of control station's Tby at the same tide of the same day	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data = 32.68 NTU and 130% of control station's Tby at the same tide of the same day

Notes:

- (1) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (2) The Action and Limit Levels for DO for Surface & Middle layers were calculated from the combined pool of baseline surface layer data and baseline middle layer data.
- (3) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.
- (4) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Table C3 Results of Baseline Monitoring conducted for SB CMPs in July and August 2012

Parameter	Detection Limit	Stations around SB CMP			EPD Stations (NM1, NM2, NM3, NM5 and NM6)		
		Average	Min	Max	Average	Min	Max
DO (mg/L)	0.1	5.6	2.5	12.2	5.1	2.3	10.7
Turbidity (NTU)	0.1	9.5	1.5	74.9	9.6	1.9	120.1
SS (mg/L)	2	9.9	3.1	130.7	8.8	0.8	49.3
Arsenic (µg/L)	10	<10	<10	<10	<10	<10	<10
Cadmium (µg/L)	0.2	0.2	0.2	0.4	0.2	0.2	0.2
Chromium (µg/L)	1	1.5	1.0	2.0	2.0	1.0	3.0
Copper (µg/L)	1	2.3	1.0	13.0	1.2	1.0	11.0
Lead (µg/L)	1	1.3	1.0	2.0	5.0	1.0	9.0
Mercury (µg/L)	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (µg/L)	1	2.2	1.0	7.0	2.1	1.0	5.0
Silver (µg/L)	1	<1	<1	<1	<1	<1	<1
Zinc (µg/L)	10	18.9	10.0	173.0	23.7	10.0	224.0
NH ₃ -N (mg/L)	0.01	0.1	0.0	0.4	0.1	0.0	0.4
TIN (mg/L)	0.1	0.8	0.3	1.7	0.8	0.2	1.8
BOD ₅ (mg/L)	2	<2	<2	<2	<2	<2	<2

Table C4 In-situ Monitoring Results for Routine Water Quality Monitoring of CMP 1 in August 2014

Sampling Period	Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen (%)	(mg L ⁻¹)	pH (mg L ⁻¹)
August 2014	RFE (Reference)	26.23	29.43	14.40	47.78	3.27	7.78
	IPE (Impact)	28.80	21.39	3.53	99.20	6.80	8.00
	INE (Intermediate)	28.72	23.88	6.54	65.25	4.42	7.77
	Ma Wan	26.08	29.51	3.80	57.21	3.92	7.87
	Shum Shui Kok	27.13	26.53	13.86	66.96	4.59	7.88
	Tai Mo To	27.38	26.44	10.71	58.61	4.00	7.82
	Tai Ho Bay 1	29.06	21.71	3.96	95.40	6.50	7.96
	Tai Ho Bay 2	29.57	19.38	6.34	90.92	6.22	7.89
	WQO	N/A	26.49-32.37#	N/A	N/A	>4	6.5-8.5

Notes:

#Not exceeding 10% of natural ambient level which is the result obtained from the Reference Station.

Cell shaded yellow / red indicate value exceeding the Action/Limit levels.

Table C5 Laboratory Results for Routine Water Quality Monitoring of CMP 1 in August 2014

Sampling Period	Stations	As (µg/L)	Cd (µg/L)	Cr (µg/L)	Cu (µg/L)	Pb (µg/L)	Hg (µg/L)	Ni (µg/L)	Ag (µg/L)	Zn (µg/L)	NH ₃ (mg/L)	TIN (mg/L)	BOD ₅ (mg/L)	SS (mg/L)
August 2014	RFE	1.85	<LOR	1.38	8.91	1.54	<LOR	1.25	<LOR	16.51	0.09	0.61	1.22	15.34
	IPE	2.17	0.10	0.89	5.48	0.67	<LOR	2.05	<LOR	14.26	0.06	0.82	1.30	8.50
	INE	2.07	0.07	0.76	7.80	0.88	<LOR	1.44	<LOR	16.44	0.07	0.62	1.27	8.77
	Ma Wan	1.75	0.10	1.51	10.10	2.34	<LOR	1.73	<LOR	28.00	0.10	0.54	1.01	8.25
	Shum Shui Kok	2.25	5.78	0.73	8.36	1.94	<LOR	5.40	<LOR	53.88	0.10	0.82	1.19	11.11
	Tai Mo To	2.14	0.07	0.84	4.39	1.14	<LOR	1.34	<LOR	12.13	0.12	0.75	1.38	12.33
	Tai Ho Bay 1	1.86	0.08	0.76	4.69	0.80	<LOR	2.71	<LOR	17.18	0.04	0.73	1.49	7.15
	Tai Ho Bay 2	1.25	0.20	0.50	1.24	0.59	<LOR	0.98	<LOR	10.49	0.10	0.65	1.30	6.36

WQO of TIN: 0.5 mg/L

Wet Season WQO of SS: 12.0 mg/L

Note: Cell shaded yellow / red indicate value exceeding the Action/Limit levels.

Table C6 *Water Column Profiling Results for CMP 1 on 14 August 2014*

Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen		pH	Suspended Solids
				(%)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)
WCP 1 (Downstream)	27.64	23.69	11.75	59.67	4.12	7.66	13.85
WCP 2 (Upstream)	27.52	24.12	12.39	57.13	3.94	7.58	14.95
WQO (wet season)	N/A	21.51- 26.53#	N/A	N/A	>4	6.5-8.5	12.00

Note: #Not exceeding 10% of natural ambient level which is the result obtained from the Reference Station.

Annex D

Dredging Record for CMP 2 in August 2014

Table D1 Dredging Record at SB CMP 2

Date	Daily Dredging Volume (m ³)	Weekly Dredging Volume (m ³) (From Sunday to Saturday)
27-Jul-2014	7,800	63,700
28-Jul-2014	9,100	
29-Jul-2014	8,450	
30-Jul-2014	11,050	
31-Jul-2014	9,750	
01-Aug-2014	9,750	
02-Aug-2014	7,800	
03-Aug-2014	7,800	63,050
04-Aug-2014	8,450	
05-Aug-2014	9,750	
06-Aug-2014	9,100	
07-Aug-2014	9,750	
08-Aug-2014	6,500	
09-Aug-2014	11,700	
10-Aug-2014	13,000	74,100
11-Aug-2014	11,050	
12-Aug-2014	10,400	
13-Aug-2014	10,400	
14-Aug-2014	11,700	
15-Aug-2014	9,100	
16-Aug-2014	8,450	
17-Aug-2014	9,100	66,300
18-Aug-2014	10,400	
19-Aug-2014	9,750	
20-Aug-2014	10,400	
21-Aug-2014	9,750	
22-Aug-2014	9,100	
23-Aug-2014	7,800	
24-Aug-2014	9,100	59,800
25-Aug-2014	10,400	
26-Aug-2014	8,450	
27-Aug-2014	8,450	
28-Aug-2014	8,450	
29-Aug-2014	7,800	
30-Aug-2014	7,150	
31-Aug-2014	7,800	7,800

Annex E

Raw Data for Impact Water
Quality Monitoring during
Dredging Operations in
August 2014

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/01	MF	DS1	10:26:20	B	2.9	111.9	0.33	29.45	20.19	82.50	5.63	5.30	7.84	6
2014/08/01	MF	DS1	10:27:08	T	1.0	292.4	0.45	30.09	18.66	91.70	6.25	2.60	7.89	4
2014/08/01	MF	DS1	10:27:43	B	3.0	333.6	0.49	29.57	19.81	86.60	5.91	5.20	7.85	5
2014/08/01	MF	DS1	10:28:21	T	0.8	274.0	1.10	29.90	19.01	92.10	6.28	3.20	7.89	4
2014/08/01	MF	DS1	10:29:00	B	3.0	304.0	0.50	29.57	19.79	87.40	5.97	4.60	7.85	5
2014/08/01	MF	DS1	10:29:43	T	1.1	276.6	0.83	29.93	19.00	91.20	6.22	3.40	7.89	3
2014/08/01	MF	DS2	10:11:24	B	3.9	132.2	0.67	29.39	20.26	81.60	5.57	3.00	7.84	5
2014/08/01	MF	DS2	10:11:57	M	3.0	281.0	0.41	29.42	20.15	81.80	5.59	2.80	7.84	7
2014/08/01	MF	DS2	10:12:34	T	1.1	288.5	0.62	29.63	19.59	86.80	5.93	3.00	7.88	5
2014/08/01	MF	DS2	10:13:16	B	3.9	131.7	0.34	29.34	21.41	79.20	5.38	6.60	7.84	5
2014/08/01	MF	DS2	10:13:51	M	2.9	156.0	0.64	29.38	20.31	79.90	5.46	3.80	7.84	7
2014/08/01	MF	DS2	10:15:09	T	0.8	166.1	0.45	29.65	19.57	86.00	5.87	2.90	7.88	5
2014/08/01	MF	DS2	10:15:49	B	3.8	315.1	0.33	29.39	20.91	81.10	5.52	4.40	7.84	5
2014/08/01	MF	DS2	10:16:27	M	3.0	93.2	0.75	29.40	20.24	80.80	5.52	2.70	7.84	7
2014/08/01	MF	DS2	10:16:58	T	0.8	76.2	0.07	29.76	19.48	86.30	5.89	2.60	7.88	5
2014/08/01	MF	DS3	10:00:28	B	6.1	223.5	0.48	29.32	22.76	84.10	5.67	3.80	7.87	4
2014/08/01	MF	DS3	10:00:58	M	4.2	112.5	0.24	29.58	21.27	86.90	5.89	4.20	7.91	5
2014/08/01	MF	DS3	10:01:32	T	1.1	45.4	0.94	29.62	19.73	87.70	5.99	2.60	7.88	6
2014/08/01	MF	DS3	10:02:17	B	5.8	302.5	0.76	28.50	24.45	68.70	4.65	9.40	7.77	4
2014/08/01	MF	DS3	10:02:58	M	4.0	321.2	0.74	29.58	21.65	85.50	5.78	5.90	7.91	5
2014/08/01	MF	DS3	10:03:34	T	1.0	223.7	0.74	29.73	19.70	88.30	6.02	2.60	7.88	6
2014/08/01	MF	DS3	10:04:16	B	6.1	319.7	0.27	29.13	23.07	78.00	5.27	6.60	7.82	4
2014/08/01	MF	DS3	10:05:06	M	4.0	122.1	0.44	29.68	21.33	84.40	5.70	8.60	7.92	5
2014/08/01	MF	DS3	10:05:47	T	0.9	83.8	0.20	29.49	20.01	85.90	5.87	3.00	7.86	6
2014/08/01	MF	DS4	09:51:25	B	5.1	70.5	0.50	29.70	21.83	93.20	6.28	5.90	7.93	8
2014/08/01	MF	DS4	09:52:06	M	3.6	158.0	0.55	29.77	21.43	97.00	6.54	5.30	7.95	6
2014/08/01	MF	DS4	09:52:38	T	0.8	46.3	1.20	29.76	20.12	99.90	6.79	2.80	7.95	4
2014/08/01	MF	DS4	09:53:20	B	4.9	348.8	0.78	29.44	22.59	84.00	5.66	8.20	7.88	8
2014/08/01	MF	DS4	09:53:51	M	3.4	254.9	0.69	29.80	20.96	97.60	6.60	4.10	7.99	6
2014/08/01	MF	DS4	09:54:22	T	1.0	30.6	0.20	29.76	20.36	103.10	7.00	2.70	7.98	4
2014/08/01	MF	DS4	09:55:05	B	4.9	306.5	1.05	29.74	21.80	92.50	6.23	6.40	7.92	9
2014/08/01	MF	DS4	09:55:39	M	3.5	221.3	0.11	29.73	21.35	94.90	6.41	4.70	7.95	6
2014/08/01	MF	DS4	09:56:18	T	1.1	89.9	0.78	29.82	20.01	98.90	6.72	2.60	7.93	4
2014/08/01	MF	DS5	09:43:59	B	1.9	196.2	0.15	29.97	20.95	109.80	7.40	4.10	8.03	4
2014/08/01	MF	DS5	09:44:27	T	1.0	248.6	0.63	29.96	20.70	114.00	7.70	2.90	8.05	4
2014/08/01	MF	DS5	09:44:54	B	1.9	136.1	0.50	29.98	20.58	115.40	7.79	2.90	8.05	5
2014/08/01	MF	DS5	09:45:19	T	1.0	239.2	0.62	29.99	20.47	115.90	7.83	2.80	8.05	4
2014/08/01	MF	DS5	09:45:45	B	1.9	25.0	0.42	29.96	20.69	114.50	7.73	3.70	8.04	4
2014/08/01	MF	DS5	09:46:10	T	1.0	228.4	0.69	29.96	20.38	116.10	7.75	2.60	8.06	4
2014/08/01	MF	US1	10:35:13	B	4.2	95.5	0.16	28.93	21.68	100.30	6.84	5.70	7.93	4
2014/08/01	MF	US1	10:36:08	M	3.0	79.6	0.52	29.02	21.54	74.30	5.07	2.40	7.81	4
2014/08/01	MF	US1	10:36:44	T	1.2	87.5	0.09	29.30	20.77	78.10	5.33	2.10	7.83	3
2014/08/01	MF	US1	10:37:19	B	4.0	152.9	0.35	28.96	21.84	74.30	5.07	2.60	7.80	3
2014/08/01	MF	US1	10:37:55	M	3.0	143.8	0.52	29.00	21.50	73.60	5.03	2.50	7.81	3
2014/08/01	MF	US1	10:38:32	T	0.9	50.3	0.70	29.66	19.96	83.30	5.67	1.90	7.86	3
2014/08/01	MF	US1	10:39:13	B	4.0	155.4	0.58	28.94	21.66	74.70	5.10	2.30	7.81	3
2014/08/01	MF	US1	10:39:57	M	3.0	93.5	0.94	28.99	21.38	74.50	5.09	2.20	7.81	4
2014/08/01	MF	US1	10:40:35	T	0.9	167.7	1.61	29.85	19.29	87.40	5.96	2.30	7.88	3
2014/08/01	MF	US2	10:45:15	B	6.8	99.6	1.01	28.01	24.94	61.90	4.22	10.70	7.77	4
2014/08/01	MF	US2	10:45:51	M	4.4	215.3	0.83	28.74	22.13	68.10	4.65	4.00	7.81	4
2014/08/01	MF	US2	10:46:26	T	1.2	113.2	0.42	29.79	19.18	83.10	5.67	1.60	7.86	4
2014/08/01	MF	US2	10:47:25	B	7.0	348.2	0.34	28.25	24.18	63.10	4.30	9.30	7.78	3
2014/08/01	MF	US2	10:48:13	M	4.5	38.0	0.21	28.71	22.40	67.70	4.62	3.90	7.80	3
2014/08/01	MF	US2	10:48:52	T	1.0	302.1	0.35	29.76	19.25	82.80	5.65	1.60	7.86	4
2014/08/01	MF	US2	10:50:04	B	7.0	182.9	0.02	28.27	24.12	62.40	4.25	7.50	7.77	4
2014/08/01	MF	US2	10:50:46	M	4.4	277.4	0.74	28.59	23.07	66.10	4.51	3.70	7.79	4
2014/08/01	MF	US2	10:51:22	T	1.0	203.7	0.91	28.67	19.37	81.00	5.54	2.80	7.86	4
2014/08/01	MF	MW1	08:12:02	B	17.0	196.2	0.80	26.77	28.60	52.60	3.58	5.90	7.82	21
2014/08/01	MF	MW1	08:12:44	M	9.4	30.6	0.83	27.93	25.08	60.30	4.11	2.50	7.83	19
2014/08/01	MF	MW1	08:13:31	T	1.1	221.3	0.69	29.45	18.84	76.80	5.28	1.70	7.83	23
2014/08/01	MF	MW1	08:17:21	B	17.1	122.1	0.94	26.39	29.51	51.70	3.53	6.10	7.82	21
2014/08/01	MF	MW1	08:18:04	M	9.5	131.7	0.34	28.10	24.37	60.90	4.16	2.30	7.83	18
2014/08/01	MF	MW1	08:18:51	T	1.1	274.0	0.45	29.10	18.97	75.80	5.21	1.60	7.84	22
2014/08/01	MF	MW1	08:20:05	B	16.9	87.5	0.09	26.33	29.69	50.60	3.45	6.50	7.82	21
2014/08/01	MF	MW1	08:20:53	M	9.7	113.2	0.94	27.26	27.07	55.80	3.80	3.60	7.83	19
2014/08/01	MF	MW1	08:21:40	T	1.3	65.7	0.91	29.36	19.38	76.20	5.23	1.90	7.84	23
2014/08/01	MF	THB1	09:30:31	B	2.9	258.3	0.80	29.38	20.95	88.50	5.99	5.80	7.90	10
2014/08/01	MF	THB1	09:31:02	T	1.0	222.3	0.34	29.65	20.10	89.30	6.08	4.10	7.90	6
2014/08/01	MF	THB1	09:31:36	B	2.9	264.3	0.16	29.73	20.96	89.70	6.07	4.00	7.90	9
2014/08/01	MF	THB1	09:32:04	T	1.1	102.0	0.31	29.56	20.21	88.00	6.00	3.70	7.89	6
2014/08/01	MF	THB1	09:32:37	B	2.9	236.4	0.34	29.73	20.76	89.30	6.05	3.90	7.91	10
2014/08/01	MF	THB1	09:33:15	T	0.9	300.6	0.52	29.66	20.11	90.20	6.14	3.30	7.90	6
2014/08/01	MF	THB2	10:38:13	M	1.2	40.0	0.03	30.60	19.78	96.49	6.48	7.60	7.84	4
2014/08/01	MF	THB2	10:38:36	M	1.2	40.0	0.03	30.60	19.78	96.48	6.48	7.60	7.83	4
2014/08/01	MF	THB2	10:39:10	M	1.2	40.0	0.03	30.60	19.79	96.95	6.51	7.70	7.83	4
2014/08/01	MF	WSR45C	08:55:46	B	11.9	46.2	0.35	27.46	26.60	60.00	4.09	6.80	7.83	10
2014/08/01	MF	WSR45C	08:56:22	M	7.2	209.6	0.37	28.51	23.12	65.40	4.46	2.90	7.84	5
2014/08/01	MF	WSR45C	08:57:01	T	1.0	214.8	0.35	29.34	19.50	77.70	5.34	2.30	7.86	3
2014/08/01	MF	WSR45C	08:59:42	B	12.1	264.5	0.57	27.52	26.53	59.80	4.07	6.50	7.81	10
2014/08/01	MF	WSR45C	09:00:22	M	7.1	206.8	0.13	28.14	24.43	61.70	4.21	4.10	7.83	5
2014/08/01	MF	WSR45C	09:01:00	T	1.1	191.3	0.69	29.42	19.11	77.90	5.35	1.90	7.86	3
2014/08/01	MF	WSR45C	09:01:54	B	12.0	60.3	0.09	27.44	26.68	58.10	3.96	6.60	7.81	9
2014/08/01	MF	WSR45C	09:02:30	M	6.9	275.6	0.64	28.07	24.63	60.50	4.12	5.10	7.82	5
2014/08/01	MF	WSR45C	09:03:07	T	1.2	142.9	0.39	29.37	19.33	76.70	5.27	2.00	7.86	3
2014/08/01	MF	WSR46	11:08:59	B	8.8	257.7	1.30	27.75	25.76	59.50	4.05	8.10	7.78	8
2014/08/01	MF	WSR46	11:09:59	M	5.6	328.8	0.96	28.37	23.67	65.90	4.49	3		

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/01	ME	DS1	15:26:17	B	3.9	357.9	0.14	29.02	21.43	82.30	5.62	4.60	7.78	15
2014/08/01	ME	DS1	15:26:51	M	3.0	358.4	0.29	30.17	20.87	107.40	7.22	10.70	7.80	9
2014/08/01	ME	DS1	15:27:15	T	0.9	55.5	0.58	30.55	19.25	112.20	7.56	6.70	7.83	4
2014/08/01	ME	DS1	15:28:01	B	4.0	20.3	1.00	29.35	21.17	95.90	6.52	4.90	7.76	15
2014/08/01	ME	DS1	15:28:33	M	3.2	298.6	0.20	29.88	20.35	101.60	6.88	12.50	7.82	9
2014/08/01	ME	DS1	15:28:56	T	1.1	319.3	0.37	30.26	19.41	110.40	7.47	6.90	7.84	4
2014/08/01	ME	DS1	15:29:36	B	4.0	289.2	0.30	29.42	20.93	97.70	6.65	4.30	7.79	14
2014/08/01	ME	DS1	15:30:09	M	2.9	97.3	0.33	29.94	20.13	103.70	7.03	10.10	7.81	9
2014/08/01	ME	DS1	15:30:44	T	1.1	296.9	0.21	30.48	19.18	116.70	7.88	5.20	7.83	4
2014/08/01	ME	DS2	15:35:58	B	10.9	239.7	0.68	26.93	28.18	51.70	3.52	11.30	7.82	5
2014/08/01	ME	DS2	15:36:22	M	6.5	107.6	0.09	27.85	25.02	57.30	3.91	6.10	7.84	6
2014/08/01	ME	DS2	15:36:56	T	1.1	203.3	0.64	30.13	19.04	94.90	6.45	2.90	7.85	3
2014/08/01	ME	DS2	15:37:56	B	11.1	264.9	0.40	26.98	28.08	54.70	3.72	10.20	7.82	5
2014/08/01	ME	DS2	15:38:32	M	6.4	60.8	0.66	27.93	25.00	61.40	4.19	3.40	7.83	6
2014/08/01	ME	DS2	15:39:10	T	0.9	44.4	1.64	30.01	19.29	95.20	6.47	2.80	7.84	4
2014/08/01	ME	DS2	15:40:26	B	10.5	241.4	0.40	27.79	22.00	52.00	3.54	10.30	7.80	5
2014/08/01	ME	DS2	15:41:16	M	6.6	289.5	0.46	28.31	24.07	68.10	4.64	3.90	7.81	6
2014/08/01	ME	DS2	15:41:51	T	1.1	140.8	1.21	30.10	19.05	96.70	6.57	2.90	7.83	3
2014/08/01	ME	DS3	15:47:10	B	7.9	43.3	0.36	28.21	24.31	67.20	4.58	4.20	7.85	4
2014/08/01	ME	DS3	15:47:42	M	5.1	207.9	0.06	25.45	23.56	71.90	4.90	3.10	7.88	4
2014/08/01	ME	DS3	15:48:19	T	1.0	12.7	0.53	30.22	17.96	97.00	6.62	2.70	7.89	5
2014/08/01	ME	DS3	15:50:22	B	8.1	294.1	0.59	28.33	23.97	72.90	4.97	2.50	7.81	4
2014/08/01	ME	DS3	15:50:56	M	5.0	221.8	0.44	28.73	22.72	77.80	5.30	2.20	7.94	4
2014/08/01	ME	DS3	15:51:29	T	1.1	125.2	0.55	30.12	16.25	95.40	6.51	2.40	7.80	5
2014/08/01	ME	DS3	15:52:17	B	8.1	18.7	0.66	28.37	23.90	68.70	4.68	8.40	7.86	5
2014/08/01	ME	DS3	15:52:52	M	5.0	124.1	0.25	28.47	23.52	72.70	4.95	2.80	7.87	4
2014/08/01	ME	DS3	15:53:30	T	1.0	113.9	0.82	29.93	18.96	93.60	6.38	2.50	7.88	5
2014/08/01	ME	DS4	15:57:53	B	9.1	19.5	0.74	28.29	24.10	74.30	5.06	2.60	7.79	6
2014/08/01	ME	DS4	15:58:30	M	5.6	81.5	0.71	28.99	21.63	81.60	5.57	2.80	7.82	4
2014/08/01	ME	DS4	15:59:12	T	1.0	115.2	0.73	30.06	17.28	99.20	6.81	2.00	7.89	12
2014/08/01	ME	DS4	16:00:00	B	8.4	110.0	1.07	30.54	23.32	77.80	5.30	2.70	7.76	6
2014/08/01	ME	DS4	16:00:34	M	5.3	123.5	1.25	29.04	21.45	82.10	5.60	2.80	7.81	4
2014/08/01	ME	DS4	16:01:14	T	1.3	100.6	1.87	30.01	17.48	97.70	6.71	1.90	7.89	12
2014/08/01	ME	DS4	16:02:01	B	8.7	353.8	0.06	28.39	23.87	77.00	5.24	2.90	7.79	6
2014/08/01	ME	DS4	16:02:40	M	5.6	114.4	0.87	28.83	22.13	78.60	5.36	3.00	7.84	4
2014/08/01	ME	DS4	16:03:21	T	0.9	30.8	0.89	29.89	17.74	96.20	6.61	1.70	7.90	12
2014/08/01	ME	DS5	16:07:50	B	10.6	91.7	0.31	27.14	27.60	53.20	3.62	17.90	7.90	8
2014/08/01	ME	DS5	16:08:54	M	6.2	70.6	0.34	29.36	20.64	90.10	6.15	2.50	7.93	8
2014/08/01	ME	DS5	16:09:36	T	0.9	99.5	1.16	30.16	16.61	101.60	6.99	2.10	7.96	9
2014/08/01	ME	DS5	16:10:55	B	10.4	26.6	0.24	27.07	27.58	55.30	3.77	14.30	7.87	8
2014/08/01	ME	DS5	16:11:50	M	6.2	89.0	0.73	29.27	20.83	87.20	5.95	2.50	7.88	8
2014/08/01	ME	DS5	16:12:27	T	1.2	95.6	1.12	30.13	16.80	101.00	6.95	2.00	7.89	9
2014/08/01	ME	DS5	16:13:47	B	10.7	81.5	0.78	26.91	28.07	62.60	4.27	11.00	7.87	7
2014/08/01	ME	DS5	16:14:39	M	6.4	356.4	0.33	29.30	20.73	86.20	5.88	3.00	7.86	8
2014/08/01	ME	DS5	16:15:30	T	1.6	81.9	1.78	29.74	17.20	97.00	6.70	2.30	7.87	10
2014/08/01	ME	US1	15:15:49	B	4.1	89.4	0.97	28.68	23.04	77.50	5.28	3.40	7.81	7
2014/08/01	ME	US1	15:16:26	M	3.1	4.6	0.46	28.86	22.57	76.60	5.21	4.20	7.81	10
2014/08/01	ME	US1	15:17:08	T	0.9	65.5	0.15	30.84	20.25	147.00	9.81	5.30	7.87	7
2014/08/01	ME	US1	15:17:59	B	3.8	65.0	0.13	28.69	23.02	77.70	5.29	3.60	7.81	7
2014/08/01	ME	US1	15:18:25	M	2.7	313.8	0.72	29.28	22.09	82.00	5.56	6.60	7.86	10
2014/08/01	ME	US1	15:18:54	T	1.2	42.3	1.00	30.54	20.36	136.20	9.12	6.00	7.94	8
2014/08/01	ME	US1	15:19:32	B	4.1	93.9	1.19	28.65	23.10	84.50	5.75	3.90	7.80	7
2014/08/01	ME	US1	15:20:17	M	3.1	83.3	0.71	29.04	22.32	77.00	5.23	5.80	7.81	10
2014/08/01	ME	US1	15:20:46	T	1.3	64.4	0.36	30.57	20.54	118.70	7.94	6.40	7.83	7
2014/08/01	ME	US2	15:03:40	B	5.8	41.7	0.21	28.28	24.41	61.10	4.16	17.40	7.73	17
2014/08/01	ME	US2	15:04:16	M	4.0	4.1	0.93	28.99	23.42	69.90	4.70	10.10	7.83	14
2014/08/01	ME	US2	15:04:50	T	0.8	195.8	0.37	30.41	20.97	116.10	7.77	8.40	7.87	12
2014/08/01	ME	US2	15:05:34	B	5.8	274.5	0.17	28.20	24.71	70.10	4.77	18.50	7.71	17
2014/08/01	ME	US2	15:06:27	M	4.0	276.4	0.81	29.04	23.22	72.80	4.92	10.30	7.80	13
2014/08/01	ME	US2	15:07:02	T	1.1	343.7	0.47	30.86	20.41	134.90	8.99	8.60	7.86	11
2014/08/01	ME	US2	15:07:48	B	6.0	274.7	0.91	28.31	24.56	75.10	5.10	15.00	7.73	18
2014/08/01	ME	US2	15:08:27	M	4.1	191.3	0.11	29.01	23.23	72.80	4.92	12.30	7.79	14
2014/08/01	ME	US2	15:09:00	T	1.0	202.6	0.42	31.03	20.38	140.00	9.30	8.60	7.85	12
2014/08/01	ME	MW1	16:57:15	B	16.9	224.6	0.18	27.14	27.50	64.10	4.37	1.80	7.78	3
2014/08/01	ME	MW1	16:58:06	M	9.5	36.8	0.39	29.95	20.59	102.20	6.91	1.40	7.78	6
2014/08/01	ME	MW1	16:58:55	T	1.0	78.9	0.25	30.46	18.54	107.80	7.30	1.20	7.79	6
2014/08/01	ME	MW1	17:00:38	B	17.0	211.2	0.44	26.88	28.23	63.00	4.29	3.10	7.82	3
2014/08/01	ME	MW1	17:01:28	M	9.4	305.8	0.60	29.87	20.69	99.90	6.75	1.40	7.82	7
2014/08/01	ME	MW1	17:02:16	T	0.8	50.3	0.91	30.45	18.56	108.90	7.38	1.30	7.83	6
2014/08/01	ME	MW1	17:06:20	B	16.9	65.3	0.47	27.12	27.58	68.20	4.65	2.10	7.81	3
2014/08/01	ME	MW1	17:07:03	M	9.5	137.9	0.42	29.58	21.10	93.80	6.36	1.40	7.82	6
2014/08/01	ME	MW1	17:07:51	T	1.1	278.5	0.70	30.34	18.76	106.70	7.24	1.30	7.83	6
2014/08/01	ME	THB1	14:45:59	B	3.0	96.3	0.94	29.96	20.51	134.40	9.08	4.20	7.76	5
2014/08/01	ME	THB1	14:46:21	T	0.8	98.9	1.46	30.67	19.97	142.30	9.53	3.20	7.78	6
2014/08/01	ME	THB1	14:46:50	B	2.9	26.6	1.97	30.09	20.41	138.30	9.33	3.90	7.80	6
2014/08/01	ME	THB1	14:47:17	T	0.9	324.4	0.73	30.73	19.90	145.10	9.72	3.10	7.81	6
2014/08/01	ME	THB1	14:47:46	B	2.9	106.6	0.97	29.95	20.50	132.50	8.96	4.40	7.83	5
2014/08/01	ME	THB1	14:48:18	T	0.9	176.7	0.42	30.58	19.92	144.40	9.69	3.10	7.85	6
2014/08/01	ME	THB2	14:56:46	M	1.5	40.0	0.03	30.79	19.71	146.98	9.84	6.20	8.01	6
2014/08/01	ME	THB2	14:57:15	M	1.4	40.0	0.03	30.90	19.65	152.81	10.22	6.70	8.10	7
2014/08/01	ME	THB2	14:57:42	M	1.4	40.0	0.02	30.98	19.63	163.88	10.94	7.20	8.13	7
2014/08/01	ME	WSR45C	16:20:56	B	12.0	41.0	0.42	26.38	29.44	48.70	3.32	10.90	7.79	14
2014/08/01	ME	WSR45C	16:21:46	M	7.0	52.9	0.44	29.92	19.11	98.20	6.69	3.40	7.80	5
2014/08/01	ME	WSR45C	16:22:22	T	0.8	64.5	0.93	30.27	16.37	104.40	7.18	2.00	7.81	3
2014/08/01	ME	WSR45C	16:23:30	B	12.1	132.1	0.32	26.39	29.46	53.50	3.65	10.80	7.79	15
2014/08/01	ME	WSR45C	16:24:20	M	6.9	318.4	0.16	29.84	19.02	96.80	6.			

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/04	MF	DS1	12:44:17	B	3.1	318.2	0.87	29.53	20.13	119.40	8.14	2.30	8.04	5
2014/08/04	MF	DS1	12:45:07	T	0.9	9.3	1.71	30.24	18.90	141.65	9.61	1.40	8.19	4
2014/08/04	MF	DS1	12:45:49	B	3.0	212.6	0.38	29.49	20.29	115.82	7.90	2.60	8.01	5
2014/08/04	MF	DS1	12:46:30	T	1.1	17.7	0.28	30.09	18.97	138.75	9.44	2.20	8.18	5
2014/08/04	MF	DS1	12:47:12	B	3.0	350.5	0.52	29.47	20.35	113.62	7.75	2.90	8.01	5
2014/08/04	MF	DS1	12:47:53	T	0.9	336.4	0.63	30.26	18.85	132.98	9.02	1.30	8.17	5
2014/08/04	MF	DS2	12:52:20	B	2.9	134.6	0.10	30.04	20.12	135.33	9.15	4.40	8.16	8
2014/08/04	MF	DS2	12:52:50	T	1.1	208.3	0.91	30.03	19.27	138.70	9.43	2.90	8.15	6
2014/08/04	MF	DS2	12:53:20	B	2.9	165.1	0.49	30.10	20.31	141.08	9.52	3.80	8.19	8
2014/08/04	MF	DS2	12:53:52	T	1.0	105.3	1.12	30.00	19.20	139.79	9.51	2.20	8.16	6
2014/08/04	MF	DS2	12:54:24	B	3.0	97.0	0.45	30.07	20.44	138.99	9.38	5.80	8.14	8
2014/08/04	MF	DS2	12:55:00	T	1.1	246.2	1.12	30.16	18.95	137.99	9.38	1.90	8.15	5
2014/08/04	MF	DS3	12:58:57	B	2.1	70.7	0.36	30.43	19.49	155.03	10.45	2.80	8.30	5
2014/08/04	MF	DS3	12:59:43	T	1.0	155.5	0.05	30.41	18.94	153.14	10.36	1.80	8.20	4
2014/08/04	MF	DS3	13:00:08	B	1.9	326.9	0.21	30.41	19.05	154.62	10.46	1.90	8.24	5
2014/08/04	MF	DS3	13:00:36	T	1.0	262.0	0.44	30.41	19.12	156.90	10.61	2.00	8.25	4
2014/08/04	MF	DS3	13:01:04	B	2.0	331.9	0.20	30.43	19.11	158.09	10.68	2.00	8.25	5
2014/08/04	MF	DS3	13:01:42	T	0.9	277.2	0.35	30.42	19.00	155.11	10.49	1.90	8.22	4
2014/08/04	MF	DS4	13:07:28	B	4.2	180.0	0.39	29.67	21.74	113.59	7.66	5.10	8.04	7
2014/08/04	MF	DS4	13:07:59	M	3.1	115.8	0.27	30.08	20.78	125.98	8.49	3.90	8.20	8
2014/08/04	MF	DS4	13:08:25	T	1.0	321.4	0.75	30.79	19.27	164.07	11.01	2.70	8.36	5
2014/08/04	MF	DS4	13:09:02	B	4.1	338.5	0.36	29.38	22.93	106.93	7.20	6.50	7.93	7
2014/08/04	MF	DS4	13:09:49	M	2.9	196.4	0.38	30.24	20.25	155.13	10.45	3.00	8.27	8
2014/08/04	MF	DS4	13:10:23	T	1.0	283.6	0.32	30.96	19.05	176.85	11.84	2.10	8.37	5
2014/08/04	MF	DS4	13:10:56	B	4.2	187.1	0.18	29.53	22.29	124.18	8.37	5.30	8.02	7
2014/08/04	MF	DS4	13:11:23	M	3.0	262.8	0.86	29.73	21.58	123.18	8.31	4.10	8.12	8
2014/08/04	MF	DS4	13:12:06	T	1.0	199.4	0.04	30.80	19.22	169.99	11.41	2.10	8.35	5
2014/08/04	MF	DS5	13:16:04	B	5.1	89.8	0.30	28.09	26.73	69.31	4.67	13.10	7.73	14
2014/08/04	MF	DS5	13:16:45	M	3.5	169.9	0.74	29.99	20.86	118.19	7.97	3.90	8.19	8
2014/08/04	MF	DS5	13:17:26	T	1.1	213.7	0.85	30.63	19.69	166.57	11.18	2.30	8.34	6
2014/08/04	MF	DS5	13:18:12	B	5.0	223.4	0.18	28.51	25.40	68.90	4.64	8.90	7.78	15
2014/08/04	MF	DS5	13:18:49	M	3.6	187.4	1.80	29.70	21.41	113.71	7.68	3.70	8.11	8
2014/08/04	MF	DS5	13:19:38	T	1.2	269.0	0.36	30.91	19.34	173.09	11.59	2.00	8.37	6
2014/08/04	MF	DS5	13:20:23	B	5.0	308.6	0.85	28.06	26.80	60.96	4.11	14.80	7.71	14
2014/08/04	MF	DS5	13:21:07	M	3.3	96.4	0.91	29.97	20.89	126.78	8.55	3.80	8.18	8
2014/08/04	MF	DS5	13:21:49	T	1.1	137.0	0.33	30.67	19.62	164.24	11.02	2.20	8.34	5
2014/08/04	MF	US1	13:37:01	B	3.0	32.3	0.34	30.21	22.01	100.42	6.84	5.20	7.94	5
2014/08/04	MF	US1	13:37:34	T	1.0	319.8	0.26	29.83	19.52	126.17	8.59	2.30	8.12	6
2014/08/04	MF	US1	13:38:04	B	3.1	227.9	0.13	29.02	21.98	108.14	7.36	2.20	7.93	5
2014/08/04	MF	US1	13:38:36	T	1.1	167.0	1.50	30.01	19.09	128.46	8.61	1.70	8.14	6
2014/08/04	MF	US1	13:39:04	B	3.1	161.7	0.21	29.42	20.81	117.74	8.02	2.10	8.02	5
2014/08/04	MF	US1	13:39:43	T	1.1	117.5	0.60	30.05	19.02	130.61	8.89	1.40	8.14	6
2014/08/04	MF	US2	13:43:23	B	8.1	284.0	0.02	27.67	25.88	68.31	4.65	5.10	7.76	7
2014/08/04	MF	US2	13:44:09	M	4.9	99.2	0.21	28.14	24.42	67.42	4.60	5.50	7.79	5
2014/08/04	MF	US2	13:44:56	T	1.1	194.2	0.55	29.96	19.27	125.52	8.54	1.30	8.13	4
2014/08/04	MF	US2	13:45:38	B	8.2	290.8	0.44	27.39	26.58	67.01	4.57	4.10	7.75	7
2014/08/04	MF	US2	13:46:24	M	5.0	176.8	0.71	28.34	23.51	68.50	4.68	2.30	7.83	5
2014/08/04	MF	US2	13:47:10	T	1.2	221.4	0.52	29.85	19.59	120.85	8.22	1.00	8.10	4
2014/08/04	MF	US2	13:48:22	B	8.1	162.4	0.18	27.38	26.63	57.01	3.89	4.30	7.75	7
2014/08/04	MF	US2	13:49:06	M	4.9	295.2	0.47	28.13	24.40	64.92	4.43	3.80	7.80	5
2014/08/04	MF	US2	13:49:51	T	1.1	36.3	0.11	29.90	19.42	124.10	8.45	1.40	8.12	4
2014/08/04	MF	MW1	11:24:09	B	19.2	289.0	0.16	25.12	32.00	44.51	3.06	5.90	7.73	21
2014/08/04	MF	MW1	11:24:55	M	10.4	142.2	0.14	26.47	28.74	52.09	3.56	1.70	7.79	3
2014/08/04	MF	MW1	11:25:42	T	1.0	206.7	0.30	29.79	18.39	89.91	6.16	0.50	7.95	3
2014/08/04	MF	MW1	11:31:55	B	18.7	271.2	0.62	25.12	31.99	43.09	2.96	8.70	7.75	20
2014/08/04	MF	MW1	11:32:35	M	10.5	116.5	1.13	26.59	28.42	50.57	3.46	2.70	7.82	3
2014/08/04	MF	MW1	11:33:18	T	1.1	191.2	0.80	29.40	19.53	84.98	5.83	0.70	7.93	3
2014/08/04	MF	MW1	11:34:20	B	18.6	147.0	0.47	25.02	32.22	42.59	2.93	8.30	7.75	19
2014/08/04	MF	MW1	11:35:11	M	10.6	13.3	0.67	26.57	28.51	54.15	3.70	1.60	7.81	3
2014/08/04	MF	MW1	11:36:00	T	0.9	313.3	0.51	29.59	18.73	93.94	6.45	0.60	7.96	3
2014/08/04	MF	THB1	12:35:01	B	2.8	0.7	0.53	29.51	21.09	102.47	6.95	8.00	7.98	12
2014/08/04	MF	THB1	12:35:51	T	0.9	271.3	0.40	30.35	18.96	130.89	8.86	3.20	8.13	5
2014/08/04	MF	THB1	12:36:38	B	3.0	166.0	0.08	29.54	21.15	107.93	7.32	6.40	7.97	12
2014/08/04	MF	THB1	12:37:16	T	0.9	77.2	1.03	30.48	18.95	126.21	8.53	2.80	8.11	5
2014/08/04	MF	THB1	12:37:45	B	3.0	79.8	0.20	29.80	20.63	124.12	8.40	5.50	8.02	12
2014/08/04	MF	THB1	12:38:19	T	0.8	188.3	0.44	30.49	18.94	127.29	8.60	3.10	8.11	5
2014/08/04	MF	THB2	12:51:11	M	1.3	40.0	0.03	30.77	19.28	132.03	8.86	7.10	8.01	4
2014/08/04	MF	THB2	12:52:13	M	1.3	40.0	0.03	30.78	19.29	131.61	8.83	7.10	8.00	4
2014/08/04	MF	THB2	12:53:05	M	1.3	40.0	0.03	30.75	19.33	128.43	8.62	7.30	7.99	4
2014/08/04	MF	WSR45C	12:07:48	B	12.0	340.5	0.07	25.84	30.39	45.29	3.10	5.90	7.74	10
2014/08/04	MF	WSR45C	12:08:31	M	7.1	49.0	0.66	27.29	26.66	52.36	3.58	3.10	7.78	7
2014/08/04	MF	WSR45C	12:09:13	T	0.9	279.1	0.94	29.93	18.86	99.04	6.76	0.80	8.01	4
2014/08/04	MF	WSR45C	12:10:02	B	11.9	290.8	0.25	26.14	29.62	50.06	3.43	5.00	7.73	10
2014/08/04	MF	WSR45C	12:10:49	M	7.2	151.4	0.59	27.31	26.60	53.15	3.63	3.00	7.77	8
2014/08/04	MF	WSR45C	12:11:33	T	0.8	289.4	0.57	29.99	18.77	98.93	6.75	0.80	8.00	4
2014/08/04	MF	WSR45C	12:12:24	B	12.2	186.3	0.15	26.18	29.60	48.86	3.34	5.60	7.73	10
2014/08/04	MF	WSR45C	12:13:04	M	7.2	138.1	0.72	27.22	26.80	51.25	3.50	2.60	7.77	7
2014/08/04	MF	WSR45C	12:13:52	T	1.1	317.5	1.52	29.71	19.12	101.90	6.97	0.60	8.01	4
2014/08/04	MF	WSR46	14:03:38	B	9.0	305.4	0.51	26.83	27.89	48.95	3.35	12.40	7.72	15
2014/08/04	MF	WSR46	14:04:23	M	5.3	308.6	0.69	27.53	26.51	54.88	3.75	2.90	7.75	4
2014/08/04	MF	WSR46	14:05:06	T	1.1	71.9	0.76	30.24	16.90	106.09	7.28	3.40	8.00	8
2014/08/04	MF	WSR46	14:05:55	B	9.0	346.9	0.30	26.80	27.97	52.90	3.62	9.60	7.72	15
2014/08/04	MF	WSR46	14:06:41	M	5.4	313.6	0.43	27.28	26.72	54.08	3.69	3.00	7.75	4
2014/08/04	MF	WSR46	14:07:23	T	1.2	67.1	0.31	30.02	17.91	104.00	7.12	1.90	8.01	7
2014/08/04	MF	WSR46	14:08:12	B	9.1	26.2	0.22	26.77	28.03	52.00	3.55	7.90	7.72	15
2014/08/04	MF	WSR46	14:08:56											

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/04	ME	DS1	17:27:20	B	3.0	102.3	0.33	30.09	19.34	159.76	10.84	1.30	8.23	4
2014/08/04	ME	DS1	17:28:01	T	1.1	242.9	0.46	30.94	17.93	167.64	11.31	1.40	8.29	5
2014/08/04	ME	DS1	17:28:43	B	3.0	146.2	0.17	29.70	20.06	147.03	10.00	1.30	8.15	5
2014/08/04	ME	DS1	17:29:23	T	1.1	13.5	1.47	30.76	16.79	156.73	10.67	1.70	8.21	5
2014/08/04	ME	DS1	17:30:05	B	3.0	53.4	0.23	29.87	19.64	145.82	9.92	1.40	8.17	5
2014/08/04	ME	DS1	17:30:36	T	1.1	306.4	0.53	30.53	18.23	161.38	10.94	1.70	8.25	5
2014/08/04	ME	DS2	17:35:15	B	4.1	236.2	0.44	28.85	22.20	104.20	7.11	1.20	7.95	4
2014/08/04	ME	DS2	17:35:45	M	3.0	34.9	0.74	29.92	19.64	132.09	8.98	1.20	8.17	4
2014/08/04	ME	DS2	17:36:10	T	1.0	103.1	0.18	30.50	16.80	144.93	9.91	1.60	8.16	5
2014/08/04	ME	DS2	17:36:43	B	4.0	9.0	0.53	29.07	21.67	121.28	8.26	1.30	7.99	4
2014/08/04	ME	DS2	17:37:20	M	3.0	30.0	0.21	30.10	19.20	144.63	9.82	1.30	8.18	4
2014/08/04	ME	DS2	17:37:59	T	1.1	118.6	0.61	30.58	17.42	154.53	10.51	1.80	8.22	6
2014/08/04	ME	DS2	17:38:37	B	4.0	301.2	0.53	28.97	21.95	114.91	7.83	1.50	7.97	4
2014/08/04	ME	DS2	17:39:17	M	3.0	61.7	0.59	29.13	21.46	111.28	7.59	1.40	8.00	4
2014/08/04	ME	DS2	17:39:49	T	1.1	219.4	0.44	30.54	17.49	149.79	10.19	2.20	8.22	5
2014/08/04	ME	DS3	17:44:51	B	5.9	135.3	0.91	27.96	24.95	68.73	4.69	2.80	7.79	4
2014/08/04	ME	DS3	17:45:29	M	4.2	47.2	0.51	28.58	22.93	88.04	6.01	0.90	7.90	3
2014/08/04	ME	DS3	17:46:01	T	1.1	127.0	0.41	30.69	16.52	130.90	8.93	2.30	8.14	6
2014/08/04	ME	DS3	17:46:37	B	5.9	283.9	1.45	27.85	25.29	85.82	5.85	2.50	7.78	4
2014/08/04	ME	DS3	17:47:01	M	3.8	288.2	0.99	28.23	24.05	75.81	5.17	2.00	7.85	3
2014/08/04	ME	DS3	17:47:30	T	1.0	303.5	0.42	30.66	16.21	123.22	8.43	2.50	8.10	6
2014/08/04	ME	DS3	17:48:07	B	5.8	49.3	0.53	27.87	25.28	80.46	5.48	2.90	7.77	4
2014/08/04	ME	DS3	17:48:44	M	4.0	122.5	0.23	28.78	22.48	92.59	6.31	1.30	7.93	3
2014/08/04	ME	DS3	17:49:24	T	1.0	155.2	0.61	30.82	15.97	128.98	8.81	2.50	8.09	6
2014/08/04	ME	DS4	17:53:21	B	7.9	354.8	0.98	26.97	27.64	62.88	4.29	5.20	7.70	6
2014/08/04	ME	DS4	17:54:09	M	4.9	187.0	0.33	28.25	24.07	66.32	4.52	3.10	7.84	5
2014/08/04	ME	DS4	17:54:42	T	1.0	93.6	1.74	30.65	15.94	114.13	7.82	2.50	8.07	4
2014/08/04	ME	DS4	17:55:33	B	7.9	347.2	0.16	27.19	27.15	62.27	4.25	4.70	7.72	6
2014/08/04	ME	DS4	17:56:03	M	5.0	350.5	0.05	28.30	23.99	70.77	4.82	1.90	7.85	5
2014/08/04	ME	DS4	17:56:41	T	1.1	24.7	0.66	30.69	15.91	119.60	8.19	2.40	8.07	4
2014/08/04	ME	DS4	17:57:35	B	8.0	154.8	0.46	27.18	27.12	56.11	3.83	4.60	7.72	6
2014/08/04	ME	DS4	17:58:10	M	4.9	304.9	0.27	28.06	24.69	67.53	4.60	2.90	7.82	5
2014/08/04	ME	DS4	17:58:54	T	1.1	96.2	0.42	30.74	15.86	123.54	8.46	2.60	8.07	4
2014/08/04	ME	DS5	18:03:49	B	9.3	13.8	0.33	25.71	30.72	42.87	2.94	5.70	7.70	8
2014/08/04	ME	DS5	18:04:31	M	5.7	2.6	0.29	28.44	23.59	80.48	5.48	1.50	7.88	4
2014/08/04	ME	DS5	18:05:19	T	1.1	34.3	0.94	30.62	16.50	130.43	8.91	2.20	8.09	5
2014/08/04	ME	DS5	18:06:12	B	9.1	321.6	0.04	26.72	25.76	50.56	3.46	5.60	7.69	8
2014/08/04	ME	DS5	18:06:51	M	5.6	337.2	0.39	28.04	24.56	66.13	4.51	2.60	7.82	4
2014/08/04	ME	DS5	18:07:34	T	1.2	88.8	0.37	30.37	17.50	134.68	9.19	2.10	8.13	5
2014/08/04	ME	DS5	18:08:28	B	9.2	41.4	0.58	25.95	30.23	52.38	3.58	5.50	7.70	8
2014/08/04	ME	DS5	18:09:09	M	5.6	16.8	0.42	28.35	23.83	72.40	4.93	2.10	7.87	4
2014/08/04	ME	DS5	18:09:52	T	1.1	86.6	1.52	30.51	16.41	132.06	9.05	2.30	8.11	5
2014/08/04	ME	US1	17:18:48	B	2.9	273.9	0.21	29.19	21.80	109.93	7.47	5.80	7.97	9
2014/08/04	ME	US1	17:19:18	T	1.1	0.6	0.20	29.69	20.75	122.96	8.34	5.70	8.10	9
2014/08/04	ME	US1	17:19:58	B	3.1	31.4	0.66	29.34	21.53	111.65	7.58	7.20	7.99	9
2014/08/04	ME	US1	17:20:33	T	1.2	236.2	0.48	30.38	19.68	156.21	10.53	5.80	8.28	9
2014/08/04	ME	US1	17:21:18	B	3.0	307.9	0.74	29.52	21.08	122.06	8.28	6.50	8.05	9
2014/08/04	ME	US1	17:22:01	T	1.0	220.6	0.47	30.26	19.84	155.50	10.50	5.60	8.25	9
2014/08/04	ME	US2	17:07:49	B	2.9	114.4	0.53	29.78	21.65	122.84	8.27	9.50	8.08	10
2014/08/04	ME	US2	17:08:32	T	1.1	305.8	0.19	30.40	20.21	166.99	11.22	4.40	8.31	7
2014/08/04	ME	US2	17:09:15	B	3.0	0.3	0.19	29.68	21.88	127.59	8.60	10.60	8.05	9
2014/08/04	ME	US2	17:09:51	T	1.0	101.2	0.52	30.09	20.80	135.67	9.13	12.20	8.18	6
2014/08/04	ME	US2	17:12:39	B	3.0	227.4	0.07	29.51	22.27	105.77	7.13	12.80	7.99	9
2014/08/04	ME	US2	17:14:24	T	1.1	188.2	0.44	30.08	20.93	145.89	9.82	16.90	8.21	7
2014/08/04	ME	MW1	18:53:00	B	18.2	11.8	0.51	24.65	32.97	40.37	2.78	3.80	7.71	5
2014/08/04	ME	MW1	18:53:53	M	10.0	216.0	0.51	25.61	31.03	43.41	2.98	2.40	7.73	6
2014/08/04	ME	MW1	18:54:42	T	1.0	126.7	0.47	30.26	20.04	121.93	8.22	0.80	8.04	5
2014/08/04	ME	MW1	18:55:55	B	18.0	130.3	1.26	24.67	32.96	41.39	2.85	4.00	7.70	5
2014/08/04	ME	MW1	18:56:51	M	9.9	355.1	0.15	25.79	30.82	44.02	3.02	2.10	7.74	6
2014/08/04	ME	MW1	18:57:42	T	1.0	53.4	0.97	30.57	19.22	119.81	8.07	0.90	8.05	5
2014/08/04	ME	MW1	18:58:56	B	18.1	76.8	0.37	24.68	32.96	40.18	2.77	4.40	7.70	5
2014/08/04	ME	MW1	18:59:51	M	10.0	320.2	0.16	26.01	30.11	48.68	3.33	1.50	7.76	6
2014/08/04	ME	MW1	19:00:44	T	1.0	74.6	0.58	30.39	19.76	119.72	8.07	0.80	8.03	5
2014/08/04	ME	THB1	16:58:24	B	2.9	16.9	0.97	29.65	21.24	111.41	7.54	7.40	8.03	8
2014/08/04	ME	THB1	16:59:04	T	1.0	330.8	1.16	30.29	20.07	144.84	9.76	4.50	8.25	8
2014/08/04	ME	THB1	17:00:05	B	3.1	98.1	0.94	29.45	21.76	103.63	7.01	7.50	7.93	9
2014/08/04	ME	THB1	17:00:45	T	1.0	334.6	0.95	30.17	20.32	140.20	9.45	5.00	8.25	8
2014/08/04	ME	THB1	17:01:21	B	3.1	25.3	0.23	29.79	21.06	127.98	8.65	5.90	8.05	8
2014/08/04	ME	THB1	17:01:47	T	1.1	25.8	0.76	29.85	20.83	124.44	8.41	5.90	8.15	8
2014/08/04	ME	THB2	17:08:17	M	1.2	40.0	0.03	31.16	19.16	175.65	11.73	9.10	8.22	6
2014/08/04	ME	THB2	17:09:06	M	1.2	40.0	0.03	31.16	19.16	175.93	11.74	9.10	8.23	6
2014/08/04	ME	THB2	17:10:08	M	1.2	40.0	0.03	31.21	19.14	178.68	11.92	8.70	8.24	6
2014/08/04	ME	WSR45C	18:14:00	B	11.8	122.8	0.29	25.36	31.57	51.68	3.56	7.50	7.70	10
2014/08/04	ME	WSR45C	18:14:55	M	6.9	295.0	0.55	26.78	28.01	47.83	3.27	3.30	7.74	5
2014/08/04	ME	WSR45C	18:15:48	T	1.1	46.0	1.32	30.82	15.43	128.03	8.77	2.40	8.11	5
2014/08/04	ME	WSR45C	18:16:45	B	11.8	330.5	0.82	25.31	31.69	44.09	3.03	9.20	7.69	9
2014/08/04	ME	WSR45C	18:17:31	M	6.9	184.5	0.27	26.88	27.73	50.26	3.44	3.00	7.73	5
2014/08/04	ME	WSR45C	18:18:22	T	1.1	194.3	0.29	31.01	15.17	126.82	8.67	2.70	8.10	4
2014/08/04	ME	WSR45C	18:19:25	B	11.8	189.9	0.38	25.34	31.63	42.37	2.91	9.40	7.69	10
2014/08/04	ME	WSR45C	18:20:13	M	6.8	353.1	0.35	27.27	27.27	52.49	3.58	2.70	7.74	5
2014/08/04	ME	WSR45C	18:20:58	T	1.1	108.2	0.48	30.88	15.98	128.64	8.78	2.40	8.11	5
2014/08/04	ME	WSR46	16:32:58	B	9.0	197.4	0.87	26.35	29.09	45.23	3.10	10.00	7.72	13
2014/08/04	ME	WSR46	16:33:40	M	5.6	263.8	0.35	27.16	27.28	56.94	3.88	4.10	7.77	9
2014/08/04	ME	WSR46	16:34:59	T	1.1	79.2	0.44	31.07	13.58	119.34	8.22	3.60	7.99	6
2014/08/04	ME	WSR46	16:35:49	B	9.0	330.7	0.37	26.33	29.15	50.48	3.45	8.80	7.72	14
2014/08/04	ME	WSR46	16:36:23	M	5.3	159.5	0.59							

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/06	MF	DS1	15:04:17	B	2.2	236.0	0.34	29.10	21.39	117.62	8.02	6.30	8.08	6
2014/08/06	MF	DS1	15:04:46	T	0.9	169.2	1.09	29.69	20.01	135.00	9.19	3.00	8.20	12
2014/08/06	MF	DS1	15:05:15	B	2.1	248.9	0.82	29.07	21.68	119.62	8.15	4.70	8.05	6
2014/08/06	MF	DS1	15:05:51	T	0.8	8.7	0.55	29.42	20.38	129.80	8.86	3.50	8.17	13
2014/08/06	MF	DS1	15:06:40	B	2.2	277.0	0.23	29.11	21.42	122.41	8.35	5.00	8.08	5
2014/08/06	MF	DS1	15:07:21	T	0.9	172.5	0.80	29.56	19.84	145.17	9.91	2.60	8.24	12
2014/08/06	MF	DS2	15:14:51	B	2.0	342.8	0.48	29.55	20.71	130.96	8.90	8.30	8.15	9
2014/08/06	MF	DS2	15:15:25	T	1.2	15.7	0.23	29.63	20.26	138.44	9.42	2.90	8.18	6
2014/08/06	MF	DS2	15:16:24	B	1.9	308.5	0.27	29.55	20.61	133.95	9.11	3.20	8.15	9
2014/08/06	MF	DS2	15:17:06	T	1.0	273.0	0.35	29.62	20.20	139.63	9.51	2.30	8.19	6
2014/08/06	MF	DS2	15:17:35	B	2.2	313.2	0.07	29.51	20.68	136.44	9.28	2.90	8.15	9
2014/08/06	MF	DS2	15:18:15	T	1.0	114.5	0.83	29.60	20.30	138.33	9.42	2.60	8.18	6
2014/08/06	MF	DS3	15:22:30	B	2.1	235.6	1.26	29.61	21.31	121.35	8.21	4.00	8.08	6
2014/08/06	MF	DS3	15:22:53	T	1.0	284.0	0.29	29.89	20.41	132.72	8.99	3.90	8.18	8
2014/08/06	MF	DS3	15:23:21	B	2.0	58.0	0.58	29.73	20.63	133.82	9.07	3.50	8.16	6
2014/08/06	MF	DS3	15:23:47	T	0.9	148.7	0.73	30.00	20.12	139.20	9.42	3.30	8.21	8
2014/08/06	MF	DS3	15:27:46	B	1.8	35.1	0.12	29.65	20.94	131.11	8.89	6.70	8.14	6
2014/08/06	MF	DS3	15:29:07	T	1.0	255.3	0.53	29.95	20.37	137.78	9.32	8.00	8.19	8
2014/08/06	MF	DS4	15:34:36	B	5.0	358.6	0.17	28.41	24.82	56.16	3.80	14.80	7.71	12
2014/08/06	MF	DS4	15:35:14	M	3.5	307.5	0.43	28.78	23.65	71.52	4.84	7.10	7.82	8
2014/08/06	MF	DS4	15:35:45	T	0.9	69.1	0.69	29.86	20.90	106.13	7.17	4.60	8.08	9
2014/08/06	MF	DS4	15:36:33	B	4.9	42.5	0.72	27.84	26.90	54.66	3.69	18.00	7.63	11
2014/08/06	MF	DS4	15:37:20	M	3.5	335.2	0.44	28.80	23.59	73.91	5.01	6.20	7.82	8
2014/08/06	MF	DS4	15:38:05	T	1.0	72.8	0.09	29.54	21.36	110.81	7.51	3.60	8.04	9
2014/08/06	MF	DS4	15:38:48	B	5.0	6.2	0.82	28.09	25.93	55.56	3.76	18.10	7.66	12
2014/08/06	MF	DS4	15:39:36	M	3.5	100.0	0.28	28.74	23.78	70.71	4.79	7.00	7.79	9
2014/08/06	MF	DS4	15:40:18	T	1.0	268.1	0.51	29.68	21.23	110.81	7.49	3.90	8.05	9
2014/08/06	MF	DS5	15:45:21	B	5.1	195.2	0.44	27.94	26.28	61.53	4.16	10.10	7.67	9
2014/08/06	MF	DS5	15:45:50	M	3.4	171.8	0.26	28.56	24.17	60.03	4.07	10.10	7.79	10
2014/08/06	MF	DS5	15:46:19	T	1.2	170.6	0.83	29.74	21.05	98.12	6.64	5.10	8.08	6
2014/08/06	MF	DS5	15:47:00	B	5.0	29.9	0.25	28.22	25.43	70.90	4.80	7.20	7.74	9
2014/08/06	MF	DS5	15:47:30	M	3.5	109.0	0.46	29.10	22.87	80.97	5.48	7.20	7.90	11
2014/08/06	MF	DS5	15:47:51	T	0.9	3.3	0.39	29.84	20.77	108.59	7.34	4.20	8.12	6
2014/08/06	MF	DS5	15:48:45	B	5.0	309.7	0.75	28.11	25.52	59.33	4.02	8.50	7.74	10
2014/08/06	MF	DS5	15:49:09	M	3.5	154.1	0.41	28.91	23.38	69.10	4.68	9.20	7.82	10
2014/08/06	MF	DS5	15:49:32	T	1.1	209.9	0.60	29.72	21.15	101.50	6.86	5.40	8.09	6
2014/08/06	MF	US1	16:04:14	B	2.9	88.9	0.13	28.27	23.32	104.34	7.12	3.00	7.91	5
2014/08/06	MF	US1	16:04:42	T	0.8	206.9	0.60	29.62	19.80	129.86	8.86	2.60	8.20	4
2014/08/06	MF	US1	16:05:11	B	3.0	296.0	0.19	28.68	22.68	111.42	7.60	7.80	7.95	5
2014/08/06	MF	US1	16:05:40	T	0.9	333.1	0.49	29.07	21.08	113.01	7.73	5.10	8.08	4
2014/08/06	MF	US1	16:06:04	B	3.0	354.7	0.66	28.45	23.31	101.75	6.94	5.80	7.91	6
2014/08/06	MF	US1	16:06:28	T	1.2	342.7	0.25	29.34	20.58	116.59	7.96	5.20	8.14	4
2014/08/06	MF	US2	16:10:59	B	3.9	184.0	0.92	27.93	24.88	83.00	5.66	2.30	7.82	5
2014/08/06	MF	US2	16:11:23	M	3.0	167.8	0.53	28.58	22.51	91.27	6.24	2.00	7.94	3
2014/08/06	MF	US2	16:11:48	T	1.0	213.4	0.53	29.27	20.72	119.96	8.19	2.00	8.13	6
2014/08/06	MF	US2	16:12:13	B	4.0	213.0	0.55	27.98	24.83	96.25	6.56	2.60	7.83	5
2014/08/06	MF	US2	16:12:35	M	3.0	107.4	0.52	28.22	23.97	87.98	6.00	2.50	7.89	4
2014/08/06	MF	US2	16:12:59	T	0.9	223.5	0.24	29.38	20.45	120.56	8.23	2.00	8.17	6
2014/08/06	MF	US2	16:13:24	B	4.1	205.8	0.43	28.00	24.72	97.04	6.62	3.60	7.84	5
2014/08/06	MF	US2	16:13:46	M	3.0	298.7	0.61	28.36	23.19	88.07	6.02	2.40	7.91	3
2014/08/06	MF	US2	16:14:08	T	1.3	59.3	0.34	29.17	20.82	119.26	8.15	2.10	8.14	6
2014/08/06	MF	MW1	17:06:11	B	17.9	183.3	0.17	25.30	31.93	51.92	3.56	6.80	7.72	12
2014/08/06	MF	MW1	17:06:51	M	10.0	165.9	0.53	26.53	29.17	64.75	4.42	4.00	7.82	6
2014/08/06	MF	MW1	17:07:31	T	1.0	20.6	0.31	27.31	26.88	93.69	6.37	2.30	7.94	6
2014/08/06	MF	MW1	17:08:34	B	18.1	178.4	0.14	25.29	31.95	51.52	3.53	6.20	7.71	12
2014/08/06	MF	MW1	17:09:07	M	10.1	167.1	0.04	26.24	29.71	56.29	3.85	4.30	7.79	6
2014/08/06	MF	MW1	17:09:49	T	1.1	199.0	0.48	27.47	27.05	89.41	6.07	2.60	7.95	6
2014/08/06	MF	MW1	17:10:55	B	18.1	305.3	0.54	25.20	32.18	51.02	3.50	5.90	7.70	12
2014/08/06	MF	MW1	17:11:35	M	9.9	136.4	0.54	26.51	29.10	58.38	3.98	3.80	7.79	6
2014/08/06	MF	MW1	17:12:18	T	1.1	33.6	0.27	27.48	27.06	90.20	6.13	2.40	7.95	6
2014/08/06	MF	THB1	14:48:36	B	1.9	13.9	0.11	29.65	20.74	122.68	8.32	14.60	8.12	15
2014/08/06	MF	THB1	14:49:03	T	0.9	293.9	0.62	29.88	20.38	133.76	9.06	11.60	8.18	14
2014/08/06	MF	THB1	14:49:33	B	1.9	231.2	0.49	29.67	20.73	127.07	8.62	13.40	8.12	16
2014/08/06	MF	THB1	14:50:03	T	1.0	182.1	0.78	29.78	20.55	131.36	8.90	12.00	8.16	13
2014/08/06	MF	THB1	14:50:55	B	2.0	223.7	0.31	29.60	20.99	120.87	8.20	14.90	8.09	15
2014/08/06	MF	THB1	14:51:16	T	0.8	232.7	0.47	29.79	20.54	125.26	8.49	12.30	8.16	13
2014/08/06	MF	THB2	15:10:46	M	1.0	40.0	0.03	30.66	19.39	88.21	5.93	9.00	7.86	9
2014/08/06	MF	THB2	15:11:09	M	1.0	40.0	0.03	30.72	19.16	100.58	6.76	7.30	7.95	9
2014/08/06	MF	THB2	15:11:37	M	1.0	40.0	0.03	30.70	19.29	96.08	6.46	7.60	7.88	9
2014/08/06	MF	WSR45C	16:24:43	B	12.1	268.7	0.69	25.76	30.85	44.82	3.07	16.20	7.66	12
2014/08/06	MF	WSR45C	16:25:13	M	6.8	275.7	0.44	26.42	29.11	43.82	3.00	8.80	7.68	9
2014/08/06	MF	WSR45C	16:25:41	T	1.0	176.1	1.09	29.99	20.04	93.62	6.35	3.30	8.26	6
2014/08/06	MF	WSR45C	16:26:36	B	12.1	301.4	0.46	25.66	31.04	44.72	3.06	18.60	7.65	11
2014/08/06	MF	WSR45C	16:27:10	M	7.0	82.3	0.16	26.46	28.98	42.42	2.90	9.80	7.68	10
2014/08/06	MF	WSR45C	16:27:49	T	0.9	30.8	1.54	29.42	20.74	104.76	7.14	3.00	8.19	6
2014/08/06	MF	WSR45C	16:29:40	B	12.1	118.0	0.99	25.70	30.92	44.71	3.06	15.80	7.64	12
2014/08/06	MF	WSR45C	16:30:09	M	7.2	68.1	0.37	26.14	29.72	40.13	2.75	10.30	7.67	9
2014/08/06	MF	WSR45C	16:30:37	T	1.0	272.5	0.53	28.60	23.26	86.83	5.91	3.80	8.08	6
2014/08/06	MF	WSR46	14:22:54	B	7.7	301.2	0.48	27.05	27.56	56.79	3.87	12.70	7.71	9
2014/08/06	MF	WSR46	14:23:37	M	5.1	299.5	0.72	28.10	24.50	75.98	5.18	3.60	7.84	6
2014/08/06	MF	WSR46	14:24:17	T	0.8	169.2	0.66	29.55	16.27	122.97	8.57	3.80	8.14	5
2014/08/06	MF	WSR46	14:25:48	B	8.4	307.8	1.11	26.87	28.19	47.89	3.26	15.80	7.68	9
2014/08/06	MF	WSR46	14:26:17	M	4.7	295.2	1.02	28.12	24.39	70.48	4.81	4.90	7.85	6
2014/08/06	MF	WSR46	14:26:46	T	1.2	233.3	0.30	29.42	17.78	112.57	7.79	3.80	8.13	5
2014/08/06	MF	WSR46	14:27:47	B	8.1	279.1	1.09	27.00	27.98	53.88	3.67	10.40	7.71	9
2014/08/06	MF	WSR46	14:28:16											

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/06	ME	DS1	10:20:07	B	2.9	166.2	0.14	29.32	22.00	110.81	7.51	2.30	8.06	4
2014/08/06	ME	DS1	10:20:34	T	1.3	16.5	1.23	29.72	20.88	114.59	7.76	2.90	8.12	6
2014/08/06	ME	DS1	10:21:01	B	3.1	222.8	0.40	29.17	22.22	111.01	7.53	2.60	8.04	4
2014/08/06	ME	DS1	10:21:48	T	1.2	98.2	0.41	29.74	20.90	117.08	7.92	3.10	8.12	6
2014/08/06	ME	DS1	10:22:25	B	3.2	347.1	0.91	29.10	22.37	118.66	8.05	3.00	8.03	4
2014/08/06	ME	DS1	10:22:55	T	0.9	171.9	0.96	29.82	20.24	115.98	7.87	2.70	8.16	6
2014/08/06	ME	DS2	10:29:03	B	3.8	156.9	0.62	28.47	23.82	86.91	5.91	3.20	7.92	16
2014/08/06	ME	DS2	10:29:30	M	2.8	254.9	0.15	28.58	22.91	88.80	6.06	6.00	7.96	9
2014/08/06	ME	DS2	10:30:01	T	1.1	237.4	0.33	29.10	21.59	105.51	7.19	3.60	8.06	6
2014/08/06	ME	DS2	10:32:19	B	4.0	291.1	0.57	28.55	23.66	95.06	6.46	4.70	7.92	15
2014/08/06	ME	DS2	10:32:55	M	3.0	3.7	0.51	28.64	23.01	93.96	6.40	12.60	7.96	8
2014/08/06	ME	DS2	10:33:40	T	1.0	140.3	0.40	29.42	21.08	114.05	7.75	3.30	8.11	6
2014/08/06	ME	DS2	10:34:24	B	3.8	24.6	0.49	28.88	22.31	103.11	7.02	10.20	8.01	17
2014/08/06	ME	DS2	10:35:03	M	3.1	309.9	0.36	28.72	22.90	99.82	6.80	6.50	7.98	8
2014/08/06	ME	DS2	10:35:36	T	1.0	28.9	0.27	29.73	20.41	113.24	7.69	3.10	8.16	6
2014/08/06	ME	DS3	10:42:05	B	6.1	258.1	0.32	27.36	26.95	72.36	4.93	4.70	7.82	6
2014/08/06	ME	DS3	10:42:38	M	3.8	196.3	0.56	28.22	23.96	78.43	5.35	3.00	7.90	5
2014/08/06	ME	DS3	10:43:10	T	1.1	57.2	0.44	29.28	20.95	106.16	7.24	2.20	8.11	7
2014/08/06	ME	DS3	10:43:53	B	6.1	129.2	0.49	27.51	26.50	77.23	5.26	3.90	7.84	6
2014/08/06	ME	DS3	10:44:38	M	4.1	179.6	0.58	27.83	25.11	73.65	5.03	4.00	7.86	5
2014/08/06	ME	DS3	10:45:19	T	1.0	127.6	0.19	29.55	20.25	114.00	7.77	2.30	8.16	6
2014/08/06	ME	DS3	10:46:00	B	6.0	96.5	0.61	27.72	25.89	80.01	5.45	4.60	7.86	6
2014/08/06	ME	DS3	10:46:46	M	4.2	165.9	0.52	27.90	25.03	75.04	5.12	3.70	7.86	5
2014/08/06	ME	DS3	10:47:29	T	1.0	291.7	0.25	29.49	20.41	112.50	7.67	2.20	8.15	6
2014/08/06	ME	DS4	10:52:56	B	8.0	54.1	0.65	28.52	28.92	52.07	3.56	8.70	7.73	10
2014/08/06	ME	DS4	10:53:28	M	5.1	44.6	0.29	27.36	26.43	59.22	4.04	3.90	7.80	5
2014/08/06	ME	DS4	10:54:12	T	1.0	67.4	0.66	29.05	20.71	103.83	7.12	2.50	8.08	5
2014/08/06	ME	DS4	10:55:00	B	7.9	51.4	1.71	26.56	28.82	52.86	3.61	7.60	7.72	11
2014/08/06	ME	DS4	10:55:49	M	5.0	115.5	0.55	27.40	26.27	59.12	4.04	3.70	7.80	5
2014/08/06	ME	DS4	10:56:38	T	0.9	78.7	0.39	28.93	21.12	99.65	6.83	2.40	8.05	5
2014/08/06	ME	DS4	10:57:24	B	8.1	257.1	0.41	26.70	28.46	54.94	3.75	6.30	7.73	11
2014/08/06	ME	DS4	10:58:09	M	5.2	41.2	0.70	27.20	26.94	56.13	3.83	3.90	7.78	5
2014/08/06	ME	DS4	10:58:54	T	1.0	256.1	0.85	29.03	20.78	99.35	6.81	2.40	8.07	5
2014/08/06	ME	DS5	11:03:41	B	8.9	282.8	0.19	26.80	28.18	56.72	3.87	4.80	7.73	7
2014/08/06	ME	DS5	11:04:28	M	5.6	353.6	0.70	26.98	27.69	52.84	3.61	4.20	7.75	5
2014/08/06	ME	DS5	11:05:13	T	0.9	25.2	1.28	29.06	20.56	99.03	6.79	2.20	8.10	3
2014/08/06	ME	DS5	11:06:35	B	9.1	255.6	0.37	26.66	28.59	48.27	3.30	6.40	7.71	7
2014/08/06	ME	DS5	11:07:27	M	5.5	131.2	1.55	26.97	27.72	52.64	3.59	3.70	7.76	6
2014/08/06	ME	DS5	11:08:10	T	1.2	138.8	0.32	29.19	20.36	103.59	7.10	2.30	8.12	3
2014/08/06	ME	DS5	11:08:55	B	9.1	309.0	0.31	26.69	28.49	51.44	3.51	5.90	7.72	7
2014/08/06	ME	DS5	11:09:41	M	5.3	84.7	0.51	27.01	20.41	52.44	3.58	4.00	7.75	5
2014/08/06	ME	DS5	11:10:22	T	1.1	295.0	0.87	29.09	20.66	102.29	7.01	2.30	8.10	4
2014/08/06	ME	US1	10:11:19	B	3.0	255.4	0.47	28.17	24.85	75.92	5.16	5.30	7.77	7
2014/08/06	ME	US1	10:11:45	T	1.1	181.8	0.58	29.67	21.32	90.85	6.14	4.00	8.04	6
2014/08/06	ME	US1	10:12:11	B	3.0	239.0	0.01	28.14	24.93	77.31	5.25	4.70	7.79	7
2014/08/06	ME	US1	10:12:43	T	0.9	317.0	1.04	29.78	20.67	98.01	6.64	3.60	8.08	6
2014/08/06	ME	US1	10:13:19	B	3.1	38.3	0.05	27.70	26.11	71.44	4.86	5.60	7.76	7
2014/08/06	ME	US1	10:13:53	T	0.9	83.0	0.47	29.80	20.56	99.40	6.73	3.40	8.08	6
2014/08/06	ME	US2	10:02:21	B	2.1	337.9	0.60	29.48	21.49	95.95	6.50	3.60	8.01	7
2014/08/06	ME	US2	10:02:48	T	0.9	139.9	0.40	29.76	20.96	104.51	7.07	3.60	8.06	5
2014/08/06	ME	US2	10:04:40	B	2.0	160.0	0.49	28.98	22.79	81.81	5.55	7.20	7.90	7
2014/08/06	ME	US2	10:05:06	T	1.0	162.0	0.31	29.51	21.21	93.25	6.33	5.10	8.03	5
2014/08/06	ME	US2	10:05:32	B	2.0	32.5	0.44	29.10	22.53	89.17	6.04	5.40	7.92	7
2014/08/06	ME	US2	10:06:11	T	0.9	67.4	0.66	29.53	21.19	97.63	6.62	4.00	8.02	5
2014/08/06	ME	MW1	08:07:08	B	18.9	60.3	0.15	25.20	32.19	46.56	3.19	5.80	7.77	8
2014/08/06	ME	MW1	08:07:55	M	10.5	306.7	0.31	25.97	30.28	53.36	3.65	2.50	7.85	4
2014/08/06	ME	MW1	08:08:47	T	1.1	34.4	0.17	28.66	22.03	108.81	7.45	1.20	8.13	5
2014/08/06	ME	MW1	08:10:14	B	19.0	45.4	0.71	25.24	32.08	44.06	3.02	7.40	7.79	8
2014/08/06	ME	MW1	08:11:08	M	10.1	32.1	0.46	27.15	27.14	70.63	4.82	2.20	7.96	4
2014/08/06	ME	MW1	08:12:03	T	1.2	56.7	0.81	28.49	22.72	106.50	7.29	1.50	8.12	4
2014/08/06	ME	MW1	08:13:13	B	19.0	163.5	0.15	25.31	31.94	47.95	3.29	3.90	7.80	8
2014/08/06	ME	MW1	08:14:07	M	10.8	72.2	0.28	25.91	30.52	53.34	3.65	2.40	7.85	4
2014/08/06	ME	MW1	08:15:09	T	0.9	307.8	0.13	28.48	22.71	106.19	7.27	1.50	8.12	5
2014/08/06	ME	THB1	09:33:52	B	3.1	325.6	0.83	27.72	26.11	48.52	3.30	12.50	7.72	16
2014/08/06	ME	THB1	09:34:17	T	0.9	191.6	0.08	30.38	19.24	95.34	6.44	4.70	8.24	9
2014/08/06	ME	THB1	09:34:52	B	3.0	179.2	0.14	28.32	25.07	75.81	5.13	9.60	7.77	16
2014/08/06	ME	THB1	09:35:35	T	1.0	27.2	0.71	30.33	19.42	119.75	8.09	2.30	8.23	10
2014/08/06	ME	THB1	09:36:22	B	3.2	329.6	0.41	27.62	26.39	57.08	3.88	6.60	7.71	16
2014/08/06	ME	THB1	09:37:03	T	1.1	18.8	1.11	30.23	19.55	103.01	6.97	3.30	8.20	10
2014/08/06	ME	THB2	09:39:33	M	1.3	40.0	0.02	30.50	19.69	85.00	5.72	13.10	7.82	6
2014/08/06	ME	THB2	09:40:10	M	1.3	40.0	0.02	30.51	19.73	84.58	5.69	13.70	7.81	6
2014/08/06	ME	THB2	09:40:57	M	1.3	40.0	0.03	30.51	19.68	83.97	5.65	14.00	7.81	6
2014/08/06	ME	WSR45C	08:58:42	B	12.1	196.7	0.13	25.15	32.36	48.67	3.42	9.50	7.73	12
2014/08/06	ME	WSR45C	08:59:26	M	7.1	13.3	0.51	28.14	24.07	78.20	5.34	3.00	7.95	3
2014/08/06	ME	WSR45C	09:00:12	T	1.0	330.3	0.54	29.22	20.09	110.61	7.59	2.10	8.12	4
2014/08/06	ME	WSR45C	09:01:07	B	12.1	103.5	0.37	25.18	32.27	45.98	3.15	9.80	7.73	12
2014/08/06	ME	WSR45C	09:01:43	M	7.1	87.5	0.67	28.07	24.23	71.41	4.88	3.70	7.94	3
2014/08/06	ME	WSR45C	09:02:28	T	0.6	10.0	1.05	29.37	18.74	109.31	7.53	2.10	8.13	4
2014/08/06	ME	WSR45C	09:03:19	B	12.2	254.8	0.11	25.38	31.83	49.57	3.40	9.50	7.73	12
2014/08/06	ME	WSR45C	09:03:59	M	7.1	65.6	0.61	28.05	24.37	73.60	5.03	3.60	7.94	3
2014/08/06	ME	WSR45C	09:04:44	T	1.0	182.2	1.08	29.36	18.93	110.40	7.60	2.10	8.13	4
2014/08/06	ME	WSR46	11:29:48	B	8.1	357.5	0.35	27.59	26.59	59.94	4.07	4.50	7.73	5
2014/08/06	ME	WSR46	11:30:26	M	5.1	132.3	0.15	28.47	22.81	75.72	5.18	3.10	7.85	3
2014/08/06	ME	WSR46	11:31:01	T	1.1	141.5	0.46	29.56	17.21	116.21	8.05	2.80	8.17	4
2014/08/06	ME	WSR46	11:31:47	B	7.9	114.2	0.31	27.78	26.05	66.59	4.52	3.90	7.75	4
2014/08/06	ME	WSR46	11:32:32	M	5.1	151.8	0.25	28.33	23.37	73.14				

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/08	MF	DS1	16:58:01	B	2.0	56.3	0.16	29.45	19.66	99.26	6.80	14.53	7.95	6
2014/08/08	MF	DS1	16:58:41	T	0.9	180.8	0.51	29.88	18.43	107.92	7.39	5.46	7.99	6
2014/08/08	MF	DS1	16:59:12	B	2.0	162.7	0.89	29.50	19.54	100.21	6.86	15.95	7.95	6
2014/08/08	MF	DS1	16:59:50	T	0.9	281.7	0.09	29.75	18.81	105.26	7.20	8.95	7.97	6
2014/08/08	MF	DS1	17:00:16	B	2.0	65.7	0.56	29.45	19.65	99.65	6.82	14.42	7.95	5
2014/08/08	MF	DS1	17:00:43	T	1.1	69.0	0.37	29.59	19.29	102.08	6.99	11.18	7.96	6
2014/08/08	MF	DS2	17:05:06	B	2.1	185.8	0.09	29.59	19.20	103.73	7.10	12.06	7.96	8
2014/08/08	MF	DS2	17:05:46	T	1.2	212.8	1.21	29.58	19.24	104.39	7.15	11.42	7.97	8
2014/08/08	MF	DS2	17:06:32	B	1.9	346.1	1.40	29.54	19.31	102.74	7.04	15.10	7.95	8
2014/08/08	MF	DS2	17:07:13	T	1.1	243.4	0.02	29.75	18.96	109.68	7.50	9.61	8.00	8
2014/08/08	MF	DS2	17:08:06	B	1.9	159.8	0.32	29.52	19.31	102.03	6.99	11.29	7.96	8
2014/08/08	MF	DS2	17:08:39	T	1.0	108.0	0.24	29.87	18.70	109.84	7.51	9.78	8.00	8
2014/08/08	MF	DS3	17:13:06	B	1.9	160.5	0.59	29.72	19.59	105.46	7.19	10.91	7.98	9
2014/08/08	MF	DS3	17:13:48	T	0.8	343.6	0.96	30.03	19.07	108.70	7.40	8.71	7.99	8
2014/08/08	MF	DS3	17:14:22	B	1.7	141.7	0.40	29.88	19.12	108.44	7.39	8.26	7.99	9
2014/08/08	MF	DS3	17:14:58	T	0.8	330.0	1.13	30.05	19.05	109.27	7.43	8.50	7.99	8
2014/08/08	MF	DS3	17:15:47	B	2.0	250.7	0.80	29.80	19.19	107.58	7.34	8.57	7.98	8
2014/08/08	MF	DS3	17:16:21	T	1.0	280.1	0.10	30.01	19.06	109.82	7.47	8.16	7.99	7
2014/08/08	MF	DS4	17:22:15	B	3.1	135.0	0.41	29.91	20.21	116.26	7.88	12.19	8.03	20
2014/08/08	MF	DS4	17:22:46	T	1.0	57.4	0.15	30.14	19.58	122.98	8.33	8.39	8.06	14
2014/08/08	MF	DS4	17:23:10	B	2.8	247.0	0.78	29.86	20.74	113.17	7.65	16.17	8.03	19
2014/08/08	MF	DS4	17:23:37	T	1.0	158.5	0.43	30.14	19.62	123.48	8.36	8.36	8.06	13
2014/08/08	MF	DS4	17:24:17	B	2.9	23.1	0.18	29.77	21.07	108.58	7.34	17.96	8.00	20
2014/08/08	MF	DS4	17:24:57	T	0.8	171.3	0.18	30.07	19.52	120.24	8.15	7.96	8.06	14
2014/08/08	MF	DS5	17:28:59	B	5.1	112.7	0.62	29.33	21.66	90.32	6.13	15.39	7.89	11
2014/08/08	MF	DS5	17:29:25	M	3.5	221.5	0.84	29.73	21.08	105.01	7.10	12.87	8.00	9
2014/08/08	MF	DS5	17:30:05	T	0.7	222.9	0.57	30.71	19.76	139.78	9.37	6.83	8.17	11
2014/08/08	MF	DS5	17:30:45	B	5.2	328.7	0.45	28.36	22.69	68.88	4.72	14.23	7.85	9
2014/08/08	MF	DS5	17:31:29	M	3.4	218.8	0.75	29.59	21.35	100.17	6.78	14.47	7.96	11
2014/08/08	MF	DS5	17:32:10	T	0.8	304.4	0.76	30.72	19.77	140.87	9.44	6.80	8.17	9
2014/08/08	MF	DS5	17:32:58	B	5.0	212.1	0.30	28.58	22.96	67.99	4.61	12.51	7.79	12
2014/08/08	MF	DS5	17:33:41	M	3.4	115.1	0.27	29.99	20.48	118.96	8.04	11.54	8.06	15
2014/08/08	MF	DS5	17:34:13	T	0.9	124.2	0.31	30.70	19.78	140.91	9.44	6.90	8.18	12
2014/08/08	MF	US1	17:47:53	B	1.9	80.0	1.05	29.05	19.73	88.08	6.07	6.34	7.86	16
2014/08/08	MF	US1	17:48:26	T	1.1	177.3	0.21	29.39	19.29	91.79	6.30	5.14	7.89	12
2014/08/08	MF	US1	17:49:52	B	1.9	304.0	0.30	28.79	21.46	84.11	5.77	4.41	7.86	15
2014/08/08	MF	US1	17:50:37	T	1.0	180.5	0.23	29.33	19.47	90.27	6.20	4.53	7.88	11
2014/08/08	MF	US1	17:51:16	B	2.1	324.0	0.44	28.84	21.40	86.23	5.91	4.11	7.88	7
2014/08/08	MF	US1	17:52:05	T	1.0	92.7	0.34	28.98	20.77	86.78	5.95	4.45	7.87	9
2014/08/08	MF	US2	17:56:20	B	2.8	305.6	0.30	28.85	20.48	81.60	5.62	4.37	7.83	11
2014/08/08	MF	US2	17:57:10	T	1.2	112.3	0.12	29.02	20.22	82.96	5.70	4.04	7.84	7
2014/08/08	MF	US2	17:57:53	B	3.0	309.8	0.42	28.10	23.03	69.49	4.78	6.36	7.80	9
2014/08/08	MF	US2	17:58:42	T	1.1	235.2	0.31	29.12	20.02	84.85	5.83	3.91	7.85	11
2014/08/08	MF	US2	17:59:24	B	2.9	212.0	0.21	28.53	21.49	77.72	5.35	5.18	7.81	7
2014/08/08	MF	US2	18:00:03	T	1.0	251.5	0.50	29.32	19.60	90.63	6.22	4.06	7.88	9
2014/08/08	MF	MW1	18:46:52	B	17.9	255.6	0.12	25.18	31.92	39.35	2.70	11.15	7.74	12
2014/08/08	MF	MW1	18:47:44	M	10.0	216.2	0.60	25.55	31.01	40.23	2.76	7.00	7.74	12
2014/08/08	MF	MW1	18:48:52	T	1.1	217.0	0.78	27.08	26.99	63.93	4.37	4.87	7.81	13
2014/08/08	MF	MW1	18:50:02	B	18.0	13.0	0.66	25.17	31.92	38.52	2.65	10.92	7.74	12
2014/08/08	MF	MW1	18:50:55	M	9.9	178.7	0.09	26.23	29.08	45.64	3.13	6.24	7.77	12
2014/08/08	MF	MW1	18:51:47	T	1.0	338.3	1.28	27.31	26.13	63.23	4.33	4.74	7.80	12
2014/08/08	MF	MW1	18:52:58	B	18.1	2.9	0.42	25.19	31.91	38.65	2.66	10.36	7.74	13
2014/08/08	MF	MW1	18:53:55	M	10.1	324.6	0.18	25.34	31.52	39.11	2.69	7.58	7.74	12
2014/08/08	MF	MW1	18:55:23	T	1.2	252.1	1.53	27.88	24.16	61.44	4.21	3.97	7.77	12
2014/08/08	MF	THB1	16:47:36	B	2.3	292.3	0.13	29.79	19.73	102.43	6.97	18.33	7.97	20
2014/08/08	MF	THB1	16:48:33	T	1.3	150.4	1.06	29.89	19.22	105.91	7.22	18.59	8.00	19
2014/08/08	MF	THB1	16:48:59	B	2.1	225.5	0.61	29.69	19.95	101.01	6.88	20.01	7.96	20
2014/08/08	MF	THB1	16:49:36	T	1.0	190.4	0.92	29.73	19.82	101.43	6.91	17.01	7.96	19
2014/08/08	MF	THB1	16:50:24	B	2.0	234.2	0.45	29.66	19.97	100.55	6.85	17.33	7.95	20
2014/08/08	MF	THB1	16:51:12	T	1.0	160.9	0.74	29.81	19.47	104.75	7.14	16.05	7.97	18
2014/08/08	MF	THB2	16:55:21	M	1.0	40.0	0.03	31.04	18.82	120.44	8.07	14.69	8.01	22
2014/08/08	MF	THB2	16:56:09	M	1.0	40.0	0.03	31.08	18.80	122.14	8.18	14.59	8.03	22
2014/08/08	MF	THB2	16:57:35	M	1.0	40.0	0.03	31.09	18.81	122.35	8.19	14.39	8.05	21
2014/08/08	MF	WSR45C	18:10:13	B	11.9	146.4	0.25	26.28	29.11	47.05	3.22	13.34	7.74	16
2014/08/08	MF	WSR45C	18:10:58	M	7.0	45.4	0.41	26.58	28.15	47.69	3.27	11.93	7.74	14
2014/08/08	MF	WSR45C	18:11:40	T	0.9	324.1	0.66	29.47	19.25	95.22	6.53	3.79	7.92	9
2014/08/08	MF	WSR45C	18:12:36	B	11.8	194.5	0.44	26.06	29.74	43.98	3.01	14.85	7.74	16
2014/08/08	MF	WSR45C	18:13:22	M	6.8	223.0	0.38	26.59	28.09	48.48	3.32	10.00	7.75	13
2014/08/08	MF	WSR45C	18:14:18	T	1.1	154.9	0.36	29.53	19.12	96.39	6.61	3.37	7.92	8
2014/08/08	MF	WSR45C	18:15:11	B	12.0	330.7	1.19	26.04	29.75	44.15	3.03	13.59	7.74	16
2014/08/08	MF	WSR45C	18:15:53	M	7.3	344.4	0.18	26.50	28.35	48.67	3.34	7.72	7.75	13
2014/08/08	MF	WSR45C	18:16:36	T	1.0	212.2	0.77	29.66	18.56	94.72	6.50	3.88	7.92	9
2014/08/08	MF	WSR46	16:15:51	B	7.9	267.0	0.74	26.82	27.38	50.26	3.45	21.75	7.71	9
2014/08/08	MF	WSR46	16:16:35	M	4.8	311.4	1.09	28.27	22.72	65.53	4.57	7.56	7.75	7
2014/08/08	MF	WSR46	16:17:03	T	1.2	263.4	0.81	29.79	18.17	101.08	6.94	4.01	7.94	4
2014/08/08	MF	WSR46	16:17:54	B	8.1	239.6	0.34	26.77	27.62	51.10	3.50	24.75	7.74	9
2014/08/08	MF	WSR46	16:18:41	M	5.1	318.3	0.60	28.51	23.07	72.23	4.93	7.57	7.81	8
2014/08/08	MF	WSR46	16:19:27	T	0.9	198.0	0.47	29.88	18.62	110.98	7.59	4.01	7.96	4
2014/08/08	MF	WSR46	16:20:16	B	8.3	290.8	0.93	26.77	27.65	51.06	3.50	26.46	7.74	9
2014/08/08	MF	WSR46	16:20:58	M	5.1	259.3	0.46	28.57	22.67	74.84	5.11	7.30	7.83	7
2014/08/08	MF	WSR46	16:21:42	T	1.1	249.9	1.03	29.81	19.08	118.62	8.10	3.90	8.05	4

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/08	ME	DS1	12:00:56	B	3.1	302.6	0.17	29.62	18.91	102.12	7.00	8.98	7.91	12
2014/08/08	ME	DS1	12:01:33	T	1.1	92.1	0.41	29.46	18.54	99.08	6.83	5.93	7.89	7
2014/08/08	ME	DS1	12:02:16	B	2.9	317.1	0.27	29.55	19.84	110.94	7.58	11.72	7.94	12
2014/08/08	ME	DS1	12:02:47	T	1.1	319.7	0.76	29.50	18.76	102.73	7.06	6.36	7.93	7
2014/08/08	ME	DS1	12:03:24	B	3.0	223.1	0.44	29.72	19.54	108.32	7.39	5.19	7.97	12
2014/08/08	ME	DS1	12:03:53	T	1.2	115.7	0.20	29.45	18.67	100.56	6.92	6.09	7.91	7
2014/08/08	ME	DS2	12:10:13	B	3.2	276.1	0.62	29.14	19.15	95.16	6.57	3.52	7.86	5
2014/08/08	ME	DS2	12:10:46	T	1.2	65.3	0.12	29.15	18.95	94.44	6.52	3.84	7.86	5
2014/08/08	ME	DS2	12:11:15	B	3.1	18.2	1.14	29.11	19.37	94.73	6.53	3.48	7.86	5
2014/08/08	ME	DS2	12:11:41	T	1.2	303.4	0.85	29.14	19.10	94.85	6.55	3.72	7.86	5
2014/08/08	ME	DS2	12:12:10	B	3.0	14.6	0.41	29.14	19.11	94.54	6.53	3.68	7.86	5
2014/08/08	ME	DS2	12:12:48	T	1.0	114.8	0.24	29.14	19.07	94.41	6.52	4.09	7.86	5
2014/08/08	ME	DS3	12:17:49	B	5.1	226.3	0.39	28.87	20.51	90.61	6.24	4.03	7.85	7
2014/08/08	ME	DS3	12:18:16	M	3.6	228.0	0.56	29.01	19.99	92.78	6.39	4.55	7.86	8
2014/08/08	ME	DS3	12:18:59	T	1.0	57.7	1.70	29.59	18.92	100.69	6.91	3.67	7.88	6
2014/08/08	ME	DS3	12:19:43	B	5.0	136.1	0.46	28.87	20.37	90.11	6.21	3.49	7.85	7
2014/08/08	ME	DS3	12:20:16	M	3.4	352.8	0.52	29.24	19.68	96.64	6.64	3.41	7.87	8
2014/08/08	ME	DS3	12:20:45	T	1.2	161.7	0.33	29.67	19.14	105.02	7.18	3.07	7.91	6
2014/08/08	ME	DS3	12:21:31	B	5.2	1.3	0.17	28.73	20.84	85.22	5.87	5.14	7.83	8
2014/08/08	ME	DS3	12:22:13	M	3.6	18.8	0.88	29.06	19.94	94.26	6.49	3.68	7.87	8
2014/08/08	ME	DS3	12:22:55	T	1.1	222.4	0.93	29.56	18.83	100.69	6.91	3.87	7.89	6
2014/08/08	ME	DS4	12:28:06	B	7.8	15.3	0.58	27.57	25.25	65.14	4.46	8.95	7.74	12
2014/08/08	ME	DS4	12:28:33	M	5.0	42.9	0.63	28.08	22.24	75.92	5.24	6.82	7.76	12
2014/08/08	ME	DS4	12:29:18	T	1.0	4.3	0.13	29.26	19.21	94.50	6.51	3.67	7.87	5
2014/08/08	ME	DS4	12:30:02	B	8.1	96.7	0.52	27.59	25.25	65.22	4.47	8.73	7.75	12
2014/08/08	ME	DS4	12:30:45	M	5.0	178.4	0.40	28.34	22.27	76.66	5.27	5.57	7.80	12
2014/08/08	ME	DS4	12:31:30	T	1.1	70.5	0.83	29.29	19.29	96.00	6.60	3.54	7.87	5
2014/08/08	ME	DS4	12:32:16	B	8.1	103.7	0.52	27.55	25.30	64.31	4.41	7.42	7.74	12
2014/08/08	ME	DS4	12:32:45	M	5.0	34.4	0.16	28.22	22.25	73.27	5.05	6.74	7.76	13
2014/08/08	ME	DS4	12:33:20	T	1.1	322.1	0.24	29.32	18.76	93.28	6.43	3.66	7.85	5
2014/08/08	ME	DS5	12:38:30	B	8.5	172.7	0.24	27.26	26.18	61.82	4.23	5.88	7.73	5
2014/08/08	ME	DS5	12:39:13	M	5.2	236.8	0.34	28.59	20.90	85.15	5.87	3.53	7.81	6
2014/08/08	ME	DS5	12:39:59	T	1.1	117.2	0.50	29.40	18.02	93.49	6.46	3.65	7.84	4
2014/08/08	ME	DS5	12:40:43	B	9.0	99.4	0.77	26.80	27.83	56.79	3.88	11.83	7.73	5
2014/08/08	ME	DS5	12:41:25	M	5.6	49.4	0.17	28.38	21.97	78.58	5.41	4.06	7.80	6
2014/08/08	ME	DS5	12:42:22	T	0.9	110.8	1.00	29.65	16.95	93.97	6.51	3.76	7.83	4
2014/08/08	ME	DS5	12:43:37	B	8.9	190.0	0.63	26.97	27.06	60.11	4.12	5.97	7.74	5
2014/08/08	ME	DS5	12:44:20	M	5.5	255.2	0.63	28.48	21.37	80.42	5.54	3.85	7.81	6
2014/08/08	ME	DS5	12:44:52	T	0.9	143.6	0.88	29.50	17.56	93.56	6.48	3.78	7.85	4
2014/08/08	ME	US1	11:50:59	B	2.1	105.1	1.03	29.53	20.57	100.51	7.48	6.00	7.98	12
2014/08/08	ME	US1	11:51:26	T	0.9	60.1	0.62	29.74	19.99	117.70	8.01	14.50	8.02	14
2014/08/08	ME	US1	11:52:10	B	1.9	63.6	0.91	29.59	20.72	112.05	7.61	4.60	8.00	12
2014/08/08	ME	US1	11:52:49	T	1.1	29.7	0.37	29.78	19.88	125.36	8.53	12.81	8.07	14
2014/08/08	ME	US1	11:53:20	B	2.1	62.6	0.46	29.57	20.34	117.23	7.98	5.00	8.04	12
2014/08/08	ME	US1	11:53:51	T	1.1	197.5	0.56	29.79	19.87	128.86	8.76	10.60	8.08	14
2014/08/08	ME	US2	11:42:14	B	2.0	104.0	0.33	29.56	20.19	108.37	7.38	5.43	8.01	7
2014/08/08	ME	US2	11:43:00	T	1.1	26.1	0.62	29.63	19.85	122.74	8.37	4.49	8.07	6
2014/08/08	ME	US2	11:43:40	B	2.1	299.9	1.10	29.43	20.75	97.37	6.63	6.46	7.92	7
2014/08/08	ME	US2	11:44:24	T	0.9	259.2	0.26	29.70	19.74	127.90	8.72	4.30	8.09	6
2014/08/08	ME	US2	11:44:50	B	2.0	298.5	0.89	29.45	20.61	98.84	6.73	5.81	7.91	7
2014/08/08	ME	US2	11:45:32	T	1.0	303.3	0.11	29.72	19.81	122.14	8.32	4.58	8.06	6
2014/08/08	ME	MW1	09:53:55	B	17.7	42.8	0.46	25.56	31.12	42.98	2.95	4.10	7.68	8
2014/08/08	ME	MW1	09:54:49	M	10.1	301.2	0.04	27.71	23.74	77.68	5.35	2.28	7.85	5
2014/08/08	ME	MW1	09:55:33	T	1.1	70.1	0.62	28.67	20.12	94.36	6.53	2.07	7.91	5
2014/08/08	ME	MW1	09:56:42	B	17.8	350.7	0.47	25.43	31.40	41.68	2.86	6.74	7.74	9
2014/08/08	ME	MW1	09:57:44	M	10.3	37.6	0.76	27.70	23.79	77.68	5.35	2.29	7.88	5
2014/08/08	ME	MW1	09:58:31	T	1.0	77.0	0.89	29.10	19.28	98.21	6.78	2.13	7.95	5
2014/08/08	ME	MW1	09:59:42	B	18.0	49.9	0.69	25.42	31.47	41.84	2.87	8.30	7.76	8
2014/08/08	ME	MW1	10:00:25	M	10.1	251.1	0.83	27.78	23.48	76.94	5.30	2.31	7.88	5
2014/08/08	ME	MW1	10:01:10	T	1.1	61.1	1.58	29.00	19.55	97.70	6.74	2.03	7.96	5
2014/08/08	ME	THB1	11:18:30	B	3.2	171.2	1.21	29.54	20.78	95.85	6.51	10.51	7.92	15
2014/08/08	ME	THB1	11:19:19	T	0.8	255.4	0.30	29.78	20.00	115.81	7.87	4.21	8.04	9
2014/08/08	ME	THB1	11:20:20	B	3.1	50.6	1.56	28.88	22.10	72.08	4.92	9.79	7.74	15
2014/08/08	ME	THB1	11:21:00	T	1.2	143.2	0.12	29.76	20.44	122.07	8.28	4.32	8.07	9
2014/08/08	ME	THB1	11:22:01	B	2.9	163.6	1.58	29.15	21.27	86.05	5.87	5.54	7.87	15
2014/08/08	ME	THB1	11:22:45	T	0.9	116.3	0.11	29.81	19.78	125.27	8.52	3.46	8.08	9
2014/08/08	ME	THB2	11:23:30	M	1.2	40.0	0.03	30.11	18.96	93.70	6.37	11.29	7.90	4
2014/08/08	ME	THB2	11:24:17	M	1.2	40.0	0.03	30.08	18.94	94.27	6.41	9.79	7.91	4
2014/08/08	ME	THB2	11:26:11	M	1.2	40.0	0.03	30.09	18.94	97.66	6.64	6.59	7.95	4
2014/08/08	ME	WSR45C	10:41:52	B	12.0	147.3	0.82	25.96	30.16	46.07	3.16	14.67	7.75	8
2014/08/08	ME	WSR45C	10:42:43	M	6.9	154.6	0.09	28.60	20.06	81.93	5.88	4.01	7.86	8
2014/08/08	ME	WSR45C	10:43:27	T	1.0	127.6	0.89	28.95	18.09	86.93	6.05	4.13	7.86	9
2014/08/08	ME	WSR45C	10:44:15	B	12.1	305.3	0.09	26.01	30.02	47.81	3.27	13.58	7.75	8
2014/08/08	ME	WSR45C	10:45:00	M	7.1	1.2	0.62	28.63	20.04	82.84	5.74	3.93	7.86	8
2014/08/08	ME	WSR45C	10:45:45	T	1.0	92.4	0.97	29.01	17.90	88.12	6.14	3.59	7.86	9
2014/08/08	ME	WSR45C	10:46:35	B	12.0	74.3	0.33	25.98	30.08	46.18	3.16	14.45	7.74	8
2014/08/08	ME	WSR45C	10:47:17	M	7.2	30.5	0.65	28.61	20.04	82.07	5.69	4.03	7.86	8
2014/08/08	ME	WSR45C	10:48:04	T	0.9	83.7	0.39	29.20	17.04	89.48	6.24	3.59	7.86	9
2014/08/08	ME	WSR46	13:04:29	B	8.1	98.0	0.50	27.65	24.86	58.22	3.99	10.05	7.69	11
2014/08/08	ME	WSR46	13:05:14	M	4.9	123.3	0.73	28.82	19.90	77.25	5.34	4.59	7.73	5
2014/08/08	ME	WSR46	13:05:53	T	1.0	83.8	1.45	30.08	15.69	90.77	6.29	4.04	7.75	4
2014/08/08	ME	WSR46	13:06:36	B	8.5	62.9	0.24	27.62	25.04	58.46	4.01	10.54	7.69	10
2014/08/08	ME	WSR46	13:07:51	M	4.8	126.0	0.67	28.80	20.02	76.18	5.26	5.00	7.72	5
2014/08/08	ME	WSR46	13:08:33	T	1.1	134.6	1.46	30.10	15.62	91.09	6.31	3.96	7.75	4
2014/08/08	ME	WSR46	13:09:16	B	8.1	6.7	0.44	27.68	24.83	59.25	4.06	10.98	7.69	11
2014/08/08	ME	WSR46	13:10:09	M	4.8	91.1	1.11	28.91	19					

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/11	MF	DS1	18:01:11	B	1.9	241.1	0.92	28.76	21.53	74.53	5.11	11.45	7.75	13
2014/08/11	MF	DS1	18:02:00	T	1.1	299.9	0.65	29.33	20.88	90.47	6.17	11.55	7.84	11
2014/08/11	MF	DS1	18:03:00	B	2.1	268.6	0.29	29.32	20.90	91.07	6.21	11.45	7.84	13
2014/08/11	MF	DS1	18:04:00	T	1.0	3.1	0.45	29.33	20.89	92.18	6.28	12.05	7.85	12
2014/08/11	MF	DS1	18:05:01	B	2.1	216.5	1.04	29.23	20.96	89.79	6.13	11.85	7.83	13
2014/08/11	MF	DS1	18:06:01	T	1.0	180.7	0.26	29.31	20.91	91.50	6.24	11.45	7.85	11
2014/08/11	MF	DS2	18:10:29	B	3.0	45.9	0.33	29.11	21.19	88.13	6.02	10.85	7.82	18
2014/08/11	MF	DS2	18:11:12	T	1.0	131.5	1.10	29.25	21.03	92.94	6.34	8.55	7.86	13
2014/08/11	MF	DS2	18:12:01	B	2.9	158.2	0.49	29.13	21.20	87.24	5.95	10.05	7.82	18
2014/08/11	MF	DS2	18:13:00	T	0.9	245.3	0.72	29.23	21.05	92.96	6.34	8.75	7.85	14
2014/08/11	MF	DS2	18:14:01	B	3.1	41.9	0.35	29.16	21.16	88.65	6.05	9.75	7.83	17
2014/08/11	MF	DS2	18:15:09	T	1.0	111.4	0.20	29.17	21.12	89.37	6.10	10.45	7.83	14
2014/08/11	MF	DS3	18:20:14	B	4.3	178.6	0.57	28.84	21.72	78.57	5.37	38.12	7.79	21
2014/08/11	MF	DS3	18:21:01	M	3.0	247.1	0.23	29.15	21.31	86.50	5.90	31.33	7.84	15
2014/08/11	MF	DS3	18:22:14	T	1.0	222.1	0.46	29.33	21.08	95.04	6.47	14.65	7.88	13
2014/08/11	MF	DS3	18:23:01	B	3.8	218.9	0.43	28.91	21.61	80.90	5.53	39.12	7.80	20
2014/08/11	MF	DS3	18:24:00	M	3.0	198.3	0.65	28.98	21.51	81.40	5.56	38.22	7.81	15
2014/08/11	MF	DS3	18:25:00	T	1.2	41.1	0.55	29.36	21.00	96.37	6.56	9.35	7.89	13
2014/08/11	MF	DS3	18:26:49	B	4.0	52.7	0.13	28.89	21.63	79.01	5.40	43.72	7.79	21
2014/08/11	MF	DS3	18:27:33	M	3.0	297.5	0.43	28.95	21.55	80.53	5.50	39.82	7.80	15
2014/08/11	MF	DS3	18:28:42	T	1.1	283.8	0.57	29.29	21.07	94.09	6.41	11.45	7.88	13
2014/08/11	MF	DS4	18:34:11	B	3.9	275.3	0.61	28.86	21.69	80.97	5.54	18.64	7.80	18
2014/08/11	MF	DS4	18:35:11	M	3.0	240.7	0.34	29.22	21.28	91.33	6.22	20.34	7.86	15
2014/08/11	MF	DS4	18:36:02	T	0.8	212.2	0.63	29.37	21.13	99.48	6.77	13.25	7.91	13
2014/08/11	MF	DS4	18:37:00	B	3.9	244.1	0.26	28.84	21.71	79.79	5.46	22.24	7.80	18
2014/08/11	MF	DS4	18:38:04	M	2.9	89.6	1.00	29.16	21.32	89.44	6.10	20.54	7.84	15
2014/08/11	MF	DS4	18:39:00	T	1.2	269.5	0.71	29.38	21.12	99.90	6.79	12.75	7.91	13
2014/08/11	MF	DS4	18:40:01	B	3.9	137.6	0.27	28.83	21.74	79.91	5.47	22.34	7.80	18
2014/08/11	MF	DS4	18:41:00	M	3.0	203.7	0.86	28.95	21.57	81.83	5.59	22.24	7.81	15
2014/08/11	MF	DS4	18:42:01	T	1.1	236.3	0.01	29.38	21.12	99.33	6.75	11.75	7.91	13
2014/08/11	MF	DS5	18:50:00	B	1.5	40.0	0.03	29.11	21.38	87.83	5.99	26.53	7.83	21
2014/08/11	MF	DS5	18:51:01	B	1.5	40.0	0.03	29.06	21.44	85.12	5.81	30.63	7.82	22
2014/08/11	MF	DS5	18:52:02	B	1.5	40.0	0.03	29.04	21.47	84.02	5.74	32.33	7.81	20
2014/08/11	MF	US1	19:10:10	B	2.8	267.4	0.20	28.72	21.15	71.35	4.91	14.25	7.71	13
2014/08/11	MF	US1	19:11:00	T	1.2	250.2	0.46	28.84	21.00	72.57	4.98	10.55	7.73	10
2014/08/11	MF	US1	19:12:00	B	2.8	32.5	0.16	28.64	21.48	67.23	4.62	17.34	7.70	13
2014/08/11	MF	US1	19:13:10	T	0.9	289.3	1.56	28.82	21.17	71.17	4.88	12.75	7.72	9
2014/08/11	MF	US1	19:14:01	B	3.0	128.9	0.31	28.66	21.44	67.14	4.61	17.94	7.70	14
2014/08/11	MF	US1	19:15:00	T	1.1	299.6	0.54	28.96	21.01	75.32	5.16	10.25	7.76	10
2014/08/11	MF	US2	19:23:00	B	8.0	240.9	1.34	28.95	21.49	68.59	4.57	12.05	7.69	17
2014/08/11	MF	US2	19:24:00	M	4.9	340.6	0.68	28.88	20.96	71.44	4.91	9.45	7.69	11
2014/08/11	MF	US2	19:25:01	T	0.9	254.0	0.51	28.96	20.74	73.87	5.07	8.95	7.71	10
2014/08/11	MF	US2	19:26:00	B	7.9	31.0	0.55	28.73	21.29	67.82	4.66	11.65	7.68	18
2014/08/11	MF	US2	19:27:00	M	5.1	52.0	0.37	28.86	20.90	70.45	4.94	9.85	7.69	10
2014/08/11	MF	US2	19:28:00	T	1.2	88.7	0.64	28.92	20.79	72.07	4.95	9.05	7.70	11
2014/08/11	MF	US2	19:30:31	B	8.1	39.3	0.09	28.25	22.27	65.52	4.50	14.45	7.70	18
2014/08/11	MF	US2	19:31:19	M	5.3	334.0	0.22	28.59	21.67	66.44	4.56	13.25	7.69	9
2014/08/11	MF	US2	19:32:00	T	1.2	333.7	0.58	28.86	20.88	70.18	4.82	9.85	7.69	11
2014/08/11	MF	MW1	20:03:49	B	17.9	257.1	0.39	26.03	28.90	45.64	3.14	28.38	7.68	23
2014/08/11	MF	MW1	20:04:35	M	10.2	278.3	0.18	27.32	27.32	47.55	3.27	13.46	7.66	19
2014/08/11	MF	MW1	20:05:19	T	0.9	139.9	0.55	27.47	25.43	53.59	3.67	11.10	7.64	18
2014/08/11	MF	MW1	20:06:39	B	18.1	260.0	0.15	26.05	28.86	45.49	3.13	24.83	7.67	24
2014/08/11	MF	MW1	20:07:24	M	10.1	78.5	0.28	26.68	27.28	47.35	3.25	11.54	7.66	19
2014/08/11	MF	MW1	20:08:10	T	1.0	243.2	0.22	27.49	25.40	53.55	3.67	10.17	7.64	18
2014/08/11	MF	MW1	20:09:19	B	18.1	82.5	0.69	26.06	28.85	45.33	3.12	33.28	7.67	24
2014/08/11	MF	MW1	20:10:04	M	10.2	238.4	0.30	26.71	27.21	47.31	3.25	12.41	7.65	18
2014/08/11	MF	MW1	20:10:59	T	0.8	109.3	0.22	27.58	25.17	55.10	3.78	8.80	7.64	18
2014/08/11	MF	THB1	18:41:09	B	1.7	152.4	0.94	29.03	22.01	81.12	5.52	16.75	7.73	22
2014/08/11	MF	THB1	18:42:02	T	1.0	186.1	0.54	29.08	21.92	84.03	5.72	15.67	7.74	17
2014/08/11	MF	THB1	18:42:52	B	1.8	144.2	1.40	29.02	22.05	79.71	5.43	20.12	7.72	22
2014/08/11	MF	THB1	18:43:37	T	1.0	270.4	0.52	29.09	21.94	83.98	5.71	17.62	7.74	19
2014/08/11	MF	THB1	18:44:22	B	1.9	78.3	0.65	29.09	21.93	84.00	5.71	17.59	7.74	22
2014/08/11	MF	THB1	18:45:08	T	0.9	187.1	0.24	29.09	21.91	84.65	5.76	14.26	7.74	17
2014/08/11	MF	THB2	18:47:39	M	0.9	40.0	0.04	30.85	20.08	84.19	5.62	16.99	7.80	15
2014/08/11	MF	THB2	18:48:07	M	0.9	40.0	0.04	30.77	20.10	85.37	5.71	18.99	7.80	15
2014/08/11	MF	THB2	18:48:50	M	0.9	40.0	0.04	30.63	20.35	83.86	5.61	14.19	7.80	15
2014/08/11	MF	WSR45C	19:21:31	B	12.3	236.8	0.14	27.59	24.88	57.93	3.98	23.15	7.63	16
2014/08/11	MF	WSR45C	19:22:25	M	7.4	244.9	1.73	28.19	23.58	61.47	4.21	12.88	7.63	12
2014/08/11	MF	WSR45C	19:23:11	T	1.1	275.7	1.27	28.81	22.22	67.24	4.59	8.13	7.63	9
2014/08/11	MF	WSR45C	19:24:03	B	11.6	309.9	0.72	27.76	24.54	57.03	3.91	16.72	7.63	17
2014/08/11	MF	WSR45C	19:24:43	M	7.1	238.3	0.94	28.58	22.79	64.12	4.38	12.17	7.63	13
2014/08/11	MF	WSR45C	19:25:24	T	1.1	248.5	0.57	28.92	22.04	69.00	4.70	7.82	7.63	9
2014/08/11	MF	WSR45C	19:26:17	B	11.5	245.5	0.61	27.80	24.47	58.02	3.98	17.07	7.63	15
2014/08/11	MF	WSR45C	19:27:03	M	7.2	268.7	0.77	28.55	22.87	64.09	4.38	10.87	7.63	12
2014/08/11	MF	WSR45C	19:27:49	T	1.2	252.7	0.37	28.99	21.91	70.09	4.78	7.76	7.64	9
2014/08/11	MF	WSR46	18:15:48	B	8.1	297.3	0.14	28.06	23.77	60.31	4.13	22.57	7.60	16
2014/08/11	MF	WSR46	18:16:31	M	5.1	289.2	0.39	29.10	21.75	78.03	5.31	11.33	7.66	12
2014/08/11	MF	WSR46	18:17:13	T	1.0	87.6	0.41	29.30	20.38	73.62	5.03	13.03	7.59	13
2014/08/11	MF	WSR46	18:18:05	B	7.9	251.7	1.26	28.01	23.91	59.02	4.04	19.86	7.64	16
2014/08/11	MF	WSR46	18:18:47	M	4.9	249.5	0.87	28.98	21.53	68.13	4.65	14.51	7.61	12
2014/08/11	MF	WSR46	18:19:33	T	1.1	311.1	0.79	29.24	20.58	71.29	4.87	14.19	7.59	14
2014/08/11	MF	WSR46	18:20:18	B	7.4	256.1	0.87	28.24	23.44	61.88	4.23	14.80	7.65	16
2014/08/11	MF	WSR46	18:20:56	M	5.4	309.6	1.11	28.93	22.03	72.73	4.96	11.73	7.68	12
2014/08/11	MF	WSR46	18:21:36	T	1.1	351.3	0.64	29.23	20.68	70.80	4.84	12.95	7.59	13

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/11	ME	DS1	12:29:10	B	3.7	345.1	1.17	28.04	22.90	64.57	4.45	8.95	7.71	9
2014/08/11	ME	DS1	12:30:13	M	2.8	69.4	0.35	28.58	21.60	68.67	4.72	9.15	7.75	9
2014/08/11	ME	DS1	12:31:06	T	1.1	349.1	0.48	29.03	20.89	76.86	5.26	6.45	7.79	11
2014/08/11	ME	DS1	12:32:00	M	3.8	9.1	0.80	28.15	22.54	62.67	4.32	9.95	7.75	9
2014/08/11	ME	DS1	12:33:00	B	2.9	42.4	0.56	28.61	21.62	68.86	4.73	8.95	7.77	8
2014/08/11	ME	DS1	12:34:00	T	1.0	40.3	0.37	29.02	20.84	76.76	5.26	6.45	7.79	10
2014/08/11	ME	DS1	12:35:00	M	4.0	298.5	0.24	27.95	23.05	61.76	4.26	8.75	7.76	10
2014/08/11	ME	DS1	12:36:00	B	2.9	350.2	0.41	28.50	21.77	65.96	4.54	9.45	7.77	9
2014/08/11	ME	DS1	12:37:00	T	1.1	167.1	0.32	28.93	20.96	75.75	5.20	6.25	7.80	11
2014/08/11	ME	DS2	12:42:10	B	7.9	121.8	0.12	27.00	25.50	55.26	3.82	12.45	7.78	16
2014/08/11	ME	DS2	12:43:00	M	4.9	47.4	0.70	28.05	22.67	60.96	4.20	8.45	7.78	7
2014/08/11	ME	DS2	12:44:00	T	1.1	230.7	0.44	28.99	20.71	73.45	5.04	7.15	7.79	10
2014/08/11	ME	DS2	12:45:12	B	8.1	204.5	0.37	26.91	25.77	53.46	3.69	12.45	7.78	17
2014/08/11	ME	DS2	12:46:11	M	4.8	16.5	0.51	28.28	22.18	63.05	4.34	8.75	7.78	7
2014/08/11	ME	DS2	12:47:00	T	1.0	75.0	0.58	29.25	20.56	75.14	5.14	6.95	7.80	10
2014/08/11	ME	DS2	12:48:00	B	8.1	61.1	0.08	26.93	25.68	52.16	3.60	12.25	7.79	16
2014/08/11	ME	DS2	12:49:03	M	4.9	93.8	0.92	28.14	22.54	62.35	4.29	8.95	7.79	8
2014/08/11	ME	DS2	12:50:00	T	1.0	193.2	0.47	29.17	20.61	74.54	5.10	6.85	7.79	10
2014/08/11	ME	DS3	12:54:42	B	7.8	172.3	0.25	27.33	24.63	56.35	3.89	12.55	7.79	10
2014/08/11	ME	DS3	12:55:28	M	5.1	285.4	0.11	27.91	23.30	62.15	4.28	9.25	7.79	8
2014/08/11	ME	DS3	12:56:12	T	0.8	353.4	1.18	28.98	20.77	69.94	4.80	8.05	7.77	8
2014/08/11	ME	DS3	12:57:53	B	7.6	44.4	0.34	27.13	25.10	53.65	3.71	14.15	7.79	10
2014/08/11	ME	DS3	12:58:38	M	5.2	110.6	0.21	27.62	24.01	58.65	4.04	9.55	7.79	9
2014/08/11	ME	DS3	12:59:21	T	1.1	326.8	0.43	28.82	20.87	68.24	4.69	8.95	7.78	8
2014/08/11	ME	DS3	13:01:09	B	7.5	256.7	0.19	27.23	24.89	54.15	3.74	13.35	7.79	10
2014/08/11	ME	DS3	13:02:02	M	5.1	158.4	0.65	27.95	23.22	62.44	4.30	9.25	7.80	9
2014/08/11	ME	DS3	13:03:00	T	1.0	185.5	0.75	28.72	21.00	67.03	4.61	9.05	7.77	8
2014/08/11	ME	DS4	13:07:45	B	9.9	9.6	0.52	26.91	25.67	54.24	3.75	16.24	7.79	15
2014/08/11	ME	DS4	13:08:35	M	6.3	73.7	0.47	27.31	24.65	55.64	3.84	13.25	7.79	13
2014/08/11	ME	DS4	13:09:23	T	1.1	63.6	0.40	28.68	21.39	68.43	4.70	8.65	7.79	8
2014/08/11	ME	DS4	13:10:14	B	10.2	55.6	0.73	26.88	25.79	52.64	3.64	17.74	7.80	15
2014/08/11	ME	DS4	13:11:02	M	6.0	96.2	0.57	27.36	24.59	55.64	3.84	12.95	7.80	12
2014/08/11	ME	DS4	13:12:00	T	1.0	88.3	0.37	28.63	21.39	67.32	4.63	8.65	7.79	8
2014/08/11	ME	DS4	13:13:38	B	9.6	9.8	0.41	27.05	25.32	52.34	3.62	15.94	7.80	15
2014/08/11	ME	DS4	13:14:27	M	6.1	344.9	0.81	27.42	24.70	55.24	3.81	12.05	7.80	13
2014/08/11	ME	DS4	13:15:11	T	1.1	13.0	0.47	28.74	20.92	64.72	4.45	9.25	7.77	8
2014/08/11	ME	DS5	13:23:43	B	10.6	115.0	0.43	26.87	25.76	51.53	3.56	28.63	7.80	14
2014/08/11	ME	DS5	13:24:54	M	5.8	124.8	1.24	27.36	24.54	54.43	3.76	16.24	7.79	12
2014/08/11	ME	DS5	13:25:42	T	1.1	63.0	0.58	28.74	21.32	69.41	4.77	9.15	7.80	8
2014/08/11	ME	DS5	13:27:32	B	11.7	125.6	0.44	26.97	25.77	51.33	3.55	31.13	7.80	15
2014/08/11	ME	DS5	13:28:14	M	7.1	70.5	0.69	27.24	24.75	53.73	3.71	16.34	7.79	12
2014/08/11	ME	DS5	13:29:03	T	1.2	48.2	0.61	28.73	21.33	69.11	4.75	8.75	7.80	8
2014/08/11	ME	DS5	13:30:18	B	11.3	66.4	0.34	26.88	25.77	51.53	3.56	25.83	7.80	14
2014/08/11	ME	DS5	13:31:01	M	6.7	55.1	0.58	27.39	24.43	54.92	3.79	15.34	7.79	12
2014/08/11	ME	DS5	13:32:00	T	1.4	143.0	0.37	28.66	21.43	69.60	4.78	8.95	7.81	8
2014/08/11	ME	US1	13:48:28	B	2.8	338.7	0.74	28.74	21.71	70.48	4.83	25.83	7.81	19
2014/08/11	ME	US1	13:49:21	T	1.0	50.1	0.68	29.17	21.10	82.76	5.65	13.35	7.88	13
2014/08/11	ME	US1	13:50:10	B	3.1	25.7	1.17	28.70	21.76	71.28	4.88	24.94	7.81	18
2014/08/11	ME	US1	13:51:00	T	1.0	154.8	0.88	29.18	21.07	84.86	5.79	11.25	7.88	13
2014/08/11	ME	US1	13:52:00	B	3.0	64.8	0.50	28.76	21.67	72.28	4.95	25.63	7.81	18
2014/08/11	ME	US1	13:54:05	T	0.9	53.9	0.10	29.03	21.23	80.26	5.49	10.65	7.84	13
2014/08/11	ME	US2	14:02:34	B	2.0	177.7	0.15	29.05	21.26	82.35	5.63	11.65	7.84	12
2014/08/11	ME	US2	14:03:15	T	1.0	93.5	0.20	29.17	21.16	84.24	5.75	10.35	7.85	11
2014/08/11	ME	US2	14:04:00	B	2.1	67.4	0.68	29.10	21.23	83.84	5.72	11.75	7.84	13
2014/08/11	ME	US2	14:05:00	T	0.9	61.6	0.43	29.17	21.14	85.04	5.80	10.15	7.86	11
2014/08/11	ME	US2	14:06:00	B	2.0	67.5	0.37	29.06	21.36	78.85	5.39	15.34	7.82	12
2014/08/11	ME	US2	14:07:00	T	1.0	8.3	0.61	29.24	21.08	85.23	5.88	9.35	7.86	12
2014/08/11	ME	MW1	12:21:35	B	18.1	92.4	0.38	26.64	28.40	50.53	3.45	8.41	7.65	8
2014/08/11	ME	MW1	12:22:26	M	9.5	296.0	0.13	26.78	28.02	51.28	3.51	7.04	7.67	9
2014/08/11	ME	MW1	12:23:15	T	1.0	85.0	1.30	28.59	24.44	67.65	4.58	4.14	7.67	6
2014/08/11	ME	MW1	12:24:24	B	17.7	342.8	0.51	26.84	27.90	51.89	3.55	11.49	7.69	8
2014/08/11	ME	MW1	12:25:46	M	10.1	83.9	0.88	27.14	27.16	54.38	3.71	7.16	7.70	9
2014/08/11	ME	MW1	12:26:46	T	1.4	101.5	1.21	27.93	25.56	62.00	4.21	4.91	7.69	6
2014/08/11	ME	MW1	12:28:08	B	18.3	346.3	0.58	27.17	27.14	54.57	3.72	8.52	7.70	8
2014/08/11	ME	MW1	12:29:00	M	10.0	133.0	0.82	27.26	26.90	55.59	3.79	6.33	7.70	9
2014/08/11	ME	MW1	12:29:46	T	0.8	80.7	1.39	28.68	23.78	67.42	4.57	5.56	7.69	6
2014/08/11	ME	THB1	13:38:33	B	3.1	93.7	0.39	28.92	23.08	74.40	5.04	15.59	7.69	13
2014/08/11	ME	THB1	13:39:24	T	0.9	219.5	0.31	29.22	22.28	85.36	5.78	4.46	7.73	8
2014/08/11	ME	THB1	13:40:01	B	3.1	37.6	0.24	28.92	23.10	74.40	5.04	15.78	7.70	14
2014/08/11	ME	THB1	13:41:02	T	0.9	13.4	0.21	29.15	22.41	87.75	5.95	4.88	7.74	9
2014/08/11	ME	THB1	13:41:47	B	3.1	126.7	0.85	28.90	23.13	73.83	5.00	14.02	7.70	13
2014/08/11	ME	THB1	13:42:46	T	1.1	58.2	0.94	29.06	22.80	84.84	5.75	5.65	7.75	9
2014/08/11	ME	THB2	13:49:53	M	1.3	40.0	0.04	30.04	20.08	86.46	5.85	3.19	7.78	6
2014/08/11	ME	THB2	13:50:23	M	1.3	40.0	0.05	30.02	20.08	87.26	5.91	3.29	7.78	5
2014/08/11	ME	THB2	13:50:48	M	1.3	40.0	0.04	30.02	20.09	87.37	5.91	3.09	7.78	6
2014/08/11	ME	WSR45C	13:07:59	B	11.9	42.0	0.83	27.64	25.48	57.51	3.93	13.00	7.67	11
2014/08/11	ME	WSR45C	13:08:59	M	6.9	62.0	0.49	27.79	25.03	58.55	4.00	13.40	7.66	14
2014/08/11	ME	WSR45C	13:09:59	T	0.9	120.9	1.36	28.54	23.20	67.17	4.58	9.29	7.66	10
2014/08/11	ME	WSR45C	13:10:59	B	12.1	94.2	0.86	27.75	25.22	57.70	3.94	13.68	7.67	12
2014/08/11	ME	WSR45C	13:11:59	M	6.9	97.6	0.94	27.78	24.97	57.85	3.95	13.26	7.66	14
2014/08/11	ME	WSR45C	13:12:59	T	1.1	128.4	0.40	28.56	23.31	67.61	4.60	9.74	7.67	10
2014/08/11	ME	WSR45C	13:13:59	B	11.8	51.2	1.12	27.75	25.18	57.66	3.94	14.49	7.67	11
2014/08/11	ME	WSR45C	13:14:59	M	7.0	67.6	0.12	27.83	24.90	58.30	3.98	13.01	7.67	15
2014/08/11	ME	WSR45C	13:15:59	T	0.9	129.3	0.73	28.61	23.27	68.56	4.67	9.64	7.68	11
2014/08/11	ME	WSR46	14:21:59	B	7.5	93.4	0.70	28.29	24.45	63.05	4.29	25.03	7.62	21
2014/08/11	ME	WSR46	14:22:59	M	5.3	125.4	1.09</							

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/13	MF	DS1	10:49:02	B	3.0	199.1	0.31	28.38	21.95	69.32	4.77	14.63	7.65	10
2014/08/13	MF	DS1	10:49:37	T	1.0	125.4	0.96	28.44	21.21	70.32	4.86	8.77	7.65	12
2014/08/13	MF	DS1	10:50:05	B	3.0	27.4	0.13	28.41	21.84	66.85	4.60	13.31	7.64	9
2014/08/13	MF	DS1	10:50:32	T	1.2	248.2	0.99	28.44	21.35	67.40	4.65	10.10	7.64	13
2014/08/13	MF	DS1	10:51:05	B	2.9	355.2	0.46	28.42	21.81	66.92	4.61	12.83	7.64	10
2014/08/13	MF	DS1	10:51:31	T	1.1	325.2	0.06	28.46	21.30	68.61	4.73	8.97	7.64	12
2014/08/13	MF	DS2	10:56:12	B	3.0	45.0	0.33	28.52	21.92	73.63	5.06	11.38	7.68	14
2014/08/13	MF	DS2	10:56:38	T	1.1	294.9	0.10	28.48	21.92	77.26	5.32	12.91	7.69	13
2014/08/13	MF	DS2	10:57:07	B	2.8	232.4	0.39	28.54	21.67	76.57	5.26	9.20	7.69	15
2014/08/13	MF	DS2	10:57:38	T	1.3	121.4	0.65	28.48	21.48	77.43	5.33	8.53	7.69	13
2014/08/13	MF	DS2	10:58:03	B	3.0	102.9	0.15	28.52	21.59	76.90	5.29	8.84	7.69	14
2014/08/13	MF	DS2	10:58:27	T	1.1	55.1	0.77	28.45	21.39	77.79	5.36	10.00	7.69	13
2014/08/13	MF	DS3	11:02:31	B	5.8	162.3	0.35	28.68	22.42	69.47	4.75	11.62	7.67	13
2014/08/13	MF	DS3	11:02:58	M	4.2	98.6	1.14	28.60	22.18	68.23	4.67	11.66	7.66	13
2014/08/13	MF	DS3	11:03:25	T	1.0	258.8	0.95	28.38	20.80	74.21	5.14	7.41	7.66	9
2014/08/13	MF	DS3	11:04:07	B	5.7	16.6	0.45	28.67	22.44	67.95	4.64	11.71	7.67	12
2014/08/13	MF	DS3	11:04:38	M	4.0	139.4	0.37	28.56	22.01	66.55	4.57	10.32	7.65	13
2014/08/13	MF	DS3	11:05:06	T	1.1	344.7	0.05	28.38	20.80	74.14	5.14	7.11	7.66	8
2014/08/13	MF	DS3	11:05:38	B	6.0	249.1	0.25	28.65	22.44	68.00	4.65	11.99	7.66	12
2014/08/13	MF	DS3	11:06:01	M	4.1	22.1	0.89	28.59	22.18	67.41	4.62	11.16	7.66	12
2014/08/13	MF	DS3	11:06:27	T	1.1	290.7	0.39	28.47	21.29	69.62	4.80	8.50	7.65	8
2014/08/13	MF	DS4	11:10:55	B	6.6	47.5	1.22	28.62	21.91	73.53	5.04	12.27	7.68	11
2014/08/13	MF	DS4	11:11:27	M	4.0	240.2	0.30	28.64	21.94	72.34	4.96	8.77	7.68	13
2014/08/13	MF	DS4	11:11:54	T	1.0	105.6	0.48	28.47	20.99	73.43	5.07	7.23	7.67	9
2014/08/13	MF	DS4	11:12:24	B	5.8	28.4	0.19	28.67	22.34	70.22	4.80	16.09	7.67	12
2014/08/13	MF	DS4	11:12:49	M	4.2	118.7	0.19	28.61	21.63	73.51	5.05	7.24	7.68	12
2014/08/13	MF	DS4	11:13:15	T	1.0	316.2	0.21	28.48	20.82	73.05	5.05	8.12	7.67	8
2014/08/13	MF	DS4	11:13:48	B	5.8	169.5	0.62	28.67	22.24	70.34	4.81	12.27	7.67	10
2014/08/13	MF	DS4	11:14:11	M	4.1	192.8	0.16	28.63	21.80	71.47	4.90	8.45	7.67	13
2014/08/13	MF	DS4	11:14:34	T	1.1	221.8	1.08	28.49	20.91	73.21	5.06	7.90	7.67	9
2014/08/13	MF	DS5	11:18:18	B	4.9	294.7	0.51	28.57	21.80	73.40	5.04	10.48	7.69	13
2014/08/13	MF	DS5	11:18:46	M	3.5	215.0	0.24	28.53	21.39	74.47	5.13	8.42	7.69	10
2014/08/13	MF	DS5	11:19:09	T	1.0	212.6	0.51	28.47	21.14	74.50	5.14	8.07	7.69	8
2014/08/13	MF	DS5	11:19:39	B	5.2	163.8	0.69	28.57	21.76	72.69	4.99	9.92	7.69	14
2014/08/13	MF	DS5	11:20:04	M	3.5	216.0	0.61	28.56	21.60	72.35	4.97	9.11	7.68	10
2014/08/13	MF	DS5	11:20:34	T	1.0	311.2	0.48	28.51	21.29	74.59	5.14	8.40	7.69	8
2014/08/13	MF	DS5	11:21:02	B	4.9	12.6	0.67	28.60	22.01	70.63	4.84	11.98	7.68	13
2014/08/13	MF	DS5	11:21:25	M	3.5	78.1	0.90	28.58	21.75	70.87	4.87	9.88	7.68	9
2014/08/13	MF	DS5	11:21:50	T	1.1	192.1	0.12	28.45	20.96	76.67	5.30	7.05	7.70	8
2014/08/13	MF	US1	10:40:07	B	5.0	303.9	0.43	27.65	24.68	53.21	4.06	10.92	7.68	12
2014/08/13	MF	US1	10:40:32	M	3.7	302.5	0.68	27.89	23.81	58.53	4.00	11.77	7.68	13
2014/08/13	MF	US1	10:41:01	T	1.3	76.0	0.38	28.19	22.64	61.82	4.25	11.96	7.65	15
2014/08/13	MF	US1	10:41:31	B	5.0	25.3	0.55	27.89	23.92	58.97	4.05	11.12	7.65	12
2014/08/13	MF	US1	10:42:00	M	3.6	98.9	0.72	28.15	22.96	60.15	4.13	13.09	7.65	13
2014/08/13	MF	US1	10:42:26	T	1.3	117.6	0.72	28.45	21.26	66.70	4.60	9.31	7.64	14
2014/08/13	MF	US1	10:42:59	B	5.0	298.4	0.50	27.76	24.32	57.19	3.93	10.72	7.67	13
2014/08/13	MF	US1	10:43:24	M	3.5	62.9	0.29	28.16	22.98	59.61	4.09	12.14	7.66	13
2014/08/13	MF	US1	10:44:01	T	1.2	304.2	0.51	28.47	21.25	66.90	4.62	7.20	7.64	15
2014/08/13	MF	US2	10:30:02	B	9.8	79.6	0.19	27.03	26.44	54.75	3.76	13.24	7.71	14
2014/08/13	MF	US2	10:30:39	M	5.9	342.6	0.74	27.13	26.16	53.43	3.67	14.40	7.70	16
2014/08/13	MF	US2	10:31:18	T	1.2	318.1	0.59	28.26	21.65	67.80	4.68	6.12	7.65	8
2014/08/13	MF	US2	10:31:58	B	9.9	225.7	1.09	27.01	26.52	52.93	3.63	15.16	7.70	13
2014/08/13	MF	US2	10:32:37	M	6.0	140.7	0.47	27.17	26.08	52.87	3.63	13.50	7.70	15
2014/08/13	MF	US2	10:33:22	T	1.1	51.1	0.51	28.27	21.67	67.39	4.65	6.20	7.65	8
2014/08/13	MF	US2	10:34:57	B	10.1	44.1	0.32	27.00	26.55	53.61	3.68	13.74	7.70	13
2014/08/13	MF	US2	10:35:31	M	6.2	191.1	0.58	27.24	25.96	53.57	3.68	13.74	7.69	17
2014/08/13	MF	US2	10:36:17	T	1.1	97.2	0.30	28.30	21.71	66.88	4.62	6.35	7.64	8
2014/08/13	MF	MW1	09:03:20	B	19.0	265.3	0.30	25.74	29.47	47.95	3.21	22.32	7.76	20
2014/08/13	MF	MW1	09:04:17	M	10.5	174.5	0.93	26.14	28.46	50.14	3.46	17.56	7.77	20
2014/08/13	MF	MW1	09:05:05	T	1.1	354.8	0.50	26.99	26.31	53.40	3.67	6.49	7.73	8
2014/08/13	MF	MW1	09:06:10	B	19.0	112.1	0.96	25.59	29.67	46.89	3.23	22.58	7.79	20
2014/08/13	MF	MW1	09:06:53	M	10.5	134.5	0.79	26.14	28.51	49.56	3.42	16.93	7.76	20
2014/08/13	MF	MW1	09:07:43	T	1.1	233.2	0.50	26.69	26.69	52.67	3.62	7.78	7.72	8
2014/08/13	MF	MW1	09:08:48	B	19.0	218.1	1.08	25.73	29.61	47.01	3.24	18.32	7.78	19
2014/08/13	MF	MW1	09:09:32	M	10.4	142.1	0.76	26.12	28.59	49.24	3.39	16.89	7.76	19
2014/08/13	MF	MW1	09:10:19	T	1.0	328.2	1.14	26.71	27.15	51.70	3.56	8.61	7.73	9
2014/08/13	MF	THB1	11:31:42	B	3.3	327.3	0.33	26.60	21.90	62.60	4.30	21.19	7.59	16
2014/08/13	MF	THB1	11:32:12	T	1.1	327.5	0.65	28.57	21.45	64.12	4.41	11.54	7.59	15
2014/08/13	MF	THB1	11:32:37	B	2.9	120.6	0.77	28.58	21.43	63.79	4.39	13.19	7.59	16
2014/08/13	MF	THB1	11:33:07	T	1.1	261.1	0.03	28.55	21.05	66.02	4.55	10.01	7.60	15
2014/08/13	MF	THB1	11:33:39	B	2.9	276.7	0.80	28.58	21.83	62.39	4.28	15.29	7.59	16
2014/08/13	MF	THB1	11:34:02	T	1.1	277.9	0.41	28.59	21.21	63.97	4.41	10.51	7.59	15
2014/08/13	MF	WSR45C	09:42:47	B	11.6	198.7	0.62	26.44	27.98	48.24	3.32	60.09	7.71	34
2014/08/13	MF	WSR45C	09:43:39	M	7.1	260.5	0.47	26.59	27.62	49.22	3.38	14.89	7.71	20
2014/08/13	MF	WSR45C	09:44:25	T	1.1	339.5	0.79	28.24	21.82	65.13	4.50	8.19	7.63	12
2014/08/13	MF	WSR45C	09:45:19	B	11.6	261.1	0.46	26.45	28.02	48.44	3.33	50.13	7.72	33
2014/08/13	MF	WSR45C	09:46:01	M	7.0	189.7	1.12	26.58	27.67	49.01	3.37	17.60	7.71	20
2014/08/13	MF	WSR45C	09:46:46	T	0.8	13.1	1.50	28.22	21.69	64.28	4.44	8.03	7.64	12
2014/08/13	MF	WSR45C	09:47:32	B	11.9	214.4	0.45	26.43	28.06	48.45	3.33	37.96	7.72	35
2014/08/13	MF	WSR45C	09:48:11	M	7.0	170.8	0.45	26.60	27.62	48.92	3.36	17.87	7.72	21
2014/08/13	MF	WSR45C	09:48:57	T	0.9	329.7	1.00	28.21	21.64	66.05	4.57	7.78	7.64	12
2014/08/13	MF	WSR46	10:05:36	B	8.8	126.2	0.53	27.69	24.46	58.91	4.05	14.36	7.68	23
2014/08/13	MF	WSR46	10:06:17	M	5.4	62.7	0.30	28.13	23.03	62.61	4.30	7.66	7.65	12
2014/08/13	MF	WSR46	10:06:53	T	1.2	67.6	0.33	28.22	22.62	64.01	4.40	7.23	7.65	8
2014/08/13	MF	WSR46	10:08:45	B	9.4	158.0	0.48	27.40	25.55	53.99	3.70	27.81	7.69	23
2014/08/13	MF													

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/13	ME	DS1	14:18:05	B	4.0	304.4	0.38	28.01	23.34	64.72	4.45	8.43	7.61	10
2014/08/13	ME	DS1	14:18:28	M	3.1	122.5	0.76	28.08	23.24	62.33	4.28	8.60	7.61	11
2014/08/13	ME	DS1	14:19:00	T	0.8	304.7	0.02	28.36	21.20	71.32	4.93	7.40	7.61	10
2014/08/13	ME	DS1	14:19:44	B	3.8	180.4	0.16	28.10	23.17	61.65	4.23	8.55	7.61	11
2014/08/13	ME	DS1	14:20:17	M	2.9	119.7	0.75	28.20	22.95	61.94	4.25	9.12	7.60	16
2014/08/13	ME	DS1	14:20:41	T	0.8	31.7	0.48	28.31	20.44	70.85	4.92	7.67	7.60	9
2014/08/13	ME	DS1	14:21:09	B	4.0	227.1	0.48	28.11	23.19	62.28	4.28	8.57	7.60	12
2014/08/13	ME	DS1	14:21:33	M	3.1	14.0	0.63	28.18	23.05	61.36	4.21	9.31	7.60	17
2014/08/13	ME	DS1	14:22:04	T	0.9	170.8	0.85	28.35	20.85	72.71	5.04	6.99	7.60	9
2014/08/13	ME	DS2	14:27:05	B	10.0	10.9	0.43	27.09	26.33	53.17	3.65	13.04	7.64	11
2014/08/13	ME	DS2	14:27:43	M	5.9	133.7	0.45	27.54	24.62	58.24	4.01	9.98	7.63	16
2014/08/13	ME	DS2	14:28:11	T	0.9	315.0	0.14	28.30	21.21	69.68	4.82	8.52	7.61	9
2014/08/13	ME	DS2	14:29:01	B	10.0	1.2	0.19	27.19	26.04	52.06	3.57	12.06	7.64	15
2014/08/13	ME	DS2	14:29:31	M	6.2	70.6	0.32	27.36	25.36	54.51	3.74	9.31	7.64	15
2014/08/13	ME	DS2	14:30:15	T	0.8	329.3	0.31	28.30	21.31	70.51	4.88	8.99	7.60	13
2014/08/13	ME	DS2	14:31:41	B	10.1	159.6	0.09	27.12	26.25	52.06	3.57	13.23	7.64	15
2014/08/13	ME	DS2	14:32:22	M	5.9	206.8	0.28	27.45	25.01	56.20	3.86	9.27	7.63	15
2014/08/13	ME	DS2	14:32:52	T	0.9	246.1	0.42	28.26	21.59	68.38	4.73	9.02	7.60	13
2014/08/13	ME	DS3	14:37:49	B	7.1	187.4	0.15	27.41	25.19	58.01	3.99	14.45	7.63	15
2014/08/13	ME	DS3	14:38:19	M	4.6	189.5	0.63	27.43	25.10	56.45	3.88	16.00	7.63	15
2014/08/13	ME	DS3	14:38:52	T	0.8	324.6	0.63	28.16	21.82	67.47	4.67	9.87	7.61	12
2014/08/13	ME	DS3	14:39:42	B	7.0	145.9	0.25	27.40	25.21	55.79	3.93	15.35	7.63	22
2014/08/13	ME	DS3	14:40:16	M	4.9	118.7	0.76	27.42	25.14	55.66	3.92	15.67	7.63	22
2014/08/13	ME	DS3	14:41:00	T	1.1	329.8	0.30	28.25	21.87	67.76	4.68	8.81	7.59	19
2014/08/13	ME	DS3	14:41:46	B	7.1	165.9	0.57	27.41	25.20	55.88	3.84	15.04	7.63	22
2014/08/13	ME	DS3	14:42:25	M	4.4	300.7	0.20	27.47	24.97	56.64	3.89	15.38	7.63	23
2014/08/13	ME	DS3	14:43:08	T	0.9	329.8	0.58	28.23	21.87	67.97	4.69	9.41	7.60	19
2014/08/13	ME	DS4	14:48:01	B	8.2	228.4	0.21	27.32	25.45	55.25	3.80	38.36	7.64	20
2014/08/13	ME	DS4	14:48:48	M	4.9	81.1	0.48	27.45	25.04	56.19	3.86	22.26	7.63	23
2014/08/13	ME	DS4	14:49:35	T	1.0	304.5	0.14	27.97	22.77	65.54	4.52	16.68	7.61	19
2014/08/13	ME	DS4	14:50:18	B	8.0	141.2	0.49	27.29	25.55	54.43	3.74	29.63	7.64	34
2014/08/13	ME	DS4	14:51:02	M	4.9	139.1	0.66	27.43	25.07	55.71	3.83	22.07	7.62	16
2014/08/13	ME	DS4	14:51:34	T	1.0	176.4	0.24	27.96	22.75	64.35	4.44	15.93	7.61	16
2014/08/13	ME	DS4	14:52:14	B	8.2	140.2	0.27	27.25	25.69	54.25	3.73	35.76	7.63	32
2014/08/13	ME	DS4	14:52:44	M	5.2	97.7	0.59	27.37	25.25	54.94	3.78	21.25	7.62	17
2014/08/13	ME	DS4	14:53:31	T	1.1	169.9	0.73	27.89	23.14	63.84	4.40	17.03	7.60	17
2014/08/13	ME	DS5	15:03:33	B	10.0	65.2	0.85	25.23	25.84	38.64	3.84	36.68	7.62	33
2014/08/13	ME	DS5	15:04:20	M	6.2	98.6	0.97	27.40	25.23	55.31	3.90	36.51	7.62	16
2014/08/13	ME	DS5	15:05:07	T	0.9	175.5	1.04	27.84	23.51	62.23	4.89	17.06	7.60	15
2014/08/13	ME	DS5	15:05:52	B	10.1	50.2	0.82	27.34	25.43	54.41	3.74	45.19	7.62	20
2014/08/13	ME	DS5	15:06:35	M	5.9	136.8	0.46	27.49	24.97	55.69	3.83	25.95	7.62	21
2014/08/13	ME	DS5	15:07:23	T	0.8	125.6	0.77	27.81	23.70	61.29	4.22	16.93	7.60	19
2014/08/13	ME	DS5	15:08:08	B	10.0	325.5	0.38	27.35	25.39	54.47	3.74	29.60	7.62	20
2014/08/13	ME	DS5	15:08:56	M	6.1	75.7	0.46	27.41	25.21	54.74	3.76	24.67	7.62	22
2014/08/13	ME	DS5	15:09:29	T	1.2	105.3	0.63	27.76	23.82	60.29	4.15	15.73	7.61	20
2014/08/13	ME	US1	14:09:50	B	3.0	100.3	0.74	28.16	23.24	63.67	4.37	25.21	7.62	10
2014/08/13	ME	US1	14:10:19	T	1.1	78.5	1.15	28.34	21.41	73.22	5.06	9.30	7.63	11
2014/08/13	ME	US1	14:10:59	B	2.9	36.6	0.98	28.38	21.73	71.39	4.92	15.70	7.63	10
2014/08/13	ME	US1	14:11:25	T	1.1	102.2	0.26	28.38	21.15	75.28	5.20	6.36	7.63	9
2014/08/13	ME	US1	14:11:59	B	2.9	194.3	0.05	28.20	23.18	63.07	4.33	19.91	7.61	11
2014/08/13	ME	US1	14:12:27	T	0.9	27.4	1.64	28.37	21.22	73.54	5.08	6.86	7.63	9
2014/08/13	ME	US2	14:00:45	B	4.0	209.7	0.18	28.53	22.47	68.04	4.66	10.55	7.60	10
2014/08/13	ME	US2	14:01:12	M	2.9	177.4	0.43	28.61	22.19	70.46	4.83	9.48	7.60	12
2014/08/13	ME	US2	14:01:38	T	1.1	280.1	0.68	28.42	21.13	75.34	5.21	5.85	7.62	6
2014/08/13	ME	US2	14:02:22	B	4.2	174.2	0.55	28.03	23.83	60.62	4.15	12.12	7.60	15
2014/08/13	ME	US2	14:02:47	M	2.9	36.4	0.44	28.57	22.01	69.67	4.79	8.63	7.61	19
2014/08/13	ME	US2	14:03:25	T	1.1	55.2	0.84	28.41	20.96	74.83	5.18	5.34	7.62	16
2014/08/13	ME	US2	14:03:59	B	4.2	4.8	0.43	28.12	23.65	61.38	4.20	11.73	7.60	20
2014/08/13	ME	US2	14:04:25	M	3.0	251.9	1.15	28.49	21.52	71.30	4.91	7.31	7.62	14
2014/08/13	ME	US2	14:05:11	T	1.0	345.1	1.56	28.33	20.73	77.58	5.38	5.29	7.63	18
2014/08/13	ME	MW1	15:48:25	B	18.1	328.0	0.62	27.58	24.31	61.08	4.21	12.77	7.59	13
2014/08/13	ME	MW1	15:49:29	M	10.0	104.4	0.60	27.65	24.08	61.00	4.20	12.85	7.59	13
2014/08/13	ME	MW1	15:50:21	T	0.8	76.6	1.39	27.92	22.74	68.72	4.75	8.40	7.59	10
2014/08/13	ME	MW1	15:51:57	B	18.3	321.1	0.47	27.58	24.36	59.48	4.09	14.79	7.60	10
2014/08/13	ME	MW1	15:52:43	M	10.2	51.9	1.02	27.68	23.98	60.88	4.19	14.40	7.59	7
2014/08/13	ME	MW1	15:53:30	T	1.0	53.1	1.08	27.95	22.62	68.80	4.75	7.33	7.59	10
2014/08/13	ME	MW1	15:54:42	B	18.0	39.5	0.64	27.61	24.23	60.05	4.13	15.30	7.60	6
2014/08/13	ME	MW1	15:55:26	M	10.5	80.0	0.85	27.73	23.73	62.71	4.32	12.24	7.59	10
2014/08/13	ME	MW1	15:56:18	T	1.1	321.1	0.74	27.95	22.71	67.98	4.69	7.45	7.59	7
2014/08/13	ME	THB1	13:15:54	B	3.1	46.4	0.61	28.59	21.53	68.58	4.72	7.78	7.45	17
2014/08/13	ME	THB1	13:16:29	T	0.9	170.9	0.47	28.54	20.75	68.84	4.76	5.62	7.50	16
2014/08/13	ME	THB1	13:16:59	B	2.9	94.5	0.41	28.58	21.37	65.62	4.52	7.67	7.52	10
2014/08/13	ME	THB1	13:17:25	T	1.1	328.5	0.32	28.55	20.87	67.76	4.68	5.95	7.54	17
2014/08/13	ME	THB1	13:18:01	B	2.9	236.1	0.19	28.61	21.54	67.12	4.61	7.74	7.56	17
2014/08/13	ME	THB1	13:18:42	T	0.9	103.9	0.90	28.55	20.93	68.22	4.71	5.74	7.56	10
2014/08/13	ME	WSR45C	15:15:23	B	12.1	146.1	0.58	27.55	24.82	57.16	3.93	37.57	7.61	20
2014/08/13	ME	WSR45C	15:16:07	M	6.9	106.7	0.52	27.54	24.88	56.29	3.87	26.38	7.61	21
2014/08/13	ME	WSR45C	15:16:38	T	1.2	130.1	0.12	28.11	22.17	67.07	4.63	11.60	7.60	20
2014/08/13	ME	WSR45C	15:17:25	B	12.3	70.5	0.41	27.50	24.98	55.68	3.82	35.45	7.62	13
2014/08/13	ME	WSR45C	15:18:07	M	7.0	55.7	0.34	27.54	24.82	56.14	3.86	24.10	7.61	12
2014/08/13	ME	WSR45C	15:18:38	T	1.3	48.4	0.10	28.11	22.15	67.04	4.63	11.59	7.61	11
2014/08/13	ME	WSR45C	15:19:22	B	12.1	169.1	0.39	27.48	25.03	55.74	3.83	34.00	7.62	13
2014/08/13	ME	WSR45C	15:20:04	M	6.8	82.9	0.49	27.54	24.83	56.00	3.85	24.20	7.61	12
2014/08/13	ME	WSR45C	15:20:45	T	1.1	145.3	0.47	28.10	22.17	68.08	4.70	11.37	7.59	11
2014/08/13	ME	WSR46	13:37:09	B	9.0	151.5	0.84	27.26	25.67	56.14	3.86	13.76	7.61	17
2014/08/13														

大小磨刀以南污泥坑二挖掘操作時的水質監察

監測日期	潮汐	監測站	時間	深度	深度(米)	水流方向	水流速度(米/秒)	水溫(攝氏度)	鹽度	溶解氧(%)	溶解氧(毫克/升)	混濁度(濁度單位)	酸鹼度	懸浮固體(毫克/升)
2014/08/15	漲潮	DS1	10:14:29	底層	3	274.8	0.35	28.56	19.8	69.27	4.81	12.52	7.67	23.8
2014/08/15	漲潮	DS1	10:15:15	面層	1	305.9	0.3	28.65	19.73	69.84	4.84	11.98	7.66	14.9
2014/08/15	漲潮	DS1	10:15:54	底層	3	214.7	0.6	28.45	19.95	67.93	4.72	25.28	7.64	23.4
2014/08/15	漲潮	DS1	10:16:20	面層	1.1	286.5	0.72	28.77	19.53	69.85	4.84	6.37	7.64	15.3
2014/08/15	漲潮	DS1	10:17:08	底層	3.1	249.2	0.48	28.43	20.03	67.39	4.68	27	7.62	23.2
2014/08/15	漲潮	DS1	10:17:42	面層	1.1	293.4	0.4	28.83	19.58	69.58	4.84	8.19	7.62	14.2
2014/08/15	漲潮	DS2	10:26:19	底層	2.9	269.7	0.44	28.49	19.99	70.34	4.89	17.42	7.61	23.1
2014/08/15	漲潮	DS2	10:27:02	面層	1.1	355.4	0.35	28.72	19.75	70.71	4.9	10.04	7.6	14.2
2014/08/15	漲潮	DS2	10:27:31	底層	2.9	266.2	0.87	28.48	19.98	68.54	4.76	19.59	7.6	24
2014/08/15	漲潮	DS2	10:28:06	面層	1	245.8	0.54	28.66	19.78	69.86	4.84	10.04	7.6	14.4
2014/08/15	漲潮	DS2	10:29:16	底層	3	306.1	0.07	28.53	19.93	68.77	4.78	14.22	7.59	22.3
2014/08/15	漲潮	DS2	10:29:54	面層	1.1	321.6	0.4	28.61	19.81	69.27	4.81	12.06	7.59	14.8
2014/08/15	漲潮	DS3	10:36:06	底層	2.9	136.8	0.13	28.32	20.72	68.54	4.76	10.91	7.6	13.2
2014/08/15	漲潮	DS3	10:37:12	面層	1	272.2	0.6	28.85	19.66	71.15	4.92	8.21	7.58	12.9
2014/08/15	漲潮	DS3	10:38:08	底層	2.9	238.5	0.36	28.33	20.61	67.2	4.66	11.45	7.58	12.6
2014/08/15	漲潮	DS3	10:38:32	面層	1.1	72.7	0.71	28.76	19.74	69.85	4.84	8.4	7.58	12.8
2014/08/15	漲潮	DS3	10:39:01	底層	3	118.1	0.41	28.46	20.33	68.14	4.73	10.69	7.58	13.6
2014/08/15	漲潮	DS3	10:39:26	面層	1.2	272.6	0.29	28.67	19.83	69.23	4.8	9.36	7.58	12.9
2014/08/15	漲潮	DS4	10:44:26	底層	5.1	103.5	0.42	28.11	21.94	65.8	4.55	13.51	7.58	14.7
2014/08/15	漲潮	DS4	10:45:11	中層	3.6	250.7	0.45	28.55	21.88	63.66	4.4	12.7	7.57	13
2014/08/15	漲潮	DS4	10:46:03	面層	1	183.5	0.74	28.78	19.81	70.08	4.85	8.42	7.58	8.5
2014/08/15	漲潮	DS4	10:46:53	底層	5.1	173.4	0.48	28.09	21.96	63.5	4.4	12.54	7.58	14.9
2014/08/15	漲潮	DS4	10:47:36	中層	3.7	199.3	0.12	28.19	21.8	63.23	4.37	11.07	7.57	13
2014/08/15	漲潮	DS4	10:48:19	面層	1.2	277.5	0.16	28.48	20.18	67.58	4.69	9.21	7.58	8.5
2014/08/15	漲潮	DS4	10:49:05	底層	5	35.1	0.81	28.19	21.82	63.38	4.38	11.31	7.57	15.1
2014/08/15	漲潮	DS4	10:49:31	中層	3.5	207.9	0.44	28.31	21.11	64.17	4.44	10.11	7.57	13.5
2014/08/15	漲潮	DS4	10:50:15	面層	0.9	218.9	0.55	28.58	20.11	68.23	4.73	8.78	7.58	8.4
2014/08/15	漲潮	DS5	10:54:24	底層	5.9	129.7	0.15	27.99	22.16	62.68	4.34	17.53	7.57	15.1
2014/08/15	漲潮	DS5	10:55:02	中層	4.1	222.6	0.8	28.29	21.42	66.03	4.57	7.95	7.58	12.9
2014/08/15	漲潮	DS5	10:55:40	面層	0.9	211.4	0.54	28.77	20.16	70.25	4.85	8.44	7.58	10.5
2014/08/15	漲潮	DS5	10:56:26	底層	6	170.9	0.7	27.95	22.37	60.14	4.16	22.56	7.57	15.1
2014/08/15	漲潮	DS5	10:57:01	中層	4	48.3	1.32	28.24	21.6	65.18	4.51	10.15	7.58	12.8
2014/08/15	漲潮	DS5	10:57:33	面層	1	259.6	0.31	28.69	20.14	68.99	4.77	9.1	7.58	11.2
2014/08/15	漲潮	DS5	10:58:25	底層	6	43.7	0.53	27.97	22.28	61.52	4.26	20.38	7.57	13.8
2014/08/15	漲潮	DS5	10:59:09	中層	4.1	153.9	0.3	28.29	21.5	65.74	4.55	8.74	7.58	12.7
2014/08/15	漲潮	DS5	10:59:57	面層	1	184.9	0.45	28.57	20.16	67.86	4.7	10.53	7.58	10.2
2014/08/15	漲潮	US1	11:15:16	底層	4	249.9	0.48	28.01	22.04	62.24	4.31	22.12	7.59	17
2014/08/15	漲潮	US1	11:15:46	中層	3	214.4	1.16	28.13	21.64	63.14	4.37	13.81	7.59	20.1
2014/08/15	漲潮	US1	11:16:11	面層	1	63.7	0.1	28.35	21.01	65.62	4.54	9.97	7.58	11.6
2014/08/15	漲潮	US1	11:16:49	底層	4	173.7	0.83	27.9	22.26	61.14	4.24	17.58	7.59	16.7
2014/08/15	漲潮	US1	11:17:14	中層	2.9	265.4	0.24	27.96	22.05	61.35	4.25	13.8	7.59	19.9
2014/08/15	漲潮	US1	11:17:44	面層	1	145.5	0.32	28.24	21.3	63.91	4.43	10.23	7.59	11.7
2014/08/15	漲潮	US1	11:18:15	底層	3.9	40.8	0.63	27.96	22.11	61.28	4.24	16.29	7.58	15.6
2014/08/15	漲潮	US1	11:18:37	中層	3	178.1	0.55	27.92	22.21	60.54	4.19	16.86	7.59	20.2
2014/08/15	漲潮	US1	11:19:07	面層	1.1	132.8	0.46	28.15	21.53	62.89	4.36	12.39	7.58	11.6
2014/08/15	漲潮	US2	11:23:14	底層	8.1	179.7	0.97	27.53	23.63	60.67	4.2	17.8	7.6	21.7
2014/08/15	漲潮	US2	11:23:41	中層	5.2	343.2	0.14	27.59	23.39	58.92	4.08	20.04	7.61	16.9
2014/08/15	漲潮	US2	11:24:06	面層	0.9	266.2	0.7	28.51	21.19	67.57	4.66	6.47	7.59	14.8
2014/08/15	漲潮	US2	11:24:43	底層	8	235.6	0.22	27.48	23.82	58.13	4.02	17.37	7.61	21.8
2014/08/15	漲潮	US2	11:25:09	中層	5.2	134.2	0.26	27.56	23.64	57.76	4	18.51	7.61	16.8
2014/08/15	漲潮	US2	11:25:39	面層	1	140.1	0.37	28.92	20.51	70.01	4.81	4.31	7.59	15.3
2014/08/15	漲潮	US2	11:26:47	底層	8.1	286.5	0.39	27.46	23.88	57.34	3.97	13.08	7.61	21.5
2014/08/15	漲潮	US2	11:27:14	中層	4.9	43.2	0.57	27.68	23.04	58.47	4.05	17.57	7.6	17.6
2014/08/15	漲潮	US2	11:27:42	面層	0.9	353.5	0.47	28.42	21.29	68.72	4.61	7.05	7.59	15.2
2014/08/15	漲潮	MW1	08:30:54	底層	17.6	292.9	0.29	26.9	25.66	54.22	3.75	8.01	7.62	8.8
2014/08/15	漲潮	MW1	08:31:29	中層	10.2	247.8	0.52	27.22	24.5	55.66	3.95	7.81	7.64	12.3
2014/08/15	漲潮	MW1	08:32:10	面層	1	236.2	0.69	28.42	20.47	68.23	4.73	5.34	7.59	5.6
2014/08/15	漲潮	MW1	08:33:08	底層	19	44.9	0.32	26.33	25.94	53.76	3.71	9.91	7.67	8.3
2014/08/15	漲潮	MW1	08:33:47	中層	10.2	106	0.64	27.37	23.37	58.43	4.06	7.78	7.66	13.2
2014/08/15	漲潮	MW1	08:34:21	面層	0.9	276.8	0.48	28.25	20.95	65.02	4.51	6.16	7.61	5.8
2014/08/15	漲潮	MW1	08:35:59	底層	17.7	64.7	0.22	25.83	25.94	52.55	3.63	15.35	7.68	8.6
2014/08/15	漲潮	MW1	08:36:36	中層	10.1	120.4	0.36	27.74	22.72	59.6	4.13	7.06	7.65	12.7
2014/08/15	漲潮	MW1	08:37:24	面層	1	72.4	0.24	28.37	20.56	66.96	4.65	5.14	7.6	5.9
2014/08/15	漲潮	THB1	09:40:37	底層	1.9	208.9	0.34	28.54	19.69	70.2	4.88	22.32	7.61	17.7
2014/08/15	漲潮	THB1	09:41:24	面層	0.8	107.4	0.29	28.58	19.67	70	4.86	17.69	7.6	16.2
2014/08/15	漲潮	THB1	09:42:21	底層	2	183	0.1	28.56	19.66	69.64	4.84	15.07	7.6	18.2
2014/08/15	漲潮	THB1	09:43:04	面層	1.1	219.9	0.18	28.61	19.6	69.84	4.85	10.74	7.6	15.5
2014/08/15	漲潮	THB1	09:44:02	底層	2.2	220	0.82	28.56	19.66	69.38	4.82	14.4	7.6	18
2014/08/15	漲潮	THB1	09:44:47	面層	1.1	253	0.62	28.55	19.66	69.3	4.82	15.31	7.59	17.2
2014/08/15	漲潮	THB2	09:55:34	中層	1.3	40	0.04	28.15	21.69	50.35	3.48	9.69	7.55	4.8
2014/08/15	漲潮	THB2	09:55:55	底層	1.3	40	0.03	28.16	21.7	50.54	3.5	10.99	7.56	4.7
2014/08/15	漲潮	THB2	09:56:20	中層	1.3	40	0.04	28.17	21.64	50.73	3.51	10.99	7.56	4.9
2014/08/15	漲潮	WSR45C	09:10:46	底層	11.5	275.8	0.3	27.47	23.84	56.79	3.93	14.23	7.65	10.4
2014/08/15	漲潮	WSR45C	09:11:39	中層	6.9	318.8	0.67	28.25	20.45	65.6	4.56	8.46	7.6	9.8
2014/08/15	漲潮	WSR45C	09:12:41	面層	0.9	233.7	0.22	28.54	19.2	69.09	4.82	8.05	7.59	18
2014/08/15	漲潮	WSR45C	09:13:27	底層	12	241.3	1.1	27.56	23.41	59.13	4.09	13.01	7.63	10.4
2014/08/15	漲潮	WSR45C	09:14:06	中層	6.8	272.1	0.85	28.34	20.04	66.38	4.62	9.09	7.6	10.2
2014/08/15	漲潮	WSR45C	09:14:40	面層	1.1	289.1	0.6	28.59	19.21	69.19	4.82	6.64	7.59	17.6
2014/08/15	漲潮	WSR45C	09:15:23	底層	11.9	252	0.54	27.57	23.2	60.17	4.17	12.23	7.62	11
2014/08/15	漲潮	WSR45C	09:15:55	中層	7.3	261	0.85	28.31	20.15	66.02	4.6	9.87	7.61	10.3
2014/08/15	漲潮	WSR45C	09:16:31	面層	1	286.6	0.61	28.53	19.39	68.95	4.8	7.66	7.59	17.6
2014/08/15	漲潮	WSR46	11:39:34	底層	8.7	254	0.4	27.34	24.52	58.08	4.01	29.1	7.63	20.5
2014/08/15	漲潮	WSR46	11:40:06	中層	5.7	299.9	0.35	27.94	22.31	62.4	4.32	6.51	7.62	12.2
2014/08/15	漲潮	WSR46												

大小磨刀以南污泥坑二挖掘操作時的水質監察

監測日期	潮汐	監測站	時間	深度	深度(米)	水流方向	水流速度(米/秒)	水溫(攝氏度)	鹽度	溶解氧(%)	溶解氧(毫克/升)	混濁度(濁度單位)	酸鹼度	懸浮固體(毫克/升)
2014/08/15	退潮	DS1	15:34:35	底層	3	263	0.92	28.08	22.04	65.94	4.56	9.23	7.61	11.1
2014/08/15	退潮	DS1	15:35:16	面層	1	346.3	0.46	28.74	20.82	69.8	4.81	8.6	7.59	9.8
2014/08/15	退潮	DS1	15:35:47	底層	3	334.7	0.12	28.11	21.84	63.59	4.4	10.22	7.59	11.6
2014/08/15	退潮	DS1	15:36:21	面層	1.1	87.7	0.12	29.13	20.37	71.28	4.89	8.5	7.59	9.3
2014/08/15	退潮	DS1	15:36:49	底層	3	302.2	0.21	28.26	21.67	64.87	4.48	8.89	7.58	11.2
2014/08/15	退潮	DS1	15:37:14	面層	1	56	0.4	29.24	20.32	71.97	4.93	8.03	7.59	10
2014/08/15	退潮	DS2	15:42:09	底層	8.1	279.7	0.15	27.21	24.8	56.52	3.91	10.57	7.65	11.8
2014/08/15	退潮	DS2	15:42:47	中層	5.1	338.4	0.34	27.46	24.06	57.4	3.97	8.23	7.64	9.4
2014/08/15	退潮	DS2	15:43:28	面層	0.9	133.3	0.6	29.23	20.39	72.12	4.94	7.41	7.6	9.2
2014/08/15	退潮	DS2	15:44:06	底層	8.1	343.1	0.28	27.36	24.38	57.03	3.94	10.54	7.63	11.5
2014/08/15	退潮	DS2	15:44:32	中層	5.1	109.7	0.28	27.76	23.41	59.27	4.09	7.75	7.63	9.7
2014/08/15	退潮	DS2	15:45:11	面層	1.1	63.4	0.51	29.02	20.2	72.7	4.97	7.41	7.59	9.1
2014/08/15	退潮	DS2	15:47:11	底層	8.1	74	0.16	27.22	24.74	56.72	3.92	11.06	7.63	11.8
2014/08/15	退潮	DS2	15:47:47	中層	5	142.9	0.4	27.82	23.2	60.26	4.16	7.2	7.62	9.5
2014/08/15	退潮	DS2	15:48:19	面層	1	305	0.18	28.8	20.97	68.66	4.72	6.76	7.59	9.5
2014/08/15	退潮	DS3	15:52:58	底層	7.1	12.5	0.62	27.43	24.05	59.06	4.08	15.5	7.63	11.2
2014/08/15	退潮	DS3	15:53:41	中層	4.3	93.8	0.37	27.55	23.64	58.1	4.02	14.46	7.62	17.8
2014/08/15	退潮	DS3	15:54:17	面層	1	193.5	1.45	29.38	20.41	73.06	4.99	6.75	7.6	19.6
2014/08/15	退潮	DS3	15:54:59	底層	7	99	0.32	27.41	24.09	57.29	3.96	16.59	7.63	11.2
2014/08/15	退潮	DS3	15:55:32	中層	4.4	63.2	0.21	27.45	23.94	56.77	3.93	14.5	7.63	17.6
2014/08/15	退潮	DS3	15:56:07	面層	1	106.6	0.78	29.42	20.33	72.95	4.98	6.7	7.6	18.1
2014/08/15	退潮	DS3	15:56:47	底層	7	72.1	0.25	27.39	24.17	56.79	3.93	16.57	7.63	11.6
2014/08/15	退潮	DS3	15:57:21	中層	4.5	118.4	0.14	28.05	22.48	61.38	4.24	10.81	7.61	17.9
2014/08/15	退潮	DS3	15:58:01	面層	1.1	191.9	0.2	28.44	20.95	73.84	5.04	6.73	7.59	19.7
2014/08/15	退潮	DS4	16:06:39	底層	9.1	92	0.74	27.34	24.31	57.64	3.99	19.74	7.64	19.2
2014/08/15	退潮	DS4	16:07:23	中層	5.6	161.2	0.57	27.46	23.9	57.27	3.96	14.11	7.63	13.9
2014/08/15	退潮	DS4	16:07:59	面層	0.9	110.5	0.75	28.97	20.6	70.18	4.82	8.11	7.59	7.1
2014/08/15	退潮	DS4	16:08:44	底層	9.2	82.2	0.43	27.33	24.33	56.19	3.88	21.29	7.64	18.9
2014/08/15	退潮	DS4	16:09:29	中層	5.7	88.2	0.85	27.44	24	56.67	3.92	14.07	7.63	14.6
2014/08/15	退潮	DS4	16:09:59	面層	1	157.2	0.56	28.99	20.66	69.73	4.78	8.11	7.59	7
2014/08/15	退潮	DS4	16:10:50	底層	9.2	174.1	0.48	27.33	24.31	55.84	3.86	19.74	7.63	19.2
2014/08/15	退潮	DS4	16:11:22	中層	5.5	280	0.6	27.48	23.8	56.62	3.92	12.81	7.62	14.1
2014/08/15	退潮	DS4	16:11:56	面層	1.3	135.9	1.02	29.03	20.7	69.72	4.78	7.91	7.59	7.3
2014/08/15	退潮	DS5	16:18:45	底層	11.2	41.4	0.72	27.36	24.25	57.77	3.99	17.78	7.65	7.8
2014/08/15	退潮	DS5	16:19:14	中層	6.5	148.1	0.65	27.56	23.51	57.95	4.01	10.64	7.64	12.1
2014/08/15	退潮	DS5	16:19:43	面層	1	32.6	0.35	28.78	20.3	70.1	4.84	7.66	7.61	8.9
2014/08/15	退潮	DS5	16:20:44	底層	11.1	117.1	0.33	27.32	24.36	56.49	3.91	18.86	7.64	8.1
2014/08/15	退潮	DS5	16:21:25	中層	6.3	46	0.33	27.67	23.14	58.21	4.03	10.2	7.62	12.6
2014/08/15	退潮	DS5	16:21:57	面層	1.2	129	1.47	28.82	20.23	69.75	4.81	7.5	7.6	8.4
2014/08/15	退潮	DS5	16:23:04	底層	11.4	31.6	1	27.39	24.45	55.58	3.82	21.11	7.64	7.8
2014/08/15	退潮	DS5	16:23:33	中層	6.7	109.8	0.42	27.52	23.65	57.06	3.95	10.92	7.63	11.7
2014/08/15	退潮	DS5	16:24:12	面層	0.8	127.7	1.21	28.88	20.11	70.34	4.85	7.59	7.59	9.2
2014/08/15	退潮	US1	15:25:35	底層	3.1	346.4	0.68	28.23	21.61	65.94	4.56	20.01	7.59	19.8
2014/08/15	退潮	US1	15:26:23	面層	0.9	289.8	0.95	28.21	21.11	70.13	4.82	17.72	7.59	24.6
2014/08/15	退潮	US1	15:26:50	底層	3.1	266.6	1.33	28.24	21.6	64.82	4.48	22.65	7.57	20.2
2014/08/15	退潮	US1	15:27:15	面層	1.1	300.5	0.46	28.51	21.31	66.91	4.61	17.1	7.58	23.9
2014/08/15	退潮	US1	15:27:42	底層	3	273.7	0.28	28.32	21.51	65.41	4.52	24.47	7.58	20.4
2014/08/15	退潮	US1	15:28:06	面層	1.1	214.5	0.22	29.02	20.82	72.14	4.94	12.52	7.59	25
2014/08/15	退潮	US2	15:16:49	底層	2.9	16	0.36	28.39	21.4	71.17	4.91	11.73	7.59	9.6
2014/08/15	退潮	US2	15:17:13	面層	1.2	153.3	0.48	29.14	20.47	77.11	5.28	7.04	7.6	7.2
2014/08/15	退潮	US2	15:17:39	底層	3	141.2	0.86	28.43	21.36	69.55	4.8	10.31	7.59	10
2014/08/15	退潮	US2	15:18:06	面層	1.2	223.1	1.27	29.55	20.07	77.99	5.32	7	7.59	7.2
2014/08/15	退潮	US2	15:18:47	底層	3	223.3	0.07	28.4	21.38	68.14	4.7	8.97	7.58	9.6
2014/08/15	退潮	US2	15:19:12	面層	1	76.6	1.5	29.73	19.95	78.44	5.34	6.93	7.6	7.1
2014/08/15	退潮	MW1	17:01:19	底層	18.1	191.1	0.21	28.46	22.53	69.13	4.74	8.9	7.66	9
2014/08/15	退潮	MW1	17:01:55	中層	10	219.8	0.44	28.62	22.06	69.19	4.74	7.04	7.65	11.5
2014/08/15	退潮	MW1	17:02:35	面層	1.2	101.5	1.86	29.21	19.77	75.92	5.22	5.9	7.63	17.2
2014/08/15	退潮	MW1	17:03:21	底層	18.1	213.7	0.08	28.44	22.58	67.64	4.63	8.06	7.65	8.7
2014/08/15	退潮	MW1	17:04:06	中層	9.8	68.4	0.83	28.65	22.02	68.79	4.71	7.5	7.64	11.7
2014/08/15	退潮	MW1	17:04:43	面層	0.9	102.1	1.04	29.08	20	72.09	4.96	6.09	7.63	17.2
2014/08/15	退潮	MW1	17:05:40	底層	17.9	222.4	0.2	28.6	22.17	68.47	4.69	7.49	7.64	8.9
2014/08/15	退潮	MW1	17:06:19	中層	9.8	40.3	0.7	28.69	21.84	69	4.73	7.74	7.64	11.2
2014/08/15	退潮	MW1	17:07:02	面層	0.8	63	0.55	28.51	18.91	76.31	5.26	5.68	7.62	17.3
2014/08/15	退潮	THB1	15:08:59	底層	3.1	80.2	0.55	28.51	21.28	68.04	4.69	13.71	7.54	11.9
2014/08/15	退潮	THB1	15:09:26	面層	1	110.7	0.53	28.74	20.63	71.15	4.9	6.62	7.56	6.6
2014/08/15	退潮	THB1	15:09:58	底層	3	25.5	0.02	28.44	21.35	69.09	4.77	6.42	7.57	11.6
2014/08/15	退潮	THB1	15:10:26	面層	1.1	116.9	0.48	28.44	20.6	70.45	4.86	6.43	7.57	6.2
2014/08/15	退潮	THB1	15:10:59	底層	3.4	124	0.61	28.3	21.68	66.13	4.56	8.2	7.57	12.4
2014/08/15	退潮	THB1	15:11:33	面層	1	12.4	0.41	28.89	20.4	71.01	4.89	6.62	7.58	6.9
2014/08/15	退潮	THB2	15:15:47	中層	1.4	40	0.02	29.22	20.32	67.7	4.64	19.29	7.53	6.8
2014/08/15	退潮	THB2	15:16:14	面層	1.4	40	0.02	29.29	20.36	67.91	4.65	19.09	7.55	7
2014/08/15	退潮	THB2	15:16:37	中層	1.4	40	0.02	29.29	20.39	67.31	4.6	18.79	7.56	6.7
2014/08/15	退潮	WSR45C	16:28:49	底層	12.1	73.5	1.15	27.96	22.38	62.63	4.34	12.93	7.61	17
2014/08/15	退潮	WSR45C	16:29:20	中層	6.8	100.3	0.44	28.11	21.94	63.33	4.38	9.42	7.61	10
2014/08/15	退潮	WSR45C	16:29:48	面層	1	121	0.67	28.8	20.32	70.53	4.86	7.49	7.6	8.5
2014/08/15	退潮	WSR45C	16:30:31	底層	12.3	65.2	0.83	27.98	22.31	62.53	4.32	10.65	7.6	17.6
2014/08/15	退潮	WSR45C	16:31:13	中層	7.2	166.4	0.33	28.08	22.01	62.86	4.35	9.46	7.6	9.6
2014/08/15	退潮	WSR45C	16:31:42	面層	1	104.9	1.07	28.76	20.32	70.45	4.86	7.88	7.6	8.4
2014/08/15	退潮	WSR45C	16:32:25	底層	12.2	39.4	0.6	27.98	22.31	62.16	4.3	10.97	7.6	17.6
2014/08/15	退潮	WSR45C	16:32:55	中層	7.1	105.9	0.86	28.04	22.11	62.36	4.31	10.03	7.6	10.5
2014/08/15	退潮	WSR45C	16:33:23	面層	1.1	282.6	1.05	28.87	20.25	70.54	4.86	7.53	7.6	8.7
2014/08/15	退潮	WSR46	14:39:49	底層	9.2	109.9	0.33	27.53	23.53	58.65	4.06	8.94	7.51	12.4
2014/08/15	退潮	WSR46	14:40:16	中層	5.5	77.1	0.72	28.08	21.66	62.16	4.31	8.48	7.53	10.4
2014/08/15	退潮	WSR46	14:40:47	面層	1	62.8	0.97	29.27	19.23					

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/18	MF	DS1	12:53:56	B	2.9	272.6	0.50	29.41	17.37	92.15	6.39	5.53	7.77	8
2014/08/18	MF	DS1	12:54:18	T	1.1	290.1	0.35	29.82	16.93	98.38	6.80	5.82	7.76	9
2014/08/18	MF	DS1	12:54:41	B	3.1	259.7	0.31	29.40	17.52	90.64	6.29	5.87	7.75	8
2014/08/18	MF	DS1	12:55:04	T	0.9	126.9	0.56	29.93	16.84	98.49	6.79	5.90	7.76	9
2014/08/18	MF	DS1	12:55:27	B	3.0	314.8	0.19	29.40	17.58	90.68	6.29	5.74	7.75	8
2014/08/18	MF	DS1	12:55:49	T	1.0	185.3	0.08	29.74	16.92	97.36	6.74	5.56	7.74	9
2014/08/18	MF	DS2	13:00:19	B	1.9	321.6	0.95	29.94	17.41	102.24	7.03	6.59	7.80	7
2014/08/18	MF	DS2	13:00:42	T	0.9	271.8	0.33	29.96	17.14	101.03	6.95	5.47	7.79	8
2014/08/18	MF	DS2	13:01:50	B	2.0	13.8	0.72	29.98	16.95	100.21	6.90	10.02	7.78	7
2014/08/18	MF	DS2	13:02:17	T	0.8	236.2	0.12	30.16	16.39	101.93	7.02	3.48	7.79	7
2014/08/18	MF	DS2	13:02:43	B	1.9	95.7	0.20	29.97	16.82	101.10	6.97	4.52	7.79	7
2014/08/18	MF	DS2	13:03:04	T	0.8	88.7	0.49	30.00	16.62	101.24	6.98	4.11	7.79	8
2014/08/18	MF	DS3	13:14:14	B	3.0	93.8	0.30	30.49	17.58	111.90	7.62	5.47	7.85	9
2014/08/18	MF	DS3	13:14:39	T	0.9	359.2	0.85	30.50	17.50	113.17	7.71	5.66	7.85	9
2014/08/18	MF	DS3	13:15:03	B	3.1	115.9	0.30	30.46	17.74	112.68	7.67	7.52	7.84	9
2014/08/18	MF	DS3	13:15:26	T	1.0	135.8	0.54	30.47	17.50	111.86	7.62	5.24	7.84	9
2014/08/18	MF	DS3	13:15:48	B	3.1	115.4	0.53	30.45	17.82	112.78	7.67	6.75	7.84	9
2014/08/18	MF	DS3	13:16:10	T	1.0	73.9	0.38	30.48	17.46	111.98	7.63	5.42	7.84	9
2014/08/18	MF	DS4	13:21:34	B	5.2	325.5	0.61	28.62	21.38	71.37	4.91	13.51	7.65	16
2014/08/18	MF	DS4	13:21:58	M	3.5	336.0	0.47	29.86	18.82	95.29	6.51	16.14	7.71	16
2014/08/18	MF	DS4	13:22:20	T	0.6	181.0	0.95	30.42	17.87	114.10	7.76	5.19	7.89	9
2014/08/18	MF	DS4	13:22:47	B	5.0	260.2	0.49	28.86	21.58	74.74	5.11	12.26	7.64	16
2014/08/18	MF	DS4	13:23:11	M	3.4	293.8	0.47	29.89	18.90	94.50	6.47	14.58	7.71	16
2014/08/18	MF	DS4	13:23:34	T	0.9	211.9	1.16	30.42	17.95	114.81	7.81	4.38	7.89	9
2014/08/18	MF	DS4	13:24:08	B	5.2	250.4	0.36	28.45	22.86	66.38	4.54	15.92	7.62	17
2014/08/18	MF	DS4	13:24:32	M	3.5	98.0	0.87	29.64	19.17	84.58	5.79	17.80	7.67	16
2014/08/18	MF	DS4	13:24:53	T	1.0	207.5	1.86	30.40	17.93	114.73	7.81	5.91	7.88	9
2014/08/18	MF	DS5	13:28:52	B	5.0	124.3	0.86	28.54	22.55	68.44	4.68	8.30	7.66	12
2014/08/18	MF	DS5	13:29:19	M	3.4	13.8	0.57	29.88	18.82	97.27	6.64	9.00	7.78	11
2014/08/18	MF	DS5	13:29:46	T	0.9	328.2	0.80	30.74	17.84	117.26	7.94	3.57	7.89	5
2014/08/18	MF	DS5	13:30:12	B	5.0	29.7	0.23	28.80	22.02	75.40	5.15	8.85	7.66	13
2014/08/18	MF	DS5	13:30:38	M	3.3	22.2	0.40	29.82	19.17	98.20	6.70	8.58	7.74	11
2014/08/18	MF	DS5	13:31:07	T	0.7	56.7	0.36	30.36	18.21	112.63	7.66	5.54	7.83	5
2014/08/18	MF	DS5	13:31:41	B	4.9	176.3	0.30	28.96	21.53	77.30	5.28	9.21	7.65	13
2014/08/18	MF	DS5	13:32:04	M	3.6	259.2	0.27	29.89	18.77	98.32	6.72	8.42	7.79	11
2014/08/18	MF	DS5	13:32:30	T	1.0	149.9	0.21	30.47	17.89	117.11	7.96	3.99	7.86	5
2014/08/18	MF	US1	13:45:30	B	3.2	53.6	0.94	29.61	17.39	94.85	6.56	9.49	7.80	8
2014/08/18	MF	US1	13:45:57	M	1.1	247.3	0.65	30.30	16.56	107.28	7.37	2.66	7.82	5
2014/08/18	MF	US1	13:46:20	B	3.1	323.0	0.78	29.59	17.36	95.63	6.62	8.99	7.79	8
2014/08/18	MF	US1	13:46:45	T	0.8	295.0	0.18	30.32	16.57	107.63	7.39	2.62	7.82	5
2014/08/18	MF	US1	13:47:09	B	3.0	263.1	0.57	29.44	17.63	92.47	6.40	19.34	7.74	7
2014/08/18	MF	US1	13:47:31	T	0.9	238.1	0.46	30.14	16.61	104.74	7.21	3.38	7.79	5
2014/08/18	MF	US2	13:52:22	B	9.8	5.5	0.76	26.75	26.70	48.31	3.33	11.06	7.65	8
2014/08/18	MF	US2	13:52:50	M	5.9	61.2	0.41	28.11	21.90	64.67	4.47	9.14	7.65	13
2014/08/18	MF	US2	13:53:18	T	0.7	58.9	0.28	29.63	17.39	93.97	6.50	2.86	7.78	5
2014/08/18	MF	US2	13:56:02	B	10.1	298.8	0.31	26.73	26.65	48.53	3.35	12.41	7.62	8
2014/08/18	MF	US2	13:56:33	M	5.8	277.5	0.25	28.00	22.22	63.38	4.38	7.66	7.62	12
2014/08/18	MF	US2	13:56:58	T	0.8	200.5	0.54	29.52	17.36	93.67	6.49	2.94	7.76	5
2014/08/18	MF	US2	13:57:39	B	10.0	19.8	0.20	26.91	26.17	51.26	3.53	12.73	7.61	8
2014/08/18	MF	US2	13:58:02	M	6.1	233.8	0.13	28.07	21.93	60.88	4.21	7.73	7.61	13
2014/08/18	MF	US2	13:58:30	T	0.8	10.9	0.26	29.63	17.28	94.34	6.53	2.94	7.76	6
2014/08/18	MF	MW1	14:45:02	B	19.5	101.5	0.86	25.09	31.18	45.01	3.11	6.67	7.82	9
2014/08/18	MF	MW1	14:45:44	M	10.5	23.3	0.36	26.50	27.47	57.08	3.93	3.95	7.78	7
2014/08/18	MF	MW1	14:46:26	T	1.0	233.3	0.45	28.18	22.30	77.98	5.37	2.16	7.77	5
2014/08/18	MF	MW1	14:47:21	B	19.2	269.5	0.58	25.13	31.14	44.82	3.10	6.97	7.76	9
2014/08/18	MF	MW1	14:48:00	M	10.8	10.7	0.13	26.27	28.05	54.56	3.76	4.25	7.74	7
2014/08/18	MF	MW1	14:48:40	T	1.0	359.0	0.06	28.37	21.49	76.10	5.25	2.19	7.71	5
2014/08/18	MF	MW1	14:49:39	B	18.6	332.5	0.60	25.13	31.15	43.63	3.01	6.80	7.72	9
2014/08/18	MF	MW1	14:50:18	M	10.5	33.3	0.57	26.55	27.34	56.72	3.91	3.77	7.71	7
2014/08/18	MF	MW1	14:51:09	T	1.0	112.7	0.29	29.56	19.04	92.22	6.32	2.22	7.72	5
2014/08/18	MF	THB1	12:43:48	B	2.0	124.3	0.30	29.75	17.06	93.89	6.49	4.49	7.75	19
2014/08/18	MF	THB1	12:44:11	T	0.9	348.8	0.47	30.06	16.72	98.89	6.81	5.19	7.77	5
2014/08/18	MF	THB1	12:44:33	B	2.0	238.9	1.68	29.64	17.36	84.23	5.82	6.50	7.75	19
2014/08/18	MF	THB1	12:44:55	T	0.9	212.5	0.54	29.62	17.72	93.09	6.42	7.40	7.77	6
2014/08/18	MF	THB1	12:46:09	B	2.0	143.1	1.11	29.81	17.23	93.00	6.42	6.13	7.74	18
2014/08/18	MF	THB1	12:46:31	T	0.9	168.4	0.88	29.73	17.43	91.24	6.30	7.47	7.73	5
2014/08/18	MF	THB2	12:52:28	M	1.4	40.0	0.03	30.86	18.01	85.49	5.77	13.39	7.70	9
2014/08/18	MF	THB2	12:53:35	M	1.4	40.0	0.02	30.86	18.02	88.22	5.95	12.69	7.72	10
2014/08/18	MF	THB2	12:54:36	M	1.4	40.0	0.03	30.79	18.01	93.66	6.33	8.29	7.75	9
2014/08/18	MF	WSR45C	14:10:14	B	12.0	231.9	0.46	25.91	29.12	43.42	2.99	19.68	7.66	5
2014/08/18	MF	WSR45C	14:10:43	M	7.3	280.6	0.80	26.43	27.35	44.47	3.07	9.14	7.66	12
2014/08/18	MF	WSR45C	14:11:13	T	0.8	244.2	0.17	30.01	16.68	98.24	6.77	3.70	7.80	5
2014/08/18	MF	WSR45C	14:11:56	B	12.1	136.2	0.50	25.91	29.07	45.10	3.11	21.48	7.65	5
2014/08/18	MF	WSR45C	14:12:25	M	7.1	237.1	0.37	26.54	27.05	46.94	3.24	9.49	7.65	13
2014/08/18	MF	WSR45C	14:12:54	T	1.0	223.0	1.16	30.03	16.33	99.14	6.85	3.45	7.80	5
2014/08/18	MF	WSR45C	14:13:55	B	11.9	279.0	0.60	25.94	28.99	43.51	3.00	27.67	7.64	5
2014/08/18	MF	WSR45C	14:14:25	M	7.1	228.7	0.55	26.46	27.31	46.47	3.21	10.37	7.64	12
2014/08/18	MF	WSR45C	14:14:57	T	1.0	243.1	1.04	30.00	16.34	99.44	6.87	3.56	7.78	5
2014/08/18	MF	WSR46	12:17:19	B	8.7	332.4	1.18	27.20	24.46	56.52	3.91	9.43	7.50	11
2014/08/18	MF	WSR46	12:17:53	M	5.6	348.8	1.00	29.33	17.98	86.24	5.97	4.68	7.64	8
2014/08/18	MF	WSR46	12:18:24	T	1.1	309.8	0.85	29.92	14.71	95.82	6.69	3.35	7.70	5
2014/08/18	MF	WSR46	12:19:03	B	8.8	295.8	0.86	27.36	24.33	56.69	3.92	9.13	7.60	10
2014/08/18	MF	WSR46	12:19:32	M	5.4	321.8	0.69	29.37	17.96	87.48	6.05	4.56	7.66	8
2014/08/18	MF	WSR46	12:20:09	T	1.1	307.0	0.75	29.90	14.93	95.73	6.68	3.27	7.73	6
2014/08/18	MF	WSR46	12:20:49	B	8.7	242.6	0.16	27.83	23.10	59.43	4.10	6.44	7.60	11
2014/08/18	MF	WSR46	12:21:19	M	5.4	287.8								

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/18	ME	DS1	07:48:18	B	3.1	244.5	0.39	29.04	17.25	88.94	6.21	3.51	7.74	5
2014/08/18	ME	DS1	07:48:40	T	1.1	189.1	0.60	29.03	17.17	87.20	6.10	3.11	7.73	4
2014/08/18	ME	DS1	07:49:04	B	3.0	8.4	0.19	29.18	17.57	87.15	6.06	4.16	7.73	5
2014/08/18	ME	DS1	07:49:27	T	0.9	129.5	0.29	29.07	17.30	86.93	6.07	3.35	7.72	4
2014/08/18	ME	DS1	07:49:49	B	3.0	358.0	0.20	29.14	17.44	87.04	6.06	3.81	7.72	5
2014/08/18	ME	DS1	07:50:12	T	1.0	352.1	0.18	29.06	17.39	86.36	6.03	3.43	7.72	4
2014/08/18	ME	DS2	07:55:07	B	10.0	184.8	0.51	26.33	27.76	45.54	3.14	8.70	7.69	12
2014/08/18	ME	DS2	07:55:39	M	6.0	28.2	0.62	27.14	25.25	51.52	3.56	5.22	7.69	8
2014/08/18	ME	DS2	07:56:12	T	1.1	335.4	0.35	29.19	16.98	84.92	5.93	3.00	7.72	4
2014/08/18	ME	DS2	07:58:11	B	9.7	203.0	0.37	26.50	27.66	47.33	3.26	8.58	7.67	13
2014/08/18	ME	DS2	07:58:44	M	6.1	339.6	0.41	27.36	24.43	56.58	3.91	6.15	7.67	8
2014/08/18	ME	DS2	07:59:13	T	1.2	65.7	0.92	29.14	17.12	82.83	5.78	2.88	7.70	4
2014/08/18	ME	DS2	07:59:54	B	9.5	92.8	0.29	26.24	28.24	45.37	3.13	9.71	7.67	13
2014/08/18	ME	DS2	08:00:23	M	5.9	8.1	0.44	27.36	24.36	56.85	3.93	5.74	7.68	7
2014/08/18	ME	DS2	08:00:54	T	1.0	251.7	0.35	29.16	17.06	83.53	5.83	2.83	7.71	4
2014/08/18	ME	DS3	08:06:19	B	7.0	192.1	0.30	27.48	24.24	59.10	4.08	3.91	7.67	7
2014/08/18	ME	DS3	08:06:43	M	4.2	214.8	0.19	28.94	19.42	71.95	4.98	4.44	7.68	7
2014/08/18	ME	DS3	08:07:10	T	1.1	189.8	0.40	29.24	17.25	83.71	5.83	3.20	7.70	5
2014/08/18	ME	DS3	08:07:44	B	7.0	44.6	0.57	27.44	24.36	60.43	4.17	3.95	7.66	7
2014/08/18	ME	DS3	08:08:09	M	4.4	175.8	0.71	28.99	19.21	76.38	5.28	3.83	7.68	8
2014/08/18	ME	DS3	08:08:43	T	1.0	211.4	0.23	29.21	17.44	83.23	5.79	3.19	7.69	5
2014/08/18	ME	DS3	08:09:13	B	6.8	155.9	0.67	27.80	23.20	62.84	4.34	4.08	7.67	8
2014/08/18	ME	DS3	08:09:36	M	4.6	155.6	0.43	28.76	19.99	72.04	4.98	4.37	7.67	8
2014/08/18	ME	DS3	08:10:00	T	1.3	235.5	0.50	29.18	17.56	81.32	5.66	3.20	7.69	5
2014/08/18	ME	DS4	08:17:43	B	9.0	32.7	0.46	27.05	25.65	56.62	3.90	8.79	7.68	9
2014/08/18	ME	DS4	08:18:18	M	5.6	345.5	0.58	28.44	20.54	67.19	4.66	3.46	7.68	7
2014/08/18	ME	DS4	08:18:47	T	1.1	231.7	0.68	29.22	17.41	81.27	5.66	3.12	7.70	4
2014/08/18	ME	DS4	08:19:20	B	9.4	81.9	0.36	26.96	25.85	53.73	3.71	12.14	7.66	9
2014/08/18	ME	DS4	08:19:50	M	5.4	281.4	1.19	28.47	20.31	69.54	4.82	3.43	7.67	7
2014/08/18	ME	DS4	08:20:17	T	0.9	78.6	0.29	29.19	17.50	80.80	5.62	3.07	7.68	4
2014/08/18	ME	DS4	08:20:57	B	9.1	84.6	0.86	26.93	25.93	52.37	3.61	12.67	7.66	9
2014/08/18	ME	DS4	08:21:22	M	5.6	234.8	0.16	28.21	20.81	65.45	4.55	3.57	7.67	7
2014/08/18	ME	DS4	08:21:49	T	0.9	174.6	0.23	29.21	17.43	79.98	5.57	3.08	7.68	5
2014/08/18	ME	DS5	08:26:07	B	11.1	53.8	0.47	26.18	29.02	45.51	3.12	15.07	7.67	9
2014/08/18	ME	DS5	08:26:46	M	6.7	73.6	0.31	27.68	23.51	58.92	4.07	3.89	7.66	5
2014/08/18	ME	DS5	08:27:14	T	1.1	108.7	1.10	29.34	16.76	83.07	5.79	2.94	7.69	4
2014/08/18	ME	DS5	08:27:58	B	11.1	255.1	0.32	26.15	28.43	43.85	3.02	17.33	7.67	9
2014/08/18	ME	DS5	08:28:27	M	6.4	133.7	0.26	27.79	23.05	60.17	4.16	3.75	7.66	5
2014/08/18	ME	DS5	08:28:56	T	1.0	205.0	0.52	29.28	17.09	82.61	5.75	3.07	7.68	4
2014/08/18	ME	DS5	08:29:24	B	11.1	99.9	0.54	26.30	27.87	43.30	3.33	12.86	7.65	9
2014/08/18	ME	DS5	08:30:01	M	6.6	143.4	0.77	27.64	23.53	56.14	3.88	4.42	7.66	5
2014/08/18	ME	DS5	08:30:34	T	0.9	157.8	0.33	29.25	17.30	81.11	5.65	3.15	7.68	4
2014/08/18	ME	US1	07:36:44	B	3.1	199.0	0.65	29.32	19.05	84.63	5.83	20.48	7.72	10
2014/08/18	ME	US1	07:37:12	T	1.0	120.0	0.53	29.57	17.93	91.37	6.30	5.35	7.75	9
2014/08/18	ME	US1	07:37:43	B	3.0	96.5	0.53	29.51	18.42	89.89	6.19	11.60	7.74	10
2014/08/18	ME	US1	07:38:15	T	1.0	238.5	1.01	29.56	18.00	91.00	6.28	5.12	7.75	9
2014/08/18	ME	US1	07:38:47	B	3.0	6.3	0.50	29.43	19.41	86.17	5.91	10.24	7.72	9
2014/08/18	ME	US1	07:39:43	T	1.0	342.0	0.31	29.56	18.15	90.64	6.25	6.34	7.75	9
2014/08/18	ME	US2	07:22:11	B	2.0	192.1	0.51	29.52	19.32	86.59	5.93	13.85	7.72	15
2014/08/18	ME	US2	07:22:43	T	0.9	175.8	0.19	29.12	18.32	92.10	6.33	4.52	7.76	8
2014/08/18	ME	US2	07:23:07	B	1.9	231.7	0.50	29.70	18.08	93.41	6.42	4.01	7.76	15
2014/08/18	ME	US2	07:23:30	T	0.9	55.6	0.33	29.77	17.80	94.54	6.51	3.53	7.76	9
2014/08/18	ME	US2	07:23:56	B	2.1	287.8	0.16	29.73	18.14	94.28	6.48	4.02	7.76	14
2014/08/18	ME	US2	07:24:23	T	1.1	314.8	1.44	29.70	17.71	94.38	6.51	3.98	7.76	8
2014/08/18	ME	MW1	06:04:10	B	18.7	91.9	0.68	25.14	31.02	43.26	2.99	6.19	7.72	3
2014/08/18	ME	MW1	06:04:49	M	10.7	249.6	0.17	27.61	23.98	63.23	4.36	2.24	7.73	5
2014/08/18	ME	MW1	06:05:32	T	1.0	57.1	0.28	28.99	18.35	81.52	5.67	2.19	7.70	8
2014/08/18	ME	MW1	06:06:30	B	18.8	228.9	0.50	25.14	31.10	43.04	2.97	5.00	7.75	3
2014/08/18	ME	MW1	06:07:07	M	10.6	124.2	0.10	27.35	24.90	61.39	4.23	2.23	7.74	5
2014/08/18	ME	MW1	06:07:51	T	1.0	87.3	1.02	28.96	18.36	80.75	5.61	2.18	7.70	9
2014/08/18	ME	MW1	06:08:57	B	18.9	21.6	0.35	25.11	31.21	44.20	3.05	5.93	7.76	4
2014/08/18	ME	MW1	06:09:34	M	10.4	120.1	0.70	27.15	25.41	55.29	3.81	2.64	7.74	5
2014/08/18	ME	MW1	06:10:16	T	1.1	200.3	0.67	28.94	18.75	79.50	5.52	2.14	7.70	9
2014/08/18	ME	THB1	07:14:56	B	3.1	218.1	0.47	28.85	19.13	70.16	4.87	14.00	7.62	6
2014/08/18	ME	THB1	07:15:17	T	1.1	317.7	0.86	29.25	18.85	77.80	5.37	13.37	7.63	25
2014/08/18	ME	THB1	07:15:40	B	3.0	197.2	0.73	29.19	19.42	73.97	5.09	18.40	7.64	7
2014/08/18	ME	THB1	07:16:04	T	1.0	317.7	0.19	29.45	18.44	81.93	5.65	7.02	7.63	24
2014/08/18	ME	THB1	07:16:28	B	3.0	120.1	0.37	29.18	19.34	74.80	5.15	12.06	7.64	7
2014/08/18	ME	THB1	07:16:50	T	1.0	125.1	0.50	29.35	18.89	78.07	5.38	10.76	7.64	25
2014/08/18	ME	THB2	07:26:11	M	1.3	40.0	0.03	29.97	18.21	82.76	5.66	3.89	7.73	4
2014/08/18	ME	THB2	07:27:11	M	1.3	40.0	0.03	29.92	18.22	82.75	5.67	3.99	7.73	4
2014/08/18	ME	THB2	07:28:08	M	1.3	40.0	0.03	29.88	18.22	80.75	5.53	4.79	7.72	4
2014/08/18	ME	WSR45C	06:48:00	B	11.9	272.2	0.37	25.69	29.59	43.77	3.02	8.75	7.71	10
2014/08/18	ME	WSR45C	06:48:27	M	7.2	137.8	0.64	26.70	19.12	70.58	4.91	5.52	7.72	5
2014/08/18	ME	WSR45C	06:47:11	T	0.9	131.8	0.38	29.37	15.47	86.56	6.07	3.19	7.72	4
2014/08/18	ME	WSR45C	06:48:04	B	12.1	126.0	0.81	25.63	29.94	41.31	2.85	9.54	7.71	10
2014/08/18	ME	WSR45C	06:48:34	M	7.0	60.9	0.75	28.88	18.67	73.40	5.10	4.49	7.71	5
2014/08/18	ME	WSR45C	06:49:08	T	1.1	125.1	0.30	29.37	15.53	85.83	6.02	3.22	7.71	4
2014/08/18	ME	WSR45C	06:49:48	B	11.9	318.6	0.46	25.79	29.18	43.53	3.01	8.74	7.70	9
2014/08/18	ME	WSR45C	06:50:21	M	7.0	63.4	0.33	28.72	18.37	70.20	4.90	5.69	7.71	5
2014/08/18	ME	WSR45C	06:50:54	T	0.9	109.9	0.65	29.38	15.42	86.13	6.04	3.10	7.72	4
2014/08/18	ME	WSR46	08:46:55	B	8.9	124.3	0.59	27.93	22.75	60.41	4.17	6.67	7.63	9
2014/08/18	ME	WSR46	08:47:20	M	5.5	333.2	0.72	28.88	17.75	77.10	5.39	3.60	7.66	8
2014/08/18	ME	WSR46	08:47:49	T	1.1	55.6	0.66	29.47	14.25	91.59	6.46	3.20	7.75	4
2014/08/18	ME	WSR46	08:48:25	B	8.8	104.5	0.60	27.92	22.72	61.04	4.22	6.68	7.63	8
2014/08/18	ME	WSR46	08:48:51	M	5.6	227.6	0.20	28.88	17.69	78.76	5.50			

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/20	MF	DS1	15:33:20	B	2.0	24.9	0.48	29.01	15.67	94.27	6.65	8.85	7.84	7
2014/08/20	MF	DS1	15:34:02	T	1.1	141.2	0.10	29.02	15.76	93.57	6.59	9.45	7.86	13
2014/08/20	MF	DS1	15:35:00	B	2.0	240.8	0.17	29.01	15.67	93.57	6.60	9.85	7.88	7
2014/08/20	MF	DS1	15:36:01	T	1.1	256.9	0.92	28.98	15.38	96.07	6.79	9.35	7.91	13
2014/08/20	MF	DS1	15:37:00	B	2.0	306.5	0.14	28.99	15.63	94.37	6.66	10.95	7.89	8
2014/08/20	MF	DS1	15:38:00	T	1.0	61.8	0.23	28.95	15.05	98.87	7.01	10.15	7.94	13
2014/08/20	MF	DS2	15:42:47	B	1.9	134.6	1.27	29.13	15.51	96.87	6.83	12.15	7.93	6
2014/08/20	MF	DS2	15:43:27	T	1.0	10.3	0.66	29.10	15.41	97.96	6.91	9.05	7.94	9
2014/08/20	MF	DS2	15:44:13	B	2.0	266.9	0.78	29.10	15.42	97.46	6.87	8.45	7.94	7
2014/08/20	MF	DS2	15:45:00	T	1.1	174.4	0.31	29.08	15.34	98.36	6.94	6.95	7.94	9
2014/08/20	MF	DS2	15:46:01	B	2.0	318.9	0.93	29.08	15.33	97.86	6.91	6.85	7.94	6
2014/08/20	MF	DS2	15:47:00	T	1.0	194.8	0.63	29.06	15.29	98.66	6.97	6.95	7.95	9
2014/08/20	MF	DS3	15:51:43	B	3.2	206.7	0.53	29.14	15.63	96.76	6.81	6.35	7.93	6
2014/08/20	MF	DS3	15:52:27	T	1.1	253.9	0.23	29.13	15.49	98.26	6.92	5.75	7.95	8
2014/08/20	MF	DS3	15:53:08	B	3.1	207.9	0.31	29.16	15.64	95.46	6.72	6.95	7.92	6
2014/08/20	MF	DS3	15:54:00	T	1.2	232.4	0.30	29.16	15.54	96.36	6.78	6.65	7.93	8
2014/08/20	MF	DS3	15:55:00	B	3.0	314.6	0.36	29.16	15.69	94.96	6.68	7.25	7.92	6
2014/08/20	MF	DS3	15:56:01	T	0.9	161.2	0.22	29.12	15.43	99.25	7.00	5.45	7.95	7
2014/08/20	MF	DS4	16:00:24	B	5.0	329.1	0.72	28.10	22.15	57.37	3.96	12.15	7.69	11
2014/08/20	MF	DS4	16:01:03	M	3.5	252.5	1.41	28.27	15.75	72.06	5.03	11.75	7.79	9
2014/08/20	MF	DS4	16:02:00	T	1.1	250.9	0.06	29.10	15.53	93.65	6.80	7.35	7.92	8
2014/08/20	MF	DS4	16:03:00	B	4.9	118.5	0.37	28.15	21.57	57.67	3.99	14.75	7.69	11
2014/08/20	MF	DS4	16:04:00	M	3.5	355.2	0.53	29.06	16.77	82.16	5.75	13.35	7.84	9
2014/08/20	MF	DS4	16:05:00	T	1.1	288.1	0.29	29.08	15.44	94.35	6.65	7.45	7.92	8
2014/08/20	MF	DS4	16:06:00	B	4.9	337.4	1.02	29.10	21.19	57.27	3.97	12.15	7.71	10
2014/08/20	MF	DS4	16:07:00	M	3.6	98.3	0.23	29.06	16.89	81.65	5.72	13.75	7.85	9
2014/08/20	MF	DS4	16:08:00	T	1.0	140.3	0.44	29.06	15.34	94.15	6.65	7.25	7.92	8
2014/08/20	MF	DS5	16:11:48	B	4.9	298.2	0.24	28.35	19.38	65.06	4.54	13.25	7.72	12
2014/08/20	MF	DS5	16:12:27	M	3.5	219.5	0.40	29.15	16.14	85.95	6.03	13.15	7.87	14
2014/08/20	MF	DS5	16:13:10	T	0.9	194.5	0.10	29.03	15.18	99.34	7.02	5.45	7.97	4
2014/08/20	MF	DS5	16:14:53	B	5.1	158.9	1.04	28.43	20.83	72.65	5.03	13.95	7.73	12
2014/08/20	MF	DS5	16:15:38	M	3.4	166.5	0.34	29.02	17.13	77.85	5.44	16.34	7.81	14
2014/08/20	MF	DS5	16:16:25	T	0.8	81.5	0.64	29.04	15.39	93.64	6.61	7.35	7.92	4
2014/08/20	MF	DS5	16:17:09	B	5.0	195.8	0.53	28.78	18.70	82.05	5.71	10.45	7.76	13
2014/08/20	MF	DS5	16:18:00	M	3.6	299.6	0.87	29.11	16.79	78.35	5.48	15.24	7.83	13
2014/08/20	MF	DS5	16:19:00	T	0.9	287.4	0.41	28.99	15.14	98.73	6.99	5.15	7.96	5
2014/08/20	MF	US1	16:33:43	B	3.0	260.2	0.29	28.77	15.81	89.43	6.32	3.26	7.88	5
2014/08/20	MF	US1	16:34:21	T	1.1	7.0	1.09	28.68	15.13	97.92	6.96	2.96	7.94	4
2014/08/20	MF	US1	16:35:04	B	2.8	154.8	0.02	28.74	15.98	91.72	6.49	3.76	7.89	5
2014/08/20	MF	US1	16:36:00	T	1.0	300.1	0.06	28.93	15.16	97.72	6.95	2.96	7.94	4
2014/08/20	MF	US1	16:37:00	B	2.7	31.0	0.48	28.60	17.48	82.43	5.79	5.15	7.82	5
2014/08/20	MF	US1	16:38:00	T	0.9	250.6	0.66	28.69	15.34	95.02	6.75	3.16	7.91	3
2014/08/20	MF	US2	16:42:13	B	9.9	94.3	0.11	26.07	27.63	40.86	2.83	17.24	7.71	14
2014/08/20	MF	US2	16:43:09	M	6.1	293.3	0.64	27.77	21.49	62.04	4.33	8.25	7.74	10
2014/08/20	MF	US2	16:44:00	T	0.9	51.6	0.47	28.66	15.78	90.32	6.40	3.26	7.90	4
2014/08/20	MF	US2	16:45:00	B	9.7	314.4	0.63	26.09	27.59	40.26	2.79	21.24	7.71	15
2014/08/20	MF	US2	16:46:11	M	5.5	135.0	0.28	27.85	21.33	62.34	4.34	10.85	7.74	10
2014/08/20	MF	US2	16:47:00	T	1.0	178.7	1.05	28.75	15.31	89.52	6.35	3.86	7.92	4
2014/08/20	MF	US2	16:50:06	B	10.3	4.9	0.53	26.23	27.54	49.75	3.44	16.74	7.71	15
2014/08/20	MF	US2	16:51:02	M	6.4	139.2	0.85	27.77	22.43	60.64	4.21	9.25	7.74	11
2014/08/20	MF	US2	16:52:00	T	0.9	19.4	0.33	28.64	15.53	87.51	6.22	3.56	7.90	4
2014/08/20	MF	MW1	17:14:51	B	18.1	315.8	0.54	24.72	31.25	42.56	2.96	6.76	7.68	9
2014/08/20	MF	MW1	17:15:38	M	10.2	240.4	0.34	26.02	27.70	52.28	3.63	4.14	7.67	8
2014/08/20	MF	MW1	17:16:28	T	1.1	97.1	1.27	27.44	22.12	71.71	5.01	2.40	7.71	4
2014/08/20	MF	MW1	17:17:40	B	18.3	255.1	0.27	24.78	31.12	42.80	2.97	6.16	7.69	8
2014/08/20	MF	MW1	17:18:37	M	10.1	18.0	0.66	25.94	27.97	51.59	3.58	4.48	7.68	8
2014/08/20	MF	MW1	17:19:25	T	1.2	14.7	0.14	27.38	22.23	72.61	5.08	2.88	7.72	4
2014/08/20	MF	MW1	17:21:00	B	18.0	229.9	0.11	24.78	31.11	42.67	2.96	6.37	7.68	8
2014/08/20	MF	MW1	17:22:00	M	10.1	337.9	0.23	26.03	27.70	53.15	3.69	4.41	7.68	9
2014/08/20	MF	MW1	17:22:48	T	1.1	352.5	0.46	27.23	23.02	68.61	4.79	2.72	7.70	4
2014/08/20	MF	THB1	16:00:45	B	2.0	325.5	0.26	29.24	17.24	81.91	5.70	12.25	7.70	13
2014/08/20	MF	THB1	16:01:18	T	1.0	258.7	0.59	29.26	16.47	88.46	6.18	10.99	7.75	13
2014/08/20	MF	THB1	16:01:55	B	2.0	144.7	0.12	29.25	16.88	85.28	5.95	10.58	7.73	13
2014/08/20	MF	THB1	16:02:47	T	1.0	247.9	0.11	29.26	16.52	88.97	6.22	9.86	7.76	13
2014/08/20	MF	THB1	16:03:33	B	1.9	61.3	0.31	29.24	17.26	82.39	5.74	10.90	7.71	13
2014/08/20	MF	THB1	16:04:19	T	0.9	24.5	0.77	29.21	16.26	91.41	6.40	11.13	7.78	13
2014/08/20	MF	THB2	16:07:32	M	0.8	40.0	0.05	29.35	13.50	79.11	5.61	10.39	7.69	14
2014/08/20	MF	THB2	16:08:20	M	0.7	40.0	0.05	29.22	13.15	80.55	5.74	10.39	7.72	14
2014/08/20	MF	THB2	16:09:06	M	0.7	40.0	0.05	29.27	13.22	80.61	5.74	10.19	7.73	14
2014/08/20	MF	WSR45C	16:36:10	B	12.6	71.1	0.11	25.62	29.11	38.00	2.63	15.48	7.61	16
2014/08/20	MF	WSR45C	16:37:13	M	6.8	199.7	0.59	26.49	26.65	43.75	3.03	8.32	7.61	11
2014/08/20	MF	WSR45C	16:38:02	T	1.2	182.0	1.00	26.51	17.67	84.14	5.92	2.64	7.75	5
2014/08/20	MF	WSR45C	16:38:54	B	12.1	227.6	0.51	25.81	28.76	39.24	2.72	14.92	7.62	16
2014/08/20	MF	WSR45C	16:39:33	M	6.7	11.5	1.54	26.69	26.04	42.60	2.96	8.33	7.60	11
2014/08/20	MF	WSR45C	16:40:14	T	1.2	29.3	0.14	28.44	18.47	78.46	5.50	2.91	7.72	5
2014/08/20	MF	WSR45C	16:41:08	B	11.9	324.6	0.62	25.75	28.86	38.47	2.66	15.24	7.62	16
2014/08/20	MF	WSR45C	16:41:54	M	6.9	197.9	0.14	26.52	26.61	41.91	2.90	8.57	7.60	11
2014/08/20	MF	WSR45C	16:42:37	T	1.3	294.0	0.15	28.45	18.40	78.80	5.52	2.67	7.73	5
2014/08/20	MF	WSR46	15:34:59	B	8.1	258.1	0.64	27.02	24.95	51.47	3.56	11.14	7.52	16
2014/08/20	MF	WSR46	15:35:34	M	5.0	256.2	0.76	28.53	16.58	83.04	5.87	4.00	7.68	5
2014/08/20	MF	WSR46	15:36:12	T	1.2	138.5	1.11	28.84	15.25	95.06	6.74	3.65	7.77	4
2014/08/20	MF	WSR46	15:37:20	B	8.1	248.8	0.40	27.79	21.88	61.92	4.31	6.67	7.63	16
2014/08/20	MF	WSR46	15:38:06	M	5.1	294.8	0.75	28.40	18.21	77.66	5.46	4.71	7.70	4
2014/08/20	MF	WSR46	15:38:47	T	1.0	166.2	1.76	28.81	14.92	95.02	6.75	3.57	7.81	4
2014/08/20	MF	WSR46	15:39:40	B	8.2	265.0	0.85	27.77	21.98	61.58	4.28	6.19	7.65	16
2014/08/20	MF	WSR46	15:40:25	M	5.1									

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/20	ME	DS1	09:11:44	B	3.9	149.8	1.83	28.93	17.79	82.83	5.78	5.25	7.88	6
2014/08/20	ME	DS1	09:12:26	M	2.8	349.1	0.20	29.30	16.47	88.12	6.16	6.15	7.92	7
2014/08/20	ME	DS1	09:13:10	T	1.0	7.7	0.59	29.24	15.60	91.12	6.40	5.45	7.94	6
2014/08/20	ME	DS1	09:14:00	B	4.1	217.7	0.28	28.78	18.26	81.73	5.70	5.65	7.87	6
2014/08/20	ME	DS1	09:15:00	M	3.0	263.9	0.32	29.23	16.61	86.72	6.06	6.65	7.91	7
2014/08/20	ME	DS1	09:16:00	T	1.1	236.4	0.87	29.29	15.70	91.12	6.39	5.75	7.94	6
2014/08/20	ME	DS1	09:17:00	B	4.2	221.4	0.33	28.61	18.80	78.83	5.50	7.45	7.87	7
2014/08/20	ME	DS1	09:18:00	M	2.9	185.0	0.05	29.21	16.89	85.42	5.96	6.05	7.91	7
2014/08/20	ME	DS1	09:19:00	T	1.0	330.5	1.51	29.30	15.40	92.01	6.47	5.25	7.95	6
2014/08/20	ME	DS2	09:30:04	B	7.5	226.3	0.39	26.95	24.89	56.24	3.90	6.15	7.79	20
2014/08/20	ME	DS2	09:31:00	M	4.7	256.4	0.29	27.32	23.48	58.84	4.09	6.65	7.81	8
2014/08/20	ME	DS2	09:32:00	T	1.0	46.9	0.35	28.93	14.80	91.70	6.51	4.66	7.96	5
2014/08/20	ME	DS2	09:33:00	B	6.9	300.0	0.82	26.59	25.92	51.84	3.60	8.25	7.80	21
2014/08/20	ME	DS2	09:34:00	M	4.6	26.6	0.07	27.69	21.88	66.13	4.61	3.96	7.84	8
2014/08/20	ME	DS2	09:35:01	T	0.9	271.6	0.38	28.92	14.64	92.70	6.58	4.66	7.97	5
2014/08/20	ME	DS2	09:36:00	B	7.0	320.0	0.62	27.28	45.85	3.18	10.55	7.78	20	
2014/08/20	ME	DS2	09:37:01	M	4.5	262.0	1.56	28.14	19.77	72.82	5.09	4.06	7.86	8
2014/08/20	ME	DS2	09:38:00	T	1.1	183.1	0.62	28.84	15.16	89.20	6.33	4.16	7.93	5
2014/08/20	ME	DS3	09:43:10	B	8.0	144.0	0.24	25.89	28.03	50.54	3.51	5.75	7.81	7
2014/08/20	ME	DS3	09:44:00	M	5.2	23.1	0.38	27.29	23.65	57.43	3.99	4.56	7.79	6
2014/08/20	ME	DS3	09:45:00	T	0.8	338.7	0.96	28.90	15.08	88.99	6.31	2.96	7.94	5
2014/08/20	ME	DS3	09:46:00	B	8.0	202.6	0.12	25.91	27.97	50.54	3.51	4.66	7.83	7
2014/08/20	ME	DS3	09:47:00	M	5.0	82.9	0.70	27.35	23.31	58.73	4.08	4.06	7.81	6
2014/08/20	ME	DS3	09:48:00	T	0.9	134.8	0.48	26.85	14.98	89.69	6.37	3.36	7.95	6
2014/08/20	ME	DS3	09:50:24	B	8.1	326.8	0.60	25.43	27.80	52.43	3.64	4.76	7.82	7
2014/08/20	ME	DS3	09:51:05	M	4.9	2.6	0.44	27.34	23.38	59.22	4.12	3.96	7.81	6
2014/08/20	ME	DS3	09:52:00	T	1.1	260.4	1.40	28.88	14.72	91.78	6.52	3.16	7.95	5
2014/08/20	ME	DS4	09:59:33	B	9.1	114.2	0.15	25.75	28.66	50.33	3.49	5.15	7.79	6
2014/08/20	ME	DS4	10:00:24	M	5.5	39.4	0.33	27.28	23.33	59.22	4.12	5.25	7.81	5
2014/08/20	ME	DS4	10:01:05	T	0.9	301.7	1.13	28.75	15.41	87.28	6.19	4.16	7.93	5
2014/08/20	ME	DS4	10:02:00	B	9.0	159.3	0.62	25.85	28.84	47.13	3.27	5.85	7.80	6
2014/08/20	ME	DS4	10:03:00	M	5.8	324.8	0.04	27.09	24.11	56.72	3.94	5.06	7.80	5
2014/08/20	ME	DS4	10:04:01	T	1.2	246.1	0.36	28.75	15.38	89.87	6.38	3.76	7.94	5
2014/08/20	ME	DS4	10:05:00	B	8.8	73.6	0.70	25.61	28.80	44.04	3.06	8.25	7.80	6
2014/08/20	ME	DS4	10:06:00	M	5.6	57.1	0.43	27.35	23.12	57.52	4.00	4.66	7.80	5
2014/08/20	ME	DS4	10:07:00	T	0.9	108.8	0.20	26.81	15.68	87.27	6.18	3.56	7.92	4
2014/08/20	ME	DS5	10:11:48	B	11.1	126.2	0.47	26.20	42.24	2.93	15.24	7.79	14	
2014/08/20	ME	DS5	10:12:35	M	6.7	70.8	0.83	27.28	24.42	56.21	3.89	4.26	7.80	5
2014/08/20	ME	DS5	10:13:22	T	1.3	255.1	0.38	28.82	15.10	89.76	6.37	3.36	7.94	3
2014/08/20	ME	DS5	10:14:24	B	11.3	91.4	0.17	26.21	30.12	41.74	2.90	14.55	7.80	15
2014/08/20	ME	DS5	10:15:06	M	6.3	100.6	1.02	26.74	25.21	52.62	3.66	4.96	7.82	5
2014/08/20	ME	DS5	10:16:00	T	1.1	17.1	0.38	28.76	15.30	89.16	6.33	3.76	7.95	3
2014/08/20	ME	DS5	10:17:08	B	11.1	64.0	0.35	25.18	30.21	40.84	2.83	15.84	7.80	15
2014/08/20	ME	DS5	10:18:00	M	6.0	133.3	1.52	27.19	24.02	56.11	3.90	4.26	7.80	5
2014/08/20	ME	DS5	10:19:00	T	1.1	241.8	0.58	28.77	15.15	90.36	6.42	3.66	7.95	3
2014/08/20	ME	US1	10:33:33	B	3.1	276.1	0.70	26.06	18.50	80.06	5.55	5.75	7.81	6
2014/08/20	ME	US1	10:34:15	T	1.2	61.7	0.34	29.04	15.07	93.24	6.59	4.56	7.95	5
2014/08/20	ME	US1	10:35:00	B	2.9	290.2	0.17	29.11	17.80	79.66	5.54	5.45	7.83	6
2014/08/20	ME	US1	10:36:00	T	1.0	31.1	0.71	29.06	15.09	93.53	6.61	4.96	7.95	5
2014/08/20	ME	US1	10:37:36	B	2.9	199.3	0.56	29.14	18.32	79.86	5.54	6.85	7.87	6
2014/08/20	ME	US1	10:38:15	T	1.1	220.6	0.09	29.12	16.02	82.75	5.81	6.15	7.92	5
2014/08/20	ME	US2	10:43:45	B	2.0	150.2	0.30	29.20	15.51	90.93	6.40	4.96	7.95	6
2014/08/20	ME	US2	10:44:24	T	1.1	61.7	0.10	29.10	14.88	95.52	6.76	5.35	7.97	6
2014/08/20	ME	US2	10:45:06	B	2.0	299.7	0.16	29.32	15.54	90.53	6.36	4.56	7.92	6
2014/08/20	ME	US2	10:46:00	T	0.9	113.0	1.73	29.13	14.93	95.02	6.71	4.86	7.96	6
2014/08/20	ME	US2	10:45:00	B	1.9	109.1	0.60	29.08	15.24	93.72	6.82	9.55	7.95	5
2014/08/20	ME	US2	10:56:00	T	1.1	23.1	0.67	29.12	15.22	86.61	6.62	7.55	7.95	6
2014/08/20	ME	MW1	08:07:15	B	19.0	56.2	0.63	24.50	31.78	45.89	3.19	5.15	7.89	7
2014/08/20	ME	MW1	08:08:03	M	10.5	219.5	1.32	26.12	26.55	49.49	3.45	4.26	7.90	6
2014/08/20	ME	MW1	08:09:00	T	1.1	57.9	0.87	28.83	14.64	94.38	6.71	2.46	8.03	7
2014/08/20	ME	MW1	08:10:03	B	18.8	30.7	0.72	24.48	31.76	45.59	3.17	5.35	7.89	7
2014/08/20	ME	MW1	08:11:00	M	10.8	277.3	0.33	25.21	29.85	47.39	3.29	4.06	7.89	6
2014/08/20	ME	MW1	08:12:00	T	0.9	91.0	0.44	28.76	15.26	91.18	6.47	2.36	8.01	7
2014/08/20	ME	MW1	08:13:01	B	19.1	108.0	0.44	24.48	31.73	45.69	3.18	5.06	7.89	7
2014/08/20	ME	MW1	08:14:00	M	10.6	350.8	0.75	25.24	29.73	47.09	3.27	3.86	7.89	6
2014/08/20	ME	MW1	08:15:00	T	1.0	38.5	0.96	28.82	14.51	94.17	6.71	2.56	8.03	7
2014/08/20	ME	THB1	10:15:04	B	1.9	200.7	0.41	29.55	15.49	95.25	6.66	4.92	7.87	7
2014/08/20	ME	THB1	10:15:32	T	1.0	27.8	0.31	29.56	15.42	95.54	6.68	4.58	7.88	6
2014/08/20	ME	THB1	10:15:58	B	1.9	61.8	0.72	29.78	16.12	94.63	6.57	6.62	7.87	7
2014/08/20	ME	THB1	10:16:39	T	1.0	349.9	0.06	29.51	15.26	97.70	6.85	4.38	7.90	6
2014/08/20	ME	THB1	10:17:29	B	1.8	98.1	0.83	29.88	16.35	93.73	6.49	7.29	7.86	7
2014/08/20	ME	THB1	10:18:12	T	1.0	52.3	0.59	29.69	15.75	98.20	6.84	4.32	7.90	6
2014/08/20	ME	THB2	10:22:44	M	1.1	40.0	0.05	29.28	13.84	86.16	6.11	2.29	7.81	7
2014/08/20	ME	THB2	10:23:30	M	1.1	40.0	0.05	29.26	13.96	86.23	6.12	2.29	7.82	6
2014/08/20	ME	THB2	10:24:15	M	1.1	40.0	0.05	29.25	13.82	86.49	6.14	2.19	7.82	6
2014/08/20	ME	WSR45C	09:46:09	B	12.0	66.6	1.89	25.29	30.15	40.34	2.79	10.54	7.65	4
2014/08/20	ME	WSR45C	09:47:03	M	6.8	345.3	0.98	27.08	24.65	52.52	3.64	4.23	7.66	6
2014/08/20	ME	WSR45C	09:47:55	T	1.0	34.3	0.36	28.85	15.54	89.76	6.35	3.03	7.81	8
2014/08/20	ME	WSR45C	09:48:47	B	12.1	57.4	0.33	25.36	30.04	40.90	2.83	9.82	7.72	4
2014/08/20	ME	WSR45C	09:49:40	M	6.8	69.1	1.12	27.16	24.44	53.28	3.69	4.44	7.70	6
2014/08/20	ME	WSR45C	09:50:28	T	1.0	52.1	0.59	28.85	15.31	89.74	6.36	3.13	7.84	8
2014/08/20	ME	WSR45C	09:51:23	B	11.8	221.2	0.73	25.35	30.02	40.62	2.81	9.21	7.74	4
2014/08/20	ME	WSR45C	09:52:13	M	6.8	192.7	0.16	27.18	24.38	52.98	3.67	4.32	7.71	6
2014/08/20	ME	WSR45C	09:52:59	T	1.2	51.5	0.78	28.85	15.63	88.61	6.27	3.16	7.85	8
2014/08/20	ME	WSR46	10:50:43	B	8.0	7.0	0.25	26.83	26.48	42.45	2.92	8.88	7.63	12
2014/08/20	ME	WSR46	10:51:34	M	5.1	95.2	0.84	27.94	21.99	55.42	3.84	4.26	7.66	5
2014														

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/22	MF	DS1	17:02:22	B	2.1	110.4	0.60	29.08	15.62	90.39	6.37	3.56	7.98	3
2014/08/22	MF	DS1	17:03:06	T	1.1	253.9	0.57	29.36	15.02	93.17	6.55	3.36	7.94	4
2014/08/22	MF	DS1	17:04:00	B	2.0	3.8	0.75	29.16	15.38	90.26	6.36	3.56	7.91	3
2014/08/22	MF	DS1	17:05:09	T	1.1	115.4	0.20	29.26	15.07	90.55	6.38	3.36	7.91	4
2014/08/22	MF	DS1	17:06:00	B	1.9	209.6	0.26	29.19	15.23	90.04	6.35	3.36	7.90	3
2014/08/22	MF	DS1	17:07:00	T	1.0	135.9	0.36	29.36	14.87	91.52	6.44	3.36	7.89	4
2014/08/22	MF	DS2	17:11:21	B	1.9	12.7	0.24	29.11	16.23	91.55	6.43	14.35	7.91	17
2014/08/22	MF	DS2	17:12:04	T	0.8	284.5	0.30	29.41	15.34	93.24	6.54	9.05	7.91	10
2014/08/22	MF	DS2	17:13:00	B	2.0	145.5	0.73	29.19	15.95	90.54	6.36	12.35	7.90	18
2014/08/22	MF	DS2	17:14:00	T	0.9	255.7	0.60	29.33	15.40	93.01	6.53	10.45	7.90	10
2014/08/22	MF	DS2	17:15:00	B	1.8	271.5	0.35	29.31	15.44	92.70	6.51	11.85	7.90	17
2014/08/22	MF	DS2	17:16:00	T	0.8	215.7	0.74	29.21	15.33	92.78	6.52	9.55	7.90	10
2014/08/22	MF	DS3	17:20:34	B	3.9	100.6	0.13	28.59	19.02	80.39	5.60	16.14	7.89	14
2014/08/22	MF	DS3	17:21:18	M	3.0	202.4	0.87	28.69	18.59	83.22	5.81	13.25	7.89	14
2014/08/22	MF	DS3	17:22:02	T	0.9	160.3	1.10	29.00	16.83	90.01	6.31	9.25	7.93	7
2014/08/22	MF	DS3	17:23:03	B	3.9	52.8	0.37	28.64	18.85	81.75	5.70	15.44	7.89	14
2014/08/22	MF	DS3	17:24:00	M	2.9	258.2	0.17	28.75	18.22	83.83	5.85	15.64	7.89	15
2014/08/22	MF	DS3	17:25:00	T	1.0	201.9	0.42	29.26	15.82	93.05	6.53	6.85	7.93	7
2014/08/22	MF	DS3	17:26:06	B	4.0	316.8	0.38	28.57	19.19	76.95	5.36	17.34	7.86	14
2014/08/22	MF	DS3	17:27:04	M	3.4	152.0	0.42	28.69	18.51	83.89	5.85	9.85	7.90	14
2014/08/22	MF	DS3	17:28:01	T	1.0	260.4	1.05	29.27	15.71	92.81	6.51	6.85	7.92	7
2014/08/22	MF	DS4	17:32:26	B	4.9	259.2	0.93	28.31	20.27	67.15	4.67	32.03	7.83	20
2014/08/22	MF	DS4	17:33:12	M	3.4	235.0	0.63	28.51	19.25	78.65	5.48	28.13	7.85	22
2014/08/22	MF	DS4	17:34:11	T	1.0	35.5	0.27	29.29	15.71	94.31	6.62	12.85	7.91	12
2014/08/22	MF	DS4	17:35:05	B	4.9	259.8	0.51	28.42	20.07	71.69	4.98	30.43	7.84	19
2014/08/22	MF	DS4	17:36:00	M	3.5	215.0	0.49	28.62	18.84	80.60	5.62	27.33	7.86	22
2014/08/22	MF	DS4	17:37:00	T	1.0	260.8	0.27	29.22	15.99	93.87	6.58	10.65	7.90	13
2014/08/22	MF	DS4	17:38:01	B	5.1	192.3	0.26	28.40	20.14	70.17	4.88	30.53	7.83	21
2014/08/22	MF	DS4	17:39:00	M	3.2	11.0	0.14	28.54	19.14	76.99	5.37	29.03	7.86	22
2014/08/22	MF	DS4	17:40:00	T	1.1	243.5	0.67	29.20	15.89	93.23	6.55	9.75	7.90	12
2014/08/22	MF	DS5	17:43:49	B	3.9	25.3	0.41	28.94	18.99	86.54	6.00	13.95	7.93	11
2014/08/22	MF	DS5	17:44:30	M	2.9	342.1	0.84	29.09	17.37	92.18	6.43	11.35	7.96	15
2014/08/22	MF	DS5	17:45:14	T	1.3	220.0	0.45	29.24	16.78	97.81	6.83	8.15	7.94	10
2014/08/22	MF	DS5	17:46:00	B	3.8	198.6	0.39	28.84	18.80	83.94	5.83	16.44	7.90	12
2014/08/22	MF	DS5	17:47:03	M	2.8	41.1	0.69	29.07	17.55	92.64	6.46	13.55	7.92	15
2014/08/22	MF	DS5	17:48:08	T	1.0	10.1	0.47	29.27	16.47	97.77	6.83	7.45	7.94	10
2014/08/22	MF	DS5	17:49:00	B	3.9	62.7	0.51	28.92	18.39	87.17	6.06	13.65	7.92	11
2014/08/22	MF	DS5	17:50:02	M	2.8	4.1	0.34	29.01	17.68	92.79	6.47	13.05	7.94	15
2014/08/22	MF	DS5	17:51:02	T	0.9	238.2	0.66	29.36	15.91	98.12	6.87	6.85	7.94	10
2014/08/22	MF	US1	18:05:19	B	4.2	285.3	0.36	28.05	19.06	71.16	5.00	5.75	7.76	4
2014/08/22	MF	US1	18:06:00	M	3.1	280.8	0.62	28.15	18.67	70.36	4.95	3.56	7.76	3
2014/08/22	MF	US1	18:07:57	T	0.9	170.4	0.31	28.97	15.37	79.42	5.61	20.14	7.80	16
2014/08/22	MF	US1	18:11:30	B	3.9	167.8	0.21	27.79	20.13	64.98	4.56	6.55	7.77	4
2014/08/22	MF	US1	18:12:07	M	3.0	300.0	0.10	28.02	19.03	68.13	4.80	4.16	7.78	3
2014/08/22	MF	US1	18:14:46	T	1.2	252.9	0.51	28.67	16.83	76.08	5.36	4.66	7.79	16
2014/08/22	MF	US1	18:15:28	B	4.2	351.0	0.51	27.70	20.63	63.66	4.46	6.95	7.77	4
2014/08/22	MF	US1	18:16:15	M	3.2	179.7	0.33	28.07	18.89	66.80	4.70	3.96	7.77	2
2014/08/22	MF	US1	18:17:01	T	0.9	323.7	1.57	28.59	17.16	74.58	5.25	3.56	7.79	16
2014/08/22	MF	US2	18:21:31	B	8.0	170.7	0.16	26.71	24.41	51.69	3.61	11.95	7.78	13
2014/08/22	MF	US2	18:22:15	M	5.0	324.7	0.20	27.04	23.13	55.91	3.91	6.55	7.78	10
2014/08/22	MF	US2	18:23:06	T	1.0	350.8	0.91	28.98	15.57	77.36	5.46	3.56	7.78	3
2014/08/22	MF	US2	18:24:59	B	8.3	176.3	0.51	26.74	24.34	56.28	3.93	11.55	7.78	13
2014/08/22	MF	US2	18:26:01	M	5.0	12.7	0.44	27.22	22.42	57.95	4.06	5.95	7.78	9
2014/08/22	MF	US2	18:27:00	T	1.1	132.6	0.36	28.94	15.64	77.81	5.49	3.56	7.78	3
2014/08/22	MF	US2	18:28:01	B	7.8	322.6	0.33	26.62	24.88	51.63	3.60	12.85	7.78	13
2014/08/22	MF	US2	18:29:00	M	5.0	328.2	0.65	27.19	22.51	56.94	3.99	6.55	7.78	10
2014/08/22	MF	US2	18:30:00	T	0.9	185.1	1.59	29.04	15.26	78.26	5.53	4.06	7.78	3
2014/08/22	MF	MW1	18:47:24	B	18.1	122.5	0.55	24.68	30.64	46.20	3.23	10.53	7.75	13
2014/08/22	MF	MW1	18:48:19	M	9.9	68.9	0.20	25.81	27.79	48.86	3.40	7.28	7.73	8
2014/08/22	MF	MW1	18:49:09	T	1.0	89.5	0.47	26.52	25.75	62.10	4.32	3.49	7.76	8
2014/08/22	MF	MW1	18:50:09	B	18.0	64.9	0.44	24.70	30.51	45.99	3.21	9.23	7.75	13
2014/08/22	MF	MW1	18:50:59	M	10.1	171.2	0.66	25.95	27.31	53.59	3.73	5.21	7.75	8
2014/08/22	MF	MW1	18:51:59	T	0.9	53.4	0.33	26.53	25.67	61.85	4.30	3.54	7.76	8
2014/08/22	MF	MW1	18:52:59	B	18.0	333.8	0.49	24.82	30.38	46.32	3.23	9.27	7.76	13
2014/08/22	MF	MW1	18:53:59	M	10.0	89.2	0.23	26.07	27.07	55.84	3.88	5.28	7.75	8
2014/08/22	MF	MW1	18:55:00	T	1.0	329.3	0.68	26.78	24.67	59.32	4.13	2.80	7.73	7
2014/08/22	MF	THB1	17:20:57	B	1.7	227.3	0.94	28.88	16.58	81.23	5.71	11.60	7.74	11
2014/08/22	MF	THB1	17:21:46	T	1.1	276.3	0.47	29.15	15.59	86.19	6.07	9.39	7.76	11
2014/08/22	MF	THB1	17:22:15	B	2.1	274.9	0.33	28.73	17.52	77.18	5.41	14.10	7.71	12
2014/08/22	MF	THB1	17:23:11	T	0.9	150.1	0.52	29.21	15.45	86.13	6.06	9.05	7.76	11
2014/08/22	MF	THB1	17:24:07	B	2.2	4.5	0.11	28.68	17.83	74.91	5.25	13.76	7.71	11
2014/08/22	MF	THB1	17:25:18	T	0.8	188.8	0.48	29.31	15.19	87.15	6.13	7.57	7.76	12
2014/08/22	MF	THB2	17:31:10	M	1.0	40.0	0.03	29.37	18.16	63.96	4.42	16.11	7.52	5
2014/08/22	MF	THB2	17:31:59	M	1.0	40.0	0.03	29.35	18.15	64.26	4.44	15.51	7.54	5
2014/08/22	MF	THB2	17:32:59	M	1.0	40.0	0.03	29.36	18.12	63.86	4.42	16.31	7.56	6
2014/08/22	MF	WSR45C	18:08:09	B	12.1	302.9	0.94	25.41	29.20	43.06	2.99	17.07	7.72	19
2014/08/22	MF	WSR45C	18:09:14	M	7.0	271.6	0.56	26.16	26.86	47.06	3.27	8.64	7.71	12
2014/08/22	MF	WSR45C	18:09:59	T	1.1	133.9	0.49	28.89	16.47	82.01	5.77	2.70	7.77	8
2014/08/22	MF	WSR45C	18:10:59	B	12.2	276.1	0.73	25.47	29.03	43.54	3.03	15.27	7.72	19
2014/08/22	MF	WSR45C	18:11:59	M	7.1	340.5	0.41	26.16	26.85	47.31	3.29	9.94	7.71	12
2014/08/22	MF	WSR45C	18:12:59	T	0.9	263.0	0.55	28.87	16.60	82.76	5.82	2.61	7.76	9
2014/08/22	MF	WSR45C	18:13:59	B	12.0	270.1	1.04	25.35	29.30	42.79	2.98	24.63	7.72	17
2014/08/22	MF	WSR45C	18:15:00	M	6.8	216.1	0.50	26.33	26.16	49.26	3.43	9.64	7.71	13
2014/08/22	MF	WSR45C	18:15:59	T	0.9	227.3	0.37	28.91	16.42	83.24	5.86	2.64	7.76	8
2014/08/22	MF	WSR46	16:52:38	B	7.4	283.7	0.41	26.27	26.50	45.82	3.19	50.00	7.68	21
2014/08/22	MF	WSR46	16:53:37	M	5									

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/22	ME	DS1	10:18:55	B	4.1	31.4	0.84	27.76	20.24	68.68	4.82	5.85	7.84	7
2014/08/22	ME	DS1	10:19:51	M	3.0	133.3	1.53	27.93	19.20	68.88	4.85	6.05	7.83	7
2014/08/22	ME	DS1	10:20:34	T	0.8	147.1	0.44	28.29	17.07	75.51	5.35	3.66	7.82	4
2014/08/22	ME	DS1	10:22:27	B	4.2	78.7	0.52	27.79	20.12	67.80	4.76	5.25	7.81	7
2014/08/22	ME	DS1	10:24:05	M	3.0	100.3	1.06	27.96	19.19	70.22	4.94	8.75	7.80	7
2014/08/22	ME	DS1	10:25:00	T	1.0	143.7	1.16	28.27	17.58	77.55	5.48	5.35	7.82	4
2014/08/22	ME	DS1	10:26:00	B	3.9	351.8	0.46	27.75	20.34	66.22	4.65	4.46	7.79	7
2014/08/22	ME	DS1	10:27:00	M	3.1	28.6	0.66	28.08	19.08	69.74	4.90	4.46	7.80	7
2014/08/22	ME	DS1	10:28:00	T	1.1	101.8	0.65	28.28	17.50	78.28	5.53	4.36	7.82	4
2014/08/22	ME	DS2	10:32:46	B	8.0	214.9	0.45	25.97	27.31	46.09	3.21	6.05	7.80	7
2014/08/22	ME	DS2	10:33:33	M	5.0	291.3	0.23	27.55	21.29	62.97	4.41	3.46	7.83	4
2014/08/22	ME	DS2	10:34:13	T	1.0	12.0	0.41	28.29	16.58	72.91	5.18	3.66	7.83	4
2014/08/22	ME	DS2	10:35:00	B	8.1	4.0	0.30	26.02	27.21	49.62	3.45	6.15	7.81	7
2014/08/22	ME	DS2	10:36:00	M	4.9	175.2	0.18	27.65	20.92	65.80	4.61	3.16	7.84	4
2014/08/22	ME	DS2	10:37:00	T	1.0	48.8	0.77	28.31	16.27	73.74	5.24	3.46	7.81	4
2014/08/22	ME	DS2	10:38:07	B	8.1	172.6	0.30	26.04	27.13	47.73	3.32	6.25	7.80	7
2014/08/22	ME	DS2	10:39:00	M	5.0	207.8	0.47	27.48	21.43	60.99	4.28	4.56	7.82	4
2014/08/22	ME	DS2	10:40:00	T	1.1	259.3	0.59	28.30	16.71	73.86	5.24	4.06	7.82	4
2014/08/22	ME	DS3	10:43:51	B	7.2	151.4	0.16	26.78	24.66	59.92	4.17	4.66	7.81	4
2014/08/22	ME	DS3	10:44:31	M	4.5	6.0	0.14	27.89	19.74	68.17	4.79	2.56	7.83	3
2014/08/22	ME	DS3	10:45:12	T	1.1	74.5	0.68	28.29	16.51	72.90	5.18	3.46	7.80	4
2014/08/22	ME	DS3	10:46:02	B	7.3	37.7	0.07	26.39	25.91	55.71	3.88	3.96	7.83	4
2014/08/22	ME	DS3	10:47:00	M	4.4	284.7	0.68	28.02	19.16	70.20	4.94	2.36	7.82	3
2014/08/22	ME	DS3	10:48:08	T	1.1	96.3	0.40	28.52	14.44	75.54	5.41	3.96	7.79	4
2014/08/22	ME	DS3	10:49:00	B	6.8	146.3	0.09	26.84	24.64	57.34	3.99	4.86	7.81	3
2014/08/22	ME	DS3	10:50:00	M	4.7	47.0	0.42	27.90	19.86	70.53	4.95	1.96	7.83	3
2014/08/22	ME	DS3	10:51:00	T	1.1	25.4	0.32	28.26	16.82	72.35	5.13	3.46	7.80	4
2014/08/22	ME	DS4	10:54:50	B	8.9	211.3	1.93	25.99	27.35	52.65	3.66	4.36	7.81	8
2014/08/22	ME	DS4	10:55:34	M	5.6	324.6	0.65	27.81	19.84	66.44	4.67	2.76	7.82	3
2014/08/22	ME	DS4	10:56:17	T	1.0	204.3	0.12	28.32	15.92	72.29	5.15	3.86	7.78	6
2014/08/22	ME	DS4	10:59:47	B	8.7	66.9	0.55	26.96	26.98	52.27	3.64	5.75	7.81	8
2014/08/22	ME	DS4	11:00:31	M	5.4	250.3	0.06	27.83	19.86	66.88	4.70	2.76	7.81	3
2014/08/22	ME	DS4	11:01:11	T	1.0	52.5	0.42	28.15	17.10	70.41	5.00	3.66	7.79	6
2014/08/22	ME	DS4	11:02:00	B	9.2	98.1	0.47	26.00	27.38	51.98	3.61	3.66	7.81	8
2014/08/22	ME	DS4	11:03:00	M	5.5	304.9	0.12	27.80	20.08	67.10	4.71	2.66	7.82	3
2014/08/22	ME	DS4	11:04:00	T	1.0	120.7	0.65	28.17	16.99	70.54	5.01	3.76	7.79	6
2014/08/22	ME	DS5	11:09:47	B	11.0	339.9	0.58	25.08	29.71	44.67	3.11	23.94	7.81	15
2014/08/22	ME	DS5	11:10:31	M	6.6	219.8	0.39	27.06	23.24	57.48	4.02	5.45	7.81	6
2014/08/22	ME	DS5	11:11:10	T	1.2	96.9	0.72	28.16	16.88	69.99	4.97	3.86	7.79	5
2014/08/22	ME	DS5	11:12:12	B	11.2	104.8	0.66	25.11	29.76	43.57	3.03	21.04	7.81	16
2014/08/22	ME	DS5	11:13:00	M	6.7	38.6	0.69	27.10	23.12	57.60	4.02	4.86	7.82	6
2014/08/22	ME	DS5	11:14:00	T	1.0	287.8	0.55	28.03	17.84	68.70	4.87	3.76	7.80	4
2014/08/22	ME	DS5	11:15:00	B	11.2	148.2	0.32	25.11	29.78	42.78	2.98	23.44	7.82	14
2014/08/22	ME	DS5	11:16:00	M	6.7	123.0	0.10	26.93	23.79	58.73	4.10	3.36	7.83	6
2014/08/22	ME	DS5	11:17:00	T	1.1	60.6	0.14	28.05	17.84	68.93	4.88	3.66	7.79	5
2014/08/22	ME	US1	11:34:07	B	2.8	84.3	0.44	19.67	73.21	5.11	9.25	7.82	6	
2014/08/22	ME	US1	11:35:00	T	1.1	34.9	0.46	28.40	19.16	74.93	5.24	5.85	7.84	7
2014/08/22	ME	US1	11:37:25	B	2.9	129.5	0.42	28.30	20.15	80.72	5.62	7.65	7.83	6
2014/08/22	ME	US1	11:38:12	T	1.0	175.3	0.74	28.71	17.89	85.99	6.02	5.25	7.90	7
2014/08/22	ME	US1	11:39:00	B	2.9	44.1	0.33	28.29	19.54	72.74	5.08	9.75	7.82	6
2014/08/22	ME	US1	11:40:00	T	1.1	42.6	1.12	28.68	17.98	84.89	5.94	5.45	7.89	7
2014/08/22	ME	US2	11:44:36	B	3.0	280.4	0.89	28.20	20.19	64.28	4.48	8.05	7.75	7
2014/08/22	ME	US2	11:45:19	T	1.0	228.9	0.75	28.88	17.13	90.00	6.31	4.36	7.92	5
2014/08/22	ME	US2	11:46:05	B	2.8	77.5	0.49	28.15	20.51	66.01	4.60	9.35	7.75	7
2014/08/22	ME	US2	11:47:00	T	1.1	71.5	0.52	28.69	18.02	84.35	5.90	4.46	7.89	5
2014/08/22	ME	US2	11:48:59	B	2.6	301.2	0.39	28.22	20.41	59.55	4.15	8.75	7.75	7
2014/08/22	ME	US2	11:50:00	T	0.9	89.8	0.31	28.66	17.42	88.63	6.21	4.36	7.91	5
2014/08/22	ME	MW1	10:26:39	B	18.8	64.1	0.28	24.78	30.77	43.98	3.06	4.06	7.74	6
2014/08/22	ME	MW1	10:27:28	M	10.5	312.9	0.63	26.45	25.30	60.34	4.21	2.09	7.79	4
2014/08/22	ME	MW1	10:28:18	T	1.2	85.8	0.93	28.13	17.85	78.68	5.56	1.84	7.78	3
2014/08/22	ME	MW1	10:29:39	B	19.1	109.7	0.56	24.79	30.76	43.04	3.00	4.12	7.80	6
2014/08/22	ME	MW1	10:30:24	M	10.6	147.8	0.80	26.96	22.92	64.02	4.49	2.06	7.81	3
2014/08/22	ME	MW1	10:31:10	T	1.1	88.2	0.32	28.08	18.04	78.83	5.57	1.82	7.80	4
2014/08/22	ME	MW1	10:32:16	B	19.0	86.4	0.40	24.88	30.53	43.47	3.03	4.14	7.81	6
2014/08/22	ME	MW1	10:33:03	M	10.4	144.7	0.06	24.76	22.16	66.44	4.66	1.71	7.82	4
2014/08/22	ME	MW1	10:33:57	T	1.3	146.8	0.44	28.07	18.84	76.46	5.38	1.71	7.80	3
2014/08/22	ME	THB1	11:36:16	B	2.9	191.0	0.04	27.02	21.51	56.20	3.92	4.15	7.69	8
2014/08/22	ME	THB1	11:37:02	T	1.0	238.9	1.56	28.95	17.63	91.04	6.36	3.54	7.86	8
2014/08/22	ME	THB1	11:37:31	B	2.9	195.8	0.33	28.00	20.11	64.24	4.50	4.21	7.72	8
2014/08/22	ME	THB1	11:38:15	T	0.8	320.8	1.51	29.06	17.39	92.63	6.46	3.41	7.87	8
2014/08/22	ME	THB1	11:39:00	B	2.9	206.3	0.98	27.57	22.00	56.79	3.96	4.00	7.70	8
2014/08/22	ME	THB1	11:39:45	T	0.9	185.7	0.24	29.06	17.41	91.85	6.41	4.13	7.86	8
2014/08/22	ME	WSR45C	11:10:19	B	12.2	309.8	0.29	24.85	30.70	33.26	2.73	15.91	7.76	12
2014/08/22	ME	WSR45C	11:11:04	M	7.0	86.2	0.83	26.06	27.27	45.53	3.16	3.95	7.76	4
2014/08/22	ME	WSR45C	11:12:03	T	1.1	52.5	1.18	28.45	15.79	72.33	5.15	3.54	7.71	3
2014/08/22	ME	WSR45C	11:12:56	B	12.1	58.1	1.82	24.85	30.72	39.08	2.72	15.65	7.77	11
2014/08/22	ME	WSR45C	11:13:32	M	7.1	102.1	0.40	25.93	27.66	44.16	3.07	4.76	7.75	4
2014/08/22	ME	WSR45C	11:14:47	T	1.2	45.6	0.62	28.38	16.18	71.42	5.08	3.55	7.71	3
2014/08/22	ME	WSR45C	11:15:35	B	12.1	239.1	0.18	24.86	30.72	39.37	2.74	16.39	7.77	12
2014/08/22	ME	WSR45C	11:16:30	M	6.7	8.6	1.22	26.52	25.77	51.44	3.58	3.33	7.76	4
2014/08/22	ME	WSR45C	11:17:07	T	0.8	41.5	1.22	28.58	15.16	71.80	5.11	3.62	7.71	3
2014/08/22	ME	WSR46	11:58:20	B	8.3	117.9	0.26	26.50	25.96	46.24	3.21	6.45	7.70	9
2014/08/22	ME	WSR46	11:59:09	M	4.6	244.1	0.17	28.18	18.49	60.09	4.23	2.75	7.66	13
2014/08/22	ME	WSR46	11:59:52	T	1.1	132.7	0.55	29.38	13.74	75.78	5.37	3.81	7.66	4
2014/08/22	ME	WSR46	12:00:51	B	8.3	118.1	0.99	26.36	26.51	44.51	3.09	7.21	7.70	9
2014/08/22	ME	WSR46	12:01:39	M	5.6	192.5	1.00	27.39	18.06	54.54	3.88	3.39	7.67	14

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/26	MF	DS1	18:43:25	B	2.1	188.8	1.21	28.50	20.36	88.75	6.15	8.38	7.88	12
2014/08/26	MF	DS1	18:44:12	T	1.0	94.2	0.29	28.48	20.18	86.21	5.98	7.49	7.86	10
2014/08/26	MF	DS1	18:44:55	B	2.0	198.3	0.36	28.49	20.30	86.38	5.99	8.96	7.87	13
2014/08/26	MF	DS1	18:45:39	T	1.0	330.5	0.35	28.47	20.19	85.30	5.92	7.59	7.86	9
2014/08/26	MF	DS1	18:46:20	B	2.0	273.6	0.50	28.49	20.37	86.60	6.00	8.30	7.87	13
2014/08/26	MF	DS1	18:47:07	T	0.9	280.5	0.20	28.47	20.37	86.17	5.97	7.84	7.87	10
2014/08/26	MF	DS2	18:52:15	B	4.1	206.7	0.70	28.56	21.45	99.35	6.84	9.48	7.97	11
2014/08/26	MF	DS2	18:52:47	M	3.1	66.8	0.46	28.77	20.65	101.79	7.01	7.70	7.98	13
2014/08/26	MF	DS2	18:53:29	T	0.8	191.1	0.62	28.73	20.44	98.61	6.80	7.33	7.95	12
2014/08/26	MF	DS2	18:54:09	B	4.2	76.7	0.29	28.63	21.28	98.85	6.80	9.17	7.97	11
2014/08/26	MF	DS2	18:54:33	M	2.9	259.8	0.59	28.74	20.49	98.95	6.82	7.87	7.96	14
2014/08/26	MF	DS2	18:55:01	T	1.1	133.6	0.52	28.50	20.45	97.91	6.76	8.13	7.93	11
2014/08/26	MF	DS2	18:55:44	B	4.1	298.4	0.40	28.50	21.24	94.33	6.50	8.75	7.93	12
2014/08/26	MF	DS2	18:56:27	M	2.9	275.3	0.33	28.73	20.48	98.36	6.79	7.07	7.94	14
2014/08/26	MF	DS2	18:57:07	T	0.9	255.6	0.39	28.74	20.45	98.42	6.79	7.06	7.94	12
2014/08/26	MF	DS3	19:01:43	B	5.2	143.2	0.74	27.62	22.75	69.04	4.79	10.30	7.79	16
2014/08/26	MF	DS3	19:03:04	M	3.5	300.5	0.18	28.01	22.01	75.71	5.24	14.36	7.83	12
2014/08/26	MF	DS3	19:03:55	T	0.8	251.2	0.99	28.82	20.61	105.27	7.25	7.86	7.99	11
2014/08/26	MF	DS3	19:04:52	B	5.0	262.2	0.26	27.48	23.07	67.60	4.69	10.86	7.80	16
2014/08/26	MF	DS3	19:05:22	M	3.5	258.5	0.20	28.02	22.03	76.74	5.31	14.40	7.85	12
2014/08/26	MF	DS3	19:06:06	T	0.8	256.9	1.16	28.80	20.60	102.88	7.08	8.15	7.98	11
2014/08/26	MF	DS3	19:06:59	B	4.9	123.6	0.43	27.78	22.47	71.45	4.95	9.32	7.82	16
2014/08/26	MF	DS3	19:07:40	M	3.4	66.1	0.84	27.89	22.22	72.84	5.05	11.62	7.82	13
2014/08/26	MF	DS3	19:08:36	T	0.8	207.7	0.14	28.77	20.56	102.06	7.03	7.83	7.97	11
2014/08/26	MF	DS4	19:14:48	B	2.0	75.5	0.18	28.85	20.89	108.46	7.45	6.23	8.02	9
2014/08/26	MF	DS4	19:15:19	T	1.1	315.0	0.04	28.97	20.76	113.51	7.79	5.59	8.04	8
2014/08/26	MF	DS4	19:15:47	B	2.1	277.1	1.17	28.68	21.15	103.46	7.12	6.52	7.99	9
2014/08/26	MF	DS4	19:16:14	T	1.1	282.7	0.82	28.94	20.76	111.98	7.69	5.53	8.03	8
2014/08/26	MF	DS4	19:16:44	B	2.0	138.1	1.78	28.61	21.26	99.78	6.87	7.24	7.97	9
2014/08/26	MF	DS4	19:17:12	T	1.0	246.0	0.28	28.92	20.80	111.22	7.63	5.80	8.03	8
2014/08/26	MF	DS5	19:21:44	M	1.5	79.0	0.47	28.88	20.90	106.00	7.28	17.81	8.01	14
2014/08/26	MF	DS5	19:22:09	M	1.5	79.0	0.47	28.88	20.90	105.72	7.26	15.96	8.01	15
2014/08/26	MF	DS5	19:22:36	M	1.5	79.0	0.47	28.89	20.89	105.94	7.27	16.37	8.01	13
2014/08/26	MF	US1	19:56:37	B	4.0	246.4	0.80	27.21	23.49	59.37	4.13	12.26	7.75	14
2014/08/26	MF	US1	19:57:26	M	2.8	195.3	0.66	27.44	22.67	60.31	4.20	10.68	7.74	13
2014/08/26	MF	US1	19:58:33	T	0.9	227.0	0.17	28.32	20.09	74.56	5.19	3.97	7.78	6
2014/08/26	MF	US1	19:59:05	B	4.2	349.0	0.43	27.14	23.71	58.59	4.08	14.35	7.75	14
2014/08/26	MF	US1	19:59:53	M	3.2	313.7	0.71	27.25	23.29	58.23	4.05	11.96	7.74	12
2014/08/26	MF	US1	20:00:36	T	0.8	189.5	0.39	28.46	19.87	76.30	5.31	3.36	7.79	7
2014/08/26	MF	US1	20:01:39	B	4.0	270.0	0.74	27.25	23.49	57.80	4.02	12.89	7.74	14
2014/08/26	MF	US1	20:02:14	M	2.9	294.0	1.14	27.68	21.98	63.94	4.41	9.60	7.75	13
2014/08/26	MF	US1	20:02:57	T	1.0	174.9	0.56	28.51	19.69	76.99	5.35	3.07	7.79	6
2014/08/26	MF	US2	20:07:53	B	6.0	263.2	1.02	27.24	23.87	63.74	4.42	10.81	7.77	10
2014/08/26	MF	US2	20:08:39	M	4.0	191.9	0.27	28.03	21.78	75.64	5.24	3.12	7.80	4
2014/08/26	MF	US2	20:09:23	T	0.8	126.0	0.47	28.47	19.96	78.14	5.43	2.75	7.79	8
2014/08/26	MF	US2	20:10:09	B	6.0	262.1	0.17	27.39	23.67	68.92	4.78	8.90	7.79	10
2014/08/26	MF	US2	20:10:52	M	4.2	246.2	0.46	27.98	21.94	74.39	5.16	3.45	7.80	4
2014/08/26	MF	US2	20:11:38	T	1.1	313.9	0.25	28.03	20.21	83.08	5.77	2.72	7.82	8
2014/08/26	MF	US2	20:12:30	B	6.0	261.0	0.69	27.54	23.38	69.98	4.85	7.63	7.79	9
2014/08/26	MF	US2	20:13:20	M	4.2	59.3	0.11	28.26	21.33	82.07	5.68	2.77	7.84	4
2014/08/26	MF	US2	20:13:51	T	1.0	40.6	1.03	28.51	19.79	80.78	5.61	2.71	7.80	8
2014/08/26	MF	MW1	21:03:50	B	18.0	204.6	0.12	25.62	28.61	51.99	3.61	11.77	7.78	14
2014/08/26	MF	MW1	21:05:01	M	9.5	149.6	0.29	25.69	28.43	53.13	3.69	12.83	7.79	15
2014/08/26	MF	MW1	21:06:03	T	1.2	359.7	0.70	26.73	25.64	60.67	4.21	4.58	7.78	6
2014/08/26	MF	MW1	21:07:05	B	18.0	229.7	0.42	25.57	28.73	51.30	3.57	12.48	7.78	13
2014/08/26	MF	MW1	21:07:51	M	10.0	24.6	0.43	25.75	28.29	53.68	3.74	11.77	7.79	15
2014/08/26	MF	MW1	21:08:41	T	1.1	238.2	0.57	26.73	25.63	59.82	4.15	4.64	7.78	6
2014/08/26	MF	MW1	21:09:44	B	18.1	319.6	0.29	25.60	28.68	51.81	3.60	12.23	7.79	13
2014/08/26	MF	MW1	21:10:30	M	10.1	331.6	0.49	25.78	28.22	54.16	3.76	10.30	7.79	15
2014/08/26	MF	MW1	21:11:20	T	1.1	243.1	0.27	26.62	25.97	60.00	4.16	4.34	7.79	6
2014/08/26	MF	THB1	18:22:45	B	1.9	62.2	0.43	28.77	21.17	106.16	7.29	10.28	8.01	15
2014/08/26	MF	THB1	18:23:28	T	0.9	199.9	0.12	28.83	21.09	110.14	7.56	9.10	8.03	14
2014/08/26	MF	THB1	18:24:07	B	2.1	237.7	0.44	28.83	21.09	109.90	7.54	9.05	8.03	16
2014/08/26	MF	THB1	18:24:37	T	1.0	255.2	0.42	28.81	21.12	108.59	7.45	10.15	8.03	14
2014/08/26	MF	THB1	18:25:13	B	2.0	324.7	0.44	28.81	21.11	108.98	7.48	10.26	8.03	15
2014/08/26	MF	THB1	18:26:08	T	1.0	275.3	1.11	28.81	21.11	109.09	7.49	9.86	8.03	13
2014/08/26	MF	THB2	18:25:11	M	0.9	40.0	0.03	29.78	20.14	118.01	8.01	14.41	7.99	9
2014/08/26	MF	THB2	18:26:00	M	0.9	40.0	0.03	29.79	20.12	119.22	8.10	15.91	7.99	8
2014/08/26	MF	THB2	18:27:00	M	0.9	40.0	0.03	29.80	20.10	122.43	8.31	13.91	8.01	8
2014/08/26	MF	WSR45C	20:26:08	B	11.5	7.3	0.57	26.10	27.03	53.86	3.75	15.19	7.77	17
2014/08/26	MF	WSR45C	20:26:56	M	7.0	283.0	0.13	26.23	26.66	54.57	3.79	12.91	7.77	15
2014/08/26	MF	WSR45C	20:27:44	T	1.0	285.6	0.20	27.77	22.39	73.30	5.09	5.02	7.80	8
2014/08/26	MF	WSR45C	20:28:30	B	11.9	130.7	1.34	26.00	27.33	52.74	3.67	15.40	7.77	18
2014/08/26	MF	WSR45C	20:29:11	M	7.0	164.8	0.40	26.26	26.58	54.73	3.80	12.16	7.77	16
2014/08/26	MF	WSR45C	20:29:54	T	0.8	47.8	0.26	28.33	20.64	75.09	5.21	4.87	7.79	8
2014/08/26	MF	WSR45C	20:30:46	B	11.9	125.3	0.60	25.97	27.43	52.13	3.62	17.70	7.77	17
2014/08/26	MF	WSR45C	20:31:29	M	7.1	123.4	0.11	26.19	26.78	53.80	3.74	13.25	7.77	15
2014/08/26	MF	WSR45C	20:32:09	T	0.9	96.8	1.01	28.20	20.84	73.63	5.11	5.03	7.79	8
2014/08/26	MF	WSR46	17:52:29	B	7.9	307.8	0.56	26.95	24.01	60.44	4.21	10.87	7.62	10
2014/08/26	MF	WSR46	17:53:19	M	4.9	131.6	0.71	27.97	20.51	64.30	4.49	5.03	7.69	5
2014/08/26	MF	WSR46	17:54:06	T	0.9	209.2	0.66	28.92	18.61	85.29	5.93	2.49	7.80	5
2014/08/26	MF	WSR46	17:54:55	B	7.7	83.9	0.28	27.05	23.57	59.18	4.13	9.36	7.74	10
2014/08/26	MF	WSR46	17:55:44	M	4.9	65.4	0.77	27.98	20.48	63.97	4.47	4.55	7.72	5
2014/08/26	MF	WSR46	17:56:31	T	1.0	283.2	0.81	28.82	18.79	81.61	5.67	2.61	7.80	5
2014/08/26	MF	WSR46	17:57:21	B	7.8	74.0	0.41	27.07	23.59	59.34	4.14	9.31	7.76	11
2014/08/26	MF													

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/26	ME	DS1	14:04:52	B	3.1	240.7	0.83	28.06	21.65	76.25	5.29	9.85	7.88	12
2014/08/26	ME	DS1	14:05:20	T	1.1	8.7	1.13	28.81	20.62	102.63	7.06	6.97	7.97	10
2014/08/26	ME	DS1	14:08:47	B	2.9	79.3	0.44	28.19	21.46	81.55	5.65	7.91	7.89	11
2014/08/26	ME	DS1	14:09:33	T	1.2	327.1	0.13	28.99	20.44	108.43	7.45	4.92	7.99	10
2014/08/26	ME	DS1	14:10:07	B	2.8	51.1	0.77	28.72	20.73	103.28	7.12	5.38	7.96	13
2014/08/26	ME	DS1	14:10:54	T	1.0	230.7	0.68	28.91	20.51	109.16	7.51	5.37	7.99	10
2014/08/26	ME	DS2	14:15:48	B	10.0	357.6	0.10	25.87	27.29	53.69	3.74	8.13	7.77	11
2014/08/26	ME	DS2	14:16:29	M	5.9	195.6	0.41	27.41	22.76	68.20	4.75	4.70	7.79	7
2014/08/26	ME	DS2	14:17:11	T	0.8	315.1	0.70	29.21	20.13	111.05	7.61	6.15	8.00	8
2014/08/26	ME	DS2	14:17:59	B	10.0	264.5	0.34	25.81	27.53	53.64	3.74	12.72	7.77	11
2014/08/26	ME	DS2	14:18:44	M	5.9	234.4	0.55	27.27	23.11	67.06	4.67	4.49	7.79	7
2014/08/26	ME	DS2	14:19:32	T	1.0	242.3	0.85	29.18	20.16	111.38	7.64	5.62	8.01	8
2014/08/26	ME	DS2	14:20:25	B	10.0	246.3	0.24	25.84	27.44	54.24	3.78	12.05	7.77	11
2014/08/26	ME	DS2	14:21:09	M	6.0	154.7	0.47	27.31	22.99	68.10	4.75	4.15	7.79	7
2014/08/26	ME	DS2	14:21:54	T	1.1	43.4	0.23	29.04	20.24	112.36	7.72	4.71	8.01	9
2014/08/26	ME	DS3	14:27:11	B	7.3	95.0	0.53	27.77	24.71	63.50	4.42	11.82	7.78	11
2014/08/26	ME	DS3	14:27:50	M	4.3	216.6	0.08	27.61	22.37	73.20	5.09	4.05	7.80	4
2014/08/26	ME	DS3	14:28:42	T	0.9	39.1	0.44	28.62	20.31	92.76	6.42	4.98	7.88	8
2014/08/26	ME	DS3	14:29:37	B	7.1	257.3	0.28	26.83	24.48	63.64	4.43	10.98	7.78	10
2014/08/26	ME	DS3	14:30:24	M	4.3	172.3	0.38	27.69	22.15	75.18	5.23	4.36	7.82	4
2014/08/26	ME	DS3	14:31:10	T	1.0	268.3	0.66	28.98	19.76	98.32	6.78	4.63	7.91	8
2014/08/26	ME	DS3	14:31:57	B	7.0	252.6	0.35	27.44	22.86	70.72	4.92	5.52	7.80	12
2014/08/26	ME	DS3	14:32:39	M	4.5	59.6	0.34	28.48	20.59	83.23	6.11	5.92	7.89	5
2014/08/26	ME	DS3	14:33:26	T	0.9	113.3	0.32	28.98	19.92	99.11	6.83	4.55	7.92	8
2014/08/26	ME	DS4	14:37:45	B	8.0	124.4	0.65	27.34	23.25	70.42	4.90	4.48	7.79	7
2014/08/26	ME	DS4	14:38:36	M	4.6	170.7	0.33	28.59	20.64	100.51	6.94	4.77	7.89	8
2014/08/26	ME	DS4	14:39:07	T	1.4	201.5	1.12	29.01	18.97	87.41	6.05	3.67	7.82	4
2014/08/26	ME	DS4	14:39:54	B	7.9	41.3	0.59	27.30	23.34	68.41	4.76	4.69	7.78	7
2014/08/26	ME	DS4	14:40:34	M	4.9	155.3	0.12	28.11	21.32	83.17	5.77	4.64	7.83	8
2014/08/26	ME	DS4	14:41:22	T	0.8	138.3	0.88	29.01	18.82	83.02	5.75	4.13	7.78	4
2014/08/26	ME	DS4	14:42:39	B	8.1	135.1	0.81	26.90	24.12	59.92	4.18	9.95	7.74	7
2014/08/26	ME	DS4	14:43:28	M	4.8	77.5	0.68	27.92	21.78	76.04	5.28	5.34	7.81	8
2014/08/26	ME	DS4	14:44:14	T	1.0	353.4	0.20	28.92	18.97	80.83	5.61	4.85	7.77	4
2014/08/26	ME	DS5	14:48:33	B	10.2	125.4	0.89	26.84	24.44	61.78	4.30	8.96	7.76	9
2014/08/26	ME	DS5	14:49:08	M	5.6	40.3	0.90	27.91	21.78	76.57	5.32	4.76	7.80	7
2014/08/26	ME	DS5	14:49:56	T	1.0	44.6	0.56	28.97	18.49	77.84	5.41	3.46	7.75	6
2014/08/26	ME	DS5	14:51:19	B	9.6	51.5	0.40	26.83	24.41	59.41	4.14	10.95	7.75	10
2014/08/26	ME	DS5	14:52:04	M	6.3	72.4	0.52	27.88	21.74	73.71	5.12	6.39	7.79	7
2014/08/26	ME	DS5	14:52:46	T	0.7	103.7	1.05	29.01	18.39	79.39	5.51	3.08	7.75	6
2014/08/26	ME	DS6	14:53:29	B	10.3	71.6	0.53	26.81	24.42	59.60	4.17	10.50	7.75	9
2014/08/26	ME	DS5	14:54:15	M	6.1	151.9	0.56	28.11	21.21	77.93	5.41	5.64	7.81	7
2014/08/26	ME	DS5	14:54:58	T	0.9	102.2	0.91	28.71	19.02	75.80	5.27	4.04	7.75	6
2014/08/26	ME	US1	13:54:36	B	3.0	3.3	0.16	27.14	23.54	63.58	4.43	10.35	7.78	13
2014/08/26	ME	US1	13:55:08	T	1.0	93.8	0.32	28.83	20.58	102.10	7.03	9.17	7.97	14
2014/08/26	ME	US1	13:56:30	B	2.9	22.5	0.69	28.04	21.65	84.96	5.89	16.06	7.88	13
2014/08/26	ME	US1	13:57:16	T	0.8	331.1	0.67	28.96	20.55	107.09	7.36	6.36	7.99	14
2014/08/26	ME	US1	13:57:58	B	3.0	174.2	0.62	27.22	23.41	65.20	4.54	12.71	7.79	12
2014/08/26	ME	US1	13:58:42	T	0.8	349.8	0.88	28.77	20.70	104.15	7.17	7.34	7.98	14
2014/08/26	ME	US2	13:46:31	B	3.3	97.9	0.76	27.29	23.26	65.68	4.57	9.00	7.80	12
2014/08/26	ME	US2	13:47:38	T	1.1	171.4	0.15	28.27	21.20	87.58	6.06	10.90	7.90	11
2014/08/26	ME	US2	13:48:17	B	2.9	260.9	1.02	27.59	22.57	69.74	4.85	10.49	7.80	11
2014/08/26	ME	US2	13:48:41	T	0.9	114.0	0.42	28.81	20.34	98.22	6.77	11.56	7.95	11
2014/08/26	ME	US2	13:49:07	B	3.1	110.9	0.35	27.86	21.94	78.95	5.48	10.89	7.82	12
2014/08/26	ME	US2	13:49:31	T	0.9	338.2	0.26	28.98	20.15	100.72	6.93	10.87	7.97	12
2014/08/26	ME	MW1	12:02:34	B	19.4	44.1	0.91	25.30	29.14	52.63	3.67	5.56	7.75	7
2014/08/26	ME	MW1	12:03:24	M	10.4	318.7	0.26	25.62	28.44	58.92	4.10	3.16	7.79	6
2014/08/26	ME	MW1	12:04:15	T	0.9	75.5	0.89	27.18	24.38	75.12	5.21	2.37	7.83	4
2014/08/26	ME	MW1	12:05:47	B	19.1	185.8	0.47	25.33	29.06	52.99	3.69	5.71	7.79	7
2014/08/26	ME	MW1	12:06:43	M	10.5	66.6	0.44	25.67	28.25	58.54	4.07	3.13	7.81	6
2014/08/26	ME	MW1	12:07:29	T	0.8	76.4	0.92	27.73	22.95	79.70	5.52	2.24	7.85	4
2014/08/26	ME	MW1	12:08:42	B	19.2	52.6	0.71	25.57	28.54	57.39	3.99	3.87	7.82	7
2014/08/26	ME	MW1	12:09:31	M	10.5	140.9	0.34	25.60	28.43	56.96	3.96	3.21	7.81	6
2014/08/26	ME	MW1	12:10:25	T	0.6	68.8	0.68	26.01	22.48	82.15	5.67	2.05	7.86	4
2014/08/26	ME	THB1	13:25:19	B	3.0	218.3	0.55	28.30	21.14	88.50	6.13	7.20	7.90	12
2014/08/26	ME	THB1	13:26:08	T	0.9	352.5	1.19	28.58	20.55	104.48	7.22	5.27	7.99	8
2014/08/26	ME	THB1	13:27:01	B	3.0	34.5	0.43	28.01	21.72	71.79	4.98	11.42	7.81	13
2014/08/26	ME	THB1	13:27:50	T	1.0	174.4	1.22	28.70	20.44	105.38	7.27	5.28	7.98	8
2014/08/26	ME	THB1	13:28:32	B	2.9	98.4	0.29	28.11	21.53	79.38	5.50	7.55	7.85	12
2014/08/26	ME	THB1	13:29:00	T	0.9	250.8	0.68	28.69	20.40	104.25	7.20	4.99	7.99	8
2014/08/26	ME	THB2	13:30:18	M	1.3	40.0	0.03	28.79	20.38	81.03	5.59	9.62	7.85	5
2014/08/26	ME	THB2	13:31:01	M	1.3	40.0	0.03	28.86	20.29	82.88	5.71	8.72	7.88	5
2014/08/26	ME	THB2	13:32:01	M	1.3	40.0	0.03	28.88	20.26	82.80	5.70	8.72	7.89	5
2014/08/26	ME	WSR45C	12:51:11	B	12.6	87.3	0.41	26.87	24.23	62.55	4.36	11.26	7.79	10
2014/08/26	ME	WSR45C	12:51:44	M	7.0	92.5	1.12	27.27	22.95	66.67	4.65	5.04	7.80	6
2014/08/26	ME	WSR45C	12:52:26	T	1.1	147.6	0.58	28.71	19.37	84.83	5.89	2.83	7.84	3
2014/08/26	ME	WSR45C	12:53:29	B	12.3	42.3	0.51	27.00	23.79	63.27	4.41	7.60	7.79	10
2014/08/26	ME	WSR45C	12:54:18	M	6.9	56.7	0.45	27.29	22.96	67.48	4.70	5.40	7.80	6
2014/08/26	ME	WSR45C	12:55:03	T	1.1	3.9	0.10	28.46	19.98	82.79	5.75	3.00	7.84	3
2014/08/26	ME	WSR45C	12:55:49	B	12.2	23.3	0.33	27.05	23.74	64.67	4.51	5.95	7.80	10
2014/08/26	ME	WSR45C	12:56:34	M	7.1	56.3	0.77	27.23	23.14	65.98	4.60	5.80	7.80	6
2014/08/26	ME	WSR45C	12:57:17	T	1.0	41.2	1.09	28.89	19.24	84.81	5.88	2.48	7.84	3
2014/08/26	ME	WSR46	15:12:30	B	7.8	102.5	1.53	26.88	23.92	50.53	3.53	24.30	7.69	28
2014/08/26	ME	WSR46	15:13:23	M	4.7	77.0	0.81	27.65	21.07	58.43	4.09	5.58	7.69	7
2014/08/26	ME	WSR46	15:14:08	T	1.1	102.3	0.91	29.26	17.63	78.73	5.47	2.33	7.74	3
2014/08/26	ME	WSR46	15:15:00	B	8.0	38.5	0.77	26.90	23.92	50.44	3.52	23.21	7.69	25
2014/08/26	ME	WSR46	15:15:33	M	5.4	72.1	0.30	2						

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/28	MF	DS1	08:33:24	B	3.1	300.2	0.98	27.43	23.14	68.99	4.79	7.60	7.70	9
2014/08/28	MF	DS1	08:34:08	T	1.0	276.5	1.13	27.55	22.67	74.03	5.15	5.78	7.71	7
2014/08/28	MF	DS1	08:34:42	B	2.9	211.1	0.49	27.43	23.16	68.79	4.78	8.19	7.70	9
2014/08/28	MF	DS1	08:35:32	T	0.9	233.2	0.97	27.55	22.70	73.84	5.13	5.66	7.71	7
2014/08/28	MF	DS1	08:36:17	B	3.1	223.8	0.24	27.46	23.03	69.89	4.86	7.87	7.71	9
2014/08/28	MF	DS1	08:37:00	T	0.9	140.8	0.45	27.54	22.72	73.41	5.10	5.78	7.71	7
2014/08/28	MF	DS2	08:42:59	B	3.0	54.2	0.91	27.50	22.81	71.84	5.00	7.24	7.71	8
2014/08/28	MF	DS2	08:43:42	T	0.9	313.3	0.75	27.53	22.73	74.09	5.15	6.50	7.71	7
2014/08/28	MF	DS2	08:44:24	B	3.0	17.3	0.34	27.51	22.83	72.77	5.06	8.96	7.71	8
2014/08/28	MF	DS2	08:45:09	T	1.0	190.3	0.80	27.50	22.81	73.38	5.10	6.86	7.71	7
2014/08/28	MF	DS2	08:45:41	B	3.1	12.0	0.29	27.52	22.78	73.98	5.14	6.71	7.71	7
2014/08/28	MF	DS2	08:46:25	T	0.9	9.3	0.40	27.52	22.77	74.44	5.18	6.49	7.71	7
2014/08/28	MF	DS3	08:56:43	B	4.8	218.3	0.79	27.59	22.60	75.13	5.22	7.74	7.72	6
2014/08/28	MF	DS3	08:57:28	M	3.7	286.2	0.22	27.58	22.58	76.10	5.29	6.27	7.72	9
2014/08/28	MF	DS3	08:58:04	T	0.9	293.3	0.29	27.62	22.50	77.42	5.38	5.38	7.73	8
2014/08/28	MF	DS3	08:58:57	B	5.0	152.4	0.17	27.56	22.72	72.50	5.04	7.79	7.71	6
2014/08/28	MF	DS3	08:59:41	M	3.6	111.6	0.53	27.63	22.47	77.91	5.42	5.35	7.73	9
2014/08/28	MF	DS3	09:00:25	T	1.2	260.2	0.23	27.64	22.47	78.22	5.44	5.24	7.73	8
2014/08/28	MF	DS3	09:02:24	B	4.9	107.3	0.64	27.56	22.97	66.36	4.61	10.36	7.70	6
2014/08/28	MF	DS3	09:03:05	M	3.4	229.8	1.82	27.55	22.66	74.34	5.17	6.47	7.71	9
2014/08/28	MF	DS3	09:03:48	T	1.0	38.4	0.18	27.66	22.45	78.26	5.44	5.03	7.72	7
2014/08/28	MF	DS4	09:08:40	B	6.0	103.0	0.33	27.66	22.87	68.30	4.73	7.47	7.72	11
2014/08/28	MF	DS4	09:09:06	M	4.0	100.2	0.39	27.81	22.23	76.49	5.31	7.77	7.73	8
2014/08/28	MF	DS4	09:09:40	T	1.0	272.9	0.54	27.89	22.14	80.83	5.60	6.68	7.76	9
2014/08/28	MF	DS4	09:10:44	B	6.1	237.6	0.58	27.80	23.12	65.00	4.50	8.74	7.70	11
2014/08/28	MF	DS4	09:11:23	M	4.1	187.4	0.36	27.86	22.21	77.38	5.37	7.11	7.75	8
2014/08/28	MF	DS4	09:12:03	T	1.1	286.0	1.27	27.83	22.14	81.32	5.63	6.57	7.76	8
2014/08/28	MF	DS4	09:12:52	B	5.9	261.8	0.81	27.62	23.06	66.42	4.60	8.99	7.71	12
2014/08/28	MF	DS4	09:13:40	M	4.0	327.8	0.39	27.85	22.24	77.60	5.38	6.83	7.75	8
2014/08/28	MF	DS4	09:14:16	T	0.8	340.0	0.43	27.93	22.14	81.35	5.64	6.44	7.77	8
2014/08/28	MF	DS5	09:19:06	B	5.4	22.6	0.19	27.89	22.23	74.34	5.15	10.37	7.76	9
2014/08/28	MF	DS5	09:20:08	M	3.5	46.4	0.68	27.97	22.03	80.49	5.58	8.14	7.76	13
2014/08/28	MF	DS5	09:20:48	T	0.9	118.3	0.26	28.00	22.02	81.26	5.63	7.92	7.77	11
2014/08/28	MF	DS5	09:21:36	B	5.0	266.3	0.22	27.70	22.82	72.41	5.02	13.70	7.74	8
2014/08/28	MF	DS5	09:22:17	M	3.4	138.8	0.33	27.98	22.03	79.75	5.52	8.19	7.76	13
2014/08/28	MF	DS5	09:22:49	T	0.7	172.3	0.14	28.04	22.02	80.48	5.57	7.82	7.76	11
2014/08/28	MF	DS5	09:23:24	B	5.0	181.6	0.43	27.78	22.56	73.86	5.12	11.85	7.74	9
2014/08/28	MF	DS5	09:24:06	M	3.6	108.7	0.35	27.97	22.03	79.61	5.52	8.60	7.76	13
2014/08/28	MF	DS5	09:24:42	T	1.0	245.5	0.24	28.03	22.02	80.86	5.60	8.04	7.76	12
2014/08/28	MF	US1	09:41:06	B	4.9	200.2	0.50	27.87	25.12	65.72	3.93	19.74	7.69	21
2014/08/28	MF	US1	09:41:31	M	3.7	200.8	0.58	26.85	25.24	65.97	3.88	21.89	7.69	22
2014/08/28	MF	US1	09:41:58	T	0.9	253.1	0.56	27.19	24.11	64.07	4.45	7.61	7.70	18
2014/08/28	MF	US1	09:42:39	B	5.1	116.7	0.22	26.83	25.33	65.59	3.85	27.73	7.69	21
2014/08/28	MF	US1	09:43:07	M	3.4	6.2	0.04	26.90	25.08	66.11	3.89	17.45	7.69	23
2014/08/28	MF	US1	09:43:41	T	0.9	313.8	0.83	27.22	24.08	64.85	4.50	6.98	7.70	18
2014/08/28	MF	US1	09:44:14	B	4.9	146.0	0.36	26.80	25.40	66.16	3.89	22.24	7.69	20
2014/08/28	MF	US1	09:44:45	M	3.8	246.6	0.15	27.15	24.32	62.54	4.34	7.91	7.70	22
2014/08/28	MF	US1	09:45:24	T	1.0	310.2	0.25	27.20	24.16	65.07	4.51	6.83	7.69	18
2014/08/28	MF	US2	09:50:16	B	10.0	198.8	0.20	26.49	26.34	58.59	4.06	5.38	7.71	6
2014/08/28	MF	US2	09:50:45	M	6.1	215.3	0.03	26.94	24.98	62.86	4.36	5.30	7.70	6
2014/08/28	MF	US2	09:51:18	T	0.9	121.7	0.30	27.09	24.62	65.05	4.51	5.79	7.70	6
2014/08/28	MF	US2	09:53:33	B	10.0	251.3	0.38	26.64	25.94	60.70	4.21	6.13	7.71	6
2014/08/28	MF	US2	09:54:05	M	5.9	337.0	0.28	26.86	25.22	62.06	4.30	5.17	7.71	6
2014/08/28	MF	US2	09:54:34	T	0.8	354.0	1.33	27.29	24.17	67.03	4.64	6.65	7.70	6
2014/08/28	MF	US2	09:55:13	B	10.1	187.1	0.36	26.60	26.11	59.95	4.15	6.46	7.71	6
2014/08/28	MF	US2	09:55:44	M	6.0	325.9	0.38	26.87	25.22	61.76	4.28	5.63	7.71	6
2014/08/28	MF	US2	09:56:15	T	0.8	69.9	0.63	27.33	24.13	68.10	4.71	6.37	7.70	6
2014/08/28	MF	MW1	07:17:34	B	18.8	297.5	0.33	25.75	28.83	48.82	3.38	11.86	7.70	17
2014/08/28	MF	MW1	07:18:19	M	10.6	121.9	0.16	26.42	26.73	56.84	3.94	6.21	7.71	8
2014/08/28	MF	MW1	07:19:04	T	1.1	359.0	0.18	27.29	23.68	68.24	4.74	4.22	7.71	4
2014/08/28	MF	MW1	07:20:19	B	18.8	138.8	0.20	25.82	28.58	50.44	3.49	12.11	7.72	16
2014/08/28	MF	MW1	07:21:04	M	10.6	220.0	0.67	26.39	26.81	56.55	3.92	6.37	7.73	8
2014/08/28	MF	MW1	07:21:54	T	1.1	336.8	0.19	27.32	23.57	68.26	4.74	4.28	7.72	5
2014/08/28	MF	MW1	07:22:59	B	18.8	162.9	0.38	25.97	28.13	52.32	3.62	9.62	7.73	17
2014/08/28	MF	MW1	07:23:44	M	10.5	123.6	0.27	26.36	26.92	56.33	3.90	6.12	7.73	9
2014/08/28	MF	MW1	07:24:29	T	1.0	139.8	0.13	27.38	23.27	67.49	4.69	4.42	7.72	4
2014/08/28	MF	THB1	08:21:41	B	3.1	319.2	0.62	27.53	22.95	68.52	4.76	6.16	7.70	12
2014/08/28	MF	THB1	08:22:18	T	1.1	248.2	0.22	27.51	22.99	68.82	4.78	6.35	7.70	7
2014/08/28	MF	THB1	08:22:55	B	3.0	16.7	0.51	27.54	22.92	68.82	4.78	5.89	7.70	11
2014/08/28	MF	THB1	08:23:39	T	1.0	327.1	0.71	27.62	22.72	71.77	4.98	5.14	7.71	7
2014/08/28	MF	THB1	08:24:15	B	3.0	100.5	0.45	27.45	23.15	67.60	4.70	7.14	7.70	12
2014/08/28	MF	THB1	08:24:42	T	1.1	224.6	1.04	27.63	22.70	71.98	5.00	5.00	7.71	7
2014/08/28	MF	THB2	08:32:49	M	1.5	40.0	0.04	28.16	21.97	63.19	4.36	10.82	7.66	4
2014/08/28	MF	THB2	08:33:21	M	1.5	40.0	0.05	28.16	21.96	63.68	4.40	10.92	7.67	4
2014/08/28	MF	THB2	08:33:52	M	1.5	40.0	0.04	28.16	21.95	63.98	4.42	10.72	7.68	4
2014/08/28	MF	WSR45C	07:52:39	B	12.2	254.6	0.59	26.79	25.47	60.37	4.19	9.50	7.72	11
2014/08/28	MF	WSR45C	07:53:13	M	6.6	282.9	1.30	27.23	23.81	65.94	4.58	6.84	7.72	8
2014/08/28	MF	WSR45C	07:53:50	T	1.1	217.4	0.92	27.37	23.09	72.61	5.05	5.13	7.72	5
2014/08/28	MF	WSR45C	07:54:44	B	12.0	84.4	0.32	26.79	25.49	60.04	4.16	9.54	7.72	11
2014/08/28	MF	WSR45C	07:55:14	M	7.2	272.2	0.93	27.22	23.84	65.33	4.54	6.73	7.72	8
2014/08/28	MF	WSR45C	07:55:50	T	1.2	233.2	0.44	27.37	23.10	72.67	5.06	5.07	7.72	6
2014/08/28	MF	WSR45C	07:56:39	B	12.3	173.7	0.73	26.71	25.78	58.44	4.05	11.53	7.72	11
2014/08/28	MF	WSR45C	07:57:12	M	7.0	275.6	0.36	27.20	23.91	65.02	4.52	7.05	7.72	8
2014/08/28	MF	WSR45C	07:57:46	T	1.0	70.4	0.38	27.35	23.14	71.61	4.98	5.13	7.72	5
2014/08/28	MF	WSR46	10:09:04	B	10.2	220.3	0.48	26.88	25.07	58.72	4.07	22.17	7.69	20
2014/08/28	MF	WSR46	10:09:32	M	5.7	323.2	0.90	26.9						

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/28	ME	DS1	14:08:24	B	4.2	69.0	0.87	27.46	23.81	73.83	5.11	18.43	7.76	15
2014/08/28	ME	DS1	14:09:03	M	3.0	122.8	0.49	27.85	23.14	80.20	5.53	6.10	7.78	14
2014/08/28	ME	DS1	14:09:46	T	0.9	232.9	0.21	28.21	22.55	88.25	6.07	5.48	7.81	7
2014/08/28	ME	DS1	14:10:21	B	4.2	326.4	0.26	27.23	24.21	69.47	4.81	9.12	7.74	15
2014/08/28	ME	DS1	14:11:06	M	2.9	54.4	0.40	27.83	23.07	79.84	5.51	12.94	7.77	14
2014/08/28	ME	DS1	14:11:37	T	0.9	126.3	0.30	28.08	23.74	85.00	5.85	6.40	7.79	7
2014/08/28	ME	DS1	14:12:27	B	4.2	190.2	0.61	27.31	23.98	69.71	4.83	10.82	7.74	15
2014/08/28	ME	DS1	14:12:54	M	3.1	60.9	0.55	27.87	23.00	82.26	5.68	7.67	7.76	14
2014/08/28	ME	DS1	14:13:19	T	1.0	21.6	0.29	28.14	22.64	86.74	5.97	5.22	7.80	7
2014/08/28	ME	DS2	14:17:18	B	6.0	37.7	0.27	27.11	24.78	67.43	4.67	11.51	7.74	14
2014/08/28	ME	DS2	14:17:49	M	4.0	19.5	1.00	27.32	24.12	70.69	4.89	8.00	7.74	9
2014/08/28	ME	DS2	14:18:14	T	1.1	18.0	0.17	28.04	22.94	83.13	5.72	5.36	7.76	9
2014/08/28	ME	DS2	14:19:05	B	5.8	155.3	0.27	27.25	24.37	69.58	4.82	8.97	7.74	14
2014/08/28	ME	DS2	14:19:34	M	4.1	244.3	0.21	27.28	24.26	69.95	4.84	8.87	7.73	9
2014/08/28	ME	DS2	14:20:06	T	0.9	307.1	0.14	27.95	23.08	81.55	5.62	5.80	7.76	9
2014/08/28	ME	DS2	14:20:53	B	6.1	58.9	0.56	27.28	24.34	70.37	4.87	8.85	7.73	13
2014/08/28	ME	DS2	14:21:35	M	4.0	138.4	0.40	27.31	24.10	70.32	4.87	7.91	7.73	9
2014/08/28	ME	DS2	14:22:12	T	1.0	9.6	0.59	28.07	22.93	84.62	5.82	5.27	7.77	9
2014/08/28	ME	DS3	14:26:02	B	7.9	339.0	0.14	26.61	26.03	58.30	4.04	15.70	7.72	19
2014/08/28	ME	DS3	14:26:49	M	4.9	24.4	0.64	27.31	24.32	69.84	4.83	7.97	7.73	11
2014/08/28	ME	DS3	14:27:28	T	0.9	285.0	1.50	27.81	23.57	77.07	5.31	7.00	7.74	9
2014/08/28	ME	DS3	14:28:10	B	8.3	70.4	0.37	26.62	26.02	58.24	4.04	16.70	7.72	17
2014/08/28	ME	DS3	14:28:43	M	4.8	107.4	0.32	27.45	24.06	71.43	4.94	7.11	7.74	10
2014/08/28	ME	DS3	14:29:14	T	0.9	308.3	0.78	27.93	23.42	78.17	5.38	7.44	7.74	9
2014/08/28	ME	DS3	14:30:01	B	8.0	28.7	0.51	26.59	26.09	57.29	3.97	17.55	7.72	19
2014/08/28	ME	DS3	14:30:39	M	5.2	69.9	0.72	27.47	24.01	73.04	5.05	6.51	7.74	11
2014/08/28	ME	DS3	14:31:10	T	0.9	335.0	0.62	27.92	23.40	78.42	5.40	7.25	7.75	9
2014/08/28	ME	DS4	14:35:15	B	8.8	75.5	0.86	26.58	26.08	57.33	3.98	22.36	7.71	21
2014/08/28	ME	DS4	14:35:45	M	5.5	43.7	0.10	27.53	24.09	71.57	4.94	9.74	7.73	14
2014/08/28	ME	DS4	14:36:15	T	0.9	294.7	0.11	27.74	23.96	76.25	5.25	6.46	7.75	11
2014/08/28	ME	DS4	14:36:57	B	9.0	52.1	0.48	26.59	26.06	58.66	4.07	22.99	7.72	20
2014/08/28	ME	DS4	14:37:53	M	5.4	84.5	0.64	27.59	24.03	74.30	5.12	8.12	7.74	14
2014/08/28	ME	DS4	14:38:34	T	0.8	288.5	0.72	27.75	23.95	76.81	5.28	6.27	7.75	11
2014/08/28	ME	DS4	14:39:23	B	8.8	337.0	0.11	26.59	26.05	57.36	3.98	24.44	7.72	21
2014/08/28	ME	DS4	14:40:09	M	5.6	136.4	0.65	27.57	24.02	73.94	5.10	9.16	7.74	13
2014/08/28	ME	DS4	14:40:38	T	1.0	311.4	0.36	27.73	23.95	76.15	5.24	6.72	7.75	10
2014/08/28	ME	DS5	14:48:29	B	11.0	37.7	0.14	26.58	26.12	56.96	3.95	21.96	7.71	17
2014/08/28	ME	DS5	14:49:07	M	6.5	307.1	0.78	26.81	25.35	59.02	4.09	23.78	7.71	31
2014/08/28	ME	DS5	14:49:49	T	1.0	24.4	0.10	27.60	23.97	72.76	5.02	14.34	7.73	20
2014/08/28	ME	DS5	14:50:24	B	11.0	123.3	0.77	26.56	26.18	56.12	3.89	22.36	7.71	17
2014/08/28	ME	DS5	14:51:14	M	6.4	111.0	0.12	26.96	24.80	60.07	4.17	24.01	7.71	29
2014/08/28	ME	DS5	14:51:54	T	0.9	9.9	0.49	27.60	23.97	72.83	5.02	14.14	7.73	20
2014/08/28	ME	DS5	14:55:20	B	11.0	63.7	1.30	26.61	25.99	56.58	3.92	18.80	7.71	18
2014/08/28	ME	DS5	14:56:25	M	6.1	60.9	0.90	27.12	24.38	62.03	4.30	27.52	7.71	32
2014/08/28	ME	DS5	14:57:06	T	0.8	9.6	1.21	27.46	23.88	68.85	4.76	21.11	7.72	19
2014/08/28	ME	US1	13:51:49	B	4.0	143.4	1.23	27.39	23.54	68.74	4.77	9.41	7.74	12
2014/08/28	ME	US1	13:52:23	M	2.9	313.5	0.57	27.66	23.02	74.34	5.15	8.53	7.75	12
2014/08/28	ME	US1	13:52:54	T	1.0	108.3	1.07	28.33	22.25	90.93	6.25	6.01	7.83	8
2014/08/28	ME	US1	13:53:40	B	4.3	90.0	1.30	27.41	23.52	68.78	4.77	8.80	7.74	11
2014/08/28	ME	US1	13:54:04	M	3.1	74.2	0.72	27.68	23.09	74.79	5.18	7.94	7.75	12
2014/08/28	ME	US1	13:54:30	T	0.9	245.9	0.52	28.34	22.25	90.23	6.20	5.89	7.82	8
2014/08/28	ME	US1	13:55:09	B	4.0	162.2	0.47	27.42	23.45	68.48	4.75	9.12	7.72	12
2014/08/28	ME	US1	13:55:42	M	3.0	320.7	0.47	28.20	22.37	87.46	6.02	5.94	7.81	11
2014/08/28	ME	US1	13:56:25	T	1.1	262.1	0.77	28.34	22.28	91.72	6.31	7.25	7.83	8
2014/08/28	ME	US2	13:41:47	B	5.8	99.1	0.32	27.15	24.55	65.66	4.55	23.43	7.75	22
2014/08/28	ME	US2	13:42:40	M	3.8	279.0	0.29	27.96	22.79	81.70	5.64	15.75	7.80	20
2014/08/28	ME	US2	13:43:26	T	0.9	228.1	0.09	28.38	22.10	93.20	6.41	7.41	7.84	9
2014/08/28	ME	US2	13:44:09	B	6.1	25.4	0.16	26.86	25.24	59.94	4.16	20.00	7.73	23
2014/08/28	ME	US2	13:44:52	M	3.9	305.9	0.36	27.77	23.05	77.64	5.37	16.51	7.78	19
2014/08/28	ME	US2	13:45:25	T	1.0	72.0	0.77	28.27	22.10	89.57	6.17	7.97	7.83	9
2014/08/28	ME	US2	13:46:07	B	5.8	228.8	0.34	26.85	25.27	58.80	4.08	20.92	7.72	22
2014/08/28	ME	US2	13:46:48	M	4.1	284.7	0.16	27.11	24.57	66.13	4.58	19.16	7.73	20
2014/08/28	ME	US2	13:47:17	T	1.1	223.4	0.17	28.15	22.21	88.16	6.08	8.23	7.81	9
2014/08/28	ME	MW1	15:57:01	B	18.3	152.4	0.14	27.06	25.54	69.09	4.77	7.06	7.73	8
2014/08/28	ME	MW1	15:57:44	M	9.7	119.3	0.36	27.14	25.38	69.40	4.79	5.89	7.72	9
2014/08/28	ME	MW1	15:58:26	T	0.9	118.3	0.53	27.38	24.90	72.81	5.01	4.55	7.72	7
2014/08/28	ME	MW1	15:59:33	B	18.1	37.2	0.50	27.02	25.59	67.95	4.69	6.43	7.71	8
2014/08/28	ME	MW1	16:00:15	M	9.7	22.4	0.90	27.05	25.47	68.14	4.70	5.17	7.71	8
2014/08/28	ME	MW1	16:00:57	T	1.3	32.0	0.91	27.58	24.06	75.28	5.19	4.19	7.71	8
2014/08/28	ME	MW1	16:01:54	B	18.0	0.2	0.76	27.04	25.54	67.75	4.68	7.45	7.71	8
2014/08/28	ME	MW1	16:02:32	M	10.0	44.5	0.55	27.12	25.23	68.26	4.71	4.61	7.70	10
2014/08/28	ME	MW1	16:03:14	T	1.0	71.3	1.21	27.68	23.85	77.41	5.33	4.11	7.71	7
2014/08/28	ME	THB1	13:26:27	B	3.0	12.2	0.46	27.72	22.79	69.12	4.79	10.43	7.75	12
2014/08/28	ME	THB1	13:27:15	T	0.9	318.9	0.91	28.20	22.34	83.76	5.77	5.47	7.81	9
2014/08/28	ME	THB1	13:28:00	B	3.0	37.9	0.57	27.77	22.76	73.41	5.08	8.23	7.75	12
2014/08/28	ME	THB1	13:28:32	T	0.9	103.5	0.31	28.22	22.33	83.61	5.76	5.51	7.80	8
2014/08/28	ME	THB1	13:29:03	B	3.1	67.7	0.99	27.77	22.77	74.71	5.17	8.04	7.76	11
2014/08/28	ME	THB1	13:30:01	T	0.9	88.1	0.73	28.24	22.31	85.10	5.86	5.52	7.81	7
2014/08/28	ME	THB2	13:35:19	M	1.4	40.0	0.05	27.84	22.97	74.03	5.11	7.82	7.70	5
2014/08/28	ME	THB2	13:35:49	M	1.4	40.0	0.04	27.80	23.01	73.23	5.06	8.12	7.70	5
2014/08/28	ME	THB2	13:36:15	M	1.4	40.0	0.04	27.78	23.04	72.93	5.04	8.52	7.71	5
2014/08/28	ME	WSR45C	15:24:55	B	12.0	151.9	0.51	26.73	25.61	58.88	4.08	16.55	7.70	20
2014/08/28	ME	WSR45C	15:25:31	M	7.1	71.5	1.39	26.82	25.38	59.69	4.14	13.18	7.70	16
2014/08/28	ME	WSR45C	15:26:03	T	0.7	301.3	0.16	27.62	24.07	72.38	4.99	10.99	7.72	16
2014/08/28	ME	WSR45C	15:26:51	B	12.2	29.9	0.53	26.74	25.61	58.79	4.08	15.93	7.70	21
2014/08/28	ME	WSR45C	15:27:23	M	6.8	107.7	0.08	26.89	25.23	60				

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/30	MF	DS1	09:16:05	B	3.0	205.4	0.74	27.25	22.15	71.83	5.03	10.19	7.67	15
2014/08/30	MF	DS1	09:16:48	T	1.1	345.9	0.19	27.43	21.55	73.11	5.13	8.36	7.67	8
2014/08/30	MF	DS1	09:17:35	B	2.8	262.7	0.41	27.27	22.07	71.68	5.02	11.64	7.66	15
2014/08/30	MF	DS1	09:18:22	T	1.0	64.0	0.39	27.48	21.46	73.51	5.15	7.24	7.66	8
2014/08/30	MF	DS1	09:19:08	B	2.9	168.9	0.61	27.26	22.16	71.36	5.00	10.77	7.66	15
2014/08/30	MF	DS1	09:19:56	T	1.1	222.4	0.69	27.46	21.49	73.33	5.14	7.12	7.66	7
2014/08/30	MF	DS2	09:26:16	B	3.1	255.9	0.12	27.32	22.28	75.42	5.28	8.85	7.67	9
2014/08/30	MF	DS2	09:26:55	T	1.0	139.3	0.56	27.43	21.77	75.47	5.28	7.49	7.67	10
2014/08/30	MF	DS2	09:27:26	B	3.1	43.9	0.67	27.32	22.25	74.53	5.21	9.11	7.68	9
2014/08/30	MF	DS2	09:28:14	T	1.1	266.9	0.43	27.37	21.91	74.29	5.20	10.08	7.67	11
2014/08/30	MF	DS2	09:29:05	B	2.9	147.6	0.33	27.30	22.35	74.04	5.18	9.18	7.68	9
2014/08/30	MF	DS2	09:29:45	T	1.0	274.7	0.59	27.41	21.68	74.24	5.20	9.44	7.67	11
2014/08/30	MF	DS3	09:34:56	B	3.0	241.8	0.37	27.38	23.29	73.55	5.11	13.64	7.68	14
2014/08/30	MF	DS3	09:35:36	T	1.0	290.7	1.26	27.36	22.54	75.48	5.27	8.46	7.71	10
2014/08/30	MF	DS3	09:36:04	B	3.0	299.3	0.44	27.40	23.31	73.85	5.13	14.78	7.69	14
2014/08/30	MF	DS3	09:36:49	T	1.1	284.4	0.48	27.24	22.77	75.46	5.27	7.60	7.69	11
2014/08/30	MF	DS3	09:37:37	B	3.0	308.8	0.11	27.35	23.27	72.91	5.07	10.73	7.68	15
2014/08/30	MF	DS3	09:38:17	T	1.1	165.0	0.54	27.26	22.60	75.13	5.25	9.04	7.68	10
2014/08/30	MF	DS4	09:42:39	B	6.0	61.4	0.42	26.84	24.33	67.15	4.68	15.31	7.68	14
2014/08/30	MF	DS4	09:43:41	M	4.2	250.7	0.70	27.37	23.26	75.67	5.26	11.07	7.70	9
2014/08/30	MF	DS4	09:44:25	T	0.9	71.5	0.91	27.35	22.39	77.06	5.38	6.18	7.69	5
2014/08/30	MF	DS4	09:45:03	B	6.0	97.1	0.46	26.95	24.07	69.57	4.85	14.55	7.69	15
2014/08/30	MF	DS4	09:45:44	M	4.0	62.1	0.26	27.40	23.21	78.42	5.31	9.06	7.70	9
2014/08/30	MF	DS4	09:46:16	T	0.8	300.9	0.36	27.52	21.83	76.97	5.38	6.26	7.69	5
2014/08/30	MF	DS4	09:47:01	B	5.9	150.8	0.77	27.05	23.81	70.85	4.94	12.74	7.69	14
2014/08/30	MF	DS4	09:47:40	M	4.0	46.9	0.35	27.41	23.25	75.90	5.27	9.24	7.70	9
2014/08/30	MF	DS4	09:48:17	T	0.9	303.5	0.58	27.45	22.23	76.97	5.37	5.99	7.69	5
2014/08/30	MF	DS5	09:52:50	B	5.2	353.4	0.11	27.33	23.24	77.87	5.42	6.89	7.70	5
2014/08/30	MF	DS5	09:53:32	M	3.6	282.7	0.18	27.51	22.67	80.77	5.62	5.01	7.71	6
2014/08/30	MF	DS5	09:54:11	T	1.0	207.4	0.38	27.67	21.96	79.79	5.56	5.12	7.70	5
2014/08/30	MF	DS5	09:54:51	B	5.0	114.6	0.13	27.35	23.10	77.40	5.39	7.30	7.70	5
2014/08/30	MF	DS5	09:55:26	M	3.5	48.9	0.77	27.38	23.11	80.63	5.61	4.97	7.72	6
2014/08/30	MF	DS5	09:55:59	T	1.1	246.1	0.58	27.46	22.31	78.83	5.50	4.87	7.70	5
2014/08/30	MF	DS5	09:56:46	B	4.9	92.0	0.12	27.34	23.20	78.12	5.43	5.83	7.71	5
2014/08/30	MF	DS5	09:57:27	M	3.6	233.1	0.38	27.46	22.94	80.66	5.61	4.78	7.71	6
2014/08/30	MF	DS5	09:58:10	T	1.0	244.4	0.76	27.64	22.06	79.81	5.56	4.82	7.70	4
2014/08/30	MF	US1	10:11:48	B	3.0	255.9	0.31	26.84	23.45	67.57	4.73	10.52	7.68	14
2014/08/30	MF	US1	10:12:32	T	1.1	62.1	0.46	27.04	22.92	69.32	4.85	7.72	7.68	11
2014/08/30	MF	US1	10:13:01	B	2.9	321.4	0.51	26.96	23.16	67.87	4.75	9.12	7.67	15
2014/08/30	MF	US1	10:13:24	T	1.0	289.3	0.23	27.33	23.36	70.73	4.96	6.48	7.67	11
2014/08/30	MF	US1	10:14:30	B	3.0	102.0	0.78	27.04	22.85	69.26	4.85	7.43	7.67	14
2014/08/30	MF	US1	10:15:07	T	1.0	316.7	0.32	27.30	22.03	71.63	5.02	7.67	7.67	11
2014/08/30	MF	US2	10:19:33	B	10.0	356.7	0.04	26.25	25.68	60.90	4.26	23.48	7.68	20
2014/08/30	MF	US2	10:20:07	M	5.9	218.1	0.35	26.28	25.56	61.18	4.28	15.25	7.68	19
2014/08/30	MF	US2	10:20:44	T	0.9	65.6	0.39	27.31	22.08	73.56	5.15	3.99	7.68	5
2014/08/30	MF	US2	10:21:38	B	10.0	185.6	0.62	26.25	25.69	60.64	4.24	17.68	7.68	20
2014/08/30	MF	US2	10:22:18	M	6.0	244.7	0.45	26.30	25.49	61.50	4.30	11.16	7.68	20
2014/08/30	MF	US2	10:23:03	T	0.9	251.9	0.15	27.36	21.97	74.64	5.23	4.06	7.68	5
2014/08/30	MF	US2	10:23:54	B	10.0	201.6	0.26	26.21	25.81	60.09	4.20	20.60	7.68	19
2014/08/30	MF	US2	10:24:43	M	5.9	256.4	0.51	26.24	25.71	60.25	4.21	15.49	7.68	18
2014/08/30	MF	US2	10:25:27	T	0.9	327.5	0.70	27.34	22.01	74.06	5.19	3.73	7.68	5
2014/08/30	MF	MW1	08:00:43	B	18.3	182.5	0.30	25.88	28.15	56.41	3.91	14.52	7.71	15
2014/08/30	MF	MW1	08:01:30	M	10.1	5.7	0.77	26.68	25.28	63.13	4.39	4.75	7.70	9
2014/08/30	MF	MW1	08:02:29	T	1.1	189.8	0.60	27.26	22.94	70.37	4.91	4.68	7.68	5
2014/08/30	MF	MW1	08:03:37	B	18.0	168.8	0.41	25.92	27.96	57.26	3.97	7.19	7.73	15
2014/08/30	MF	MW1	08:04:38	M	9.9	112.3	0.55	26.29	26.66	60.61	4.21	5.22	7.72	8
2014/08/30	MF	MW1	08:05:30	T	1.0	136.6	0.34	27.29	22.80	71.34	4.98	4.25	7.69	5
2014/08/30	MF	MW1	08:06:42	B	18.1	190.1	0.94	25.86	28.18	56.56	3.92	13.01	7.74	16
2014/08/30	MF	MW1	08:07:32	M	10.1	337.0	0.25	26.23	26.83	59.86	4.16	7.34	7.73	8
2014/08/30	MF	MW1	08:08:21	T	1.0	254.8	0.29	27.19	23.27	70.72	4.93	4.56	7.69	5
2014/08/30	MF	THB1	09:03:18	B	3.0	172.9	0.39	27.34	21.89	73.83	5.17	9.11	7.68	8
2014/08/30	MF	THB1	09:04:02	T	1.0	312.8	0.46	27.45	21.45	74.17	5.20	7.76	7.67	12
2014/08/30	MF	THB1	09:05:10	B	3.0	277.6	0.44	27.30	22.12	70.70	4.95	9.23	7.66	8
2014/08/30	MF	THB1	09:06:03	T	1.0	75.2	0.35	27.47	21.39	73.97	5.19	6.96	7.67	12
2014/08/30	MF	THB1	09:06:44	B	3.0	194.5	0.89	27.34	21.89	71.63	5.02	8.83	7.67	7
2014/08/30	MF	THB1	09:07:30	T	1.0	154.9	0.20	27.46	21.41	73.71	5.17	6.42	7.67	12
2014/08/30	MF	THB2	09:23:42	M	1.3	40.0	0.05	28.89	22.19	58.83	4.01	7.13	7.59	3
2014/08/30	MF	THB2	09:24:56	M	1.3	40.0	0.05	28.89	22.15	59.87	4.08	7.23	7.61	3
2014/08/30	MF	THB2	09:26:31	M	1.3	40.0	0.05	28.91	22.14	58.72	4.00	7.23	7.61	3
2014/08/30	MF	WSR45C	08:36:51	B	12.1	212.9	0.47	26.56	25.16	63.27	4.41	20.73	7.70	17
2014/08/30	MF	WSR45C	08:37:46	M	7.1	224.5	0.78	26.90	23.98	65.91	4.60	6.49	7.69	7
2014/08/30	MF	WSR45C	08:38:27	T	1.1	143.8	0.38	27.67	20.74	74.45	5.22	4.71	7.67	5
2014/08/30	MF	WSR45C	08:39:26	B	12.3	207.9	0.47	26.40	25.75	61.08	4.26	17.00	7.70	17
2014/08/30	MF	WSR45C	08:40:14	M	7.1	240.6	1.30	26.97	23.55	67.80	4.74	5.48	7.69	7
2014/08/30	MF	WSR45C	08:40:59	T	1.1	153.2	0.51	27.56	21.21	73.66	5.16	4.82	7.68	5
2014/08/30	MF	WSR45C	08:41:57	B	12.1	119.6	0.54	26.29	26.15	60.13	4.19	20.03	7.71	17
2014/08/30	MF	WSR45C	08:42:46	M	7.0	244.3	0.38	26.95	23.64	66.91	4.67	5.67	7.69	8
2014/08/30	MF	WSR45C	08:43:40	T	0.9	260.7	0.85	27.45	21.63	72.83	5.10	4.74	7.68	5
2014/08/30	MF	WSR46	10:37:34	B	8.7	314.8	0.98	26.18	25.86	61.89	4.33	23.16	7.69	19
2014/08/30	MF	WSR46	10:38:19	M	5.6	265.5	0.59	26.79	23.74	67.81	4.75	8.15	7.68	11
2014/08/30	MF	WSR46	10:39:04	T	1.0	267.0	0.63	27.22	22.88	72.83	5.09	6.14	7.68	7
2014/08/30	MF	WSR46	10:39:57	B	9.1	312.6	0.76	26.18	25.88	61.68	4.31	22.43	7.69	18
2014/08/30	MF	WSR46	10:40:38	M	5.6	292.7	1.13	26.81	23.78	68.61	4.80	8.07	7.68	11
2014/08/30	MF	WSR46	10:41:18	T	1.0	2.5	0.56	27.60	21.37	74.30	5.20	5.90	7.66	7
2014/08/30	MF	WSR46	10:42:09	B	8.9	261.0	1.10	26.19	25.85	61.84	4.32	21.09	7.69	19
2014/08/30	MF	WSR46	10:42:49	M										

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2014/08/30	ME	DS1	14:39:54	B	3.1	25.4	0.38	27.34	23.31	76.74	5.34	11.66	7.71	10
2014/08/30	ME	DS1	14:40:41	T	1.0	150.6	1.60	28.26	22.09	85.54	5.90	5.51	7.73	6
2014/08/30	ME	DS1	14:41:19	B	3.0	256.2	0.36	26.99	23.83	69.97	4.88	10.13	7.69	10
2014/08/30	ME	DS1	14:42:03	T	0.9	97.3	0.43	28.24	22.15	85.51	5.89	5.68	7.73	6
2014/08/30	ME	DS1	14:42:46	B	2.9	193.0	0.32	26.55	24.55	64.40	4.51	7.19	7.68	10
2014/08/30	ME	DS1	14:43:19	T	0.8	76.5	0.18	27.88	22.58	80.43	5.56	7.87	7.71	6
2014/08/30	ME	DS2	14:49:28	B	9.9	127.6	0.08	25.77	27.26	56.57	3.95	10.85	7.70	7
2014/08/30	ME	DS2	14:50:13	M	6.0	124.8	0.46	26.08	26.24	60.71	4.24	5.81	7.70	12
2014/08/30	ME	DS2	14:50:59	T	1.0	339.9	0.65	27.69	22.85	80.79	5.60	7.16	7.73	7
2014/08/30	ME	DS2	14:51:40	B	9.6	31.8	0.33	25.80	27.17	56.62	3.95	11.01	7.70	7
2014/08/30	ME	DS2	14:53:06	M	6.0	39.5	0.33	26.10	26.20	60.17	4.20	6.57	7.70	13
2014/08/30	ME	DS2	14:53:41	T	1.0	100.6	0.65	27.93	22.57	80.54	5.57	6.85	7.72	8
2014/08/30	ME	DS2	14:54:52	B	9.9	134.4	0.76	25.78	27.26	55.55	3.88	10.51	7.70	7
2014/08/30	ME	DS2	14:55:56	M	5.9	37.3	0.59	26.16	26.00	59.88	4.18	8.16	7.69	12
2014/08/30	ME	DS2	14:56:43	T	0.8	148.7	0.35	28.18	22.30	82.85	5.71	7.44	7.73	7
2014/08/30	ME	DS3	15:02:03	B	7.1	153.6	0.40	26.09	26.20	59.82	4.18	8.97	7.69	11
2014/08/30	ME	DS3	15:02:39	M	4.5	93.3	0.83	27.00	23.97	66.80	4.65	9.28	7.69	9
2014/08/30	ME	DS3	15:03:36	T	1.1	274.7	0.59	28.02	22.53	82.38	5.69	6.16	7.73	7
2014/08/30	ME	DS3	15:04:19	B	7.1	177.8	0.82	26.09	26.22	59.90	4.18	9.54	7.70	12
2014/08/30	ME	DS3	15:05:02	M	4.5	231.2	0.19	26.87	24.04	65.00	4.54	10.04	7.68	9
2014/08/30	ME	DS3	15:05:50	T	1.0	87.3	1.17	28.01	22.55	81.84	5.65	6.18	7.73	7
2014/08/30	ME	DS3	15:06:50	B	7.1	71.4	1.11	26.09	26.23	59.24	4.14	9.35	7.70	10
2014/08/30	ME	DS3	15:07:33	M	4.4	98.8	0.27	26.91	24.23	64.70	4.52	10.24	7.68	9
2014/08/30	ME	DS3	15:08:21	T	0.9	118.9	0.99	28.02	22.57	81.69	5.64	6.31	7.73	7
2014/08/30	ME	DS4	15:13:39	B	8.9	111.8	0.42	26.11	26.26	60.04	4.19	8.34	7.70	10
2014/08/30	ME	DS4	15:14:10	M	5.5	346.8	0.18	26.29	25.54	60.05	4.20	8.87	7.69	12
2014/08/30	ME	DS4	15:14:54	T	1.1	273.9	0.59	28.13	22.50	82.92	5.71	5.70	7.74	7
2014/08/30	ME	DS4	15:15:45	B	9.1	314.0	0.91	26.10	26.30	59.98	4.19	8.60	7.70	10
2014/08/30	ME	DS4	15:16:27	M	5.6	123.0	0.81	25.10	24.89	61.47	4.30	8.51	7.68	11
2014/08/30	ME	DS4	15:17:07	T	1.0	34.4	0.65	28.16	22.47	83.03	5.72	5.64	7.74	7
2014/08/30	ME	DS4	15:17:56	B	9.0	90.0	0.50	26.09	26.37	59.38	4.15	8.96	7.70	10
2014/08/30	ME	DS4	15:18:40	M	5.4	78.2	0.56	26.58	24.74	61.94	4.33	8.89	7.68	12
2014/08/30	ME	DS4	15:19:20	T	1.0	214.7	1.05	28.15	22.47	82.15	5.66	5.49	7.73	7
2014/08/30	ME	DS5	15:27:05	B	10.3	102.1	0.09	26.09	26.27	60.19	4.20	8.51	7.70	9
2014/08/30	ME	DS5	15:27:53	M	5.8	175.2	0.14	26.44	25.01	61.39	4.29	7.97	7.68	8
2014/08/30	ME	DS5	15:28:40	T	0.9	123.0	0.13	28.00	22.56	81.73	5.64	5.89	7.73	7
2014/08/30	ME	DS5	15:29:22	B	10.0	241.1	0.28	26.45	25.11	61.90	4.33	8.11	7.69	8
2014/08/30	ME	DS5	15:30:04	M	6.1	127.0	0.42	26.44	25.11	61.90	4.33	8.11	7.69	8
2014/08/30	ME	DS5	15:30:54	T	1.0	95.2	0.51	27.92	21.79	79.05	5.49	6.08	7.71	7
2014/08/30	ME	DS5	15:31:46	B	10.2	98.1	0.39	26.95	26.40	59.70	4.10	9.49	7.70	10
2014/08/30	ME	DS5	15:32:33	M	6.0	117.8	0.16	27.00	23.62	67.90	4.74	7.11	7.69	8
2014/08/30	ME	DS5	15:33:14	T	1.0	259.3	0.06	27.94	22.01	79.17	5.49	6.11	7.71	6
2014/08/30	ME	US1	14:30:17	B	3.1	38.1	0.33	26.33	25.06	60.18	4.21	9.57	7.66	11
2014/08/30	ME	US1	14:30:59	T	0.8	179.1	0.49	27.71	22.96	79.35	5.49	10.25	7.71	14
2014/08/30	ME	US1	14:31:42	B	3.0	200.4	0.40	26.92	23.95	67.79	4.73	14.74	7.67	11
2014/08/30	ME	US1	14:32:26	T	0.8	123.9	1.22	27.71	22.71	82.78	5.72	9.17	7.72	14
2014/08/30	ME	US1	14:33:06	B	3.0	97.4	1.02	26.98	23.90	66.80	4.66	13.85	7.68	11
2014/08/30	ME	US1	14:33:48	T	1.0	15.1	0.22	27.98	22.64	82.55	5.70	8.57	7.72	15
2014/08/30	ME	US2	14:21:24	B	2.9	259.8	1.24	27.28	23.44	75.41	5.24	11.67	7.69	13
2014/08/30	ME	US2	14:22:03	T	0.9	235.2	1.28	28.38	22.04	89.50	6.16	6.31	7.75	9
2014/08/30	ME	US2	14:22:30	B	2.9	84.9	0.42	27.42	23.23	78.91	5.48	10.52	7.72	12
2014/08/30	ME	US2	14:23:11	T	1.1	22.3	0.52	28.34	22.06	89.43	6.16	6.39	7.75	9
2014/08/30	ME	US2	14:23:58	B	2.9	359.1	0.67	27.32	23.36	76.36	5.31	11.20	7.70	13
2014/08/30	ME	US2	14:24:42	T	1.1	220.9	0.62	28.22	22.26	88.89	6.12	6.65	7.75	8
2014/08/30	ME	MW1	16:13:51	B	18.2	207.5	0.33	26.46	26.42	67.39	4.67	3.61	7.76	4
2014/08/30	ME	MW1	16:14:47	M	9.9	274.9	0.44	26.66	25.95	70.00	4.95	3.34	7.76	7
2014/08/30	ME	MW1	16:15:35	T	1.3	85.8	0.63	27.82	23.43	81.38	5.82	3.11	7.77	4
2014/08/30	ME	MW1	16:16:40	B	18.0	246.4	0.81	26.52	26.33	67.94	4.71	3.64	7.76	4
2014/08/30	ME	MW1	16:17:23	M	9.9	358.3	1.26	26.63	26.03	69.26	4.80	3.56	7.76	7
2014/08/30	ME	MW1	16:18:18	T	1.1	79.7	0.59	27.56	23.74	80.04	5.53	3.43	7.77	4
2014/08/30	ME	MW1	16:19:31	B	18.0	321.7	0.70	26.61	26.10	68.51	4.75	3.41	7.76	4
2014/08/30	ME	MW1	16:20:21	M	9.7	285.3	0.48	26.64	26.01	69.26	4.80	3.46	7.76	6
2014/08/30	ME	MW1	16:21:18	T	1.0	17.3	0.61	27.39	23.97	78.16	5.41	3.41	7.76	5
2014/08/30	ME	THB1	14:09:57	B	3.0	130.3	1.56	27.22	23.24	73.25	5.11	11.94	7.66	10
2014/08/30	ME	THB1	14:10:42	T	1.0	102.8	0.85	27.41	22.57	76.73	5.35	8.46	7.67	10
2014/08/30	ME	THB1	14:11:32	B	2.9	8.7	0.28	27.30	23.09	74.87	5.22	13.37	7.66	10
2014/08/30	ME	THB1	14:12:07	T	1.1	0.8	0.42	27.50	22.36	76.81	5.35	7.00	7.67	10
2014/08/30	ME	THB1	14:12:49	B	3.0	112.9	0.35	27.27	22.59	74.50	5.21	8.17	7.66	10
2014/08/30	ME	THB1	14:13:34	T	1.1	334.8	1.05	27.50	22.33	77.07	5.37	6.90	7.67	10
2014/08/30	ME	THB2	14:25:41	M	1.2	40.0	0.05	29.83	21.59	88.14	5.93	8.22	7.74	7
2014/08/30	ME	THB2	14:26:44	M	1.2	40.0	0.05	29.75	21.63	89.09	6.00	8.12	7.76	6
2014/08/30	ME	THB2	14:27:57	M	1.2	40.0	0.05	29.55	21.74	89.53	6.05	8.02	7.77	7
2014/08/30	ME	WSR45C	15:39:13	B	11.7	299.6	0.10	25.99	26.64	59.28	4.14	12.24	7.71	13
2014/08/30	ME	WSR45C	15:40:03	M	7.1	22.9	0.21	26.55	24.96	63.41	4.43	7.06	7.70	11
2014/08/30	ME	WSR45C	15:41:11	T	0.9	66.8	0.28	27.83	22.82	79.59	5.50	6.10	7.74	7
2014/08/30	ME	WSR45C	15:42:09	B	12.1	25.2	0.35	25.56	28.11	52.36	3.65	17.44	7.72	13
2014/08/30	ME	WSR45C	15:43:06	M	7.0	10.2	0.86	26.56	25.03	64.00	4.47	6.56	7.71	11
2014/08/30	ME	WSR45C	15:44:06	T	0.8	266.3	0.34	27.88	22.81	80.68	5.57	5.92	7.75	7
2014/08/30	ME	WSR45C	15:45:10	B	11.9	316.8	0.73	25.99	26.66	56.89	3.97	14.72	7.70	13
2014/08/30	ME	WSR45C	15:45:58	M	6.9	34.8	0.44	26.60	24.88	63.88	4.46	6.12	7.71	11
2014/08/30	ME	WSR45C	15:46:43	T	0.8	132.7	0.21	27.89	22.77	80.37	5.55	5.64	7.74	7
2014/08/30	ME	WSR46	13:45:44	B	9.2	145.2	0.09	26.07	26.10	56.25	4.07	12.74	7.56	14
2014/08/30	ME	WSR46	13:46:25	M	5.3	188.4	0.19	26.40	24.93	60.61	4.24	8.46	7.57	10
2014/08/30	ME	WSR46	13:47:04	T	1.1	104.6	0.70	28.51	19.43	83.21	5.79	3.55	7.61	4
2014/08/30	ME	WSR46	13:48:04	B	9.1	129.4	0.84	26.08	26.05	58.45	4.09	11.09	7.62	13
2014/08/30	ME	WSR46	13:49:17	M	5.5	117.7	0.43	26.3						

Annex F

Study Programme

