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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

**Monthly EM&A Report**

**January 2017**

**Client :** China International Water & Electric Corporation  
**Project:** Providing Sufficient Water Depth for Kwai Tsing Container  
Basin and its Approach Channel  
**Contract No.:** CV/2013/04  
**Report No.:** 0394/13/ED/0353B

Project Proponent:

Civil Engineering & Development Department  
101 Princess Margaret Road,  
Homantin,  
Kowloon, Hong Kong.

Prepared by: Wingo So

Reviewed by: Cyrus Lai

Certified by:



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Colin Yung  
Environmental Team Leader for  
MaterialLab Consultants Limited

Ref.: CEDDWKTBEM00\_0\_0303L.17

13 February 2017  
By Post and Fax (2419 6218)

Mott MacDonald Hong Kong Ltd.  
20/F, AIA Kowloon Tower,  
Landmark East,  
100 How Ming Street,  
Kwun Tong, Kowloon

Attention: Ir Chau T C, Felix, Engineer's Representative

Dear Ir Chau,

**Re: Agreement No. CE 63/2008 (CE)  
Dredging Works in Kwai Tsing Container Basin and its Approach Channel  
– Investigation, Design and Construction)**

**Contract No. CV/2013/04  
Dredging Works in Kwai Tsing Container Basin and its Approach Channel  
Verification of Monthly EM&A Report for January 2017**

Reference is made to the Environmental Team's submission of the Monthly Environmental Monitoring & Audit Report for January 2017 (ET's Report No. 0394/13/ED/0353B) received by e-mail on 9 February 2017.

We write to verify the captioned report in accordance with Condition 5.4 of EP-426/2011/A.

Thank you very much for your kind attention and please do not hesitate to contact our Mr Andy Wong or the undersigned should you have any queries.

Yours faithfully,  
For and on behalf of  
Ramboll Environ Hong Kong Limited



Y H Hui  
Independent Environmental Checker

Cc:	MMHK	Mr. C M Howley	2827 1823 (by fax)
	MateriaLab	Mr. Colin Yung	2450 6138 (by fax)
	CIWE	Mr. K.O. Leung and Mr. Lam Wai-hung	2419 6028 (by fax)

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**EXECUTIVE SUMMARY**

- i. This is the Thirty Third Monthly Environmental Monitoring Audit (EM&A) Monthly Report – January 2017 for Contract No. CV/2013/04 – Dredging Works in Kwai Tsing and its Approach Channel (Agreement No. CE63/2008 – Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel). The dredging works commenced on 23 April 2014. This report presents the environmental monitoring and audit works conducted from 23 December 2016 to 22 January 2017.
- ii. Construction Activities for the Reporting Period  
During this reporting period, the principal work activities included:
  - Preparation Works of Dredging at Portion A / Zone 2B1 and 2B2 in EP
- iii. Water Quality Monitoring  
Routine impact water quality monitoring at 21 designated monitoring stations namely C1, C2, C3, G1, G2, G3, G4, G5, G6, SR2, SR3, SR4, SR5, SR6, SR7, SR8, SR9, SR10, SR11, SR12, SR13 were conducted during the reporting period. Exceedances of TIN (in-situ & lab) and SS were recorded at various monitoring stations, detail of exceedance are summarized in **Table I and II**. However, investigation indicated these exceedances were not related to the Project works.

**Table I Summary of Water Quality Exceedances – Routine Impact Monitoring (In-situ)**

Station	Exceedance Level	DO (S&M)		DO (B)		Turbidity		NH3-N		UIA		TIN		Total	
		E	F	E	F	E	F	E	F	E	F	E	F	E	F
SR2	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR3	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR4	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR5	Action	0	0	0	0	0	0	-	-	-	-	1	1	1	1
	Limit	0	0	0	0	0	0	-	-	-	-	0	0	0	0
SR6	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR7	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR8	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR9	Action	0	0	0	0	0	0	-	-	-	-	5	5	5	5
	Limit	0	0	0	0	0	0	-	-	-	-	4	4	4	4
SR10	Action	0	0	0	0	0	0	-	-	-	-	4	5	4	5
	Limit	0	0	0	0	0	0	-	-	-	-	1	0	1	0
SR11	Action	0	0	0	0	0	0	-	-	-	-	2	4	2	4
	Limit	0	0	0	0	0	0	-	-	-	-	2	0	2	0
SR12	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR13	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
Total	Action	0	0	0	0	0	0	0	0	0	0	12	15	27	
	Limit	0	0	0	0	0	0	0	0	0	0	7	4	11	

**Table II Summary of Water Quality Exceedances – Routine Impact Monitoring (Laboratory Analysis)**

Station	Exceedance Level	Suspended Solids		BOD <sub>5</sub>		E. coli		NH <sub>3</sub> -N		UIA		Synthetic Detergent		TIN		Total	
		E	F	E	F	E	F	E	F	E	F	E	F	E	F	E	F
SR2	Action	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
SR3	Action	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
SR4	Action	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	3	3	0	0	0	0	0	0	0	0	0	0	-	-	3	3
SR5	Action	0	1	-	-	-	-	-	-	-	-	-	-	1	1	1	2
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	0	0	0	0
SR6	Action	3	2	-	-	-	-	-	-	-	-	-	-	-	-	3	2
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR7	Action	2	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR8	Action	1	0	-	-	-	-	-	-	-	-	-	-	-	-	1	0
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR9	Action	2	2	-	-	-	-	-	-	-	-	-	-	5	5	7	7
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	4	4	4	4
SR10	Action	1	1	-	-	-	-	-	-	-	-	-	-	4	5	5	6
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	1	0	1	0
SR11	Action	1	1	-	-	-	-	-	-	-	-	-	-	2	4	3	5
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	2	0	2	0
SR12	Action	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	1	2	0	0	0	0	0	0	0	0	0	0	-	-	1	2
SR13	Action	0	0	-	-	-	-	-	-	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	-	-	0	0	-	-	-	-	0	0
Total	Action	10	8	0	0	0	0	0	0	0	0	0	0	12	15	45	
	Limit	4	5	0	0	0	0	0	0	0	0	0	0	7	4	20	

Among the 21 monitoring stations, supplementary 24-hr water quality monitoring was also conducted at 7 of the stations, which are SR4, SR5, SR9, SR10, SR11, SR12 and SR13. No exceedance was recorded in the reporting month. Number of exceedances recorded in the reporting month at each impact station is summarized in **Table III**.

**Table III Summary of the Exceedances Recorded in Reporting Month – 24-hr Monitoring**

Station	Exceedance Level	Turbidity	DO	NH <sub>3</sub> -N	Total
SR4	Action	0	0	0	0
	Limit	0	0	0	0
SR5	Action	0	0	-	0
	Limit	0	0	-	0
SR9	Action	0	0	-	0
	Limit	0	0	-	0
SR10	Action	0	0	-	0
	Limit	0	0	-	0
SR11	Action	0	0	-	0
	Limit	0	0	-	0
SR12	Action	0	0	0	0
	Limit	0	0	0	0
SR13	Action	0	0	-	0
	Limit	0	0	-	0
Total	Action	0	0	0	0
	Limit	0	0	0	0

**iv. Waste Management**

No inert or non-inert C&D material related to dredging works was disposed and a small amount of general refuse were disposed off site in the reporting month.

**v. Non-Compliance, Complaints, Notifications of Summons and Successful Prosecutions**

No complaint, notification of prosecutions or summons was received in the reporting period.

**vi. Site Inspections and Audit**

The Environmental Team conducted 4 site inspections in the reporting period. No particular observation was recorded in the reporting month.

**vii. Compliance with Specific EP conditions**

Implementation of contractor's mitigation for waste management and preparation works and other general site practice were checked. It was concluded that the project in compliance with the EP requirements on site mitigation measures in general.

**viii. Construction Activities for the Coming Reporting Period**

During the coming reporting period, the principal work activities included:

- Preparation Works of Dredging at Portion A / Zone 2B1 and 2B2 in EP
- Dredging at Portion A / Zone 2B1, 2B2 and Zone 2C1 in EP

According to information provided by the Contractor, dredging works and marine works will only be carried out at area outside Berth KC5 and Tsing Yi Submarine Outfall at Subzones Z1A, Z2B1, Z2B2 and Z2C1 in future. Refer to Section 2.1.4 and Section 2.1.10 of the EM&A Manual, routine water quality monitoring stations at SR6, SR7, SR8, SR9, SR10 and SR11 and 24 hour monitoring stations at SR9, SR10 and SR11 were proposed to be removed as according to the *Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)* (0394\_13\_ED\_03321) which no objection was received from EPD and relevant parties. The removal of the water quality monitoring at the mentioned stations will be effective from 23 January 2017. The proposal is shown in **Appendix M**.

Future Key Issues include:

- Regular inspection on silt curtain deployment
- Regular inspection on silt screen deployment
- Implementation of EM&A Programme
- Maintain dredging below allowable dredging rate in EP.
- Cleaning of excess material from the decks and exposed fittings of barges and dredgers before the vessel is moved.
- Barge loading shall be monitored to ensure material is not lost during transportation.
- Conditions in dumping permit shall be followed strictly.

## 1. INTRODUCTION

### 1.1 Background

- 1.1.1 The Project objective is to dredge approximately 4.0 million cubic metres of sediment from the seabed of Kwai Tsing Container Basin, as well as portions of Northern Fairway and Western Fairway, to provide sufficient depth of container basin and approach channel to Kwai Tsing Container Terminal (KTCT) for the safe navigation of Ultra Large Container Ships (ULCS).
- 1.1.2 The environmental monitoring and audit works of this Project is governed by Environmental Permit (EP) No. EP-426/2011/A, EM&A Manual (AEIAR-156/2010) and EM&A TIN (EPD Letter Ref: (34) in Ax(1) to EP2/N3/C/57Pt.7)).
- 1.1.3 The project proponent was the Civil Engineering & Development Department, HKSAR (CEDD). The Project General Layout is shown in **Figure 1**.
- 1.1.4 Mott MacDonald Hong Kong Ltd. (MMHK) was commissioned by CEDD as the Engineer for the Project. Ramboll Environ Hong Kong Limited (REHK) was employed as the Independent Environmental Checker (IEC) in the Project.
- 1.1.5 China International Water & Electric Corporation Limited (CIWE) was appointed as the main contractor for the dredging works.
- 1.1.6 MaterialLab Consultants Limited (MCL) was appointed as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for the Project.
- 1.1.7 The construction phase of the Project under the EP was commenced on 23 April 2014. The impact EM&A programme of the Project commenced on 23 April 2014.

### 1.2 Purpose of the Report

- 1.2.1 This Thirty Third Monthly EM&A Report is prepared by MCL. This report presents a summary of the environmental monitoring and audit works, list of activities and mitigation measures proposed by the ET for the Project in 23 December 2016 to 22 January 2017.

### 1.3 Structure of the Report

- 1.3.1 The structure of this report is as follows:

- Section 1: Introduction, including background, purpose and structure of the report
- Section 2: Basic Project Information – summaries background and scope of the Contract, site description, project organization and contract details, construction programme, the construction works undertaken and the status of Environmental Permits/Licenses during the reporting period.
- Section 3: Routine Impact Water Quality Monitoring – summaries the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency,



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monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.

Section 4: 24-hr Water Quality Monitoring – summaries the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.

Section 5: Environmental Site Inspection – summaries the audit findings of the weekly site inspections undertaken within the reporting period.

Section 6: Exceedance of the environmental parameters – summaries any monitoring exceedance within the reporting period.

Section 7: Non-Compliance, Complaints, notifications of summons and Prosecution – summaries any environmental complaints, environmental summons and successful prosecutions within the reporting period.

Section 8: Conclusions and Recommendation

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## 2. BASIC PROJECT INFORMATION

### 2.1 Project Organizations

2.1.1 The Project Organization structure is shown in **Appendix A**. The key personnel contact names and numbers are summarized in **Table 2.1**.

**Table 2.1 Key Personnel Contact of the Contract**

Party	Position	Name	Telephone	Fax
Engineer's Representative (MMHK)	Senior Resident Engineer	Ir. Felix Chau	2419 6008	2419 6218
Independent Environmental Checker (REHK)	Independent Environmental Checker	Mr. YH Hui	3465 2888	3465 2899
Contractor (CIW&E)	Site Agent	Mr. KO Leung	2419 6008	2419 6218
	Environmental Officer	Mr. WH Lam	2419 6008	2419 6218
Environmental Team (MCL)	Environmental Team Leader	Mr. Colin Yung	3565 4114	3565 4160

### 2.2 Construction Programme

2.2.1 The construction phase of the Project under the EP commenced on 23 April 2014.

2.2.2 The construction programme of the Project is shown in **Appendix B**.

2.2.3 The environmental mitigation measures implementation schedule is presented in **Appendix J**.

### 2.3 Works undertaken during the month

During this reporting period, the principal work activities included:

- Preparation Works of Dredging at Portion A / Zone 2B1 and 2B2 in EP

Note: Hotspot area was completed excepted hard materials and buffer zone was almost completed except known highspot and hard materials

### 2.4 Status of Environmental Licences, Notification and Permits

2.4.1 A summary of the relevant permits, licences and/or notifications on environmental protection for this Contract is presented in **Table 2.2**.

**Table 2.2 Status of Environmental Licenses, Notification and Permits**

Permit / Direction / License	Ref No	Valid From	Valid Till
Notification pursuant to Air Pollution (Control Dust) Regulation	Not Required		
Billing Account for Waste Disposal (Land Vehicle/ Dump Truck)	7018156	5/9/2013	Upon Completion
Billing Account for Waste Disposal (Vessels to Tuen Mun 38 Fill Bank)	7018156	13/12/2016	13/2/2017
Construction Noise Permit Portion A (Area A3) (PME listed in condition 3a shall only be operated. General Holidays including Sunday 07:00 – 23:00. Any day other than a general holiday including Sunday 19:00 – 23:00)	GW-RW0460-16	1/9/2016	18/1/2017
	GW-RW0013-17	19/1/2017	18/7/2017
Marine Dumping Permit Portion A Type 1 Open Sea Disposal (Dedicated Site) Type 2 Confined Marine Disposal <i>East of Sha Chau Contaminated Mud Pit (CMP Vd) as directed by management team of CEDD</i>	EP/MD/17-135	1/12/2016	31/12/2016
	EP/MD/17-150	1/1/2017	31/1/2017
	EP/MD/17-167	1/2/2017	28/2/2017
Marine Dumping Permit Portion A Type 1 Open Sea Disposal <i>East of Sha Chau Contaminated Mud Pit (CMP Va) or South of the Brothers Contaminated Mud Pits (CMP 2) as directed by management team of CEDD</i>	EP/MD/17-136	1/12/2016	29/12/2016
Marine Dumping Permit Portion A Type 1 Open Sea Disposal <i>An area of South Cheung Chau Open Sea Sediment Disposal Area denoted "KTCB" as shown in the chartlet (Drawing no. MFC/002-KTCB-A-R1)</i>	EP/MD/17-151	30/12/2016	29/6/2017
Waste Producer License	5213-320-C3907-01	27/10/2014	Upon Completion

Note: Only preparation works for dredging was carried out in the reporting month and no marine sediment was disposed in the reporting month.

The Construction Noise Permit No. GW-RW0460-16 was replaced by Permit No. GW-RW0013-17 on 19 January 2017. Therefore the cancellation date of Permit No. GW-RW0460-16 was 19 January 2017.

## 2.5 Summary of EM&A Programme Requirements

2.5.1 The EM&A programme requires environmental monitoring for water quality and environmental site inspections for air quality, noise, water quality, waste management, landscape and visual impact. The EM&A requirements for each parameter described in the following sections include:

- All monitoring parameters;
- Monitoring schedules for the reporting month and forthcoming month;
- Action and Limit levels for all environmental parameters;
- Event / Action Plan;
- Environmental mitigation measures, as recommended in the Project EIA reports; and
- Environmental requirement in contract documents.

## 2.6 Construction Activities for the Coming Reporting Period

During the coming reporting period, the principal work activities included:

- Preparation Works of Dredging at Portion A / Zone 2B1 and 2B2 in EP
- Dredging at Portion A / Zone 2B1, 2B2 and Zone 2C1 in EP

According to information provided by the Contractor, dredging works and marine works will only be carried out at area outside Berth KC5 and Tsing Yi Submarine Outfall at Subzones Z1A, Z2B1, Z2B2 and Z2C1 in future. Refer to Section 2.1.4 and Section 2.1.10 of the EM&A Manual, routine water quality monitoring stations at SR6, SR7, SR8, SR9, SR10 and SR11 and 24 hour monitoring stations at SR9, SR10 and SR11 were proposed to be removed as according to the *Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)* (0394\_13\_ED\_03321) which no objection was received from EPD and relevant parties. The removal of the water quality monitoring at the mentioned stations will be effective from 23 January 2017. The proposal is shown in **Appendix M**.

Future Key Issues include:

- Regular inspection on silt curtain deployment
- Regular inspection on silt screen deployment
- Implementation of EM&A Programme
- Maintain dredging below allowable dredging rate in EP.
- Cleaning of excess material from the decks and exposed fittings of barges and dredgers before the vessel is moved.
- Barge loading shall be monitored to ensure material is not lost during transportation.
- Conditions in dumping permit shall be followed strictly.

### 3. ROUTINE IMPACT WATER QUALITY MONITORING

#### 3.1 Monitoring Methodology

3.1.1 In-situ measurements and water samples were taken at 3 depths of the water column for each monitoring location, i.e. 1m below the surface, mid-depth, and 1m above the seabed, except where the water depth was less than 6m in which case the mid-depth was omitted and for locations where the water depth was less than 3m only the mid-depth level was monitored.

##### *In-Situ Measurement*

3.1.2 Prior to each monitoring day, wet bulb calibration was performed for the DO probes. Zero check in distilled water and calibration with a solution of known NTU were carried out for the turbidity probes. Three-point calibration of pH probes was completed each monitoring day.

3.1.3 At each sampling depth, two consecutive measurements were taken for turbidity, pH, DO, temperature, salinity, and ammonia. Separate deployment of the monitoring instruments was conducted for the consecutive measurements. When the difference between the two measurements for DO or turbidity was higher than 25% of the value of the first reading, the reading would be discarded and further readings would be taken. Three replicates of TIN measurement were performed for each depth at each monitoring location.

##### *Laboratory Analysis*

3.1.4 Duplicate water samples were collected at each sampling depth for laboratory measurement of SS, BOD<sub>5</sub> & synthetic detergent, ammonia, and *E.coli* at the required monitoring stations shown in **Table 3.4**. Three replicates were taken for TIN measurements at the specified locations. Samples were stored in high density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to the laboratory on the same day of collection for analysis.

3.1.5 ALS Technichem (HK) Pty Ltd (HOKLAS Reg. No. 066), was appointed to be the laboratory for analysis of water samples in the impact monitoring project. The methods adopted by the laboratories and the reporting limits are detailed in **Table 3.1**.

**Table 3.1** Laboratory Measurement/Analysis Methods and Reporting Limits

Analysis Description	Method	Reporting limits
Suspended Solid	APHA 2540D	1 mg/L
Ammonia	APHA 4500NH3:B&C	0.01 mg/L
Nitrite	APHA 4500NO2:B&H	0.01 mg/L
Nitrate	APHA 4500NO3:I	0.01 mg/L
Total Inorganic Nitrogen	By Calculation	0.02 mg/L
5-day Biochemical Oxygen Demand	APHA 5210B	1 mg/L
Synthetic Detergent	As Methylene Blue Active Substance	0.5 mg/L

Analysis Description	Method	Reporting limits
<i>E. coli</i>	DoE Section 7.8 & 7.9 plus in situ urease test	1 cfu/100mL

**3.2 Monitoring Equipment**

3.2.1 Equipment used for in-situ measurement and water sampling during impact water quality monitoring is summarised in **Table 3.2**. The equipment is in compliance with the requirements set out in the EM&A Manual. All in-situ monitoring instruments were calibrated by a HOKLAS-accredited laboratory or by standard solutions. Calibration of temperature, DO, salinity, pH and turbidity is conducted in three month interval, while QA/QC for in-situ ammonia measurement is carried out at 1-month interval. Calibration certificates for the water quality monitoring equipment are attached in **Appendix D**.

**Table 3.2** Water Quality Monitoring and Sampling Equipment

Parameter	Equipment	Model	Range	Equipment Accuracy
Nitrate	Photometer	<ul style="list-style-type: none"> <li>HACH DR900, and</li> <li>Nitrate Reagent Set (Cadmium Reduction Method)</li> </ul>	NO <sub>3</sub> : 0.01 to 0.50 mg/L	±0.5%
Ammonia, Nitrite	Photometer	<ul style="list-style-type: none"> <li>Lovibond MD600 Maxi Direct, and</li> <li>Ammonia Reagent Set (Indophenol blue / Salicylate);</li> <li>Nitrite Reagent Set (N-(1-Naphthyl)-ethylenediamine)</li> </ul>	NH <sub>3</sub> -N: 0.02 to 1mg/L; 1 to 50mg/L NO <sub>2</sub> : 0.01 to 0.5mg/L	±2%
Temperature, Dissolved Oxygen, salinity, pH, Turbidity	Water Quality Monitoring Device	YSI 6920V2-2-M Sonde	Temp: -5 to 50°C DO: 0-50mg/L DO%: 0-500% Sal: 0 to 70 ppt pH: 0 to 14 pH units Turb: 0-1000NTU	Temp: ±0.15°C DO: ±0.1mg/L or 1% (whichever greater) for 0-20mg/L; ±15% for 20-50mg/L Sal: ±1% or 0.1ppt (whichever greater) pH: ±0.2 units Turb: ±2% or 0.3NTU (whichever greater)
Water Sampling	Water Sampler	Aquatic Research Transparent PC Horizontal Water Sampler 2.2L / 3L / 5L	NA	NA
Positioning	Global Positioning System (GPS)	Garmin eTrex	NA	±3m
		Garmin GPS72	NA	±3m
Water Depth	Echo Sounder	Garmin ECHO 100	0.6 to 91 m	0.1 m

**3.3 Monitoring Parameters**

3.3.1 The monitoring parameters and frequency for both in-situ measurement and laboratory analysis are summarised in **Table 3.3**. Parameters for each monitoring station are specified in **Table 3.4**.

**Table 3.3 Monitoring Parameters and Frequency**

Parameters	Monitoring Frequency
<u>In-situ Measurement</u> Turbidity (in NTU), pH, Dissolved Oxygen (in mg/L and %), Temperature (in °C), Salinity (in ppt), <sup>1</sup> Ammonia-N (in mg/L-N and UIA); <sup>2</sup> TIN: Ammonia-N (in mg/L), Nitrite (in mg/L), Nitrate (in mg/L)	3 days per week, at mid-flood and mid-ebb tides (except <sup>3</sup> detergent which shall be taken one day per month, at mid-flood and mid-ebb)
<u>Laboratory Analysis</u> <sup>1</sup> Ammonia-N (in mg/L-N and UIA), Suspended Solids (SS), <sup>3</sup> BOD <sub>5</sub> , <sup>3</sup> <i>E.coli</i> , <sup>3</sup> Synthetic Detergent; <sup>2</sup> TIN: Ammonia-N (in mg/L), Nitrite (in mg/L), Nitrate (in mg/L)	36 hours interval was allowed between subsequent sets of measurement.

Notes:

- Ammonia measurements and samples were taken at SR2, SR3, SR4, SR12, C1, C2, C3 only; UIA: In-situ unionized ammonia was calculated from in-situ measurement of NH<sub>3</sub>-N, temperature, pH and salinity; Laboratory determined unionized ammonia was calculated from analysed NH<sub>3</sub>-N from water samples and in-situ measurement of temperature, pH and salinity;
- Total Inorganic Nitrogen (TIN) measurements and samples were taken at SR5, SR9, SR10, SR11, G1, G2, G3, G4, G5, G6 only;
- BOD<sub>5</sub>, *E.coli* and Synthetic Detergent samples were taken at SR4, SR12, C1, C2, C3 only.



Table 3.4 Water Quality Monitoring Parameters

ID	In-situ Measurement							Laboratory Analysis					
	pH	Temperature	Salinity	Turbidity	Dissolved Oxygen / Dissolved Oxygen%	NH <sub>3</sub> -N / UIA	TIN (NH <sub>3</sub> -N, NO <sub>2</sub> & NO <sub>3</sub> )	Suspended Solids	BOD <sub>5</sub>	E. coli	NH <sub>3</sub> -N / UIA	Synthetic Detergent	TIN (NH <sub>3</sub> -N, NO <sub>2</sub> & NO <sub>3</sub> )
SR2	○	○	○	○	○	○		○			○		
SR3	○	○	○	○	○	○		○			○		
SR4	○	○	○	○	○	○		○	○	○	○	○	
SR5	○	○	○	○	○		○	○					○
SR6	○	○	○	○	○			○					
SR7	○	○	○	○	○			○					
SR8	○	○	○	○	○			○					
SR9	○	○	○	○	○		○	○					○
SR10	○	○	○	○	○		○	○					○
SR11	○	○	○	○	○		○	○					○
SR12	○	○	○	○	○	○		○	○	○	○	○	
SR13	○	○	○	○	○			○					
G1	○	○	○	○	○		○	○					○
G2	○	○	○	○	○		○	○					○
G3	○	○	○	○	○		○	○					○
G4	○	○	○	○	○		○	○					○
G5	○	○	○	○	○		○	○					○
G6	○	○	○	○	○		○	○					○
C1	○	○	○	○	○	○		○	○	○	○	○	
C2	○	○	○	○	○	○		○	○	○	○	○	
C3	○	○	○	○	○	○		○	○	○	○	○	

Note:

1. UIA: In-situ unionized ammonia was calculated from in-situ measurement of NH<sub>3</sub>-N, temperature, pH and salinity; laboratory determined unionized ammonia was calculated from analysed NH<sub>3</sub>-N from water samples taken and in-situ measurement of temperature, pH and salinity.

### 3.4 Monitoring Locations

3.4.1 Impact water quality monitoring was conducted at 21 locations, including 12 sensitive receivers (SR2-13), 6 gradient stations (G1-6) and 3 control stations (C1-3), whose detailed information is summarised in **Table 3.5**. The locations of the stations are also shown in **Figure 2**.

**Table 3.5** Locations of Water Quality Monitoring Stations

Water Monitoring Station		Easting	Northing
SR2	Casam, Gazetted Beach	825723.225	825334.784
SR3	Approach, Gazetted Beach	826960.152	825260.726
SR4	Tsuen Wan, WSD Flushing Water Intake	829270.482	825382.994
SR5	Ma Wan, Fish Culture Zone	823758.839	823575.934
SR6	Kau Yi Chau, Corals	825655.637	816444.509
SR7	Green Island, Corals	829830.065	815996.449
SR8	Shek Kok Tsui, Corals	828562.803	811100.522
SR9	Cheung Sha Wan, Fish Culture Zone	818700.675	810910.924
SR10	Lo Tik Wan, Fish Culture Zone	831528.007	809237.067
SR11	Sok Kwu Wan, Fish Culture Zone	831721.774	807839.924
SR12	Tsing Yi, WSD Flushing Water Intake	829599.152	823262.269
SR13	EMSD Cooling Water Intake for Kwai Chung Hospital	831397.450	822002.433
G1	Gradient Station	820626.195	822834.323
G2	Gradient Station	825979.792	824683.158
G3	Gradient Station	826431.159	820617.725
G4	Gradient Station	830423.070	819431.722
G5	Gradient Station	821388.238	815001.087
G6	Gradient Station	831293.103	811408.482
C1	Control Station	817511.733	822492.021
C2	Control Station	825062.857	808648.094
C3	Control Station	835061.918	807452.449

### 3.5 Monitoring date, time frequency and duration

In the reporting period, impact water quality monitoring was carried out 3 days per week, at mid-flood and mid-ebb tides, from 23 December 2016 to 22 January 2017. Detailed impact monitoring schedule for the reporting month and the coming month is included in **Appendix E**

### 3.6 Weather conditions

3.6.1 The weather condition during the impact monitoring is provided in **Appendix L**.

### 3.7 Results and Observations

3.7.1 Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Impact water quality monitoring results and graphical presentations are provided in **Appendix F**.

3.7.2 During the monitoring period, heavy marine traffic (not associated with the Project) was commonly observed nearby the Project site and its vicinity, that the propeller wash from vessels could lead to potential disturbance of seabed sediment and affect the water quality.

3.7.3 Number of exceedances recorded in the reporting month at each impact station is summarized in **Table 3.6** and **3.7**.

**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



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**Table 3.6 Summary of Water Quality Exceedance (In-situ Measurement)**

Station	Exceedance Level	DO (S&M)		DO (B)		Turbidity		NH3-N		UIA		TIN		Total	
		E	F	E	F	E	F	E	F	E	F	E	F	E	F
SR2	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR3	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR4	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR5	Action	0	0	0	0	0	0	-	-	-	-	1	1	1	1
	Limit	0	0	0	0	0	0	-	-	-	-	0	0	0	0
SR6	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR7	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR8	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
SR9	Action	0	0	0	0	0	0	-	-	-	-	5	5	5	5
	Limit	0	0	0	0	0	0	-	-	-	-	4	4	4	4
SR10	Action	0	0	0	0	0	0	-	-	-	-	4	5	4	5
	Limit	0	0	0	0	0	0	-	-	-	-	1	0	1	0
SR11	Action	0	0	0	0	0	0	-	-	-	-	2	4	2	4
	Limit	0	0	0	0	0	0	-	-	-	-	2	0	2	0
SR12	Action	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	-	-	0	0
SR13	Action	0	0	0	0	0	0	-	-	-	-	-	-	0	0
	Limit	0	0	0	0	0	0	-	-	-	-	-	-	0	0
Total	Action	0	0	0	0	0	0	0	0	0	0	12	15	27	
	Limit	0	0	0	0	0	0	0	0	0	0	7	4	11	

**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



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**Table 3.7 Summary of Water Quality Exceedance (Laboratory Analysis)**

Station	Exceedance Level	Suspended Solids		BOD <sub>5</sub>		<i>E. coli</i>		NH <sub>3</sub> -N		UIA		Synthetic Detergent		TIN		Total	
		E	F	E	F	E	F	E	F	E	F	E	F	E	F	E	F
SR2	Action	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
SR3	Action	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	0	0	0	0	-	-	-	-	0	0
SR4	Action	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	3	3	0	0	0	0	0	0	0	0	0	0	-	-	3	3
SR5	Action	0	1	-	-	-	-	-	-	-	-	-	-	1	1	1	2
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	0	0	0	0
SR6	Action	3	2	-	-	-	-	-	-	-	-	-	-	-	-	3	2
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR7	Action	2	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR8	Action	1	0	-	-	-	-	-	-	-	-	-	-	-	-	1	0
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	-	-	0	0
SR9	Action	2	2	-	-	-	-	-	-	-	-	-	-	5	5	7	7
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	4	4	4	4
SR10	Action	1	1	-	-	-	-	-	-	-	-	-	-	4	5	5	6
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	1	0	1	0
SR11	Action	1	1	-	-	-	-	-	-	-	-	-	-	2	4	3	5
	Limit	0	0	-	-	-	-	-	-	-	-	-	-	2	0	2	0
SR12	Action	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Limit	1	2	0	0	0	0	0	0	0	0	0	0	-	-	1	2
SR13	Action	0	0	-	-	-	-	-	-	0	0	-	-	-	-	0	0
	Limit	0	0	-	-	-	-	-	-	0	0	-	-	-	-	0	0
Total	Action	10	8	0	0	0	0	0	0	0	0	0	0	12	15	45	
	Limit	4	5	0	0	0	0	0	0	0	0	0	0	7	4	20	

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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3.7.4 During the reporting period, 27 AL and 11 LL exceedances for TIN (in-situ), 18 AL and 9 LL exceedances for SS and 27 AL and 11 LL exceedances for TIN (lab) were recorded.

3.7.5 A number of exceedances were recorded in the reporting month, however, based on the finding from the investigation on the recorded cases of exceedances, the cause was found not related to the project. The exceedances may be caused by influences in the vicinity of the station or changes of the ambient conditions.

3.7.6 The details of Notification of Exceedance can be referred to **Appendix I**.

### **3.8 Action and Limit Levels**

3.8.1 Referring to the ER Letter ref. (CV/2013/04)/M45/400/1247 dated 19 March 2015, a Revised Baseline Water Quality Monitoring Test Methodology – Review of Action and Limit Levels has been submitted to EPD by ER in March 2015. The Action and Limit Level for the wet season (April – October) was effected and applied to the water quality monitoring data from 1 April 2015. The Action and Limit Level is given in **Appendix C**.

### **3.9 Event and Action Plan**

3.9.1 The Event and Action Plan is given in **Appendix H**.

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## 4. 24-HR WATER QUALITY MONITORING

### 4.1 Monitoring Methodology

4.1.1 The monitoring probes are set up around the fish rack at the four Fish Culture Zones and seawater intake point. Small buoys are placed on the sea surface to indicate the locations of the monitoring probes. Data loggers and wireless modems are placed on a framework or covered places, such as storage house on the fish rack.

4.1.2 The 24 hours water quality monitoring is performed at a depth of 1 to 2m below the water surface. The dissolved oxygen, temperature and turbidity data are logged at 5 minutes interval by the multi-probe, while ammonia data are logged at 20 minutes interval and data are transmitted via the wireless transmission system to the designated computers with the installation of automatic checking programme to detect exceedances at the offices of ET. In case where an action/limit level exceedance is evidenced (a continuous exceedance for any 30 minutes i.e. 6 consecutive monitoring data exceedances for DO, temperature and turbidity; and 3 consecutive exceedances of ammonia data), an email notification will be sent automatically to ET, Contractor, ER, EPD, AFCD and WSD to alert the event for further investigation.

### 4.2 Monitoring Equipment

4.2.1 The following equipment and facilities will be used for the monitoring of water quality impacts:

#### Dissolved Oxygen, Turbidity and Temperature Measuring Equipment

A multi probe meter measuring dissolved oxygen, temperature and turbidity is set up at the 24 hours monitoring stations

- A DO level in the range of 0-20 mg/L and 0-200% saturation;
- A temperature of between 0 and 45 degree Celsius;
- A turbidity of between 0-1000NTU

The DO equipment is equipped with built-in salinity compensation.

#### Ammonia Measuring Equipment

The ammonia measuring equipment is used to monitor seawater ammonia level at WSD flushing water intake on a 24 hours a days 7 days a week during works basis.

#### Data Acquisition System

The data acquisition system is used to log water quality data at 5 minutes interval by the multi-probe and at 20 min interval by the ammonia sensor. Data will be transmitted via the wireless transmission system to the designated computers at ET office.

**Table 4.1** lists out the detail of monitoring equipment.

**Table 4.1 24 Hours Water Quality Monitoring Equipment**

Parameter	Equipment	Model	Range	Equipment Accuracy
Temperature, Dissolved Oxygen, Turbidity	Water Quality Monitoring Device	•YSI 6920V2-2-M Sonde	Temp: -5 to 50°C DO: 0-50mg/L DO%: 0-500% Turb: 0-1000NTU	<ul style="list-style-type: none"> <li>▪Temp: ±0.15°C</li> <li>▪DO: ±0.1mg/L or 1% (whichever greater) for 0-20mg/L; ±15% for 20-50mg/L</li> <li>▪Turb: ±2% or 0.3NTU (whichever greater)</li> </ul>
Data Acquisition System	Data Logger	Campbell CR200	NA	NA
	Data Logger	Campbell CR800	NA	NA
	Data Transmitter	NXN GT-511	NA	NA
Ammonia	Photometric Analyzer	Systea S.p.A. Micromac 1000 Ammonia Reagent Set: OPA	N-NH <sub>3</sub> : 0-2mg/L	N-NH <sub>3</sub> : <0.01mg/L

**4.2.2 Equipment Calibration**

In-situ monitoring instruments are checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at 3 months intervals throughout the water quality monitoring programme.

The monitoring equipment, monitoring probes are cleaned and checked twice a week.

Equipment calibration records are in **Appendix D**.

**4.3 Monitoring Parameters**

4.3.1 Dissolved oxygen, temperature and turbidity are recorded every 5 minutes, 24 hours a day 7 days a week during dredging works.

4.3.2 In-situ NH<sub>3</sub>-N at WSD Flushing Water Intake are measured every 20 minutes, 24 hours a day 7 days a week during works.

4.3.3 The water quality parameters measured at particular locations are shown in **Table 4.2**.



**Table 4.2 24-hr Water Quality Monitoring Parameters**

ID	Description	Parameters				
		Temperature	Turbidity	DO (mg/L)	DO%	NH <sub>3</sub> -N
SR4	Tsuen Wan, WSD Flushing Water Intake	○	○	○	○	○
SR5	Ma Wan, Fish Culture Zone	○	○	○	○	
SR9	Cheung Sha Wan, Fish Culture Zone	○	○	○	○	
SR10	Lo Tik Wan, Fish Culture Zone	○	○	○	○	
SR11	Sok Kwu Wan, Fish Culture Zone	○	○	○	○	
SR12	Tsing Yi, WSD Flushing Water Intake	○	○	○	○	○
SR13	EMSD Cooling Water Intake for Kwai Chung Hospital	○	○	○	○	

**4.4 Monitoring Locations**

The 24 hours water quality monitoring works are performed at the following locations (**Table 4.3**).

**Table 4.3 Location of Water Quality Monitoring Station**

Water Monitoring Station		Easting	Northing
SR4	Tsuen Wan, WSD Flushing Water Intake	829270.482	825382.994
SR5	Ma Wan, Fish Culture Zone	823758.839	823575.934
SR9	Cheung Sha Wan, Fish Culture Zone	818700.675	810910.924
SR10	Lo Tik Wan, Fish Culture Zone	831528.007	809237.067
SR11	Sok Kwu Wan, Fish Culture Zone	831721.774	807839.924
SR12	Tsing Yi, WSD Flushing Water Intake	829599.152	823262.269
SR13	EMSD Cooling Water Intake for Kwai Chung Hospital	831397.450	822002.433

Revisions on monitoring locations were proposed in previous submission (MaterialLab Report No. Ref: 0394/13/ED/0103 – WATER QUALITY MONITORING LOCATION) and were agreed among AFCD, EMSD, WSD and EPD.

**4.5 Results and Observations**

4.5.1 24-hr water quality monitoring was conducted at all designated monitoring stations in the reporting month. Results are provided in **Appendix G**.

4.5.2 During the reporting period, heavy marine traffic (not associated with the Project) was commonly observed nearby the Project site and its vicinity, that the propeller wash from vessels could lead to potential disturbance of seabed sediment and affect the water quality.

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The above conditions may affect monitoring results. Furthermore, the fish culturing or other activities occurring on the fish rack may cause adverse impact on the receiving water.

4.5.3 Number of exceedances recorded in the reporting month at each impact station is summarized in **Table 4.4**.

**Table 4.4 Summary of Water Quality Exceedance (24-hr Monitoring)**

Station	Exceedance Level	Turbidity	DO	NH <sub>3</sub> -N	Total
SR4	Action	0	0	0	0
	Limit	0	0	0	0
SR5	Action	0	0	-	0
	Limit	0	0	-	0
SR9	Action	0	0	-	0
	Limit	0	0	-	0
SR10	Action	0	0	-	0
	Limit	0	0	-	0
SR11	Action	0	0	-	0
	Limit	0	0	-	0
SR12	Action	0	0	0	0
	Limit	0	0	0	0
SR13	Action	0	0	-	0
	Limit	0	0	-	0
Total	Action	0	0	0	0
	Limit	0	0	0	0

**4.6** No exceedance was recorded in the reporting month.

#### **4.7** Action and Limit Levels

4.7.1 Referring to the ER Letter ref. (CV/2013/04)/M45/400/1247 dated 19 March 2015, a Revised Baseline Water Quality Monitoring Test Methodology – Review of Action and Limit Levels has been submitted to EPD by ER in March 2015. The Action and Limit Level for the wet season (April – October) was effected and applied to the water quality monitoring data from 1 April 2015. The Action and Limit Level is given in **Appendix C**.

#### **4.8** Event and Action Plan

4.8.1 The Event and Action Plan is given in **Appendix H**.

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## 5. ENVIRONMENTAL SITE INSPECTION AND AUDIT

### 5.1 Site Inspections

5.1.1 Site inspections were carried out weekly by ET to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. In the reporting month, 4 site inspections were carried out on 29 December 2016, 5, 12, 18 January 2017.

5.1.2 The Environmental Team conducted 4 site inspections in the reporting period. No particular observation was recorded in the reporting month.

5.1.3 According to Contractor, no archaeological deposit was found during reporting period.

### 5.2 Advice on the Solid and Liquid Waste Management Status

5.2.1 According to the Contractor, 10m<sup>3</sup> general refuse was generated and disposed of in the reporting period. Monthly summary of waste flow table is detailed in **Appendix K**.

### 5.3 Dredging and Disposal

5.3.1 Implementation of mitigation measures for dredging works and the associated dredging records were checked and the findings are summarized in **Table 5.1**.

**Table 5.1 Compliance with EP Conditions in the Reporting Month**

EP Condition	Compliance Status and/or Recommendations
3.1 (f) Silt Screen Deployment Plan	Silt screens deployment at WSD1, WSD8 and EMSD1 complied with Silt Screen Deployment Plan.
3.1 (g) 24-hr environmental monitoring and audit	24-hr enhanced environmental monitoring and audit of water quality parameters implemented.

5.3.2 The silt screen deployment within the Project area were maintained and confirmed to be complied with EP conditions in general.

5.3.3 No inert or non-inert C&D material related to dredging works and a small amount of general refuse were disposed off site in the reporting month. The details can be referred to the **Table 5.2**.

**Table 5.2 Waste Quantities of Dredging Works**

Month	Marine Sediment Type	Quantity Generated from 23 December 2016 to 22 January 2017 (m <sup>3</sup> )	Cumulative-to-22 January 2017 (m <sup>3</sup> )	Disposal / Dumping Ground
January 2017	Type 1 – Open Sea Disposal	0	1683850	NA
	Type 2 – Confined Marine Disposal	0	625280	NA
	Type 3 – Special Treatment / Disposal	0	1260	NA

**Note:**

Only preparation works for dredging was carried out in the reporting month and no marine sediment was disposed in the reporting month.

**5.4 Implementation Status of Environmental Mitigation Measures**

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix J**. Most of the necessary mitigation measures were implemented properly.

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## MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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### 6. EXCEEDANCE OF THE ENVIRONMENTAL PARAMETERS

- 6.1.1 Seventy two (72) Action Level and Thirty one (31) Limit Level exceedances were recorded in the routine impact monitoring in the reporting month.
- 6.1.2 No exceedance was recorded in the 24-hr monitoring in the reporting month.
- 6.1.3 Notification of exceedance is provided in **Appendix I**.

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**7. NON-COMPLIANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION**

7.1.1 No complaint, inspection notice, notification of summons or prosecution was received in this reporting period. Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in Tables 7.1, 7.2 and 7.3.

**Table 7.1 Environmental Complaints Log**

Complaint Log No.	Date of Receipt	Received From and Received By	Nature of Complaint	Date Investigated	Outcome	Date of Reply
Nil	-	-	-	-	-	-

**Table 7.2 Cumulative Statistics on Complaints**

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	0

**Table 7.3 Cumulative Statistics on Successful Prosecutions**

Environmental Parameters	Cumulative No. Brought Forward	No. of Prosecutions This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	0

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## 8. CONCLUSIONS

- 8.1.1 The dredging works was commenced on 23 April 2014. The EM&A programme was carried out in accordance with the EM&A Manual requirements. As per the EM&A Manual, water quality impact monitoring was conducted during the dredging works.
- 8.1.2 Seventy two (72) Action Level and Thirty one (31) Limit Level exceedances were recorded in the routine impact monitoring in the reporting month.
- 8.1.3 No exceedance was recorded in the 24-hr monitoring in the reporting month.
- 8.1.4 Based on the finding from the investigation on the recorded cases of exceedances, the cause was found not related to the project.
- 8.1.5 Environmental site inspections were carried out for 4 times in the reporting month.
- 8.1.6 No environmental complaint was received and followed up by Environmental Team in the reporting period.
- 8.1.7 No notification of summons and prosecution was received in the reporting month.
- 8.1.8 According to information provided by the Contractor, dredging works and marine works will only be carried out at area outside Berth KC5 and Tsing Yi Submarine Outfall at Subzones Z1A, Z2B1, Z2B2 and Z2C1 in future. Refer to Section 2.1.4 and Section 2.1.10 of the EM&A Manual, routine water quality monitoring stations at SR6, SR7, SR8, SR9, SR10 and SR11 and 24 hour monitoring stations at SR9, SR10 and SR11 were proposed to be removed as according to the *Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)* (0394\_13\_ED\_0332I) which no objection was received from EPD and relevant parties. The removal of the water quality monitoring at the mentioned stations will be effective from 23 January 2017.



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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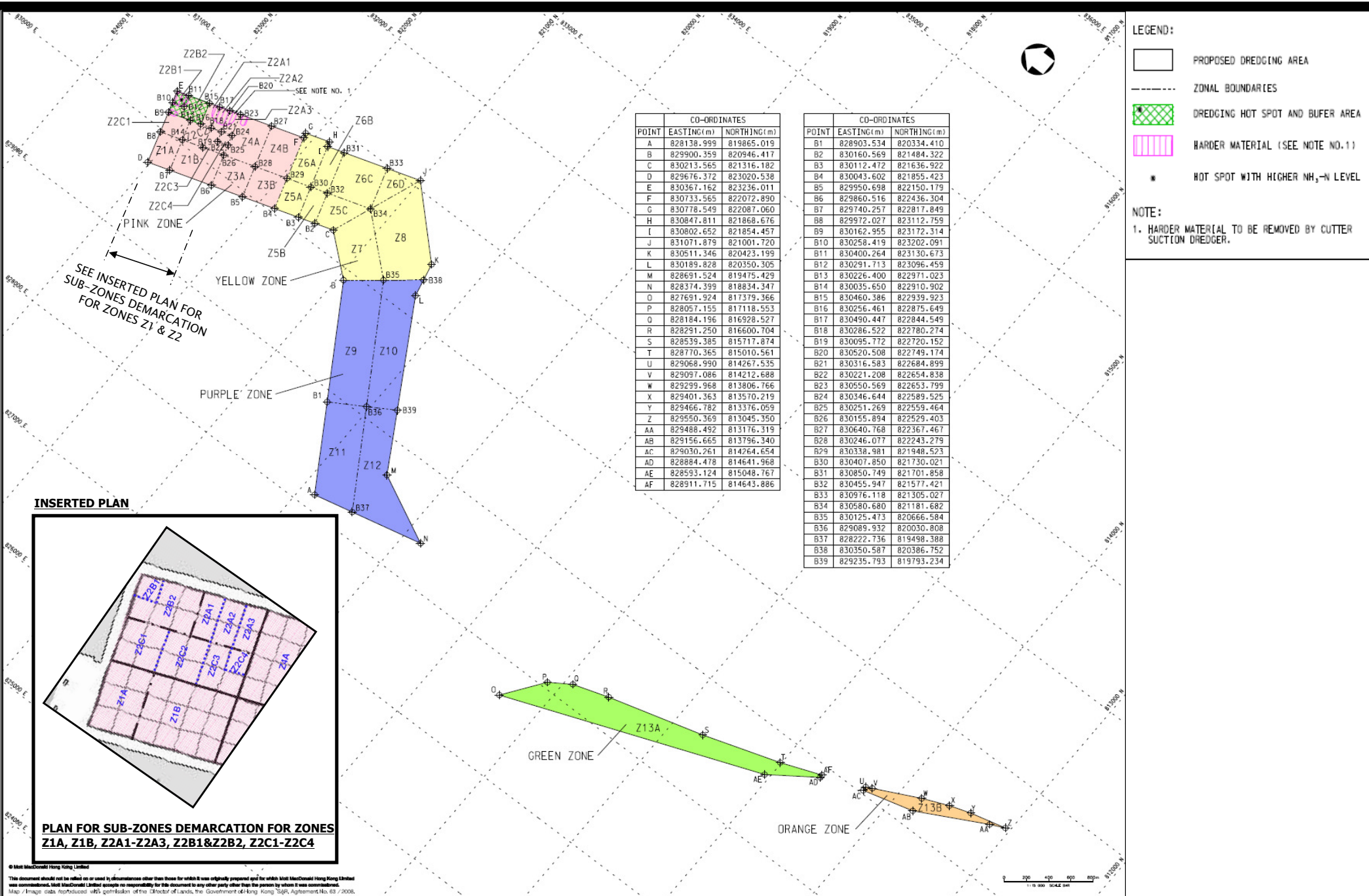
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Figure 1

Project General Layout



Project Title: Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel

Figure 2: Zones and Sub-zone of Dredging Plan Layout (Extracted from Figure 2 of Justification for the Proposed Demarcation of the Dredging Zones)

Environmental Permit No.:

EP-426/2011/A



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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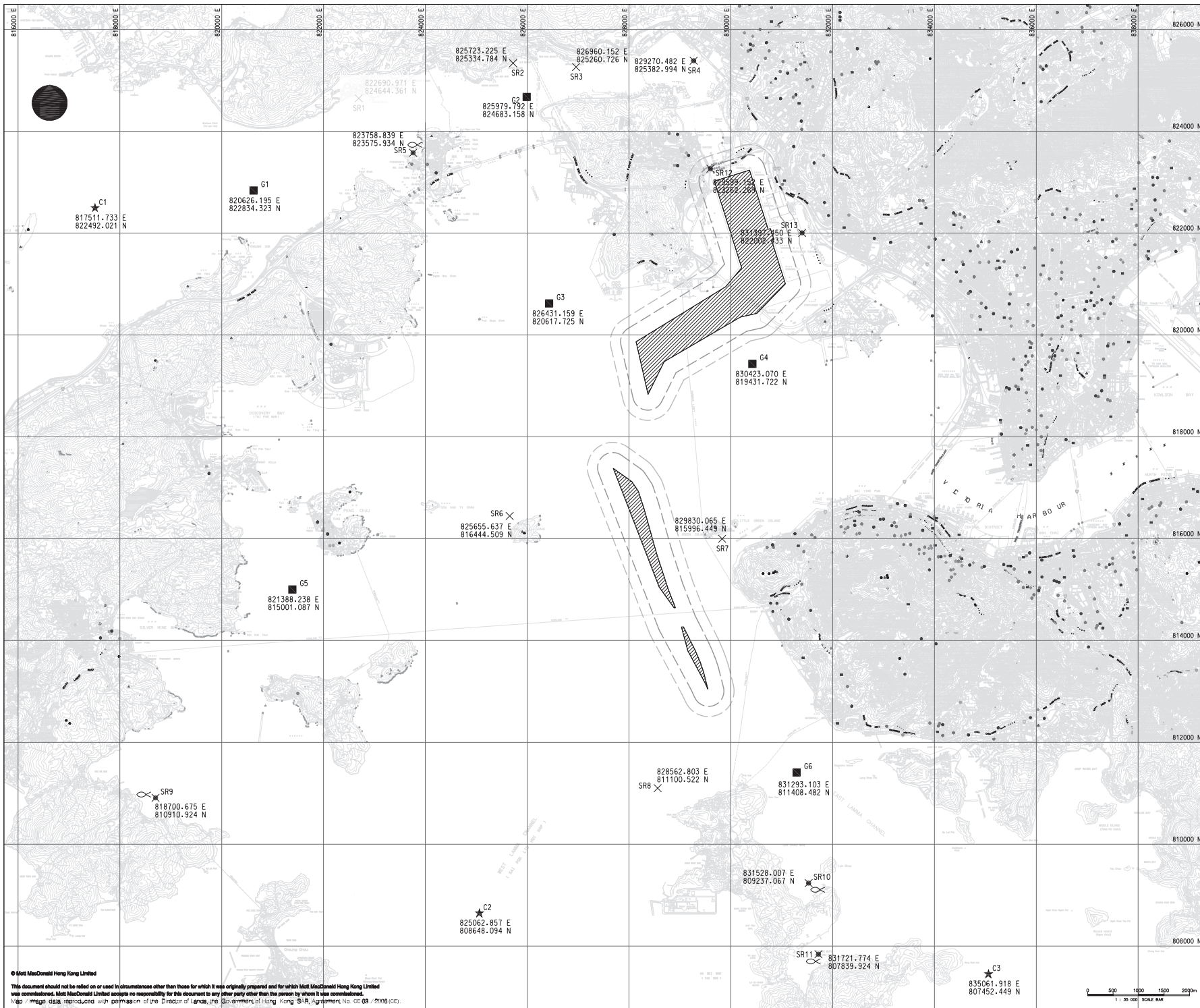
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Report No.: 0394/13/ED/0353B

Figure 2

Locations of Water Quality Monitoring Stations



**NOTES:**

1. ALL COORDINATES ARE IN HONG KONG METRIC GRID (1980).
2. THE CONTRACTOR SHALL REFER TO RELEVANT SECTION(S) AND APPENDICES OF THE PARTICULAR SPECIFICATION REGARDING THE WATER QUALITY MONITORING.

- LEGEND:**
- SITE BOUNDARY
  - X MONITORING STATION
  - ★ CONTROL STATION
  - GRADIENT STATION
  - 24-HRS MONITORING STATION
  - ⊗ FISH CULTURE ZONE

1	APR 13	WH	TENDER ADDENDUM NO. 1	SL	CMH
0	APR 13	WH	TENDER DRAWING	SL	CMH
Rev	Date	Drawn	Description	Chk'd	App'd

20/F AIA Newbank Tower  
Landmark East  
100 Housfield Street  
Kwai Tsing, New Territories  
Hong Kong  
T: +852 2518 8787  
F: +852 2517 1853  
W: www.mottmac.com.hk

Client

**CEDD** THE GOVERNMENT OF THE HONG KONG  
SPECIAL ADMINISTRATIVE REGION  
CIVIL ENGINEERING  
AND DEVELOPMENT DEPARTMENT

Project

CONTRACT NO. : CV/2013/04  
DREDGING WORKS IN KWAI TSING  
CONTAINER BASIN AND ITS  
APPROACH CHANNEL

Title

**PROVISIONAL LOCATION  
OF WATER QUALITY  
MONITORING STATIONS**

Designed	FC	Eng check	SL
Drawn	WH	Coordination	TF
Dwg check	FC	Approved	CMH
Scale at A1	Status	Rev	
1:35000	TEN	2	

Drawing Number  
**MMH/259053/EM/403**

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
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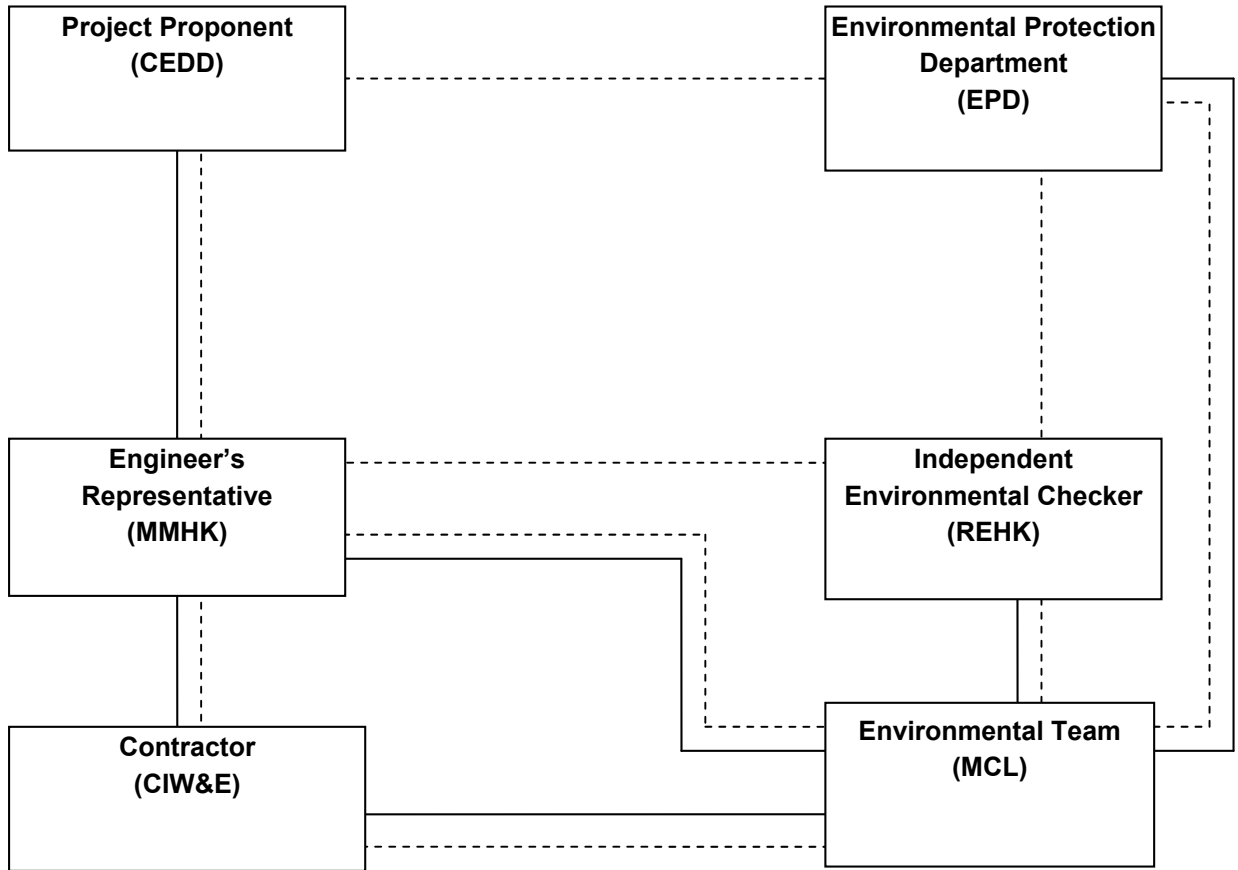
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Appendix A  
Project Organization Chart





**Legend:**  
 ——— Line of Reporting  
 - - - - Line of Communication

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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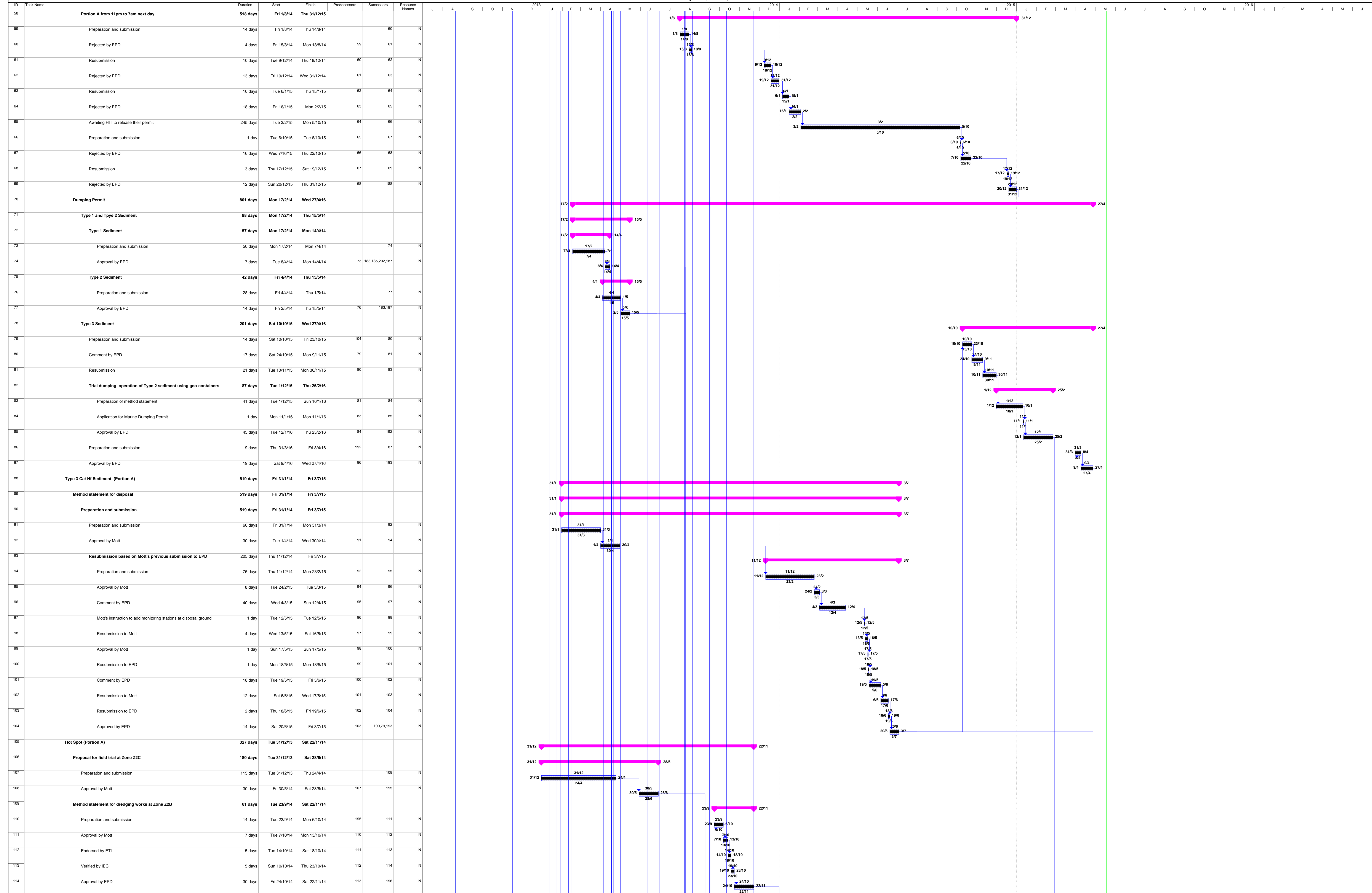
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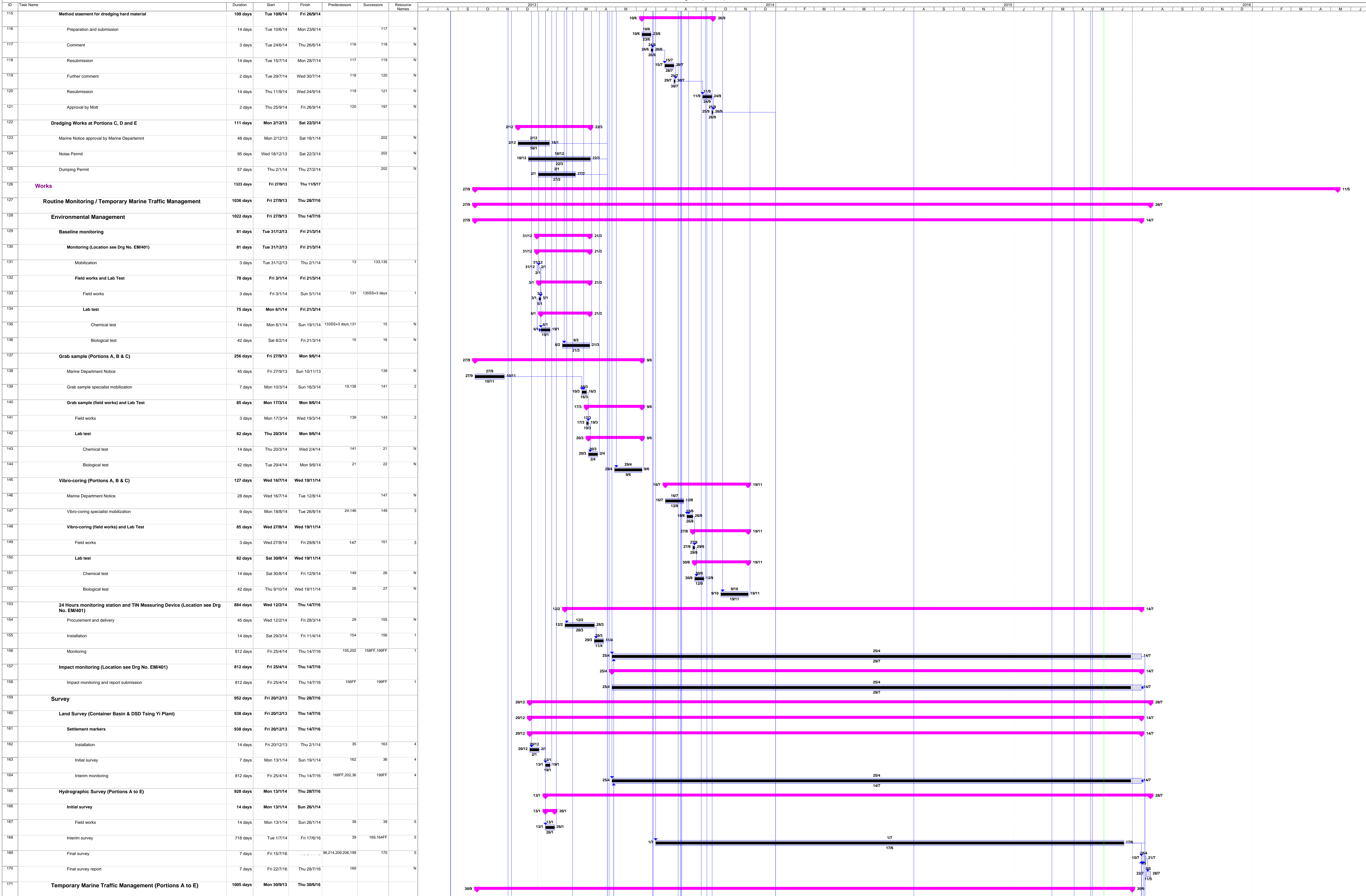
Appendix B  
Construction Programme

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Resource Names
1	<b>Contract Period</b>	1351 days	Fri 30/8/13	Thu 11/5/17			
2	<b>Contract Commencement Date</b>	0 days	Fri 30/8/13	Fri 30/8/13		4SS	
3	<b>Extended Contract Completion Date</b>	0 days	Mon 9/5/16	Mon 9/5/16		284FF	
4	<b>Possession of Site</b>	0 day			S,18SS,31SS,41SS	N	
5	<b>Section 1</b>	1351 days	Fri 30/8/13	Thu 11/5/17			
6	<b>Submission</b>	972 days	Fri 30/8/13	Wed 27/4/16			
7	<b>Routine Monitoring / Temporary Marine Traffic Management</b>	484 days	Fri 30/8/13	Fri 26/12/14			
8	<b>Environmental Management</b>	484 days	Fri 30/8/13	Fri 26/12/14			
9	<b>Baseline monitoring</b>	231 days	Fri 30/8/13	Thu 17/4/14			
10	ETL and relevant site personal	30 days	Fri 30/8/13	Sat 28/9/13		4SS,13	N
11	Lab Test	30 days	Fri 30/8/13	Sat 28/9/13		4SS,13	N
12	<b>Monitoring (Location see Drg No. EM/401)</b>	201 days	Sun 29/9/13	Thu 17/4/14			
13	Plan	93 days	Sun 29/9/13	Mon 30/12/13	10,11	131	N
14	<b>Sediment Report</b>	88 days	Mon 20/1/14	Thu 17/4/14			
15	Preliminary report	19 days	Mon 20/1/14	Fri 7/2/14		135 136	N
16	Final report	27 days	Sat 22/3/14	Thu 17/4/14		136 183,185,202	N
17	<b>Grab sample (Portions A, B &amp; C)</b>	321 days	Fri 30/8/13	Wed 16/7/14			
18	Grab sample specialist	30 days	Fri 30/8/13	Sat 28/9/13		4SS,19	N
19	Sediment testing and sampling plan	162 days	Sun 29/9/13	Sun 9/3/14		18 139	N
20	<b>Sediment report</b>	105 days	Thu 3/4/14	Wed 16/7/14			
21	Preliminary report	26 days	Thu 3/4/14	Mon 28/4/14		143 144	N
22	Final report	37 days	Tue 10/5/14	Wed 16/7/14		144 187	N
23	<b>Vibro-coring (Portions A, B &amp; C)</b>	159 days	Mon 21/7/14	Fri 26/12/14			
24	Sediment testing and sampling plan	28 days	Mon 21/7/14	Sun 17/8/14		147	N
25	<b>Sediment report</b>	105 days	Sat 13/9/14	Fri 26/12/14			
26	Preliminary report	26 days	Sat 13/9/14	Wed 8/10/14		151 152	N
27	Final report	37 days	Thu 20/11/14	Fri 26/12/14		152 187FS-139 days	N
28	<b>24 Hours monitoring station and TIN Measuring Device (Location see Drg No. EM/401)</b>	79 days	Mon 25/11/13	Tue 11/2/14			
29	Instrumentation	79 days	Mon 25/11/13	Tue 11/2/14		154	N
30	<b>Survey</b>	179 days	Fri 30/8/13	Mon 24/2/14			
31	Surveyor	35 days	Fri 30/8/13	Thu 3/10/13		4SS,35,38	N
32	Geophysicist	35 days	Sun 3/11/13	Sat 7/12/13		202	N
33	<b>Land Survey (Container Basin &amp; DSD Tsing Yi Plant)</b>	67 days	Tue 26/11/13	Fri 31/1/14			
34	<b>Settlement markers</b>	67 days	Tue 26/11/13	Fri 31/1/14			
35	Method Statement for Installation and Monitoring	24 days	Tue 26/11/13	Thu 19/12/13		31 162	N
36	Initial report	12 days	Mon 20/1/14	Fri 31/1/14		163 164	N
37	<b>Hydrographic Survey (Portions A to E)</b>	144 days	Fri 4/10/13	Mon 24/2/14			
38	Method Statement	36 days	Fri 4/10/13	Fri 8/11/13		31 167	N
39	Initial survey Report	29 days	Mon 27/1/14	Mon 24/2/14		167 168	N
40	<b>Temporary Marine Traffic Management (Portions A to E)</b>	144 days	Fri 30/8/13	Mon 20/1/14			
41	Consultant, Risk Manager and Marine Traffic Engineer	28 days	Fri 30/8/13	Thu 26/9/13		4SS,43	N
42	Independent Checking Engineer (ICE)	25 days	Fri 27/12/13	Mon 20/1/14		173FS-60 days	N
43	Webbase software and Trial Run	50 days	Fri 27/9/13	Fri 15/11/13		41 173	N
44	<b>Dredging Works (Portions A to E)</b>	896 days	Thu 14/11/13	Wed 27/4/16			
45	Independent Checking Engineer (ICE)	21 days	Thu 14/11/13	Wed 4/12/13		51	N
46	<b>Silt screen deployment plan and report (Location see Drg No. EM/401)</b>	77 days	Fri 6/12/13	Thu 20/2/14			
47	Method statement	77 days	Fri 6/12/13	Thu 20/2/14		185,178	N
48	<b>Dredging method statement and silt curtain deployment plan</b>	118 days	Thu 28/11/13	Tue 25/3/14			
49	Method statement for dredging works	104 days	Thu 28/11/13	Tue 11/3/14		202	N
50	<b>Silt curtain deployment plan</b>	118 days	Thu 28/11/13	Tue 25/3/14			
51	Design	70 days	Tue 17/12/13	Mon 24/2/14		45 52FS-89 days	N
52	Deployment plan	118 days	Thu 28/11/13	Tue 25/3/14		51FS-89 days	N
53	<b>Dredging Works at Portions A and B</b>	891 days	Tue 19/11/13	Wed 27/4/16			
54	<b>General seabed</b>	891 days	Tue 19/11/13	Wed 27/4/16			
55	Marine Notice approval by Marine Departemnt	247 days	Tue 19/11/13	Wed 23/7/14		185	N
56	<b>Noise Permit</b>	739 days	Mon 23/12/13	Thu 31/12/15			
57	General	101 days	Mon 23/12/13	Wed 2/4/14		183,185	N









China International Water & Electric Corp. Task Critical Task Milestone Summary

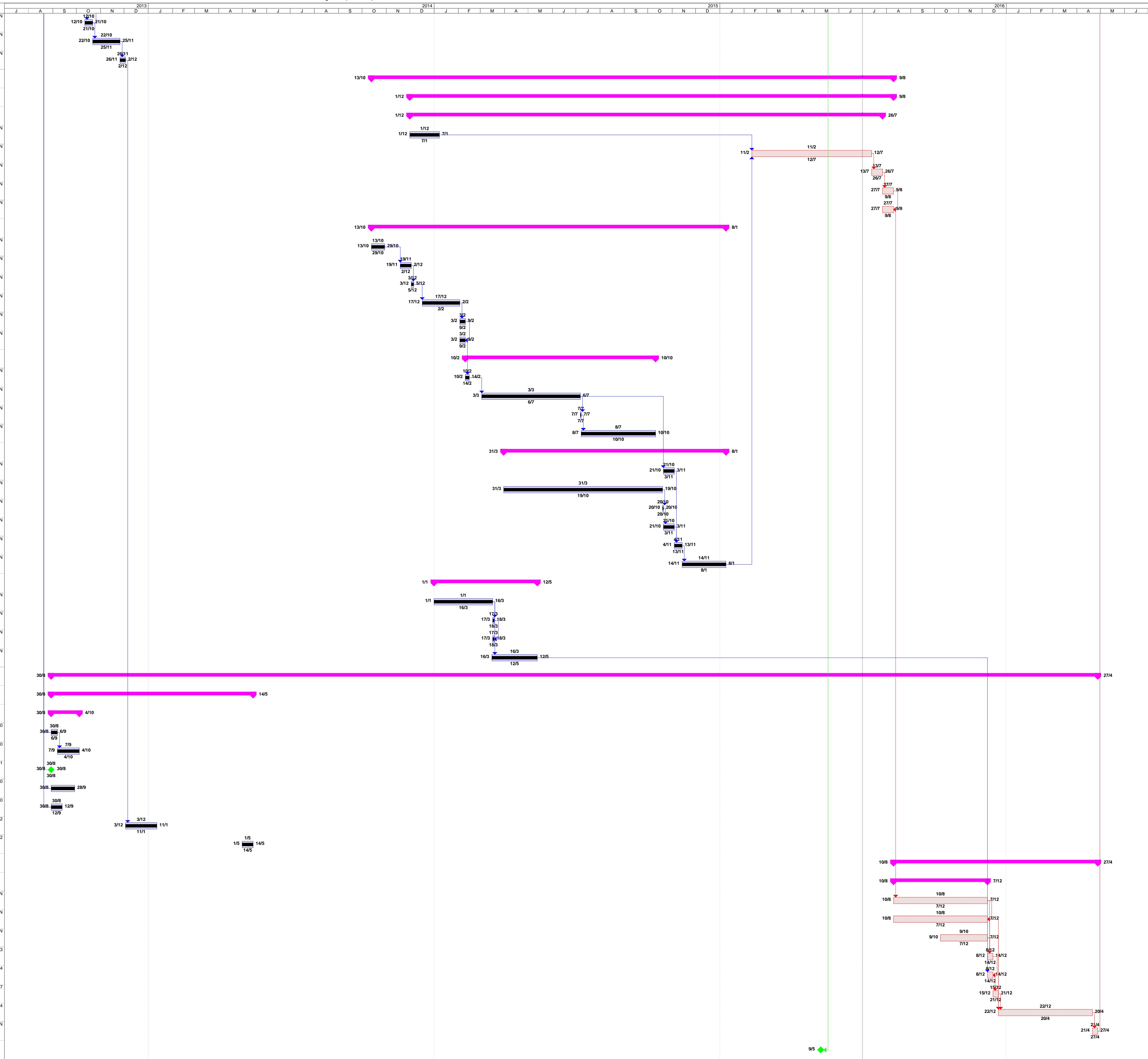
\* Subject to availability of working windows

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Resource Names
172	Organizing meeting for information collection	990 days	Mon 30/9/13	Wed 15/6/16			N
173	Temporary marine traffic management and TMTM meeting	952 days	Fri 22/11/13	Thu 30/6/16	42FS-60 days,43		N
174	<b>Dredging Works (Portions A to E)</b>	<b>964 days</b>	<b>Sun 1/12/13</b>	<b>Thu 21/7/16</b>			
175	Interface with other contractors or utility undertakings	943 days	Sun 1/12/13	Thu 30/6/16			N
176	Organizing coordination meeting	943 days	Sun 1/12/13	Thu 30/6/16			N
177	<b>Silt screen (Location see Drg No. EM/401)</b>	<b>882 days</b>	<b>Fri 21/2/14</b>	<b>Thu 21/7/16</b>			
178	Installation of silt screen	7 days	Fri 21/2/14	Thu 27/2/14	47	179,202	6
179	Maintenance of silt screen	813 days	Thu 24/4/14	Thu 14/7/16	178	180,199FF	6
180	Removal of silt screen	7 days	Fri 15/7/16	Thu 21/7/16	179		6
181	<b>Dredging Works at Portions A and B</b>	<b>710 days</b>	<b>Mon 9/6/14</b>	<b>Wed 18/5/16</b>			
182	<b>General seabed</b>	<b>701 days</b>	<b>Mon 9/6/14</b>	<b>Mon 9/5/16</b>			
183	Mobilization	42 days	Fri 27/6/14	Thu 7/8/14	74,77,16,57	185	7
184	Fabrication of silt curtain	7 days	Mon 9/6/14	Sun 15/6/14		185	8
185	Pilot test for silt curtain	2 days	Fri 8/8/14	Sat 9/8/14	164,74,16,47,55,57	187	7
186	Monitoring brief for unidentified sonar contacts & masked areas	3 days	Wed 27/7/14	Fri 4/7/14		187	N
187	Dredging works 1 (subject to availability of working windows)	30 days	Sun 10/8/14	Mon 1/9/14	74,77,22,27FS-139 days	195	7
188	Dredging works 2 (subject to availability of working windows)	595 days	Tue 23/9/14	Mon 9/5/16	195,69	169,199	7
189	<b>Type 3 Cat Hf Sediment (Portion A)</b>	<b>292 days</b>	<b>Sat 1/8/15</b>	<b>Wed 18/5/16</b>			
190	Procurement and delivery of Geo-container	112 days	Sat 1/8/15	Fri 20/11/15	104	192	N
191	<b>Trial dumping operation of Type 2 sediment using geo-containers</b>	<b>34 days</b>	<b>Fri 26/2/16</b>	<b>Wed 30/3/16</b>			
192	Trial dumping	34 days	Fri 26/2/16	Wed 30/3/16	85,190	193,86	7
193	Dredging works	21 days	Thu 28/4/16	Wed 18/5/16	104,192,87		7
194	<b>Hot Spot (Portion A)</b>	<b>609 days</b>	<b>Tue 9/9/14</b>	<b>Mon 9/5/16</b>			
195	Field trial at Zone Z2C	14 days	Tue 9/9/14	Mon 22/9/14	187,108	188,110	7
196	Dredging works at Z2B *	493 days	Thu 1/1/15	Mon 9/5/16	114	169	7
197	Dredging of hard material *	493 days	Thu 1/1/15	Mon 9/5/16	121	169	7
198	Outfall demolition works*	70 days	Tue 1/3/16	Mon 9/5/16		169,199	7
199	Removal of high spots*	66 days	Tue 10/5/16		58FF,164FF,179FF	220FS-14 days,169	7
200	<b>Dredging Works for Portions C, D and E</b>	<b>707 days</b>	<b>Fri 18/4/14</b>	<b>Thu 24/3/16</b>			
201	<b>Dredging Works for Portion D</b>	<b>666 days</b>	<b>Fri 18/4/14</b>	<b>Fri 12/2/16</b>			
202	Mobilization	7 days	Fri 18/4/14	Ti	1,16,52,123,124,125	203,204,156,164	9
203	Pilot test of silt curtain	2 days	Fri 25/4/14	Sat 26/4/14	202	204FF	9
204	Trial dredging	2 days	Fri 25/4/14	Sat 26/4/14	202,203FF	205	9
205	Dredging works	153 days	Sun 27/4/14	Fri 26/9/14	204	208,206	9
206	Removal of high spots	1 day	Fri 12/2/16	Fri 12/2/16	205,209FF	169	9
207	<b>Dredging Works for Portion E</b>	<b>504 days</b>	<b>Sat 27/9/14</b>	<b>Fri 12/2/16</b>			
208	Dredging Works	51 days	Sat 27/9/14	Sun 16/11/14	205	209,211,213	9
209	Removal of high spots	1 day	Fri 12/2/16	Fri 12/2/16	208,214SS+20 days	169,208FF	9
210	<b>Dredging Works for Portion C</b>	<b>478 days</b>	<b>Wed 3/12/14</b>	<b>Thu 24/3/16</b>			
211	Northern west section	260 days	Wed 3/12/14	Wed 19/8/15	208		7,9
212	Middle section	16 days	Thu 5/11/15	Fri 20/11/15	213FS+4 days	214	7
213	Southern east section	321 days	Mon 15/12/14	Sat 31/10/15	208	212FS+4 days	7,9
214	Removal of high spots	62 days	Sat 23/1/16	Thu 24/3/16	212	169,209SS+20 days	7,9
215	<b>Marine Ground Investigation Works near KC5 in Portion A</b>	<b>74 days</b>	<b>Fri 14/4/16</b>	<b>Mon 13/6/16</b>			
216	Mobilization	7 days	Fri 14/4/16	Thu 7/4/16		217	15
217	Drilling*	32 days	Fri 8/4/16	Mon 9/5/16		216	15
218	Report	35 days	Tue 10/5/16	Mon 13/6/16		217	N
219	<b>Remaining Works</b>	<b>315 days</b>	<b>Fri 1/7/16</b>	<b>Thu 11/5/17</b>			
220	Removal of rock material outside berth KC5 (Details to be confirmed later)*	304 days	Fri 1/7/16	Sun 30/4/17	199FS-14 days		16
221	Dredging works around Tsing Yi Submarine Outfall*	14 days	Fri 28/4/17	Thu 11/5/17	283		7
222	<b>Section 2</b>	<b>1337 days</b>	<b>Fri 30/8/13</b>	<b>Thu 27/4/17</b>			
223	<b>Submission</b>	<b>1064 days</b>	<b>Wed 11/9/13</b>	<b>Tue 9/8/16</b>			
224	<b>Preliminaries (Portion F)</b>	<b>83 days</b>	<b>Wed 11/9/13</b>	<b>Mon 2/12/13</b>			
225	<b>Engineer Principal Accommodation</b>	<b>83 days</b>	<b>Wed 11/9/13</b>	<b>Mon 2/12/13</b>			
226	Preparation and submission of location and layout	0 days	Wed 11/9/13	Wed 11/9/13		227	N
227	Approval of location and layout	30 days	Thu 12/9/13	Fri 11/10/13		226	N
228	Independent Checking Engineer (ICE)	14 days	Mon 7/10/13	Sun 20/10/13	229FF-1 day		N





ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Resource Names	
229	Preparation of calculation	10 days	Sat 12/10/13	Mon 21/10/13	227	230,228FF-1 day	N	
230	Comment and resubmission of calculation	35 days	Tue 22/10/13	Mon 25/11/13	229	231	N	
231	Approval of calculation	7 days	Tue 26/11/13	Mon 2/12/13	230	272	N	
232	<b>Outfall Modification Works (Location see Drg No. S202)</b>	<b>667 days</b>	<b>Mon 13/10/14</b>	<b>Tue 9/8/16</b>				
233	<b>Method statement for modification works</b>	<b>618 days</b>	<b>Mon 1/12/14</b>	<b>Tue 9/8/16</b>				
234	<b>Preparation and submission</b>	<b>604 days</b>	<b>Mon 1/12/14</b>	<b>Tue 26/7/16</b>				
235	Preparation and submission	38 days	Mon 1/12/14	Wed 7/1/15		236	N	
236	Awaiting resolving TMTA constraints	153 days	Thu 11/2/16	Tue 12/7/16	235,258	237	N	
237	Resubmission	14 days	Wed 13/7/16	Tue 26/7/16	236	238	N	
238	Approval by Mott	14 days	Wed 27/7/16	Tue 9/8/16	237	239FF	N	
239	Approval by DSD	14 days	Wed 27/7/16	Tue 9/8/16	238FF	276	N	
240	<b>Flow Measurement Survey</b>	<b>453 days</b>	<b>Mon 13/10/14</b>	<b>Fri 8/1/16</b>				
241	Preparation and submission	17 days	Mon 13/10/14	Wed 29/10/14		242	N	
242	Resubmission	14 days	Wed 19/11/14	Tue 2/12/14	241	243	N	
243	Further comment by Mott	3 days	Wed 3/12/14	Fri 5/12/14	242	244	N	
244	Resubmission	48 days	Wed 17/12/14	Mon 2/2/15	243	245	N	
245	Approval by Mott	7 days	Tue 3/2/15	Mon 9/2/15	244	246FF	N	
246	Approval by DSD	7 days	Tue 3/2/15	Mon 9/2/15	245FF	248	N	
247	<b>Flow Survey Measurement report</b>	<b>243 days</b>	<b>Tue 10/2/15</b>	<b>Sat 10/10/15</b>				
248	Analyzing survey data	5 days	Tue 10/2/15	Sat 14/2/15	246	249	N	
249	Preparation and submission	126 days	Tue 3/3/15	Mon 6/7/15	248	253,250	N	
250	Approval by Mott	1 day	Tue 7/7/15	Tue 7/7/15	249	251	N	
251	Approval by DSD	95 days	Wed 8/7/15	Sat 10/10/15	250		N	
252	<b>Engineer's Assessment Report on Flow Measurement Survey</b>	<b>284 days</b>	<b>Tue 31/3/15</b>	<b>Fri 8/1/16</b>				
253	Assessment calculations	14 days	Wed 21/10/15	Tue 3/11/15	249	257	N	
254	Preparation and submission	203 days	Tue 3/3/15	Mon 19/10/15	255		N	
255	Further comment by Mott	1 day	Tue 20/10/15	Tue 20/10/15	254	256	N	
256	Resubmission	14 days	Wed 21/10/15	Tue 3/11/15	255	257	N	
257	Approval by Mott	10 days	Wed 4/11/15	Fri 13/11/15	256,253	258	N	
258	Approval by DSD	56 days	Sat 14/11/15	Fri 8/1/16	257	236	N	
259	<b>Video Filming and Dye Test</b>	<b>132 days</b>	<b>Thu 1/1/15</b>	<b>Tue 12/5/15</b>				
260	Preparation and submission	75 days	Thu 1/1/15	Mon 16/3/15		261,263FS-1 day	N	
261	Approval by Mott	2 days	Tue 17/3/15	Wed 18/3/15	260	262FF	N	
262	Approval by DSD	2 days	Tue 17/3/15	Wed 18/3/15	261FF		N	
263	Using digital camera in lieu of CCTV	58 days	Mon 16/3/15	Tue 12/5/15	260FS-1 day	280	N	
264	<b>Works</b>	<b>1337 days</b>	<b>Fri 30/8/13</b>	<b>Thu 27/4/17</b>				
265	<b>Preliminaries (Portion F)</b>	<b>258 days</b>	<b>Fri 30/8/13</b>	<b>Wed 14/5/14</b>				
266	<b>Contractor's mobilization</b>	<b>36 days</b>	<b>Fri 30/8/13</b>	<b>Fri 4/10/13</b>				
267	Site clearance	8 days	Fri 30/8/13	Fri 6/9/13		4SS,268	10	
268	Contractor's site office	28 days	Sat 7/9/13	Fri 4/10/13		267	10	
269	Security Guard	0 days	Fri 30/8/13	Fri 30/8/13		4SS	11	
270	Temporary electricity power supply	30 days	Fri 30/8/13	Sat 28/9/13		4SS	10	
271	Engineer's Initial Temporary Accommodation	14 days	Fri 30/8/13	Thu 12/9/13		4SS	10	
272	Engineer's Principal Accommodation	40 days	Tue 3/12/13	Sat 11/1/14		231	12	
273	Engineer's Car Park	14 days	Thu 1/5/14	Wed 14/5/14			12	
274	<b>Outfall Modification Works (Location see Drg No. S202)</b>	<b>261 days</b>	<b>Wed 10/8/16</b>	<b>Thu 27/4/17</b>				
275	<b>Procurement of material</b>	<b>120 days</b>	<b>Wed 10/8/16</b>	<b>Wed 7/12/16</b>				
276	Non return valves	120 days	Wed 10/8/16	Wed 7/12/16		239	277FF,279	N
277	Flange adaptors	120 days	Wed 10/8/16	Wed 7/12/16		276FF	282,279	N
278	1200mm diameter concrete pipes	60 days	Sun 9/10/16	Wed 7/12/16			282,279	N
279	Dye test	7 days	Thu 8/12/16	Wed 14/12/16		278,276,277	280FF	13
280	Video filming	7 days	Thu 8/12/16	Wed 14/12/16		279FF,263	281	14
281	Dredging works	7 days	Thu 15/12/16	Wed 21/12/16		280	282	7
282	Modification works	120 days	Thu 22/12/16	Thu 20/4/17		277,278,281	283	14
283	As-built video submission	7 days	Fri 21/4/17	Thu 27/4/17		282	221	N
284	<b>Extended Contract Completion Date</b>	<b>0 days</b>	<b>Mon 9/5/16</b>	<b>Mon 9/5/16</b>		3FF		



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

Appendix C  
Action and Limit Levels

Action and Limit Levels for Routine Water Quality Monitoring (Dry Season)

Monitoring Station	DO (mg/L) Surface & Middle		DO (mg/L) Bottom		Turbidity (NTU) Depth-Averaged		Suspended Solids (mg/L) Depth-averaged		BOD5(mg/L) Depth- averaged		E.coli (CFU /100mL) Depth-averaged		NH3-N (mg/L) Depth-averaged		UIA (mg/L) Depth-averaged		Synthetic Detergent as MBAS (mg/L) Depth- averaged		TIN (mg/L) Depth Averaged	
	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
Seawater Intake																				
SR4	2	2	2	2	<10	<10	<10	<10	<10	<10	<20,000	<20,000	<1	<1	0.021	0.021	<5	<5	NA	NA
SR12																				
Fish Culture Zone																				
SR5	5.45	5.39 <sup>#</sup>	5.43	5.27 <sup>+</sup>	6.7 or 120% <sup>C*</sup>	10.1 or 130% <sup>C^</sup>	12 or 120% <sup>C*</sup>	19 or 130% <sup>C^</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36	0.39
SR9	6.11	6.02 <sup>#</sup>	6.11	6.04 <sup>+</sup>	2.9 or 120% <sup>C*</sup>	4.8 or 130% <sup>C^</sup>	9 or 120% <sup>C*</sup>	18 or 130% <sup>C^</sup>												
SR10																				
SR11																				
Gazetted Beach																				
SR2	5.45	5.39 <sup>#</sup>	5.43	5.27 <sup>+</sup>	6.7 or 120% <sup>C*</sup>	10.1 or 130% <sup>C^</sup>	12 or 120% <sup>C*</sup>	19 or 130% <sup>C^</sup>	NA	NA	NA	NA	0.21 or 120% <sup>C*</sup>	0.24 or 130% <sup>C^</sup>	0.021	0.021	NA	NA	NA	NA
SR3																				
Corals																				
SR6	6.11	6.02 <sup>#</sup>	6.11	6.04 <sup>+</sup>	2.9 or 120% <sup>C*</sup>	4.8 or 130% <sup>C^</sup>	9 or 120% <sup>C*</sup>	18 or 130% <sup>C^</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7																				
SR8																				
EMSD Cooling Water Intake																				
SR13	5.31	5.22 <sup>#</sup>	5.29	5.12 <sup>+</sup>	13.1 or 120% <sup>C*</sup>	15.7 or 130% <sup>C^</sup>	23 or 120% <sup>C*</sup>	38 or 130% <sup>C^</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note:

\* Or 120% of upstream control station at the same tide of the day

^ Or 130% of upstream control station at the same tide of the day

# According to EM&A Manual, LL of DO (surface & middle) is 5 mg/L or 1 percentile of baseline data in FCZ; 4 mg/L or 1 percentile of baseline data in other impact monitoring stations.

+ According to EM&A Manual, LL of DO (bottom) is 2 mg/L or 1 percentile of baseline data

For DO measurement, non-compliance occurs when monitoring result is lower than the limits;

For TIN, UIA, NH<sub>3</sub>-N, SS, BOD<sub>5</sub>, E.coli, synthetic detergent and turbidity, non-compliance of water quality results when monitoring results is higher than the limits;

AL/LL of TIN and NH<sub>3</sub>-N are determined from laboratory results for better accuracy and reliability. These AL/LL will be applied to both laboratory and in-situ measurements at impact stage.

Dry Season: November to March

## Action and Limit Levels for Routine Water Quality Monitoring (Wet Season)

Monitoring Station	DO (mg/L) Surface & Middle		DO (mg/L) Bottom		Turbidity (NTU) Depth-Averaged		Suspended Solids (mg/L) Depth-averaged		BOD5 (mg/L) Depth-averaged		E.coli (CFU /100mL) Depth-averaged		NH3-N (mg/L) Depth-averaged		UIA (mg/L) Depth-averaged		Synthetic Detergent as MBAS (mg/L) Depth-averaged		TIN (mg/L) Depth Averaged	
	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
Seawater Intake																				
SR4	2	2	2	2	<10	<10	<10	<10	<10	<10	<20,000	<20,000	<1	<1	0.021	0.021	<5	<5	NA	NA
SR12																				
Fish Culture Zone																				
SR5	5.00#	5.00#	4.11	4.04+	10.8 or 120%C*	15.0 or 130%C^	12 or 120%C*	19 or 130%C^											0.45	0.50
SR9									NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	5.00	5.00#	4.41	4.25+	4.0 or 120%C*	8.7 or 130%C^	9 or 120%C*	18 or 130%C^											0.37	0.49
SR11																				
Gazetted Beach																				
SR2	4.68	4.62#	4.11	4.04+	10.8 or 120%C*	15.0 or 130%C^	12 or 120%C*	19 or 130%C^	NA	NA	NA	NA	0.21 or 120%C*	0.24 or 130%C^	0.021	0.021	NA	NA	NA	NA
SR3																				
Corals																				
SR6																				
SR7	5.00	4.82#	4.41	4.25+	4.0 or 120%C*	8.7 or 130%C^	9 or 120%C*	18 or 130%C^	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR8																				
EMSD Cooling Water Intake																				
SR13	4.24	4.17#	3.70	3.58+	13.1 or 120%C*	15.7 or 130%C^	23 or 120%C*	38 or 130%C^	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note:

\* Or 120% of upstream control station at the same tide of the day

^ Or 130% of upstream control station at the same tide of the day

# According to EM&A Manual, LL of DO (surface & middle) is 5 mg/L or 1 percentile of baseline data in FCZ; 4 mg/L or 1 percentile of baseline data in other impact monitoring stations. (5%ile & 1 %ile determined from wet season baseline data for cluster 1 (4.68mg/L & 4.62mg/L) and cluster 2 (5.00mg/L & 4.82mg/L) are 5mg/L or below, thus 5mg/L was adopted as the AL & LL for the SR in FCZ)

+ According to EM&A Manual, LL of DO (bottom) is 2 mg/L or 1 percentile of baseline data

Referring to the ER Letter ref. (CV/2013/04)/M45/400/1247 dated 19 March 2015, a Revised Baseline Water Quality Monitoring Test Methodology – Review of Action and Limit Levels has been submitted to EPD by ER in March 2015. The Action and Limit Level for the wet season (April – October) was effected and applied to the water quality monitoring data from 1 April 2015.

For DO measurement, non-compliance occurs when monitoring result is lower than the limits;

For TIN, UIA, NH<sub>3</sub>-N, SS, BOD<sub>5</sub>, E.coli, synthetic detergent and turbidity, non-compliance of water quality results when monitoring results is higher than the limits;

AL/LL of TIN and NH<sub>3</sub>-N are determined from laboratory results for better accuracy and reliability. These AL/LL will be applied to both laboratory and in-situ measurements at impact stage.

Wet season: April to October

Action and Limit Levels for 24-hr Water Quality Monitoring (Dry Season)

Monitoring Station	DO (mg/L) Surface		Turbidity (NTU) Surface		Ammonia-N (mg/L) Surface	
	AL	LL	AL	LL	AL	LL
WSD Seawater Intake						
SR4	2	2	<10	<10	<1	<1
SR12						
Fish Culture Zone						
SR5	5.46	5.39	6.0	7.9	NA	NA
SR9	6.12	5.97	2.8	4.7		
SR10						
SR11						
EMSD Cooling Water Intake						
SR13	5.28	5.22	11.9	13.3	NA	NA

Note: According to EM&A Manual, LL of DO (surface & middle) is 5 mg/L or 1 percentile of baseline data in FCZ; 4 mg/L or 1 percentile of baseline data in other impact monitoring stations.

Dry Season: November to March.

Action and Limit Levels for 24-hr Water Quality Monitoring (Wet Season)

Monitoring Station	DO (mg/L) Surface		Turbidity (NTU) Surface		Ammonia-N (mg/L) Surface	
	AL	LL	AL	LL	AL	LL
WSD Seawater Intake						
SR4	2	2	<10	<10	<1	<1
SR12						
Fish Culture Zone						
SR5	5.24	5.13	9.7	14.4	NA	NA
SR9	5.13	5.00#	5.9	7.1		
SR10						
SR11						
EMSD Cooling Water Intake						
SR13	4.23	4.17	11.9	13.3	NA	NA

Note: # According to EM&A Manual, LL of DO (surface & middle) is 5 mg/L or 1 percentile of baseline data in FCZ; 4 mg/L or 1 percentile of baseline data in other impact monitoring stations. (1 %ile determined from wet season baseline data for cluster 2 (4.78mg/L) is below 5mg/L, thus 5mg/L was adopted as the DO (surface) LL for the SR in FCZ in cluster 2 stations)

Referring to the ER Letter ref. (CV/2013/04)/M45/400/1247 dated 19 March 2015, a Revised Baseline Water Quality Monitoring Test Methodology – Review of Action and Limit Levels has been submitted to EPD by ER in March 2015. The Action and Limit Level for the wet season (April – October) was effected and applied to the water quality monitoring data from 1 April 2015.

Wet Season: April to October.



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

Appendix D  
Copies of Calibration Certificates

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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Report No.: 0394/13/ED/0353B

Calibration Certificates  
Impact Monitoring

## FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : MaterialLab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102900

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161826/1

Date sample received : 01/11/2016

Date of calibration : 02/11/2016

Next calibration date : 01/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com



Report No. : 142626WA161826

Page 2 of 3

**Results :****A. pH calibration**

pH reading at 22°C for Q.C. solution(6.86) and at 22°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.07	-0.11
6.86	6.86	0.00

**B. Salinity calibration**

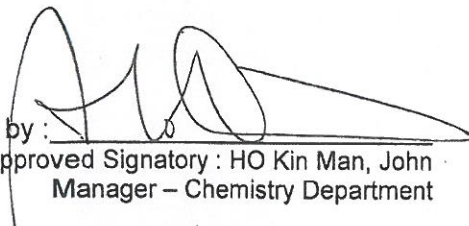
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.04	+0.04	± 0.5
20	20.02	+0.02	± 1.0
30	30.12	+0.12	± 1.5
40	39.82	-0.18	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.86	8.76
2	8.82	8.76
3	8.61	8.77
Average	8.76	8.76

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/11/2016

Note : This report refers only to the sample(s) tested.

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

## MaterialLab

Report No. : 142626WA161826

Page 3 of 3

### Results :

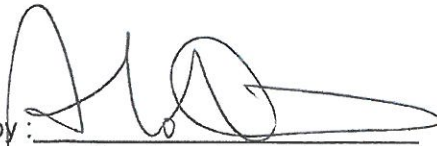
#### D. Temperature calibration

Thermometer reading, °C	Meter reading, °C
21.4	21.45

#### E. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.3	+0.30	± 0.5
4	3.8	-0.20	± 0.6
8	8.3	+0.30	± 0.8
40	39.2	-0.80	± 3.0
80	79.4	-0.60	± 4.0

Supervised by : Y. M. Chung

Certified by : 

Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/11/2016

\*\* End of Report \*\*

Note : This report refers only to the sample(s) tested.



## FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# Materialab

Report No. : 142626WA161826



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102901

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161826/1

Date sample received : 01/11/2016

Date of calibration : 02/11/2016

Next calibration date : 01/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826

Page 2 of 3

**Results :**

**A. pH calibration**

pH reading at 23°C for Q.C. solution(6.86) and at 23°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.10	-0.08
6.86	6.86	0.00

**B. Salinity calibration**

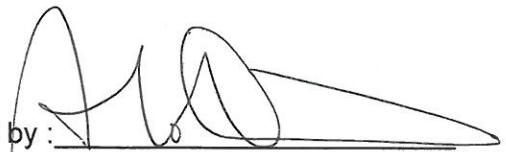
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.11	+0.11	± 0.5
20	20.21	+0.21	± 1.0
30	30.16	+0.16	± 1.5
40	40.25	+0.25	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.21	8.31
2	8.49	8.34
3	8.41	8.28
Average	8.37	8.31

Differences of D.O. Content between Winkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/11/2016

*Note : This report refers only to the sample(s) tested.*

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826

Page 3 of 3

## Results :

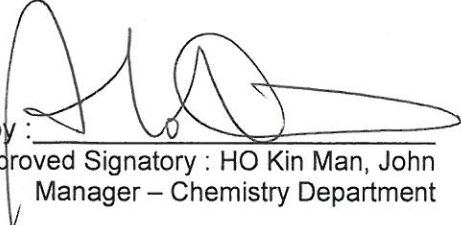
### D. Temperature calibration

Thermometer reading, °C	Meter reading, °C
23.8	23.55

### E. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	-0.2	-0.20	± 0.5
4	4.4	+0.40	± 0.6
8	8.3	+0.30	± 0.8
40	39.8	-0.20	± 3.0
80	81.1	+1.10	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/4/2016

\*\* End of Report \*\*

*Note : This report refers only to the sample(s) tested.*



**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab****Photometer Check Log**

Calibration Date:	22 December 2016		
Parameter:	NO <sub>2</sub> -N		
Check Solution ID:	0.2 mg/L NO <sub>2</sub> -N		
Check Solution Prepared by:	Fugro Technical Services		
Check Solution Concentration (mg/L):	0.2 mg N/L		
Equipment (Brand & Model, Equipment No.):	Loiibond MD600 W-18	Loiibond MD600 W-20	Loiibond MD600 W-21
Concentration Reading on Photometer:	0.20 mg/L	0.20 mg/L	0.19 mg/L
Next Calibration Date:	21 January 2017		

Prepared by: Date: 22 December 2016Checked by: Date: 22 December 2016

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab****Photometer Check Log**

Calibration Date:	22 December 2016		
Parameter:	NH <sub>3</sub> -N		
Check Solution ID:	0.2 mg/L NH <sub>3</sub> -N		
Check Solution Prepared by:	Fugro Technical Services		
Check Solution Concentration (mg/L):	0.2 mg N/L		
Equipment (Brand & Model, Equipment No.):	Lovibond MD600 W-18	Lovibond MD600 W-20	Lovibond MD600 W-21
Concentration Reading on Photometer:	0.19 mg/L	0.19 mg/L	0.19 mg/L
Next Calibration Date:	21 January 2017		

Prepared by: \_\_\_\_\_

Date: 22 December 2016

Checked by: \_\_\_\_\_

Date: 22 December 2016









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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

Calibration Certificate  
24-hr Monitoring

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

**MaterialLab**

---

Calibration Certificate  
24-hr Monitoring – SR4



# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# Materialab

Report No. : 142626WA161826(1)



Page 1 of 2

## Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102903

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

### Laboratory Information

Lab. sample ID : WA161826/2

Date sample received : 01/11/2016

Date of calibration : 02/11/2016

Next calibration date : 01/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826(1)

Page 2 of 2

**Results :**

**A. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.45	8.47
2	8.45	8.46
3	8.25	8.44
Average	8.38	8.46

Differences of D.O. Content between Winkler Titration and D.O. meter should be less than 0.2 mg/L

**B. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
23.4	23.10

**C. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.0	0.00	± 0.8
4	4.4	+0.40	± 1.2
8	8.3	+0.30	± 1.5
40	40.2	+0.20	± 3.0
80	79.7	-0.30	± 4.0

Supervised by : Y. M. Chung

Certified by : 

Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/11/2016

**\*\* End of Report \*\***

*Note : This report refers only to the sample(s) tested.*

---

**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

---

**MaterialLab**

---

Calibration Certificate  
24-hr Monitoring – SR5

## FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826(3)



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : MaterialLab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102899

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161826/4

Date sample received : 01/11/2016

Date of calibration : 21/11/2016

Next calibration date : 20/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*



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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

**MaterialLab**

Report No. : 142626WA161826(3)

Page 2 of 3

**Results :****A. pH calibration**

pH reading at 23°C for Q.C. solution(6.86) and at 23°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.12	-0.06
6.86	6.72	-0.14

**B. Salinity calibration**

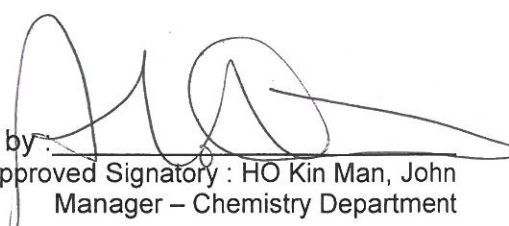
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.40	+0.40	± 0.5
20	20.63	+0.63	± 1.0
30	30.41	+0.41	± 1.5
40	40.51	+0.51	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.32	8.49
2	8.42	8.56
3	8.52	8.53
Average	8.42	8.53

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 24/11/2016

Note : This report refers only to the sample(s) tested.

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826(3)

Page 3 of 3

## Results :

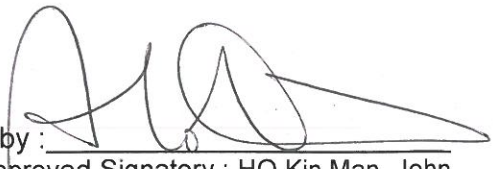
### D. Temperature calibration

Thermometer reading, °C	Meter reading, °C
22.7	22.51

### E. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.63	+0.63	± 0.7
4	4.76	+0.76	± 0.8
8	8.01	+0.01	± 1.0
40	39.5	-0.50	± 3.0
80	80.3	+0.30	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 24/11/2016

\*\* End of Report \*\*

Note : This report refers only to the sample(s) tested.

---

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

**MaterialLab**

---

Calibration Certificate  
24-hr Monitoring – SR9

## FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA161826(3)



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : MaterialLab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102906

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161826/4

Date sample received : 01/11/2016

Date of calibration : 21/11/2016

Next calibration date : 20/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*



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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

**MaterialLab**

Report No. : 142626WA161826(3)

Page 2 of 3

**Results :****A. pH calibration**

pH reading at 22°C for Q.C. solution(6.86) and at 22°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.10	-0.08
6.86	6.88	+0.02

**B. Salinity calibration**

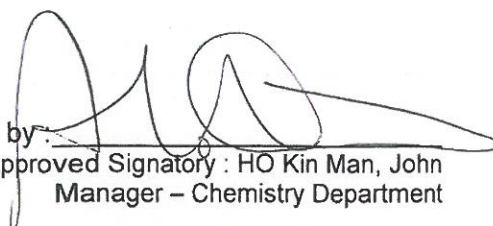
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.04	+0.04	± 0.5
20	20.19	+0.19	± 1.0
30	30.11	+0.11	± 1.5
40	40.23	+0.23	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.11	8.22
2	8.11	8.25
3	8.23	8.27
Average	8.15	8.25

Differences of D.O. Content between Winkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by:   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 24/11/2016

Note : This report refers only to the sample(s) tested.

**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com



Report No. : 142626WA161826(3)

Page 3 of 3

**Results :**


**D. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
22.3	22.17

**E. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	-0.2	-0.20	± 0.5
4	4.5	+0.50	± 0.6
8	8.0	0.00	± 0.8
40	39.2	-0.80	± 3.0
80	80.4	+0.40	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 24/11/2016

**\*\* End of Report \*\***

*Note : This report refers only to the sample(s) tested.*

---

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is white and is set against a black rectangular background that has horizontal bars extending to the left and right, creating a stylized, framed effect.

Calibration Certificate  
24-hr Monitoring – SR10

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com.hk

# Materialab

Report No. : 142626WA161616



Page 1 of 2

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14E102239

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161616/1

Date sample received : 07/10/2016

Date of calibration : 08/10/2016

Next calibration date : 07/01/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*



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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com .hk

**Materialab**

Report No. : 142626WA161616

Page 2 of 2

**Results :****A. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.37	8.23
2	8.45	8.25
3	8.08	8.27
Average	8.30	8.25

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

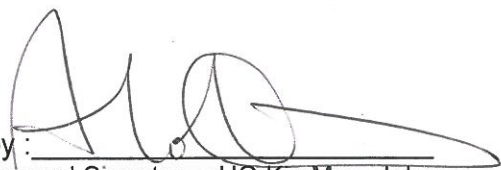
**B. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
22.10	21.55

**C. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.2	+0.20	± 0.8
4	4.2	+0.20	± 1.2
8	8.4	+0.40	± 1.5
40	39.8	-0.20	± 3.0
80	80.4	+0.40	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 30/10/2016

\*\* End of Report \*\*

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# Materialab

Report No. : 142626WA170045



Page 1 of 3

## Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

### Information Supplied by Client

Client : Materialab Consultants Limited  
Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.  
Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel  
Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter  
Client sample ID : Serial No. 14E101875  
Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

### Laboratory Information

Lab. sample ID : WA170045/1  
Date sample received : 06/01/2017  
Date of calibration : 06/01/2017  
Next calibration date : 05/04/2017  
Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com



Report No. : 142626WA170045

Page 2 of 3

**Results :**

**A. Salinity calibration**


Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	9.85	-0.15	± 0.5
20	19.80	-0.20	± 1.0
30	30.03	+0.03	± 1.5
40	40.24	+0.24	± 2.0

**B. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.74	8.60
2	8.51	8.67
3	8.88	8.72
Average	8.71	8.66

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.4 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 26/1/2017

*Note : This report refers only to the sample(s) tested.*

# FUGRO TECHNICAL SERVICES LIMITED

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5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA170045

Page 3 of 3

## Results :

### C. Temperature calibration

Thermometer reading, °C	Meter reading, °C
21.4	21.52

### D. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.6	+0.60	± 0.6
4	4.6	+0.60	± 0.7
8	8.6	+0.60	± 0.8
40	41.8	+1.80	± 3.0
80	84.7	+4.70	± 6.0

Supervised by : Y. M. Chung

Certified by : 

Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 26/11/2017

\*\* End of Report \*\*

Note : This report refers only to the sample(s) tested.



---

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)



Calibration Certificate  
24-hr Monitoring – SR11

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# Materialab

Report No. : 142626WA161826(2)



Page 1 of 2

## Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102907

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

### Laboratory Information

Lab. sample ID : WA161826/3

Date sample received : 01/11/2016

Date of calibration : 02/11/2016

Next calibration date : 01/02/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

## MaterialLab

Report No. : 142626WA161826(2)

Page 2 of 2

### Results :

#### A. Dissolved Oxygen calibration

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.49	8.46
2	8.33	8.43
3	8.25	8.45
Average	8.36	8.45

Differences of D.O. Content between Winkler Titration and D.O. meter should be less than 0.2 mg/L

#### B. Temperature calibration

Thermometer reading, °C	Meter reading, °C
23.5	23.04

#### C. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.3	+0.30	± 0.8
4	4.1	+0.10	± 1.2
8	8.3	+0.30	± 1.5
40	39.7	-0.30	± 3.0
80	80.0	0.00	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 23/11/2016

\*\* End of Report \*\*

Note : This report refers only to the sample(s) tested.

---

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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Calibration Certificate  
24-hr Monitoring – SR12

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com .hk

# Materialab

Report No. : 142626WA161616(2)



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 15A104748

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161616/3

Date sample received : 07/10/2016

Date of calibration : 08/10/2016

Next calibration date : 07/01/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*



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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com.hk

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Report No. : 142626WA161616(2)

Page 2 of 3

**Results :****A. pH calibration**

pH reading at 21°C for Q.C. solution(6.86) and at 21°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.18	0.00
6.86	6.91	+0.05

**B. Salinity calibration**

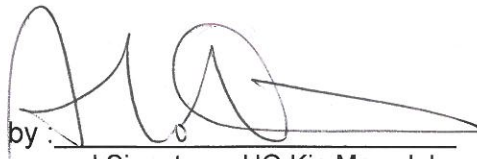
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.18	+0.18	± 0.5
20	20.23	+0.23	± 1.0
30	30.16	+0.16	± 1.5
40	40.17	+0.17	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.25	8.40
2	8.45	8.57
3	8.49	8.67
Average	8.40	8.55

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 31/10/2016

Note : This report refers only to the sample(s) tested.

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com .hk



Report No. : 142626WA161616(2)

Page 3 of 3


**Results :****D. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
21.60	21.25

**E. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	-0.3	-0.30	± 0.5
4	4.0	0.00	± 0.6
8	7.9	-0.10	± 0.8
40	40.5	+0.50	± 3.0
80	79.6	-0.40	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date

\*\* End of Report \*\*

31/10/2016

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA170045(1)



Page 1 of 2

## Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

### Information Supplied by Client

Client : MaterialLab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102898

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

### Laboratory Information

Lab. sample ID : WA170045/2

Date sample received : 06/01/2017

Date of calibration : 06/01/2017

Next calibration date : 05/04/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*



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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA170045(1)

Page 2 of 2

**Results :****A. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.72	8.90
2	8.88	8.94
3	8.64	8.85
Average	8.75	8.90

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.4 mg/L


**B. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
20.4	20.49

**C. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.0	0.00	± 0.8
4	4.4	+0.40	± 1.2
8	7.7	-0.30	± 1.5
40	39.4	-0.60	± 3.0
80	80.2	+0.20	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 26/11/2017

\*\* End of Report \*\*

Note : This report refers only to the sample(s) tested.

---

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

**Materialab**

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Calibration Certificate  
24-hr Monitoring – SR13

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com.hk

# Materialab

Report No. : 142626WA161616(1)



Page 1 of 3

### Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

#### Information Supplied by Client

Client : Materialab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102908

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

#### Laboratory Information

Lab. sample ID : WA161616/2

Date sample received : 07/10/2016

Date of calibration : 08/10/2016

Next calibration date : 07/01/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com .hk

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Report No. : 142626WA161616(1)

Page 2 of 3

**Results :****A. pH calibration**

pH reading at 21°C for Q.C. solution(6.86) and at 21°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.11	-0.07
6.86	6.90	+0.04

**B. Salinity calibration**

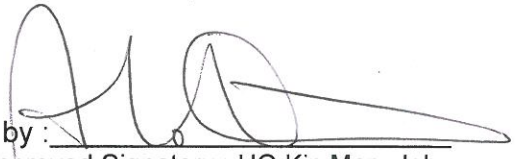
Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
10	10.29	+0.29	± 0.5
20	20.37	+0.37	± 1.0
30	30.59	+0.59	± 1.5
40	40.84	+0.84	± 2.0

**C. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.53	8.40
2	8.13	8.32
3	8.37	8.27
Average	8.34	8.33

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 31/10/2016

Note : This report refers only to the sample(s) tested.

**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.materialab.com.hk



Report No. : 142626WA161616(1)

Page 3 of 3

**Results :****D. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
21.20	21.03

**E. Turbidity calibration**

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.3	+0.30	± 0.5
4	4.3	+0.30	± 0.6
8	8.2	+0.20	± 0.8
40	40.0	0.00	± 3.0
80	79.3	-0.70	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 31/10/2016

**\*\* End of Report \*\***

*Note : This report refers only to the sample(s) tested.*



# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA170045(2)



Page 1 of 3

## Report on Calibration of YSI 69201V2-M Multi-parameter Water Quality Meter

### Information Supplied by Client

Client : MaterialLab Consultants Limited

Client's address : Rm. 23, 25, 7/F, Profit Industrial Building, No. 1-15,  
Kwai Fung Crescent, Kwai Chung, N.T.

Project : CV/2013/04 – Providing Sufficient Water Depth for  
Kwai Tsing Container Basin and its Approach Channel

Sample description : One YSI 69201V2-M Multi-parameter Water Quality Meter

Client sample ID : Serial No. 14A102902

Test required : Calibration of the YSI 69201V2-M Multi-parameter Water Quality  
Meter

### Laboratory Information

Lab. sample ID : WA170045/3

Date sample received : 06/01/2017

Date of calibration : 06/01/2017

Next calibration date : 05/04/2017

Test method used : In-house comparison method

*Note : This report refers only to the sample(s) tested.*

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Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

# MaterialLab

Report No. : 142626WA170045(2)

Page 2 of 3

**Results :**

**A. pH calibration**

pH reading at 21°C for Q.C. solution(6.86) and at 21°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.12	-0.06
6.86	6.91	+0.05

**B. Dissolved Oxygen calibration**

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.81	8.78
2	8.88	8.80
3	8.68	8.86
Average	8.79	8.81

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.4 mg/L

**C. Temperature calibration**

Thermometer reading, °C	Meter reading, °C
21.75	21.6

Supervised by : Y. M. Chung

Certified by : 

Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 26/11/2017

*Note : This report refers only to the sample(s) tested.*

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
Hong Kong.

Tel : +852 2450 8233  
Fax : +852 2450 6138  
E-mail : matlab@fugro.com  
Website : www.fugro.com

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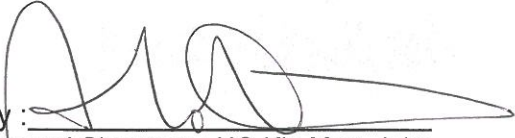
Page 3 of 3

## Results :

### D. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
0	0.3	+0.30	± 0.8
4	4.5	+0.50	± 1.2
8	8.8	+0.80	± 1.5
40	39.2	-0.80	± 3.0
80	81.3	+1.30	± 4.0

Supervised by : Y. M. Chung

Certified by :   
Approved Signatory : HO Kin Man, John  
Manager – Chemistry Department

Date : 26/11/2017

\*\* End of Report \*\*

*Note : This report refers only to the sample(s) tested.*



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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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Report No.: 0394/13/ED/0353B

Appendix E

Schedules for Routine Impact Water Quality Monitoring

Water Quality Monitoring Schedule (Present Reporting Period)

Sun	Mon	Tue	Wed	Thur	Fri	Sat
					23 December 2016	24 Routine WQM Mid-Ebb (9:04) Mid-Flood (15:09)
25	26	27 Routine WQM Mid-Flood (6:11) Mid-Ebb (11:28)	28	29 Routine WQM Mid-Flood (7:23) Mid-Ebb (13:20)	30	31 Routine WQM Mid-Flood (8:30) Mid-Ebb (14:03)
1 January 2017	2	3 Routine WQM Mid-Flood (10:26) Mid-Ebb (16:13)	4	5 Routine WQM Mid-Flood (11:58) Mid-Flood (18:07)	6	7 Routine WQM Mid-Ebb (6:54) Mid-Flood (13:38)
8	9	10 Routine WQM Mid-Ebb (10:35) Mid-Flood (16:11)	11	12 Routine WQM Mid-Ebb (12:30) Mid-Flood (17:47)	13	14 Routine WQM Mid-Flood (8:28) Mid-Ebb (14:00)
15	16	17 Routine WQM Mid-Flood (10:26) Mid-Ebb (16:07)	18	19 Routine WQM Mid-Flood (11:47) Mid-Ebb (17:51)	20	21 Routine WQM Mid-Ebb (6:19) Mid-Flood (13:17)
22						

**Remarks**

- Actual monitoring will be subjected to change due to any safety concern or adverse weather condition.

Water Quality Monitoring Schedule (Next Reporting Period)

Sun	Mon	Tue	Wed	Thur	Fri	Sat
	23 January 2017 Routine WQM Mid-Ebb (9:15) Mid-Flood (14:36)	24	25 Routine WQM Mid-Ebb (11:08) Mid-Flood (16:06)	26	27 Routine WQM Mid-Flood (7:08) Mid-Ebb (12:30)	28
29	30	31 Routine WQM Mid-Flood (8:55) Mid-Ebb (14:46)	1 February 2017	2 Routine WQM Mid-Flood (10:20) Mid-Ebb (16:26)	3	4 Routine WQM Mid-Flood (11:58) Mid-Ebb (18:51)
5	6	7 Routine WQM Mid-Ebb (09:24) Mid-Flood (14:55)	8	9 Routine WQM Mid-Ebb (11:35) Mid-Flood (16:51)	10	11 Routine WQM Mid-Flood (07:24) Mid-Ebb (13:00)
12	13	14 Routine WQM Mid-Flood (08:42) Mid-Ebb (14:32)	15	16 Routine WQM Mid-Flood (09:43) Mid-Ebb (15:46)	17	18 Routine WQM Mid-Flood (10:58) Mid-Ebb (17:32)
19	20	21 Routine WQM Mid-Ebb (08:53) Mid-Flood (13:32)	22			

**Remarks**

1. Actual monitoring will be subjected to change due to any safety concern or adverse weather condition.
2. Refer to Section 2.1.4 of the EM&A Manual, "Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)" (0394\_13\_ED\_0332I) was submitted to EPD, AFCD, WSD and EMSD on 20 December 2016. No objection was received from relevant parties. The approved proposal will be executed from 23 January 2017.
3. According to the approved proposal (0394\_13\_ED\_0332I), starting from 23 January 2017, routine impact water quality monitoring locations are SR2, SR3, SR4, SR5, SR12, SR13, G2, C1A and C2A.

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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Report No.: 0394/13/ED/0353B

Appendix F

Water Quality Monitoring Results and Graphical Presentation – Routine Impact Monitoring





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																									
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	S	1	1	8.16		29.88	29.88	21.44	21.44	95.9	96.0	7.13	7.14		2.0	2.0		NA	NA	NA	NA	NA	0.41	0.16	0.01	0.58			
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	S	1	2	8.16		29.88	29.88	21.44	21.44	96.0	96.0	7.14	7.14		2.0	2.0		NA	NA	NA	NA	NA	0.42	0.14	0.01	0.57	0.57		
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	S	1	3																			0.42	0.14	0.01	0.57				
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	M	7	1	8.26		30.29	30.29	21.44	21.44	100.1	100.2	7.42	7.44		1.5	1.5		NA	NA	NA	NA	NA	0.23	0.16	0.01	0.40			
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	M	7	2	8.26		30.29	30.29	21.44	21.44	100.3	100.2	7.44	7.43		1.5	1.5		NA	NA	NA	NA	NA	0.24	0.14	0.01	0.39	0.39	0.45	
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	M	7	3																		0.23	0.13	0.01	0.37					
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	B	13	1	8.28		30.34	30.34	21.43	21.43	100.9	101.0	7.47	7.48		9.8	9.8		NA	NA	NA	NA	NA	0.24	0.14	0.01	0.39			
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	B	13	2	2.28	5.28	30.34	30.34	21.43	21.43	101.0	101.0	7.48	7.48		9.8	9.8		NA	NA	NA	NA	NA	0.26	0.14	0.01	0.41			
G4	24/12/2016	Mid-Flood	Cloudy	Moderate	13:35	14	B	13	3																		0.26	0.13	0.01	0.41					
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	S	1	1	8.05		30.20	30.20	21.17	21.17	108.2	108.2	8.05	8.05		2.3	2.3		NA	NA	NA	NA	NA	0.06	0.12	0.01	0.19			
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	S	1	2	8.05		30.20	30.20	21.17	21.17	108.2	108.2	8.05	8.05		2.3	2.3		NA	NA	NA	NA	NA	0.05	0.14	0.01	0.20	0.19		
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	S	1	3																		0.05	0.13	0.01	0.19					
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	M	3.5	1	8.06		30.25	30.25	21.19	21.19	108.3	108.3	8.07	8.07		2.4	2.4		NA	NA	NA	NA	NA	0.04	0.14	0.01	0.19			
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	M	3.5	2	8.06		30.25	30.25	21.19	21.19	108.3	108.3	8.07	8.07		2.4	2.4		NA	NA	NA	NA	NA	0.04	0.13	0.01	0.18	0.19	0.19	
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	M	3.5	3																		0.04	0.14	0.01	0.19					
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	B	6	1	8.07		30.26	30.26	21.19	21.19	107.9	107.9	8.02	8.02		3.5	3.5		NA	NA	NA	NA	NA	0.05	0.13	0.01	0.19			
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	B	6	2	8.07		30.26	30.26	21.19	21.19	107.9	107.9	8.02	8.02		3.5	3.5		NA	NA	NA	NA	NA	0.05	0.14	0.01	0.20	0.19		
G5	24/12/2016	Mid-Flood	Fine	Moderate	13:50	7	B	6	3																		0.05	0.13	0.01	0.19					
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	S	1	1	8.17		30.37	30.37	21.11	21.11	109.8	109.8	8.18	8.18		0.5	0.5		NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09			
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	S	1	2	8.17		30.37	30.37	21.11	21.11	109.8	109.8	8.18	8.18		0.5	0.5		NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10			
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	S	1	3																		0.01	0.08	0.01	0.10					
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	M	16	1	8.16		30.37	30.37	21.10	21.10	110.5	110.5	8.23	8.23		0.4	0.4		NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09			
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	M	16	2	8.16		30.37	30.37	21.10	21.10	110.5	110.5	8.23	8.23		0.4	0.4		NA	NA	NA	NA	NA	0.01	0.06	0.01	0.08	0.09	0.09	
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	M	16	3																		0.01	0.07	0.01	0.09					
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	B	31	1	8.15		30.36	30.36	21.11	21.11	110.2	110.2	8.20	8.20		0.4	0.4		NA	NA	NA	NA	NA	0.01	0.06	0.01	0.08			
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	B	31	2	8.15		30.36	30.36	21.11	21.11	110.2	110.2	8.20	8.20		0.4	0.4		NA	NA	NA	NA	NA	0.01	0.06	0.01	0.08			
G6	24/12/2016	Mid-Flood	Fine	Moderate	12:45	32	B	31	3																		0.01	0.07	0.01	0.09					
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	S	1	1	8.25		30.22	30.22	21.41	21.41	100.7	100.7	7.47	7.46		0.9	0.9		0.13	0.13		0.008	0.007	0.007	0.007	0.007	0.007	NA		
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	S	1	2	8.25		30.22	30.22	21.41	21.41	100.6	100.6	7.46	7.46		0.9	0.9		0.12	0.13		0.007	0.007	0.007	0.007	0.007	0.007	NA		
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	S	1	3																		NA	NA	NA	NA	NA	NA	NA		
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	M	4	1	8.24		30.22	30.22	21.42	21.42	99.7	99.8	7.39	7.37		0.8	0.8		0.13	0.14		0.008	0.008	0.008	0.008	0.008	0.008	0.007	NA	
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	M	4	2	8.24		30.22	30.22	21.42	21.42	99.8	99.8	7.37	7.38		0.8	0.8		0.14	0.14		0.008	0.008	0.008	0.008	0.008	0.008	0.007	NA	
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	M	4	3																		NA	NA	NA	NA	NA	NA	NA		
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	B	7	1	8.24		30.22	30.22	21.42	21.42	99.9	99.9	7.40	7.40		0.8	0.8		0.12	0.12		0.007	0.007	0.007	0.007	0.007	0.007	0.007	NA	
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	B	7	2	8.24		30.22	30.22	21.42	21.42	99.9	99.9	7.39	7.40		0.8	0.8		0.11	0.12		0.006	0.006	0.006	0.006	0.006	0.006	0.007	NA	
SR2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:30	8	B	7	3																		NA	NA	NA	NA	NA	NA	NA		
SR3	24/12/2016	Mid-Flood	Cloudy	Moderate	12:40	7	S	1	1	8.20		30.14	30.14	21.35	21.35	97.6	97.6	7.25	7.25		0.8	0.8		0.12	0.12		0.006	0.006	0.006	0.006	0.006	0.006	0.006	NA	
SR3	24/12/2016	Mid-Flood	Cloudy	Moderate	12:40	7	S	1	2	8.20		30.14	30.14	21.35	21.35	97.5	97.6	7.24	7.25		0.8	0.8		0.12	0.12		0.006	0.006	0.006	0.006	0.006	0.006	0.006	NA	
SR3	24/12/2016	Mid-Flood	Cloudy	Moderate	12:40	7	S	1	3																		NA	NA	NA	NA	NA	NA	NA		
SR3	24/12/2016	Mid-Flood	Cloudy	Moderate	12:40	7	M	3.5	1	8.20		30.15	30.15	21.35	21.35	97.7	97.7	7.26	7.26		1.1	1.1		0.12	0.13		0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	NA
SR3	24/12/2016	Mid-Flood	Cloudy	Moderate	12:40	7	M	3.5	2	8.20																									



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																							
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)					
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	1	8.16	30.35	30.35	20.98	20.98	109.4	109.4	8.17	8.17	8.17	0.8	0.8	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	2	8.16	30.35	30.35	20.98	20.98	109.4	109.4	8.17	8.17	8.17	0.8	0.8	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	3	8.16	30.35	30.35	20.98	20.98	109.4	109.4	8.17	8.17	8.17	0.8	0.8	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	1	8.15	30.34	30.34	20.98	20.98	108.2	108.2	8.07	8.07	8.07	0.9	0.9	8.12	NA	NA	NA	NA	NA	0.01	0.10	0.01	0.12	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	2	8.15	30.34	30.34	20.97	20.98	108.2	108.2	8.07	8.07	8.07	0.9	0.9	8.12	NA	NA	NA	NA	NA	0.02	0.08	0.01	0.11	0.11	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	3	8.15	30.34	30.34	20.97	20.98	108.2	108.2	8.07	8.07	8.07	0.9	0.9	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	1	8.15	30.33	30.33	21.00	21.00	107.7	107.7	8.05	8.05	8.05	1.5	1.5	8.12	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	2	8.15	30.33	30.33	21.00	21.00	107.7	107.7	8.05	8.05	8.05	1.5	1.5	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	3	8.15	30.33	30.33	21.00	21.00	107.7	107.7	8.05	8.05	8.05	1.5	1.5	8.12	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	1	8.15	30.33	30.33	20.96	20.96	107.9	107.9	8.05	8.05	8.05	1.2	1.2	8.04	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.11	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	2	8.15	30.33	30.33	20.95	20.96	107.9	107.9	8.05	8.05	8.05	1.2	1.2	8.04	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.11	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	3	8.15	30.33	30.33	20.95	20.96	107.9	107.9	8.05	8.05	8.05	1.2	1.2	8.04	NA	NA	NA	NA	NA	0.02	0.09	0.01	0.12	0.11	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	1	8.15	30.32	30.32	20.97	20.97	107.4	107.4	8.03	8.03	8.03	1.7	1.7	8.04	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	2	8.15	30.32	30.32	20.97	20.97	107.4	107.4	8.03	8.03	8.03	1.7	1.7	8.04	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.11	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	3	8.15	30.32	30.32	20.97	20.97	107.4	107.4	8.03	8.03	8.03	1.7	1.7	8.04	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.11	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	1	8.15	30.34	30.34	20.97	20.97	107.9	107.9	8.07	8.07	8.07	1.3	1.3	8.04	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	2	8.16	30.33	30.34	20.97	20.97	107.9	107.9	8.07	8.07	8.07	1.3	1.3	8.04	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	3	8.16	30.33	30.34	20.97	20.97	107.9	107.9	8.07	8.07	8.07	1.3	1.3	8.04	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	0.10
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	1	8.12	30.00	30.00	21.55	21.55	93.9	93.9	6.95	6.95	6.95	1.9	1.9	6.91	0.12	0.13	0.13	0.005	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	2	8.12	30.00	30.00	21.55	21.55	93.8	93.9	6.94	6.95	6.95	1.9	1.9	6.91	0.12	0.13	0.13	0.005	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	3	8.12	30.00	30.00	21.55	21.55	93.8	93.9	6.94	6.95	6.95	1.9	1.9	6.91	0.12	0.13	0.13	0.005	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	M	6.5	1	8.12	30.50	30.50	21.56	21.56	92.7	92.7	6.87	6.87	6.87	2.0	2.0	7.03	0.15	0.14	0.15	0.007	0.006	0.007	0.007	0.007	0.007	0.007	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	M	6.5	2	8.12	30.50	30.50	21.56	21.56	92.6	92.7	6.86	6.87	6.87	2.0	2.0	7.03	0.15	0.14	0.15	0.007	0.006	0.007	0.007	0.007	0.007	0.007	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	M	6.5	3	8.12	30.50	30.50	21.56	21.56	92.6	92.7	6.86	6.87	6.87	2.0	2.0	7.03	0.15	0.14	0.15	0.007	0.006	0.007	0.007	0.007	0.007	0.007	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	1	8.12	30.06	30.06	21.57	21.57	92.3	92.3	6.82	6.83	6.83	2.9	2.9	7.04	0.15	0.15	0.15	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	2	8.12	30.06	30.06	21.57	21.57	92.3	92.3	6.83	6.83	6.83	2.9	2.9	7.04	0.15	0.15	0.15	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	3	8.12	30.06	30.06	21.57	21.57	92.3	92.3	6.83	6.83	6.83	2.9	2.9	7.04	0.15	0.15	0.15	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	1	8.13	30.18	30.18	21.55	21.55	95.3	95.3	7.05	7.04	7.04	3.2	3.2	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	2	8.13	30.18	30.18	21.55	21.55	95.2	95.3	7.03	7.04	7.04	3.2	3.2	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	3	8.13	30.18	30.18	21.55	21.55	95.2	95.3	7.03	7.04	7.04	3.2	3.2	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	1	8.15	30.19	30.19	21.55	21.55	95.0	94.9	7.03	7.02	7.02	4.3	4.3	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	2	8.15	30.19	30.19	21.55	21.55	94.8	94.9	7.01	7.02	7.02	4.3	4.3	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	3	8.15	30.19	30.19	21.55	21.55	94.8	94.9	7.01	7.02	7.02	4.3	4.3	7.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	1	8.16	30.19	30.19	21.55	21.55	95.0	95.1	7.03	7.04	7.04	4.1	4.1	7.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	2	8.16	30.19	30.19	21.55	21.55	95.1	95.1	7.04	7.04	7.04	4.1	4.1	7.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	3	8.16	30.19	30.19	21.55	21.55	95.1	95.1	7.04	7.04	7.04	4.1	4.1	7.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																										
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)					
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.			
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	S	1	1	6	0.10			0.10	0.10		0.006	0.006		NA	NA	NA	NA	NA	NA	170	165		<0.5	0.50		2				
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	S	1	2	5	0.10			0.10	0.10		0.006	0.006		NA	NA	NA	NA	NA	NA	160	165		<0.5	0.50		2	2			
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	S	1	3		0.10			0.10	0.10		0.006	0.006		NA	NA	NA	NA	NA	NA	140	135		<0.5	0.50		<1				
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	M	15	1	8	0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	140	135		<0.5	0.50	0.50	<1	1	1		
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	M	15	2	7	0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	130	135		<0.5	0.50	0.50	<1	1	1		
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	M	15	3		0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	150	164		<0.5	0.50		<1				
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	B	29	1	7	0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	180	164		<0.5	0.50		<1	1			
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	B	29	2	7	0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	180	164		<0.5	0.50		<1	1			
C1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:30	30	B	29	3		0.10			0.10	0.10		0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	180	164		<0.5	0.50		<1	1			
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	S	1	1	6	0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	16	16		<0.5	0.50		2				
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	S	1	2	5	<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	16	16		<0.5	0.50		2	2			
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	S	1	3		<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	16	16		<0.5	0.50		2	2			
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	M	4.5	1	8	<0.01			<0.01	0.01		0.000	0.000	0.001	NA	NA	NA	NA	NA	NA	20	18		<0.5	0.50	0.50	2	2	2		
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	M	4.5	2	8	<0.01			<0.01	0.01		0.000	0.000	0.001	NA	NA	NA	NA	NA	NA	17	18		<0.5	0.50	0.50	2	2	2		
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	M	4.5	3		<0.01			<0.01	0.01		0.000	0.000	0.001	NA	NA	NA	NA	NA	NA	17	18		<0.5	0.50	0.50	2	2	2		
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	B	8	1	8	0.04			0.04	0.04		0.002	0.002		NA	NA	NA	NA	NA	NA	130	125		<0.5	0.50		2				
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	B	8	2	9	0.04			0.04	0.04		0.002	0.002		NA	NA	NA	NA	NA	NA	120	125		<0.5	0.50		2	2			
C2	24/12/2016	Mid-Flood	Fine	Moderate	13:20	9	B	8	3		0.04			0.04	0.04		0.002	0.002		NA	NA	NA	NA	NA	NA	120	125		<0.5	0.50		2	2			
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	S	1	1	6	<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1				
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	S	1	2	6	<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1				
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	S	1	3		<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1				
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	M	15	1	8	<0.01			<0.01	0.01		0.000	0.000	0.000	NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50	0.50	<1	1	1		
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	M	15	2	6	<0.01			<0.01	0.01		0.000	0.000	0.000	NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50	0.50	<1	1	1		
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	M	15	3		<0.01			<0.01	0.01		0.000	0.000	0.000	NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50	0.50	<1	1	1		
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	B	29	1	6	<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	1	1		<0.5	0.50		<1				
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	B	29	2	6	<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1	1			
C3	24/12/2016	Mid-Flood	Fine	Moderate	11:50	30	B	29	3		<0.01			<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1	1			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	S	1	1	7	NA			NA	NA		NA	NA		0.10	0.18	0.01	0.29	0.30	0.30	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	S	1	2	6	NA			NA	NA		NA	NA		0.09	0.19	<0.01	0.29	0.30	0.30	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	S	1	3		NA			NA	NA		NA	NA		0.11	0.19	<0.01	0.31	0.30	0.30	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	M	13.5	1	10	NA			NA	NA		NA	NA		0.10	0.19	<0.01	0.30	0.30	0.29	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	M	13.5	2	11	NA			NA	NA		NA	NA		0.10	0.18	0.01	0.29	0.30	0.28	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	M	13.5	3		NA			NA	NA		NA	NA		0.11	0.19	<0.01	0.31	0.30	0.28	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	B	26	1	9	NA			NA	NA		NA	NA		0.11	0.17	0.01	0.29	0.28	0.28	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	B	26	2	9	NA			NA	NA		NA	NA		0.09	0.18	<0.01	0.28	0.28	0.28	NA	NA		NA	NA		NA	NA			
G1	24/12/2016	Mid-Flood	Cloudy	Moderate	11:45	27	B	26	3		NA			NA	NA		NA	NA		0.09	0.17	0.01	0.27	0.28	0.28	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	S	1	1	8	NA			NA	NA		NA	NA		0.12	0.14	<0.01	0.27	0.27	0.27	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	S	1	2	8	NA			NA	NA		NA	NA		0.12	0.15	<0.01	0.28	0.27	0.27	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	S	1	3		NA			NA	NA		NA	NA		0.10	0.15	<0.01	0.26	0.27	0.27	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	M	5.5	1	9	NA			NA	NA		NA	NA		0.11	0.15	<0.01	0.27	0.27	0.26	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	M	5.5	2	10	NA			NA	NA		NA	NA		0.11	0.15	<0.01	0.27	0.27	0.26	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	M	5.5	3		NA			NA	NA		NA	NA		0.10	0.15	<0.01	0.26	0.27	0.26	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	B	10	1	11	NA			NA	NA		NA	NA		0.10	0.14	<0.01	0.25	0.26	0.26	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	B	10	2	10	NA			NA	NA		NA	NA		0.10	0.15	<0.01	0.26	0.26	0.26	NA	NA		NA	NA		NA	NA			
G2	24/12/2016	Mid-Flood	Cloudy	Moderate	12:35	11	B	10	3		NA			NA	NA		NA	NA		0.11	0.14	<0.01	0.26	0.26	0.26	NA	NA		NA	NA		NA	NA			
G3	24/12/2016	Mid-Flood	Cloudy	Moderate	13:50	32	S	1	1	5	NA			NA	NA		NA	NA		0.33	0.14	<0.01	0.48	0.46	0.46											



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																															
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)										
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.								
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	S	1	1	6	0.14			0.14			0.007			0.007	0.007		NA	NA	NA	NA	NA			120	120		<0.5			<1			1		
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	S	1	2	7	0.14			0.14			0.007			0.007	0.007		NA	NA	NA	NA	NA			120	120		<0.5	0.50		<1			1		
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	S	1	3														NA	NA	NA	NA	NA														
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	M		1														NA	NA	NA	NA	NA														
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	M		2														NA	NA	NA	NA	NA	NA											NA		1
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	M		3														NA	NA	NA	NA	NA	NA													
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	B	3	1	12	0.12			0.12			0.006			0.006	0.006		NA	NA	NA	NA	NA			210	180	194	<0.5			<1			1		
SR4	24/12/2016	Mid-Flood	Cloudy	Moderate	12:55	4	B	3	2	14	0.12			0.12			0.006			0.006	0.006		NA	NA	NA	NA	NA			180	194		<0.5	0.50		<1			1		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	S	1	1	7	NA			NA			NA			0.10	0.16	0.01	0.27	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	S	1	2	6	NA			NA			NA			0.11	0.16	0.01	0.28	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	S	1	3		NA			NA			NA			0.10	0.17	<0.01	0.28	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	M	5	1	8	NA			NA			NA			0.10	0.17	<0.01	0.28	0.28	0.28		NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	M	5	2	9	NA			NA			NA			0.10	0.16	0.01	0.27	0.28	0.28		NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	M	5	3		NA			NA			NA			0.11	0.17	<0.01	0.29	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	B	9	1	8	NA			NA			NA			0.10	0.17	<0.01	0.28	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	B	9	2	7	NA			NA			NA			0.10	0.18	<0.01	0.29	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR5	24/12/2016	Mid-Flood	Cloudy	Moderate	12:15	10	B	9	3		NA			NA			NA			0.11	0.16	0.01	0.28	0.28			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	S	1	1	8	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	S	1	2	9	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	S	1	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	M	3	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	M	3	2	9	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	M	3	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	B	5	1	10	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	B	5	2	11	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR6	24/12/2016	Mid-Flood	Fine	Moderate	14:05	6	B	5	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	S	1	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	S	1	2	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	S	1	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	M	8	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	M	8	2	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	M	8	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	B	15	1	8	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	B	15	2	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR7	24/12/2016	Mid-Flood	Cloudy	Moderate	14:05	16	B	15	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	S	1	1	5	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	S	1	2	4	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	S	1	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	M	4.5	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	M	4.5	2	5	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	M	4.5	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	B	8	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	B	8	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR8	24/12/2016	Mid-Flood	Fine	Moderate	13:05	9	B	8	3		NA			NA			NA			NA	NA	NA	NA	NA			NA	NA		NA	NA		NA	NA		NA	NA		NA		
SR9	24/12/2016	Mid-Flood	Fine	Moderate	13:35	8	S	1	1	6	NA			NA			NA			0.02	0.13	<																			

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	1	4	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	2	5	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	S	1	3		NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	1	4	NA	NA	NA	NA	NA	NA	<0.01	0.10	<0.01	0.12	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	2	6	NA	NA	NA	NA	NA	NA	0.02	0.08	<0.01	0.11	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	M	5	3		NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	1	4	NA	NA	NA	NA	NA	NA	<0.01	0.07	<0.01	0.09	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	2	5	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	24/12/2016	Mid-Flood	Fine	Moderate	12:15	10	B	9	3		NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	1	6	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	2	4	NA	NA	NA	NA	NA	NA	<0.01	0.09	<0.01	0.11	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	S	1	3		NA	NA	NA	NA	NA	NA	0.02	0.09	<0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	1	4	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	2	6	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	M	5.5	3		NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	1	5	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	2	6	NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	24/12/2016	Mid-Flood	Fine	Moderate	11:30	11	B	10	3		NA	NA	NA	NA	NA	NA	<0.01	0.08	<0.01	0.10	0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	1	6	0.14	0.14	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	190	163	139	<0.5	0.50	0.50	1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	2	5	0.14	0.14	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	140	163	139	<0.5	0.50	0.50	<1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	S	1	3		0.13	0.14	0.14	0.006	0.007	0.006	NA	NA	NA	NA	NA	NA	110	120	139	<0.5	0.50	0.50	2	1	2		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	M	6.5	1	8	0.15	0.14	0.14	0.006	0.007	0.006	NA	NA	NA	NA	NA	NA	130	120	139	<0.5	0.50	0.50	1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	M	6.5	2	7	0.16	0.15	0.15	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	160	139	139	<0.5	0.50	0.50	<1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	1	8	0.14	0.15	0.15	0.006	0.007	0.007	NA	NA	NA	NA	NA	NA	120	139	139	<0.5	0.50	0.50	1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	2	7				NA	NA	NA	NA	NA	NA	NA	NA	NA	120	139	139	<0.5	0.50	0.50	1	1	1		
SR12	24/12/2016	Mid-Flood	Cloudy	Moderate	13:05	13	B	12	3								NA	NA	NA	NA	NA	NA	120	139	139	<0.5	0.50	0.50	1	1	1		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	1	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	2	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	M	6.5	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	2	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	24/12/2016	Mid-Flood	Cloudy	Moderate	13:20	13	B	12	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																															
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)									
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.						
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	S	1	1	8.16		29.88	29.88	21.46	21.46	95.7	95.8	7.11	7.12	7.12	7.12	2.0	2.0	4.6	NA	NA	NA	NA	NA	0.39	0.12	0.01	0.52								
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	S	1	2	8.16		29.88	29.88	21.46	21.46	95.7	95.8	7.11	7.12	7.12	7.12	2.0	2.0	4.6	NA	NA	NA	NA	NA	0.40	0.12	0.01	0.53	0.52							
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	S	1	3																																
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	M	7.5	1	8.26		30.32	30.32	21.44	21.44	99.5	99.6	7.31	7.31	7.31	7.31	2.0	2.0	4.6	NA	NA	NA	NA	NA	0.24	0.15	0.01	0.40								
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	M	7.5	2	8.26		30.32	30.32	21.44	21.44	99.6	99.6	7.38	7.38	7.38	7.38	2.0	2.0	4.6	NA	NA	NA	NA	NA	0.24	0.14	0.01	0.39	0.40		0.44					
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	M	7.5	3																																
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	B	14	1	8.28		30.34	30.34	21.43	21.43	100.9	101.0	7.47	7.47	7.47	7.47	9.9	9.9	4.6	NA	NA	NA	NA	NA	0.24	0.15	0.01	0.40								
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	B	14	2	8.28		30.34	30.34	21.43	21.43	101.1	101.0	7.49	7.49	7.49	7.49	9.9	9.9	4.6	NA	NA	NA	NA	NA	0.25	0.15	0.01	0.41	0.40							
G4	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:10	15	B	14	3																																
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	S	1	1	8.10		30.30	30.31	21.17	21.18	108.1	108.2	8.04	8.04	8.04	8.04	2.2	2.2	2.3	NA	NA	NA	NA	NA	0.04	0.13	0.01	0.18				0.17				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	S	1	2	8.10		30.31	30.31	21.18	21.18	108.2	108.2	8.04	8.04	8.04	8.04	2.2	2.2	2.3	NA	NA	NA	NA	NA	0.03	0.13	0.01	0.17				0.17				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	S	1	3																																
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	M	3.5	1	8.09		30.29	30.30	21.19	21.19	109.5	109.5	8.15	8.15	8.15	8.15	2.1	2.1	2.3	NA	NA	NA	NA	NA	0.07	0.12	0.01	0.20				0.20				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	M	3.5	2	8.09		30.30	30.30	21.19	21.19	109.5	109.5	8.15	8.15	8.15	8.15	2.1	2.1	2.3	NA	NA	NA	NA	NA	0.04	0.13	0.01	0.18	0.20			0.19				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	M	3.5	3																																
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	B	6	1	8.09		30.28	30.28	21.18	21.18	107.5	107.5	8.00	8.00	8.00	8.00	2.5	2.5	2.5	NA	NA	NA	NA	NA	0.06	0.13	0.01	0.20				0.20				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	B	6	2	8.09		30.28	30.28	21.17	21.18	107.5	107.5	8.00	8.00	8.00	8.00	2.5	2.5	2.5	NA	NA	NA	NA	NA	0.06	0.12	0.01	0.19	0.20			0.20				
G5	24/12/2016	Mid-Ebb	Fine	Moderate	7:20	7	B	6	3																																
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	S	1	1	8.13		30.29	30.29	21.11	21.11	108.6	108.6	8.12	8.12	8.12	8.12	0.9	0.9	0.6	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09				0.09				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	S	1	2	8.13		30.29	30.29	21.11	21.11	108.6	108.6	8.12	8.12	8.12	8.12	0.9	0.9	0.6	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10				0.09				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	S	1	3																																
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	M	15	1	8.14		30.32	30.33	21.11	21.11	110.4	110.4	8.22	8.22	8.22	8.22	0.6	0.6	0.6	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10				0.10				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	M	15	2	8.14		30.33	30.33	21.11	21.11	110.4	110.4	8.22	8.22	8.22	8.22	0.6	0.6	0.6	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10			0.10				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	M	15	3																																
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	B	29	1	8.14		30.34	30.34	21.11	21.11	109.4	109.4	8.22	8.22	8.22	8.22	0.4	0.4	0.4	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09				0.10				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	B	29	2	8.14		30.34	30.34	21.10	21.11	109.4	109.4	8.22	8.22	8.22	8.22	0.4	0.4	0.4	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10			0.10				
G6	24/12/2016	Mid-Ebb	Fine	Moderate	8:55	30	B	29	3																																
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	S	1	1	8.25		30.22	30.22	21.42	21.42	100.4	100.3	7.44	7.42	7.43	7.43	0.8	0.8	0.8	0.13	0.13	0.13	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	S	1	2	8.25		30.22	30.22	21.42	21.42	100.2	100.3	7.42	7.42	7.43	7.43	0.8	0.8	0.8	0.13	0.13	0.13	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	S	1	3																																
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	M	4.5	1	8.24		30.22	30.22	21.42	21.42	99.6	99.7	7.38	7.40	7.39	7.39	0.8	0.8	0.8	0.13	0.13	0.13	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	M	4.5	2	8.24		30.22	30.22	21.42	21.42	99.8	99.7	7.40	7.40	7.39	7.39	0.8	0.8	0.8	0.13	0.13	0.13	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	M	4.5	3																																
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	B	8	1	8.24		30.22	30.22	21.42	21.42	110.1	105.2	7.43	7.44	7.44	7.44	0.8	0.8	0.8	0.14	0.14	0.14	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	B	8	2	8.24		30.22	30.22	21.42	21.42	100.2	105.2	7.44	7.44	7.44	7.44	0.8	0.8	0.8	0.14	0.14	0.14	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
SR2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:15	9	B	8	3																																
SR3	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:05	8	S	1	1	8.20		30.14	30.14	21.34	21.34	98.0	98.1	7.28	7.30	7.29	7.29	0.																			



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																										
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)				
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	S	1	1	8.12		30.28	30.28	20.99	20.99	108.3	108.3	8.12	8.12	8.12	8.12	8.09	1.6	1.6	1.6	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	S	1	2	8.12	8.12	30.27	30.28	20.99	20.99	108.3	108.3	8.12	8.12	8.12	8.12	8.09	1.6	1.6	1.6	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10	0.10	
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	S	1	3													8.09	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11		
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	M	5	1	8.14		30.31	30.32	21.00	21.00	107.8	107.8	8.05	8.05	8.05	8.05	8.09	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	M	5	2	8.14	8.14	30.32	30.32	21.00	21.00	107.8	107.8	8.05	8.05	8.05	8.05	8.09	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.10	0.10
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	M	5	3													8.09	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10		
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	B	9	1	8.16		30.33	30.34	21.03	21.02	107.6	107.6	8.03	8.03	8.03	8.03	8.03	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	B	9	2	8.16	8.16	30.34	30.34	21.01	21.02	107.6	107.6	8.03	8.03	8.03	8.03	8.03	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.10	0.10
SR10	24/12/2016	Mid-Ebb	Fine	Moderate	9:18	10	B	9	3													8.03	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10		
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	S	1	1	8.13		30.25	30.23	20.95	20.95	107.4	107.4	8.04	8.04	8.04	8.04	8.03	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.10	
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	S	1	2	8.12	8.13	30.20	30.23	20.94	20.95	107.4	107.4	8.04	8.04	8.04	8.04	8.03	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	S	1	3													8.03	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11		
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	M	5.5	1	8.14		30.28	30.28	20.97	20.97	107.3	107.3	8.01	8.01	8.01	8.01	8.01	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	0.10
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	M	5.5	2	8.14	8.14	30.28	30.28	20.97	20.97	107.3	107.3	8.01	8.01	8.01	8.01	8.01	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11	0.10	0.10
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	M	5.5	3													8.03	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10		
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	B	10	1	8.16		30.30	30.30	20.98	20.98	107.1	107.1	7.99	7.99	7.99	7.99	8.03	1.4	1.4	1.4	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	B	10	2	8.16	8.16	30.30	30.30	20.98	20.98	107.1	107.1	7.99	7.99	7.99	7.99	8.03	1.4	1.4	1.4	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09	0.10	0.10
SR11	24/12/2016	Mid-Ebb	Fine	Moderate	10:05	11	B	10	3													8.03	1.4	1.4	1.4	NA	NA	NA	NA	NA	0.01	0.09	0.01	0.11		
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	S	1	1	8.12		29.94	29.94	21.50	21.50	93.2	93.2	6.91	6.91	6.91	6.91	6.89	1.6	1.6	1.6	0.12	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	S	1	2	8.12	8.12	29.94	29.94	21.50	21.50	93.3	93.3	6.92	6.92	6.92	6.92	6.89	1.6	1.6	1.6	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	S	1	3													6.89	2.0	2.0	2.0	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	M	7.5	1	8.12		30.05	30.05	21.57	21.57	92.7	92.7	6.86	6.86	6.86	6.86	6.89	2.0	2.0	2.0	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	M	7.5	2	8.12	8.12	30.05	30.05	21.57	21.57	92.8	92.8	6.87	6.87	6.87	6.87	6.89	2.0	2.0	2.0	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	M	7.5	3													6.89	2.0	2.0	2.0	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	B	14	1	8.12		30.07	30.07	21.57	21.57	92.1	92.2	6.83	6.84	6.84	6.84	6.89	2.9	2.9	2.9	0.16	0.16	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	B	14	2	8.12	8.12	30.07	30.07	21.57	21.57	92.2	92.2	6.84	6.84	6.84	6.84	6.89	2.9	2.9	2.9	0.15	0.16	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA
SR12	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:40	15	B	14	3													6.89	2.9	2.9	2.9	0.16	0.16	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	S	1	1	8.14		30.18	30.18	21.55	21.55	94.4	94.5	6.99	7.00	7.00	7.00	7.02	3.2	3.2	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	S	1	2	8.14	8.14	30.18	30.18	21.55	21.55	94.5	94.5	7.00	7.00	7.00	7.00	7.02	3.2	3.2	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	S	1	3													7.02	4.6	4.6	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	M	7	1	8.16		30.20	30.20	21.55	21.55	95.0	95.1	7.03	7.04	7.04	7.04	7.02	4.6	4.6	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	M	7	2	8.16	8.16	30.20	30.20	21.55	21.55	95.1	95.1	7.04	7.04	7.04	7.04	7.02	4.6	4.6	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	M	7	3													7.02	4.6	4.6	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	B	13	1	8.16		30.19	30.19	21.55	21.55	94.8	94.7	7.02	7.00	7.00	7.00	7.01	4.1	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	B	13	2	8.16	8.16	30.19	30.19	21.55	21.55	94.6	94.7	7.00	7.00	7.00	7.00	7.01	4.1	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	24/12/2016	Mid-Ebb	Cloudy	Moderate	7:25	14	B	13	3													7.01	4.1	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	S	1	1	8	0.10			0.006	0.006					NA	NA	NA	NA	NA	100	138		<0.5	0.50		2		
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	S	1	2	7	0.11	0.11		0.006	0.006		NA	NA	NA	NA	NA	190			<0.5			2	2				
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	S	1	3								NA	NA	NA	NA	NA												
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	M	16	1	6	0.09			0.005			NA	NA	NA	NA	NA	37			<0.5			1					
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	M	16	2	8	0.08	0.09	0.10	0.004	0.005	0.006	NA	NA	NA	NA	NA	56	46	110	<0.5	0.50	0.50	1	1	1			
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	M	16	3								NA	NA	NA	NA	NA												
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	B	31	1	8	0.11			0.006			NA	NA	NA	NA	NA	200			<0.5			1					
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	B	31	2	9	0.13	0.12		0.007	0.007		NA	NA	NA	NA	NA	230	214		<0.5	0.50		1	1				
C1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:15	32	B	31	3								NA	NA	NA	NA	NA												
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	S	1	1	9	0.01			0.000	0.000		NA	NA	NA	NA	NA	18			<0.5			2					
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	S	1	2	9	<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	19	18		<0.5	0.50		2	2				
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	S	1	3								NA	NA	NA	NA	NA												
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	M	4	1	8	0.03			0.001			NA	NA	NA	NA	NA	13			<0.5			2					
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	M	4	2	7	0.03	0.03	0.04	0.001	0.001	0.002	NA	NA	NA	NA	NA	21	17	21	<0.5	0.50	0.50	2	2	2			
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	M	4	3								NA	NA	NA	NA	NA												
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	B	7	1	10	0.07			0.003			NA	NA	NA	NA	NA	34			<0.5			2					
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	B	7	2	9	0.08	0.08		0.004	0.003		NA	NA	NA	NA	NA	28	31		<0.5	0.50		2	2				
C2	24/12/2016	Mid-Ebb	Fine	Moderate	8:15	8	B	7	3								NA	NA	NA	NA	NA												
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	S	1	1	5	<0.01			0.000	0.000		NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1					
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	S	1	2	6	<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	ND			<0.5			<1					
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	S	1	3								NA	NA	NA	NA	NA												
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	M	15	1	5	<0.01			0.000			NA	NA	NA	NA	NA	1			<0.5			<1					
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	M	15	2	6	0.01	0.01	0.01	0.000	0.000	0.000	NA	NA	NA	NA	NA	ND	1	1	<0.5	0.50	0.50	<1	1	1			
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	M	15	3								NA	NA	NA	NA	NA												
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	B	29	1	10	<0.01			0.000			NA	NA	NA	NA	NA	2			<0.5			<1					
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	B	29	2	8	<0.01	0.01		0.000	0.000		NA	NA	NA	NA	NA	ND	1		<0.5	0.50		<1	1				
C3	24/12/2016	Mid-Ebb	Fine	Moderate	9:38	30	B	29	3								NA	NA	NA	NA	NA												
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	S	1	1	4	NA			NA	NA		0.10	0.20	<0.01	0.31	0.30	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	S	1	2	3	NA	NA		NA	NA		0.09	0.19	0.01	0.29	0.28	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	S	1	3								0.10	0.20	<0.01	0.31	0.28												
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	M	14	1	4	NA			NA	NA	NA	0.09	0.16	0.02	0.27	0.28	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	M	14	2	4	NA	NA		NA	NA	NA	0.09	0.17	0.02	0.28	0.28	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	M	14	3								0.10	0.18	0.01	0.29	0.28												
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	B	27	1	3	NA			NA	NA		0.10	0.19	<0.01	0.30	0.29	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	B	27	2	5	NA	NA		NA	NA		0.10	0.18	0.01	0.29	0.29	NA	NA		NA	NA		NA	NA				
G1	24/12/2016	Mid-Ebb	Cloudy	Moderate	9:00	28	B	27	3								0.10	0.18	0.01	0.29	0.28												
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	S	1	1	5	NA			NA	NA		0.10	0.15	<0.01	0.26	0.25	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	S	1	2	4	NA	NA		NA	NA		0.11	0.13	0.01	0.25	0.25	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	S	1	3								0.10	0.14	0.01	0.25	0.25												
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	M	6	1	4	NA			NA	NA		0.11	0.17	0.01	0.29	0.30	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	M	6	2	6	NA	NA		NA	NA		0.11	0.17	0.01	0.29	0.30	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	M	6	3								0.11	0.19	<0.01	0.31	0.27												
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	B	11	1	6	NA			NA	NA		0.12	0.13	0.01	0.26	0.25	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	B	11	2	8	NA	NA		NA	NA		0.11	0.12	0.02	0.25	0.25	NA	NA		NA	NA		NA	NA				
G2	24/12/2016	Mid-Ebb	Cloudy	Moderate	8:10	12	B	11	3								0.11	0.13	0.01	0.25	0.25												
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	S	1	1	4	NA			NA	NA		0.31	0.14	<0.01	0.46	0.47	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	S	1	2	4	NA	NA		NA	NA		0.32	0.14	<0.01	0.47	0.47	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	S	1	3								0.32	0.14	<0.01	0.47	0.47												
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	M	17	1	5	NA			NA	NA		0.29	0.15	<0.02	0.46	0.47	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	M	17	2	5	NA	NA		NA	NA		0.30	0.16	0.01	0.47	0.47	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	M	17	3								0.29	0.17	0.01	0.47	0.47												
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	B	33	1	7	NA			NA	NA		0.23	0.13	0.02	0.38	0.39	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	B	33	2	7	NA	NA		NA	NA		0.23	0.15	<0.01	0.39	0.39	NA	NA		NA	NA		NA	NA				
G3	24/12/2016	Mid-Ebb	Cloudy	Moderate	6:50	34	B	33	3								0.23	0.15	<0.01	0.39	0.39												

















Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	S	1	1	4	0.14	0.14	0.006	0.006	0.008	NA	NA	NA	NA	NA	800	632	912	NA	NA	NA	<1	<1	1	1			
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	S	1	2	6	0.14	0.14	0.006	0.006	0.008	NA	NA	NA	NA	NA	500	632	912	NA	NA	NA	<1	<1	1	1			
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	S	1	3						NA	NA	NA	NA	NA				NA	NA	NA								
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	M	16	1	5	0.19	0.20	0.17	0.009	0.009	0.008	NA	NA	NA	NA	600	624	912	NA	NA	NA	<1	<1	1	1			
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	M	16	2	6	0.20	0.20	0.17	0.009	0.009	0.008	NA	NA	NA	NA	650	624	912	NA	NA	NA	<1	<1	1	1			
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	M	16	3						NA	NA	NA	NA	NA				NA	NA	NA								
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	B	31	1	9	0.19	0.18	0.008	0.008	0.008	NA	NA	NA	NA	NA	1600	1918	1918	NA	NA	NA	<1	2	2	2			
C1	27/12/2016	Mid-Flood	Fine	Moderate	13:37	32	B	31	2	9	0.17	0.18	0.008	0.008	0.008	NA	NA	NA	NA	NA	2300	1918	1918	NA	NA	NA	<1	2	2	2			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	S	1	1	6	0.04	0.04	0.002	0.002	0.002	NA	NA	NA	NA	NA	9	5	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	S	1	2	6	0.04	0.04	0.002	0.002	0.002	NA	NA	NA	NA	NA	3	5	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	S	1	3						NA	NA	NA	NA	NA				NA	NA	NA								
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	M	4.5	1	6	0.03	0.03	0.004	0.001	0.002	NA	NA	NA	NA	NA	1	1	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	M	4.5	2	5	0.03	0.03	0.004	0.001	0.002	NA	NA	NA	NA	NA	ND	1	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	M	4.5	3						NA	NA	NA	NA	NA				NA	NA	NA								
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	B	8	1	6	0.04	0.04	0.002	0.002	0.002	NA	NA	NA	NA	NA	ND	1	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	B	8	2	6	0.04	0.04	0.002	0.002	0.002	NA	NA	NA	NA	NA	1	1	2	NA	NA	NA	<1	<1	1	1			
C2	27/12/2016	Mid-Flood	Windv	Rough	14:56	9	B	8	3						NA	NA	NA	NA	NA				NA	NA	NA								
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	S	1	1	4	0.01	0.02	0.001	0.001	0.001	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	S	1	2	6	0.02	0.02	0.001	0.001	0.001	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	S	1	3						NA	NA	NA	NA	NA				NA	NA	NA								
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	M	15	1	4	<0.01	0.02	0.001	0.001	0.001	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	M	15	2	5	0.02	0.02	0.001	0.001	0.001	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	M	15	3						NA	NA	NA	NA	NA				NA	NA	NA								
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	B	29	1	5	0.04	0.03	0.002	0.002	0.002	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	B	29	2	6	0.02	0.03	0.001	0.002	0.002	NA	NA	NA	NA	NA	ND	1	1	NA	NA	NA	<1	<1	1	1			
C3	27/12/2016	Mid-Flood	Windv	Rough	13:46	30	B	29	3						NA	NA	NA	NA	NA				NA	NA	NA								
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	S	1	1	4	NA	NA	NA	NA	0.09	0.19	0.02	0.30	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	S	1	2	4	NA	NA	NA	NA	0.11	0.20	<0.01	0.32	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	S	1	3					0.11	0.18	0.02	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	M	14	1	4	NA	NA	NA	NA	0.12	0.18	0.02	0.32	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	M	14	2	6	NA	NA	NA	NA	0.12	0.19	0.02	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	B	27	1	4	NA	NA	NA	NA	0.12	0.17	0.02	0.31	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	B	27	2	6	NA	NA	NA	NA	0.12	0.19	0.01	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G1	27/12/2016	Mid-Flood	Fine	Moderate	13:54	28	B	27	3					0.12	0.18	0.02	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	S	1	1	5	NA	NA	NA	NA	0.15	0.20	0.01	0.36	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	S	1	2	4	NA	NA	NA	NA	0.16	0.19	0.01	0.36	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	S	1	3					0.14	0.21	<0.01	0.36	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	M	6	1	5	NA	NA	NA	NA	0.15	0.18	0.01	0.34	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	M	6	2	6	NA	NA	NA	NA	0.17	0.20	0.01	0.38	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	M	6	3					0.15	0.18	0.01	0.34	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	B	11	1	4	NA	NA	NA	NA	0.16	0.18	0.02	0.36	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	B	11	2	5	NA	NA	NA	NA	0.16	0.18	0.01	0.35	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G2	27/12/2016	Mid-Flood	Fine	Moderate	14:37	12	B	11	3					0.20	0.17	0.02	0.39	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G3	27/12/2016	Mid-Flood	Fine	Moderate	15:40	34	S	1	1	5	NA	NA	NA	NA	0.06	0.11	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G3	27/12/2016	Mid-Flood	Fine	Moderate	15:40	34	S	1	2	6	NA	NA	NA	NA	0.05	0.10	<0.01	0.16	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G3	27/12/2016	Mid-Flood	Fine	Moderate	15:40	34	S	1	3					0.07	0.11	<0.01	0.19	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
G3	27/12/2016	Mid-Flood	Fine	Moderate	15:40	34	M	17	1	6	NA	NA	NA	NA																			



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	S	1	1	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	1800	1944	1087	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	S	1	2	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	2100	1944	1087	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	S	1	3	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	2100	1944	1087	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	M	1	1	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	520	608	608	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	M	2	2	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	710	608	608	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	M	3	3	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	710	608	608	NA	NA	NA	<1	<1	1	NA		
SR4	27/12/2016	Mid-Flood	Fine	Moderate	14:52	4	M	3	3	5	0.17	0.17	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	710	608	608	NA	NA	NA	<1	<1	1	NA		
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	S	1	1	5	NA	NA	NA	NA	NA	NA	0.11	0.19	<0.01	0.31	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	S	1	2	7	NA	NA	NA	NA	NA	NA	0.11	0.17	0.01	0.29	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	S	1	3	5	NA	NA	NA	NA	NA	NA	0.11	0.17	0.02	0.30	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	M	5.5	1	5	NA	NA	NA	NA	NA	NA	0.12	0.18	0.01	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	M	5.5	2	6	NA	NA	NA	NA	NA	NA	0.11	0.18	0.01	0.30	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	M	5.5	3	5	NA	NA	NA	NA	NA	NA	0.12	0.17	0.02	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	B	10	1	5	NA	NA	NA	NA	NA	NA	0.13	0.17	0.01	0.31	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	B	10	2	4	NA	NA	NA	NA	NA	NA	0.13	0.18	0.01	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR5	27/12/2016	Mid-Flood	Fine	Moderate	14:21	11	B	10	3	5	NA	NA	NA	NA	NA	NA	0.14	0.19	0.01	0.34	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	S	1	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	S	1	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	S	1	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	M	3	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	M	3	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	M	3	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	B	5	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	B	5	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	27/12/2016	Mid-Flood	Windv	Rough	15:51	6	B	5	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	S	1	1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	S	1	2	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	S	1	3	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	M	10	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	M	10	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	M	10	3	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	B	19	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	B	19	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	27/12/2016	Mid-Flood	Fine	Moderate	16:02	20	B	19	3	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	S	1	1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	S	1	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	S	1	3	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	M	4.5	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	M	4.5	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	M	4.5	3	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	B	8	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	B	8	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	B	8	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	27/12/2016	Mid-Flood	Windv	Rough	14:45	9	B	8	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR9	27/12/2016	Mid-Flood	Windv	Rough	15:19	8	S	1	1	6	NA	NA	NA	NA	NA	NA	0.13	0.13</															











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																																		
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)													
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.									
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	S	1	1	8.22	8.22	30.43	30.44	30.44	20.98	20.98	20.98	109.1	109.1	109.1	8.17	8.17	8.17	8.17	8.15	1.2	1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	0.02	0.02	0.07	0.07	0.01	0.01	0.10	0.10	0.10
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	S	1	2	8.22		30.43		20.96	108.9		8.13	1.1		NA	0.03		0.07			0.01		0.11																
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	S	1	3	8.21	30.43	30.44	30.44	20.96	20.96	20.96	108.9	108.9	108.9	8.13	8.13	8.13	8.13	8.15	1.1	1.1	1.1	1.2	NA	NA	NA	NA	NA	NA	0.03	0.03	0.07	0.07	0.01	0.01	0.11	0.11	0.11	
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	M	5	1		8.21		20.95	108.9		8.13	1.1		NA	0.03		0.07			0.01		0.11																	
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	M	5	2	8.21	8.21	30.43	30.43	30.43	20.93	20.93	20.93	108.6	108.6	108.6	8.11	8.11	8.11	8.11	8.46	1.4	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	0.03	0.03	0.06	0.06	0.01	0.01	0.10	0.10	0.11
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	B	9	2	8.21		20.92		108.6	8.11		1.4	NA		0.03	0.07		0.01			0.11																		
SR10	27/12/2016	Mid-Ebb	Windy	Rough	10:49	10	B	9	3	8.23	30.43	30.43	30.43	20.97	20.97	20.97	112.6	112.6	112.6	8.41	8.41	8.41	8.41	8.46	0.5	0.5	0.5	0.5	NA	NA	NA	NA	NA	NA	0.01	0.01	0.04	0.04	0.01	0.01	0.06	0.06	0.07	
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	S	1	1		8.24		30.45	21.09		112.5	8.39		0.7	NA		0.01			0.05		0.01		0.07															
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	S	1	2	8.24	8.24	30.43	30.43	30.43	21.09	21.09	21.09	114.1	114.1	114.1	8.52	8.52	8.52	8.52	8.46	0.7	0.7	0.7	0.6	NA	NA	NA	NA	NA	NA	0.01	0.01	0.05	0.05	0.01	0.01	0.07	0.07	0.07
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	M	5.5	1	8.24		30.42		21.10	114.0		8.52	0.7		NA	0.02		0.05			0.01		0.08																
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	M	5.5	2	8.24	8.23	30.43	30.43	30.43	20.97	20.97	20.97	112.6	112.6	112.6	8.41	8.41	8.41	8.41	8.46	0.5	0.5	0.5	0.6	NA	NA	NA	NA	NA	NA	0.01	0.01	0.04	0.04	0.01	0.01	0.06	0.06	0.07
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	B	10	2	8.23		20.97		112.6	8.41		0.5	NA		0.01	0.05		0.01			0.07																		
SR11	27/12/2016	Mid-Ebb	Windy	Rough	11:31	11	B	10	3	8.09	30.06	30.06	30.06	21.35	21.35	21.35	92.8	92.8	92.8	6.90	6.90	6.90	6.90	8.09	3.1	3.1	3.1	5.4	0.22	0.22	0.22	0.22	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009			
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	B	14	2		8.09		21.35	92.8		6.90	3.1		0.22	0.009		0.009			0.009		0.009																	
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	S	1	1	8.05	8.05	30.06	30.06	30.06	21.31	21.31	21.31	93.6	93.6	93.6	6.96	6.96	6.96	6.96	6.95	10.1	10.1	10.1	5.4	0.21	0.21	0.21	0.21	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008		
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	S	1	2	8.05		21.31		93.6	6.96		10.1	0.21		0.008	0.008		0.008			0.008																		
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	S	1	3	8.08	30.06	30.06	30.06	21.36	21.36	21.36	93.2	93.2	93.2	6.93	6.93	6.93	6.93	8.08	3.0	3.0	3.0	5.4	0.22	0.22	0.22	0.22	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009			
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	M	7.5	1		8.08		21.36	93.2		6.93	3.0		0.22	0.009		0.009			0.009		0.009																	
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	M	7.5	2	8.08	8.08	30.06	30.06	30.06	21.36	21.36	21.36	93.2	93.2	93.2	6.93	6.93	6.93	6.93	8.08	3.0	3.0	3.0	5.4	0.22	0.22	0.22	0.22	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009		
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	B	14	1	8.09		21.35		92.8	6.90		3.1	0.22		0.009	0.009		0.009			0.009																		
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	B	14	2	8.09	8.09	30.06	30.06	30.06	21.35	21.35	21.35	92.8	92.8	92.8	6.90	6.90	6.90	6.90	8.09	3.1	3.1	3.1	5.4	0.21	0.21	0.21	0.21	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009		
SR12	27/12/2016	Mid-Ebb	Fine	Moderate	10:35	15	B	14	3	8.09		21.35		92.8	6.90		3.1	0.21		0.009	0.009		0.009			0.009																		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	S	1	1	8.19	8.19	30.06	30.06	30.06	21.30	21.30	21.30	94.6	94.6	94.6	7.02	7.02	7.02	7.02	6.97	3.7	3.7	3.7	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	S	1	2	8.19		21.30		94.6	7.02		3.7	NA		NA	NA		NA			NA																		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	S	1	3	8.08	30.07	30.07	30.07	21.31	21.31	21.31	92.9	92.9	92.9	6.92	6.92	6.92	6.92	8.08	3.5	3.5	3.5	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	M	7	1		8.08		21.31	92.9		6.92	3.5		NA	NA		NA			NA		NA																	
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	M	7	2	8.08	8.08	30.07	30.07	30.07	21.31	21.31	21.31	92.9	92.9	92.9	6.92	6.92	6.92	6.92	8.08	3.5	3.5	3.5	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	B	13	1	8.08		21.32		92.7	6.89		4.2	NA		NA	NA		NA			NA																		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	B	13	2	8.08	8.08	30.07	30.07	30.07	21.32	21.32	21.32	92.7	92.7	92.7	6.89	6.89	6.89	6.89	8.08	4.2	4.2	4.2	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	27/12/2016	Mid-Ebb	Fine	Moderate	10:24	14	B	13	3	8.08		21.32		92.7	6.89		4.2	NA		NA	NA		NA			NA																		

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.

















Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																																		
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)														
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.												
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	1	8.11	8.11	30.42	30.42	20.12	20.12	105.4	105.4	8.04	8.04	8.04	8.04	8.05	1.7	1.7	1.7	2.0	2.0	2.0	2.0	2.0	NA	NA	NA	NA	NA	NA	0.14	0.12	0.01	0.27	0.27	0.27		
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	2	8.11		30.42		20.12		105.4		8.04		8.04			8.04		1.7		1.7		1.7		2.0		2.0		2.0		NA		NA		NA		NA	NA
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	3	8.12	8.12	30.44	30.44	20.13	20.13	105.5	105.5	8.05	8.05	8.05	8.05	8.05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	NA	NA	NA	NA	NA	NA	0.14	0.11	0.01	0.26	0.26	0.26		
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	1	8.12		30.44		20.13		105.5		8.05		8.05			8.05		2.0		2.0		2.0		2.0		2.0		2.0		NA		NA		NA		NA	NA
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	2	8.12	8.12	30.44	30.44	20.13	20.13	105.5	105.5	8.05	8.05	8.05	8.05	8.05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	NA	NA	NA	NA	NA	NA	0.14	0.12	0.01	0.27	0.27	0.27		
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	3	8.12		30.44		20.13		105.5		8.05		8.05			8.05		2.0		2.0		2.0		2.0		2.0		2.0		NA		NA		NA		NA	NA
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	1	8.12	8.12	30.48	30.48	20.15	20.15	105.8	105.8	8.08	8.08	8.08	8.08	8.08	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.14	0.13	0.01	0.26	0.26	0.26		
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	2	8.12		30.48		20.15		105.8		8.08		8.08			8.08		2.2		2.2		2.2		2.2		2.2		2.2		NA		NA		NA		NA	NA
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	3	8.12	8.12	30.48	30.48	20.15	20.15	105.8	105.8	8.08	8.08	8.08	8.08	8.08	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.13	0.13	0.01	0.27	0.27	0.27		
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	3	8.12		30.48		20.15		105.8		8.08		8.08			8.08		2.2		2.2		2.2		2.2		2.2		2.2		NA		NA		NA		NA	NA
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	1	8.11	8.11	30.38	30.38	20.11	20.11	103.9	103.9	7.89	7.89	7.89	7.89	7.89	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	0.14	0.12	0.01	0.27	0.27	0.27		
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	2	8.11		30.38		20.11		103.9		7.89		7.89			7.89		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4	1.4
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	3	8.11	8.11	30.38	30.38	20.11	20.11	103.9	103.9	7.89	7.89	7.89	7.89	7.89	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	0.15	0.12	0.01	0.28	0.28	0.28		
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	1	8.11		30.42		20.13		103.7		7.87		7.87			7.87		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5	1.5
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	2	8.11	8.11	30.42	30.42	20.13	20.13	103.7	103.7	7.87	7.87	7.87	7.87	7.87	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	NA	NA	NA	NA	NA	NA	0.15	0.11	0.01	0.27	0.27	0.27		
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	3	8.10		30.44		20.14		103.8		7.88		7.88			7.88		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	1.8
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	1	8.10	8.10	30.44	30.44	20.14	20.14	103.8	103.8	7.88	7.88	7.88	7.88	7.88	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	0.13	0.12	0.01	0.26	0.26	0.26		
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	2	8.10		30.44		20.14		103.8		7.88		7.88			7.88		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	1.8
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	3	8.10	8.10	30.44	30.44	20.14	20.14	103.8	103.8	7.88	7.88	7.88	7.88	7.88	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	0.13	0.12	0.01	0.25	0.25	0.25		
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	3	8.10		30.44		20.14		103.8		7.88		7.88			7.88		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	1.8
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	1	7.93	7.93	30.21	30.21	20.48	20.48	96.2	96.3	7.24	7.24	7.24	7.24	7.24	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.13	0.13	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	2	7.93		30.21		20.48		96.3		96.3		96.3			7.23		7.23		7.23		7.23		7.23		7.23		3.0		3.0		3.0		3.0		3.0	
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	3	7.94	7.94	30.23	30.23	20.28	20.43	94.6	94.6	7.13	7.13	7.13	7.13	7.13	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.16	0.16	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	M	7.5	1	7.94		30.23		20.28		94.5		94.6		94.6			7.12		7.12		7.12		7.12		7.12		7.12		2.3		2.3		2.3		2.3		2.3	
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	M	7.5	3	7.95	7.95	30.24	30.24	20.58	20.58	93.3	93.2	7.00	7.01	7.01	7.01	7.01	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	0.13	0.13	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	1	7.95		30.24		20.58		93.3		93.2		93.2			7.00		7.01		7.01		7.01		7.01		7.01		2.1		2.1		2.1		2.1		2.1	
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	3	7.95	7.95	30.24	30.24	20.58	20.58	93.1	93.2	7.01	7.01	7.01	7.01	7.01	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	0.13	0.13	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	3	7.95		30.24		20.58		93.1		93.2		93.2			7.01		7.01		7.01		7.01		7.01		7.01		2.1		2.1		2.1		2.1		2.1	
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	S	1	1	7.82	7.82	30.21	30.21	20.61	20.61	96.7	96.6	7.28	7.27	7.27	7.28	7.28	2.4	2.4	2.4																			

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	S	1	1	8																							
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	S	1	2	6	0.07	0.07																					
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	S	1	3																								
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	M	16	1	10	0.08																						
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	M	16	2	11	0.07	0.08	0.07	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003							
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	M	16	3																								
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	B	31	1	10	0.06																						
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	B	31	2	10	0.04	0.05																					
C1	29/12/2016	Mid-Flood	Fine	Moderate	9:47	32	B	31	3																								
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	S	1	1	8	0.15																						
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	S	1	2	6	0.17	0.16																					
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	S	1	3																								
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	M	4.5	1	7	0.16																						
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	M	4.5	2	7	0.14	0.15	0.15	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006								
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	M	4.5	3																								
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	B	8	1	9	0.13																						
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	B	8	2	10	0.13	0.13																					
C2	29/12/2016	Mid-Flood	Fine	Moderate	8:10	9	B	8	3																								
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	S	1	1	6	0.17																						
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	S	1	2	6	0.14	0.16																					
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	S	1	3																								
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	M	18	1	7	0.14																						
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	M	18	2	6	0.14	0.14	0.14	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006								
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	M	18	3																								
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	B	35	1	6	0.14																						
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	B	35	2	6	0.13	0.14																					
C3	29/12/2016	Mid-Flood	Fine	Moderate	9:15	36	B	35	3																								
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	S	1	1	8	NA																						
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	S	1	2	7	NA	NA																					
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	S	1	3																								
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	M	14	1	6	NA																						
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	M	14	2	7	NA	NA																					
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	M	14	3																								
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	B	27	1	12	NA																						
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	B	27	2	11	NA	NA																					
G1	29/12/2016	Mid-Flood	Fine	Moderate	9:31	28	B	27	3																								
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	S	1	1	12	NA																						
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	S	1	2	12	NA	NA																					
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	S	1	3																								
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	M	8.5	1	10	NA																						
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	M	8.5	2	10	NA	NA																					
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	M	8.5	3																								
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	B	16	1	12	NA																						
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	B	16	2	12	NA	NA																					
G2	29/12/2016	Mid-Flood	Fine	Moderate	8:39	17	B	16	3																								
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	S	1	1	6	NA																						
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	S	1	2	7	NA	NA																					
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	S	1	3																								
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	M	17	1	7	NA																						
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	M	17	2	6	NA	NA																					
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	M	17	3																								
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	B	33	1	7	NA																						
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	B	33	2	9	NA	NA																					
G3	29/12/2016	Mid-Flood	Fine	Moderate	7:08	34	B	33	3																								





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	1	8	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	2	7	NA	NA	NA	NA	NA	0.15	0.11	0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	S	1	3							0.14	0.12	<0.01	0.27														
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	1	7	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	2	7	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	M	5	3							0.14	0.12	<0.01	0.27														
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	1	6	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	2	6	NA	NA	NA	NA	NA	0.13	0.12	<0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR10	29/12/2016	Mid-Flood	Fine	Moderate	8:56	10	B	9	3							0.13	0.12	<0.01	0.26														
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	1	6	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	2	6	NA	NA	NA	NA	NA	0.16	0.12	<0.01	0.29	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	S	1	3							0.14	0.12	<0.01	0.27														
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	1	7	NA	NA	NA	NA	NA	0.15	0.11	0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	2	8	NA	NA	NA	NA	NA	0.15	0.12	<0.01	0.28	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	M	5	3							0.14	0.12	<0.01	0.27														
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	1	9	NA	NA	NA	NA	NA	0.13	0.12	<0.01	0.26	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	2	10	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR11	29/12/2016	Mid-Flood	Fine	Moderate	9:32	10	B	9	3							0.14	0.12	<0.01	0.27														
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	1	7	0.12	0.13	0.003	0.003	0.004	NA	NA	NA	NA	NA	NA	160	144	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	2	8	0.13	0.13	0.004	0.003	0.004	NA	NA	NA	NA	NA	NA	130	144	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	S	1	3							NA	NA	NA	NA	NA	NA												
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	M	7.5	1	8	0.16	0.17	0.004	0.005	0.004	NA	NA	NA	NA	NA	NA	790	829	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	M	7.5	2	9	0.17	0.17	0.005	0.005	0.004	NA	NA	NA	NA	NA	NA	870	829	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	M	7.5	3							NA	NA	NA	NA	NA	NA												
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	1	8	0.14	0.14	0.004	0.004	0.004	NA	NA	NA	NA	NA	NA	220	239	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	2	7	0.13	0.14	0.004	0.004	0.004	NA	NA	NA	NA	NA	NA	260	239	306	NA	NA	NA	<1	1				
SR12	29/12/2016	Mid-Flood	Fine	Moderate	7:51	15	B	14	3							NA	NA	NA	NA	NA	NA												
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	S	1	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	S	1	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	S	1	3							NA	NA	NA	NA	NA	NA												
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	M	7	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	M	7	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	M	7	3							NA	NA	NA	NA	NA	NA												
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	B	13	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	B	13	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	29/12/2016	Mid-Flood	Fine	Moderate	7:37	14	B	13	3							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	S	1	1	8																							
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	S	1	2	8	0.06	0.06		0.002	0.002							250	278		NA	NA		<1					
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	S	1	3													310			NA	NA		<1	1				
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	M	16	1	10	0.10			0.004								190			NA	NA		<1					
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	M	16	2	10	0.14	0.12	0.08	0.006	0.005	0.003						230	209	201	NA	NA	NA	<1	1	1			
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	M	16	3																NA	NA		<1					
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	B	31	1	12	0.05	0.05		0.002	0.002							160	139		NA	NA		<1	1				
C1	29/12/2016	Mid-Ebb	Fine	Moderate	11:00	32	B	31	2	11	0.05			0.002								120			NA	NA		<1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	S	1	1	6	0.17			0.007								1500	1549		NA	NA		<1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	S	1	2	4	0.17	0.17		0.007	0.007							1600			NA	NA		<1	1				
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	S	1	3																NA	NA		<1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	M	4.5	1	10	0.18			0.007								1400			NA	NA		1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	M	4.5	2	12	0.18	0.18	0.17	0.007	0.007	0.007						1700	1543	1300	NA	NA	NA	<1	1	1			
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	M	4.5	3																NA	NA		<1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	B	8	1	13	0.15			0.006								960			NA	NA		<1					
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	B	8	2	12	0.15	0.15		0.006	0.006							880	919		NA	NA		1	1				
C2	29/12/2016	Mid-Ebb	Fine	Moderate	12:16	9	B	8	3																NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	S	1	1	8	0.20			0.008								2300			NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	S	1	2	8	0.18	0.19		0.007	0.008							1400	1794		NA	NA		<1	1				
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	S	1	3																NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	M	18	1	9	0.16			0.007								1300			NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	M	18	2	8	0.15	0.16	0.17	0.006	0.006	0.007						2000	1612	1984	NA	NA	NA	<1	1	1			
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	M	18	3																NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	B	35	1	8	0.16			0.007								2600			NA	NA		<1					
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	B	35	2	7	0.17	0.17		0.007	0.007	0.007						2800	2698		NA	NA		<1	1				
C3	29/12/2016	Mid-Ebb	Fine	Moderate	11:13	36	B	35	3																NA	NA		<1					
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	S	1	1	8	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	S	1	2	10	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	S	1	3																NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	M	14	1	12	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	M	14	2	14	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	B	27	1	14	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	B	27	2	13	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	29/12/2016	Mid-Ebb	Fine	Moderate	11:15	28	B	27	3																NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	S	1	1	10	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	S	1	2	11	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	S	1	3																NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	M	8.5	1	11	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	M	8.5	2	9	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	M	8.5	3																NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	B	16	1	14	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	B	16	2	12	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	29/12/2016	Mid-Ebb	Fine	Moderate	12:00	17	B	16	3																NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	S	1	1	9	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	S	1	2	9	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	S	1	3																NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	M	17	1	11	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	M	17	2	10	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	M	17	3																NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	B	33	1	12	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	B	33	2	11	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	29/12/2016	Mid-Ebb	Fine	Moderate	13:23	34	B	33	3																NA	NA		NA	NA				















Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																									
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)					
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	1	8.32	8.32	30.39	30.39	20.01	20.01	101.2	101.2	7.68	7.68	7.71	2.6	2.6	2.2	NA	NA	NA	NA	0.05	0.07	0.02	0.14	0.13	0.13		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	2	8.32	8.32	30.39	30.39	20.01	20.01	101.2	101.2	7.68	7.68	7.71	2.6	2.6	2.2	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13	0.13		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	3											7.71								0.04	0.08	0.01	0.13				
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	1	8.32	8.32	30.39	30.39	20.00	20.00	101.7	101.7	7.74	7.74	7.71	2.4	2.4	2.2	NA	NA	NA	NA	0.04	0.09	0.01	0.14	0.14	0.14		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	2	8.32	8.32	30.39	30.39	20.00	20.00	101.7	101.7	7.74	7.74	7.71	2.4	2.4	2.2	NA	NA	NA	NA	0.05	0.08	0.01	0.14	0.14	0.14		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	3											7.71								0.04	0.08	0.01	0.13				
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	1	8.32	8.32	30.38	30.38	19.87	19.87	101.0	101.0	7.68	7.68	7.71	1.7	1.7	2.2	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13	0.13		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	2	8.32	8.32	30.38	30.38	19.87	19.87	101.0	101.0	7.68	7.68	7.71	1.7	1.7	2.2	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13	0.13		
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	3											7.71								0.04	0.08	0.01	0.13				
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	1	8.37	8.37	30.41	30.41	19.87	19.87	104.6	104.6	7.99	7.99	8.00	1.2	1.1	0.9	NA	NA	NA	NA	0.02	0.03	0.01	0.06	0.06	0.06		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	2	8.37	8.37	30.41	30.41	19.87	19.87	104.6	104.6	8.00	8.00	8.00	0.9	0.9	0.9	NA	NA	NA	NA	0.01	0.03	0.01	0.05	0.05	0.05		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	3											8.00								0.02	0.04	0.01	0.07				
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	1	8.36	8.36	30.40	30.40	19.83	19.83	105.1	105.1	8.02	8.02	8.00	0.8	0.9	0.9	NA	NA	NA	NA	0.01	0.04	0.01	0.06	0.06	0.06		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	2	8.36	8.36	30.40	30.40	19.85	19.85	104.6	104.6	7.98	7.98	8.00	0.9	0.9	0.9	NA	NA	NA	NA	0.01	0.04	0.01	0.06	0.06	0.06		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	3											8.00								0.01	0.03	0.01	0.05				
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	1	8.36	8.36	30.40	30.40	19.83	19.83	104.9	104.9	7.98	7.98	7.97	0.8	0.8	0.8	NA	NA	NA	NA	0.01	0.04	0.01	0.06	0.06	0.06		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	2	8.36	8.36	30.40	30.40	19.83	19.83	104.6	104.6	7.95	7.95	7.97	0.7	0.8	0.8	NA	NA	NA	NA	0.01	0.04	0.01	0.06	0.06	0.06		
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	3											7.97								0.01	0.04	0.01	0.06				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	1	8.08	8.08	30.23	30.23	20.14	20.14	97.1	97.1	7.31	7.31	7.27	4.2	4.2	4.7	0.13	0.13	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	2	8.07	8.08	30.22	30.23	20.13	20.14	97.1	97.1	7.32	7.32	7.27	4.2	4.2	4.7	0.13	0.13	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	3											7.27								NA	NA	NA	NA	NA	NA		
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	1	8.05	8.05	30.21	30.21	20.18	20.18	94.9	94.9	7.22	7.22	7.22	4.3	4.3	4.7	0.18	0.17	0.12	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	2	8.05	8.05	30.21	30.21	20.18	20.18	94.9	94.9	7.22	7.22	7.22	4.3	4.3	4.7	0.16	0.17	0.12	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	3											7.27								NA	NA	NA	NA	NA	NA		
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	1	8.05	8.05	30.21	30.21	20.18	20.18	93.5	93.5	7.10	7.10	7.10	5.5	5.5	5.5	0.06	0.07	0.07	0.002	0.002	0.002	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	2	8.05	8.05	30.21	30.21	20.18	20.18	93.5	93.5	7.10	7.10	7.10	5.5	5.5	5.5	0.07	0.07	0.07	0.002	0.002	0.002	NA	NA	NA	NA	NA	NA
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	3											7.10								NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	1	8.03	8.03	30.21	30.21	20.21	20.21	93.8	93.8	7.12	7.12	7.12	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	2	8.03	8.03	30.21	30.21	20.21	20.21	93.8	93.8	7.12	7.12	7.12	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	3											7.12								NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	1	8.03	8.03	30.21	30.21	20.22	20.22	92.3	92.3	6.99	6.99	6.99	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	2	8.03	8.03	30.21	30.21	20.22	20.22	92.3	92.3	6.99	6.99	6.99	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	3											6.99								NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	1	8.03	8.03	30.22	30.22	20.23	20.23	92.0	92.0	6.97	6.97	6.97	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	2	8.03	8.03	30.22	30.22	20.23	20.23	92.0	92.0	6.97	6.97	6.97	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	3											6.97								NA	NA	NA	NA	NA	NA		

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.







Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	1	6	NA	NA	NA	NA	NA	0.04	0.07	0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	2	6	NA	NA	NA	NA	NA	0.04	0.07	0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	S	1	3							0.04	0.08	<0.01	0.13														
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	1	7	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	2	5	NA	NA	NA	NA	NA	0.06	0.08	<0.01	0.15	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	M	5	3							0.04	0.08	<0.01	0.13														
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	1	8	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	2	7	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Flood	Cloudy	Moderate	10:20	10	B	9	3							0.04	0.07	0.01	0.12														
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	1	5	NA	NA	NA	NA	NA	0.02	0.03	0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	2	3	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	S	1	3							0.02	0.04	<0.01	0.07														
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	1	6	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	2	5	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	M	5	3							<0.01	0.04	<0.01	0.06														
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	1	6	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	2	6	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Flood	Cloudy	Moderate	10:55	10	B	9	3							<0.01	0.04	<0.01	0.06														
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	1	10	0.13	0.13	0.005	0.005	0.004	NA	NA	NA	NA	NA	NA	1500	1396	1662	NA	NA	NA	1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	2	9	0.12	0.13	0.005	0.005	0.004	NA	NA	NA	NA	NA	NA	1300	1396	1662	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	S	1	3							NA	NA	NA	NA	NA	NA												
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	1	10	0.19	0.18	0.007	0.006	0.004	NA	NA	NA	NA	NA	NA	2100	2337	1662	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	2	11	0.16	0.18	0.006	0.006	0.004	NA	NA	NA	NA	NA	NA	2600	2337	1662	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	M	7.5	3							NA	NA	NA	NA	NA	NA												
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	1	10	0.06	0.06	0.002	0.002	0.002	NA	NA	NA	NA	NA	NA	1800	1407	1662	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	2	11	0.06	0.06	0.002	0.002	0.002	NA	NA	NA	NA	NA	NA	1100	1407	1662	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Flood	Fine	Moderate	8:13	15	B	14	3							NA	NA	NA	NA	NA	NA												
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	S	1	3							NA	NA	NA	NA	NA	NA												
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	M	7	3							NA	NA	NA	NA	NA	NA												
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Flood	Fine	Moderate	8:00	14	B	13	3							NA	NA	NA	NA	NA	NA												

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																											
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)							
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	1	8.30	8.30	30.39	30.39	20.01	20.01	101.2	101.2	7.68	7.68	7.71	3.2	3.2	2.5	NA	NA	NA	NA	NA	0.06	0.09	0.01	0.16	0.15	0.15			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	2	8.30		30.39	30.39	20.01	20.01	101.2	101.2	7.68	7.68		3.2	3.2		NA	NA	NA	NA	NA	0.04	0.09	0.02	0.15					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	3															NA	NA	NA	NA	NA	0.06	0.08	0.01	0.15					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	1	8.32	8.32	30.39	30.39	20.00	20.00	101.7	101.7	7.74	7.74	7.71	3.1	3.1	2.5	NA	NA	NA	NA	NA	0.08	0.09	0.01	0.18	0.16	0.15			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	2	8.32		30.39	30.39	20.00	20.00	101.7	101.7	7.74	7.74		3.1	3.1		NA	NA	NA	NA	NA	0.06	0.09	0.01	0.16					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	3															NA	NA	NA	NA	NA	0.06	0.08	0.01	0.15					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	1	8.32	8.32	30.38	30.38	20.02	20.02	101.0	101.0	7.74	7.74		1.2	1.2		NA	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.14	0.14			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	2	8.32		30.38	30.38	20.02	20.02	101.0	101.0	7.74	7.74		1.2	1.2		NA	NA	NA	NA	NA	0.05	0.09	0.01	0.15					
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	3															NA	NA	NA	NA	NA	0.04	0.09	0.01	0.14					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	1	8.37	8.37	30.40	30.40	19.87	19.87	101.2	101.2	7.99	7.99	8.01	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07	0.07	0.07			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	2	8.37		30.40	30.40	19.87	19.87	101.2	101.2	7.99	7.99		1.0	1.0		NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	3															NA	NA	NA	NA	NA	0.01	0.04	0.01	0.06					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	1	8.37	8.37	30.40	30.40	19.83	19.83	100.1	100.1	8.03	8.03	8.01	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07	0.06	0.06			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	2	8.37		30.40	30.40	19.83	19.83	100.1	100.1	8.03	8.03		1.0	1.0		NA	NA	NA	NA	NA	0.01	0.04	0.01	0.06					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	3															NA	NA	NA	NA	NA	0.01	0.03	0.01	0.05					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	1	8.37	8.37	30.40	30.40	19.90	19.90	102.5	102.5	7.04	7.04		1.1	1.1		NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07	0.07	0.07			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	2	8.37		30.40	30.40	19.90	19.90	102.5	102.5	7.04	7.04		1.1	1.1		NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07					
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	3															NA	NA	NA	NA	NA	0.01	0.04	0.01	0.06					
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	1	8.10	8.10	30.18	30.18	20.26	20.26	100.1	100.1	7.58	7.58	7.50	2.1	2.1	2.1	0.14	0.14	0.15	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	2	8.10		30.18	30.18	20.26	20.26	100.1	100.1	7.58	7.58		2.1	2.1		0.14	0.14		0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	3																												
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	1	8.09	8.09	30.17	30.17	20.24	20.24	97.7	97.7	7.42	7.42	7.50	2.2	2.2	2.2	0.16	0.16	0.15	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	2	8.09		30.17	30.17	20.25	20.25	97.7	97.7	7.42	7.42		2.2	2.2		0.16	0.16		0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	3																												
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	1	8.09	8.09	30.17	30.17	20.21	20.21	97.1	97.1	7.35	7.35		2.1	2.1		0.14	0.14		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	2	8.09		30.17	30.17	20.21	20.21	97.1	97.1	7.35	7.35		2.1	2.1		0.13	0.14		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005		
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	3																												
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	1	8.04	8.04	30.21	30.22	20.22	20.23	92.1	92.1	6.98	6.98	7.74	2.0	2.0	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	2	8.04		30.22	30.22	20.23	20.23	92.1	92.1	9.98	9.98		2.0	2.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	3																												
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	1	8.04	8.04	30.22	30.22	20.23	20.23	92.3	92.3	7.00	7.00	7.74	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	2	8.04		30.22	30.22	20.23	20.23	92.3	92.3	7.01	7.01		2.2	2.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	3																												
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	1	8.03	8.04	30.22	30.23	20.23	20.23	92.4	92.4	7.01	7.01		1.9	1.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	2	8.04		30.24	30.23	20.23	20.23	92.4	92.4	7.01	7.01		1.9	1.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	3																												

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																													
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrate (mg/L-N)			TIN-Nitrite (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.			
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	S	1	1	8				NA	NA	NA	NA	NA	NA	0.20	0.09	<0.01	0.30				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	S	1	2	10	9			NA	NA	NA	NA	NA	NA	0.21	0.09	<0.01	0.31				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	S	1	3					NA	NA	NA	NA	NA	NA	0.22	0.08	<0.01	0.31				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	M	7.5	1	8				NA	NA	NA	NA	NA	NA	0.22	0.09	<0.01	0.32				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	M	7.5	2	8	8	9		NA	NA	NA	NA	NA	NA	0.23	0.09	<0.01	0.33				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	M	7.5	3					NA	NA	NA	NA	NA	NA	0.23	0.10	<0.01	0.34				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	B	14	1	10				NA	NA	NA	NA	NA	NA	0.25	0.10	<0.01	0.36				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	B	14	2	12	11			NA	NA	NA	NA	NA	NA	0.25	0.09	<0.01	0.35				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	31/12/2016	Mid-Ebb	Fine	Moderate	14:00	15	B	14	3					NA	NA	NA	NA	NA	NA	0.24	0.09	<0.01	0.34				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	S	1	1	6				NA	NA	NA	NA	NA	NA	0.24	0.11	<0.01	0.36				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	S	1	2	6	6			NA	NA	NA	NA	NA	NA	0.02	0.10	<0.01	0.13				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	S	1	3					NA	NA	NA	NA	NA	NA	0.03	0.10	<0.01	0.14				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	M	3	1	8				NA	NA	NA	NA	NA	NA	0.05	0.10	<0.01	0.16				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	M	3	2	6	7	7		NA	NA	NA	NA	NA	NA	0.03	0.10	<0.01	0.14				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	M	3	3					NA	NA	NA	NA	NA	NA	0.04	0.10	<0.01	0.15				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	B	5	1	8				NA	NA	NA	NA	NA	NA	0.05	0.10	<0.01	0.16				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	B	5	2	9	9			NA	NA	NA	NA	NA	NA	0.03	0.10	<0.01	0.14				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	31/12/2016	Mid-Ebb	Cloudy	Moderate	14:25	6	B	5	3					NA	NA	NA	NA	NA	NA	0.04	0.10	<0.01	0.15				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	S	1	1	5				NA	NA	NA	NA	NA	NA	0.02	0.08	<0.01	0.11				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	S	1	2	5				NA	NA	NA	NA	NA	NA	<0.01	0.07	<0.01	0.09				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	S	1	3					NA	NA	NA	NA	NA	NA	0.01	0.07	<0.01	0.09				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	M	18	1	10				NA	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	M	18	2	8	9	7		NA	NA	NA	NA	NA	NA	0.03	0.08	<0.01	0.12				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	M	18	3					NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	B	35	1	8				NA	NA	NA	NA	NA	NA	0.02	0.07	<0.01	0.10				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	B	35	2	8	8			NA	NA	NA	NA	NA	NA	0.02	0.07	<0.01	0.10				NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	31/12/2016	Mid-Ebb	Cloudy	Moderate	13:05	36	B	35	3					NA	NA	NA	NA	NA	NA	0.01	0.07	<0.01	0.09				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	S	1	1	5				0.10			0.004			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	S	1	2	6	6			0.11	0.11		0.005	0.004		NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	S	1	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	M	4.5	1	7				0.10			0.004			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	M	4.5	2	8	8			0.08	0.09		0.003	0.003	0.005	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	M	4.5	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	B	8	1	7				0.16			0.007			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	B	8	2	7	7			0.14	0.15		0.006	0.006		NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	31/12/2016	Mid-Ebb	Fine	Moderate	13:10	9	B	8	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	S	1	1	8				0.12			0.005			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	S	1	2	9	9			0.11	0.12		0.005	0.005		NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	S	1	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	M	4	1	6				0.11			0.004			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	M	4	2	6	6			0.12	0.12		0.005	0.005	0.004	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	M	4	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	B	7	1	8				0.10			0.004			NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	B	7	2	7	8			0.10	0.10		0.004	0.004	0.004	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	31/12/2016	Mid-Ebb	Fine	Moderate	13:20	8	B	7	3								NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	1	6	NA	NA	NA	NA	NA	0.06	0.09	<0.01	0.16	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	2	7	NA	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	S	1	3							0.06	0.08	<0.01	0.15														
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	1	5	NA	NA	NA	NA	NA	0.08	0.08	<0.01	0.17	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	2	6	NA	NA	NA	NA	NA	0.06	0.09	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	M	5	3							0.06	0.08	<0.01	0.15														
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	1	9	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	2	8	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:45	10	B	9	3							0.04	0.08	<0.01	0.13														
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	1	5	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	2	4	NA	NA	NA	NA	NA	<0.01	0.05	<0.01	0.07	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	S	1	3							<0.01	0.04	<0.01	0.06														
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	1	3	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	2	4	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	M	5	3							<0.01	0.03	<0.01	0.05														
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	1	4	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	2	5	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	31/12/2016	Mid-Ebb	Cloudy	Moderate	12:05	10	B	9	3							<0.01	0.04	<0.01	0.06														
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	1	6	0.14	0.14	0.14	0.006	0.005	NA	NA	NA	NA	NA	NA	1300	1572	1515	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	2	7	0.13	0.14	0.14	0.006	0.005	NA	NA	NA	NA	NA	NA	1900	1572	1515	NA	NA	NA	1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	S	1	3							NA	NA	NA	NA	NA	NA												
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	1	10	0.15	0.15	0.14	0.006	0.006	NA	NA	NA	NA	NA	NA	1200	1342	1515	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	2	8	0.15	0.15	0.14	0.006	0.006	NA	NA	NA	NA	NA	NA	1500	1342	1515	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	M	7.5	3							NA	NA	NA	NA	NA	NA												
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	1	11	0.14	0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	1600	1649	1515	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	2	10	0.14	0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	1700	1649	1515	NA	NA	NA	<1	1				
SR12	31/12/2016	Mid-Ebb	Fine	Moderate	13:40	15	B	14	3							NA	NA	NA	NA	NA	NA												
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	S	1	3							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	2	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	M	7	3							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	1	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	2	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	31/12/2016	Mid-Ebb	Fine	Moderate	13:52	14	B	13	3							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																															
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)									
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.						
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	S	1	1	7.99		30.13	30.13	20.07	20.07	99.4	99.4	7.56	7.56	7.56	7.56	2.6	2.6	2.6	NA	NA	NA	NA	NA	0.30	0.13	0.02	0.45								
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	S	1	2	7.99	7.99	30.13	30.13	20.07	20.07	99.4	99.4	7.56	7.56	7.56	7.56	2.6	2.6	2.6	NA	NA	NA	NA	NA	0.29	0.12	0.02	0.43	0.44							
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	S	1	3																																
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	M	7.5	1	8.04		30.20	30.20	20.05	20.05	99.0	99.0	7.50	7.50	7.50	7.50	2.6	2.6	2.6	NA	NA	NA	NA	NA	0.30	0.12	0.01	0.43								
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	M	7.5	2	8.04	8.04	30.20	30.20	20.05	20.05	99.0	99.0	7.50	7.50	7.50	7.50	2.6	2.6	2.6	NA	NA	NA	NA	NA	0.19	0.16	0.01	0.36								
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	M	7.5	3																																
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	M	7.5	3																																
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	B	14	1	8.04	8.04	30.27	30.27	20.03	20.17	98.9	98.9	7.49	7.49	7.49	7.49	2.0	2.0	2.0	NA	NA	NA	NA	NA	0.24	0.14	0.01	0.39								
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	B	14	2	8.04		30.27	30.27	20.30	20.17	98.9	98.9	7.49	7.49	7.49	7.49	2.0	2.0	2.0	NA	NA	NA	NA	NA	0.24	0.12	0.01	0.37								
G4	3/1/2017	Mid-Flood	Fine	Moderate	10:46	15	B	14	3																																
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	S	1	1	8.27		30.09	30.09	20.13	20.13	109.9	109.9	8.35	8.35	8.35	8.35	3.1	3.1	3.1	NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07								
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	S	1	2	8.27	8.27	30.09	30.09	20.13	20.13	109.9	109.9	8.35	8.35	8.35	8.35	3.1	3.1	3.1	NA	NA	NA	NA	NA	0.02	0.06	0.01	0.09								
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	S	1	3																																
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	M	4.5	1	8.27	8.27	30.15	30.15	20.08	20.08	109.5	109.5	8.34	8.34	8.34	8.34	3.4	3.4	3.4	NA	NA	NA	NA	NA	0.01	0.03	0.01	0.05								
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	M	4.5	2	8.27	8.27	30.15	30.15	20.08	20.08	109.5	109.5	8.34	8.34	8.34	8.34	3.4	3.4	3.4	NA	NA	NA	NA	NA	0.01	0.02	0.01	0.04	0.05							
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	M	4.5	3																																
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	B	8	1	8.25	8.25	30.25	30.25	20.06	20.06	108.7	108.7	8.27	8.27	8.27	8.27	17.1	17.1	17.1	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09								
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	B	8	2	8.25		30.25	30.25	20.06	20.06	108.7	108.7	8.27	8.27	8.27	8.27	17.1	17.1	17.1	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09								
G5	3/1/2017	Mid-Flood	Fine	Moderate	9:58	9	B	8	3																																
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	S	1	1	8.22		30.31	30.31	20.36	20.36	104.7	104.7	7.91	7.91	7.91	7.91	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10								
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	S	1	2	8.22	8.22	30.31	30.31	20.36	20.36	107.7	106.2	7.91	7.91	7.91	7.91	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.02	0.10	0.01	0.13								
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	S	1	3																																
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	M	18	1	8.22	8.22	30.34	30.34	20.34	20.34	105.6	105.6	7.98	7.98	7.98	7.98	1.2	1.2	1.2	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10								
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	M	18	2	8.22		30.34	30.34	20.34	20.34	105.6	105.6	7.98	7.98	7.98	7.98	1.2	1.2	1.2	NA	NA	NA	NA	NA	0.02	0.08	0.01	0.11	0.10							
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	M	18	3																																
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	B	35	1	8.22	8.22	30.33	30.33	20.28	20.28	104.4	104.4	7.89	7.89	7.89	7.89	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.08	0.01	0.10								
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	B	35	2			30.33	30.33	20.28	20.28	104.4	104.4	7.89	7.89	7.89	7.89	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.01	0.07	0.01	0.09								
G6	3/1/2017	Mid-Flood	Fine	Moderate	11:03	36	B	35	3																																
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	S	1	1	8.21		30.21	30.21	20.16	20.16	102.6	102.6	7.77	7.77	7.77	7.77	1.1	1.1	1.1	0.09	0.08	0.09	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004		
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	S	1	2	8.21	8.21	30.21	30.21	20.16	20.16	102.6	102.6	7.77	7.77	7.77	7.77	1.1	1.1	1.1	0.08	0.08	0.09	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	S	1	3																																
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	M	4.5	1	8.23	8.23	30.25	30.25	20.13	20.13	102.3	102.3	7.75	7.75	7.75	7.75	2.3	2.3	2.3	0.08	0.06	0.07	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	M	4.5	2	8.23		30.25	30.25	20.13	20.13	102.3	102.3	7.75	7.75	7.75	7.75	2.3	2.3	2.3	0.06	0.06	0.07	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	M	4.5	3																																
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	B	8	1	8.24	8.24	30.28	30.28	20.10	20.10	102.0	102.0	7.72	7.72	7.72	7.72	3.1	3.1	3.1	0.09	0.08	0.09	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	B	8	2	8.24		30.28	30.28	20.10	20.10	102.0	102.0	7.72	7.72	7.72	7.72	3.1	3.1	3.1	0.09	0.08	0.09	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
SR2	3/1/2017	Mid-Flood	Fine	Moderate	11:50	9	B	8	3																																
SR3	3/1/2017	Mid-Flood	Fine	Moderate	11:30	8	S	1	1	8.13		30.20	30.20	20.17	20.17	104.2	104.2	7.89	7.89	7.89	7.89	1.2																			



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																													
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	S	1	1	8.23	8.23	30.33	30.33	20.35	20.35	103.0	103.0	7.80	7.80	7.80	7.80	7.87	2.6	2.6	2.6	2.0	NA	NA	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13		
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	S	1	2	8.23		30.33		20.35		103.0		7.80					2.6				NA						0.04					0.07	0.01
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	S	1	3																														
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	M	5	1	8.22	8.22	30.22	30.22	20.33	20.33	104.9	104.9	7.93	7.93	7.93	7.93	7.87	1.3	1.3	1.3	2.0	NA	NA	NA	NA	NA	NA	0.04	0.09	0.01	0.14	0.14		
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	M	5	2	8.22		30.22		20.33		104.9		7.93					1.3				NA						0.05					0.08	0.01
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	M	5	2	8.22																													
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	M	5	3																														
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	B	9	1	8.23	8.23	30.26	30.26	20.31	20.31	104.3	104.3	7.89	7.89	7.89	7.89	7.87	2.0	2.0	2.0	2.0	NA	NA	NA	NA	NA	NA	0.03	0.08	0.01	0.12	0.12		
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	B	9	2	8.23		30.26		20.31		104.3		7.89					2.0				NA						0.03					0.06	0.01
SR10	3/1/2017	Mid-Flood	Fine	Moderate	11:20	10	B	9	3																														
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	S	1	1	8.22	8.22	30.31	30.31	20.30	20.30	102.0	102.0	7.73	7.73	7.73	7.73	7.69	1.3	1.3	1.3	1.6	NA	NA	NA	NA	NA	NA	0.03	0.07	0.01	0.11	0.11		
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	S	1	2	8.22		30.31		20.30		102.0		7.73					1.3				NA						0.04					0.07	0.01
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	S	1	3																														
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	M	5	1	8.22	8.22	30.33	30.33	20.27	20.27	101.0	101.0	7.64	7.64	7.64	7.64	7.69	1.2	1.2	1.2	1.6	NA	NA	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13		
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	M	5	2	8.22		30.33		20.27		101.0		7.64					1.2				NA						0.04					0.08	0.01
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	M	5	3																														
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	B	9	1	8.20	8.20	30.33	30.33	20.25	20.25	100.5	100.5	7.60	7.60	7.60	7.60	7.69	2.2	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.03	0.08	0.01	0.12	0.12		
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	B	9	2	8.20		30.33		20.25		100.5		7.60					2.2				NA						0.04					0.08	0.01
SR11	3/1/2017	Mid-Flood	Fine	Moderate	11:55	10	B	9	3																														
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	S	1	1	8.14	8.14	30.14	30.14	20.04	20.04	102.2	102.2	7.74	7.74	7.74	7.74	7.75	2.6	2.6	2.6	3.4	0.13	0.13	0.13	0.15	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	S	1	2	8.13		30.14		20.04		102.2		7.74					2.6				0.13				0.005								
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	S	1	3																														
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	M	7.5	1	8.14	8.14	30.15	30.15	20.03	20.03	102.4	102.4	7.75	7.75	7.75	7.75	7.75	7.75	3.4	3.4	3.4	3.4	0.18	0.16	0.17	0.15	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	M	7.5	2	8.14		30.15		20.03		102.4		7.75										3.4				0.16							
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	M	7.5	3																														
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	B	14	1	8.13	8.13	30.17	30.17	20.00	20.00	101.9	101.9	7.71	7.71	7.71	7.71	7.75	4.1	4.1	4.1	4.2	0.15	0.15	0.15	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	B	14	2	8.13		30.17		20.00		101.9		7.71									4.1				0.15								0.006
SR12	3/1/2017	Mid-Flood	Fine	Moderate	11:03	15	B	14	3																														
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	S	1	1	8.13	8.13	30.17	30.17	20.08	20.08	101.7	101.7	7.70	7.70	7.70	7.70	7.69	3.10	3.10	3.1	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	S	1	2	8.13		30.17		20.08		101.7		7.70									3.10						NA						NA
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	S	1	3																														
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	M	7	1	8.12	8.12	30.22	30.22	20.04	20.04	101.3	101.3	7.67	7.67	7.67	7.67	7.69	4.60	4.60	4.6	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	M	7	2	8.12		30.22		20.04		101.3		7.67									4.60						NA						NA
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	M	7	3																														
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	B	13	1	8.14	8.14	30.26	30.26	20.03	20.03	101.1	101.1	7.65	7.65	7.65	7.65	7.69	4.80	4.80	4.8	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	B	13	2	8.14		30.26		20.03		101.1		7.65									4.80						NA						NA
SR13	3/1/2017	Mid-Flood	Fine	Moderate	10:55	14	B	13	3																														

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	S	1	1	7	0.06			0.003								3100	2946		<0.5			<1					
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	S	1	2	6	0.06	0.06		0.003	0.003							2800			<0.5	0.50		<1	1				
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	S	1	3																								
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	M	16	1	6	0.06			0.003								4000			<0.5			2					
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	M	16	2	8	0.06	0.06	0.06	0.003	0.003	0.003						3500	3742	3098	<0.5	0.50	0.50	1	2	1			
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	M	16	3																								
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	B	31	1	8	0.07			0.004								2600			<0.5			<1					
C1	3/1/2017	Mid-Flood	Fine	Moderate	13:14	32	B	31	2	10	0.06	0.07		0.003	0.003							2800	2698		<0.5	0.50		<1	1				
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	S	1	1	6	0.02			0.001								ND			<0.5			2					
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	S	1	2	7	<0.01	0.02		0.001	0.001							ND	1		<0.5	0.50		1	2				
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	S	1	3																								
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	M	4.5	1	5	<0.01			0.001								ND			<0.5			2					
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	M	4.5	2	5	<0.01	0.01	0.01	0.001	0.001	0.001						ND	1	1	<0.5	0.50	0.50	2	2	2			
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	M	4.5	3																								
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	B	8	1	6	<0.01			0.001								ND			<0.5			1					
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	B	8	2	5	<0.01	0.01		0.001	0.001							ND	1		<0.5	0.50		1	1				
C2	3/1/2017	Mid-Flood	Fine	Moderate	10:29	9	B	8	3																								
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	S	1	1	3	<0.01			0.000								12			<0.5			1					
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	S	1	2	4	<0.01	0.01		0.000	0.000							11	11		<0.5	0.50		1	1				
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	S	1	3																								
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	M	18	1	7	0.01			0.001								9			<0.5			1					
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	M	18	2	5	0.01	0.01	0.01	0.001	0.001	0.000						11	10	12	<0.5	0.50	0.50	1	1	1			
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	M	18	3																								
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	B	35	1	9	<0.01			0.000								13			<0.5			1					
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	B	35	2	10	<0.01	0.01		0.000	0.000							16	14		<0.5	0.50		<1	1				
C3	3/1/2017	Mid-Flood	Fine	Moderate	11:38	36	B	35	3																								
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	S	1	1	10	NA			NA								NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	S	1	2	11	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	S	1	3																								
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	M	14	1	12	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	M	14	2	11	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	M	14	3																								
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	B	27	1	12	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	B	27	2	10	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G1	3/1/2017	Mid-Flood	Fine	Moderate	12:54	28	B	27	3																								
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	S	1	1	6	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	S	1	2	7	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	S	1	3																								
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	M	8.5	1	8	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	M	8.5	2	9	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	M	8.5	3																								
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	B	16	1	10	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	B	16	2	12	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G2	3/1/2017	Mid-Flood	Fine	Moderate	11:46	17	B	16	3																								
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	S	1	1	7	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	S	1	2	8	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	S	1	3																								
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	M	17	1	10	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	M	17	2	8	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	M	17	3																								
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	B	33	1	10	NA			NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	B	33	2	10	NA	NA		NA	NA							NA	NA		NA	NA		NA	NA				
G3	3/1/2017	Mid-Flood	Fine	Moderate	10:21	34	B																										

















Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	S	1	1	9	0.07			0.07	0.07		0.003	0.003		NA	NA	NA	NA	NA			1800	2163		<0.5			<1		
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	S	1	2	10	0.07			0.07	0.07		0.003	0.003		NA	NA	NA	NA	NA			2600			<0.5			<1	1	
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	S	1	3											NA	NA	NA	NA												
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	M	16	1	10	0.09			0.10	0.10	0.08	0.005	0.005	0.004	NA	NA	NA	NA	NA			2900			<0.5			2		
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	M	16	2	10	0.10									NA	NA	NA	NA	NA			1900	2347	1896	<0.5			1	2	1
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	M	16	3											NA	NA	NA	NA												
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	B	31	1	10	0.07			0.08	0.08		0.004	0.004		NA	NA	NA	NA	NA			1200			<0.5			<1		
C1	3/1/2017	Mid-Ebb	Fine	Moderate	14:20	32	B	31	2	10	0.08									NA	NA	NA	NA	NA			1500	1342		<0.5			2	2	
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	S	1	1	7	0.04			0.03	0.03		0.002	0.001	0.001	NA	NA	NA	NA	NA			ND			<0.5			1		
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	S	1	2	9	0.01									NA	NA	NA	NA	NA			ND	1		<0.5			2	2	
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	S	1	3											NA	NA	NA	NA												
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	M	4.5	1	10	0.02			0.02	0.02	0.02	0.001	0.001	0.001	NA	NA	NA	NA	NA			7			<0.5			1		
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	M	4.5	2	8	0.02									NA	NA	NA	NA	NA			10	8	5	<0.5			2	2	2
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	M	4.5	3											NA	NA	NA	NA												
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	B	8	1	16	<0.01			0.01	0.01		0.001	0.001		NA	NA	NA	NA	NA			12			<0.5			2		
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	B	8	2	14	<0.01			0.01	0.01		0.001	0.001		NA	NA	NA	NA	NA			17	14		<0.5			1	2	
C2	3/1/2017	Mid-Ebb	Fine	Moderate	16:03	9	B	8	3											NA	NA	NA	NA												
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	S	1	1	5	<0.01			0.01	0.01		0.001	0.001		NA	NA	NA	NA	NA			16			<0.5			1		
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	S	1	2	5	<0.01									NA	NA	NA	NA	NA			20	18		<0.5			<1	1	
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	S	1	3											NA	NA	NA	NA												
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	M	18	1	6	0.06			0.04	0.04	0.02	0.003	0.002	0.001	NA	NA	NA	NA	NA			ND			<0.5			1		
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	M	18	2	4	0.02									NA	NA	NA	NA	NA			ND	1	6	<0.5			2	2	1
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	M	18	3											NA	NA	NA	NA												
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	B	35	1	6	0.01			0.01	0.01		0.001	0.001		NA	NA	NA	NA	NA			11			<0.5			1		
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	B	35	2	6	0.01									NA	NA	NA	NA	NA			14	12		<0.5			<1	1	
C3	3/1/2017	Mid-Ebb	Fine	Moderate	14:51	36	B	35	3											NA	NA	NA	NA												
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	S	1	1	8	NA			NA	NA		NA	NA		0.09	0.16	<0.01	0.26	0.25			NA			NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	S	1	2	10	NA			NA	NA		NA	NA		0.09	0.15	<0.01	0.25				NA	NA		NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	S	1	3											0.08	0.15	<0.01	0.24												
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	M	14	1	9	NA			NA	NA		NA	NA		0.12	0.14	0.01	0.27	0.27			NA			NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	M	14	2	11	NA			NA	NA		NA	NA		0.12	0.13	0.02	0.27				NA	NA		NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	M	14	3											0.11	0.14	0.01	0.26												
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	B	27	1	9	NA			NA	NA		NA	NA		0.12	0.13	0.01	0.26	0.28			NA			NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	B	27	2	11	NA			NA	NA		NA	NA		0.13	0.14	0.01	0.28				NA			NA	NA		NA	NA	
G1	3/1/2017	Mid-Ebb	Fine	Moderate	14:55	28	B	27	3											0.14	0.14	0.01	0.29												
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	S	1	1	9	NA			NA	NA		NA	NA		0.10	0.14	<0.01	0.25	0.22			NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	S	1	2	7	NA			NA	NA		NA	NA		0.07	0.14	<0.01	0.22				NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	S	1	3											0.04	0.14	<0.01	0.19												
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	M	8.5	1	8	NA			NA	NA		NA	NA		0.06	0.13	<0.01	0.20	0.20			NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	M	8.5	2	7	NA			NA	NA		NA	NA		0.06	0.12	0.01	0.19				NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	M	8.5	3											0.07	0.13	0.01	0.21												
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	B	16	1	11	NA			NA	NA		NA	NA		0.07	0.13	0.01	0.21	0.21			NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	B	16	2	9	NA			NA	NA		NA	NA		0.06	0.13	0.01	0.20				NA			NA	NA		NA	NA	
G2	3/1/2017	Mid-Ebb	Fine	Moderate	15:53	17	B	16	3											0.07	0.13	0.01	0.21												
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	S	1	1	9	NA			NA	NA		NA	NA		0.18	0.13	0.01	0.32	0.35			NA			NA	NA		NA	NA	
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	S	1	2	7	NA			NA	NA		NA	NA		0.14	0.13	0.01	0.28				NA			NA	NA		NA	NA	
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	S	1	3											0.30	0.13	0.02	0.45												
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	M	17	1	10	NA			NA	NA		NA	NA		0.07	0.14	0.01	0.22	0.26			NA			NA	NA		NA	NA	
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	M	17	2	12	NA			NA	NA		NA	NA		0.06	0.13	0.02	0.21				NA			NA	NA		NA	NA	
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	M	17	3											0.08	0.14	0.01	0.23												
G3	3/1/2017	Mid-Ebb	Fine	Moderate	17:22	34	B	33	1	14	NA			NA	NA		NA	NA																	















Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																										
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.				
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	S	1	1	8.39		30.29	30.29	20.60	20.60	106.7	106.7	8.03	8.03	8.03		0.4	0.4	1.0	NA	NA	NA	NA	0.03	0.07	0.01	0.11				
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	S	1	2	8.39	8.39	30.29	30.29	20.60	20.60	106.7	106.7	8.03	8.03	8.03		0.4	0.4	1.0	NA	NA	NA	NA	0.04	0.06	0.01	0.11	0.11			
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	S	1	3												7.97			1.0	NA	NA	NA	NA	0.03	0.07	0.01	0.11				
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	M	5	1	8.36		30.27	30.27	20.36	20.36	104.7	104.7	7.91	7.91	7.91		1.0	1.0	1.0	NA	NA	NA	NA	0.04	0.08	0.01	0.13				
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	M	5	2	8.36	8.36	30.27	30.27	20.36	20.36	104.7	104.7	7.91	7.91	7.91		1.0	1.0	1.0	NA	NA	NA	NA	0.05	0.08	0.01	0.14	0.14	0.13		
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	M	5	3															NA	NA	NA	NA	0.05	0.08	0.01	0.14					
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	B	9	1	8.35		30.28	30.28	20.35	20.35	103.3	103.3	7.81	7.81	7.81		1.5	1.5	1.5	NA	NA	NA	NA	0.05	0.07	0.01	0.13				
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	B	9	2	8.35	8.35	30.28	30.28	20.35	20.35	103.3	103.3	7.81	7.81	7.81		1.5	1.5	1.5	NA	NA	NA	NA	0.04	0.08	0.01	0.13	0.13			
SR10	5/1/2017	Mid-Flood	Fine	Moderate	13:10	10	B	9	3															NA	NA	NA	NA	0.04	0.08	0.01	0.13					
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	S	1	1	8.37		30.26	30.26	20.70	20.70	109.4	109.4	8.22	8.22	8.22		0.4	0.4	0.4	NA	NA	NA	NA	0.03	0.07	0.01	0.11				
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	S	1	2	8.37	8.37	30.26	30.26	20.70	20.70	109.4	109.4	8.22	8.22	8.22		0.4	0.4	0.4	NA	NA	NA	NA	0.04	0.07	0.01	0.12				
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	S	1	3															NA	NA	NA	NA	0.04	0.08	0.01	0.13					
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	M	5	1	8.40		30.28	30.28	20.63	20.63	109.3	109.3	8.22	8.22	8.22		0.2	0.2	0.2	NA	NA	NA	NA	0.03	0.08	0.01	0.12				
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	M	5	2	8.40	8.40	30.28	30.28	20.63	20.63	109.3	109.3	8.22	8.22	8.22		0.2	0.2	0.2	NA	NA	NA	NA	0.05	0.08	0.01	0.14	0.12	0.12		
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	M	5	3															NA	NA	NA	NA	0.03	0.06	0.01	0.10					
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	B	9	1	8.41		30.29	30.29	20.63	20.63	109.3	109.3	8.22	8.22	8.22		0.2	0.2	0.2	NA	NA	NA	NA	0.06	0.06	0.01	0.13				
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	B	9	2	8.41	8.41	30.29	30.29	20.63	20.63	109.3	109.3	8.22	8.22	8.22		0.2	0.2	0.2	NA	NA	NA	NA	0.05	0.07	0.01	0.13	0.12	0.12		
SR11	5/1/2017	Mid-Flood	Fine	Moderate	14:54	10	B	9	3															NA	NA	NA	NA	0.03	0.07	0.01	0.11					
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	S	1	1	8.14		30.09	30.09	20.29	20.29	98.7	98.7	7.39	7.39	7.39		2.3	2.3	2.3	0.09	0.10	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	S	1	2	8.14	8.14	30.09	30.09	20.29	20.29	98.7	98.7	7.39	7.39	7.39		2.3	2.3	2.3	0.10	0.10	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	S	1	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	M	7.5	1	8.13		30.08	30.08	20.29	20.29	98.4	98.4	7.42	7.42	7.42		2.2	2.2	2.2	0.12	0.11	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	M	7.5	2	8.13	8.13	30.08	30.08	20.29	20.29	98.4	98.4	7.42	7.42	7.42		2.2	2.2	2.2	0.11	0.11	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	M	7.5	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	B	14	1	8.13		30.10	30.10	20.26	20.26	98.6	98.6	7.47	7.47	7.47		2.8	2.8	2.8	0.11	0.11	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	B	14	2	8.13	8.13	30.10	30.10	20.26	20.26	98.6	98.6	7.47	7.47	7.47		2.8	2.8	2.8	0.11	0.11	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
SR12	5/1/2017	Mid-Flood	Cloudy	Moderate	12:43	15	B	14	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	S	1	1	8.14		30.14	30.14	20.27	20.27	97.8	97.8	7.32	7.32	7.32		1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	S	1	2	8.14	8.14	30.14	30.14	20.27	20.27	97.8	97.8	7.33	7.33	7.33		1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	S	1	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	M	7	1	8.13		30.13	30.13	20.27	20.27	98.9	98.9	7.41	7.41	7.41		1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	M	7	2	8.13	8.13	30.13	30.13	20.27	20.27	98.9	98.9	7.43	7.43	7.43		1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	M	7	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	B	13	1	8.12		30.13	30.13	20.28	20.28	97.9	97.9	7.48	7.48	7.48		1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	B	13	2	8.12	8.12	30.13	30.13	20.28	20.28	97.9	97.9	7.47	7.47	7.47		1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	5/1/2017	Mid-Flood	Cloudy	Moderate	12:30	14	B	13	3															NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	S	1	1	9	0.05			0.003						NA	NA	NA	NA	NA			50			NA			3		
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	S	1	2	8	0.07	0.06		0.004	0.003					NA	NA	NA	NA	NA			46	48		NA	NA		2	3	
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	S	1	3											NA	NA	NA	NA												
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	M	16	1	7	0.05			0.003			NA	NA	NA	NA	NA			56			NA			2					
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	M	16	2	9	0.04	0.05	0.06	0.002	0.002	0.003	NA	NA	NA	NA	NA	NA		65	60	113	NA	NA	NA	2	2	2			
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	M	16	3								NA	NA	NA	NA															
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	B	31	1	11	0.06			0.003			NA	NA	NA	NA	NA			520			NA			1					
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	B	31	2	10	0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			480	500		NA	NA		1	1				
C1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:30	32	B	31	3								NA	NA	NA	NA															
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	S	1	1	6	0.03			0.002			NA	NA	NA	NA	NA			ND			NA			2					
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	S	1	2	8	0.05	0.04		0.004	0.003		NA	NA	NA	NA	NA			ND	1		NA	NA		2	2				
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	S	1	3								NA	NA	NA	NA															
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	M	4.5	1	8	0.01			0.001			NA	NA	NA	NA	NA			ND			NA			2					
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	M	4.5	2	7	0.02	0.02	0.04	0.002	0.001	0.003	NA	NA	NA	NA	NA	NA		ND	1	1	NA	NA	NA	2	2	2			
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	M	4.5	3								NA	NA	NA	NA															
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	B	8	1	7	0.06			0.004			NA	NA	NA	NA	NA			ND			NA			2					
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	B	8	2	8	0.06	0.06		0.004	0.004		NA	NA	NA	NA	NA			ND	1		NA	NA		2	2				
C2	5/1/2017	Mid-Flood	Fine	Moderate	12:20	9	B	8	3								NA	NA	NA	NA															
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	S	1	1	4	0.06			0.004			NA	NA	NA	NA	NA			ND			NA			1					
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	S	1	2	6	0.05	0.06		0.003	0.004		NA	NA	NA	NA	NA			ND	1		NA	NA		1	1				
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	S	1	3								NA	NA	NA	NA															
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	M	18	1	7	0.06			0.005			NA	NA	NA	NA	NA			ND			NA			1					
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	M	18	2	9	0.06	0.06	0.05	0.005	0.005	0.004	NA	NA	NA	NA	NA	NA		ND	1	1	NA	NA	NA	1	1	1			
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	M	18	3								NA	NA	NA	NA															
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	B	35	1	7	0.04			0.003			NA	NA	NA	NA	NA			ND			NA			1					
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	B	35	2	7	0.03	0.04		0.002	0.003		NA	NA	NA	NA	NA			ND	1		NA	NA		<1	1				
C3	5/1/2017	Mid-Flood	Fine	Moderate	14:40	36	B	35	3								NA	NA	NA	NA															
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	S	1	1	8	NA			NA			0.06	0.18	<0.01	0.25	0.24			NA			NA			NA					
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	S	1	2	8	NA	NA		NA	NA		0.05	0.18	<0.01	0.24	0.24			NA	NA		NA	NA		NA	NA				
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	S	1	3								0.04	0.18	<0.01	0.23															
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	M	14	1	6	NA			NA			0.04	0.18	<0.01	0.23	0.23	0.24		NA			NA			NA					
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	M	14	2	8	NA	NA		NA	NA		0.05	0.17	0.01	0.23	0.23	0.24		NA	NA		NA	NA		NA	NA				
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	M	14	3								0.04	0.18	<0.01	0.23															
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	B	27	1	10	NA			NA			0.07	0.17	0.01	0.25	0.24			NA			NA			NA					
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	B	27	2	8	NA	NA		NA	NA		0.05	0.17	0.01	0.23	0.24			NA	NA		NA	NA		NA	NA				
G1	5/1/2017	Mid-Flood	Cloudy	Moderate	15:10	28	B	27	3								0.05	0.17	0.01	0.23															
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	S	1	1	6	NA			NA			0.05	0.19	0.01	0.25	0.24			NA			NA			NA					
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	S	1	2	5	NA	NA		NA	NA		0.04	0.19	<0.01	0.24	0.24			NA	NA		NA	NA		NA	NA				
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	S	1	3								0.03	0.19	0.01	0.23															
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	M	6	1	9	NA			NA			0.04	0.18	0.01	0.23	0.23	0.23		NA			NA			NA					
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	M	6	2	7	NA	NA		NA	NA		0.05	0.18	<0.01	0.24	0.23			NA	NA		NA	NA		NA	NA				
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	M	6	3								0.04	0.17	0.01	0.22															
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	B	11	1	10	NA			NA			0.02	0.19	<0.01	0.22	0.22			NA			NA			NA					
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	B	11	2	10	NA	NA		NA	NA		0.02	0.18	<0.01	0.21	0.22			NA	NA		NA	NA		NA	NA				
G2	5/1/2017	Mid-Flood	Cloudy	Moderate	13:20	12	B	11	3								0.04	0.19	<0.01	0.24															
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	S	1	1	5	NA			NA			0.06	0.16	<0.01	0.23	0.23			NA			NA			NA					
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	S	1	2	3	NA	NA		NA	NA		0.05	0.16	<0.01	0.22	0.22			NA	NA		NA	NA		NA	NA				
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	S	1	3								0.04	0.15	0.01	0.20															
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	M	17	1	7	NA			NA			0.08	0.16	<0.01	0.25	0.24			NA			NA			NA					
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	M	17	2	7	NA	NA		NA	NA		0.06	0.16	<0.01	0.23	0.24	0.23		NA	NA		NA	NA		NA	NA				
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	M	17	3								0.06	0.16	<0.01	0.23															
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	B	33	1	9	NA			NA			0.05	0.15	<0.01	0.21	0.23			NA			NA			NA					
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	B	33	2	7	NA	NA		NA	NA		0.09	0.16	<0.01	0.26	0.23			NA	NA		NA	NA		NA	NA				
G3	5/1/2017	Mid-Flood	Cloudy	Moderate	11:48	34	B	33	3								0.05	0.16	<0.01	0.22															



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
																			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	S	1	1	5	0.12				0.005	0.005				NA	NA	NA	NA	NA	1200	1386	1594	NA	NA	NA	1		
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	S	1	2	6	0.12	0.12			0.005	0.005				NA	NA	NA	NA	NA	1600			NA	NA	NA	1	1	
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	S	1	3											NA	NA	NA	NA	NA									
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	M	2	1											NA	NA	NA	NA	NA									
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	M	2	2											NA	NA	NA	NA	NA									
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	M	2	3											NA	NA	NA	NA	NA									
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	B	3	1	8	0.15				0.006					NA	NA	NA	NA	NA	2100	1833		NA	NA	NA	2		
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	B	3	2	10	0.14	0.15			0.006	0.006				NA	NA	NA	NA	NA	1600			NA	NA	NA	1	2	
SR4	5/1/2017	Mid-Flood	Cloudy	Moderate	13:00	4	B	3	3											NA	NA	NA	NA	NA									
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	S	1	1	8	NA				NA	NA				0.04	0.19	0.01	0.24	0.24	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	S	1	2	7	NA	NA			NA	NA				0.04	0.19	0.01	0.24	0.24	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	S	1	3											0.05	0.19	0.01	0.25	0.25	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	M	5.5	1	7	NA	NA			NA	NA				0.06	0.18	0.01	0.25	0.26	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	M	5.5	2	9	NA	NA			NA	NA				0.06	0.19	0.01	0.26	0.26	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	M	5.5	3											0.07	0.18	0.01	0.26	0.25	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	B	10	1	8	NA	NA			NA	NA				0.05	0.19	<0.01	0.25	0.25	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	B	10	2	7	NA	NA			NA	NA				0.05	0.19	<0.01	0.25	0.25	NA	NA		NA	NA	NA	NA	NA	
SR5	5/1/2017	Mid-Flood	Cloudy	Moderate	14:30	11	B	10	3											0.05	0.19	0.01	0.25	0.25	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	S	1	1	6	NA				NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	S	1	2	4	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	S	1	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	M	4	1	5	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	M	4	2	6	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	M	4	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	B	7	1	7	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	B	7	2	6	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Flood	Fine	Moderate	11:34	8	B	7	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	S	1	1	4	NA				NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	S	1	2	5	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	S	1	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	M	10	1	5	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	M	10	2	6	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	M	10	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	B	19	1	9	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	B	19	2	10	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Flood	Cloudy	Moderate	11:30	20	B	19	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	S	1	1	5	NA				NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	S	1	2	4	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	S	1	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	M	4.5	1	6	NA				NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	M	4.5	2	5	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	M	4.5	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	B	8	1	7	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	B	8	2	6	NA	NA			NA	NA				NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Flood	Fine	Moderate	12:35	9	B	8	3											NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	S	1	1	6	NA				NA	NA				<0.01	0.03	<0.01	0.05	0.05	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	S	1	2	6	NA	NA			NA	NA				<0.01	0.03	<0.01	0.05	0.05	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	S	1	3											<0.01	0.02	<0.01	0.04	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	M	3.5	1	5	NA	NA			NA	NA				<0.01	0.02	<0.01	0.04	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	M	3.5	2	5	NA	NA			NA	NA				<0.01	0.03	<0.01	0.05	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	M	3.5	3											<0.01	0.02	<0.01	0.04	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	B	6	1	6	NA	NA			NA	NA				<0.01	0.01	<0.01	0.03	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	B	6	2	7	NA	NA			NA	NA				0.01	0.02	<0.01	0.04	0.04	NA	NA		NA	NA	NA	NA	NA	
SR9	5/1/2017	Mid-Flood	Fine	Moderate	12:07	7	B	6	3											<0.01	0.02	<0.01	0.04	0.04	NA	NA		NA	NA	NA	NA	NA	









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																													
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	S	1	1	8.16		30.03	30.03	20.30	20.30	98.0	98.0	7.09	7.10	7.10	7.10	1.6	1.6	1.6	0.12	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA	NA		
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	S	1	2	8.16		30.02	30.03	20.30	20.30	98.0	98.0	7.10	7.10	7.10	7.10	1.6	1.6	1.6	0.12	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA	NA		
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	S	1	3																														
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	M	2	1																														
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	M	2	2																														
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	M	2	3																														
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	B	3	1	8.16		30.03	30.03	20.30	20.30	98.1	98.1	7.24	7.25	7.25	7.25	1.5	1.5	1.5	0.10	0.09	0.10	0.005	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	B	3	2	8.16		30.03	30.03	20.30	20.30	98.1	98.1	7.25	7.25	7.25	7.25	1.5	1.5	1.5	0.10	0.09	0.10	0.005	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	
SR4	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:25	4	B	3	3																														
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	S	1	1	8.18		29.59	29.59	20.20	20.20	99.6	99.6	7.18	7.19	7.19	7.19	1.6	1.6	1.6	NA	NA	NA	NA	NA	NA	0.06	0.19	0.01	0.26	0.26	0.26	0.26		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	S	1	2	8.18		29.59	29.59	20.20	20.20	99.6	99.6	7.19	7.19	7.19	7.19	1.6	1.6	1.6	NA	NA	NA	NA	NA	NA	0.05	0.18	0.02	0.25	0.25	0.25	0.25		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	S	1	3																														
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	M	5.5	1	8.18		29.60	29.60	20.20	20.20	99.8	99.8	7.76	7.77	7.77	7.77	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	0.06	0.18	0.01	0.25	0.25	0.25	0.25		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	M	5.5	2	8.18		29.60	29.60	20.20	20.20	99.8	99.8	7.77	7.77	7.77	7.77	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	0.07	0.19	0.01	0.27	0.27	0.27	0.27		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	M	5.5	3																														
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	B	10	1	8.19		29.59	29.59	20.22	20.22	99.7	99.7	7.72	7.73	7.73	7.73	1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	0.06	0.19	0.01	0.28	0.28	0.28	0.28		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	B	10	2	8.19		29.59	29.59	20.22	20.22	99.7	99.7	7.72	7.73	7.73	7.73	1.2	1.2	1.2	NA	NA	NA	NA	NA	NA	0.06	0.17	0.02	0.25	0.25	0.25	0.25		
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	B	10	3																														
SR5	5/1/2017	Mid-Ebb	Fine	Moderate	16:41	11	B	10	3																														
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	S	1	1	8.08		29.97	29.97	20.42	20.42	97.6	97.6	7.38	7.38	7.38	7.38	2.6	2.6	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	S	1	2	8.08		29.97	29.97	20.42	20.42	97.6	97.6	7.38	7.38	7.38	7.38	2.6	2.6	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	S	1	3																														
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	M	4	1	8.08		29.93	29.93	20.28	20.28	97.0	97.0	7.35	7.35	7.35	7.35	2.7	2.7	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	M	4	2	8.08		29.93	29.93	20.28	20.28	97.0	97.0	7.35	7.35	7.35	7.35	2.7	2.7	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	M	4	3																														
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	B	7	1	8.08		29.85	29.85	20.27	20.27	97.0	97.0	7.35	7.35	7.35	7.35	2.6	2.6	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	B	7	2	8.08		29.85	29.85	20.27	20.27	97.0	97.0	7.35	7.35	7.35	7.35	2.6	2.6	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	5/1/2017	Mid-Ebb	Fine	Moderate	18:03	8	B	7	3																														
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	S	1	1	8.10		30.10	30.10	20.21	20.21	99.5	99.5	7.41	7.41	7.41	7.41	0.6	0.6	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	S	1	2	8.10		30.10	30.10	20.21	20.21	99.5	99.5	7.41	7.41	7.41	7.41	0.6	0.6	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	S	1	3																														
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	M	10	1	8.10		30.12	30.12	20.27	20.28	100.0	100.0	7.89	7.89	7.89	7.89	0.5	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	M	10	2	8.10		30.12	30.12	20.27	20.28	100.0	100.0	7.89	7.89	7.89	7.89	0.5	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	M	10	3																														
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	B	19	1	8.08		30.19	30.19	20.24	20.24	100.6	100.6	7.76	7.76	7.76	7.76	0.9	0.9	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	B	19	2	8.08		30.19	30.19	20.24	20.24	100.6	100.6	7.76	7.76	7.76	7.76	0.9	0.9	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:30	20	B	19	3																														
SR8	5/1/2017	Mid-Ebb	Fine	Moderate	17:06	9	S	1	1	8.44		30.39	30.39	20.85	20.85	112.4	112.4	8.43	8.43	8.43	8.43	1.8	1.8	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR8	5/1/2017	Mid-Ebb	Fine	Moderate	17:06	9	S	1	2	8.44		30.39																											



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	S	1	1	5	0.06			0.07	0.07		0.003	0.003		NA	NA	NA	NA	NA			22	28		NA	NA		2		
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	S	1	2	5	0.07						0.004	0.003		NA	NA	NA	NA	NA			36			NA	NA		3	3	
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	S	1	3											NA	NA	NA	NA												
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	M	16	1	4	0.11						0.005	0.004		NA	NA	NA	NA				950			NA	NA		1		
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	M	16	2	5	0.06	0.09	0.07	0.003	0.004	0.004				NA	NA	NA	NA	NA	NA		980	965	195	NA	NA	NA	2	2	2
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	M	16	3											NA	NA	NA	NA												
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	B	31	1	5	0.06						0.003	0.003		NA	NA	NA	NA	NA			260			NA	NA		2		
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	B	31	2	5	0.08	0.07		0.004	0.003					NA	NA	NA	NA	NA			290	275		NA	NA		1	2	
C1	5/1/2017	Mid-Ebb	Fine	Moderate	15:56	32	B	31	3											NA	NA	NA	NA												
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	S	1	1	4	0.04						0.003	0.003		NA	NA	NA	NA	NA			ND			NA	NA		2		
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	S	1	2	3	0.05	0.05		0.004	0.003					NA	NA	NA	NA	NA			ND	1		NA	NA		2	2	
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	S	1	3											NA	NA	NA	NA												
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	M	4.5	1	3	0.05						0.004	0.003		NA	NA	NA	NA	NA			ND			NA	NA		2		
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	M	4.5	2	3	0.04	0.05	0.06	0.003	0.003	0.004				NA	NA	NA	NA	NA	NA		ND	1	1	NA	NA	NA	2	2	2
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	M	4.5	3											NA	NA	NA	NA												
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	B	8	1	5	0.08						0.006	0.006		NA	NA	NA	NA				ND			NA	NA		2		
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	B	8	2	7	0.09	0.09		0.006	0.006					NA	NA	NA	NA	NA			ND	1		NA	NA		2	2	
C2	5/1/2017	Mid-Ebb	Fine	Moderate	17:20	9	B	8	3											NA	NA	NA	NA												
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	S	1	1	4	0.06						0.005	0.004		NA	NA	NA	NA	NA			7			NA	NA		1		
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	S	1	2	5	0.04	0.05		0.003	0.004					NA	NA	NA	NA	NA			15	10		NA	NA		1	1	
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	S	1	3											NA	NA	NA	NA												
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	M	18	1	4	0.05						0.004	0.004		NA	NA	NA	NA	NA			16			NA	NA		1		
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	M	18	2	5	0.05	0.05	0.05	0.004	0.004	0.004				NA	NA	NA	NA	NA			8	11	9	NA	NA	NA	1	1	1
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	M	18	3											NA	NA	NA	NA												
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	B	35	1	4	0.05						0.004	0.004		NA	NA	NA	NA	NA			9			NA	NA		1		
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	B	35	2	4	0.06	0.06		0.005	0.004					NA	NA	NA	NA	NA			6	7		NA	NA		1	1	
C3	5/1/2017	Mid-Ebb	Fine	Moderate	16:19	36	B	35	3											NA	NA	NA	NA												
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	S	1	1	4	NA			NA	NA					0.06	0.18	<0.01	0.25	0.25			NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	S	1	2	3	NA			NA	NA					0.06	0.18	<0.01	0.25				NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	S	1	3											0.07	0.18	<0.01	0.26												
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	M	14	1	4	NA			NA	NA					0.05	0.18	<0.01	0.24	0.24			NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	M	14	2	5	NA	NA		NA	NA					0.06	0.16	0.01	0.23		0.24		NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	M	14	3											0.06	0.17	<0.01	0.24												
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	B	27	1	4	NA			NA	NA					0.07	0.17	0.01	0.25	0.24			NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	B	27	2	5	NA	NA		NA	NA					0.07	0.16	0.01	0.24				NA	NA		NA	NA		NA	NA	
G1	5/1/2017	Mid-Ebb	Fine	Moderate	16:20	28	B	27	3											0.05	0.17	0.01	0.23												
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	S	1	1	5	NA			NA	NA					0.10	0.16	<0.01	0.27	0.27			NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	S	1	2	6	NA	NA		NA	NA					0.10	0.16	<0.01	0.27				NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	S	1	3											0.10	0.16	<0.01	0.27												
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	M	6	1	4	NA			NA	NA					0.09	0.16	<0.01	0.26	0.26			NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	M	6	2	6	NA	NA		NA	NA					0.10	0.15	0.01	0.26				NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	M	6	3											0.09	0.16	<0.01	0.26												
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	B	11	1	9	NA			NA	NA					0.09	0.16	<0.01	0.26				NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	B	11	2	10	NA	NA		NA	NA					0.09	0.16	<0.01	0.26				NA	NA		NA	NA		NA	NA	
G2	5/1/2017	Mid-Ebb	Fine	Moderate	17:10	12	B	11	3											0.09	0.16	<0.01	0.26												
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	S	1	1	5	NA			NA	NA					0.08	0.15	0.01	0.24	0.24			NA	NA		NA	NA		NA	NA	
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	S	1	2	4	NA	NA		NA	NA					0.08	0.16	<0.01	0.25				NA	NA		NA	NA		NA	NA	
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	S	1	3											0.08	0.15	<0.01	0.24												
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	M	17	1	6	NA			NA	NA					0.04	0.15	<0.01	0.20	0.21			NA	NA		NA	NA		NA	NA	
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	M	17	2	5	NA	NA		NA	NA					0.05	0.15	<0.01	0.21		0.24		NA	NA		NA	NA		NA	NA	
G3	5/1/2017	Mid-Ebb	Cloudy	Moderate	18:15	34	M	17	3											0.06	0.15	0.01	0.22												





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	S	1	1	4	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	S	1	2	4	NA	NA	NA	NA	NA	0.04	0.07	<0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	S	1	3		NA	NA	NA	NA	NA	0.03	0.07	<0.01	0.11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	M	5	1	7	NA	NA	NA	NA	NA	0.06	0.07	<0.01	0.14	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	M	5	2	6	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	M	5	3		NA	NA	NA	NA	NA	0.04	0.07	<0.01	0.12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	B	9	1	8	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	B	9	2	6	NA	NA	NA	NA	NA	0.05	0.07	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR10	5/1/2017	Mid-Ebb	Fine	Moderate	16:31	10	B	9	3		NA	NA	NA	NA	NA	0.05	0.07	<0.01	0.13		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	S	1	1	4	NA	NA	NA	NA	NA	0.05	0.07	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	S	1	2	3	NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	S	1	3		NA	NA	NA	NA	NA	0.04	0.08	<0.01	0.13		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	M	5	1	5	NA	NA	NA	NA	NA	0.06	0.07	<0.01	0.14	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	M	5	2	4	NA	NA	NA	NA	NA	0.05	0.07	<0.01	0.13	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	M	5	3		NA	NA	NA	NA	NA	0.04	0.07	<0.01	0.12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	B	9	1	5	NA	NA	NA	NA	NA	0.06	0.07	<0.01	0.14	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	B	9	2	4	NA	NA	NA	NA	NA	0.04	0.07	<0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR11	5/1/2017	Mid-Ebb	Fine	Moderate	16:03	10	B	9	3		NA	NA	NA	NA	NA	0.03	0.07	<0.01	0.11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	S	1	1	4	0.13	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	1100	1285	601	NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	S	1	2	6	0.14	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	1500			NA	NA	NA	1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	S	1	3		0.12	0.13	0.005	0.006	0.006	NA	NA	NA	NA	NA	NA				NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	M	7.5	1	6	0.14	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	450	414	601	NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	M	7.5	2	5	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	380			NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	M	7.5	3		0.12	0.13	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA	390	410	601	NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	B	14	1	5	0.13	0.13	0.006	0.005	0.005	NA	NA	NA	NA	NA	NA	430			NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	B	14	2	7	0.12	0.13	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA				NA	NA	NA	<1	1				
SR12	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:35	15	B	14	3		0.12	0.13	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA				NA	NA	NA	<1	1				
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	S	1	1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	S	1	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	M	7	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	M	7	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	M	7	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	B	13	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	B	13	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	5/1/2017	Mid-Ebb	Cloudy	Moderate	17:42	14	B	13	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	S	1	1	4	0.11			0.12			0.006			NA	NA	NA	NA	NA			11			NA	NA		<1		
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	S	1	2	6	0.13			0.12			0.007	0.007		NA	NA	NA	NA	NA			6	8		NA	NA		1	1	
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	S	1	3											NA	NA	NA	NA												
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	M	16	1	5	0.12			0.11	0.12	0.13	0.007	0.007		NA	NA	NA	NA	NA			150			NA	NA		<1		
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	M	16	2	6	0.11						0.006	0.007	0.007	NA	NA	NA	NA	NA	NA		120	134	55	NA	NA	NA	<1	1	1
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	M	16	3											NA	NA	NA	NA												
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	B	31	1	6	0.15						0.009	0.008		NA	NA	NA	NA	NA			170			NA	NA		<1		
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	B	31	2	5	0.14						0.008	0.008		NA	NA	NA	NA	NA			130	149		NA	NA		<1	1	
C1	7/1/2017	Mid-Flood	Moderat	Fine	9:50	32	B	31	3											NA	NA	NA	NA												
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	S	1	1	4	0.28			0.30	0.29		0.013	0.014		NA	NA	NA	NA	NA			16			NA	NA		<1		
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	S	1	2	4							0.014	0.014		NA	NA	NA	NA	NA			10	13		NA	NA		<1	1	
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	S	1	3											NA	NA	NA	NA												
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	M	4.5	1	4	0.24			0.25	0.25	0.25	0.011	0.011	0.012	NA	NA	NA	NA	NA	NA		12			NA	NA		<1		
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	M	4.5	2	3	0.25						0.011	0.011		NA	NA	NA	NA	NA	NA		8	10	8	NA	NA	NA	<1	1	1
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	M	4.5	3											NA	NA	NA	NA												
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	B	8	1	7	0.19						0.009	0.010		NA	NA	NA	NA	NA			3			NA	NA		<1		
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	B	8	2	6	0.21						0.010	0.010		NA	NA	NA	NA	NA			7	5		NA	NA		<1	1	
C2	7/1/2017	Mid-Flood	Moderat	Fine	11:24	9	B	8	3											NA	NA	NA	NA												
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	S	1	1	4	0.05			0.03	0.04		0.004	0.003		NA	NA	NA	NA	NA			ND			NA	NA		<1		
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	S	1	2	6							0.002	0.003		NA	NA	NA	NA	NA			ND	1		NA	NA		<1	1	
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	S	1	3											NA	NA	NA	NA												
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	M	18	1	5	0.08			0.09	0.09	0.08	0.006	0.007	0.006	NA	NA	NA	NA	NA	NA		ND			NA	NA		<1		
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	M	18	2	5	0.09						0.007	0.007		NA	NA	NA	NA	NA			ND	1	1	NA	NA	NA	<1	1	1
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	M	18	3											NA	NA	NA	NA												
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	B	35	1	9	0.10			0.12	0.11		0.008	0.008		NA	NA	NA	NA	NA			ND			NA	NA		<1		
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	B	35	2	10	0.12						0.009	0.008		NA	NA	NA	NA	NA			ND	1		NA	NA		<1	1	
C3	7/1/2017	Mid-Flood	Moderat	Fine	10:39	36	B	35	3											NA	NA	NA	NA												
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	S	1	1	5	NA			NA	NA		NA	NA		0.06	0.31	0.02	0.39	0.39			NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	S	1	2	5	NA			NA	NA		NA	NA		0.06	0.32	0.02	0.40	0.39			NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	S	1	3											0.06	0.30	0.03	0.39												
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	M	14	1	7	NA			NA	NA		NA	NA		0.04	0.31	0.02	0.37	0.38			NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	M	14	2	8	NA			NA	NA		NA	NA		0.05	0.30	0.02	0.37	0.38	0.39		NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	M	14	3											0.05	0.32	0.02	0.39												
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	B	27	1	8	NA			NA	NA		NA	NA		0.04	0.30	0.03	0.37	0.39			NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	B	27	2	7	NA			NA	NA		NA	NA		0.07	0.31	0.02	0.40	0.39			NA	NA		NA	NA		NA	NA	
G1	7/1/2017	Mid-Flood	Moderat	Fine	10:00	28	B	27	3											0.07	0.33	0.01	0.41												
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	S	1	1	4	NA			NA	NA		NA	NA		0.07	0.23	0.02	0.32	0.32			NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	S	1	2	6	NA			NA	NA		NA	NA		0.07	0.22	0.02	0.31	0.32			NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	S	1	3											0.07	0.23	0.02	0.32												
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	M	6	1	5	NA			NA	NA		NA	NA		0.08	0.23	0.02	0.33	0.32	0.32		NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	M	6	2	4	NA			NA	NA		NA	NA		0.07	0.23	0.01	0.31	0.32			NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	M	6	3											0.08	0.22	0.02	0.32												
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	B	11	1	9	NA			NA	NA		NA	NA		0.08	0.22	0.02	0.32	0.31			NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	B	11	2	8	NA			NA	NA		NA	NA		0.07	0.23	<0.01	0.31	0.31			NA	NA		NA	NA		NA	NA	
G2	7/1/2017	Mid-Flood	Moderat	Fine	10:50	12	B	11	3											0.07	0.23	0.01	0.31												
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	S	1	1	4	NA			NA	NA		NA	NA		0.14	0.16	0.01	0.31	0.31			NA	NA		NA	NA		NA	NA	
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	S	1	2	6	NA			NA	NA		NA	NA		0.13	0.16	0.01	0.30	0.31			NA	NA		NA	NA		NA	NA	
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	S	1	3											0.16	0.15	0.01	0.32												
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	M	17	1	4	NA			NA	NA		NA	NA		0.14	0.15	0.01	0.30	0.31			NA	NA		NA	NA		NA	NA	
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	M	17	2	4	NA			NA	NA		NA	NA		0.14	0.16	0.01	0.31	0.31	0.31		NA	NA		NA	NA		NA	NA	
G3	7/1/2017	Mid-Flood	Moderat	Fine	12:05	34	M	17	3																										





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	S	1	1	7	7	NA	NA	NA	NA	0.14	0.13	<0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	S	1	2	7	7	NA	NA	NA	NA	0.15	0.13	<0.01	0.29	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	S	1	3	7	7	NA	NA	NA	NA	0.13	0.13	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	M	5.5	1	8	8	NA	NA	NA	NA	0.13	0.13	<0.01	0.27	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	M	5.5	2	8	8	NA	NA	NA	NA	0.12	0.10	0.02	0.24	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	M	5.5	3	8	8	NA	NA	NA	NA	0.12	0.11	0.02	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	B	10	1	10	10	NA	NA	NA	NA	0.12	0.12	0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	B	10	2	9	10	NA	NA	NA	NA	0.12	0.11	0.02	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	7/1/2017	Mid-Flood	Moderat	Fine	10:39	11	B	10	3	9	10	NA	NA	NA	NA	0.12	0.11	0.02	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	S	1	1	5	6	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	S	1	2	6	6	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	S	1	3	6	6	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	M	5.5	1	5	6	NA	NA	NA	NA	0.04	0.05	0.01	0.10	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	M	5.5	2	6	6	NA	NA	NA	NA	0.05	0.06	<0.01	0.12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	M	5.5	3	6	6	NA	NA	NA	NA	0.07	0.07	<0.01	0.15	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	B	10	1	8	8	NA	NA	NA	NA	0.11	0.07	<0.01	0.19	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	B	10	2	8	8	NA	NA	NA	NA	0.08	0.07	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	7/1/2017	Mid-Flood	Moderat	Fine	10:03	11	B	10	3	8	8	NA	NA	NA	NA	0.06	0.06	<0.01	0.13	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	S	1	1	8	7	0.15	0.15	0.006	0.006	NA	NA	NA	NA	NA	NA	130	140	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	S	1	2	6	7	0.15	0.15	0.006	0.006	NA	NA	NA	NA	NA	NA	150	140	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	S	1	3	6	7	0.15	0.15	0.006	0.006	NA	NA	NA	NA	NA	NA	150	140	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	M	7.5	1	8	8	0.28	0.28	0.012	0.012	NA	NA	NA	NA	NA	NA	230	198	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	M	7.5	2	7	8	0.28	0.28	0.012	0.012	NA	NA	NA	NA	NA	NA	170	198	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	M	7.5	3	7	8	0.28	0.28	0.012	0.012	NA	NA	NA	NA	NA	NA	170	198	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	B	14	1	12	11	0.14	0.15	0.006	0.006	NA	NA	NA	NA	NA	NA	230	220	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	B	14	2	10	11	0.16	0.15	0.007	0.006	NA	NA	NA	NA	NA	NA	210	220	182	NA	NA	NA	<1	<1	1	1	1	1		
SR12	7/1/2017	Mid-Flood	Moderat	Fine	11:25	15	B	14	3	10	11	0.16	0.15	0.007	0.006	NA	NA	NA	NA	NA	NA	210	220	182	NA	NA	NA	<1	<1	1	1	1	1		
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	S	1	1	5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	S	1	2	4	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	S	1	3	4	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	M	7	1	7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	M	7	2	8	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	M	7	3	8	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	B	13	1	9	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	B	13	2	10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	7/1/2017	Mid-Flood	Moderat	Fine	11:35	14	B	13	3	10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																												
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.			
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	S	1	1	8.04		29.83	29.83	20.41	20.41	97.0	97.1	7.40	7.41	7.41	7.41	7.41	2.0	2.0	2.3	NA	NA	NA	NA	NA	0.54	0.14	0.01	0.69				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	S	1	2	8.04		29.83	29.83	20.41	20.41	97.1	97.1	7.41	7.41	7.41	7.41	7.41	2.0	2.0	2.3	NA	NA	NA	NA	NA	0.53	0.13	0.01	0.67	0.68			
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	S	1	3													7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	0.54	0.14	0.01	0.69				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	M	6.5	1	8.05		29.84	29.84	20.42	20.42	97.4	97.4	7.44	7.44	7.44	7.44	7.44	2.3	2.3	2.3	NA	NA	NA	NA	NA	0.52	0.14	0.01	0.67				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	M	6.5	2	8.05		29.84	29.84	20.42	20.42	97.4	97.4	7.44	7.44	7.44	7.44	7.44	2.3	2.3	2.3	NA	NA	NA	NA	NA	0.50	0.13	0.01	0.64	0.66	0.60		
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	M	6.5	3													7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	0.53	0.14	0.01	0.68				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	B	12	1	8.05		29.86	29.86	20.41	20.41	97.5	97.5	7.45	7.45	7.45	7.45	7.45	2.7	2.7	2.7	NA	NA	NA	NA	NA	0.31	0.14	0.01	0.46				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	B	12	2	8.05		29.86	29.86	20.41	20.41	97.5	97.5	7.45	7.45	7.45	7.45	7.45	2.7	2.7	2.7	NA	NA	NA	NA	NA	0.32	0.12	0.01	0.45				
G4	7/1/2017	Mid-Ebb	Moderat	Fine	7:35	13	B	12	3													7.42	2.7	2.7	2.7	NA	NA	NA	NA	NA	0.32	0.14	0.01	0.47				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	S	1	1	8.06		29.81	29.81	20.43	20.43	97.2	97.2	7.34	7.34	7.34	7.34	7.34	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.15	0.16	0.02	0.33				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	S	1	2	8.06		29.81	29.81	20.43	20.43	97.4	97.4	7.36	7.36	7.36	7.36	7.36	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	S	1	3													7.35	1.1	1.1	1.1	NA	NA	NA	NA	NA	0.15	0.15	0.01	0.31				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	M	3	1	8.05		29.86	29.86	20.51	20.51	97.2	97.2	7.35	7.35	7.35	7.35	7.35	1.4	1.4	1.4	NA	NA	NA	NA	NA	0.12	0.16	0.01	0.29				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	M	3	2	8.05		29.86	29.86	20.51	20.51	97.4	97.4	7.36	7.36	7.36	7.36	7.36	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.30	0.30		
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	M	3	3													7.35	1.4	1.4	1.4	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	B	5	1	8.06		29.86	29.86	20.55	20.55	97.6	97.6	7.36	7.36	7.36	7.36	7.36	1.3	1.3	1.3	NA	NA	NA	NA	NA	0.10	0.16	0.01	0.27				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	B	5	2	8.06		29.86	29.86	20.55	20.55	97.6	97.6	7.36	7.36	7.36	7.36	7.36	1.2	1.2	1.2	NA	NA	NA	NA	NA	0.11	0.16	0.01	0.28				
G5	7/1/2017	Mid-Ebb	Moderat	Fine	6:41	6	B	5	3													7.35	1.2	1.2	1.2	NA	NA	NA	NA	NA	0.11	0.16	0.01	0.28				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	S	1	1	8.25		30.06	30.06	20.52	20.52	100.3	100.3	7.57	7.57	7.57	7.57	7.57	0.5	0.5	0.5	NA	NA	NA	NA	NA	0.17	0.12	0.01	0.30				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	S	1	2	8.25		30.06	30.06	20.52	20.52	100.3	100.3	7.57	7.57	7.57	7.57	7.57	0.6	0.6	0.6	NA	NA	NA	NA	NA	0.16	0.11	0.01	0.28				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	S	1	3													7.61	0.6	0.6	0.6	NA	NA	NA	NA	NA	0.16	0.13	0.01	0.30				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	M	15	1	8.27		30.09	30.09	20.55	20.55	101.4	101.4	7.64	7.64	7.64	7.64	7.64	0.3	0.3	0.3	NA	NA	NA	NA	NA	0.14	0.12	0.02	0.28				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	M	15	2	8.27		30.09	30.09	20.55	20.55	101.4	101.4	7.64	7.64	7.64	7.64	7.64	0.3	0.3	0.3	NA	NA	NA	NA	NA	0.15	0.13	0.01	0.29				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	M	15	3													7.61	0.3	0.3	0.3	NA	NA	NA	NA	NA	0.12	0.13	0.02	0.27				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	B	29	1	8.29		30.17	30.17	20.57	20.57	103.1	103.1	7.76	7.76	7.76	7.76	7.76	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.13	0.13	0.01	0.27				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	B	29	2	8.29		30.17	30.17	20.57	20.57	103.1	103.1	7.76	7.76	7.76	7.76	7.76	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.13	0.13	0.01	0.27				
G6	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	30	B	29	3													7.61	1.0	1.0	1.0	NA	NA	NA	NA	NA	0.13	0.12	0.01	0.26				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	S	1	1	8.15		29.54	29.54	20.33	20.33	96.4	96.4	7.34	7.34	7.34	7.34	7.34	1.7	1.7	1.7	0.08	0.07	0.004	0.003	0.003	NA	NA	NA	NA				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	S	1	2	8.15		29.54	29.54	20.33	20.33	96.4	96.4	7.34	7.34	7.34	7.34	7.34	1.7	1.7	1.7	0.08	0.07	0.004	0.003	0.003	NA	NA	NA	NA				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	S	1	3													7.35	1.7	1.7	1.7	0.08	0.07	0.004	0.003	0.003	NA	NA	NA	NA				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	M	4.5	1	8.15		29.54	29.54	20.33	20.33	96.5	96.5	7.35	7.35	7.35	7.35	7.35	1.6	1.6	1.6	0.13	0.13	0.006	0.006	0.006	0.005	NA	NA	NA	NA			
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	M	4.5	2	8.15		29.54	29.54	20.33	20.33	96.5	96.5	7.35	7.35	7.35	7.35	7.35	1.6	1.6	1.6	0.13	0.13	0.006	0.006	0.006	0.005	NA	NA	NA	NA			
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	M	4.5	3													7.35	1.6	1.6	1.6	0.13	0.13	0.006	0.006	0.006	0.005	NA	NA	NA	NA			
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	B	8	1	8.15		29.54	29.54	20.33	20.33	96.5	96.5	7.35	7.35	7.35	7.35	7.35	2.0	2.0	2.0	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	B	8	2	8.15		29.54	29.54	20.33	20.33	96.6	96.6	7.36	7.36	7.36	7.36	7.36	2.0	2.0	2.0	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA				
SR2	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	9	B	8	3													7.35	2.0	2.0	2.0	0.11	0.12	0.005	0.005	0.005	NA	NA	NA	NA				
SR3	7/1/2017	Mid-Ebb	Moderat	Fine	8:25	8	S	1	1	8.16		29.54																										





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	S	1	1	4																							
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	S	1	2	3	0.06	0.07																					
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	S	1	3																								
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	M	16	1	6	0.06	0.07	0.08	0.003	0.004																		
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	M	16	2	5	0.08	0.07	0.08	0.005	0.004	0.005																	
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	M	16	3																								
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	B	31	1	7	0.11	0.11																					
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	B	31	2	7	0.11	0.11																					
C1	7/1/2017	Mid-Ebb	Moderat	Fine	9:40	32	B	31	3																								
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	S	1	1	5	0.24	0.24																					
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	S	1	2	5	0.23	0.24																					
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	S	1	3																								
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	M	4.5	1	5	0.18	0.19	0.19	0.009	0.009	0.009																	
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	M	4.5	2	5	0.19	0.19	0.19	0.009	0.009	0.009																	
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	M	4.5	3																								
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	B	8	1	5	0.16	0.16																					
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	B	8	2	5	0.15	0.16																					
C2	7/1/2017	Mid-Ebb	Moderat	Fine	7:22	9	B	8	3																								
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	S	1	1	5	0.02	0.02																					
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	S	1	2	4	0.02	0.02																					
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	S	1	3																								
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	M	18	1	5	0.07	0.07	0.06	0.006	0.005	0.005																	
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	M	18	2	5	0.06	0.07	0.06	0.005	0.005	0.004																	
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	M	18	3																								
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	B	35	1	7	0.09	0.09																					
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	B	35	2	7	0.08	0.09																					
C3	7/1/2017	Mid-Ebb	Moderat	Fine	8:29	36	B	35	3																								
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	S	1	1	8	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	S	1	2	9	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	S	1	3																								
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	M	14	1	8	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	M	14	2	9	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	M	14	3																								
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	B	27	1	8	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	B	27	2	7	NA	NA																					
G1	7/1/2017	Mid-Ebb	Moderat	Fine	9:35	28	B	27	3																								
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	S	1	1	5	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	S	1	2	4	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	S	1	3																								
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	M	6	1	6	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	M	6	2	6	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	M	6	3																								
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	B	11	1	8	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	B	11	2	7	NA	NA																					
G2	7/1/2017	Mid-Ebb	Moderat	Fine	8:40	12	B	11	3																								
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	S	1	1	3	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	S	1	2	3	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	S	1	3																								
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	M	17	1	5	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	M	17	2	4	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	M	17	3																								
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	B	33	1	8	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	B	33	2	8	NA	NA																					
G3	7/1/2017	Mid-Ebb	Moderat	Fine	7:20	34	B	33	3																								



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
																			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	S	1	1	5	0.10			0.12			0.004			NA	NA	NA	NA			41			NA			<1			
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	S	1	2	3	0.13			0.12			0.006	0.005		NA	NA	NA	NA			53	47		NA	NA		<1	1		
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	S	1	3											NA	NA	NA	NA												
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	M	2	1											NA	NA	NA	NA						NA						
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	M	2	2											NA	NA	NA	NA						NA						
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	M	2	3											NA	NA	NA	NA						NA						
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	B	3	1	7	0.15			0.16			0.007	0.007		NA	NA	NA	NA			57			NA			<1			
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	B	3	2	8	0.17			0.16			0.007	0.007		NA	NA	NA	NA			62	59		NA	NA		<1	1		
SR4	7/1/2017	Mid-Ebb	Moderat	Fine	8:10	4	B	3	3											NA	NA	NA	NA						NA						
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	S	1	1	4	NA			NA			NA			0.06	0.31	0.02	0.39	0.39			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	S	1	2	4	NA			NA			NA			0.08	0.31	0.02	0.41	0.39			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	S	1	3											0.04	0.31	0.02	0.37	0.39			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	M	5.5	1	5	NA			NA			NA			0.05	0.30	0.02	0.37	0.37	0.37		NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	M	5.5	2	3	NA			NA			NA			0.05	0.30	0.02	0.37	0.37	0.37		NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	M	5.5	3											0.04	0.30	0.02	0.36	0.36			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	B	10	1	7	NA			NA			NA			0.07	0.27	0.03	0.37	0.36			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	B	10	2	5	NA			NA			NA			0.06	0.28	0.02	0.36	0.36			NA			NA			NA		
SR5	7/1/2017	Mid-Ebb	Moderat	Fine	8:55	11	B	10	3											0.06	0.29	0.01	0.36	0.36			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	S	1	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	S	1	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	S	1	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	M	3	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	M	3	2	5	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	M	3	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	B	5	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	B	5	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR6	7/1/2017	Mid-Ebb	Moderat	Fine	6:23	6	B	5	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	S	1	1	5	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	S	1	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	S	1	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	M	10	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	M	10	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	M	10	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	B	19	1	9	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	B	19	2	7	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR7	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	20	B	19	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	S	1	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	S	1	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	S	1	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	M	4.5	1	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	M	4.5	2	7	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	M	4.5	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	B	8	1	7	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	B	8	2	6	NA			NA			NA			NA	NA	NA	NA	NA			NA			NA			NA		
SR8	7/1/2017	Mid-Ebb	Moderat	Fine	7:37	9	B	8	3											NA	NA	NA	NA	NA			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	S	1	1	7	NA			NA			NA			0.12	0.16	0.01	0.29	0.30			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	S	1	2	7	NA			NA			NA			0.13	0.16	<0.01	0.30	0.30			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	S	1	3											0.13	0.17	<0.01	0.31	0.30			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	M	3.5	1	8	NA			NA			NA			0.12	0.16	<0.01	0.29	0.29			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	M	3.5	2	7	NA			NA			NA			0.12	0.16	<0.01	0.29	0.29	0.28		NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	M	3.5	3											0.12	0.15	0.01	0.28	0.29			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	B	6	1	10	NA			NA			NA			0.10	0.15	0.01	0.26	0.26			NA			NA			NA		
SR9	7/1/2017	Mid-Ebb	Moderat	Fine	7:00	7	B	6	2	11	NA			NA			NA			0.08	0.15	0.01	0.24	0.26			NA			NA			NA		
SR9	7/1/2																																		

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																													
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrate (mg/L-N)			TIN-Nitrite (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.			
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	S	1	1	4	NA	NA	NA	NA	NA	NA	0.12	0.13	<0.01	0.26	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	S	1	2	4	NA	NA	NA	NA	NA	NA	0.12	0.13	<0.01	0.26	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	S	1	3		NA	NA	NA	NA	NA	NA	0.14	0.13	<0.01	0.28		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	M	5.5	1	5	NA	NA	NA	NA	NA	NA	0.12	0.12	0.01	0.25		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	M	5.5	2	4	NA	NA	NA	NA	NA	NA	0.13	0.13	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	M	5.5	3		NA	NA	NA	NA	NA	NA	0.14	0.13	<0.01	0.28		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	B	10	1	7	NA	NA	NA	NA	NA	NA	0.14	0.12	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	B	10	2	6	NA	NA	NA	NA	NA	NA	0.13	0.13	<0.01	0.27		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR10	7/1/2017	Mid-Ebb	Moderat	Fine	8:07	11	B	10	3		NA	NA	NA	NA	NA	NA	0.13	0.13	<0.01	0.27		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	S	1	1	4	NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	S	1	2	2	NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	S	1	3		NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	M	5.5	1	4	NA	NA	NA	NA	NA	NA	0.04	0.06	<0.01	0.11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	M	5.5	2	4	NA	NA	NA	NA	NA	NA	0.06	0.06	<0.01	0.13	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	M	5.5	3		NA	NA	NA	NA	NA	NA	0.05	0.06	<0.01	0.12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	B	10	1	4	NA	NA	NA	NA	NA	NA	0.12	0.06	<0.01	0.19		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	B	10	2	4	NA	NA	NA	NA	NA	NA	0.11	0.06	<0.01	0.18	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR11	7/1/2017	Mid-Ebb	Moderat	Fine	8:45	11	B	10	3		NA	NA	NA	NA	NA	NA	0.13	0.06	<0.01	0.20		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	S	1	1	4	0.12	0.13	0.13	0.005	0.005	0.007	NA	NA	NA	NA	NA	NA	76	78	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	S	1	2	3	0.13	0.13	0.13	0.006	0.005	0.007	NA	NA	NA	NA	NA	NA	80	78	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	S	1	3		0.30	0.26	0.17	0.012	0.011	0.007	NA	NA	NA	NA	NA	NA	250	206	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	M	7.5	1	5	0.21	0.26	0.17	0.009	0.011	0.007	NA	NA	NA	NA	NA	NA	170	206	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	M	7.5	3		0.13	0.12	0.12	0.005	0.005	0.007	NA	NA	NA	NA	NA	NA	180	170	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	B	14	1	8	0.11	0.12	0.12	0.005	0.005	0.007	NA	NA	NA	NA	NA	NA	160	170	140	NA	NA	NA	<1	1	1								
SR12	7/1/2017	Mid-Ebb	Moderat	Fine	8:00	15	B	14	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	S	1	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	S	1	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	M	7	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	M	7	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	M	7	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	B	13	1	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	B	13	2	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	7/1/2017	Mid-Ebb	Moderat	Fine	7:50	14	B	13	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																									
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	S	1	1	8.06		29.81	29.81	20.43	20.43	96.8	96.8	7.34	7.32	7.33		1.3	1.3		NA	NA	NA	NA	0.73	0.15	0.02	0.90			
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	S	1	2	8.06	8.06	29.81	29.81	20.43	20.43	96.7	96.8	7.32	7.33									0.73	0.16	0.02	0.91	0.91			
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	S	1	3												7.35							0.74	0.16	0.02	0.92				
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	M	3	1	8.05		28.96	28.96	20.51	20.51	97.2	97.3	7.35	7.36									0.59	0.14	0.01	0.74				
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	M	3	2	8.05	8.05	28.96	28.96	20.51	20.51	97.4	97.3	7.37	7.36									0.61	0.14	0.02	0.77	0.76	0.72		
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	M	3	3																		0.60	0.14	0.02	0.76					
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	B	5	1	80.40		29.90	29.90	20.49	20.49	97.6	97.7	7.36	7.37									0.36	0.14	0.01	0.51				
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	B	5	2	8.04	44.22	29.90	29.90	20.49	20.49	97.8	97.7	7.38	7.37									0.36	0.14	0.01	0.51	0.50			
G4	10/1/2017	Mid-Flood	Fine	moderate	14:47	6	B	5	3																		0.36	0.14	0.01	0.51					
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	S	1	1	8.10		32.34	32.34	21.34	21.34	91.7	91.6	7.42	7.41									0.12	0.15	0.01	0.28				
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	S	1	2	8.10	8.10	32.34	32.34	21.34	21.34	91.5	91.6	7.40	7.41									0.13	0.16	0.01	0.30	0.29			
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	S	1	3																			0.13	0.16	0.01	0.30				
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	M	3	1	8.10		32.34	32.34	21.34	21.34	90.1	90.2	7.26	7.27									0.14	0.15	0.01	0.30				
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	M	3	2	8.10	8.10	32.34	32.34	21.34	21.34	90.2	90.2	7.27	7.27									0.14	0.15	0.01	0.30	0.30	0.29		
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	M	3	3																		0.15	0.15	0.01	0.31					
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	B	5	1	8.10		32.34	32.34	21.32	21.32	89.7	89.7	7.22	7.22									0.12	0.15	0.01	0.28				
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	B	5	2	8.10	8.10	32.34	32.34	21.32	21.32	89.7	89.7	7.22	7.22									0.12	0.15	0.01	0.28	0.29			
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	B	5	3																		0.13	0.16	0.01	0.30	0.29				
G5	10/1/2017	Mid-Flood	Cloudy	moderate	15:37	6	B	5	3																		0.13	0.14	0.01	0.28					
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	S	1	1	8.11		32.31	32.31	21.31	21.30	89.2	89.3	6.85	6.86									0.06	0.05	0.01	0.12				
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	S	1	2	8.11	8.11	32.31	32.31	21.29	21.30	89.3	89.3	6.86	6.86									0.04	0.06	0.01	0.11	0.11			
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	S	1	3																		0.04	0.05	0.01	0.10					
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	M	15	1	8.12		32.40	32.40	21.11	21.11	88.5	88.2	6.76	6.75									0.04	0.05	0.01	0.10				
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	M	15	2	8.12	8.12	32.40	32.40	21.11	21.11	88.2	88.4	6.73	6.75									0.03	0.05	0.01	0.09	0.09	0.09		
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	M	15	3																		0.03	0.05	0.01	0.09					
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	B	29	1	8.12		32.40	32.40	20.97	20.97	86.9	86.7	6.52	6.51									0.01	0.04	0.01	0.06				
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	B	29	2	8.12	8.12	32.40	32.40	20.97	20.97	86.7	86.8	6.49	6.51									0.01	0.03	0.01	0.05	0.06	0.06		
G6	10/1/2017	Mid-Flood	Cloudy	moderate	14:07	30	B	29	3																		0.01	0.04	0.01	0.06					
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	S	1	1	8.20		29.04	29.04	20.49	20.49	96.1	96.1	7.32	7.32									NA	NA	NA	NA				
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	S	1	2	8.20	8.20	29.04	29.04	20.49	20.49	96.1	96.1	7.32	7.32									NA	NA	NA	NA	NA			
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	S	1	3																			NA	NA	NA	NA				
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	M	4.5	1	8.21		29.09	29.09	20.51	20.51	96.3	96.3	7.35	7.35									NA	NA	NA	NA				
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	M	4.5	2	8.21	8.21	29.09	29.09	20.51	20.51	96.3	96.3	7.35	7.35									NA	NA	NA	NA	NA			
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	M	4.5	3																			NA	NA	NA	NA				
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	B	8	1	8.21		29.10	29.10	20.49	20.49	96.4	96.4	7.36	7.36									NA	NA	NA	NA				
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	B	8	2	8.21	8.21	29.10	29.10	20.49	20.49	96.4	96.4	7.36	7.36									NA	NA	NA	NA	NA			
SR2	10/1/2017	Mid-Flood	Fine	moderate	13:42	9	B	8	3																			NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	S	1	1	8.23		28.50	28.50	20.55	20.55	97.7	97.8	7.47	7.48									NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	S	1	2	8.23	8.23	28.50	28.50	20.54	20.55	97.8	97.8	7.48	7.48									NA	NA	NA	NA	NA			
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	S	1	3																			NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	M	4	1	8.23		28.49	28.49	20.55	20.55	97.8	97.9	7.48	7.49									NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	M	4	2	8.23	8.23	28.49	28.49	20.55	20.55	97.9	97.9	7.49	7.49									NA	NA	NA	NA	NA			
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	M	4	3																			NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	B	7	1	8.21		28.49	28.49	20.54	20.54	97.5	97.6	7.45	7.46									NA	NA	NA	NA				
SR3	10/1/2017	Mid-Flood	Fine	moderate	13:58	8	B	7	2	8.21	8.21	28.49	28.49	20.54	20.54	97.6	97.6	7.46	7																





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	S	1	1	7	0.08			0.004			0.004			NA	NA	NA	NA	NA			18	17		NA	NA		<1		
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	S	1	2	8	0.10	0.09		0.005	0.005		0.005	0.005		NA	NA	NA	NA	NA			16	17		NA	NA		1	1	
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	S	1	3											NA	NA	NA	NA	NA											
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	M	16	1	7	0.08			0.004			0.004			NA	NA	NA	NA	NA			6	7		NA	NA		1		
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	M	16	2	7	0.09	0.09	0.09	0.005	0.005	0.005	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA		8	7	12	NA	NA	NA	<1	1	1
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	M	16	3											NA	NA	NA	NA	NA											
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	B	31	1	8	0.10			0.006			0.006			NA	NA	NA	NA	NA			13	15		NA	NA		<1		
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	B	31	2	7	0.08	0.09		0.004	0.005		0.004	0.005		NA	NA	NA	NA	NA			18	15		NA	NA		<1	1	
C1	10/1/2017	Mid-Flood	Fine	moderate	12:45	32	B	31	3											NA	NA	NA	NA	NA											
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	S	1	1	8	0.16			0.007			0.007			NA	NA	NA	NA	NA			450	479		NA	NA		<1		
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	S	1	2	7	0.14	0.15		0.006	0.007		0.006	0.007		NA	NA	NA	NA	NA			510	479		NA	NA		<1	1	
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	S	1	3											NA	NA	NA	NA	NA											
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	M	4.5	1	7	0.15			0.007			0.007			NA	NA	NA	NA	NA			77	78	148	NA	NA	NA	1		
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	M	4.5	2	7	0.14	0.15	0.13	0.006	0.006	0.006	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA		80	78		NA	NA	NA	<1	1	1
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	M	4.5	3											NA	NA	NA	NA	NA											
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	B	8	1	7	0.09			0.004			0.004			NA	NA	NA	NA	NA			81	85		NA	NA		1		
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	B	8	2	8	0.11	0.10		0.005	0.004		0.005	0.004		NA	NA	NA	NA	NA			90	85		NA	NA		1	1	
C2	10/1/2017	Mid-Flood	Cloudy	moderate	14:49	9	B	8	3											NA	NA	NA	NA	NA											
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	S	1	1	5	0.05			0.002			0.002			NA	NA	NA	NA	NA			5	7		NA	NA		1		
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	S	1	2	6	0.04	0.05		0.002	0.002		0.002	0.002		NA	NA	NA	NA	NA			10	7		NA	NA		1	1	
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	S	1	3											NA	NA	NA	NA	NA											
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	M	18	1	6	0.06			0.003			0.003			NA	NA	NA	NA	NA			4	6	3	NA	NA	NA	1		
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	M	18	2	6	0.06	0.06	0.04	0.003	0.003	0.003	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA		8	6		NA	NA	NA	<1	1	1
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	M	18	3											NA	NA	NA	NA	NA											
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	B	35	1	6	0.03			0.001			0.001			NA	NA	NA	NA	NA			1	1		NA	NA		1		
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	B	35	2	7	0.02	0.03		0.001	0.001		0.001	0.001		NA	NA	NA	NA	NA			ND	1		NA	NA		<1	1	
C3	10/1/2017	Mid-Flood	Cloudy	moderate	13:24	36	B	35	3											NA	NA	NA	NA	NA											
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	S	1	1	4	NA			NA			NA			0.05	0.26	0.02	0.33	0.34			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	S	1	2	5	NA	NA		NA	NA		NA	NA		0.05	0.27	0.02	0.34	0.34			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	S	1	3											0.05	0.27	0.02	0.34	0.33											
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	M	14	1	5	NA			NA			NA			0.06	0.26	0.01	0.33	0.33			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	M	14	2	4	NA	NA		NA	NA		NA	NA		0.06	0.26	0.02	0.34	0.33	0.33		NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	M	14	3											0.06	0.25	0.02	0.33	0.33											
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	B	27	1	6	NA			NA			NA			0.08	0.25	0.02	0.35	0.33			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	B	27	2	8	NA	NA		NA	NA		NA	NA		0.06	0.25	0.01	0.32	0.33			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Flood	Fine	moderate	13:02	28	B	27	3											0.07	0.24	0.02	0.33	0.33											
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	S	1	1	5	NA			NA			NA			0.15	0.18	0.01	0.34	0.34			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	S	1	2	5	NA	NA		NA	NA		NA	NA		0.17	0.18	0.01	0.36	0.34			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	S	1	3											0.14	0.17	0.01	0.32	0.34											
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	M	6	1	3	NA			NA			NA			0.14	0.17	0.01	0.32	0.31	0.32		NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	M	6	2	5	NA	NA		NA	NA		NA	NA		0.12	0.16	0.01	0.29	0.31	0.32		NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	M	6	3											0.13	0.17	0.01	0.31	0.31											
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	B	11	1	4	NA			NA			NA			0.14	0.17	<0.01	0.32	0.32			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	B	11	2	6	NA	NA		NA	NA		NA	NA		0.14	0.17	0.01	0.32	0.32			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Flood	Fine	moderate	13:52	12	B	11	3											0.15	0.17	<0.01	0.33	0.32											
G3	10/1/2017	Mid-Flood	Fine	moderate	15:10	7	S	1	1	4	NA			NA			NA			0.12	0.14	0.01	0.27	0.27			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Flood	Fine	moderate	15:10	7	S	1	2	6	NA	NA		NA	NA		NA	NA		0.11	0.14	<0.01	0.26	0.27			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Flood	Fine	moderate	15:10	7	S	1	3											0.11	0.15	<0.01	0.27	0.27											
G3	10/1/2017	Mid-Flood	Fine	moderate	15:10	7	M	3.5	1	6	NA			NA			NA			0.13	0.14	0.01	0.28	0.27			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Flood	Fine	moderate	15:10	7	M	3.5	2	7	NA	NA		NA																					













Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																													
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	S	1	1	8.13		29.70	29.70	20.35	20.35	96.6	96.6	7.34	7.34			1.1	1.1		0.22	0.25	0.24	0.009	0.010	0.008	NA	NA	NA	NA	NA	NA	NA		
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	S	1	2	8.13	8.13	29.70	29.70	20.35	20.35	96.6	96.6	7.34	7.34	7.34		1.1	1.1		0.22	0.25	0.24	0.009	0.010	0.008	NA	NA	NA	NA	NA	NA	NA		
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	S	1	3												7.34																		
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	M	NA	1																														
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	M	NA	2		NA		NA		NA																								
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	M	NA	3																														
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	B	3	1	8.14		29.71	29.71	20.34	20.34	96.9	96.9	7.37	7.37			2.2	2.2		0.16	0.16	0.16	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	B	3	2	8.14	8.14	29.71	29.71	20.34	20.34	96.9	96.9	7.37	7.37	7.37		2.2	2.2		0.16	0.16	0.16	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	
SR4	10/1/2017	Mid-Ebb	Fine	moderate	10:09	4	B	3	3																														
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	S	1	1	8.19		28.49	28.49	20.60	20.60	97.6	97.6	7.45	7.45			1.5	1.5		NA	NA		NA	NA		0.11	0.23	0.01	0.35					
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	S	1	2	8.19	8.19	28.49	28.49	20.60	20.60	97.6	97.6	7.45	7.45	7.45		1.5	1.5		NA	NA		NA	NA		0.10	0.24	0.01	0.35					
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	S	1	3																														
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	M	5.5	1	8.20		28.51	28.51	20.61	20.61	97.5	97.5	7.46	7.46			1.9	1.9		NA	NA		NA	NA		0.11	0.22	0.02	0.35					
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	M	5.5	2	8.20	8.20	28.51	28.51	20.61	20.61	97.5	97.5	7.46	7.46	7.46		1.9	1.9		NA	NA		NA	NA		0.12	0.21	0.02	0.35			0.34	0.35	
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	M	5.5	3																														
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	B	10	1	8.19		28.49	28.49	20.58	20.58	97.6	97.6	7.45	7.45			2.0	2.0		NA	NA		NA	NA		0.10	0.23	0.01	0.34					
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	B	10	2	8.19	8.19	28.49	28.49	20.58	20.58	97.6	97.6	7.45	7.45	7.45		2.0	2.0		NA	NA		NA	NA		0.10	0.23	0.02	0.35			0.35		
SR5	10/1/2017	Mid-Ebb	Fine	moderate	10:43	11	B	10	3																														
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	S	1	1	8.08		31.97	31.97	19.98	19.98	89.4	89.4	7.19	7.19			0.6	0.6		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	S	1	2	8.08	8.08	31.97	31.97	19.98	19.98	89.4	89.4	7.19	7.19	7.19		0.6	0.6		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	S	1	3																														
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	M	3	1	8.07		32.06	32.06	19.97	19.97	87.2	87.2	7.06	7.06			0.5	0.5		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	M	3	2	8.07	8.07	32.06	32.06	19.97	19.97	87.2	87.2	7.06	7.06	7.06		0.5	0.5		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	M	3	3																														
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	B	5	1	8.09		32.06	32.06	19.96	19.96	86.4	86.4	7.01	7.01			0.5	0.5		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	B	5	2	8.09	8.09	32.06	32.06	19.97	19.97	86.5	86.5	7.02	7.02	7.02		0.5	0.5		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR6	10/1/2017	Mid-Ebb	Cloudy	moderate	8:53	6	B	5	3																														
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	S	1	1	7.93		30.04	30.04	20.40	20.40	97.4	97.4	7.33	7.33			2.2	2.2		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	S	1	2	7.93	7.93	30.04	30.04	20.40	20.40	97.4	97.4	7.31	7.31	7.31		2.2	2.2		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	S	1	3																														
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	M	10	1	7.97		30.10	30.10	20.41	20.41	96.3	96.3	7.31	7.31			2.3	2.3		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	M	10	2	7.97	7.97	30.10	30.10	20.41	20.41	96.3	96.3	7.31	7.31	7.31		2.3	2.3		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	M	10	3																														
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	B	19	1	7.99		30.13	30.13	20.41	20.41	95.6	95.6	7.32	7.32			1.9	1.9		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	B	19	2	7.99	7.99	30.13	30.13	20.41	20.41	95.6	95.6	7.32	7.32	7.32		1.9	1.9		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR7	10/1/2017	Mid-Ebb	Fine	moderate	8:50	20	B	19	3																														
SR8	10/1/2017	Mid-Ebb	Cloudy	moderate	10:22	9	S	1	1	8.07		32.35	32.35	21.15	21.15	91.7	91.7	7.11	7.11			1.1	1.1		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	
SR8	10/1/2017	Mid-Ebb	Cloudy	moderate	10:22	9	S	1	2	8.07	8.07	32.35	32.35	21.15	21.15	91.6	91.6	7.10	7.10	7.10		1.1	1.1		NA	NA		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
SR8	10/1/2017	Mid-Ebb	Cloudy	moderate	10:22	9	S	1	3																														
SR8	10/1/2017	Mid-Ebb	Cloudy	moderate	10:22	9	M	4.5	1	8.07																													



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	10/1/2017	Mid-Ebb	Fine	moderate	11:32	32	S	1	1	7	0.06			0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			11			NA	NA		1		
C1	10/1/2017	Mid-Ebb	Fine	moderate	11:32	32	S	1	2	6	0.06			0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			4	7		NA	NA		1	1	
C1	10/1/2017	Mid-Ebb	Fine	moderate	12:32	32	S	1	3											NA	NA	NA	NA												
C1	10/1/2017	Mid-Ebb	Fine	moderate	13:32	32	M	16	1	6	0.08			0.08	0.08	0.08	0.004	0.004	0.004	NA	NA	NA	NA	NA			2			NA	NA		1		
C1	10/1/2017	Mid-Ebb	Fine	moderate	14:32	32	M	16	2	5	0.08			0.08	0.08	0.08	0.004	0.004	0.004	NA	NA	NA	NA	NA	NA		6	3	6	NA	NA	NA	1	1	1
C1	10/1/2017	Mid-Ebb	Fine	moderate	15:32	32	M	16	3											NA	NA	NA	NA												
C1	10/1/2017	Mid-Ebb	Fine	moderate	16:32	32	B	31	1	6	0.08			0.08	0.09		0.004	0.005		NA	NA	NA	NA	NA			6			NA	NA		<1		
C1	10/1/2017	Mid-Ebb	Fine	moderate	17:32	32	B	31	2	6	0.10			0.10	0.09		0.006	0.005		NA	NA	NA	NA	NA			13	9		NA	NA		<1	1	
C1	10/1/2017	Mid-Ebb	Fine	moderate	18:32	32	B	31	3											NA	NA	NA	NA												
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	S	1	1	5	0.15			0.15	0.15		0.006	0.006		NA	NA	NA	NA	NA			2500	2828		NA	NA		<1		
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	S	1	2	7	0.14			0.14	0.14		0.006	0.005	0.005	NA	NA	NA	NA	NA			3200			NA	NA		1	1	
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	S	1	3											NA	NA	NA	NA												
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	M	4.5	1	6	0.13			0.14	0.14	0.14	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA		210	194	444	NA	NA	NA	2	2	1
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	M	4.5	2	6	0.14			0.14	0.14	0.14	0.005	0.005	0.005	NA	NA	NA	NA	NA			180			NA	NA		<1		
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	M	4.5	3											NA	NA	NA	NA												
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	B	8	1	6	0.13			0.13	0.13		0.005	0.005		NA	NA	NA	NA	NA			170			NA	NA		<1		
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	B	8	2	7	0.13			0.13	0.13		0.005	0.005		NA	NA	NA	NA	NA			150	160		NA	NA		<1	1	
C2	10/1/2017	Mid-Ebb	Cloudy	moderate	10:02	9	B	8	3											NA	NA	NA	NA												
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	S	1	1	9	0.04			0.05	0.05		0.002	0.002		NA	NA	NA	NA	NA			12	13		NA	NA		<1		
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	S	1	2	9	0.05			0.05	0.05		0.002	0.002		NA	NA	NA	NA	NA			15			NA	NA		<1	1	
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	S	1	3											NA	NA	NA	NA												
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	M	18	1	8	0.04			0.05	0.05	0.05	0.002	0.002	0.002	NA	NA	NA	NA	NA	NA		6			NA	NA	NA	1	1	1
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	M	18	2	8	0.05			0.05	0.05	0.05	0.002	0.002	0.002	NA	NA	NA	NA	NA			5	5	8	NA	NA	NA	<1	1	1
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	M	18	3											NA	NA	NA	NA												
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	B	35	1	9	0.05			0.05	0.05		0.002	0.002		NA	NA	NA	NA	NA			4			NA	NA		<1		
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	B	35	2	8	0.05			0.05	0.05		0.002	0.002		NA	NA	NA	NA	NA			9	6		NA	NA		1	1	
C3	10/1/2017	Mid-Ebb	Cloudy	moderate	11:21	36	B	35	3											NA	NA	NA	NA												
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	S	1	1	4	NA			NA	NA		NA	NA		0.06	0.27	0.02	0.35	0.35			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	S	1	2	3	NA			NA	NA		NA	NA		0.06	0.27	0.01	0.34	0.35			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	S	1	3											0.07	0.27	0.02	0.36	0.35			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	M	14	1	6	NA			NA	NA		NA	NA		0.06	0.26	0.02	0.34	0.34			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	M	14	2	6	NA			NA	NA		NA	NA		0.06	0.26	0.02	0.34	0.34	0.34		NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	B	27	1	7	NA			NA	NA		NA	NA		0.07	0.24	0.02	0.33	0.33			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	B	27	2	5	NA			NA	NA		NA	NA		0.06	0.24	0.02	0.32	0.33			NA	NA		NA	NA		NA	NA	
G1	10/1/2017	Mid-Ebb	Fine	moderate	11:15	28	B	27	3											0.07	0.25	0.01	0.33	0.33			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	S	1	1	5	NA			NA	NA		NA	NA		0.12	0.18	0.01	0.31	0.32			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	S	1	2	5	NA			NA	NA		NA	NA		0.13	0.17	0.02	0.32	0.32			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	S	1	3											0.13	0.18	0.01	0.32	0.32			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	M	6	1	4	NA			NA	NA		NA	NA		0.14	0.15	0.02	0.31	0.31			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	M	6	2	6	NA			NA	NA		NA	NA		0.15	0.16	0.01	0.32	0.31	0.31		NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	M	6	3											0.13	0.16	0.01	0.30	0.31			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	B	11	1	8	NA			NA	NA		NA	NA		0.13	0.17	<0.01	0.31	0.30			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	B	11	2	10	NA			NA	NA		NA	NA		0.12	0.16	0.01	0.29	0.30			NA	NA		NA	NA		NA	NA	
G2	10/1/2017	Mid-Ebb	Fine	moderate	10:20	12	B	11	3											0.14	0.16	0.01	0.31	0.30			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Ebb	Fine	moderate	9:11	34	S	1	1	4	NA			NA	NA		NA	NA		0.12	0.13	0.01	0.26	0.26			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Ebb	Fine	moderate	9:11	34	S	1	2	5	NA			NA	NA		NA	NA		0.11	0.13	0.01	0.25	0.26			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Ebb	Fine	moderate	9:11	34	S	1	3											0.13	0.14	<0.01	0.28	0.27			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Ebb	Fine	moderate	9:11	34	M	17	1	5	NA			NA	NA		NA	NA		0.15	0.15	<0.01	0.31	0.27			NA	NA		NA	NA		NA	NA	
G3	10/1/2017	Mid-Ebb	Fine	moderate	9:11	34	M	17	2	6	NA			NA	NA		NA	NA		0.14	0.13	0.01	0.28	0.27	0.27		NA	NA		NA	NA		NA		

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																													
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrate (mg/L-N)			TIN-Nitrite (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.			
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	S	1	1	8	NA	NA	NA	NA	NA	NA	0.74	0.15	0.02	0.91	0.76	0.15	0.02	0.93	0.91	NA	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	S	1	2	8	NA	NA	NA	NA	NA	NA	0.73	0.15	0.02	0.90	0.62	0.13	0.02	0.77	0.78	0.74	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	S	1	3		NA	NA	NA	NA	NA	NA	0.63	0.13	0.02	0.78	0.63	0.13	0.02	0.78	0.78	0.74	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	M	6.5	1	9	NA	NA	NA	NA	NA	NA	0.62	0.13	0.02	0.77	0.63	0.13	0.02	0.78	0.78	0.74	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	M	6.5	2	8	NA	NA	NA	NA	NA	NA	0.63	0.13	0.02	0.78	0.63	0.13	0.02	0.78	0.78	0.74	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	M	6.5	3		NA	NA	NA	NA	NA	NA	0.63	0.13	0.02	0.78	0.63	0.13	0.02	0.78	0.78	0.74	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	B	12	1	8	NA	NA	NA	NA	NA	NA	0.38	0.14	<0.01	0.53	0.36	0.13	0.01	0.50	0.52	NA	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	B	12	2	8	NA	NA	NA	NA	NA	NA	0.38	0.13	0.01	0.52	0.36	0.13	0.01	0.50	0.52	NA	NA	NA	NA	NA	NA	NA	NA						
G4	10/1/2017	Mid-Ebb	Fine	moderate	9:11	13	B	12	3		NA	NA	NA	NA	NA	NA	0.38	0.13	0.01	0.52	0.36	0.13	0.01	0.50	0.52	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	S	1	1	5	NA	NA	NA	NA	NA	NA	0.12	0.15	<0.01	0.28	0.11	0.15	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	S	1	2	6	NA	NA	NA	NA	NA	NA	0.11	0.15	<0.01	0.27	0.11	0.15	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	S	1	3		NA	NA	NA	NA	NA	NA	0.11	0.15	<0.01	0.27	0.11	0.15	<0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	M	3	1	4	NA	NA	NA	NA	NA	NA	0.14	0.14	0.01	0.29	0.14	0.15	0.01	0.30	0.29	0.28	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	M	3	2	4	NA	NA	NA	NA	NA	NA	0.14	0.14	0.01	0.29	0.14	0.15	0.01	0.30	0.29	0.28	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	M	3	3		NA	NA	NA	NA	NA	NA	0.13	0.14	0.01	0.28	0.13	0.14	0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	B	5	1	6	NA	NA	NA	NA	NA	NA	0.13	0.14	0.01	0.28	0.13	0.14	0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	B	5	2	6	NA	NA	NA	NA	NA	NA	0.11	0.15	<0.01	0.27	0.11	0.15	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA						
G5	10/1/2017	Mid-Ebb	Cloudy	moderate	9:17	6	B	5	3		NA	NA	NA	NA	NA	NA	0.12	0.15	<0.01	0.28	0.12	0.15	<0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	S	1	1	4	NA	NA	NA	NA	NA	NA	0.03	0.05	<0.01	0.09	0.02	0.05	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	S	1	2	4	NA	NA	NA	NA	NA	NA	0.02	0.05	<0.01	0.08	0.02	0.05	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	S	1	3		NA	NA	NA	NA	NA	NA	0.02	0.05	<0.01	0.08	0.02	0.05	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	M	15	1	5	NA	NA	NA	NA	NA	NA	0.02	0.05	<0.01	0.08	0.02	0.06	<0.01	0.09	0.09	0.08	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	M	15	2	6	NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09	0.02	0.06	<0.01	0.09	0.09	0.08	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	M	15	3		NA	NA	NA	NA	NA	NA	0.03	0.05	<0.01	0.09	0.03	0.05	<0.01	0.09	0.09	0.08	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	B	29	1	6	NA	NA	NA	NA	NA	NA	<0.01	0.03	<0.01	0.05	<0.01	0.03	<0.01	0.05	0.06	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	B	29	2	5	NA	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA						
G6	10/1/2017	Mid-Ebb	Cloudy	moderate	10:43	30	B	29	3		NA	NA	NA	NA	NA	NA	<0.01	0.04	<0.01	0.06	<0.01	0.04	<0.01	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	S	1	1	4	0.14	0.14	0.15	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	S	1	2	6	0.13	0.14	0.15	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	S	1	3		0.14	0.14	0.15	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	M	4.5	1	5	0.15	0.15	0.15	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	M	4.5	2	5	0.15	0.15	0.15	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	M	4.5	3		0.16	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	B	8	1	5	0.17	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	B	8	2	6	0.17	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR2	10/1/2017	Mid-Ebb	Fine	moderate	10:26	9	B	8	3		0.17	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	S	1	1	6	0.18	0.17	0.17	0.008	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	S	1	2	6	0.16	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	S	1	3		0.18	0.17	0.17	0.008	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	M	4	1	8	0.18	0.19	0.17	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	M	4	2	7	0.20	0.19	0.17	0.009	0.009	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	M	4	3		0.15	0.14	0.14	0.007	0.007	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	B	7	1	8	0.13	0.14	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	B	7	2	7	0.13	0.14	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR3	10/1/2017	Mid-Ebb	Fine	moderate	10:15	8	B	7	3		0.13	0.14	0.14	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA															



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	S	1	1	3	NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	S	1	2	3	NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	S	1	3		NA	NA	NA	NA	NA	NA	0.08	0.08	<0.01	0.17		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	M	5	1	4	NA	NA	NA	NA	NA	NA	0.07	0.07	0.01	0.15	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	M	5	2	3	NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	M	5	3		NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	B	9	1	4	NA	NA	NA	NA	NA	NA	0.08	0.07	0.01	0.16	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	B	9	2	4	NA	NA	NA	NA	NA	NA	0.07	0.08	<0.01	0.16	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	10/1/2017	Mid-Ebb	Cloudy	moderate	11:05	10	B	9	3		NA	NA	NA	NA	NA	NA	0.06	0.07	<0.01	0.14		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	S	1	1	6	NA	NA	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	S	1	2	4	NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	S	1	3		NA	NA	NA	NA	NA	NA	0.01	0.05	<0.01	0.07		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	M	5	1	6	NA	NA	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	M	5	2	5	NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	M	5	3		NA	NA	NA	NA	NA	NA	0.02	0.06	<0.01	0.09		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	B	9	1	6	NA	NA	NA	NA	NA	NA	0.01	0.05	0.01	0.07	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	B	9	2	6	NA	NA	NA	NA	NA	NA	0.01	0.06	<0.01	0.08	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	10/1/2017	Mid-Ebb	Cloudy	moderate	11:49	10	B	9	3		NA	NA	NA	NA	NA	NA	0.02	0.05	<0.01	0.08		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	S	1	1	8	0.18	0.17	0.17	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	2900	1865	178	NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	S	1	2	7	0.16	0.17	0.18	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	1200			NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	S	1	3					NA	NA	NA	NA	NA	NA	NA	NA	NA				NA	NA	NA					
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	M	7.5	1	9	0.17	0.18	0.18	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	41	33	178	NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	M	7.5	2	8	0.18	0.18	0.18	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	27			NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	M	7.5	3					NA	NA	NA	NA	NA	NA	NA	NA	NA				NA	NA	NA					
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	B	14	1	10	0.20	0.20	0.20	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	86	91		NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	B	14	2	9	0.19	0.20	0.20	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	96			NA	NA	NA	<1	1	1		
SR12	10/1/2017	Mid-Ebb	Fine	moderate	9:53	15	B	14	3					NA	NA	NA	NA	NA	NA	NA	NA	NA				NA	NA	NA					
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	S	1	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	S	1	2	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	M	7	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	M	7	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	M	7	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	B	13	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	B	13	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	10/1/2017	Mid-Ebb	Fine	moderate	9:42	14	B	13	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																													
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	S	1	1	8.24		28.33	28.33	20.56	20.56	99.0	99.0	7.65	7.65		1.4	1.4		0.06	0.06		0.003	0.003		0.003	0.003		NA	NA	NA	NA		NA	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	S	1	2	8.24		28.33	28.33	20.56	20.56	99.0	99.0	7.65	7.65		1.4	1.4		0.06	0.06		0.003	0.003		0.003	0.003		NA	NA	NA	NA		NA	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	S	1	3												7.63											NA	NA	NA	NA		NA		
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	M	16	1	8.25		28.31	28.31	20.58	20.58	98.9	98.9	7.61	7.61		1.5	1.5		0.10	0.10		0.006	0.006		0.006	0.006		NA	NA	NA	NA		NA	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	M	16	2	8.25		28.31	28.31	20.58	20.58	98.9	98.9	7.61	7.61		1.5	1.5	1.5	0.08	0.09	0.08	0.005	0.005	0.005	0.005	0.005		NA	NA	NA	NA		NA	NA
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	M	16	3												7.63											NA	NA	NA	NA		NA		
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	B	31	1	8.25		28.32	28.32	20.59	20.59	98.8	98.8	7.60	7.60		1.7	1.7		0.10	0.10		0.006	0.006		0.006	0.006		NA	NA	NA	NA		NA	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	B	31	2	8.25		28.32	28.32	20.59	20.59	98.8	98.8	7.59	7.60		1.7	1.7		0.10	0.10		0.006	0.006		0.006	0.006		NA	NA	NA	NA		NA	
C1	12/1/2017	Mid-Flood	Fine	Moderate	14:40	32	B	31	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	S	1	1	8.10		31.61	31.61	20.13	20.13	87.6	87.6	7.60	7.60		0.1	0.1		0.15	0.15		0.006	0.006		0.006	0.006		NA	NA	NA	NA		NA	
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	S	1	2	8.10		31.61	31.61	20.13	20.13	87.6	87.6	7.60	7.60		0.1	0.1		0.15	0.15		0.006	0.006		0.006	0.006		NA	NA	NA	NA		NA	
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	S	1	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	M	4.5	1	8.10		31.61	31.61	20.13	20.13	87.9	87.9	7.66	7.66		0.5	0.5		0.09	0.09		0.003	0.003		0.003	0.003		NA	NA	NA	NA		NA	
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	M	4.5	2	8.10		31.61	31.61	20.13	20.13	87.9	87.9	7.66	7.66		0.5	0.5	0.3	0.08	0.09	0.10	0.003	0.003	0.003	0.003	0.003		NA	NA	NA	NA		NA	NA
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	M	4.5	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	1	8.10		31.61	31.61	20.13	20.13	91.1	91.1	8.02	8.02		0.4	0.4		0.07	0.07		0.003	0.003		0.003	0.003		NA	NA	NA	NA		NA	
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	2	8.10		31.61	31.61	20.13	20.13	91.1	91.1	8.02	8.02		0.4	0.4		0.07	0.07		0.003	0.003		0.003	0.003		NA	NA	NA	NA		NA	
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63											NA	NA	NA	NA		NA		
C2	12/1/2017	Mid-Flood	Fine	Moderate	16:10	9	B	8	3												7.63																		











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																													
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrate (mg/L-N)			TIN-Nitrite (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.			
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	S	1	1	9	NA	NA	NA	NA	NA	NA	0.76	0.14	0.02	0.92	0.76	0.14	0.02	0.92	0.92	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	S	1	2	9	NA	NA	NA	NA	NA	NA	0.74	0.16	0.01	0.91	0.74	0.16	0.01	0.91	0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	S	1	3	9	NA	NA	NA	NA	NA	NA	0.44	0.16	0.01	0.61	0.44	0.16	0.01	0.61	0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	M	6.5	1	8	NA	NA	NA	NA	NA	NA	0.46	0.17	0.01	0.64	0.46	0.17	0.01	0.64	0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	M	6.5	2	8	NA	NA	NA	NA	NA	NA	0.46	0.16	0.02	0.64	0.46	0.16	0.02	0.64	0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	M	6.5	3	8	NA	NA	NA	NA	NA	NA	0.21	0.15	0.01	0.37	0.21	0.15	0.01	0.37	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	B	12	2	8	NA	NA	NA	NA	NA	NA	0.19	0.15	0.01	0.35	0.19	0.15	0.01	0.35	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G4	12/1/2017	Mid-Flood	Fine	Moderate	16:50	13	B	12	3	8	NA	NA	NA	NA	NA	NA	0.22	0.15	0.01	0.38	0.22	0.15	0.01	0.38	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	S	1	1	6	NA	NA	NA	NA	NA	NA	0.16	0.15	0.01	0.32	0.16	0.15	0.01	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	S	1	2	7	NA	NA	NA	NA	NA	NA	0.15	0.15	0.01	0.31	0.15	0.15	0.01	0.31	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	S	1	3	7	NA	NA	NA	NA	NA	NA	0.14	0.18	<0.01	0.33	0.14	0.18	<0.01	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	M	3	1	8	NA	NA	NA	NA	NA	NA	0.14	0.17	0.01	0.32	0.14	0.17	0.01	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	M	3	2	7	NA	NA	NA	NA	NA	NA	0.14	0.17	0.01	0.32	0.14	0.17	0.01	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	M	3	3	8	NA	NA	NA	NA	NA	NA	0.14	0.16	0.01	0.31	0.14	0.16	0.01	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	B	5	1	9	NA	NA	NA	NA	NA	NA	0.14	0.16	0.01	0.31	0.14	0.16	0.01	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	B	5	2	10	NA	NA	NA	NA	NA	NA	0.14	0.17	0.01	0.32	0.14	0.17	0.01	0.32	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G5	12/1/2017	Mid-Flood	Fine	Moderate	16:50	6	B	5	3	10	NA	NA	NA	NA	NA	NA	0.14	0.16	0.01	0.31	0.14	0.16	0.01	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	S	1	1	10	NA	NA	NA	NA	NA	NA	0.15	0.11	0.01	0.27	0.15	0.11	0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	S	1	2	9	NA	NA	NA	NA	NA	NA	0.14	0.11	0.01	0.26	0.14	0.11	0.01	0.26	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	S	1	3	10	NA	NA	NA	NA	NA	NA	0.15	0.11	0.01	0.27	0.15	0.11	0.01	0.27	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	M	15	1	10	NA	NA	NA	NA	NA	NA	0.10	0.10	<0.01	0.21	0.10	0.10	<0.01	0.21	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	M	15	2	10	NA	NA	NA	NA	NA	NA	0.09	0.11	<0.01	0.21	0.09	0.11	<0.01	0.21	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	M	15	3	10	NA	NA	NA	NA	NA	NA	0.09	0.11	<0.01	0.21	0.09	0.11	<0.01	0.21	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	B	29	1	9	NA	NA	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	B	29	2	10	NA	NA	NA	NA	NA	NA	0.07	0.09	0.01	0.17	0.07	0.09	0.01	0.17	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA					
G6	12/1/2017	Mid-Flood	Fine	Moderate	15:30	30	B	29	3	10	NA	NA	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	S	1	1	7	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	S	1	2	6	0.12	0.13	0.13	0.006	0.006	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	S	1	3	7	0.13	0.13	0.13	0.007	0.006	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	M	4.5	1	6	0.13	0.13	0.13	0.007	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	M	4.5	2	6	0.12	0.13	0.13	0.006	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	B	8	1	8	0.12	0.13	0.13	0.006	0.006	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	B	8	2	8	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR2	12/1/2017	Mid-Flood	Fine	Moderate	15:41	9	B	8	3	8	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	S	1	1	7	0.14	0.14	0.14	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	S	1	2	7	0.14	0.14	0.14	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	S	1	3	7	0.14	0.14	0.14	0.008	0.008	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	M	4	1	12	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	M	4	2	12	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	M	4	3	12	0.13	0.13	0.13	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	B	7	1	12	0.13	0.13	0.13	0.004	0.004	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	B	7	2	12	0.12	0.13	0.13	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR3	12/1/2017	Mid-Flood	Fine	Moderate	15:51	8	B	7	3	12	0.12	0.13	0.13	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																												
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	1	8.23																												
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	2	8.23	8.23	28.31	28.31	20.50	20.50	99.1	99.1	7.66	7.66																			
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	3																													
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	1	8.22	8.22	28.30	28.31	20.49	20.49	99.2	99.2	7.64	7.65																			
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	2	8.22																												
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	3																													
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	B	31	1	8.24	8.24	28.35	28.35	20.46	20.46	99.4	99.4	7.65	7.65																			
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	B	31	2	8.24																												
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	B	31	3																													
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	1	8.10	8.10	31.68	31.68	20.11	20.11	89.1	89.1	7.83	7.83																			
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	2	8.10																												
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	3																													
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	1	8.10	8.10	31.68	31.68	20.11	20.11	89.1	89.1	7.69	7.69																			
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	2	8.10																												
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	3																													
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	B	8	1	8.10	8.10	31.68	31.68	20.11	20.11	89.0	89.0	7.54	7.54																			
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	B	8	2	8.10																												
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	B	8	3																													
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	1	8.10	8.10	31.88	31.88	20.13	20.13	90.3	90.3	8.00	8.00																			
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	2	8.10																												
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	3																													
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	1	8.10	8.10	31.88	31.88	20.13	20.13	89.2	89.2	7.60	7.60																			
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	2	8.10																												
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	3																													
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	1	8.10	8.10	31.88	31.88	20.13	20.13	90.6	90.6	7.98	7.98																			
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	2	8.10																												
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	3																													
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	1	8.20	8.20	28.66	28.66	20.61	20.61	97.7	97.7	7.46	7.46																			
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	2	8.20																												
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	3																													
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	1	8.23	8.23	28.60	28.60	20.53	20.53	97.8	97.8	7.47	7.47																			
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	2	8.23																												
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	3																													
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	1	8.21	8.21	28.48	28.48	20.51	20.51	97.7	97.7	7.46	7.46																			
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	2	8.21																												
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	3																													
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	1	8.16	8.16	29.39	29.39	20.34	20.34	97.2	97.2	7.41	7.41																			
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	2	8.16																												
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	3																													
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	1	8.16	8.16	29.38	29.38	20.35	20.35	97.3	97.3	7.41	7.41																			
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	2	8.16																												
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	3																													
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	1	8.15	8.15	29.40	29.40	20.35	20.35	97.3	97.3	7.42	7.42																			
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	2	8.15																												
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	3																													
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	S	1	1	8.02	8.02	30.01	30.03	20.41	20.67	97.4	97.4	7.35	7.35																			
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	S	1	2	8.02																												
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	S	1	3																													
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	M	17	1	8.04	8.04	29.92	29.93	20.41	20.41	97.2	97.2	7.32	7.33																			
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	M	17	2	8.04																												
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	M	17	3																													
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	B	33	1	8.09	8.09	29.80	29.82	20.42	20.42	97.1	97.1	7.36	7.37																			
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	B	33	2	8.08																												
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	B	33	3																													









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	1	6	0.06			0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			120	89	103	NA	NA	NA	1	2	2
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	2	5	0.06			0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			120	89	103	NA	NA	NA	1	2	2
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	S	1	3		0.06			0.06	0.06		0.003	0.003		NA	NA	NA	NA	NA			120	89	103	NA	NA	NA	1	2	2
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	1	8	0.09			0.08	0.09	0.09	0.005	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	37	41	39	NA	NA	NA	2	1	2
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	2	7	0.09			0.08	0.09	0.09	0.005	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	37	41	39	NA	NA	NA	2	1	2
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	M	16	3		0.11			0.11	0.11		0.006	0.006		NA	NA	NA	NA	NA	NA	NA	61	55	58	NA	NA	NA	<1	<1	1
C1	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	32	B	31	1	8	0.11			0.11	0.11		0.006	0.006		NA	NA	NA	NA	NA	NA	NA	61	55	58	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	1	4	0.15			0.15	0.15		0.006	0.006		NA	NA	NA	NA	NA	NA	NA	6	12	8	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	2	5	0.15			0.15	0.15		0.006	0.006		NA	NA	NA	NA	NA	NA	NA	6	12	8	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	S	1	3		0.09			0.09	0.09	0.11	0.003	0.003	0.004	NA	NA	NA	NA	NA	NA	NA	3	4	3	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	1	5	0.09			0.09	0.09	0.11	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	3	4	3	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	2	5	0.09			0.09	0.09	0.11	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	3	4	3	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	M	4.5	3		0.08			0.08	0.09		0.003	0.004	0.003	NA	NA	NA	NA	NA	NA	NA	1	2	1	NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	B	8	2	6	0.10			0.10	0.09		0.004	0.003		NA	NA	NA	NA	NA	NA	NA	2	1		NA	NA	NA	<1	<1	1
C2	12/1/2017	Mid-Ebb	Fine	Moderate	11:30	9	B	8	3		0.10			0.10	0.09		0.004	0.003		NA	NA	NA	NA	NA	NA	NA	2	1		NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	1	4	0.08			0.08	0.08		0.003	0.003		NA	NA	NA	NA	NA	NA	NA	5	3	4	NA	NA	NA	<1	1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	2	5	0.08			0.08	0.08		0.003	0.003		NA	NA	NA	NA	NA	NA	NA	5	3	4	NA	NA	NA	1		
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	S	1	3		0.08			0.08	0.08		0.003	0.003		NA	NA	NA	NA	NA	NA	NA	5	3	4	NA	NA	NA			
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	1	6	0.08			0.08	0.08	0.07	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	11	4	7	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	2	8	0.08			0.08	0.08	0.07	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	11	4	7	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	3		0.08			0.08	0.08	0.07	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	11	4	7	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	M	18	3		0.08			0.08	0.08	0.07	0.003	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	11	4	7	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	1	11	0.05			0.05	0.05		0.002	0.002	0.002	NA	NA	NA	NA	NA	NA	NA	ND	ND	1	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	2	10	0.05			0.05	0.05		0.002	0.002	0.002	NA	NA	NA	NA	NA	NA	NA	ND	ND	1	NA	NA	NA	<1	<1	1
C3	12/1/2017	Mid-Ebb	Fine	Moderate	12:50	36	B	35	3		0.05			0.05	0.05		0.002	0.002	0.002	NA	NA	NA	NA	NA	NA	NA	ND	ND	1	NA	NA	NA	<1	<1	1
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	1	5	NA			NA	NA		NA	NA		0.06	0.24	0.02	0.32	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	2	5	NA			NA	NA		NA	NA		0.06	0.25	0.01	0.32	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	S	1	3		NA			NA	NA		NA	NA		0.08	0.25	0.01	0.34	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	1	6	NA			NA	NA		NA	NA		0.08	0.24	0.02	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	2	6	NA			NA	NA		NA	NA		0.08	0.23	0.02	0.33	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	M	14	3		NA			NA	NA		NA	NA		0.09	0.23	0.02	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	1	4	NA			NA	NA		NA	NA		0.10	0.22	0.02	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	2	5	NA			NA	NA		NA	NA		0.10	0.22	0.02	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G1	12/1/2017	Mid-Ebb	Fine	Moderate	12:15	28	B	27	3		NA			NA	NA		NA	NA		0.10	0.23	0.01	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	1	6	NA			NA	NA		NA	NA		0.11	0.21	0.01	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	2	4	NA			NA	NA		NA	NA		0.11	0.20	0.02	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	S	1	3		NA			NA	NA		NA	NA		0.12	0.21	0.01	0.34	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	1	6	NA			NA	NA		NA	NA		0.11	0.20	0.01	0.32	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	2	7	NA			NA	NA		NA	NA		0.12	0.20	0.02	0.34	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	M	6	3		NA			NA	NA		NA	NA		0.12	0.20	0.02	0.34	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	1	10	NA			NA	NA		NA	NA		0.13	0.19	0.02	0.34	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	2	8	NA			NA	NA		NA	NA		0.13	0.19	0.02	0.34	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G2	12/1/2017	Mid-Ebb	Fine	Moderate	11:12	12	B	11	3		NA			NA	NA		NA	NA		0.12	0.20	0.01	0.33	0.34	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	S	1	1	6	NA			NA	NA		NA	NA		0.14	0.19	0.01	0.34	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G3	12/1/2017	Mid-Ebb	Fine	Moderate	10:13	34	S	1	2	4	NA			NA	NA		NA	NA		0.12	0.18	0.01	0.31	0.32	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G3																																			



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	S	1	1	10	0.17			0.007			NA	NA	NA	NA	NA	80			NA	NA	NA	<1					
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	S	1	2	9	0.18	0.18		0.008	0.008		NA	NA	NA	NA	NA	77	78		NA	NA	NA	<1	1				
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	S	1	3							NA	NA	NA	NA	NA													
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	M		1							NA	NA	NA	NA	NA													
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	M		2							NA	NA	NA	NA	NA			NA	53		NA	NA	NA					
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	M		3							NA	NA	NA	NA	NA													
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	B	3	1	10	0.14			0.006		NA	NA	NA	NA	NA	NA	32			NA	NA	NA	<1					
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	B	3	2	11	0.14	0.14		0.006	0.006	NA	NA	NA	NA	NA	NA	41	36		NA	NA	NA	2					
SR4	12/1/2017	Mid-Ebb	Fine	Moderate	11:10	4	B	3	3							NA	NA	NA	NA	NA													
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	S	1	1	4	NA			NA		0.12	0.21	0.01	0.34	0.33	NA			NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	S	1	2	6	NA	NA		NA	NA	0.11	0.21	<0.01	0.33	0.33	NA	NA		NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	S	1	3							0.11	0.20	0.02	0.33	0.33	NA			NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	M	5.5	1	7	NA			NA		0.12	0.22	<0.01	0.35	0.35	0.34			NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	M	5.5	2	9	NA	NA		NA	NA	0.12	0.22	<0.01	0.35	0.35	0.34	0.34		NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	M	5.5	3							0.13	0.21	0.01	0.35	0.34	0.34			NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	B	10	1	8	NA			NA		0.11	0.22	<0.01	0.34	0.34	0.34			NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	B	10	2	9	NA	NA		NA	NA	0.12	0.19	0.02	0.33	0.34	0.34	0.34		NA	NA	NA	NA	NA					
SR5	12/1/2017	Mid-Ebb	Fine	Moderate	11:42	11	B	10	3							0.12	0.20	0.02	0.34	0.34	0.34			NA	NA	NA	NA	NA					
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	S	1	1	6	NA			NA		NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA					
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	S	1	2	8	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	S	1	3							NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA					
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	M	3	1	7	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	M	3	2	6	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	M	3	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	B	5	1	7	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	B	5	2	8	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR6	12/1/2017	Mid-Ebb	Fine	Moderate	10:30	6	B	5	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA				
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	S	1	1	8	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	S	1	2	7	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	S	1	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	M	10	1	6	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	M	10	2	6	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	B	19	1	7	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	B	19	2	6	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR7	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	20	B	19	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	S	1	1	4	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	S	1	2	3	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	S	1	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	M	4.5	1	4	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	M	4.5	2	4	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	M	4.5	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	B	8	1	5	NA			NA		NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	B	8	2	5	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR8	12/1/2017	Mid-Ebb	Fine	Moderate	11:50	9	B	8	3							NA	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA					
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	S	1	1	6	NA			NA		0.13	0.16	<0.01	0.30	0.30	0.31			NA	NA	NA	NA						
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	S	1	2	6	NA	NA		NA	NA	0.14	0.16	<0.01	0.31	0.30	0.31			NA	NA	NA	NA						
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	S	1	3							0.14	0.14	0.02	0.30	0.31	0.31			NA	NA	NA	NA						
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	M	3.5	1	8	NA			NA		0.14	0.16	0.01	0.31	0.31	0.31			NA	NA	NA	NA						
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	M	3.5	2	10	NA	NA		NA	NA	0.13	0.16	0.01	0.30	0.31	0.31			NA	NA	NA	NA						
SR9	12/1/2017	Mid-Ebb	Fine	Moderate	9:52	7	M	3.5	3							0.14	0.16	0.01	0.31	0.31	0.31			NA									

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	S	1	1	6	NA	NA	NA	NA	NA	NA	0.08	0.09	<0.01	0.18	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	S	1	2	5	NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	S	1	3		NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	M	5	1	5	NA	NA	NA	NA	NA	NA	0.08	0.08	0.02	0.18	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	M	5	2	4	NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	M	5	3		NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	B	9	1	5	NA	NA	NA	NA	NA	NA	0.06	0.08	<0.01	0.15	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	B	9	2	5	NA	NA	NA	NA	NA	NA	0.05	0.08	<0.01	0.14	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR10	12/1/2017	Mid-Ebb	Fine	Moderate	12:30	10	B	9	3		NA	NA	NA	NA	NA	NA	0.05	0.08	<0.01	0.14	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	S	1	1	6	NA	NA	NA	NA	NA	NA	0.08	0.09	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	S	1	2	5	NA	NA	NA	NA	NA	NA	0.08	0.09	0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	S	1	3		NA	NA	NA	NA	NA	NA	0.06	0.10	<0.01	0.17	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	M	5	1	6	NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	M	5	2	5	NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	M	5	3		NA	NA	NA	NA	NA	NA	0.08	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	B	9	1	8	NA	NA	NA	NA	NA	NA	0.06	0.08	<0.01	0.15	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	B	9	2	7	NA	NA	NA	NA	NA	NA	0.05	0.08	<0.01	0.14	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR11	12/1/2017	Mid-Ebb	Fine	Moderate	13:30	10	B	9	3		NA	NA	NA	NA	NA	NA	0.05	0.08	<0.01	0.14	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	S	1	1	6	0.18	0.18	0.18	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	75	66	68	NA	NA	NA	<1	1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	S	1	2	6	0.18	0.18	0.18	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	58	66	68	NA	NA	NA	1	1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	S	1	3		0.12	0.13	0.13	0.005	0.006	0.005	NA	NA	NA	NA	NA	NA	71	79	68	NA	NA	NA	1	1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	M	7.5	1	6	0.13	0.13	0.13	0.005	0.006	0.005	NA	NA	NA	NA	NA	NA	88	79	68	NA	NA	NA	1	1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	M	7.5	2	6	0.13	0.13	0.13	0.005	0.006	0.005	NA	NA	NA	NA	NA	NA	71	79	68	NA	NA	NA	1	1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	M	7.5	3		0.16	0.17	0.17	0.007	0.008	0.007	NA	NA	NA	NA	NA	NA	59	60	68	NA	NA	NA	<1	<1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	B	14	1	8	0.18	0.17	0.17	0.007	0.008	0.007	NA	NA	NA	NA	NA	NA	61	60	68	NA	NA	NA	<1	<1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	B	14	2	10	0.18	0.17	0.17	0.007	0.008	0.007	NA	NA	NA	NA	NA	NA	61	60	68	NA	NA	NA	<1	<1	1	1	
SR12	12/1/2017	Mid-Ebb	Fine	Moderate	10:53	15	B	14	3		0.18	0.17	0.17	0.007	0.008	0.007	NA	NA	NA	NA	NA	NA	61	60	68	NA	NA	NA	<1	<1	1	1	
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	S	1	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	S	1	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	M	7	1	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	M	7	2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	M	7	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	B	13	1	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	B	13	2	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SR13	12/1/2017	Mid-Ebb	Fine	Moderate	10:43	14	B	13	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.





Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																										
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)				
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	S	1	1	7.95		30.07		20.32		99.0		6.34		6.36		6.35		3.5		NA		NA		NA		0.12	0.15	0.01	0.28	
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	S	1	2	7.95	7.95	30.07	30.07	20.32	20.32	99.0	99.0	6.34	6.36	6.35	6.35	6.35	6.35	3.5	3.5	NA	NA	NA	NA	0.12	0.14	0.01	0.27			
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	S	1	3																											
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	M	6.5	1	8.00		30.09		20.32		96.4		6.40				6.38		3.4		NA		NA		0.13	0.15	0.01	0.29			
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	M	6.5	2	8.00	8.00	30.09	30.09	20.32	20.32	96.4	96.4	6.40	6.42	6.41	6.41	6.41	6.41	3.4	3.4	NA	NA	NA	NA	0.13	0.15	0.01	0.29			
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	M	6.5	3																											
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	B	12	1	7.98		30.09		20.32		97.4		6.38				6.39		3.2		NA		NA		0.15	0.16	0.01	0.32			
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	B	12	2	7.98	7.98	30.09	30.09	20.32	20.32	97.4	97.4	6.38	6.39	6.39	6.39	6.39	6.39	3.2	3.2	NA	NA	NA	NA	0.16	0.15	0.01	0.32			
G4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:16	13	B	12	3																											
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	S	1	1	8.05		32.11		20.10		89.4		7.10				7.02		0.8		NA		NA		0.14	0.13	0.02	0.29			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	S	1	2	8.05	8.05	32.11	32.11	20.10	20.10	89.4	89.4	7.10	7.10	7.10	7.10	7.10	7.10	0.8	0.8	NA	NA	NA	NA	0.13	0.13	0.02	0.28			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	S	1	3																											
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	M	3	1	8.05		32.11		20.10		88.6		6.93				6.93		0.8		NA		NA		0.13	0.13	0.02	0.28			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	M	3	2	8.05	8.05	32.11	32.11	20.10	20.10	88.6	88.6	6.93	6.93	6.93	6.93	6.93	6.93	0.8	0.8	NA	NA	NA	NA	0.13	0.13	0.01	0.27			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	M	3	3																											
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	B	5	1	8.05		32.11		20.10		90.0		6.99				6.99		1.0		NA		NA		0.13	0.12	0.02	0.27			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	B	5	2	8.05	8.05	32.11	32.11	20.10	20.10	90.0	90.0	6.99	6.99	6.99	6.99	6.99	6.99	1.0	1.0	NA	NA	NA	NA	0.13	0.14	0.01	0.28			
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	B	5	3																											
G5	14/1/2017	Mid-Flood	Cloudy	Moderate	9:50	6	B	5	3																											
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	S	1	1	8.13		31.40		20.05		86.3		7.81				7.81		0.6		NA		NA		0.14	0.14	0.01	0.29			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	S	1	2	8.13	8.13	31.40	31.40	20.05	20.05	86.3	86.3	7.81	7.81	7.81	7.81	7.81	7.81	0.6	0.6	NA	NA	NA	NA	0.15	0.13	0.01	0.29			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	S	1	3																											
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	M	15	1	8.13		31.40		20.05		85.4		7.49				7.49		1.0		NA		NA		0.15	0.12	0.01	0.28			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	M	15	2	8.13	8.13	31.40	31.40	20.05	20.05	85.4	85.4	7.49	7.49	7.49	7.49	7.49	7.49	1.0	1.0	NA	NA	NA	NA	0.14	0.13	0.02	0.29			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	M	15	3																											
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	B	29	1	8.14		31.40		20.10		87.2		8.01				8.01		1.1		NA		NA		0.14	0.13	0.01	0.28			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	B	29	2	8.14	8.14	31.40	31.40	20.10	20.10	87.2	87.2	8.01	8.01	8.01	8.01	8.01	8.01	1.1	1.1	NA	NA	NA	NA	0.14	0.13	0.01	0.28			
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	B	29	3																											
G6	14/1/2017	Mid-Flood	Cloudy	Moderate	11:10	30	B	29	3																											
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	S	1	1	7.71		30.12		20.23		98.4		6.14				6.15		4.2		0.12		0.002		0.002		0.002		0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	S	1	2	7.72	7.72	30.12	30.12	20.23	20.23	98.5	98.4	6.15	6.15	6.15	6.15	6.15	6.15	4.2	4.2	0.12	0.13	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	S	1	3																											
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	M	4.5	1	7.71		30.12		20.23		98.4		6.13				6.14		4.1		0.12		0.002		0.002		0.002		0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	M	4.5	2	7.71	7.71	30.12	30.12	20.23	20.23	98.4	98.4	6.14	6.14	6.14	6.14	6.14	6.14	4.1	4.1	0.12	0.12	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	M	4.5	3																											
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	B	8	1	7.71		30.12		20.23		98.4		6.12				6.13		4.0		0.13		0.002		0.002		0.002		0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	B	8	2	7.71	7.71	30.12	30.12	20.23	20.23	98.4	98.4	6.13	6.13	6.13	6.13	6.13	6.13	4.0	4.0	0.12	0.13	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
SR2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:06	9	B	8	3																											
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	S	1	1	7.49		30.95		20.63		93.9		3.74				6.75		3.4		0.15		0.002		0.001		0.001		0.001		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	S	1	2	7.49	7.49	30.95	30.95	20.63	20.63	94.0	93.9	6.75	6.75	6.75	6.75	6.75	6.75	3.4	3.4	0.14	0.15	0.001	0.001	0.001	0.001	0.001	0.001	0.001		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	S	1	3																											
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	M	4	1	7.49		30.94		20.61		93.4		6.84				6.84		3.3		0.15		0.002		0.002		0.002		0.002		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	M	4	2	7.49	7.49	30.94	30.94	20.61	20.61	93.5	93.4	6.84	6.84	6.84	6.84	6.84	6.84	3.3	3.3	0.16	0.16	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	M	4	3																											
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	B	7	1	7.49		30.94		20.61		93.4		6.92				6.92		3.4		0.15		0.002		0.002		0.002		0.002		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	B	7	2	7.49	7.49	30.94	30.94	20.61	20.61	93.4	93.4	6.91	6.92	6.92	6.92	6.92	6.92	3.4	3.4	0.16	0.16	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	B	7	3																											
SR3	14/1/2017	Mid-Flood	Cloudy	Smooth	9:58	8	B	7	3																											

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																																	
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)											
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.								
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	S	1	1	7.75		30.90	30.93	20.02	20.02	98.5	98.5	5.78	5.79			2.9	2.9		0.20	0.20		0.004	0.004		0.003		NA	NA	NA	NA		NA					
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	S	1	2	7.75	7.75	30.96	30.93	20.02	20.02	98.6	98.5	5.79	5.79			2.9	2.9		0.20	0.20		0.004	0.004		0.003		NA	NA	NA	NA		NA					
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	S	1	3													5.79											NA	NA	NA	NA		NA					
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	M		1																							NA	NA	NA	NA		NA						
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	M		2																							NA	NA	NA	NA		NA						
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	M		3																							NA	NA	NA	NA		NA						
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	B	3	1	7.75		30.94	30.94	20.04	20.04	97.8	97.8	5.10	5.11			2.9	2.9		0.19	0.18		0.003	0.003		0.003		NA	NA	NA	NA		NA					
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	B	3	2	7.75	7.75	30.94	30.94	20.04	20.04	97.8	97.8	5.11	5.11			2.9	2.9		0.19	0.18		0.003	0.003		0.003		NA	NA	NA	NA		NA					
SR4	14/1/2017	Mid-Flood	Cloudy	Smooth	9:47	4	B	3	3																							NA	NA	NA	NA		NA						
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	S	1	1	7.32		30.04	30.04	20.12	20.12	98.4	98.4	6.43	6.43			4.2	4.2		NA	NA		NA	NA		NA		0.13	0.18	0.01	0.32		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	S	1	2	7.32	7.32	30.04	30.04	20.12	20.12	98.4	98.4	6.42	6.42			4.2	4.2		NA	NA		NA	NA		NA		0.14	0.17	0.02	0.33		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	S	1	3																							NA	NA	NA	NA		0.13	0.17	0.02	0.32		0.32	
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	M	5.5	1	7.32		30.04	30.04	20.12	20.12	98.4	98.4	6.53	6.53			4.3	4.3		NA	NA		NA	NA		NA		0.13	0.19	0.02	0.34		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	M	5.5	2	7.32	7.32	30.04	30.04	20.12	20.12	98.4	98.4	6.54	6.54			4.3	4.3		NA	NA		NA	NA		NA		0.13	0.17	0.02	0.32		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	M	5.5	3																							NA	NA	NA	NA		0.12	0.18	0.01	0.31		0.32	
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	B	10	1	7.32		30.04	30.04	20.12	20.12	98.4	98.4	6.43	6.43			4.3	4.3		NA	NA		NA	NA		NA		0.13	0.18	0.02	0.33		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	B	10	2	7.32	7.32	30.04	30.04	20.12	20.12	98.4	98.4	6.74	6.59			4.3	4.3		NA	NA		NA	NA		NA		0.12	0.18	0.01	0.31		0.32					
SR5	14/1/2017	Mid-Flood	Cloudy	Smooth	10:21	11	B	10	3																							NA	NA	NA	NA		0.13	0.18	0.01	0.32		0.32	
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	S	1	1	8.04		32.01	32.01	20.12	20.12	90.5	90.5	6.98	6.98			1.4	1.4		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	S	1	2	8.04	8.04	32.01	32.01	20.12	20.12	90.5	90.5	6.98	6.98			1.4	1.4		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	S	1	3																							NA	NA	NA	NA		NA						
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	M	3	1	8.04		32.01	32.01	20.12	20.12	91.1	91.1	7.02	7.02			1.5	1.5		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	M	3	2	8.04	8.04	32.01	32.01	20.12	20.12	91.1	91.1	7.02	7.02			1.5	1.5		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	M	3	3																							NA	NA	NA	NA		NA						
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	B	5	1	8.04		32.01	32.01	20.11	20.11	93.0	93.0	7.04	7.04			1.6	1.6		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	B	5	2	8.04	8.04	32.01	32.01	20.11	20.11	93.0	93.0	7.04	7.04			1.6	1.6		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR6	14/1/2017	Mid-Flood	Cloudy	Moderate	9:30	6	B	5	3																							NA	NA	NA	NA		NA						
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	S	1	1	7.93		30.01	30.01	20.40	20.40	99.2	99.2	6.39	6.39			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	S	1	2	7.93	7.93	30.01	30.01	20.40	20.40	99.2	99.2	6.39	6.39			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	S	1	3																							NA	NA	NA	NA		NA						
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	M	10	1	7.93		30.02	30.02	20.41	20.41	99.5	99.5	6.41	6.41			2.3	2.3		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	M	10	2	7.93	7.93	30.02	30.02	20.41	20.41	99.5	99.5	6.41	6.41			2.3	2.3		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	M	10	3																							NA	NA	NA	NA		NA						
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	B	19	1	7.94		30.02	30.02	20.41	20.41	99.6	99.6	6.41	6.41			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	B	19	2	7.94	7.94	30.02	30.02	20.41	20.41	99.6	99.6	6.41	6.41			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR7	14/1/2017	Mid-Flood	Cloudy	Smooth	8:30	20	B	19	3																							NA	NA	NA	NA		NA						
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	S	1	1	8.14		31.43	31.43	20.04	20.04	87.2	87.2	8.03	8.03			1.7	1.7		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	S	1	2	8.14	8.14	31.43	31.43	20.04	20.04	87.2	87.2	8.03	8.03			1.7	1.7		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	S	1	3																							NA	NA	NA	NA		NA						
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	M	4.5	1	8.14		31.43	31.43	20.04	20.04	86.5	86.5	7.84	7.84			2.0	2.0		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	M	4.5	2	8.14	8.14	31.43	31.43	20.04	20.04	86.5	86.5	7.84	7.84			2.0	2.0		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	M	4.5	3																							NA	NA	NA	NA		NA						
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	B	8	1	8.14		31.43	31.43	20.04	20.04	85.9	85.9	7.68	7.68			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	B	8	2	8.14	8.14	31.43	31.43	20.04	20.04	85.9	85.9	7.68	7.68			2.2	2.2		NA	NA		NA	NA		NA		NA	NA	NA	NA		NA					
SR8	14/1/2017	Mid-Flood	Cloudy	Moderate	10:50	9	B	8	3																																		



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	S	1	1	8	0.15			0.14			0.001			NA	NA	NA	NA	NA			48	49		NA	NA		<1		
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	S	1	2	9	0.13						0.001	0.001		NA	NA	NA	NA	NA			51			NA	NA		<1	1	
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	S	1	3											NA	NA	NA	NA												
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	M	16	1	9	0.14						0.001			NA	NA	NA	NA				71			NA	NA		<1		
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	M	16	2	8	0.16	0.15	0.15				0.001	0.001	0.001	NA	NA	NA	NA	NA	NA		80	75	70	NA	NA	NA	<1	1	1
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	M	16	3											NA	NA	NA	NA												
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	B	31	1	14	0.18						0.001			NA	NA	NA	NA	NA			89			NA	NA		<1		
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	B	31	2	14	0.14	0.16					0.001	0.001		NA	NA	NA	NA	NA			95	92		NA	NA		<1	1	
C1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:20	32	B	31	3											NA	NA	NA	NA												
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	S	1	1	9	0.14						0.006			NA	NA	NA	NA	NA			4			NA	NA		<1		
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	S	1	2	9	0.13	0.14					0.005	0.006		NA	NA	NA	NA	NA			6	5		NA	NA		<1	1	
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	S	1	3											NA	NA	NA	NA												
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	M	4.5	1	8	0.13						0.005			NA	NA	NA	NA	NA			4			NA	NA		<1		
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	M	4.5	2	9	0.13	0.13	0.13				0.005	0.005	0.005	NA	NA	NA	NA	NA	NA		5	4	4	NA	NA	NA	<1	1	1
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	M	4.5	3											NA	NA	NA	NA												
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	B	8	1	10	0.13						0.005			NA	NA	NA	NA				2			NA	NA		<1		
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	B	8	2	9	0.14	0.14					0.006	0.006		NA	NA	NA	NA	NA			5	3		NA	NA		<1	1	
C2	14/1/2017	Mid-Flood	Cloudy	Moderate	10:30	9	B	8	3											NA	NA	NA	NA												
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	S	1	1	10	0.14						0.005			NA	NA	NA	NA	NA			5			NA	NA		<1		
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	S	1	2	8	0.12	0.13					0.005	0.005		NA	NA	NA	NA	NA			8	6		NA	NA		<1	1	
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	S	1	3											NA	NA	NA	NA												
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	M	18	1	8	0.12						0.005			NA	NA	NA	NA	NA			6			NA	NA		<1		
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	M	18	2	8	0.13	0.13	0.13				0.005	0.005	0.005	NA	NA	NA	NA	NA			8	7	8	NA	NA	NA	<1	1	1
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	M	18	3											NA	NA	NA	NA												
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	B	35	1	11	0.14						0.005			NA	NA	NA	NA	NA			9			NA	NA		<1		
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	B	35	2	10	0.14	0.14					0.005	0.005		NA	NA	NA	NA	NA			12	10		NA	NA		<1	1	
C3	14/1/2017	Mid-Flood	Cloudy	Moderate	11:40	36	B	35	3											NA	NA	NA	NA												
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	S	1	1	8	NA			NA			0.12	0.17	<0.01	0.30	0.30			NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	S	1	2	9	NA	NA		NA	NA		0.13	0.17	<0.01	0.31				NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	S	1	3								0.13	0.16	0.01	0.30															
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	M	14	1	9	NA			NA			0.16	0.16	0.01	0.33	0.37			NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	M	14	2	9	NA	NA		NA	NA		0.21	0.16	0.01	0.38		0.33		NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	M	14	3								0.22	0.16	0.02	0.40															
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	B	27	1	9	NA			NA			0.13	0.16	0.01	0.30	0.30			NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	B	27	2	9	NA	NA		NA	NA		0.13	0.16	0.01	0.30				NA	NA		NA	NA		NA	NA		NA	NA	
G1	14/1/2017	Mid-Flood	Cloudy	Smooth	11:00	28	B	27	3								0.13	0.17	<0.01	0.31															
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	S	1	1	4	NA			NA			0.12	0.18	<0.01	0.31	0.31			NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	S	1	2	3	NA	NA		NA	NA		0.12	0.17	0.01	0.30				NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	S	1	3								0.12	0.18	<0.01	0.31															
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	M	6	1	4	NA			NA			0.16	0.17	0.01	0.34	0.33			NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	M	6	2	3	NA	NA		NA	NA		0.14	0.17	0.01	0.32				NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	M	6	3								0.14	0.17	0.01	0.32															
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	B	11	1	4	NA			NA			0.12	0.18	<0.01	0.31	0.30			NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	B	11	2	4	NA	NA		NA	NA		0.12	0.17	0.01	0.30				NA	NA		NA	NA		NA	NA		NA	NA	
G2	14/1/2017	Mid-Flood	Cloudy	Smooth	10:03	8	B	11	3								0.12	0.17	0.01	0.30															
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	S	1	1	6	NA			NA			0.20	0.15	0.01	0.36	0.34			NA	NA		NA	NA		NA	NA		NA	NA	
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	S	1	2	5	NA	NA		NA	NA		0.19	0.16	<0.01	0.36				NA	NA		NA	NA		NA	NA		NA	NA	
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	S	1	3								0.12	0.16	<0.01	0.29															
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	M	18	1	7	NA			NA			0.13	0.15	0.01	0.29	0.31			NA	NA		NA	NA		NA	NA		NA	NA	
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	M	18	2	7	NA	NA		NA	NA		0.14	0.15	0.01	0.30				NA	NA		NA	NA		NA	NA		NA	NA	
G3	14/1/2017	Mid-Flood	Cloudy	Smooth	8:50	36	M	18	3								0.14	0.15	0.01	0.30		</													











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																												
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)						
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	1	7.81		30.17	30.17	20.91	20.91	93.4	93.4	5.43	5.44	5.44		3.1	3.1		NA	NA		NA	NA		0.19	0.15	0.01	0.35				
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	2	7.81	7.81	30.17	30.17	20.91	20.91	93.4	93.4	5.44	5.44	5.44		3.1	3.1		NA	NA		NA	NA		0.21	0.14	0.02	0.37	0.36			
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	3												5.45				NA	NA		NA	NA		0.20	0.16	0.01	0.37				
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	1	7.81	7.81	30.17	30.17	20.91	20.91	93.4	93.4	5.47	5.47	5.47		3.3	3.3		NA	NA		NA	NA		0.16	0.16	0.01	0.33				
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	2	7.81	7.81	30.17	30.17	20.91	20.91	93.4	93.4	5.46	5.46	5.47		3.3	3.3	3.2	NA	NA	NA	NA	NA		0.17	0.15	0.01	0.33	0.33	0.34		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	3															NA	NA		NA	NA		0.17	0.15	0.01	0.33					
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	1	7.81	7.81	30.17	30.17	20.91	20.91	93.4	93.4	5.46	5.47	5.47		3.2	3.2		NA	NA		NA	NA		0.17	0.14	0.02	0.33				
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	2	7.81	7.81	30.17	30.17	20.91	20.91	93.4	93.4	5.47	5.47	5.47		3.2	3.2		NA	NA		NA	NA		0.17	0.15	0.02	0.34	0.33			
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	3															NA	NA		NA	NA		0.17	0.15	0.02	0.33					
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	1	8.10	8.10	32.13	32.13	20.08	20.08	90.3	90.3	7.28	7.28	7.28		1.4	1.4		NA	NA		NA	NA		0.17	0.14	0.01	0.32				
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	2	8.10	8.10	32.13	32.13	20.08	20.08	90.3	90.3	7.28	7.28	7.28		1.4	1.4		NA	NA		NA	NA		0.17	0.15	0.01	0.33	0.32			
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	3												7.30				NA	NA		NA	NA		0.17	0.13	0.01	0.31				
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	1	8.10	8.10	32.13	32.13	20.08	20.08	92.6	92.6	7.31	7.31	7.31		1.6	1.6	1.6	NA	NA	NA	NA	NA		0.14	0.14	0.01	0.29	0.29	0.30		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	2	8.10	8.10	32.13	32.13	20.08	20.08	92.6	92.6	7.31	7.31	7.31		1.6	1.6		NA	NA		NA	NA		0.14	0.14	0.01	0.29				
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	3															NA	NA		NA	NA		0.16	0.13	0.01	0.30					
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	1	8.10	8.10	32.13	32.13	20.08	20.08	91.5	91.5	7.30	7.30	7.30		1.7	1.7		NA	NA		NA	NA		0.13	0.14	0.01	0.28				
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	2	8.10	8.10	32.13	32.13	20.08	20.08	91.5	91.5	7.30	7.30	7.30		1.7	1.7		NA	NA		NA	NA		0.13	0.14	0.01	0.28	0.28			
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	3															NA	NA		NA	NA		0.14	0.14	0.01	0.29					
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	1	8.05	8.05	32.11	32.11	20.16	20.16	88.7	88.7	6.89	6.89	6.89		0.7	0.7		NA	NA		NA	NA		0.13	0.13	0.01	0.27				
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	2	8.05	8.05	32.11	32.11	20.16	20.16	88.7	88.7	6.89	6.89	6.89		0.7	0.7		NA	NA		NA	NA		0.15	0.13	0.01	0.29	0.28			
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	3															NA	NA		NA	NA		0.13	0.13	0.01	0.27					
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	1	8.05	8.05	32.11	32.11	20.16	20.16	89.4	89.4	6.97	6.97	6.97		0.8	0.8		NA	NA		NA	NA		0.13	0.13	0.01	0.27				
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	2	8.05	8.05	32.11	32.11	20.16	20.16	89.4	89.4	6.97	6.97	6.97		0.8	0.8		NA	NA		NA	NA		0.15	0.12	0.01	0.28	0.28			
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	3															NA	NA		NA	NA		0.15	0.12	0.01	0.28					
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	1	8.05	8.05	32.11	32.11	20.16	20.16	90.1	90.1	7.03	7.03	7.03		0.7	0.7		NA	NA		NA	NA		0.15	0.13	0.01	0.29				
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	2	8.05	8.05	32.11	32.11	20.16	20.16	90.1	90.1	7.03	7.03	7.03		0.7	0.7		NA	NA		NA	NA		0.16	0.13	0.01	0.30	0.29			
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	3															NA	NA		NA	NA		0.14	0.13	0.01	0.28					
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	1	7.91	7.91	31.05	31.05	20.52	20.52	98.2	98.2	6.27	6.27	6.27		2.8	2.8		0.14	0.14		0.004	0.004		0.004	0.004		NA	NA	NA	NA	NA
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	2	7.91	7.91	31.05	31.05	20.52	20.52	98.2	98.2	6.27	6.27	6.27		2.8	2.8		0.14	0.14		0.004	0.004		0.004	0.004		NA	NA	NA	NA	NA
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	3															NA	NA		NA	NA		NA	NA	NA	NA	NA	NA			
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	M	4.5	1	7.10	7.10	30.30	30.30	20.61	20.61	98.3	98.3	6.21	6.21	6.21		3.2	3.2		0.13	0.13		0.001	0.001		0.001	0.001		NA	NA	NA	NA	NA
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	M	4.5	2	7.10	7.10	30.30	30.30	20.61	20.61	98.3	98.3	6.21	6.21	6.21		3.2	3.2		0.13	0.13		0.001	0.001		0.001	0.001		NA	NA	NA	NA	NA
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	M	4.5	3															NA	NA		NA	NA		NA	NA	NA	NA	NA	NA			
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	B	8	1	7.91	7.91	30.07	30.07	20.40	20.40	98.3	98.3	6.23	6.23	6.23		3.1	3.1		0.15	0.15		0.004	0.004		0.004	0.004		NA	NA	NA	NA	NA
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	B	8	3															NA	NA		NA	NA		NA	NA	NA	NA	NA	NA			
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	1	7.87	7.87	30.01	30.01	20.90	20.90	92.7	92.7	6.20	6.20	6.20		2.3	2.3		0.16	0.16		0.004	0.004		0.004	0.004		NA	NA	NA	NA	NA
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	2	7.87	7.87	30.01	30.01	20.90	20.90	92.7	92.7	6.20	6.20	6.20		2.3	2.3		0.16	0.16		0.004	0.004		0.004	0.004		NA	NA	NA	NA	NA
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	3															NA	NA		NA	NA		NA	NA	NA	NA	NA	NA			
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30																																	



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																															
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrite (mg/L-N)			TIN-Nitrate (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)		
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	1	8.06		31.48	31.48	20.12	20.12	88.4	88.4	7.03	7.03			1.2	1.2		NA	NA		NA	NA		0.12	0.14	0.01	0.27							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	2	8.06	8.06	31.48	31.48	20.12	20.12	88.4	88.4	7.03	7.03	7.11		1.2	1.2		NA	NA		NA	NA		0.12	0.15	0.01	0.28							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	3																																
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	1	8.06	8.06	31.48	31.48	20.12	20.12	87.4	87.4	7.18	7.18			1.2	1.2		NA	NA		NA	NA		0.15	0.14	0.01	0.30							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	2	8.06	8.06	31.48	31.48	20.12	20.12	87.4	87.4	7.18	7.18			1.2	1.2	1.3	NA	NA	NA	NA	NA		0.15	0.14	0.01	0.30							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	3																																
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	1	8.06	8.06	31.48	31.48	20.12	20.12	90.6	90.6	7.81	7.81			1.4	1.4		NA	NA		NA	NA		0.15	0.14	0.02	0.31							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	2	8.06	8.06	31.48	31.48	20.12	20.12	90.6	90.6	7.81	7.81			1.4	1.4		NA	NA		NA	NA		0.14	0.15	0.01	0.30							
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	3																																
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	3																																
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	1	8.06	8.06	31.48	31.48	20.10	20.10	86.3	86.3	7.81	7.81			0.7	0.7		NA	NA		NA	NA		0.15	0.14	0.01	0.30							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	2	8.06	8.06	31.48	31.48	20.10	20.10	86.3	86.3	7.81	7.81			0.7	0.7		NA	NA		NA	NA		0.13	0.14	0.01	0.28							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	3																																
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	1	8.06	8.06	31.48	31.48	20.10	20.10	85.8	85.8	7.82	7.82			0.9	0.9		NA	NA		NA	NA		0.14	0.14	0.01	0.29							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	2	8.06	8.06	31.48	31.48	20.10	20.10	85.8	85.8	7.82	7.82			0.9	0.9	0.9	NA	NA	NA	NA	NA		0.13	0.14	0.01	0.28							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	3																																
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	1	8.06	8.06	31.48	31.48	20.10	20.10	87.9	87.9	8.04	8.04			1.2	1.2		NA	NA		NA	NA		0.14	0.14	0.01	0.29							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	2	8.06	8.06	31.48	31.48	20.10	20.10	87.9	87.9	8.04	8.04			1.2	1.2		NA	NA		NA	NA		0.14	0.13	0.01	0.28							
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	3																																
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	3																																
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	1	7.90	7.90	30.09	30.09	20.31	20.31	98.1	98.1	6.30	6.30			3.1	3.1		0.18	0.19		0.005	0.005		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	2	7.90	7.90	30.09	30.09	20.31	20.31	98.1	98.1	6.30	6.30			3.1	3.1		0.19	0.19		0.005	0.005		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	3																																
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	1	7.87	7.87	30.12	30.12	20.60	20.60	99.2	99.2	6.27	6.27			3.0	3.0		0.22	0.21	0.22	0.005	0.005		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	2	7.87	7.87	30.12	30.12	20.60	20.60	99.2	99.2	6.27	6.27			3.0	3.0		0.21	0.21		0.005	0.005		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	3																																
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	1	7.82	7.82	30.20	30.20	20.22	20.22	98.3	98.3	6.24	6.24			2.7	2.7		0.26	0.20	0.23	0.005	0.004		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	2	7.82	7.82	30.20	30.20	20.22	20.22	98.3	98.3	6.24	6.24			2.7	2.7		0.20	0.20		0.004	0.005		NA	NA	NA	NA							
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	3																																
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	1	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.04	6.04			2.3	2.3		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	2	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.03	6.04			2.3	2.3		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	3																																
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	1	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.05	6.06			2.4	2.4		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	2	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.06	6.06			2.4	2.4		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	3																																
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	1	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.03	6.04			2.5	2.5		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	2	7.59	7.59	30.08	30.08	20.92	20.92	92.1	92.1	6.04	6.04			2.5	2.5		NA	NA		NA	NA		NA	NA	NA	NA							
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	3																																

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	1	6	NA	NA	NA	NA	0.18	0.15	0.01	0.34	0.22	0.14	0.02	0.38	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	2	6	NA	NA	NA	NA	0.20	0.16	<0.01	0.37	0.16	0.16	<0.01	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	S	1	3		NA	NA	NA	NA	0.18	0.15	0.01	0.34	0.17	0.15	0.01	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	1	9	NA	NA	NA	NA	0.17	0.14	0.02	0.33	0.17	0.14	0.02	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	2	7	NA	NA	NA	NA	0.16	0.14	0.02	0.32	0.17	0.14	0.02	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	M	6.5	3		NA	NA	NA	NA	0.17	0.15	<0.01	0.32	0.17	0.15	<0.01	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	1	10	NA	NA	NA	NA	0.17	0.13	0.02	0.32	0.17	0.14	0.02	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	2	9	NA	NA	NA	NA	0.16	0.14	0.02	0.33	0.17	0.14	0.02	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G4	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:55	13	B	12	3		NA	NA	NA	NA	0.16	0.14	0.02	0.32	0.17	0.14	0.02	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	1	10	NA	NA	NA	NA	0.17	0.14	<0.01	0.32	0.17	0.15	<0.01	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	2	11	NA	NA	NA	NA	0.17	0.15	<0.01	0.33	0.17	0.15	<0.01	0.33	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	S	1	3		NA	NA	NA	NA	0.17	0.13	0.01	0.31	0.17	0.13	0.01	0.31	0.32	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	1	10	NA	NA	NA	NA	0.14	0.14	0.01	0.29	0.14	0.14	0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	2	11	NA	NA	NA	NA	0.13	0.13	0.01	0.27	0.13	0.13	0.01	0.27	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	M	3	3		NA	NA	NA	NA	0.16	0.13	0.01	0.30	0.16	0.13	0.01	0.30	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	1	14	NA	NA	NA	NA	0.13	0.14	<0.01	0.28	0.13	0.14	<0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	2	12	NA	NA	NA	NA	0.13	0.14	<0.01	0.28	0.13	0.14	<0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G5	14/1/2017	Mid-Ebb	Cloudy	Moderate	12:20	6	B	5	3		NA	NA	NA	NA	0.15	0.13	0.01	0.29	0.15	0.13	0.01	0.29	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	1	11	NA	NA	NA	NA	0.13	0.13	<0.01	0.27	0.13	0.13	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	2	10	NA	NA	NA	NA	0.15	0.13	<0.01	0.29	0.13	0.13	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	S	1	3		NA	NA	NA	NA	0.13	0.13	<0.01	0.27	0.13	0.13	<0.01	0.27	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	1	9	NA	NA	NA	NA	0.13	0.12	0.01	0.26	0.13	0.12	0.01	0.26	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	2	11	NA	NA	NA	NA	0.14	0.13	<0.01	0.28	0.14	0.13	<0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	M	15	3		NA	NA	NA	NA	0.15	0.13	<0.01	0.29	0.15	0.13	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	1	12	NA	NA	NA	NA	0.14	0.13	<0.01	0.28	0.14	0.13	<0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	2	12	NA	NA	NA	NA	0.16	0.13	<0.01	0.30	0.16	0.13	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
G6	14/1/2017	Mid-Ebb	Cloudy	Moderate	13:40	30	B	29	3		NA	NA	NA	NA	0.14	0.13	<0.01	0.28	0.14	0.13	<0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	1	5	0.14	0.14	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	2	4	0.14	0.14	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	S	1	3		0.14	0.14	0.001	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	M	4.5	1	5	0.14	0.14	0.001	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	M	4.5	2	4	0.14	0.14	0.001	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	B	8	1	6	0.15	0.15	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	B	8	2	4	0.15	0.15	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR2	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:10	9	B	8	3		0.15	0.15	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	1	7	0.16	0.16	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	2	7	0.16	0.16	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	S	1	3		0.16	0.16	0.004	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	M	4	1	8	0.18	0.19	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	M	4	2	8	0.20	0.19	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	M	4	3		0.17	0.17	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	B	7	1	8	0.17	0.17	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	B	7	2	9	0.17	0.17	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR3	14/1/2017	Mid-Ebb	Cloudy	Smooth	13:30	8	B	7	3		0.17	0.17	0.003	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	1	8	8	NA	NA	NA	NA	0.15	0.14	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	2	8	8	NA	NA	NA	NA	0.14	0.14	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	S	1	3			NA	NA	NA	NA	0.14	0.14	<0.01	0.29		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	1	10	10	NA	NA	NA	NA	0.15	0.14	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	2	10	10	NA	NA	NA	NA	0.14	0.14	<0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	M	5	3			NA	NA	NA	NA	0.14	0.13	0.01	0.28		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	1	10	10	NA	NA	NA	NA	0.14	0.14	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	2	10	10	NA	NA	NA	NA	0.15	0.14	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:00	10	B	9	3			NA	NA	NA	NA	0.14	0.14	<0.01	0.29		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	1	9	8	NA	NA	NA	NA	0.15	0.14	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	2	7	8	NA	NA	NA	NA	0.13	0.14	<0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	S	1	3			NA	NA	NA	NA	0.14	0.14	<0.01	0.29		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	1	8	8	NA	NA	NA	NA	0.14	0.14	<0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	2	8	8	NA	NA	NA	NA	0.13	0.14	<0.01	0.28	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	M	5	3			NA	NA	NA	NA	0.14	0.14	<0.01	0.29		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	1	9	10	NA	NA	NA	NA	0.14	0.13	0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	2	10	10	NA	NA	NA	NA	0.14	0.14	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	14/1/2017	Mid-Ebb	Cloudy	Moderate	14:40	10	B	9	3			NA	NA	NA	NA	0.14	0.14	<0.01	0.29		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	1	5	5	0.18	0.19	0.005	0.005	NA	NA	NA	NA	NA	NA	240	224	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	2	4	5	0.20	0.19	0.005	0.005	NA	NA	NA	NA	NA	NA	210	224	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	S	1	3						NA	NA	NA	NA	NA	NA	NA				NA	NA	NA						
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	1	7	7	0.22	0.22	0.005	0.005	NA	NA	NA	NA	NA	NA	260	228	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	2	6	7	0.21	0.22	0.005	0.005	NA	NA	NA	NA	NA	NA	200	228	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	M	7.5	3						NA	NA	NA	NA	NA	NA	NA				NA	NA	NA						
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	1	6	7	0.27	0.24	0.006	0.005	NA	NA	NA	NA	NA	NA	310	261	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	2	7	7	0.20	0.24	0.004	0.005	NA	NA	NA	NA	NA	NA	220	261	237	NA	NA	NA	<1	1	1			
SR12	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:00	15	B	14	3						NA	NA	NA	NA	NA	NA	NA				NA	NA	NA						
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	1	3	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	2	5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	S	1	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	1	6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	2	6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	M	7	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	1	6	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	2	7	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
SR13	14/1/2017	Mid-Ebb	Cloudy	Smooth	14:25	14	B	13	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.













Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			Uia (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
										NA									0.21	0.13	<0.01	0.35	0.35			NA	NA	NA	NA	NA	NA	NA	NA
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	S	1	1	7																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	S	1	2	7																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	S	1	3																								
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	M	6.5	1	7																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	M	6.5	2	6																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	M	6.5	3																								
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	B	12	1	9																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	B	12	2	10																							
G4	17/1/2017	Mid-Flood	Fine	Moderate	10:35	13	B	12	3																								
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	S	1	1	6																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	S	1	2	6																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	S	1	3																								
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	M	3	1	8																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	M	3	2	8																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	M	3	3																								
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	B	5	1	8																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	B	5	2	7																							
G5	17/1/2017	Mid-Flood	Fine	Rough	9:56	6	B	5	3																								
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	S	1	1	7																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	S	1	2	8																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	S	1	3																								
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	M	15	1	9																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	M	15	2	8																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	M	15	3																								
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	B	29	1	10																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	B	29	2	11																							
G6	17/1/2017	Mid-Flood	Fine	Rough	10:57	30	B	29	3																								
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	S	1	1	5																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	S	1	2	7																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	S	1	3																								
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	M	4.5	1	8																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	M	4.5	2	8																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	M	4.5	3																								
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	B	8	1	9																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	B	8	2	11																							
SR2	17/1/2017	Mid-Flood	Fine	Moderate	11:35	9	B	8	3																								
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	S	1	1	6																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	S	1	2	6																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	S	1	3																								
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	M	4	1	6																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	M	4	2	6																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	M	4	3																								
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	B	7	1	5																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	B	7	2	6																							
SR3	17/1/2017	Mid-Flood	Fine	Moderate	11:24	8	B	7	3																								



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	S	1	1	8	NA	NA	NA	0.13	0.17	<0.01	0.31	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	S	1	2	7	NA	NA	NA	0.12	0.15	0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	S	1	3	8	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	M	5.5	1	8	NA	NA	NA	0.13	0.16	<0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	M	5.5	2	8	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	M	5.5	3	8	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	B	10	1	8	NA	NA	NA	0.12	0.15	0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	B	10	2	8	NA	NA	NA	0.12	0.15	0.01	0.28	0.28	NA	NA	NA	NA	NA	NA	NA								
SR10	17/1/2017	Mid-Flood	Fine	Rough	11:13	11	B	10	3	8	NA	NA	NA	0.12	0.16	<0.01	0.29	0.28	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	S	1	1	7	NA	NA	NA	0.12	0.16	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	S	1	2	8	NA	NA	NA	0.14	0.15	0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	S	1	3	8	NA	NA	NA	0.12	0.16	<0.01	0.29	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	M	5.5	1	8	NA	NA	NA	0.13	0.16	<0.01	0.30	0.30	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	M	5.5	2	9	NA	NA	NA	0.12	0.16	<0.01	0.29	0.30	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	M	5.5	3	9	NA	NA	NA	0.14	0.15	0.01	0.30	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	B	10	1	9	NA	NA	NA	0.13	0.17	<0.01	0.31	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	B	10	2	9	NA	NA	NA	0.12	0.15	0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA								
SR11	17/1/2017	Mid-Flood	Fine	Rough	11:40	11	B	10	3	9	NA	NA	NA	0.12	0.15	0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA								
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	S	1	1	5	0.14	0.15	0.15	0.004	0.004	0.004	0.004	NA	110	95	102	370	NA	NA	1	2	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	S	1	2	7	0.15	0.16	0.16	0.005	0.005	0.005	0.004	NA	820	770	795	370	NA	NA	<1	<1	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	S	1	3	8	0.16	0.16	0.16	0.005	0.005	0.005	0.004	NA	770	795	624	370	NA	NA	<1	<1	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	M	7.5	1	8	0.16	0.16	0.16	0.005	0.005	0.005	0.004	NA	820	770	795	370	NA	NA	<1	<1	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	M	7.5	2	7	0.16	0.16	0.16	0.005	0.005	0.005	0.004	NA	770	795	624	370	NA	NA	<1	<1	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	M	7.5	3	8	0.16	0.16	0.16	0.005	0.005	0.005	0.004	NA	770	795	624	370	NA	NA	<1	<1	1						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	B	14	1	7	0.15	0.14	0.14	0.004	0.004	0.004	0.004	NA	660	590	624	370	NA	NA	2	1	2						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	B	14	2	7	0.12	0.14	0.14	0.003	0.004	0.004	0.004	NA	590	624	624	370	NA	NA	1	2	2						
SR12	17/1/2017	Mid-Flood	Fine	Moderate	11:00	15	B	14	3	7	0.12	0.14	0.14	0.003	0.004	0.004	0.004	NA	590	624	624	370	NA	NA	1	2	2						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	S	1	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	S	1	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	S	1	3	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	M	7	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	M	7	2	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	M	7	3	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	B	13	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	B	13	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Flood	Fine	Moderate	10:50	14	B	13	3	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																															
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)			Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)			TIN-Nitrite (mg/L-N)			TIN-Nitrate (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)		
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	1	7.92	29.47	29.47	20.58	20.58	97.4	97.4	7.39	7.39	7.39	7.39	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	2	7.92	29.47	29.47	20.58	20.58	97.4	97.4	7.39	7.39	7.39	7.39	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	3	7.92	29.47	29.47	20.58	20.58	97.4	97.4	7.39	7.39	7.39	7.39	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	1	7.97	29.53	29.53	20.43	20.43	97.5	97.5	7.40	7.40	7.40	7.40	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.12	0.15	0.01	0.28	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	2	7.97	29.53	29.53	20.43	20.43	97.5	97.5	7.40	7.40	7.40	7.40	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.13	0.14	0.02	0.29	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	3	7.97	29.53	29.53	20.43	20.43	97.5	97.5	7.40	7.40	7.40	7.40	2.2	2.2	2.2	NA	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.29	0.29						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	1	7.96	29.53	29.53	20.40	20.40	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.15	0.02	0.30	0.30	0.30						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	2	7.96	29.53	29.53	20.40	20.40	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.15	0.02	0.30	0.30	0.30						
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	3	7.96	29.53	29.53	20.40	20.40	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.15	0.02	0.30	0.30	0.30						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	1	7.99	29.47	29.47	20.59	20.59	97.5	97.5	7.40	7.40	7.40	7.40	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.13	0.17	0.01	0.31	0.31	0.31						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	2	7.99	29.47	29.47	20.59	20.59	97.5	97.5	7.40	7.40	7.40	7.40	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.13	0.17	0.01	0.31	0.31	0.31						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	3	7.99	29.47	29.47	20.59	20.59	97.5	97.5	7.40	7.40	7.40	7.40	2.4	2.4	2.4	NA	NA	NA	NA	NA	NA	0.14	0.16	0.01	0.31	0.31	0.31						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	1	7.97	29.51	29.51	20.40	20.40	97.6	97.6	7.41	7.41	7.41	7.41	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	2	7.97	29.51	29.51	20.40	20.40	97.6	97.6	7.41	7.41	7.41	7.41	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.29	0.30						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	3	7.97	29.51	29.51	20.40	20.40	97.6	97.6	7.41	7.41	7.41	7.41	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.14	0.02	0.29	0.29	0.29						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	1	7.97	29.56	29.56	20.39	20.39	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.31	0.30						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	2	7.97	29.56	29.56	20.39	20.39	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.13	0.16	0.01	0.30	0.31	0.30						
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	3	7.97	29.56	29.56	20.39	20.39	97.7	97.7	7.42	7.42	7.42	7.42	2.3	2.3	2.3	NA	NA	NA	NA	NA	NA	0.14	0.17	0.01	0.32	0.31	0.30						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	1	7.98	29.90	29.90	19.56	19.56	81.0	81.0	6.22	6.22	6.22	6.22	3.0	3.0	3.0	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	2	7.98	29.90	29.90	19.56	19.56	81.0	81.0	6.22	6.22	6.22	6.22	3.0	3.0	3.0	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	3	7.98	29.90	29.90	19.56	19.56	81.0	81.0	6.22	6.22	6.22	6.22	3.0	3.0	3.0	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	M	7.5	1	7.98	29.90	29.90	19.56	19.56	80.9	80.9	6.22	6.22	6.22	6.22	3.3	3.3	3.3	0.18	0.18	0.18	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	M	7.5	2	7.98	29.90	29.90	19.56	19.56	80.9	80.9	6.22	6.22	6.22	6.22	3.3	3.3	3.3	0.18	0.18	0.18	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	M	7.5	3	7.98	29.90	29.90	19.56	19.56	80.9	80.9	6.22	6.22	6.22	6.22	3.3	3.3	3.3	0.18	0.18	0.18	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	1	7.98	29.90	29.90	19.56	19.56	81.3	81.3	6.25	6.25	6.25	6.25	3.4	3.4	3.4	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	2	7.98	29.90	29.90	19.56	19.56	81.3	81.3	6.25	6.25	6.25	6.25	3.4	3.4	3.4	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	3	7.98	29.90	29.90	19.56	19.56	81.3	81.3	6.25	6.25	6.25	6.25	3.4	3.4	3.4	0.17	0.17	0.17	0.005	0.005	0.005	NA	NA	NA	NA	NA	NA						
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	1	7.98	30.01	30.01	19.50	19.50	82.4	82.4	6.33	6.33	6.33	6.33	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	2	7.98	30.01	30.01	19.50	19.50	82.4	82.4	6.33	6.33	6.33	6.33	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	3	7.98	30.01	30.01	19.50	19.50	82.4	82.4	6.33	6.33	6.33	6.33	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	1	7.98	30.01	30.01	19.50	19.50	86.3	86.3	6.63	6.63	6.63	6.63	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	2	7.98	30.01	30.01	19.50	19.50	86.3	86.3	6.63	6.63	6.63	6.63	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	3	7.98	30.01	30.01	19.50	19.50	86.3	86.3	6.63	6.63	6.63	6.63	1.7	1.7	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	1	7.98	30.01	30.01	19.50	19.50	82.5	82.5	6.34	6.34	6.34	6.34	1.9	1.9	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	2	7.98	30.01	30.01	19.50	19.50	82.5	82.5	6.34	6.34	6.34	6.34	1.9	1.9	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	3	7.98	30.01	30.01	19.50	19.50	82.5	82.5	6.34	6.34	6.34	6.34	1.9	1.9	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	S	1	1	6																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	S	1	2	8																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	S	1	3																								
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	M	6.5	1	6																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	M	6.5	2	7																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	M	6.5	3																								
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	B	12	1	10																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	B	12	2	9																							
G4	17/1/2017	Mid-Ebb	Fine	Moderate	15:55	13	B	12	3																								
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	S	1	1	8																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	S	1	2	9																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	S	1	3																								
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	M	3	1	8																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	M	3	2	8																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	M	3	3																								
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	B	5	1	8																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	B	5	2	8																							
G5	17/1/2017	Mid-Ebb	Fine	Rough	16:18	6	B	5	3																								
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	S	1	1	8																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	S	1	2	6																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	S	1	3																								
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	M	15	1	7																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	M	15	2	8																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	M	15	3																								
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	B	29	1	8																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	B	29	2	9																							
G6	17/1/2017	Mid-Ebb	Fine	Rough	14:57	30	B	29	3																								
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	S	1	1	6																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	S	1	2	7																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	S	1	3																								
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	M	4.5	1	8																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	M	4.5	2	6																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	M	4.5	3																								
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	B	8	1	8																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	B	8	2	6																							
SR2	17/1/2017	Mid-Ebb	Fine	Moderate	15:00	9	B	8	3																								
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	S	1	1	6																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	S	1	2	8																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	S	1	3																								
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	M	4	1	11																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	M	4	2	12																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	M	4	3																								
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	B	7	1	12																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	B	7	2	12																							
SR3	17/1/2017	Mid-Ebb	Fine	Moderate	15:15	8	B	7	3																								



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	1	10	10	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	2	10	10	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	S	1	3			NA	NA	NA	NA	0.12	0.16	<0.01	0.29			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	1	10	10	NA	NA	NA	NA	0.12	0.16	<0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	2	9	10	NA	NA	NA	NA	0.13	0.14	0.02	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	M	5.5	3			NA	NA	NA	NA	0.13	0.16	<0.01	0.30			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	1	15	15	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	2	14	15	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	17/1/2017	Mid-Ebb	Fine	Rough	14:40	11	B	10	3			NA	NA	NA	NA	0.13	0.15	0.01	0.29			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	1	10	11	NA	NA	NA	NA	0.12	0.16	<0.01	0.29	0.30	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	2	11	11	NA	NA	NA	NA	0.13	0.17	<0.01	0.31	0.30	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	S	1	3			NA	NA	NA	NA	0.14	0.16	<0.01	0.31			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	1	10	10	NA	NA	NA	NA	0.13	0.15	0.01	0.29	0.29	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	2	10	10	NA	NA	NA	NA	0.13	0.16	<0.01	0.30	0.29	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	M	5.5	3			NA	NA	NA	NA	0.13	0.14	0.02	0.29			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	1	9	9	NA	NA	NA	NA	0.13	0.16	<0.01	0.30	0.30	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	2	9	9	NA	NA	NA	NA	0.13	0.16	<0.01	0.30	0.30	0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	17/1/2017	Mid-Ebb	Fine	Rough	14:50	11	B	10	3			NA	NA	NA	NA	0.13	0.16	<0.01	0.30			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	1	3	3	0.16	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	17	19	155	NA	NA	NA	<1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	2	3	3	0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	22	19	155	NA	NA	NA	<1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	S	1	3			0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	450	479	155	NA	NA	NA	1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	M	7.5	1	5	5	0.18	0.18	0.18	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	510	479	155	NA	NA	NA	1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	M	7.5	2	4	5	0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	390	405	155	NA	NA	NA	<1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	1	7	8	0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	420	405	155	NA	NA	NA	1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	2	9	8	0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	420	405	155	NA	NA	NA	1	1	1		
SR12	17/1/2017	Mid-Ebb	Fine	Moderate	15:40	15	B	14	3			0.17	0.17	0.17	0.005	0.005	0.005	0.005	0.005	0.005	0.005	NA	420	405	155	NA	NA	NA	1	1	1		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	1	7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	2	8	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	S	1	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	1	9	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	2	9	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	M	7	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	1	11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	2	10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	17/1/2017	Mid-Ebb	Fine	Moderate	15:45	14	B	13	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																													
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)			Ammonia (mg/L-N)			UIA (mg/L-N)			Total Inorganic Nitrogen (mg/L-N)										
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.							
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	1	8.11	8.11	32.31	32.31	20.10	20.10	89.7	89.7	6.99	6.99	7.00	1.5	1.5	1.6	NA	NA	NA	NA	NA	NA	0.14	0.10	0.01	0.25	0.25	0.24				
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	2	8.11		32.31	32.31	20.09	20.09	89.7	89.7	6.99	6.99		1.5	1.5		NA	NA		NA	NA		NA	0.14	0.09	0.01			0.24			
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	3																														
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	1	8.10	8.10	32.30	32.30	20.09	20.09	90.2	90.2	7.01	7.01	7.00	1.5	1.6	1.6	NA	NA	NA	NA	NA	NA	0.13	0.10	0.01	0.24	0.23	0.24				
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	2	8.09		32.30	32.30	20.09	20.09	90.2	90.2	7.01	7.01		1.6	1.6		NA	NA		NA	NA		NA	0.12	0.09	0.01			0.22			
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	3																														
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	1	8.09	8.09	32.16	32.16	20.09	20.09	89.3	89.3	6.98	6.98	7.00	1.6	1.6	1.6	NA	NA	NA	NA	NA	NA	0.13	0.10	0.01	0.24	0.24	0.24				
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	2	8.09		32.16	32.16	20.09	20.09	89.3	89.3	6.98	6.98		1.6	1.6		NA	NA		NA	NA		NA	0.13	0.09	0.01			0.23			
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	3																														
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	1	8.09	8.09	32.14	32.14	20.08	20.08	87.4	87.4	6.91	6.91	6.97	0.9	0.9	1.2	NA	NA	NA	NA	NA	NA	0.14	0.11	0.01	0.26	0.26	0.25				
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	2	8.09		32.14	32.14	20.08	20.08	87.4	87.4	6.91	6.91		0.9	0.9		NA	NA		NA	NA		NA	0.14	0.11	0.01			0.26			
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	3																														
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	1	8.09	8.09	32.16	32.16	20.08	20.08	88.4	88.4	7.02	7.02	6.97	1.4	1.3	1.2	NA	NA	NA	NA	NA	NA	0.13	0.10	0.02	0.25	0.25	0.25				
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	2	8.09		32.16	32.16	20.08	20.08	88.4	88.4	7.02	7.02		1.3	1.4		NA	NA		NA	NA		NA	0.13	0.10	0.02			0.25			
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	3																														
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	1	8.09	8.09	32.16	32.17	20.08	20.08	88.7	88.7	7.06	7.06	6.97	1.1	1.4	1.3	NA	NA	NA	NA	NA	NA	0.13	0.10	0.01	0.24	0.24	0.24				
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	2	8.09		32.17	32.17	20.08	20.08	88.6	88.6	7.06	7.06		1.4	1.3		NA	NA		NA	NA		NA	0.14	0.09	0.01			0.24			
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	3																														
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	S	1	1	8.00	8.00	29.83	29.83	19.61	19.63	80.3	80.4	6.16	6.17	6.12	4.0	4.1	4.0	0.30	0.29	0.25	0.009	0.009	0.008	NA	NA	NA	NA	NA	NA				
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	S	1	2	8.00		29.82	29.83	19.64	19.63	80.4	80.4	6.17	6.17		4.1	4.1		0.23	0.24		0.007	0.007		0.007	0.007	0.007	NA			NA	NA	NA	
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	1	8.00		29.86	29.86	19.57	19.54	78.9	78.9	6.07	6.06		4.0	3.9		0.23	0.24		0.007	0.007		0.007	0.007	0.007	NA			NA	NA	NA	
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	2	8.00	7.99	29.86	29.86	19.51	19.54	78.8	78.9	6.07	6.06	6.12	4.0	4.0	4.0	0.23	0.24	0.25	0.007	0.007	0.008	NA	NA	NA	NA	NA	NA				
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	3																														
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	1	7.99		29.86	29.86	19.56	19.56	78.4	78.4	6.03	6.02		4.1	4.0		0.23	0.22		0.007	0.006		0.007	0.006	0.007	NA			NA	NA	NA	
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	2	7.99	7.99	29.86	29.86	19.56	19.56	78.3	78.4	6.02	6.03	6.12	4.1	4.0	4.1	0.23	0.22	0.23	0.007	0.006	0.007	NA	NA	NA	NA	NA	NA				
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	3																														
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	3																														
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	1	8.00	8.00	29.92	29.92	19.61	19.62	82.1	82.0	6.23	6.24	6.19	5.0	5.3	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	2	8.00		29.92	29.92	19.62	19.62	81.9	82.0	6.24	6.24		5.3	5.2		NA	NA		NA	NA		NA	NA	NA	NA			NA	NA	NA	
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	3																														
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	1	7.99	7.99	29.92	29.92	19.60	19.60	80.0	80.1	6.13	6.14	6.19	5.0	4.9	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	2	7.99		29.92	29.92	19.60	19.60	80.1	80.1	6.14	6.14		4.9	5.0		NA	NA		NA	NA		NA	NA	NA	NA			NA	NA	NA	
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	3																														
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	1	7.98	7.98	29.93	29.93	19.55	19.55	79.1	79.1	6.07	6.08	6.19	6.2	6.5	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	2	7.98		29.93	29.93	19.55	19.55	79.0	79.0	6.07	6.08		6.5	6.4		NA	NA		NA	NA		NA	NA	NA	NA			NA	NA	NA	
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	3																														

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	S	1	1	8	8	NA	NA	NA	NA	0.63	0.12	0.01	0.76	0.76	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	S	1	2	8	8	NA	NA	NA	NA	0.64	0.11	0.01	0.76	0.76	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	S	1	3			NA	NA	NA	NA	0.62	0.11	0.02	0.75	0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	M	6.5	1	11	11	NA	NA	NA	NA	0.54	0.12	0.01	0.67	0.67	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	M	6.5	2	10	11	NA	NA	NA	NA	0.55	0.11	0.01	0.67	0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	M	6.5	3			NA	NA	NA	NA	0.56	0.11	0.02	0.69	0.67	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	B	12	1	13	13	NA	NA	NA	NA	0.44	0.13	<0.01	0.58	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	B	12	2	13	13	NA	NA	NA	NA	0.45	0.11	0.01	0.57	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G4	19/1/2017	Mid-Flood	Fine	Moderate	11:01	13	B	12	3			NA	NA	NA	NA	0.46	0.11	0.02	0.59	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	S	1	1	5	5	NA	NA	NA	NA	0.18	0.15	0.02	0.35	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	S	1	2	4	5	NA	NA	NA	NA	0.12	0.16	<0.01	0.29	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	S	1	3			NA	NA	NA	NA	0.18	0.15	0.01	0.34	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	M	4.5	1	9	8	NA	NA	NA	NA	0.13	0.14	0.01	0.28	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	M	4.5	2	7	8	NA	NA	NA	NA	0.14	0.15	<0.01	0.30	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	M	4.5	3			NA	NA	NA	NA	0.13	0.15	<0.01	0.29	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	B	8	1	12	11	NA	NA	NA	NA	0.13	0.17	<0.01	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	B	8	2	10	11	NA	NA	NA	NA	0.13	0.16	0.02	0.31	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G5	19/1/2017	Mid-Flood	Fine	Moderate	10:20	9	B	8	3			NA	NA	NA	NA	0.13	0.15	0.02	0.30	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	S	1	1	4	4	NA	NA	NA	NA	0.14	0.11	<0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	S	1	2	3	4	NA	NA	NA	NA	0.14	0.10	0.01	0.25	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	S	1	3			NA	NA	NA	NA	0.13	0.12	<0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	M	18	1	6	6	NA	NA	NA	NA	0.14	0.10	0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	M	18	2	5	6	NA	NA	NA	NA	0.14	0.10	0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	M	18	3			NA	NA	NA	NA	0.14	0.11	0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	B	35	1	9	9	NA	NA	NA	NA	0.15	0.10	0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	B	35	2	8	9	NA	NA	NA	NA	0.14	0.11	<0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
G6	19/1/2017	Mid-Flood	Fine	Moderate	11:55	36	B	35	3			NA	NA	NA	NA	0.14	0.11	<0.01	0.26	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	S	1	1	3	4	0.14	0.15	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	S	1	2	4	4	0.15	0.15	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	S	1	3			0.15	0.15	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	M	4.5	1	6	5	0.14	0.15	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	M	4.5	2	4	5	0.14	0.15	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	M	4.5	3			0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	B	8	1	9	9	0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	B	8	2	8	9	0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR2	19/1/2017	Mid-Flood	Fine	Moderate	10:19	9	B	8	3			0.14	0.14	0.005	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	S	1	1	4	5	0.17	0.17	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	S	1	2	6	5	0.16	0.17	0.005	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	S	1	3			0.16	0.17	0.005	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	M	4	1	6	6	0.16	0.17	0.005	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	M	4	2	5	6	0.17	0.17	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	M	4	3			0.17	0.17	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	B	7	1	7	8	0.17	0.18	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	B	7	2	8	8	0.18	0.18	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SR3	19/1/2017	Mid-Flood	Fine	Moderate	12:23	8	B	7	3			0.18	0.18	0.006	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	1	4	NA	NA	NA	NA	0.14	0.09	0.01	0.24	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	2	6	NA	NA	NA	NA	0.14	0.10	<0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	S	1	3					0.14	0.10	0.01	0.25																
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	1	5	NA	NA	NA	NA	0.13	0.10	<0.01	0.24	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	2	4	NA	NA	NA	NA	0.12	0.09	0.01	0.22	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	M	5	3					0.13	0.09	0.01	0.23																
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	1	7	NA	NA	NA	NA	0.13	0.10	<0.01	0.24	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	2	7	NA	NA	NA	NA	0.13	0.09	0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR10	19/1/2017	Mid-Flood	Fine	Moderate	12:10	10	B	9	3					0.12	0.10	0.01	0.23																
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	1	2	NA	NA	NA	NA	0.14	0.10	<0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	2	2	NA	NA	NA	NA	0.14	0.10	0.01	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	S	1	3					0.14	0.10	0.01	0.25																
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	1	5	NA	NA	NA	NA	0.13	0.10	0.01	0.24	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	2	4	NA	NA	NA	NA	0.13	0.09	0.01	0.23	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	M	5	3					0.13	0.10	<0.01	0.24																
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	1	4	NA	NA	NA	NA	0.13	0.10	<0.01	0.24	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	2	4	NA	NA	NA	NA	0.13	0.09	0.01	0.23	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR11	19/1/2017	Mid-Flood	Fine	Moderate	13:06	10	B	9	3					0.13	0.10	<0.01	0.24																
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	S	1	1	6	0.30	0.30	0.009	0.009	NA	NA	NA	NA	NA	NA	340	345	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	S	1	2	7	0.30	0.30	0.009	0.009	NA	NA	NA	NA	NA	NA	350	345	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	S	1	3					NA	NA	NA	NA	NA	NA	NA													
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	1	7	0.23	0.23	0.007	0.007	NA	NA	NA	NA	NA	NA	16	17	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	2	9	0.23	0.23	0.007	0.007	NA	NA	NA	NA	NA	NA	18	17	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	M	7.5	3					NA	NA	NA	NA	NA	NA	NA													
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	1	7	0.23	0.23	0.007	0.007	NA	NA	NA	NA	NA	NA	5	6	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	2	7	0.22	0.23	0.006	0.007	NA	NA	NA	NA	NA	NA	7	6	NA	NA	NA	<1	1	1					
SR12	19/1/2017	Mid-Flood	Fine	Moderate	11:43	15	B	14	3					NA	NA	NA	NA	NA	NA	NA													
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	S	1	3					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	1	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	2	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	M	7	3					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	1	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	2	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					
SR13	19/1/2017	Mid-Flood	Fine	Moderate	11:22	14	B	13	3					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.













Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	S	1	1	7																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	S	1	2	8																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	S	1	3																								
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	M	6.5	1	10																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	M	6.5	2	10																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	M	6.5	3																								
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	B	12	1	12																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	B	12	2	13																							
G4	19/1/2017	Mid-Ebb	Cloudy	Moderate	18:00	13	B	12	3																								
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	S	1	1	6																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	S	1	2	6																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	S	1	3																								
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	M	4	1	4																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	M	4	2	6																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	M	4	3																								
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	B	7	1	6																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	B	7	2	8																							
G5	19/1/2017	Mid-Ebb	Fine	Moderate	17:50	8	B	7	3																								
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	S	1	1	6																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	S	1	2	6																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	S	1	3																								
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	M	16.5	1	4																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	M	16.5	2	4																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	M	16.5	3																								
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	B	32	1	5																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	B	32	2	6																							
G6	19/1/2017	Mid-Ebb	Fine	Moderate	16:50	33	B	32	3																								
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	S	1	1	6																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	S	1	2	4																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	S	1	3																								
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	M	4.5	1	6																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	M	4.5	2	8																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	M	4.5	3																								
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	B	8	1	7																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	B	8	2	7																							
SR2	19/1/2017	Mid-Ebb	Cloudy	Moderate	16:50	9	B	8	3																								
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	S	1	1	5																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	S	1	2	5																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	S	1	3																								
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	M	4	1	9																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	M	4	2	11																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	M	4	3																								
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	B	7	1	10																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	B	7	2	11																							
SR3	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:00	8	B	7	3																								



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																													
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)								
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.						
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	S	1	1	7		NA				0.14	0.10	<0.01	0.25				NA			NA			NA										
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	S	1	2	8	8	NA	NA			0.14	0.10	<0.01	0.25				NA	NA		NA	NA		NA	NA		NA	NA						
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	S	1	3							0.14	0.10	<0.01	0.25																				
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	M	5.5	1	8		NA	NA			0.12	0.09	0.01	0.22				NA	NA		NA	NA		NA	NA		NA	NA						
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	M	5.5	2	7	8	NA	NA	NA	NA	NA	0.14	0.11	<0.01	0.26				NA	NA	NA	NA	NA		NA	NA		NA	NA					
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	M	5.5	3							0.14	0.10	<0.01	0.25																				
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	B	10	1	9		NA	NA			0.14	0.09	0.01	0.24				NA	NA		NA	NA		NA	NA		NA	NA						
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	B	10	2	8	9	NA	NA			0.14	0.10	<0.01	0.25				NA	NA		NA	NA		NA	NA		NA	NA						
SR10	19/1/2017	Mid-Ebb	Fine	Moderate	16:35	11	B	10	3							0.14	0.10	<0.01	0.25																				
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	S	1	1	5		NA	NA			0.15	0.10	<0.01	0.26				NA	NA		NA	NA		NA	NA		NA	NA						
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	S	1	2	4	5	NA	NA			0.15	0.09	0.01	0.25				NA	NA		NA	NA		NA	NA		NA	NA						
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	S	1	3							0.15	0.10	<0.01	0.26																				
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	M	4.5	1	6		NA	NA			0.14	0.10	<0.01	0.25				NA	NA		NA	NA		NA	NA		NA	NA						
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	M	4.5	2	4	5	NA	NA	NA	NA	NA	0.14	0.09	0.01	0.24				NA	NA	NA	NA	NA		NA	NA		NA	NA					
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	M	4.5	3							0.14	0.08	0.01	0.23																				
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	B	8	1	6		NA	NA			0.14	0.10	<0.01	0.25				NA	NA		NA	NA		NA	NA		NA	NA						
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	B	8	2	6	6	NA	NA			0.13	0.10	<0.01	0.24				NA	NA		NA	NA		NA	NA		NA	NA						
SR11	19/1/2017	Mid-Ebb	Fine	Moderate	15:45	9	B	8	3							0.13	0.10	<0.01	0.24																				
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	S	1	1	8		0.20				NA	NA	NA	NA																				
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	S	1	2	8	8	0.19	0.20			0.007	0.006	0.007																					
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	S	1	3							NA	NA	NA	NA																				
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	M	7.5	1	10		0.17				0.006																							
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	M	7.5	2	8	9	0.18	0.18	0.19		0.006	0.006	0.006																					
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	M	7.5	3							NA	NA	NA	NA																				
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	B	14	1	12		0.19				0.006																							
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	B	14	2	11	12	0.19	0.19			0.006	0.006	0.006																					
SR12	19/1/2017	Mid-Ebb	Cloudy	Smooth	17:25	15	B	14	3							NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	S	1	1	7		NA				NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	S	1	2	7	7	NA	NA			NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	S	1	3							NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	M	7	1	12		NA	NA			NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	M	7	2	12	12	NA	NA	NA	NA	NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	M	7	3							NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	B	13	1	11		NA				NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	B	13	2	12	12	NA	NA			NA	NA	NA	NA																				
SR13	19/1/2017	Mid-Ebb	Cloudy	Moderate	17:40	14	B	13	3							NA	NA	NA	NA																				

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.











Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	S	1	1	2																							
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	S	1	2	2	0.17	0.17		0.006	0.006																		
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	S	1	3																								
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	M	16	1	3	0.20	0.20		0.007	0.007																		
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	M	16	2	3	0.19	0.19	0.20	0.19	0.007	0.007																	
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	M	16	3																								
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	B	31	1	3	0.20	0.21		0.007	0.007																		
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	B	31	2	4	0.21	0.21		0.007	0.007																		
C1	21/01/2017	Mid-Flood	Windv	Moderate	9:20	32	B	31	3																								
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	S	1	1	3	0.12	0.13		0.005	0.006																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	S	1	2	4	0.14	0.13		0.006	0.006																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	S	1	3																								
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	M	4.5	1	4	0.16	0.16	0.14	0.007	0.007																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	M	4.5	2	4	0.15	0.16	0.14	0.007	0.007																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	M	4.5	3																								
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	B	8	1	4	0.14	0.15		0.006	0.007																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	B	8	2	4	0.15	0.15		0.007	0.007																		
C2	21/01/2017	Mid-Flood	Fine	Moderate	11:00	9	B	8	3																								
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	S	1	1	3	0.11	0.12		0.005	0.005																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	S	1	2	5	0.13	0.12		0.005	0.005																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	S	1	3																								
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	M	18	1	4	0.10	0.10	0.10	0.004	0.004																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	M	18	2	4	0.10	0.10	0.10	0.004	0.004																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	M	18	3																								
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	B	35	1	4	0.10	0.09		0.004	0.003																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	B	35	2	4	0.08	0.09		0.003	0.003																		
C3	21/01/2017	Mid-Flood	Fine	Moderate	9:40	36	B	35	3																								
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	S	1	1	1	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	S	1	2	1	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	S	1	3																								
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	M	14	1	2	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	M	14	2	2	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	M	14	3																								
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	B	27	1	2	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	B	27	2	1	NA	NA		NA	NA																		
G1	21/01/2017	Mid-Flood	Windv	Moderate	9:34	28	B	27	3																								
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	S	1	1	1	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	S	1	2	2	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	S	1	3																								
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	M	6	1	2	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	M	6	2	2	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	M	6	3																								
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	B	11	1	3	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	B	11	2	2	NA	NA		NA	NA																		
G2	21/01/2017	Mid-Flood	Windv	Moderate	10:46	12	B	11	3																								
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	S	1	1	4	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	S	1	2	3	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	S	1	3																								
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	M	17	1	3	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	M	17	2	3	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	M	17	3																								
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	B	33	1	2	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	B	33	2	4	NA	NA		NA	NA																		
G3	21/01/2017	Mid-Flood	Windv	Moderate	12:34	34	B	33	3																								

Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																							
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)		
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	S	1	1	4		NA	NA	NA	NA	0.86	0.12	<0.01	0.99				NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	S	1	2	3	4	NA	NA	NA	NA	0.88	0.11	0.01	1.00	1.00			NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	S	1	3			NA	NA	NA	NA	0.88	0.11	0.01	1.00				NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	M	7.5	1	4		NA	NA	NA	NA	0.81	0.12	0.01	0.94				NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	M	7.5	2	3	4	NA	NA	NA	NA	0.80	0.12	<0.01	0.93	0.94	0.85		NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	M	7.5	3			NA	NA	NA	NA	0.82	0.11	0.01	0.94				NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	B	14	1	7		NA	NA	NA	NA	0.47	0.12	<0.01	0.60				NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	B	14	2	5	6	NA	NA	NA	NA	0.48	0.11	0.01	0.60	0.60			NA	NA	NA	NA	NA	NA	NA				
G4	21/01/2017	Mid-Flood	Windy	Moderate	12:09	15	B	14	3			NA	NA	NA	NA	0.49	0.11	0.01	0.61				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	S	1	1	5		NA	NA	NA	NA	0.18	0.18	<0.01	0.37				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	S	1	2	5	5	NA	NA	NA	NA	0.17	0.17	0.01	0.35	0.35			NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	S	1	3			NA	NA	NA	NA	0.16	0.17	0.01	0.34				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	M	3	1	3		NA	NA	NA	NA	0.16	0.18	<0.01	0.35				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	M	3	2	4	4	NA	NA	NA	NA	0.15	0.18	<0.01	0.34	0.34	0.34		NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	M	3	3			NA	NA	NA	NA	0.16	0.16	0.02	0.34				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	B	5	1	3		NA	NA	NA	NA	0.15	0.17	0.01	0.33				NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	B	5	2	5	4	NA	NA	NA	NA	0.15	0.17	0.01	0.33	0.34			NA	NA	NA	NA	NA	NA	NA				
G5	21/01/2017	Mid-Flood	Fine	Moderate	11:40	6	B	5	3			NA	NA	NA	NA	0.17	0.17	0.01	0.35				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	S	1	1	4		NA	NA	NA	NA	0.14	0.12	0.02	0.28				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	S	1	2	5	5	NA	NA	NA	NA	0.14	0.13	0.01	0.28	0.28			NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	S	1	3			NA	NA	NA	NA	0.14	0.13	0.01	0.28				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	M	15	1	3		NA	NA	NA	NA	0.12	0.12	0.02	0.26				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	M	15	2	4	4	NA	NA	NA	NA	0.14	0.13	0.01	0.28	0.27	0.27		NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	M	15	3			NA	NA	NA	NA	0.13	0.13	0.01	0.27				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	B	29	1	5		NA	NA	NA	NA	0.13	0.13	<0.01	0.27				NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	B	29	2	4	5	NA	NA	NA	NA	0.12	0.14	<0.01	0.27	0.27			NA	NA	NA	NA	NA	NA	NA				
G6	21/01/2017	Mid-Flood	Fine	Moderate	10:20	30	B	29	3			NA	NA	NA	NA	0.13	0.13	0.01	0.27				NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	S	1	1	1		0.20			0.006	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	S	1	2	2	2	0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	S	1	3			0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	M	4.5	1	3		0.19	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	M	4.5	2	3	3	0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	M	4.5	3			0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	B	8	1	3		0.21			0.007	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	B	8	2	2	3	0.20	0.21		0.007	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR2	21/01/2017	Mid-Flood	Windy	Moderate	10:30	9	B	8	3			0.20	0.21		0.007	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	S	1	1	2		0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	S	1	2	3	3	0.21	0.21		0.007	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	S	1	3			0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	M	4	1	4		0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	M	4	2	3	4	0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	M	4	3			0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	B	7	1	4		0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	B	7	2	6	5	0.20	0.20		0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				
SR3	21/01/2017	Mid-Flood	Windy	Moderate	11:04	8	B	7	3			0.20			0.006	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA				



Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																									
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)				
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	S	1	1	4	NA	NA	NA	NA	0.11	0.10	0.01	0.22	0.11	0.11	<0.01	0.23	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	S	1	2	2	NA	NA	NA	NA	0.10	0.10	<0.01	0.21	0.08	0.12	<0.01	0.21	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	S	1	3		NA	NA	NA	NA	0.10	0.10	<0.01	0.21	0.08	0.12	<0.01	0.21	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	M	5	1	4	NA	NA	NA	NA	0.08	0.10	0.01	0.19	0.08	0.10	0.01	0.19	0.20	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	M	5	2	2	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.19	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	M	5	3		NA	NA	NA	NA	0.07	0.09	0.01	0.17	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	B	9	1	2	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	B	9	2	4	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	B	9	3		NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR10	21/01/2017	Mid-Flood	Fine	Moderate	10:00	10	B	9	4	3	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	S	1	1	2	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	S	1	2	4	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	S	1	3		NA	NA	NA	NA	0.11	0.10	0.01	0.22	0.11	0.10	0.01	0.22	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	M	5	1	5	NA	NA	NA	NA	0.08	0.10	0.01	0.19	0.08	0.10	0.01	0.19	0.20	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	M	5	2	3	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.20	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	B	9	1	3	NA	NA	NA	NA	0.07	0.11	<0.01	0.19	0.07	0.11	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	B	9	2	3	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR11	21/01/2017	Mid-Flood	Fine	Moderate	9:20	10	B	9	3		NA	NA	NA	NA	0.07	0.11	<0.01	0.19	0.07	0.11	<0.01	0.19	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	S	1	1	4	0.23		0.23	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	5	7	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	S	1	2	4	0.22		0.23	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	9	7	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	S	1	3		0.23		0.23	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	3	4	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	M	7.5	1	5	0.23		0.23	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	6	4	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	M	7.5	2	4	0.23		0.23	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	6	4	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	M	7.5	3		0.21		0.21	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	7	6	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	B	14	1	8	0.21		0.21	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	5	6	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	B	14	3		0.21		0.21	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	5	6	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	B	14	3		0.21		0.21	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	5	6	6	NA	NA	<1	1	1		
SR12	21/01/2017	Mid-Flood	Windv	Moderate	11:33	15	B	14	3		0.21		0.21	0.007	0.007	0.007	0.007	0.007	NA	NA	NA	NA	NA	NA	NA	5	6	6	NA	NA	<1	1	1		
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	S	1	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	S	1	2	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	S	1	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	M	7	1	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	M	7	2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	M	7	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	B	13	1	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	B	13	2	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Flood	Windv	Moderate	11:52	14	B	13	3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.









Impact Monitoring Data

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement																									
										pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Ammonia (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrite (mg/L-N)	TIN-Nitrate (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)				
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	S & M Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.
										Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Value	Value	Value	Ave.	Value
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	S	1	1	8.06		31.74	31.74	21.12	21.12	21.12	91.7	91.7	7.92	7.92	7.85	1.0	1.0		NA	NA	NA	NA	NA	0.11	0.10	0.01	0.22		0.23

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in 1 in calculating the geometric mean.





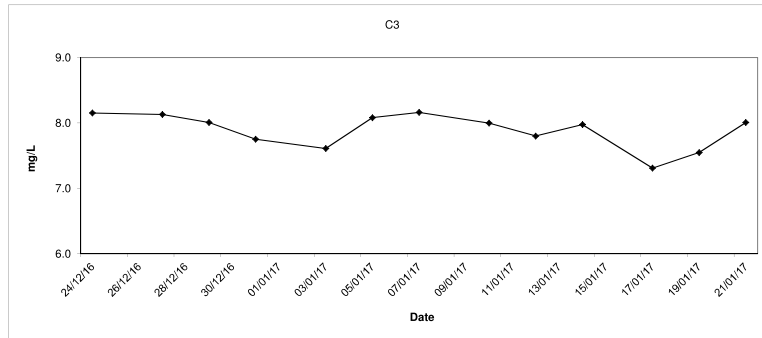
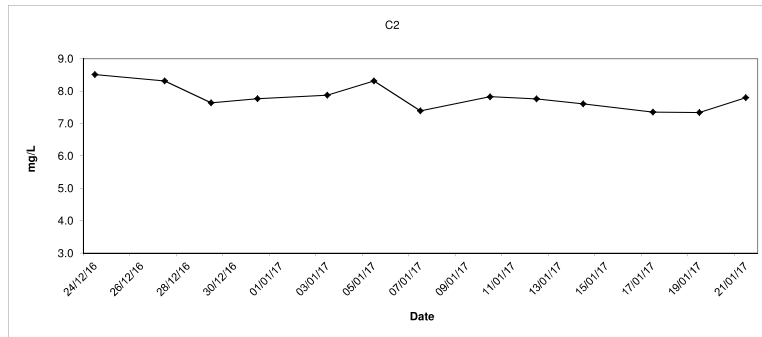
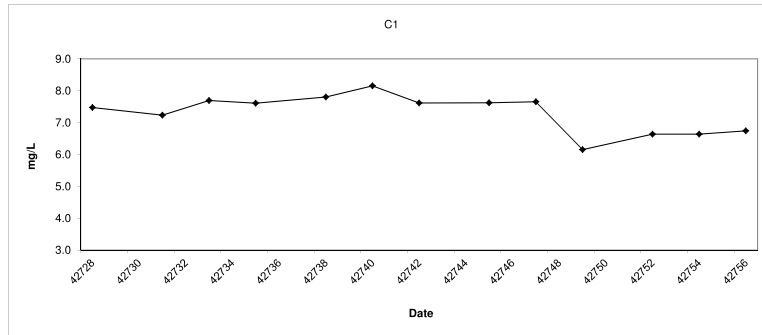


Impact Monitoring Data

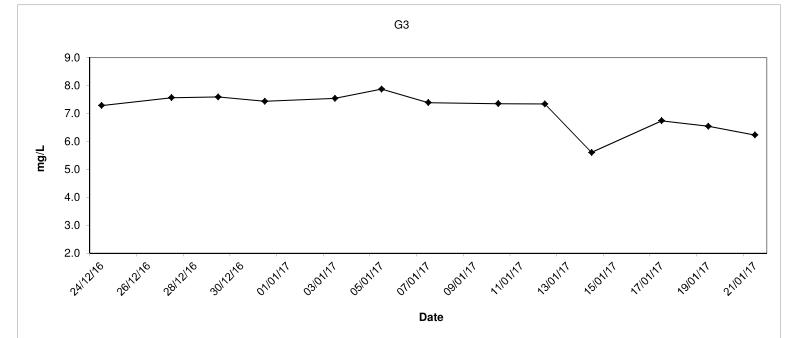
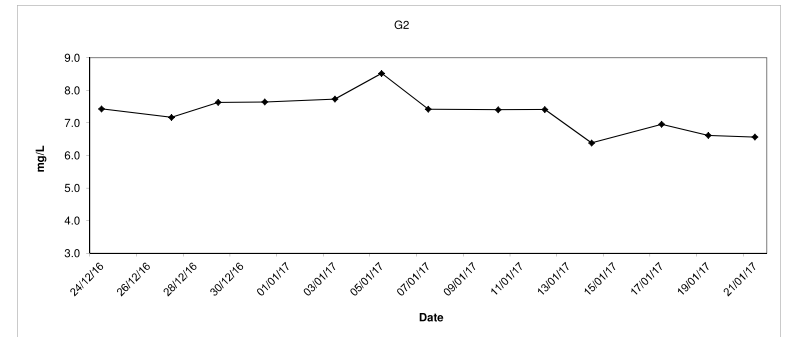
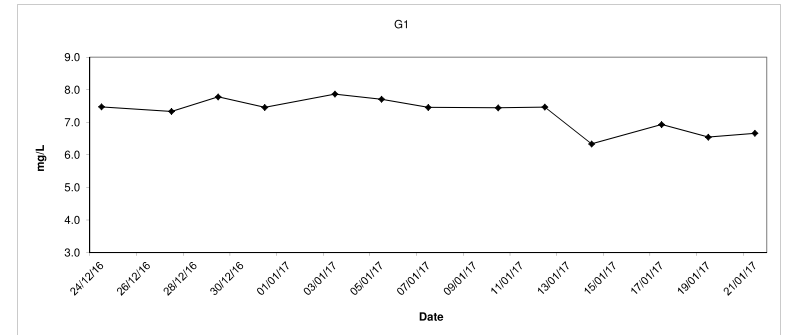
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	Laboratory Analysis																								
										Total Suspended Solids (mg/L)			Ammonia Nitrogen (mg/L-N)			UIA (mg/L-N)			TIN-Ammonia (mg/L-N)	TIN-Nitrate (mg/L-N)	TIN-Nitrite (mg/L-N)	Total Inorganic Nitrogen (mg/L-N)			E.coli (cfu/100mL)			Synthetic Detergent (mg/L)			BOD <sub>5</sub> (mg/L)			
										Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	
																			Value	Value	Value	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	Value	Ave.	Depth Ave.	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	S	1	1	3	NA	NA	NA	NA	NA	0.11	0.10	0.01	0.22	0.11	0.10	0.01	0.22	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	S	1	2	2	NA	NA	NA	NA	NA	0.11	0.10	0.01	0.22	0.11	0.10	0.01	0.22	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	S	1	3		NA	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	M	5	1	5	NA	NA	NA	NA	NA	0.09	0.12	<0.01	0.22	0.09	0.12	<0.01	0.22	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	M	5	2	4	NA	NA	NA	NA	NA	0.08	0.10	0.01	0.19	0.08	0.10	0.01	0.19	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	M	5	3		NA	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.20	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	B	9	1	3	NA	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.20	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR10	21/01/2017	Mid-Ebb	Fine	Moderate	8:40	10	B	9	2	4	NA	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	S	1	1	3	NA	NA	NA	NA	NA	0.09	0.10	<0.01	0.20	0.09	0.10	<0.01	0.20	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	S	1	2	4	NA	NA	NA	NA	NA	0.10	0.11	<0.01	0.22	0.10	0.11	<0.01	0.22	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	S	1	3		NA	NA	NA	NA	NA	0.11	0.11	<0.01	0.23	0.11	0.11	<0.01	0.23	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	M	5	1	5	NA	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.20	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	M	5	2	4	NA	NA	NA	NA	NA	0.08	0.10	0.01	0.19	0.08	0.10	0.01	0.19	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	M	5	3		NA	NA	NA	NA	NA	0.08	0.11	<0.01	0.20	0.08	0.11	<0.01	0.20	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	B	9	1	3	NA	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	B	9	2	4	NA	NA	NA	NA	NA	0.07	0.10	<0.01	0.18	0.07	0.10	<0.01	0.18	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR11	21/01/2017	Mid-Ebb	Fine	Moderate	9:15	10	B	9	3		NA	NA	NA	NA	NA	0.07	0.11	<0.01	0.19	0.07	0.11	<0.01	0.19	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	S	1	1	4	0.29			0.008	0.008	NA	NA	NA	NA	0.29			NA	NA	32	34	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	S	1	2	4	0.29			0.008	0.008	NA	NA	NA	NA	0.29			NA	NA	37	34	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	S	1	3							NA	NA	NA	NA															
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	M	7.5	1	4	0.26			0.007	0.007	NA	NA	NA	NA	0.26			NA	NA	92	101	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	M	7.5	2	3	0.25	0.26	0.26	0.007	0.007	NA	NA	NA	NA	0.25	0.26	0.26	NA	NA	110	101	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	M	7.5	3							NA	NA	NA	NA															
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	B	14	1	4	0.24			0.007	0.007	NA	NA	NA	NA	0.24			NA	NA	6	8	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	B	14	2	3	0.24	0.24	0.24	0.007	0.007	NA	NA	NA	NA	0.24	0.24	0.24	NA	NA	10	8	30	NA	NA	NA	<1	1	1	
SR12	21/01/2017	Mid-Ebb	Windv	Moderate	7:46	15	B	14	3							NA	NA	NA	NA															
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	S	1	1	3	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	S	1	2	3	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	S	1	3							NA	NA	NA	NA															
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	M	7	1	5	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	M	7	2	5	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	M	7	3							NA	NA	NA	NA															
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	B	13	1	5	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	B	13	2	7	NA			NA	NA	NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SR13	21/01/2017	Mid-Ebb	Windv	Moderate	7:31	14	B	13	3							NA	NA	NA	NA	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: 1. Depth Ave.: (Except E.coli) "Depth-averaged" is calculated by taking the arithmetic means for the reading of the surface, middle and bottom depths  
 2. ND: Not Detected  
 3. Depth Averaged of E.coli is calculated by taking geometric mean of the readings of the surface, middle and bottom, all ND sample results (<1) for E.coli is regarded as 1 in calculating the geometric mean.

Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide

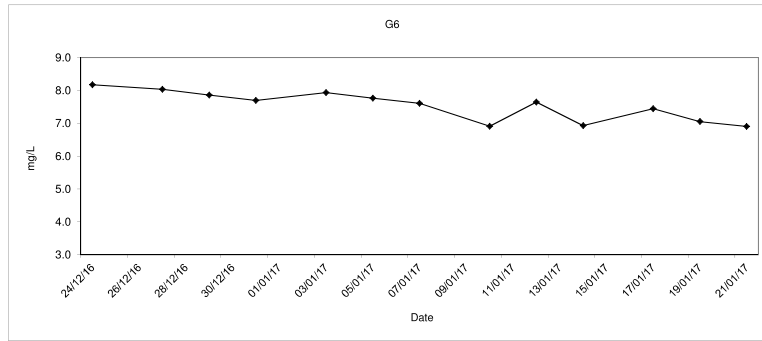
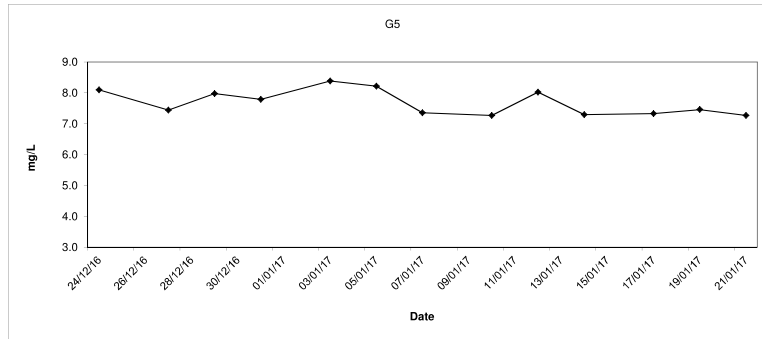
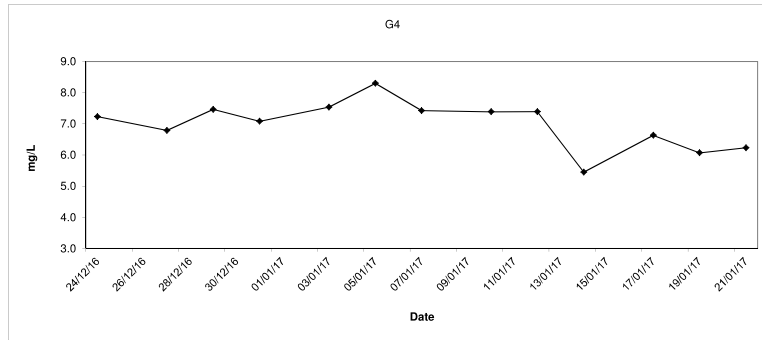


Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide

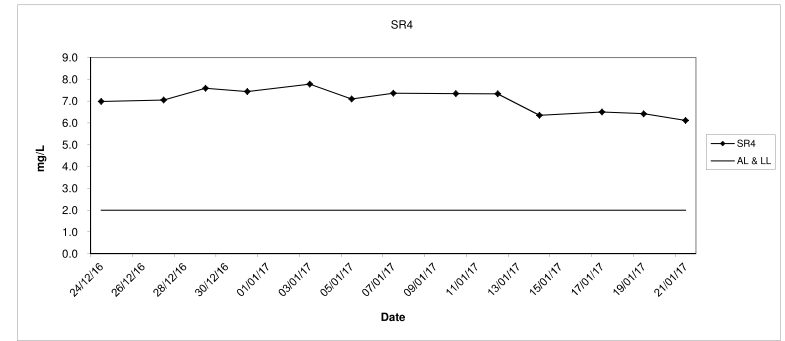
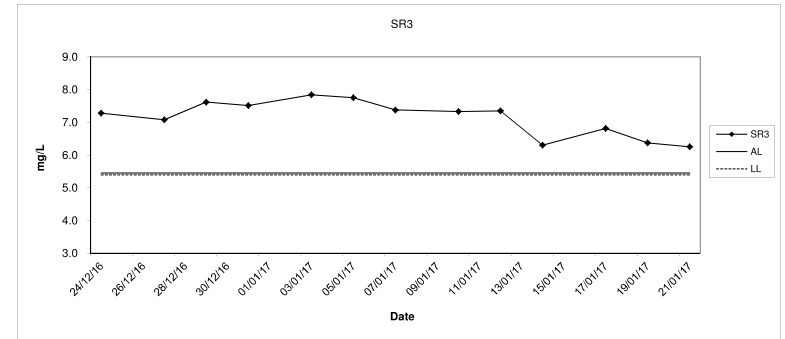
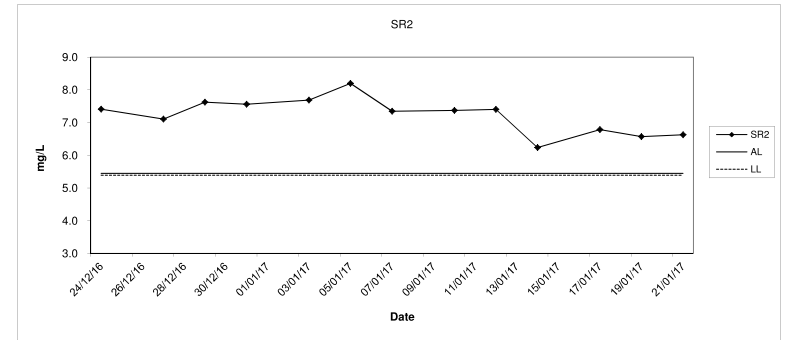




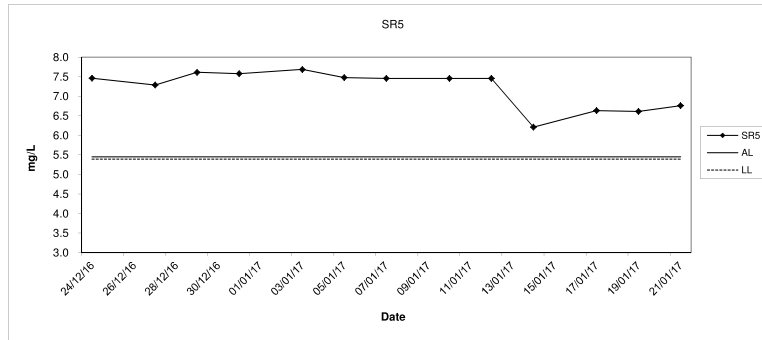
Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide



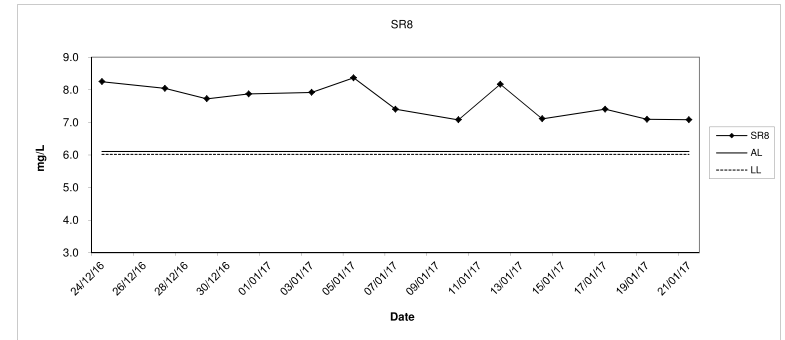
Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide



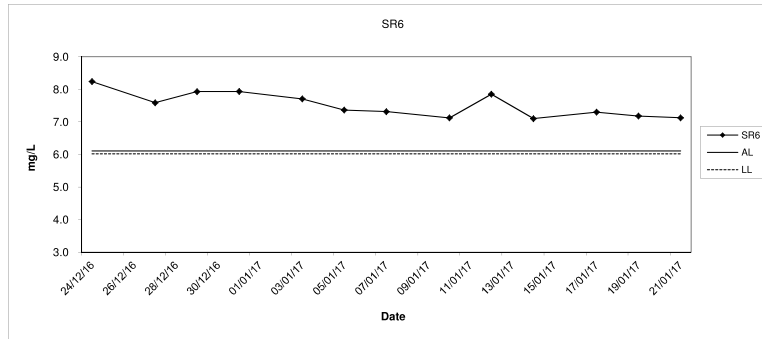
Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide



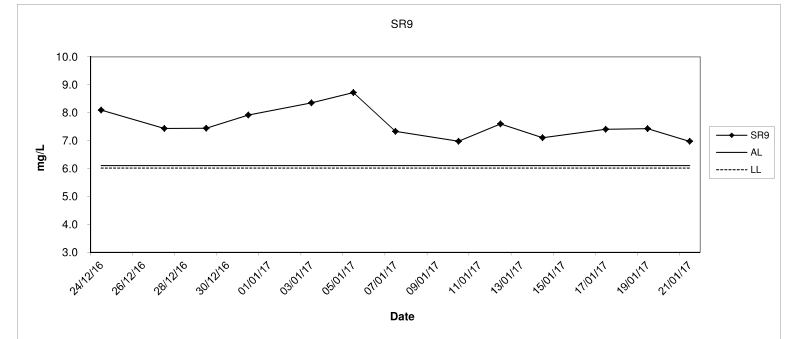
Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide



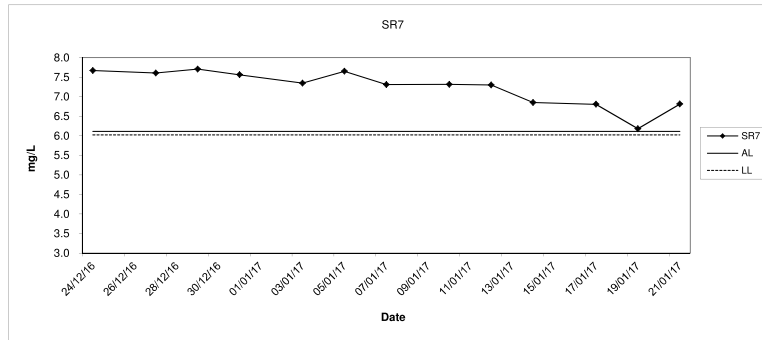
SR6



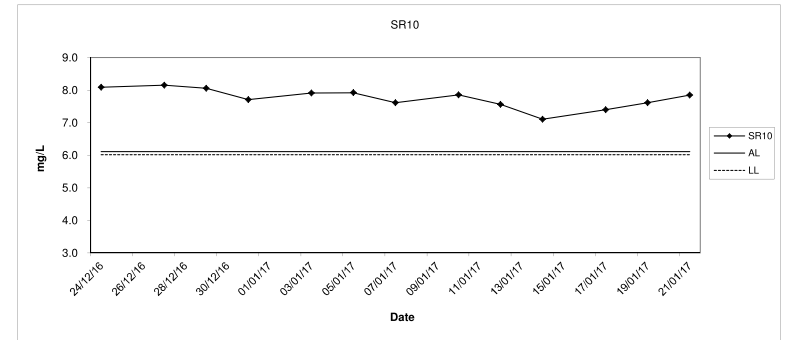
SR9



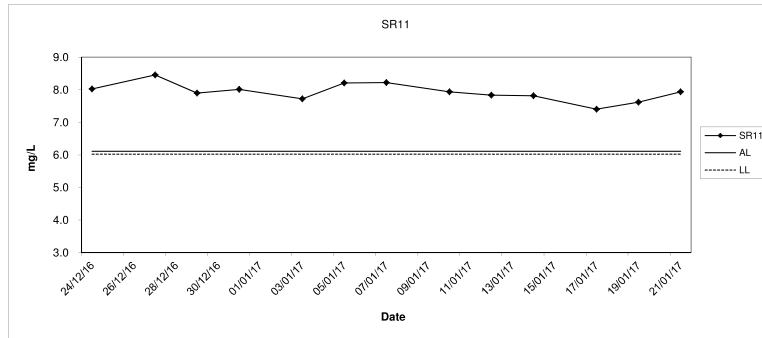
SR7



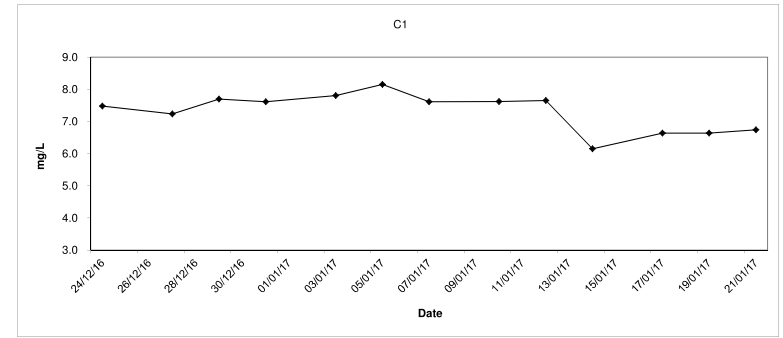
SR10



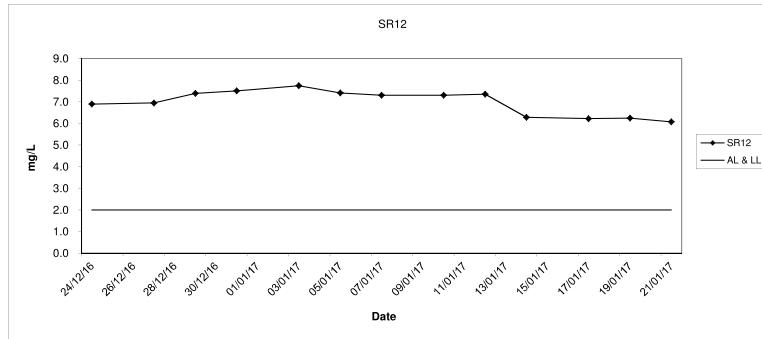
Dissolved Oxygen (Surface and Middle) at Mid-Ebb Tide



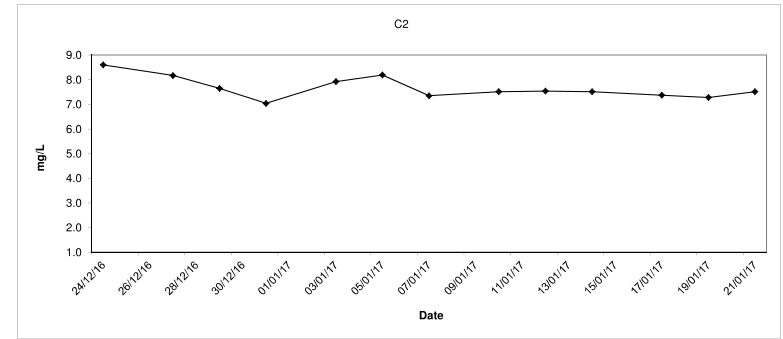
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



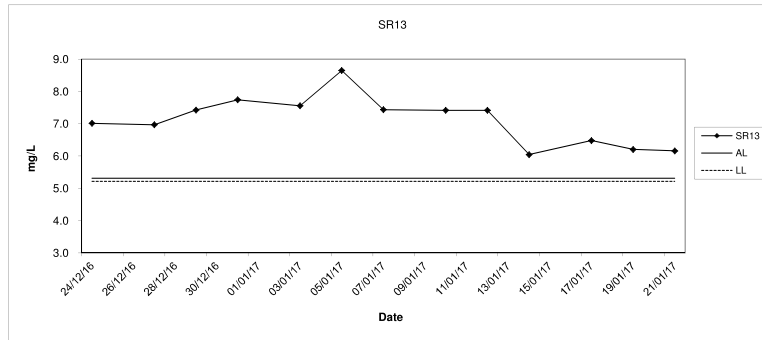
SR12



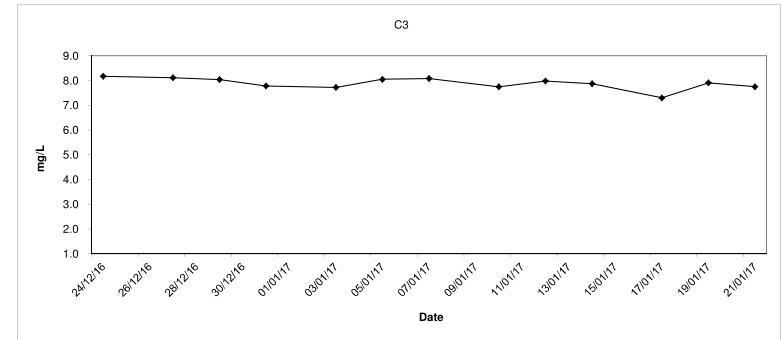
C2



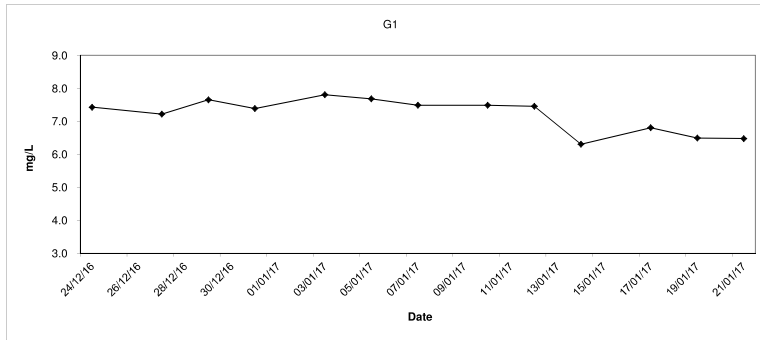
SR13



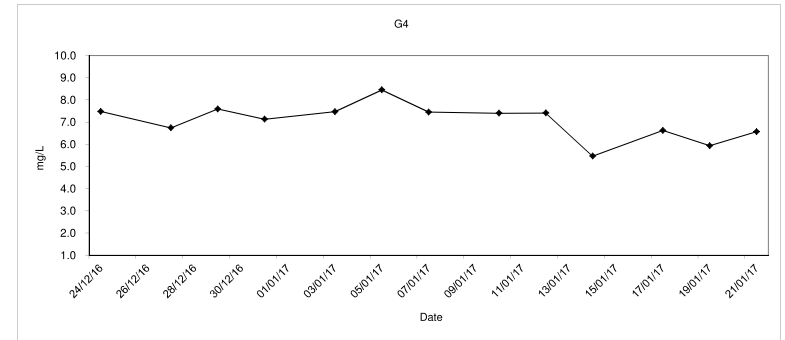
C3



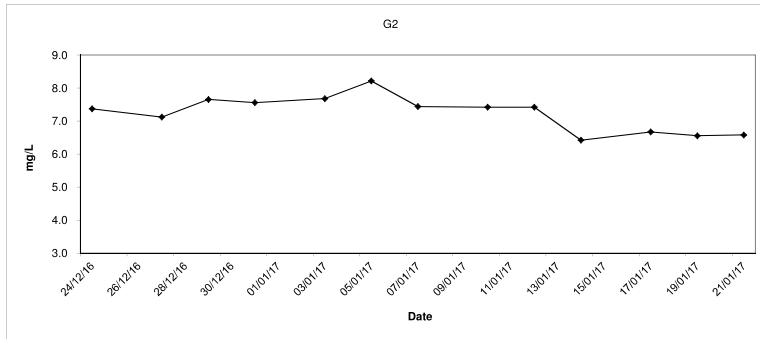
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



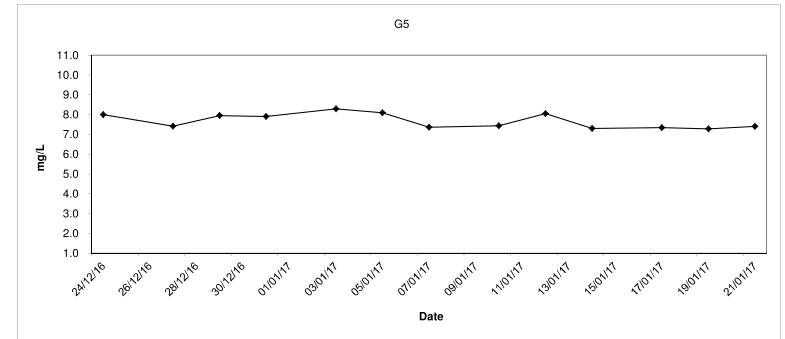
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



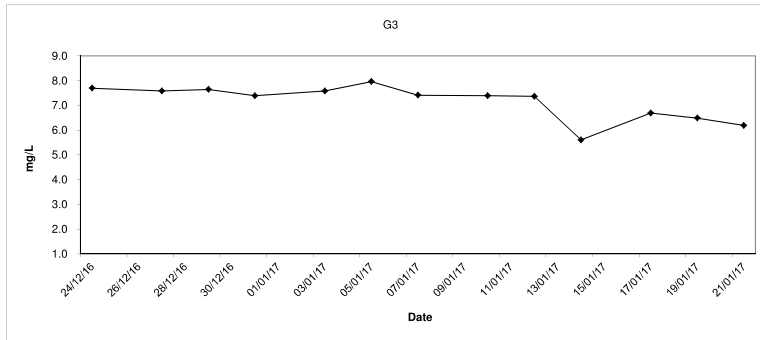
G2



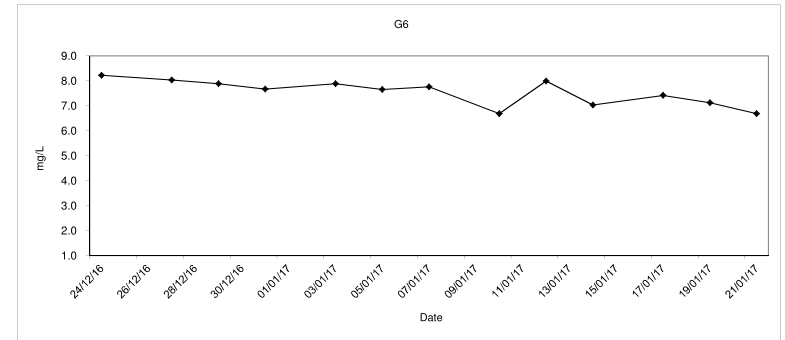
G5



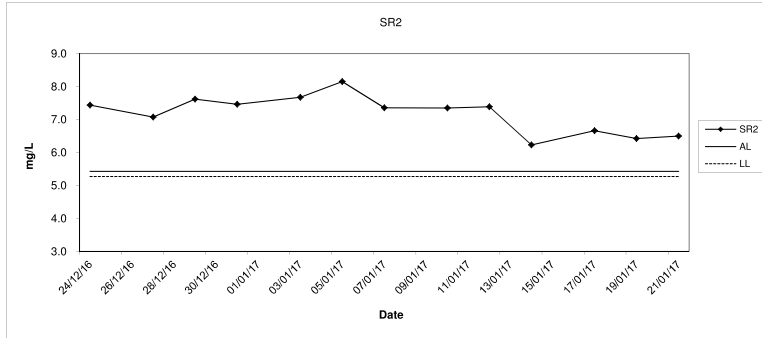
G3



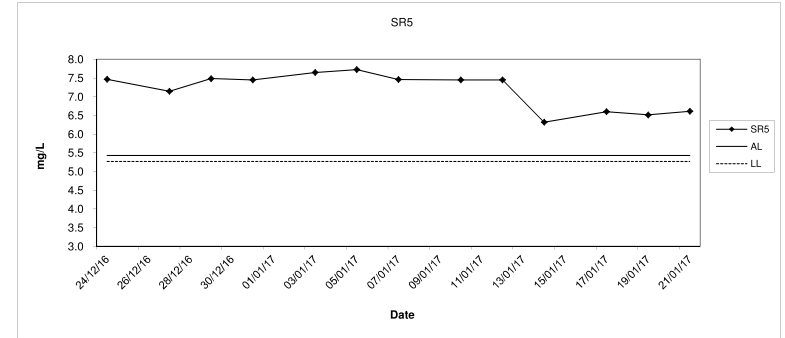
G6



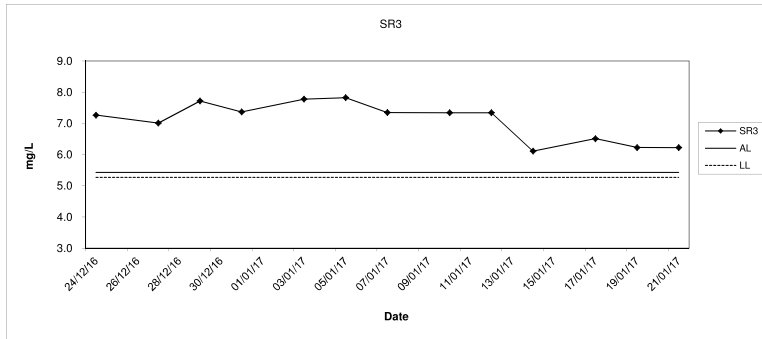
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



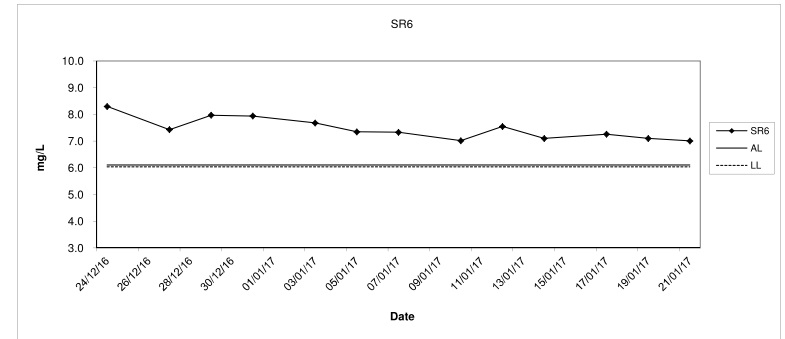
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



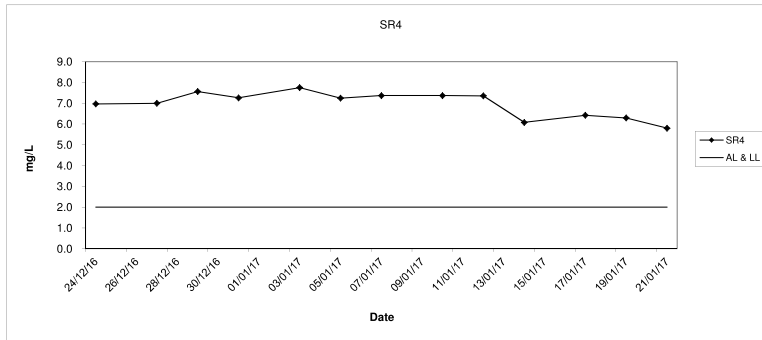
SR3



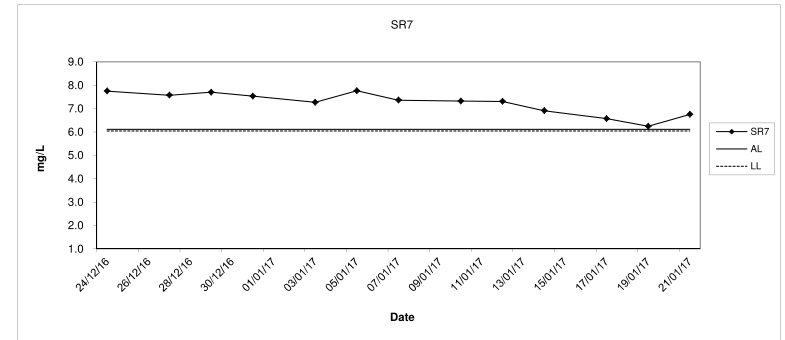
SR6



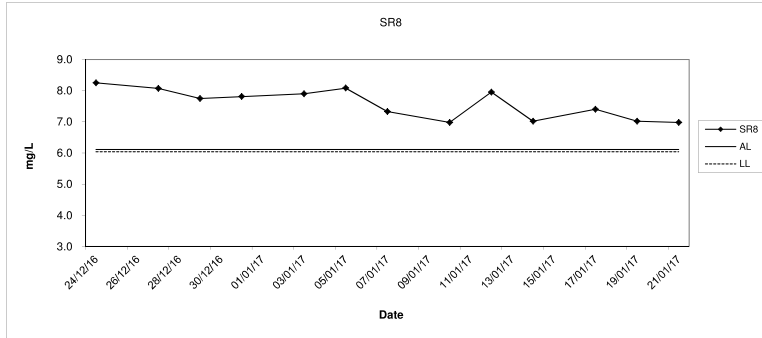
SR4



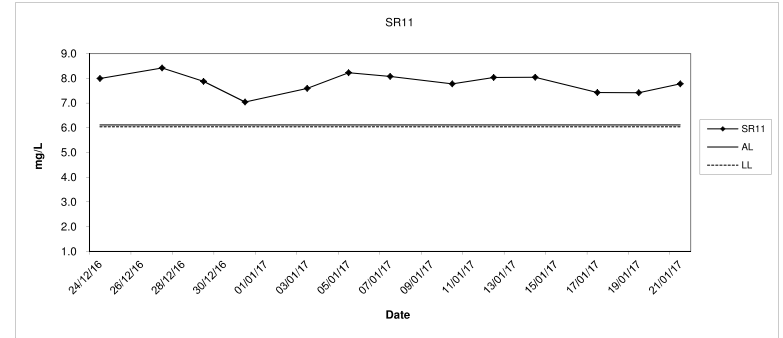
SR7



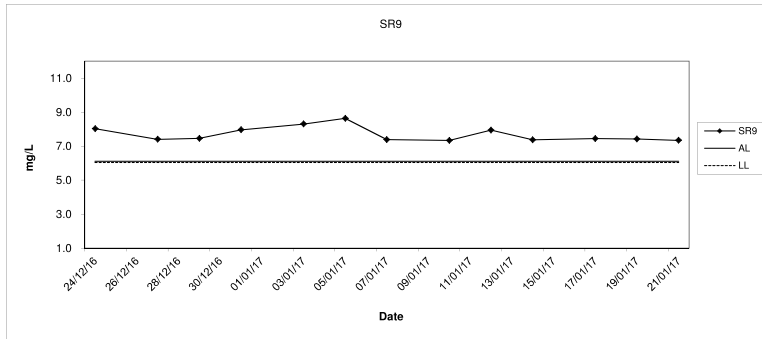
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



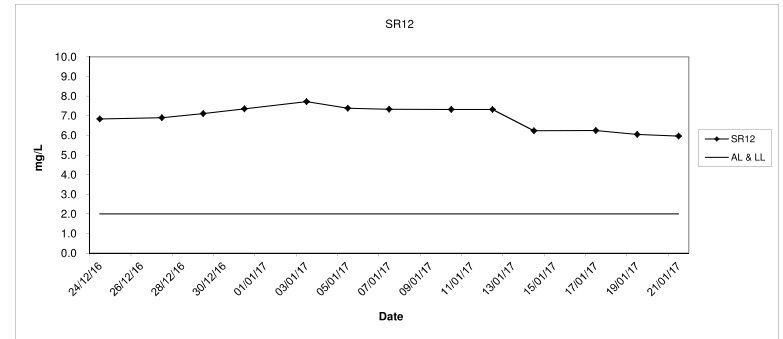
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



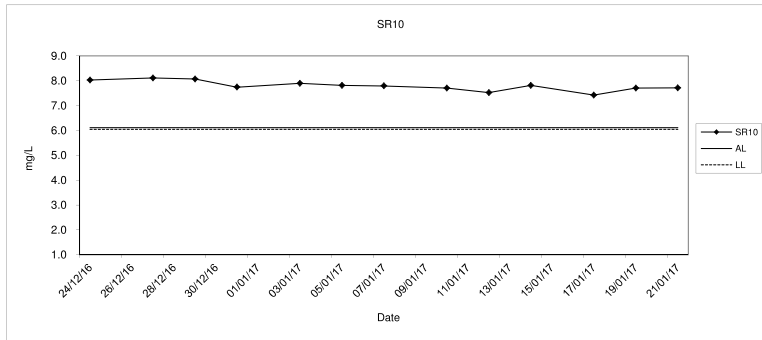
SR9



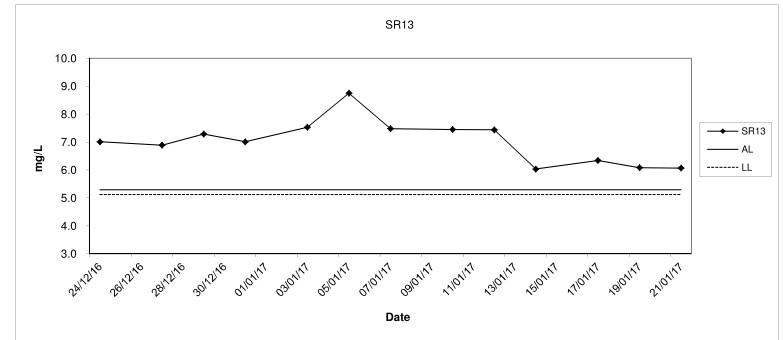
SR12



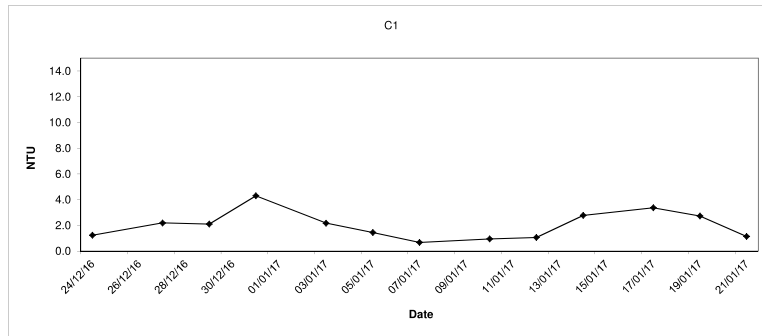
SR10



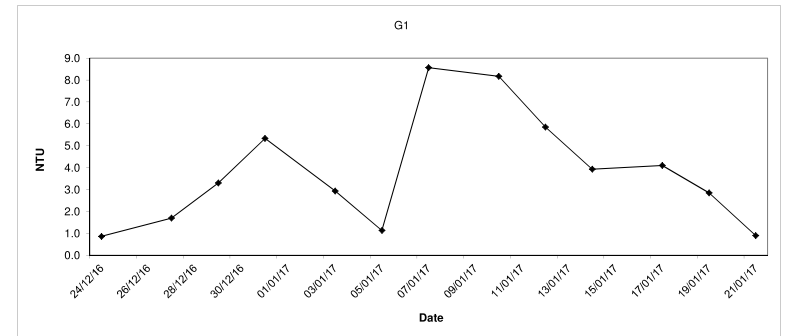
SR13



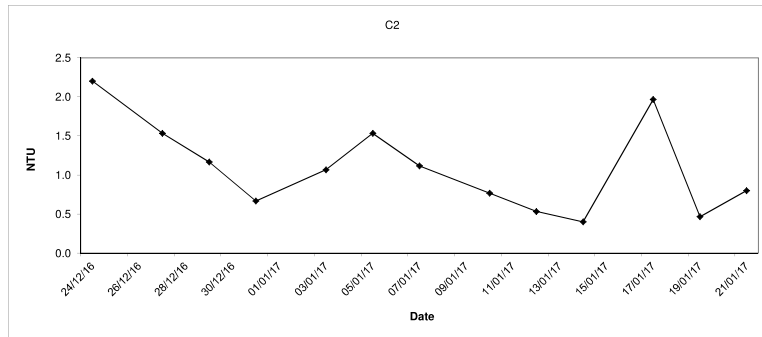
Turbidity (Depth average) at Mid-Ebb Tide



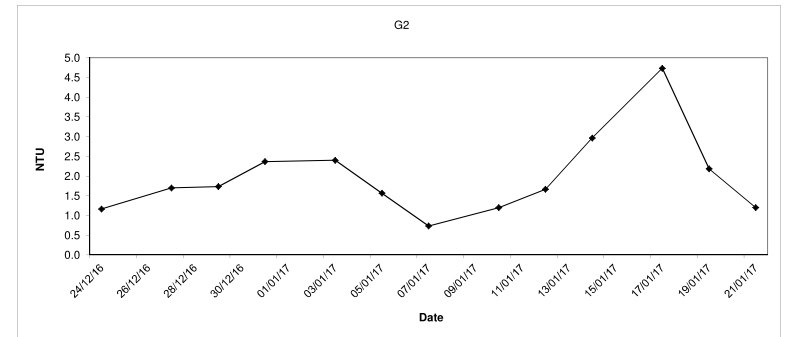
Turbidity (Depth average) at Mid-Ebb Tide



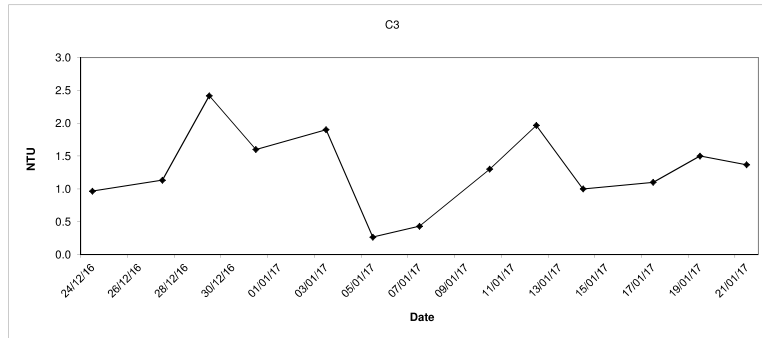
C2



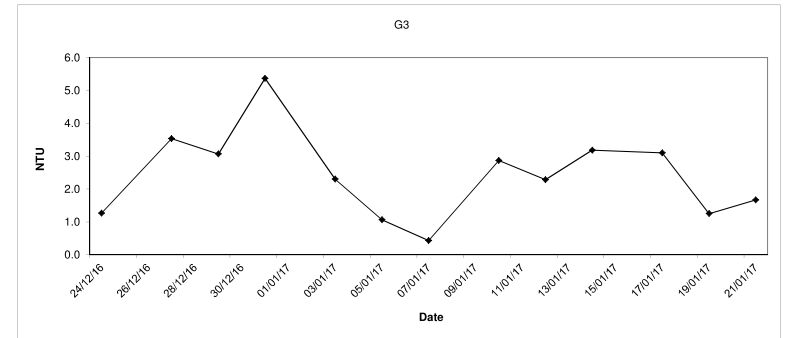
G2



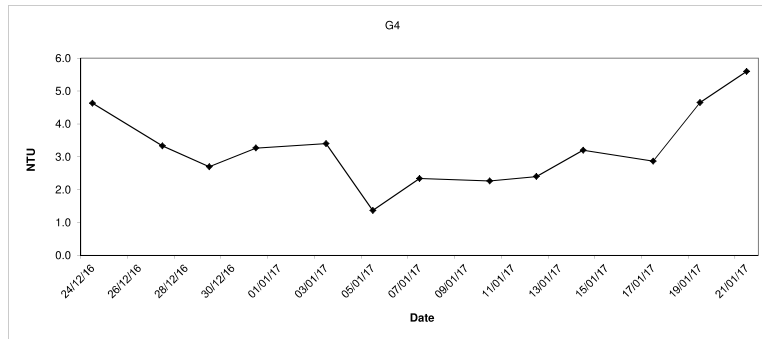
C3



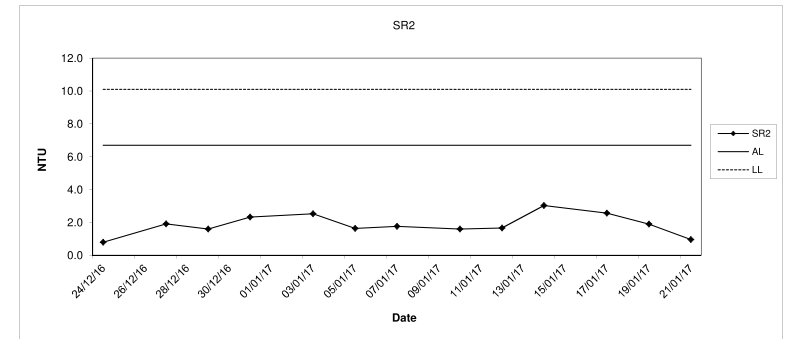
G3



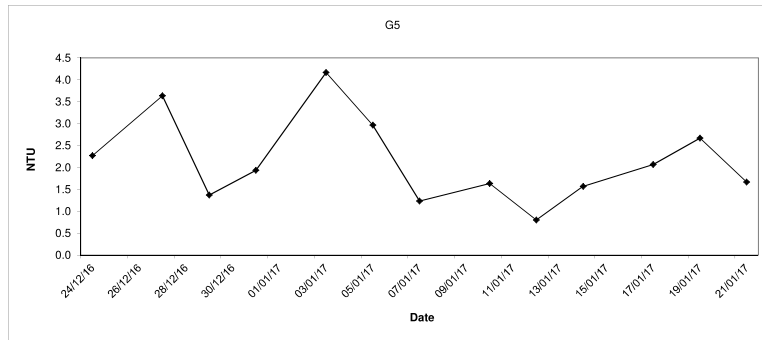
Turbidity (Depth average) at Mid-Ebb Tide



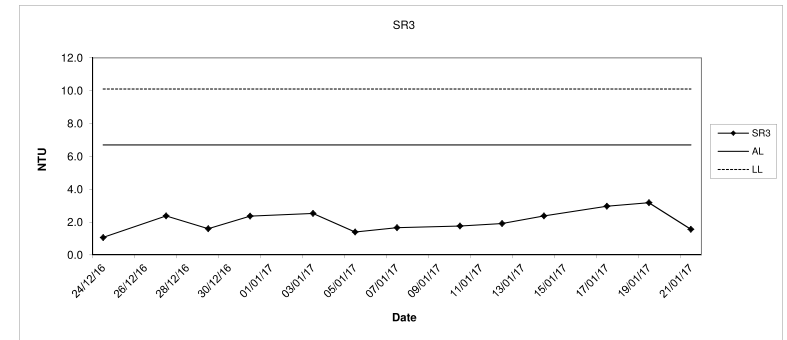
Turbidity (Depth average) at Mid-Ebb Tide



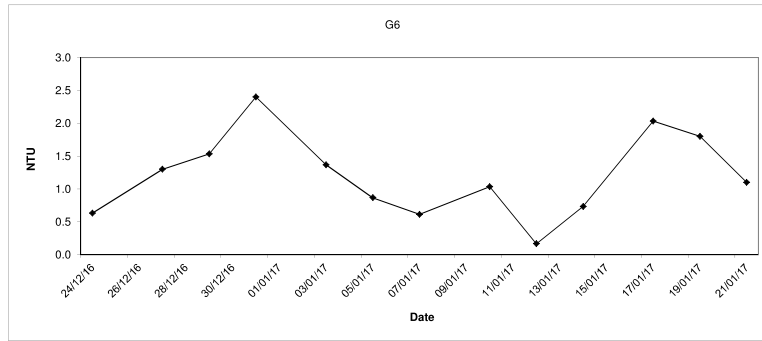
G5



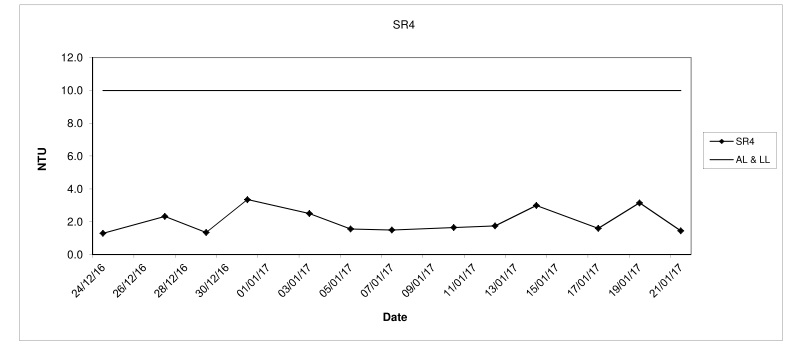
SR3



G6

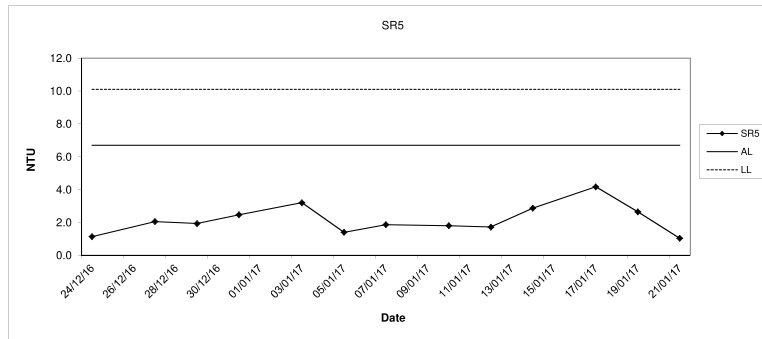


SR4

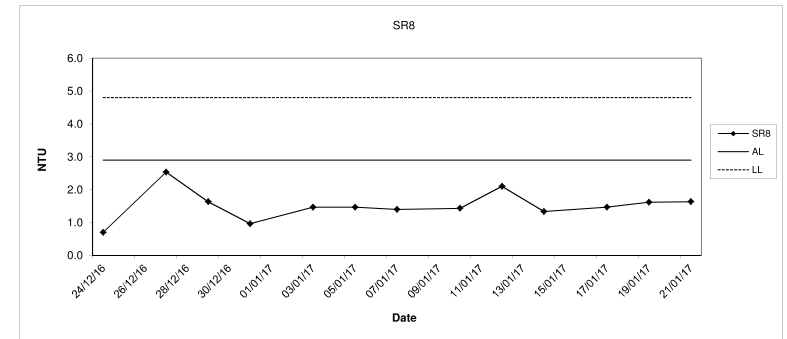




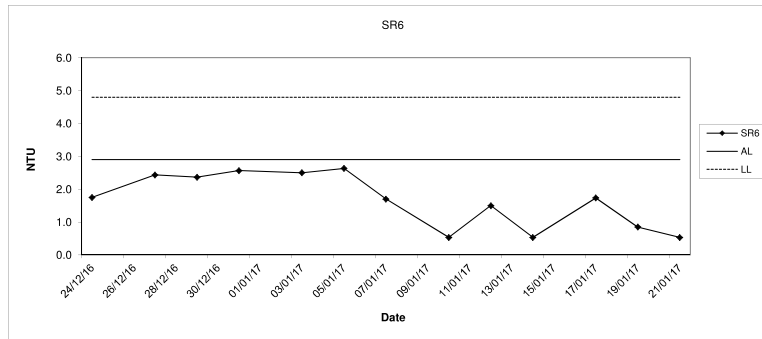
Turbidity (Depth average) at Mid-Ebb Tide



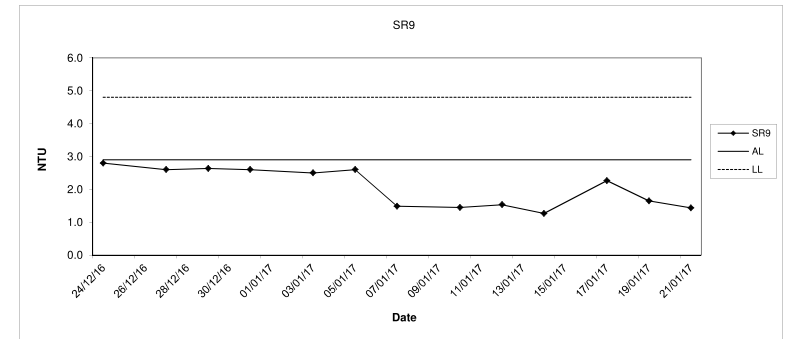
Turbidity (Depth average) at Mid-Ebb Tide



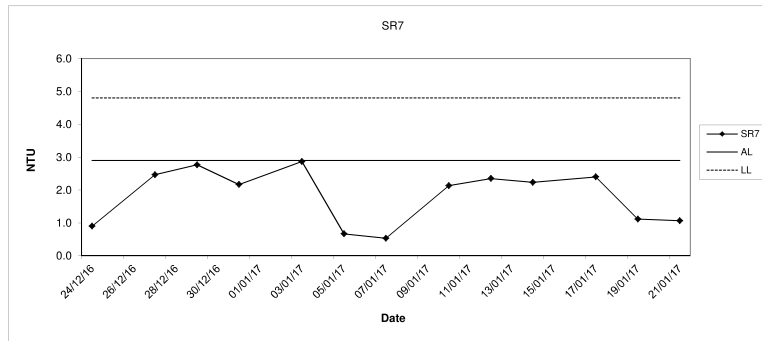
SR6



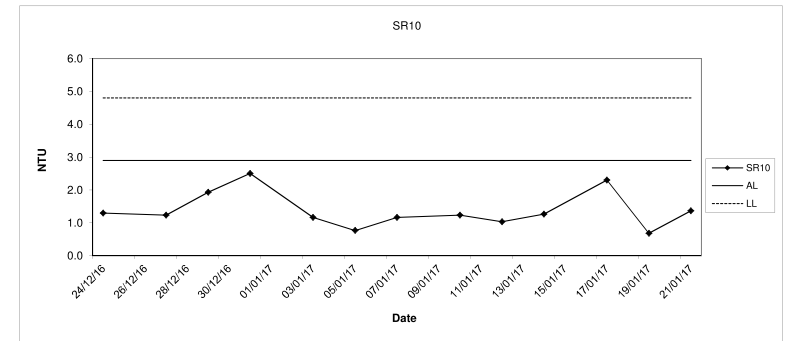
SR9



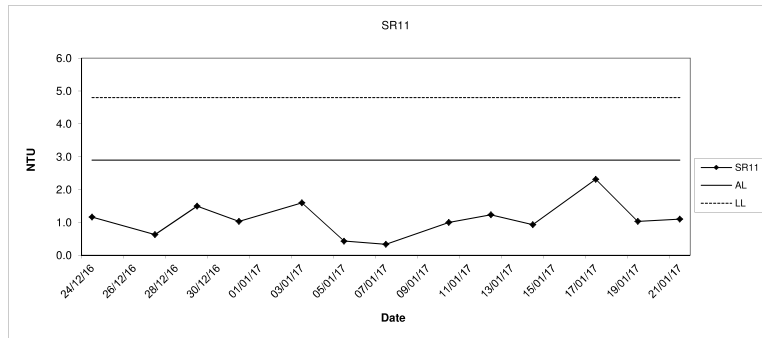
SR7



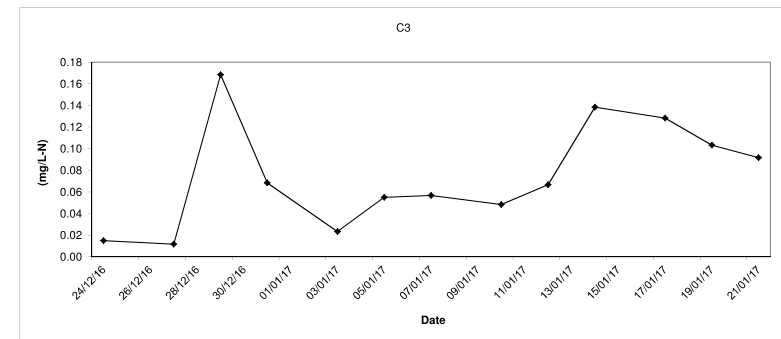
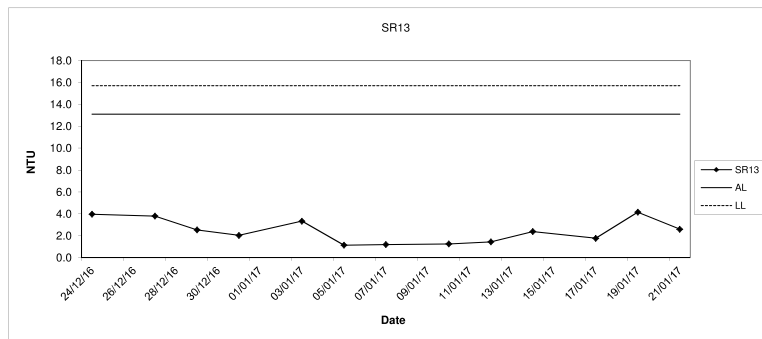
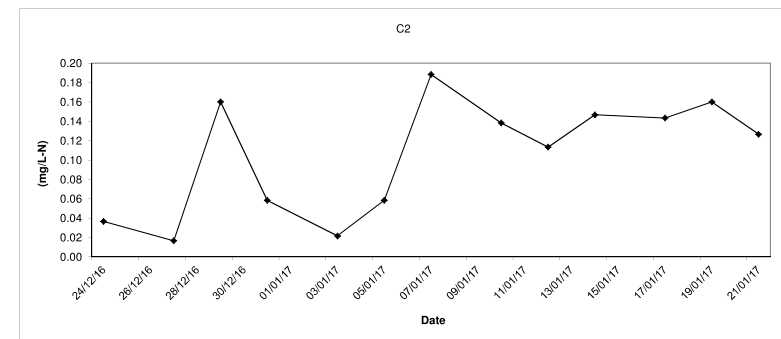
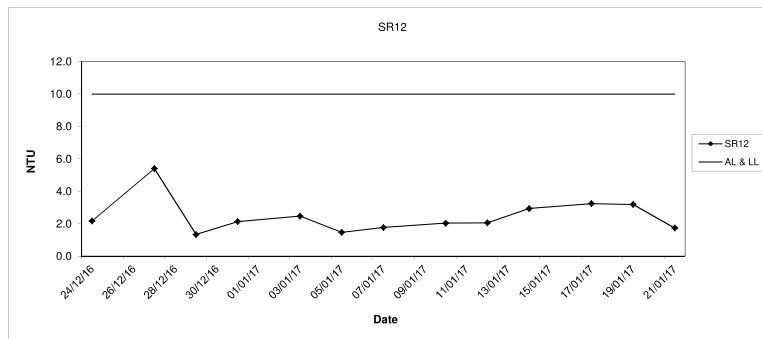
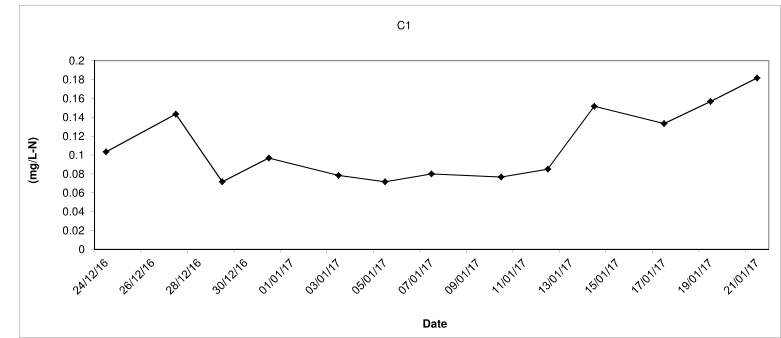
SR10



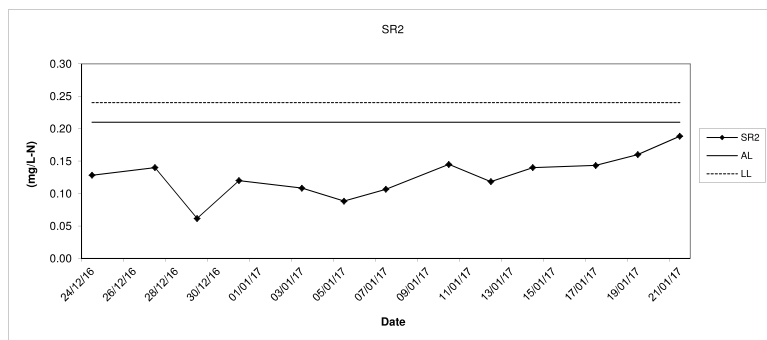
Turbidity (Depth average) at Mid-Ebb Tide



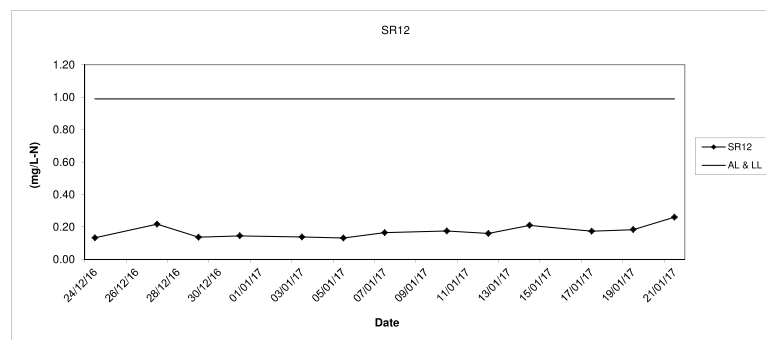
In-situ Ammonia (Depth average) at Mid-Ebb Tide



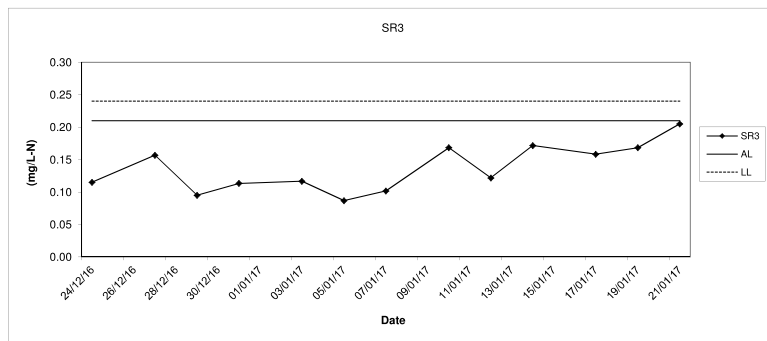
In-situ Ammonia (Depth average) at Mid-Ebb Tide



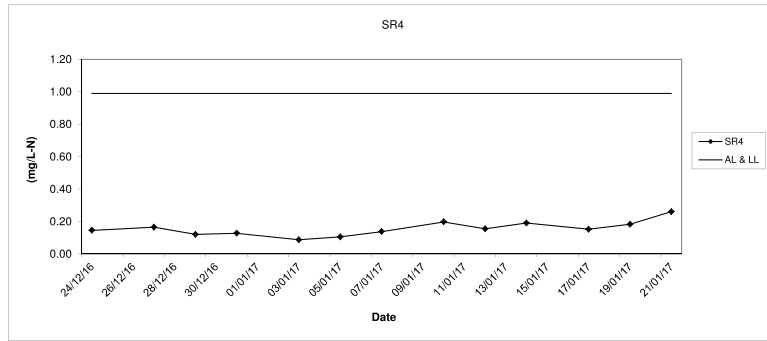
In-situ Ammonia (Depth average) at Mid-Ebb Tide



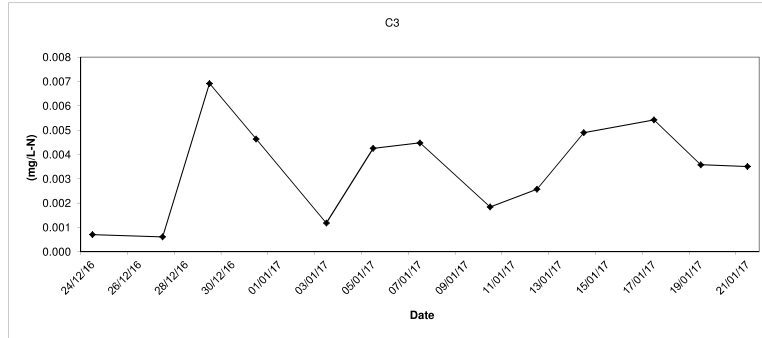
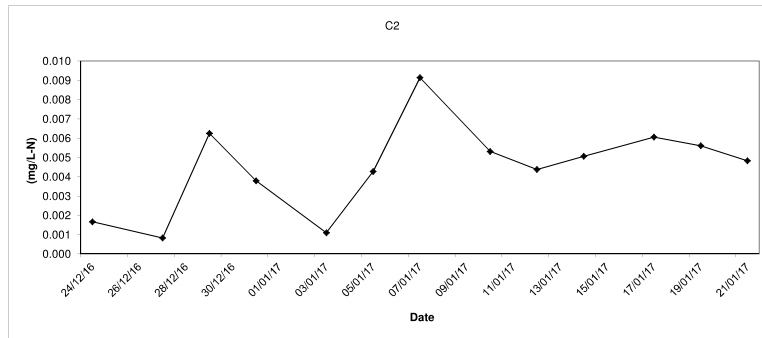
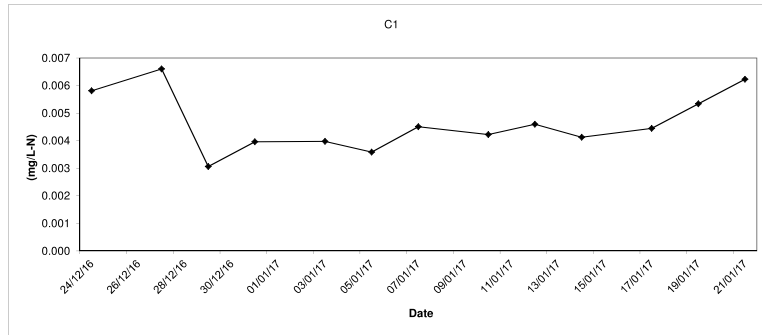
SR3



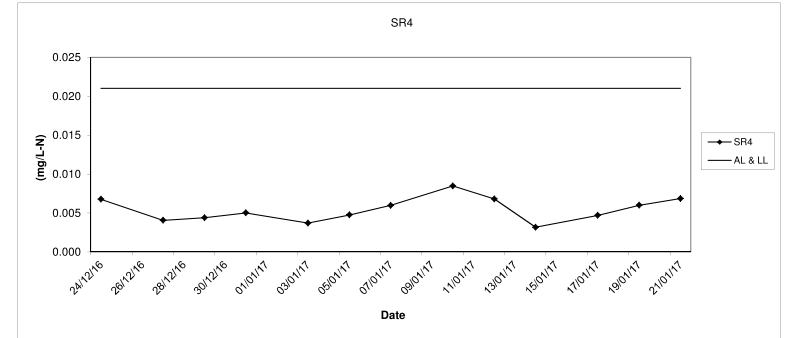
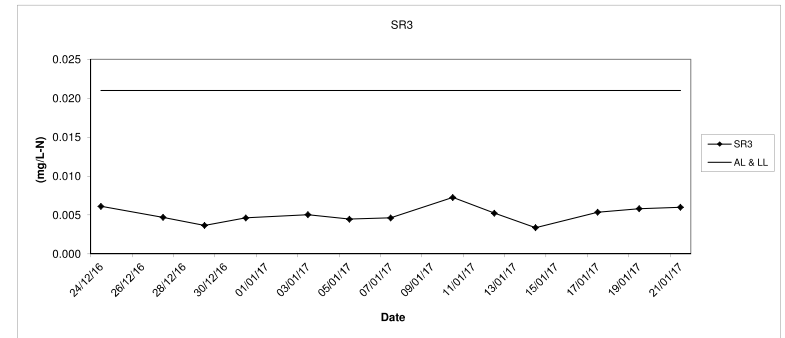
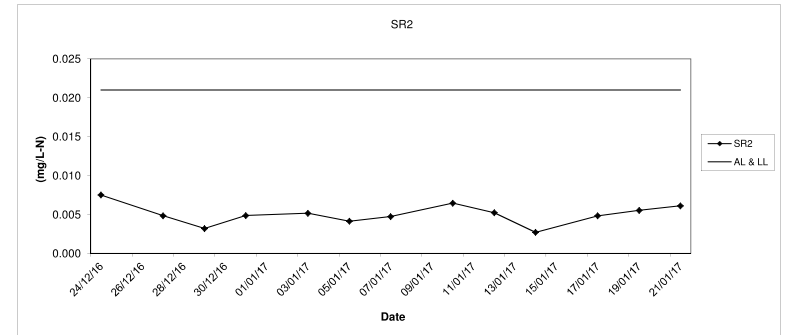
SR4



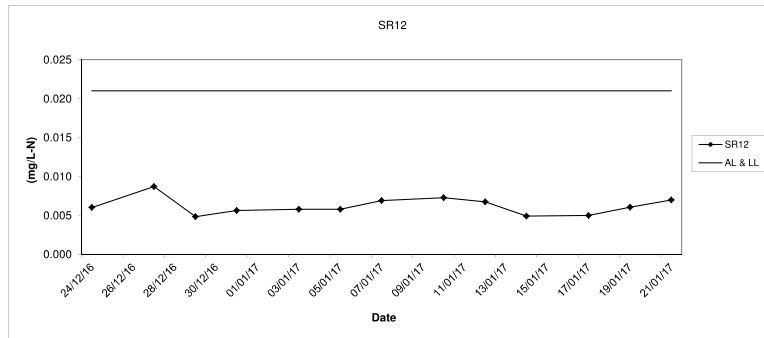
In-situ UIA (Depth average) at Mid-Ebb Tide



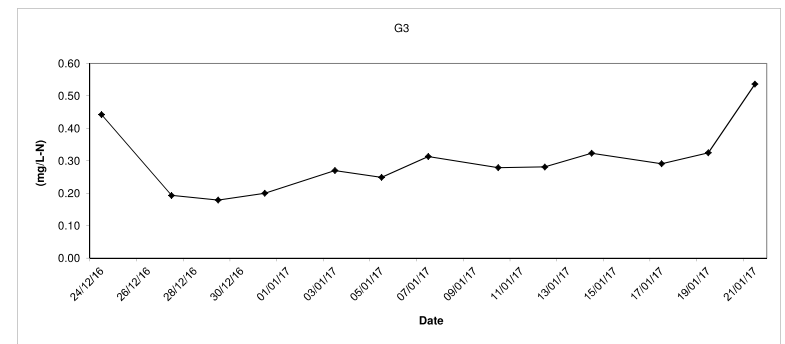
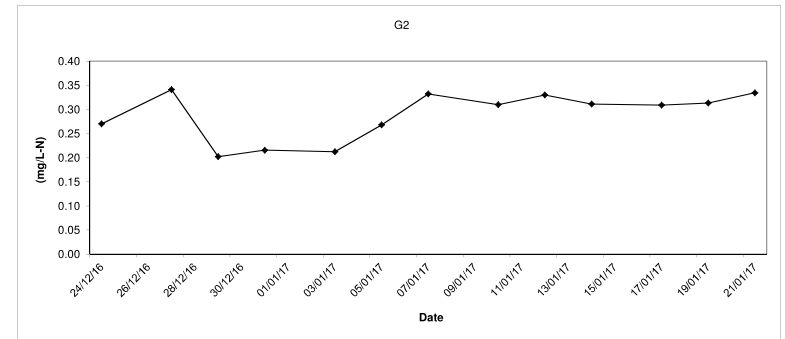
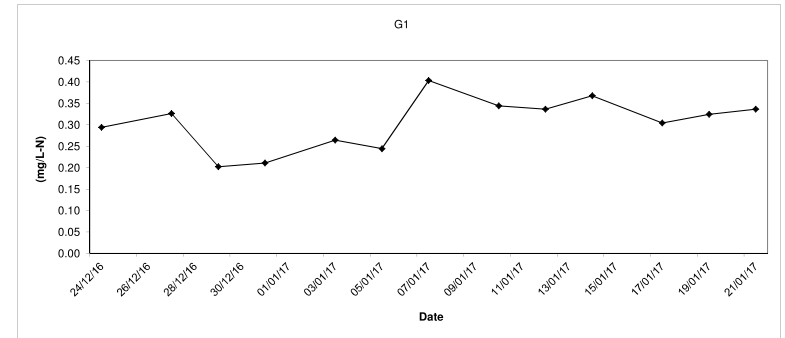
In-situ UIA (Depth average) at Mid-Ebb Tide



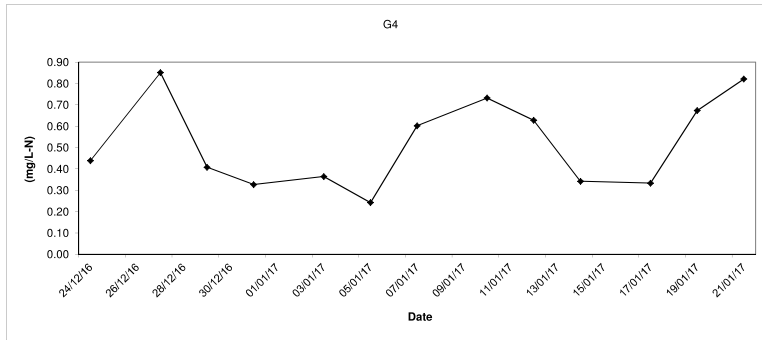
In-situ UIA (Depth average) at Mid-Ebb Tide



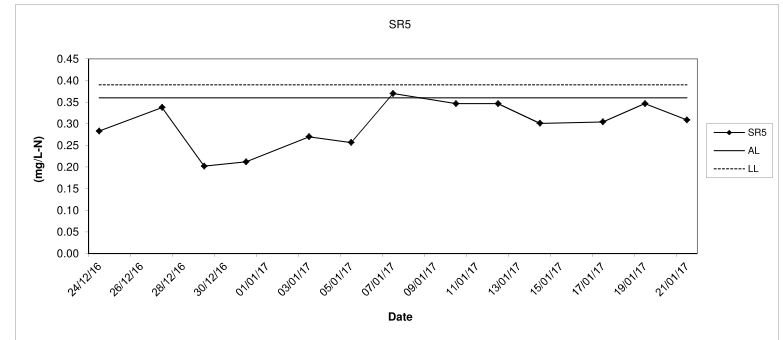
In-situ TIN (Depth average) at Mid-Ebb Tide



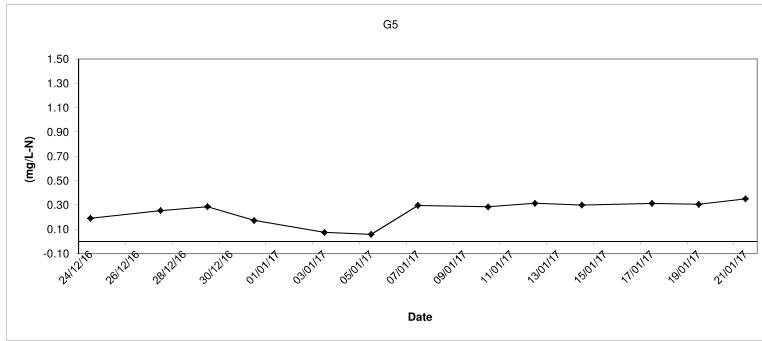
In-situ TIN (Depth average) at Mid-Ebb Tide



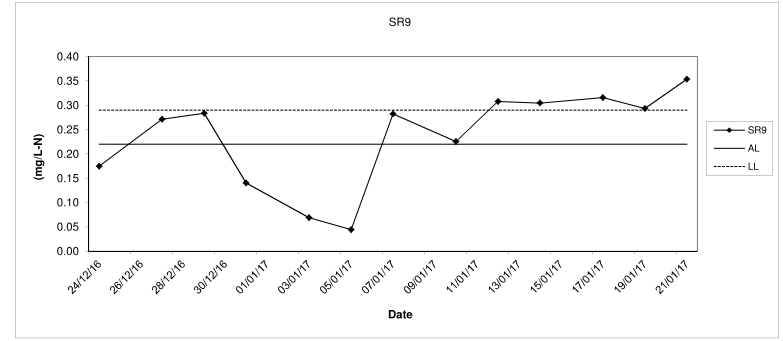
In-situ TIN (Depth average) at Mid-Ebb Tide



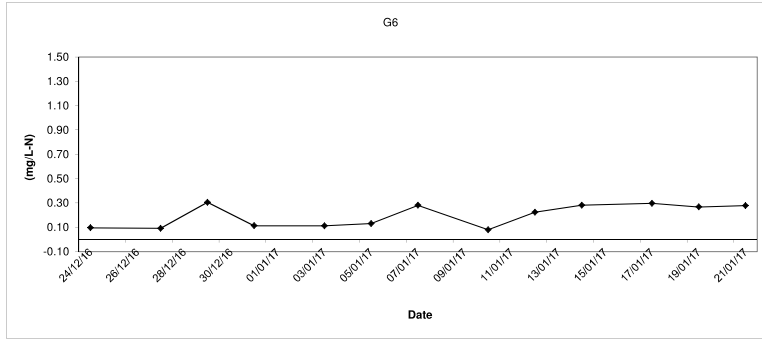
G5



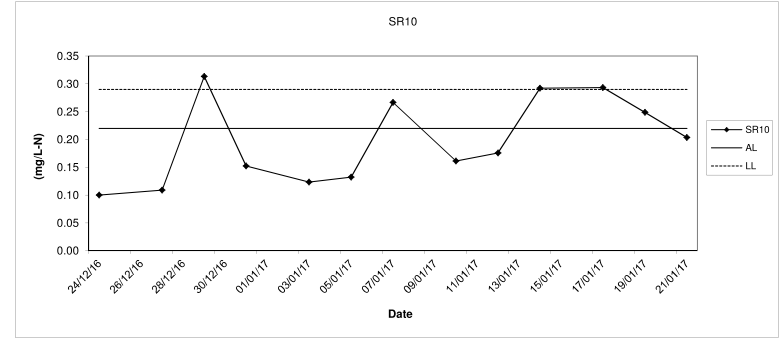
SR9



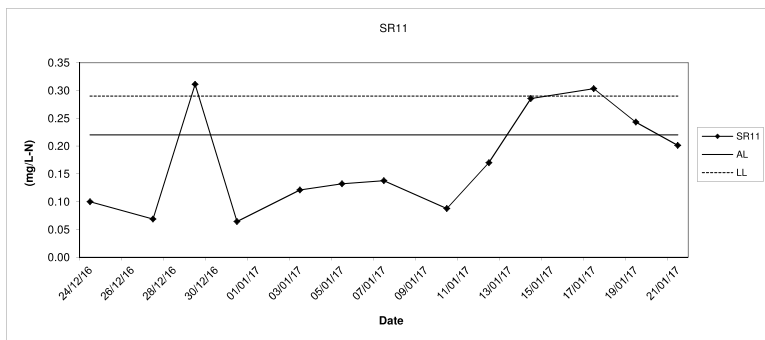
G6



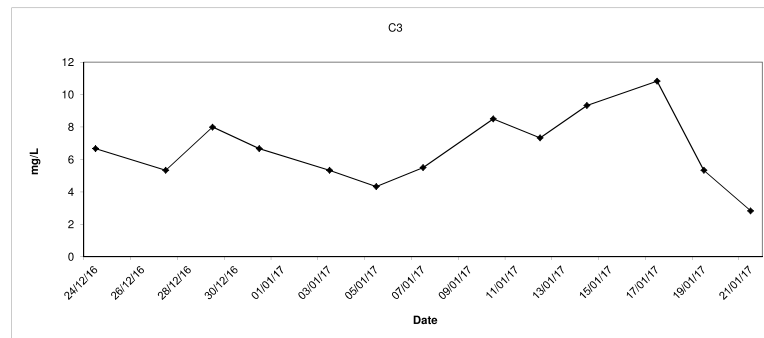
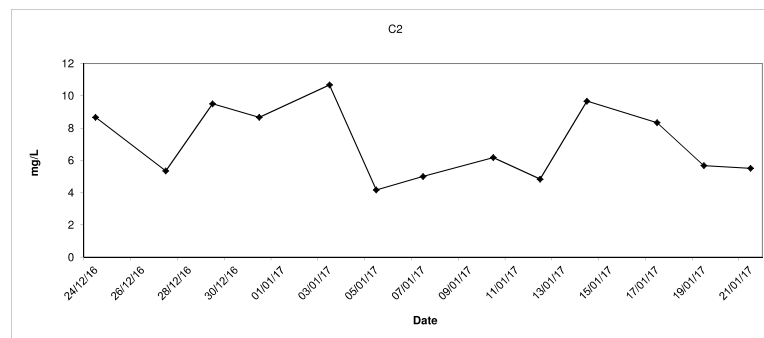
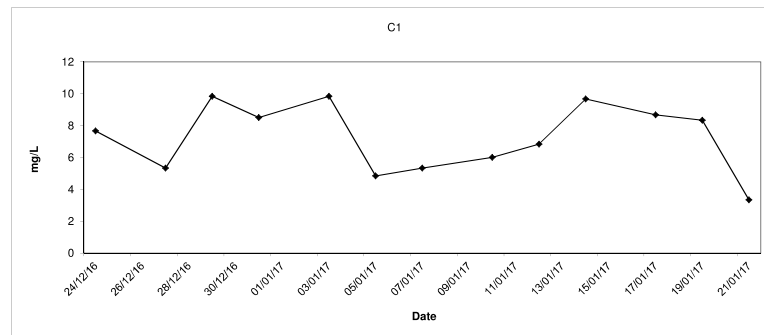
SR10



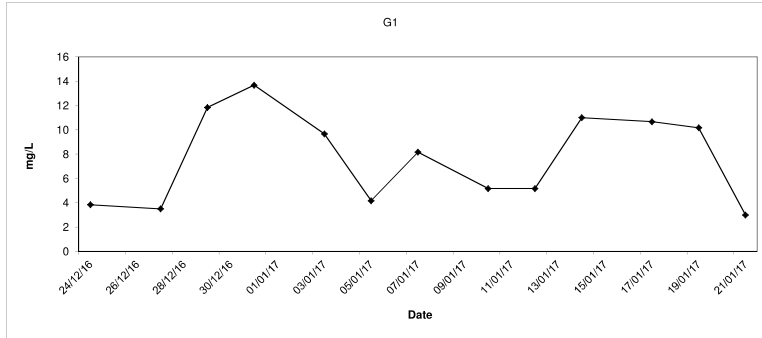
In-situ TIN (Depth average) at Mid-Ebb Tide



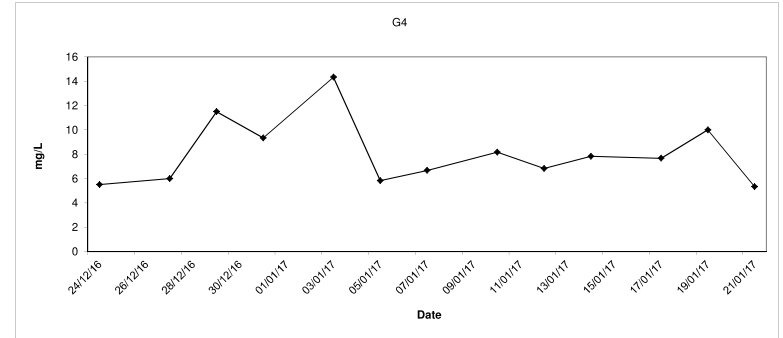
Total Suspended Solids (Depth average) at Mid-Ebb Tide



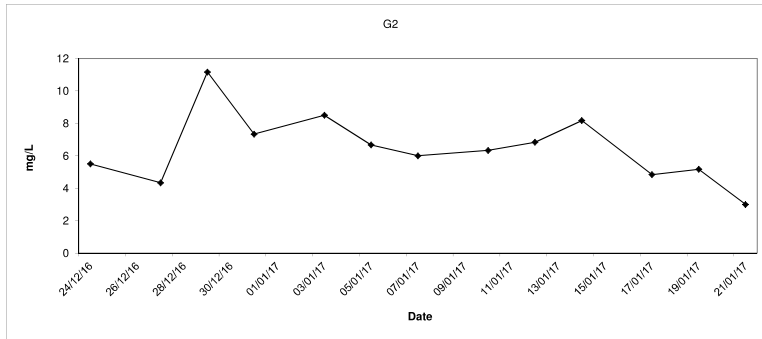
Total Suspended Solids (Depth average) at Mid-Ebb Tide



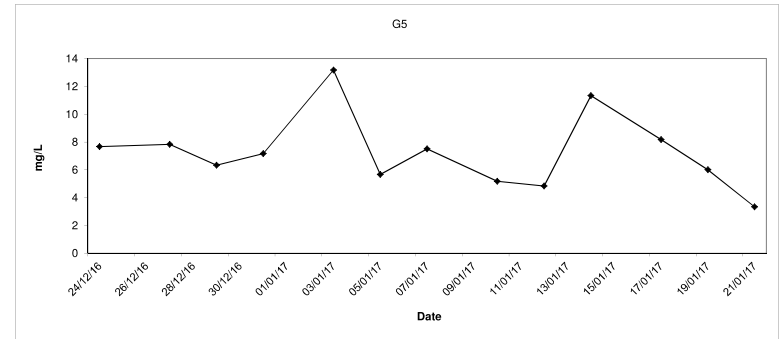
Total Suspended Solids (Depth average) at Mid-Ebb Tide



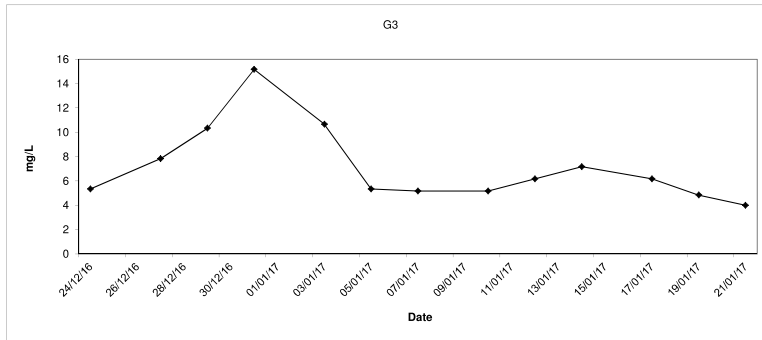
G2



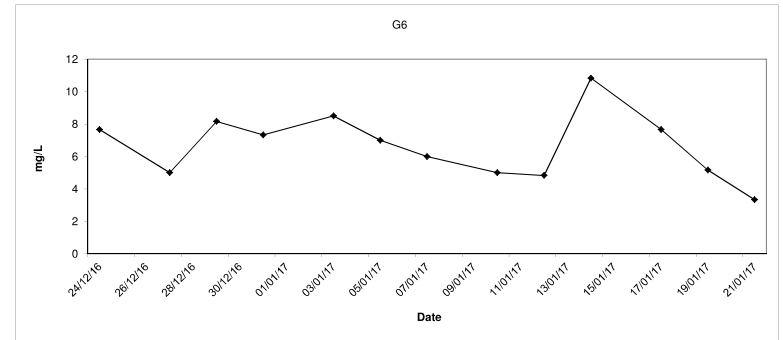
G5



G3

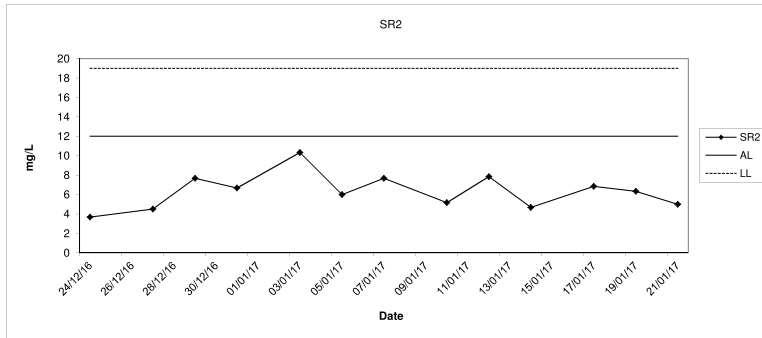


G6

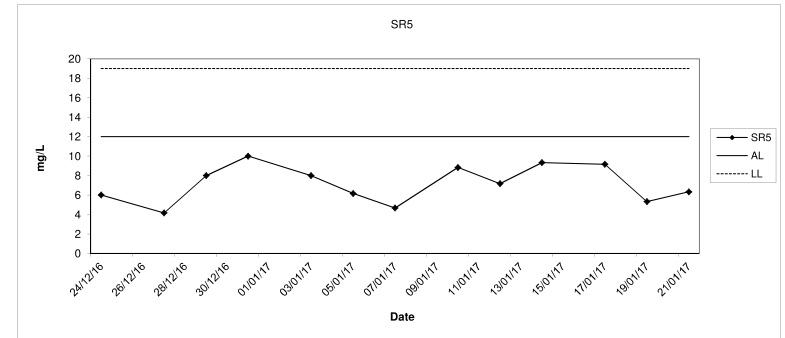




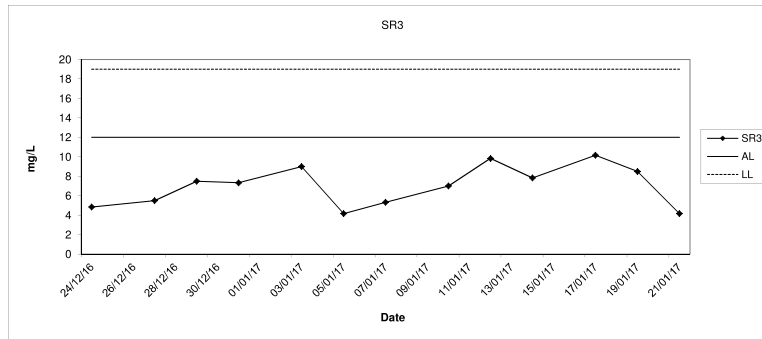
Total Suspended Solids (Depth average) at Mid-Ebb Tide



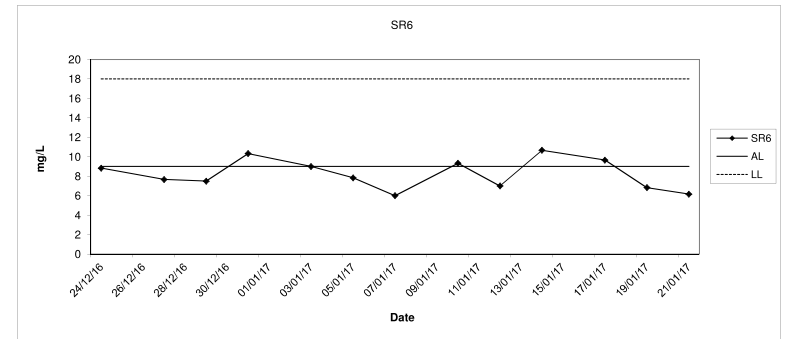
Total Suspended Solids (Depth average) at Mid-Ebb Tide



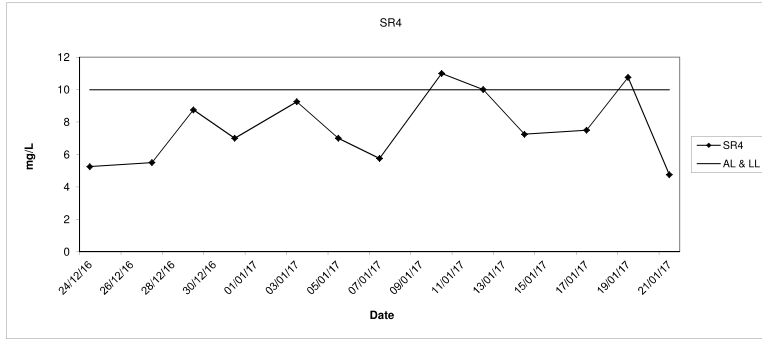
SR3



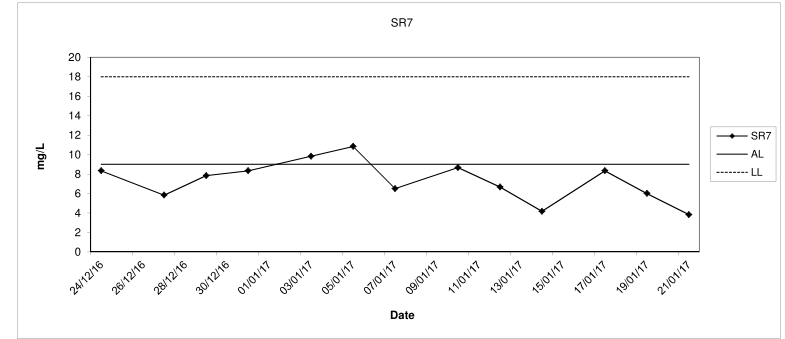
SR6



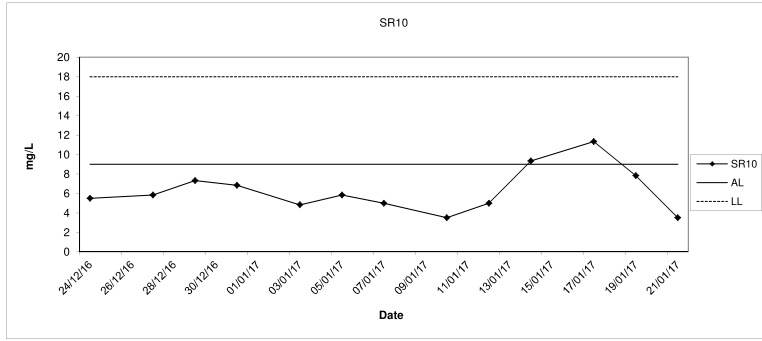
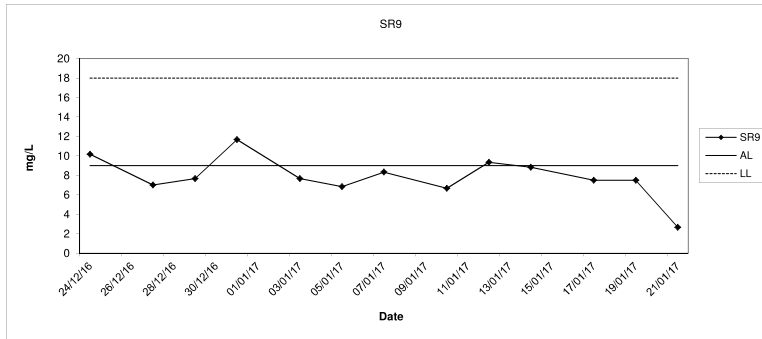
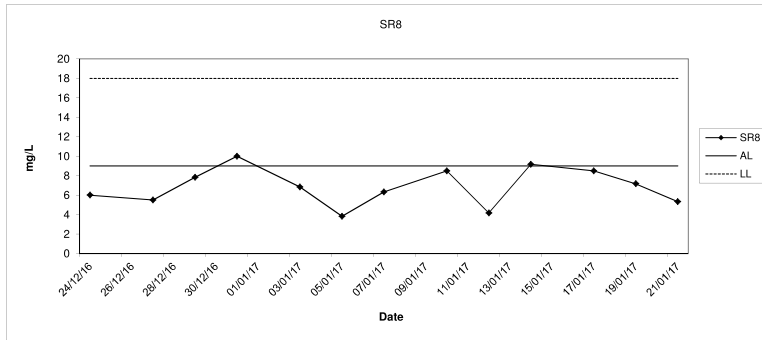
SR4



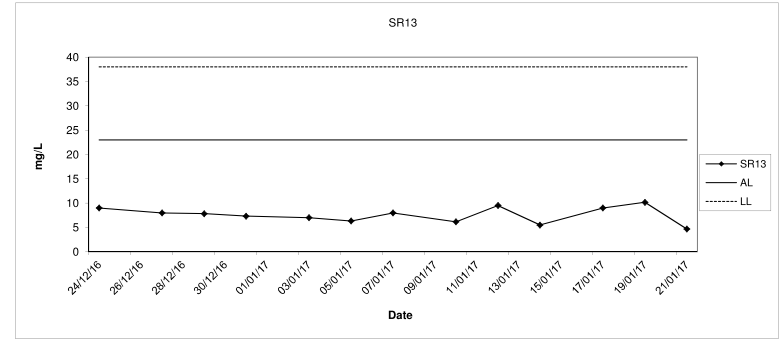
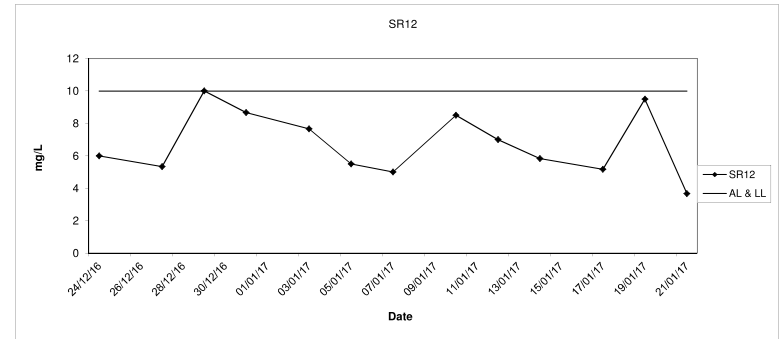
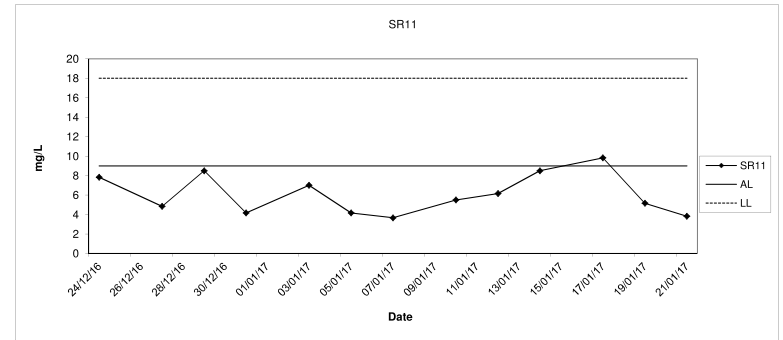
SR7



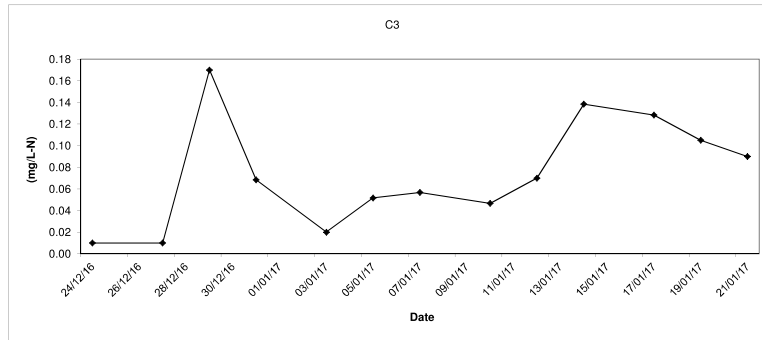
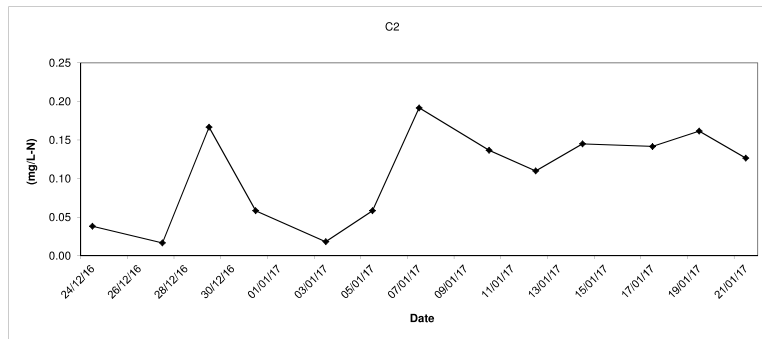
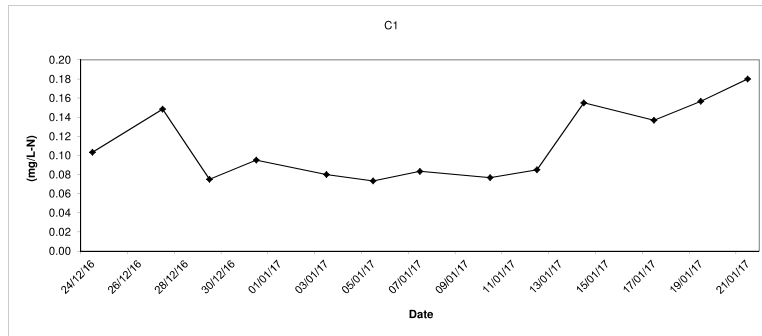
Total Suspended Solids (Depth average) at Mid-Ebb Tide



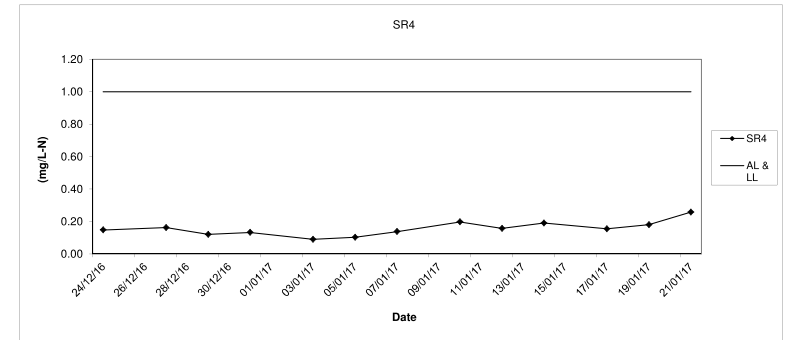
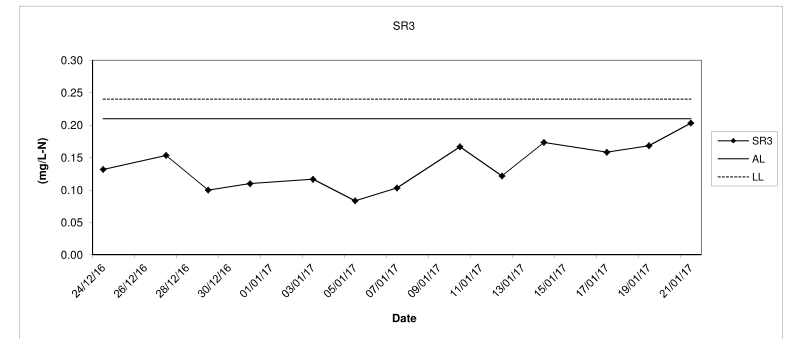
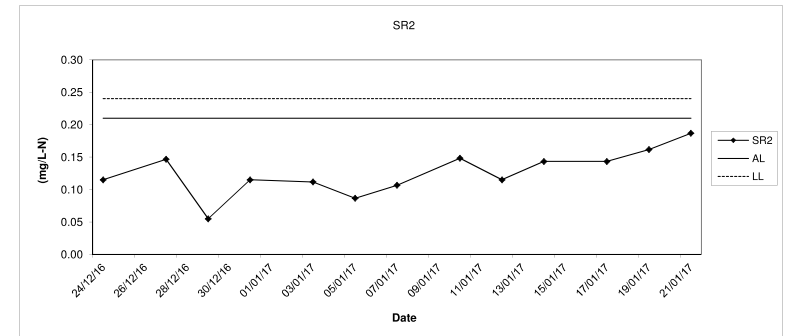
Total Suspended Solids (Depth average) at Mid-Ebb Tide



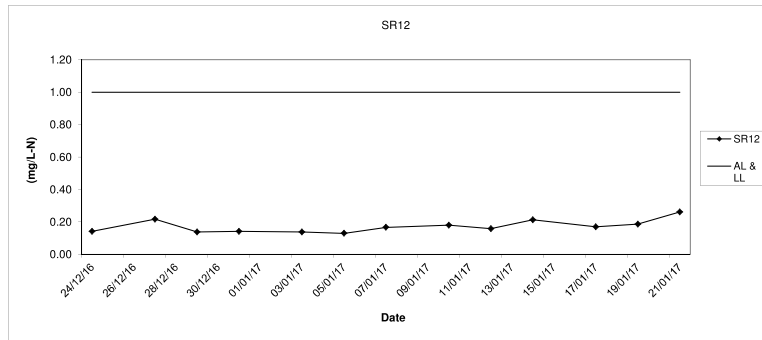
Ammonia Nitrogen (Depth average) at Mid-Ebb Tide



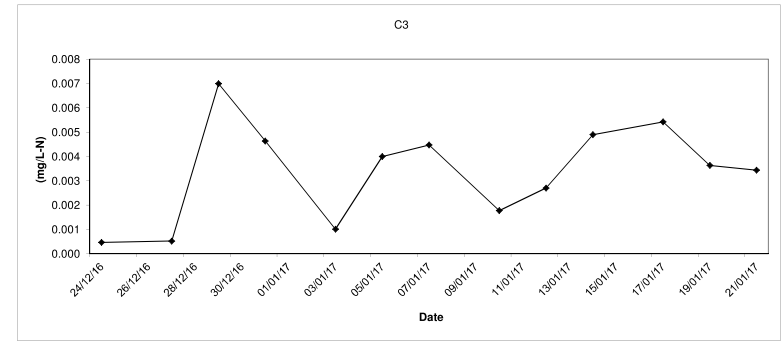
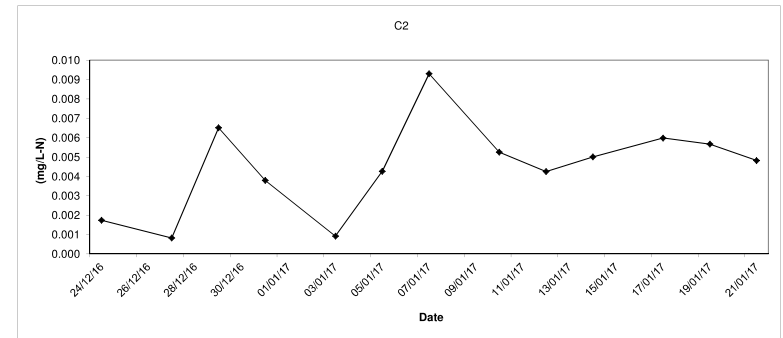
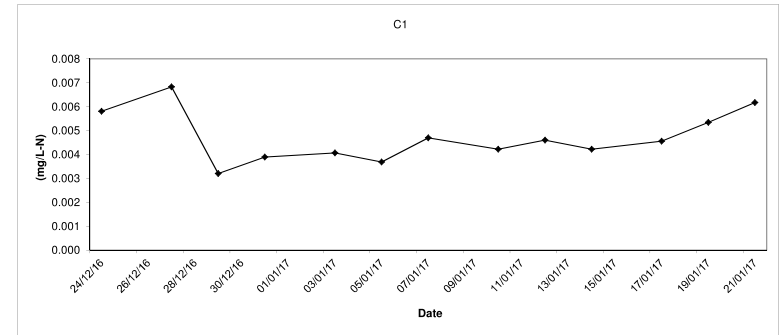
Ammonia Nitrogen (Depth average) at Mid-Ebb Tide



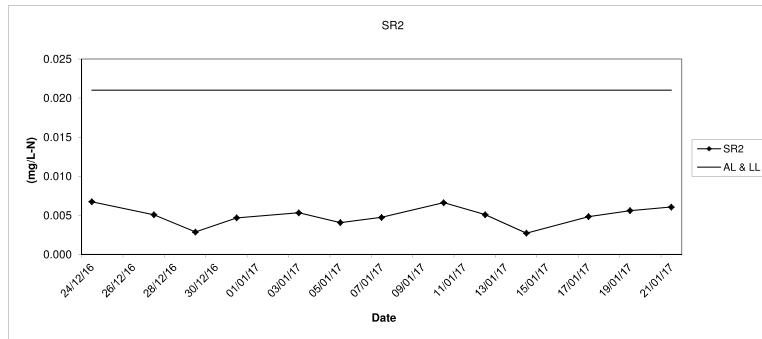
Ammonia Nitrogen (Depth average) at Mid-Ebb Tide



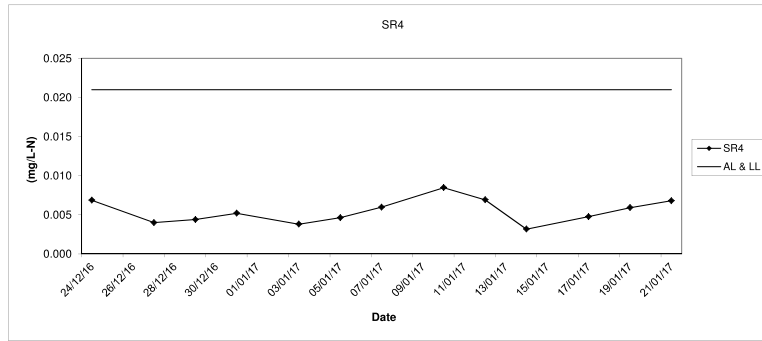
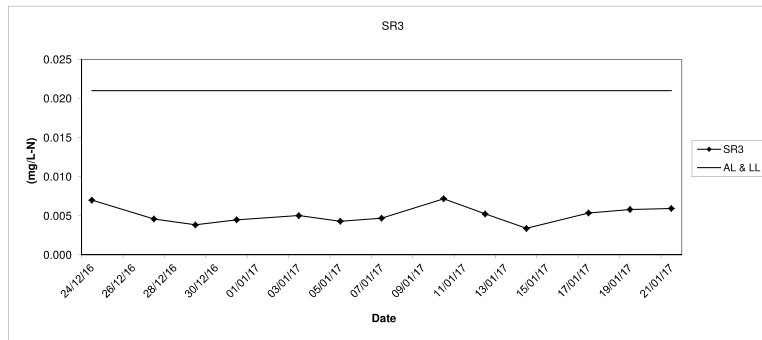
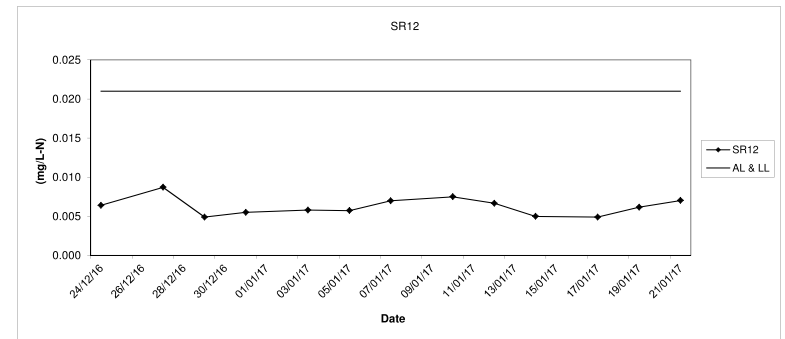
Laboratory Analysis UIA (Depth average) at Mid-Ebb Tide



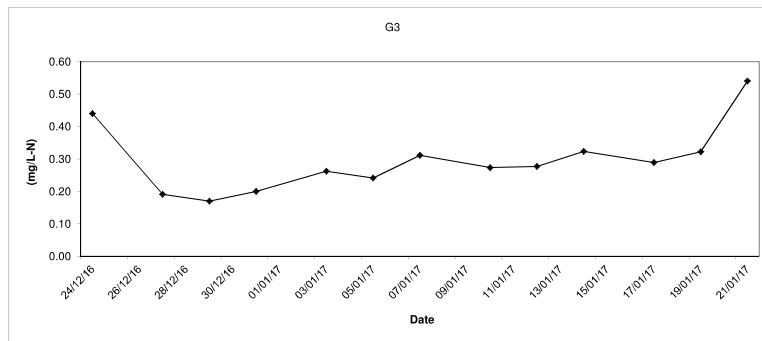
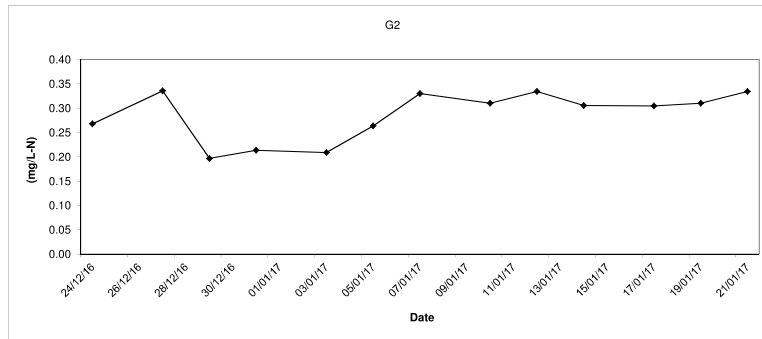
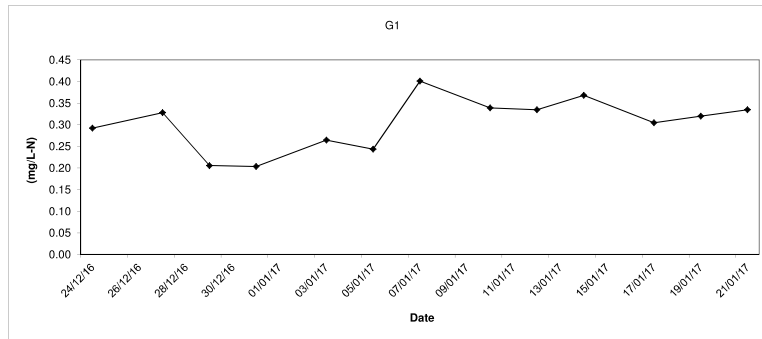
Laboratory Analysis UIA (Depth average) at Mid-Ebb Tide



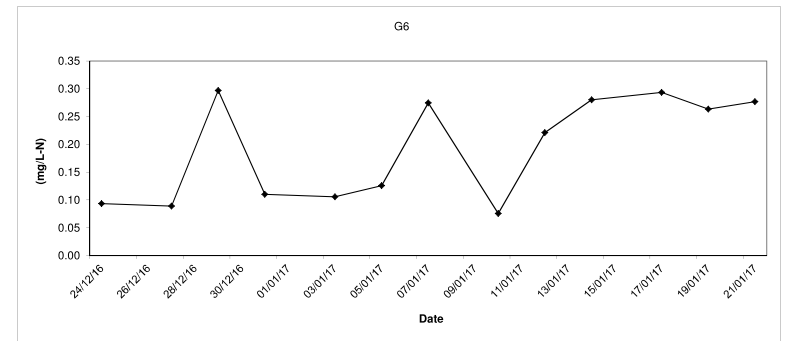
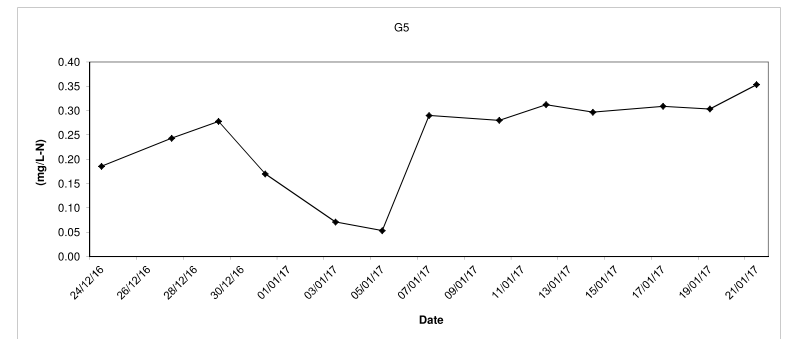
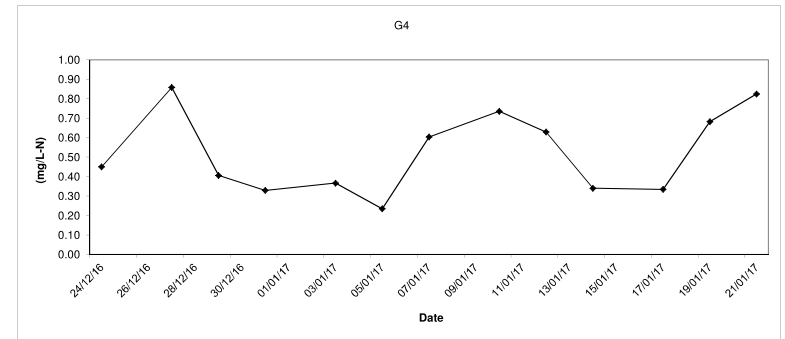
Laboratory Analysis UIA (Depth average) at Mid-Ebb Tide



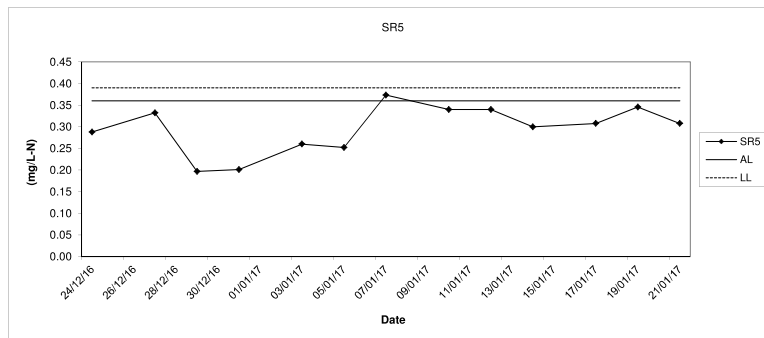
Laboratory Analysis TIN (Depth average) at Mid-Ebb Tide



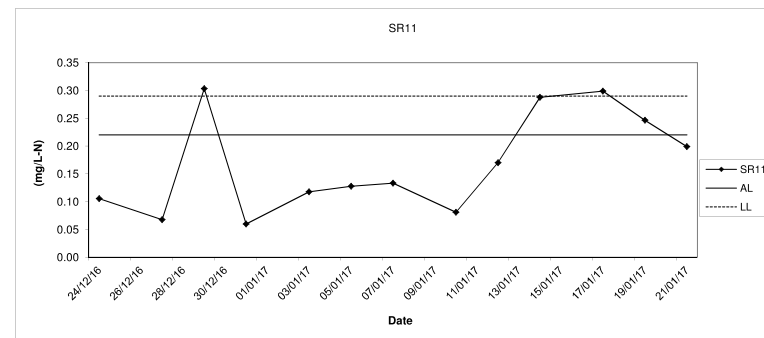
Laboratory Analysis TIN (Depth average) at Mid-Ebb Tide



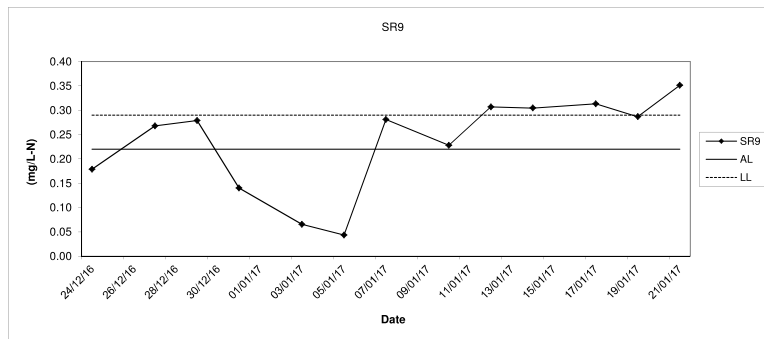
Laboratory Analysis TIN (Depth average) at Mid-Ebb Tide



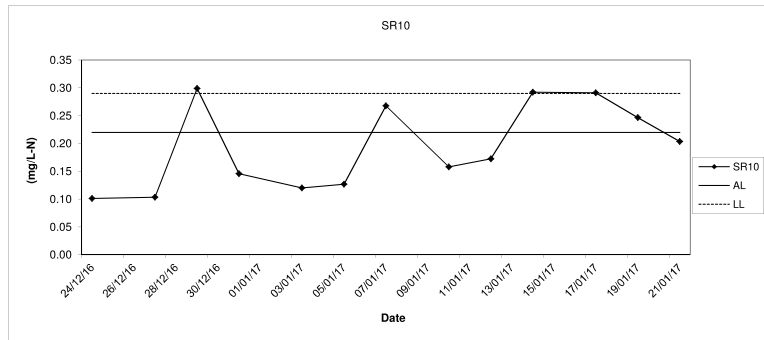
Laboratory Analysis TIN (Depth average) at Mid-Ebb Tide



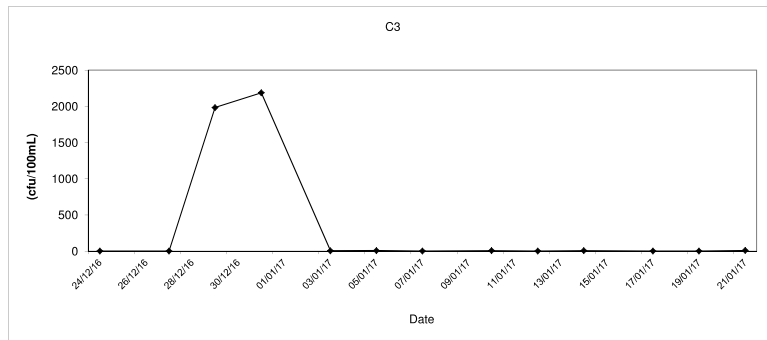
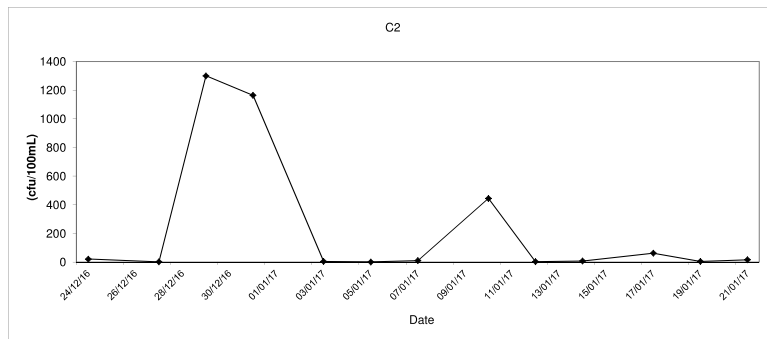
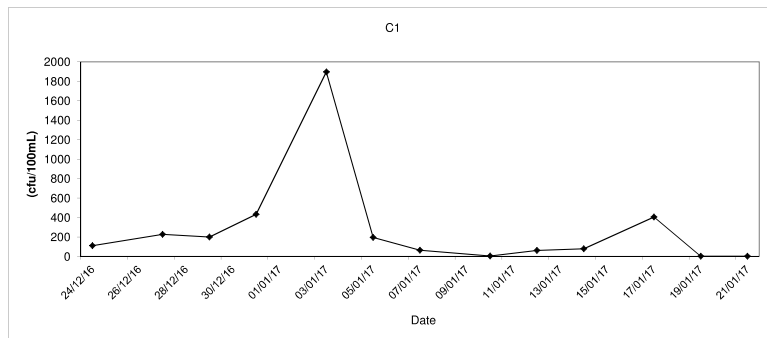
SR9



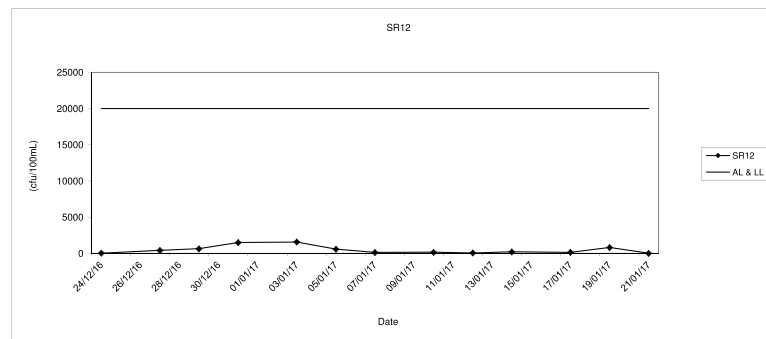
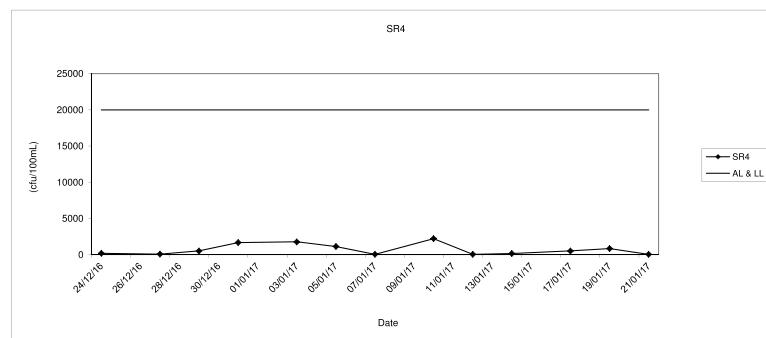
SR10



E.coli (Depth average) at Mid-Ebb Tide

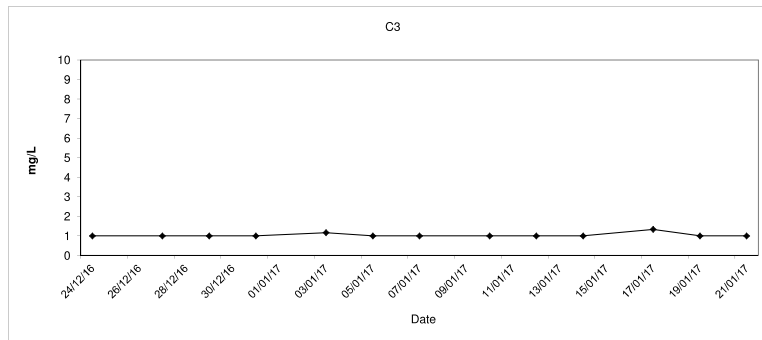
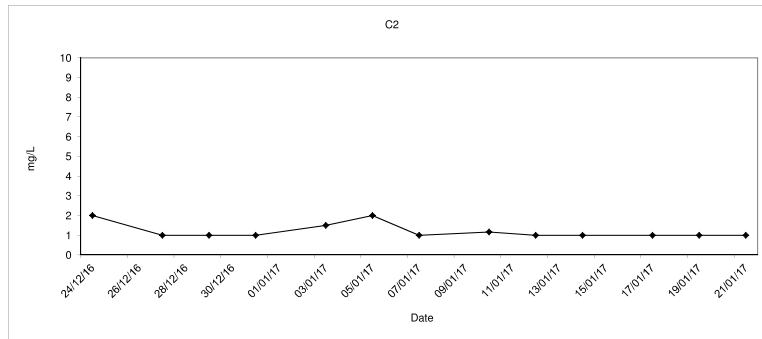
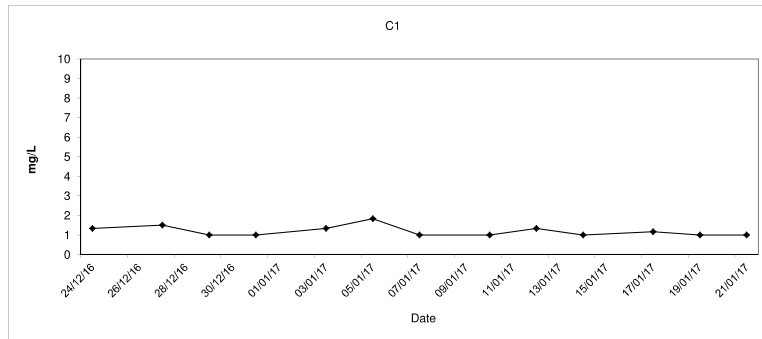


E.coli (Depth average) at Mid-Ebb Tide

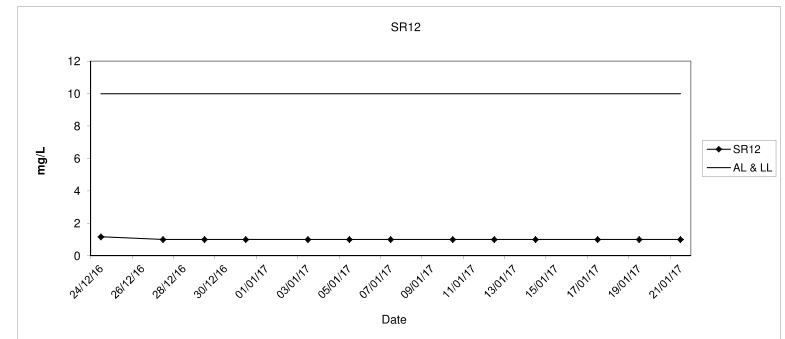
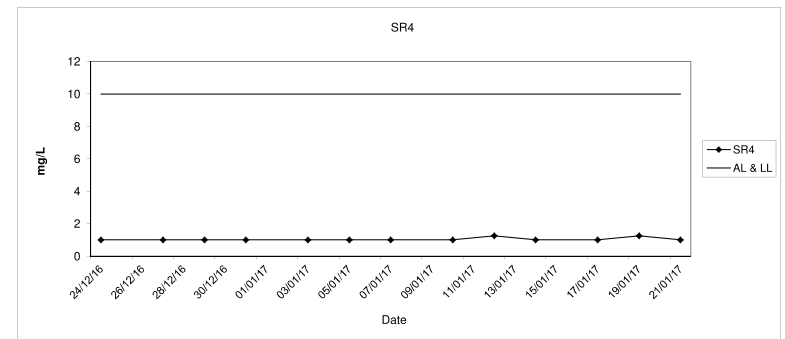




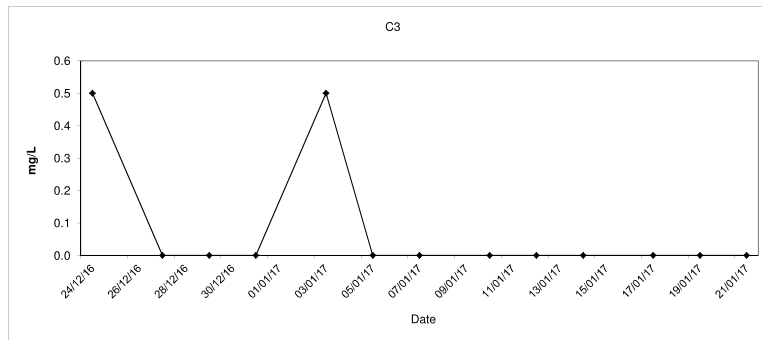
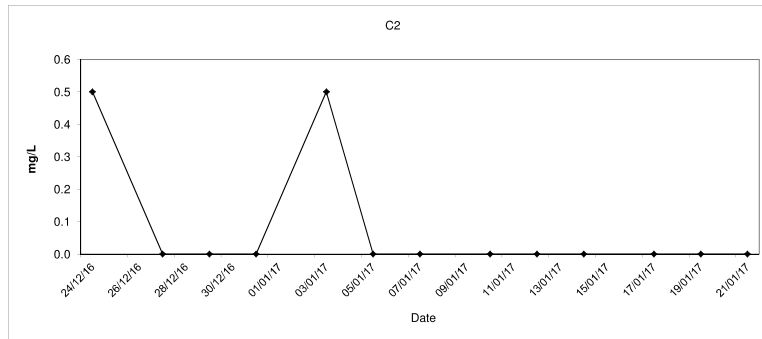
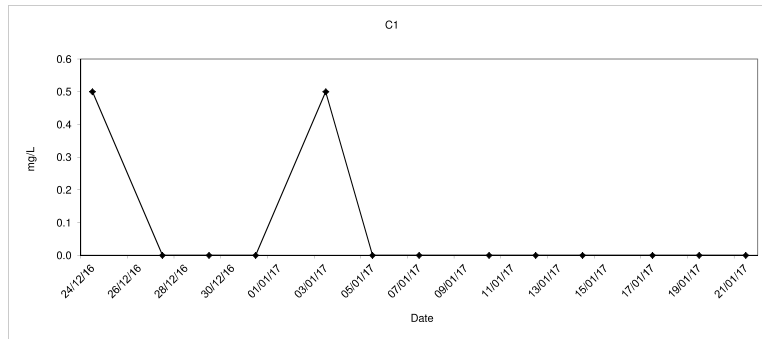
BOD<sub>5</sub> (Depth average) at Mid-Ebb Tide



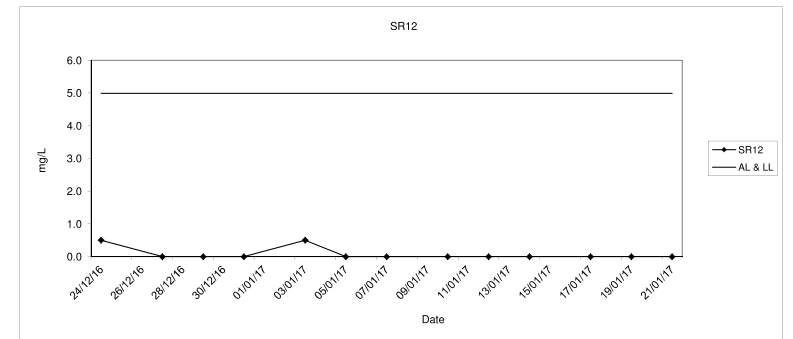
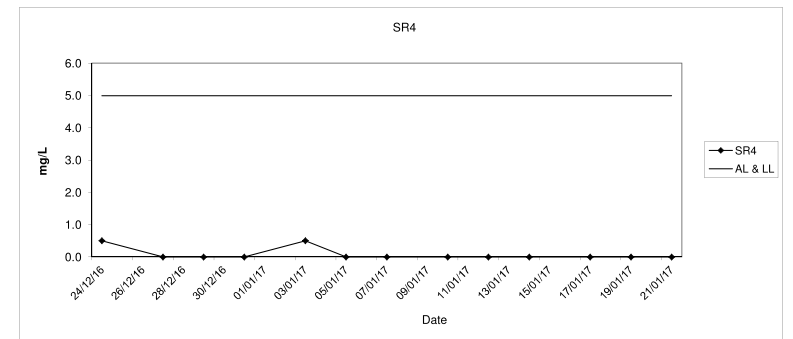
BOD<sub>5</sub> (Depth average) at Mid-Ebb Tide



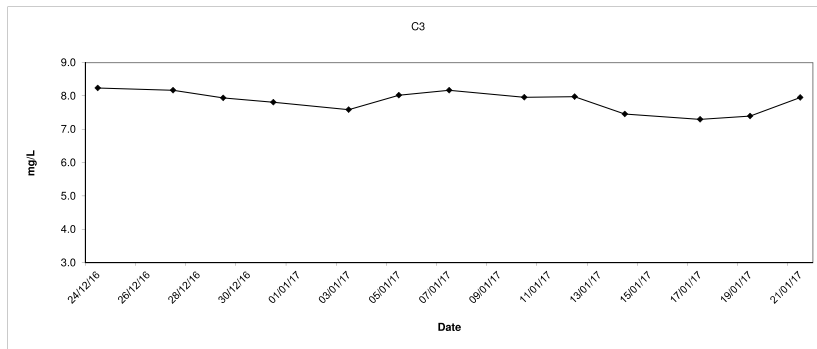
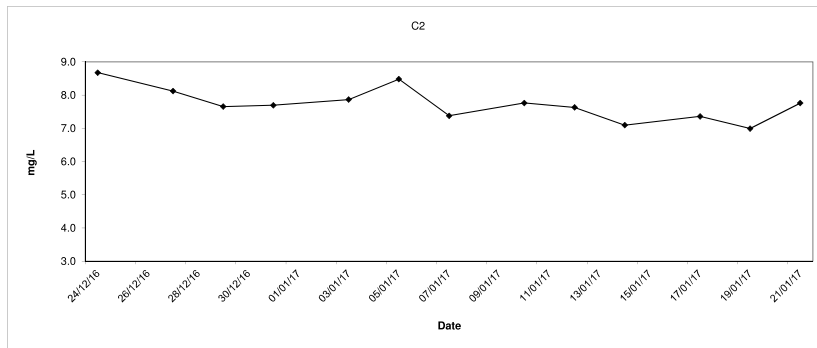
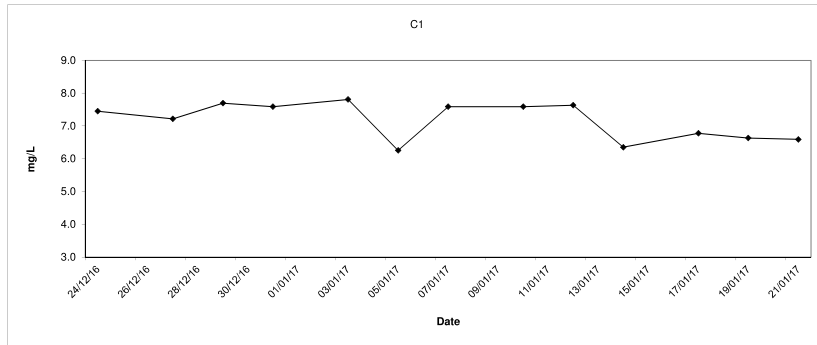
Synthetic Detergent (Depth average) at Mid-Ebb Tide



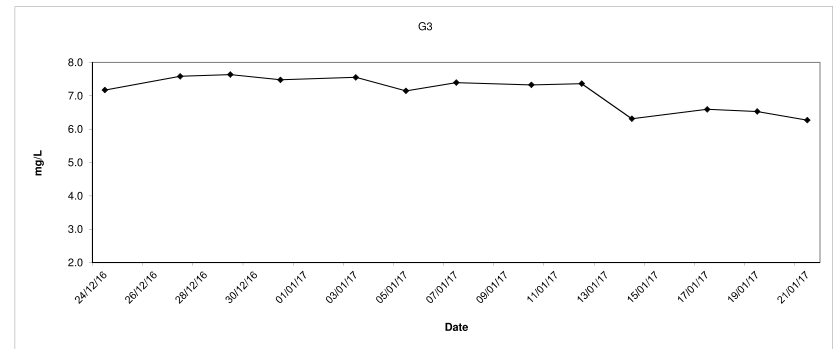
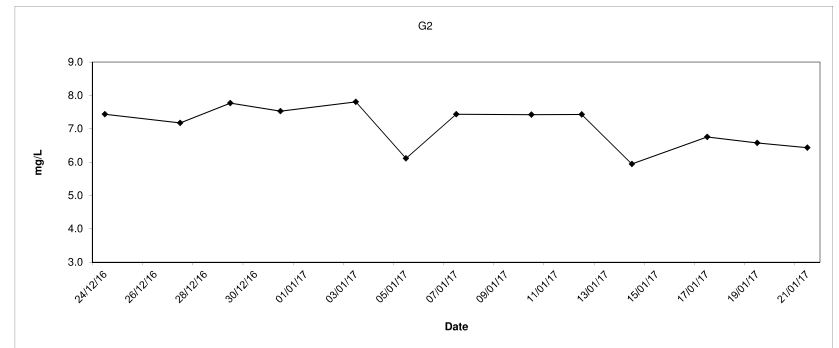
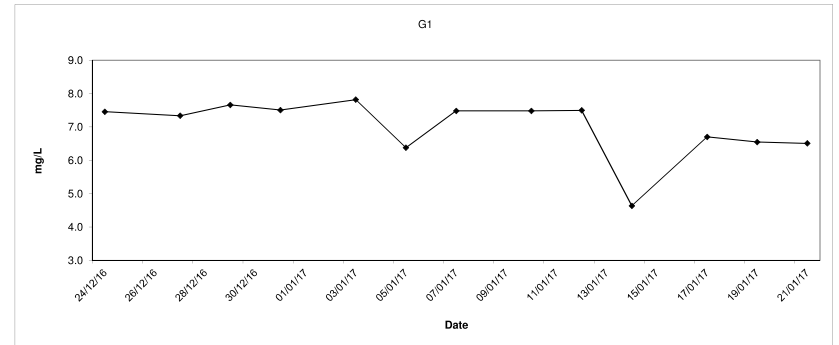
Synthetic Detergent (Depth average) at Mid-Ebb Tide



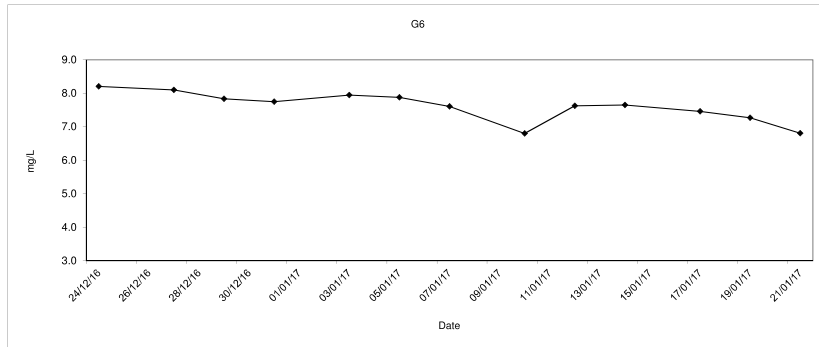
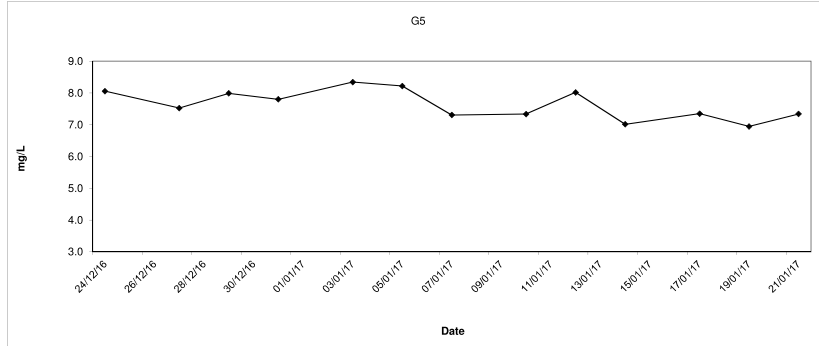
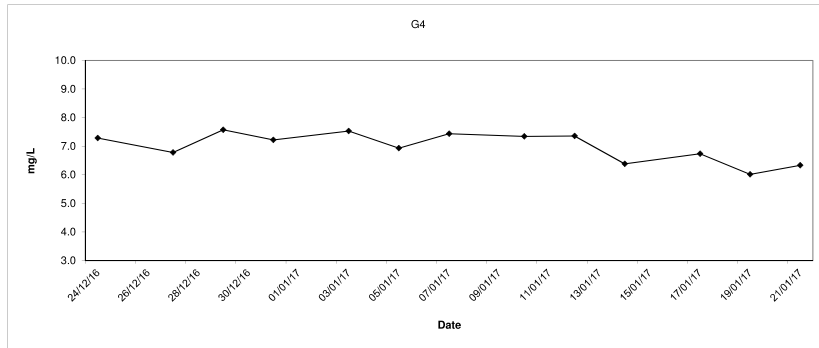
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



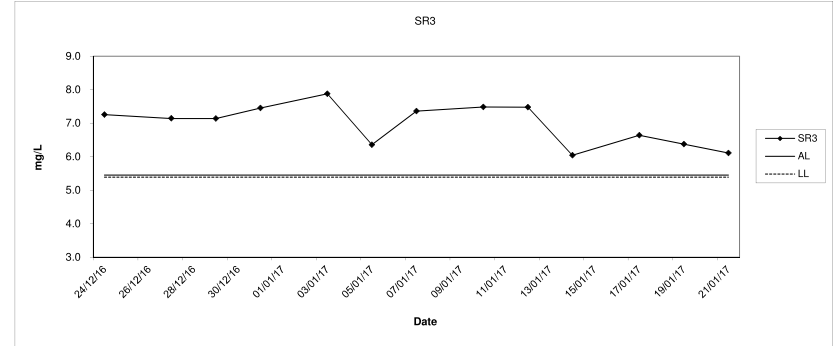
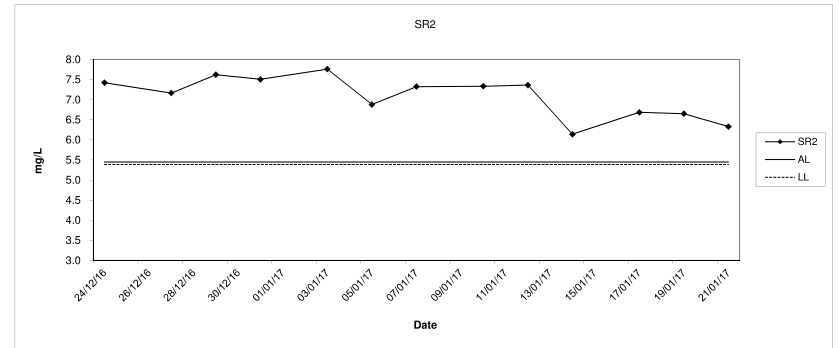
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



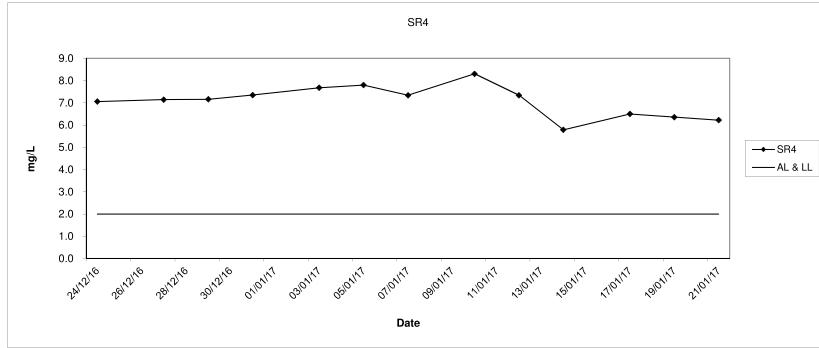
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



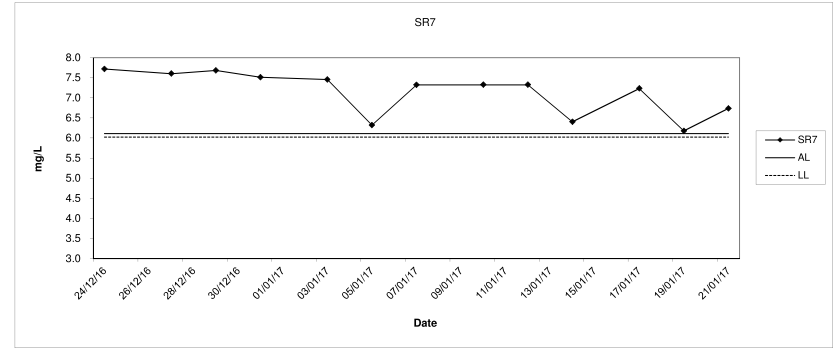
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



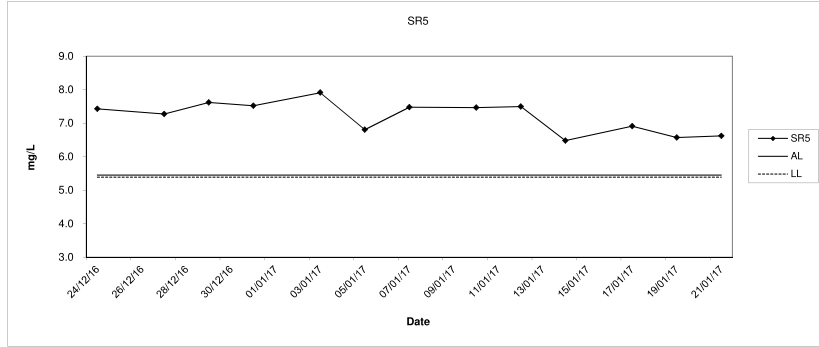
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



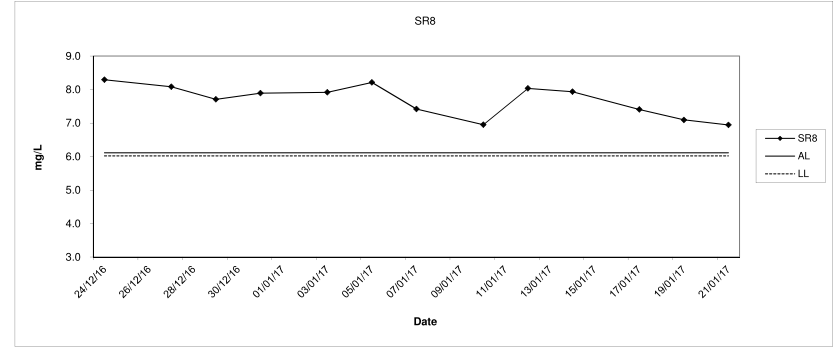
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



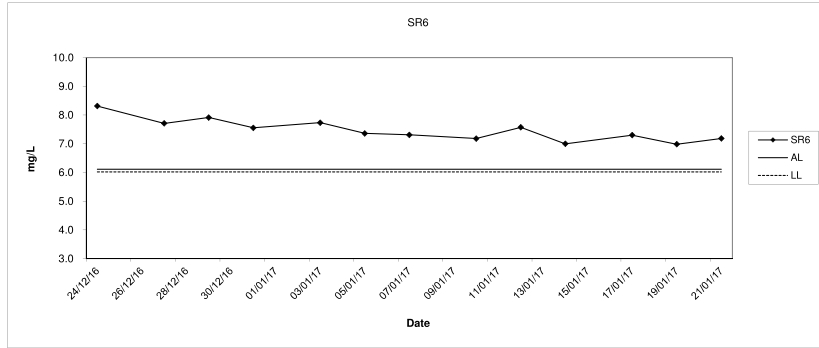
SR5



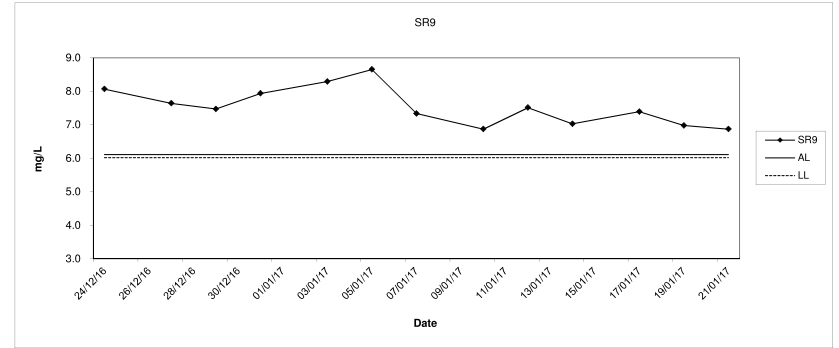
SR8



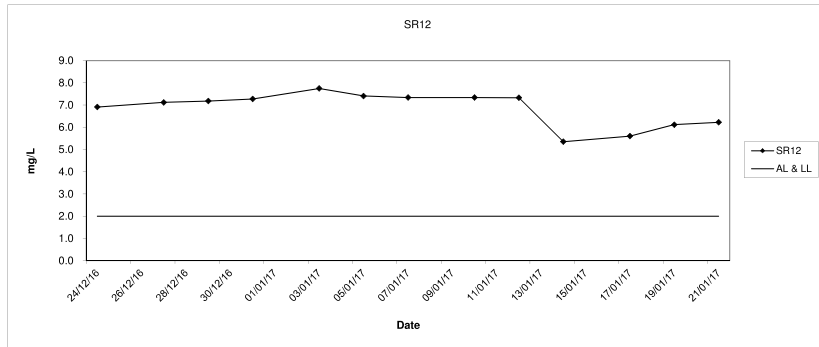
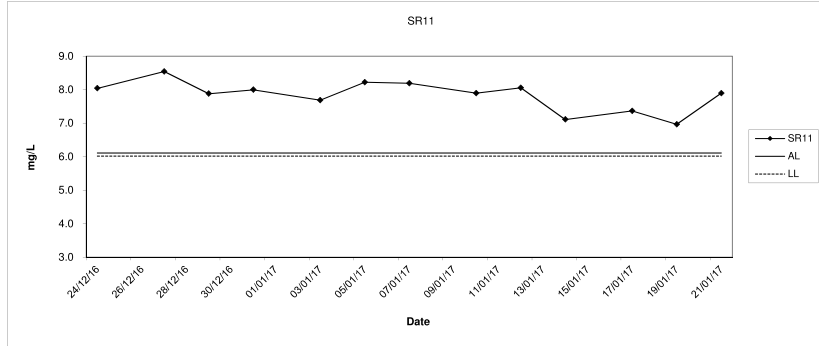
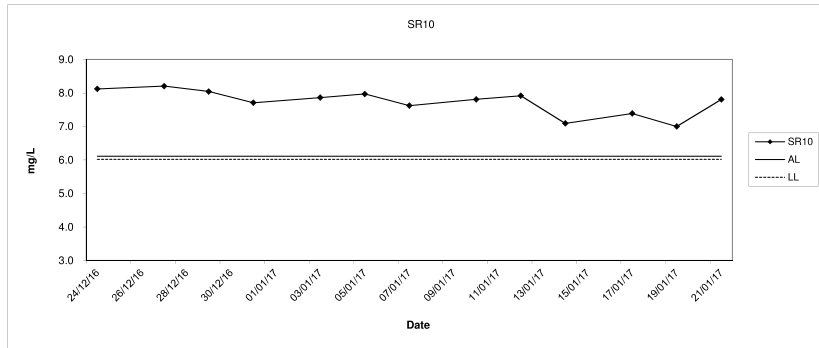
SR6



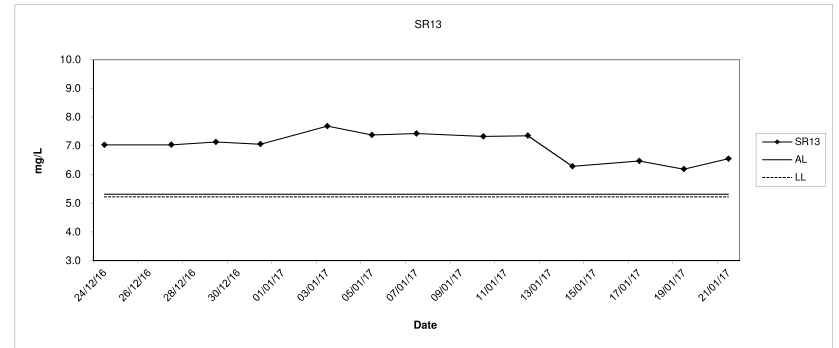
SR9



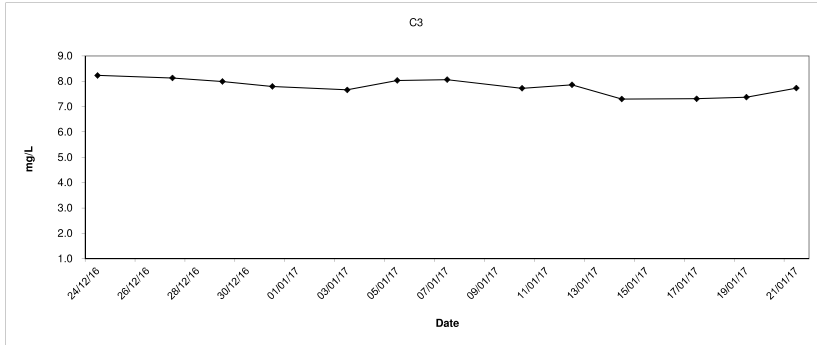
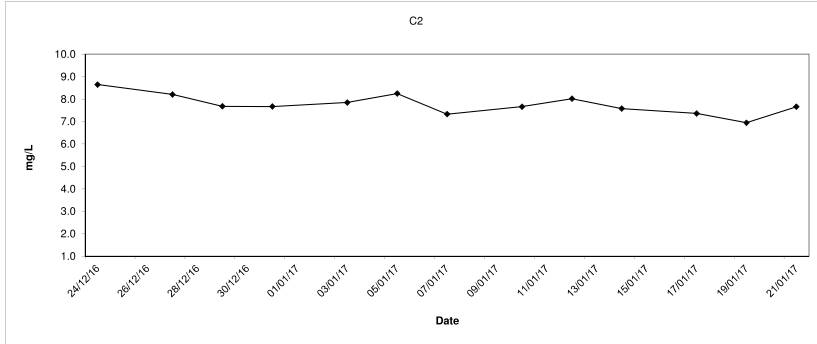
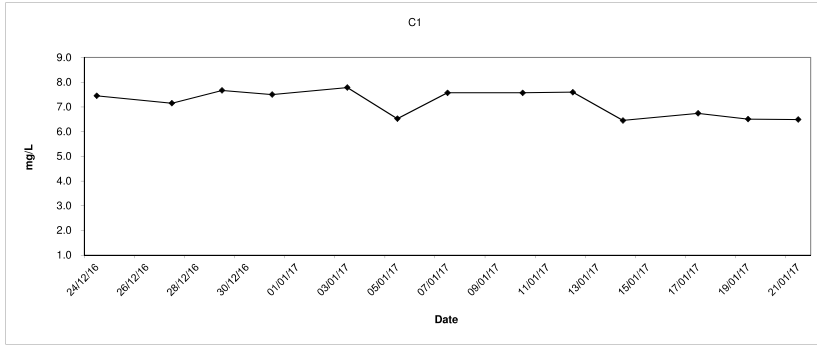
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



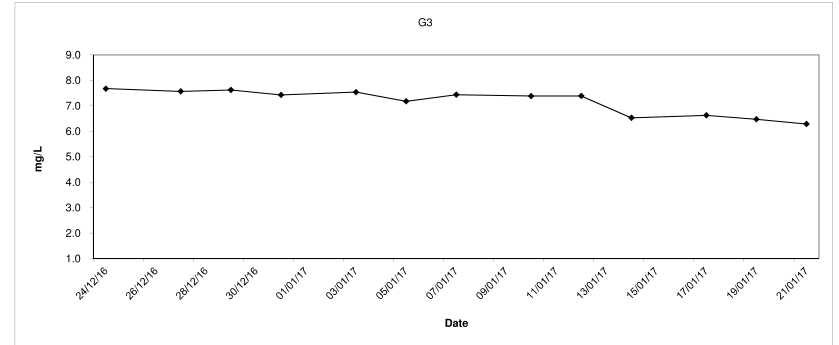
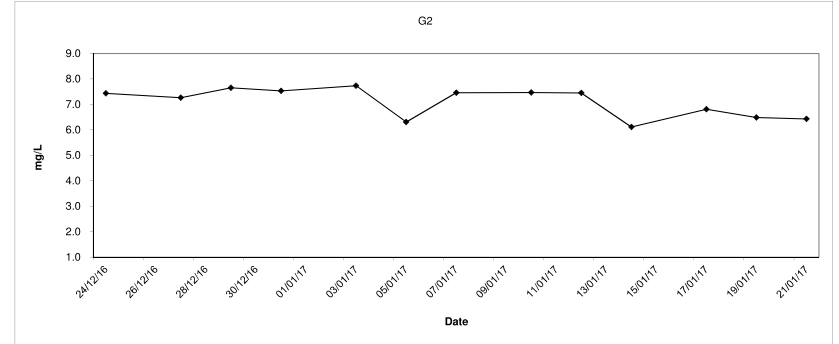
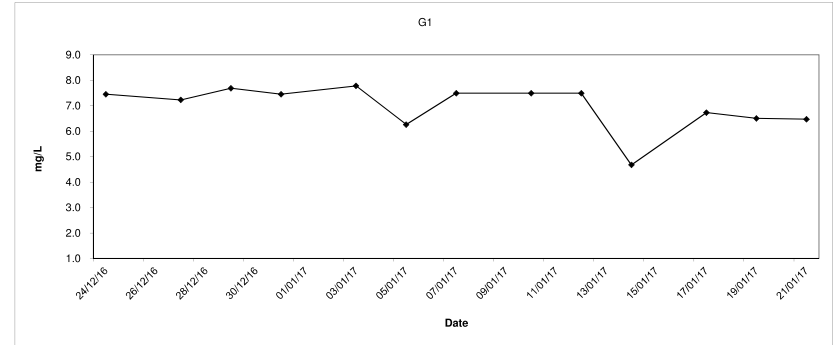
Dissolved Oxygen (Surface and Middle) at Mid-Flood Tide



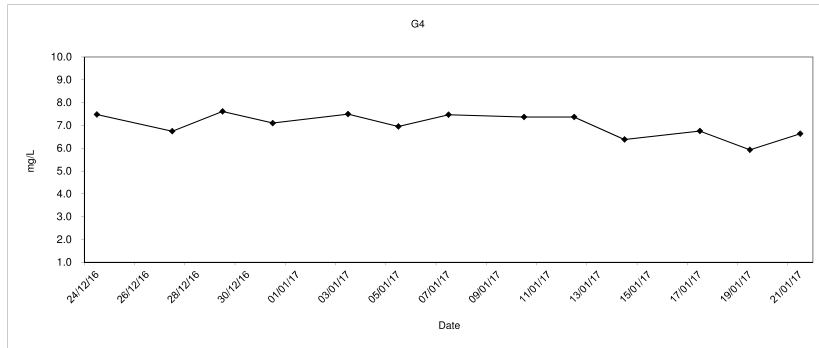
Dissolved Oxygen (Bottom) at Mid-Flood Tide



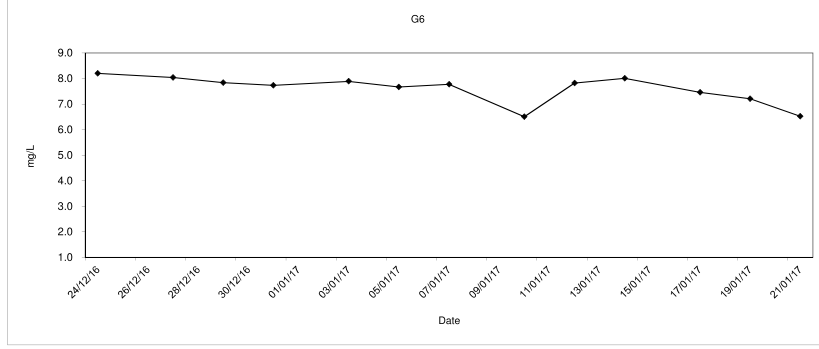
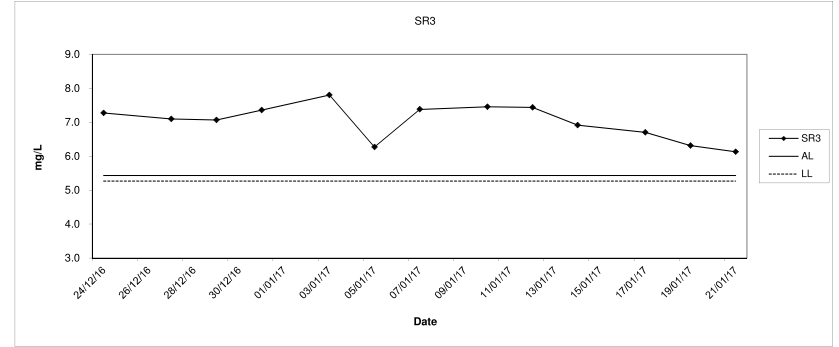
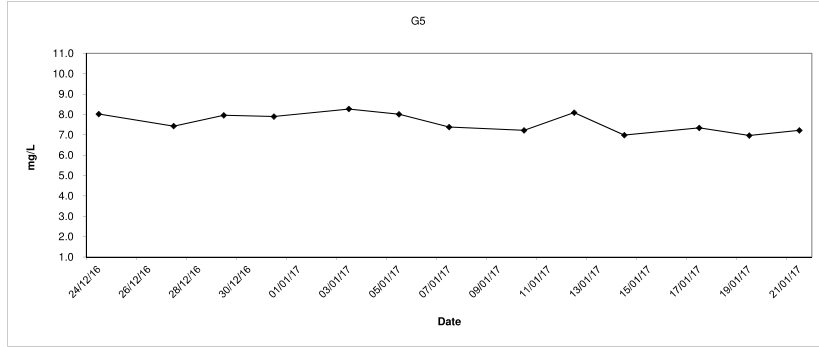
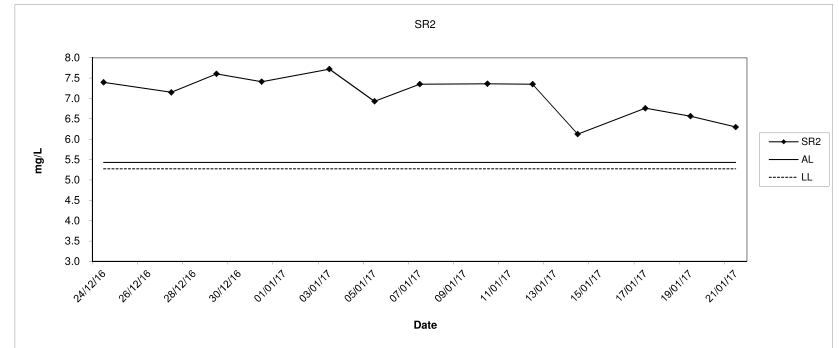
Dissolved Oxygen (Bottom) at Mid-Flood Tide



Dissolved Oxygen (Bottom) at Mid-Flood Tide

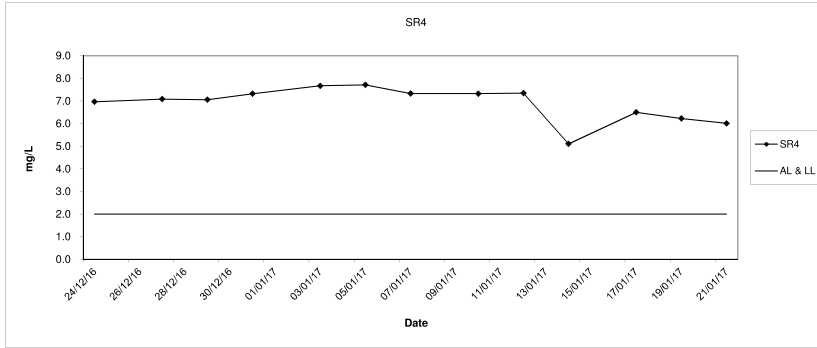


Dissolved Oxygen (Bottom) at Mid-Flood Tide

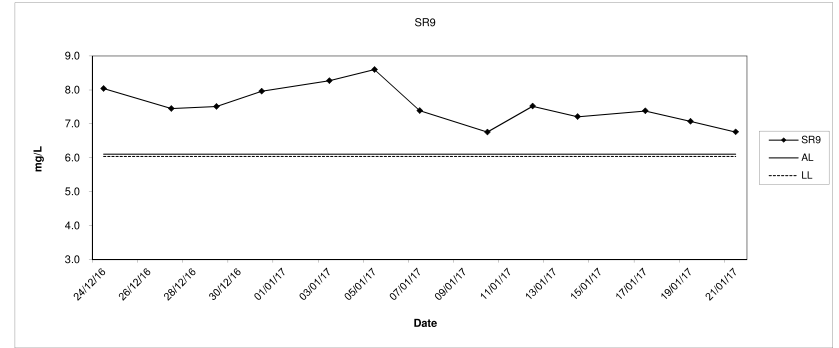
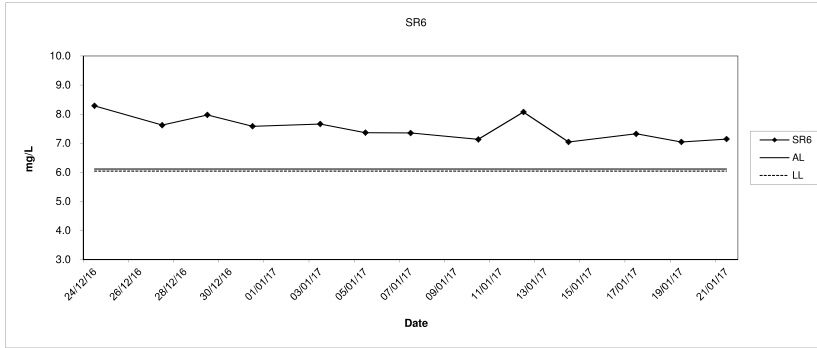
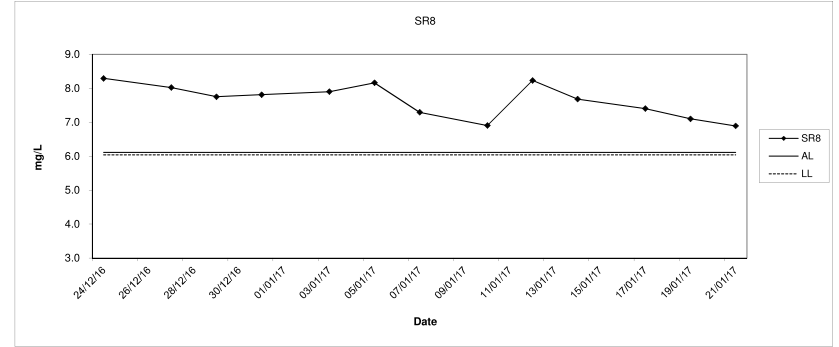
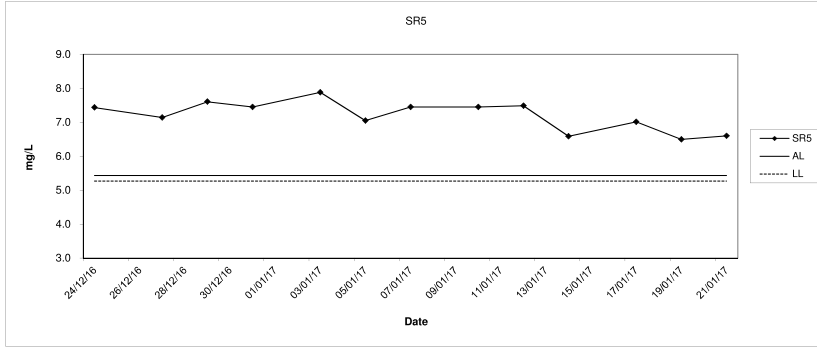
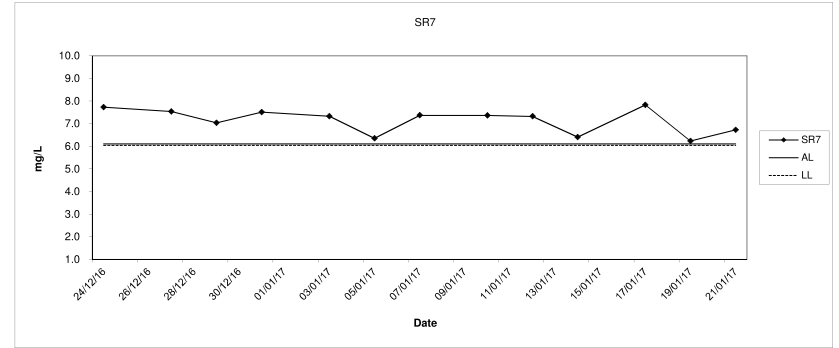




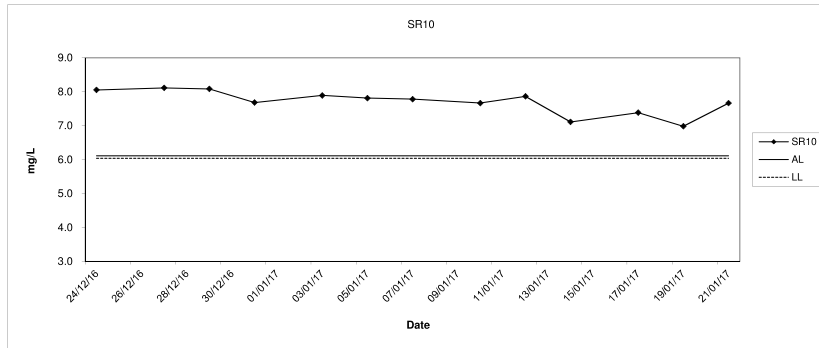
Dissolved Oxygen (Bottom) at Mid-Flood Tide



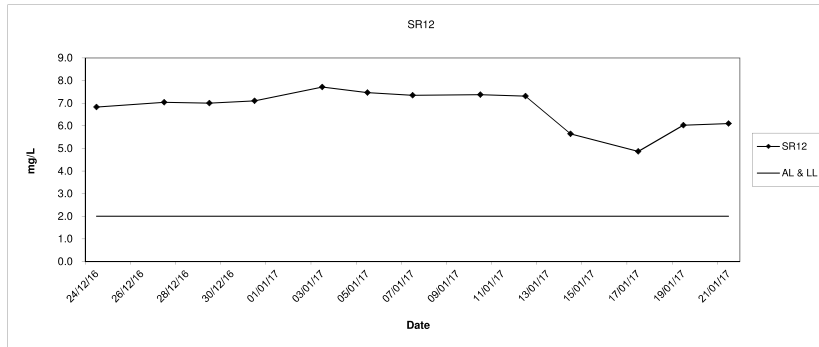
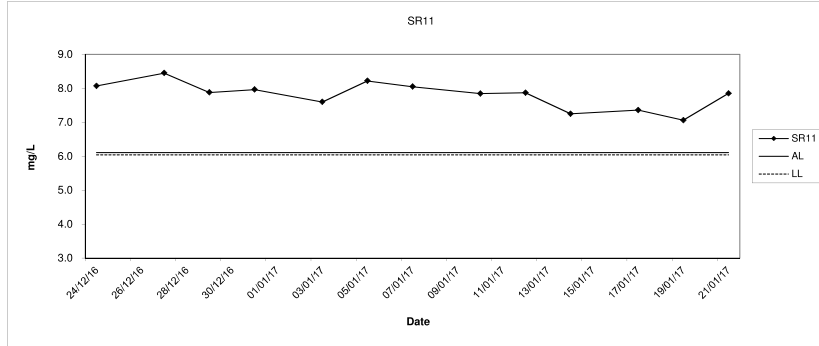
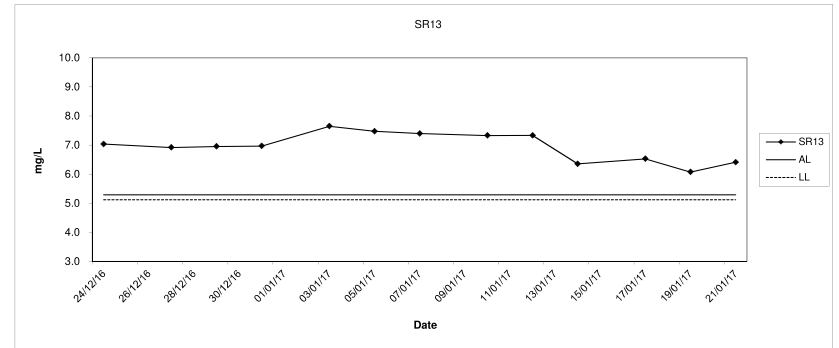
Dissolved Oxygen (Bottom) at Mid-Flood Tide



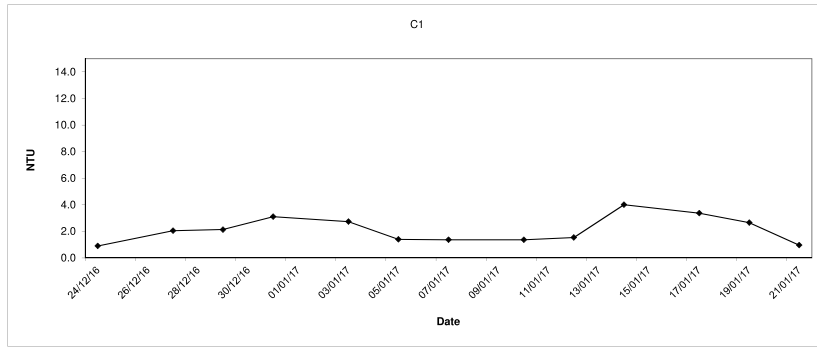
Dissolved Oxygen (Bottom) at Mid-Flood Tide



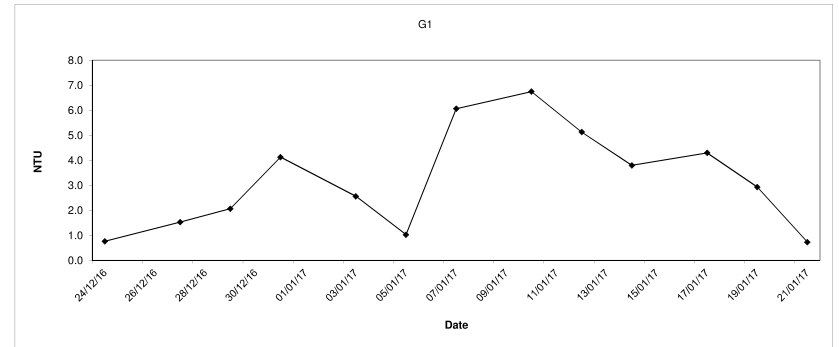
Dissolved Oxygen (Bottom) at Mid-Flood Tide



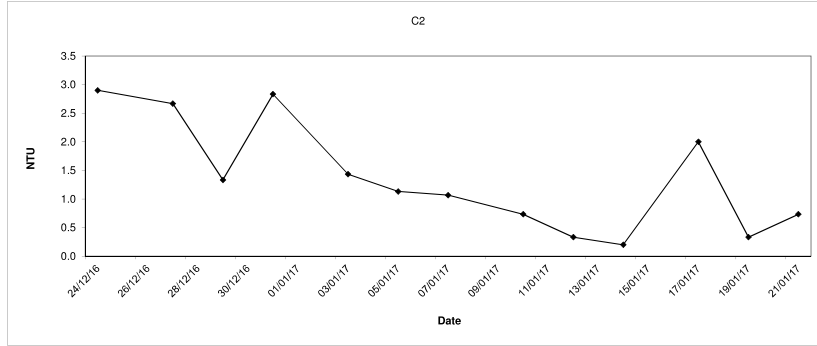
Turbidity (Depth average) at Mid-Flood Tide



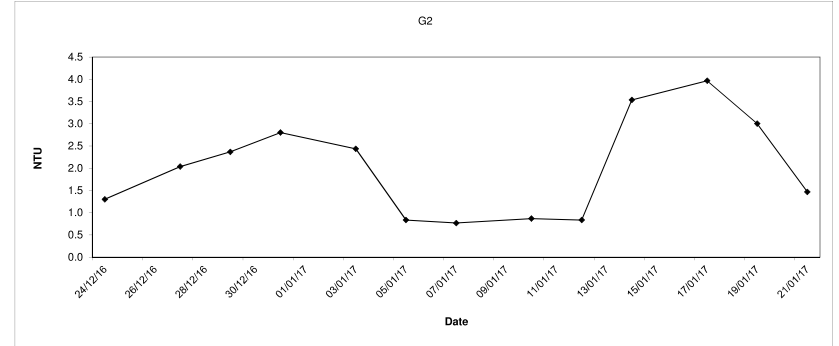
Turbidity (Depth average) at Mid-Flood Tide



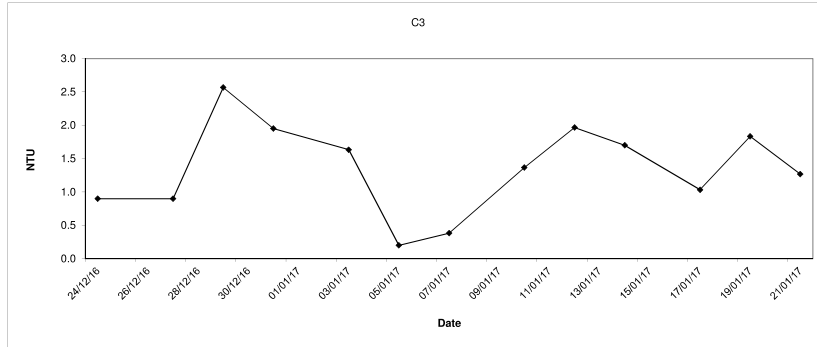
C2



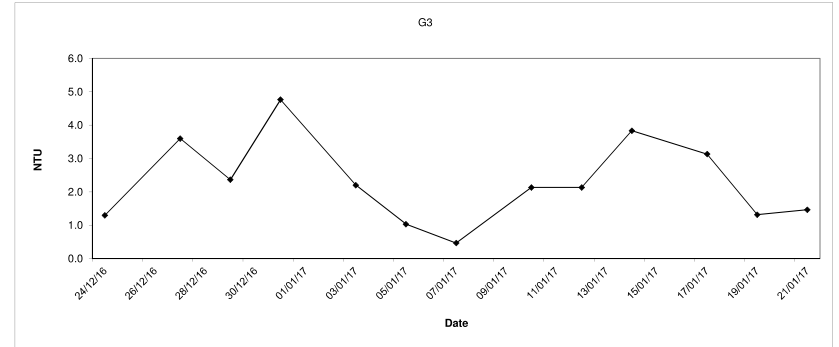
G2



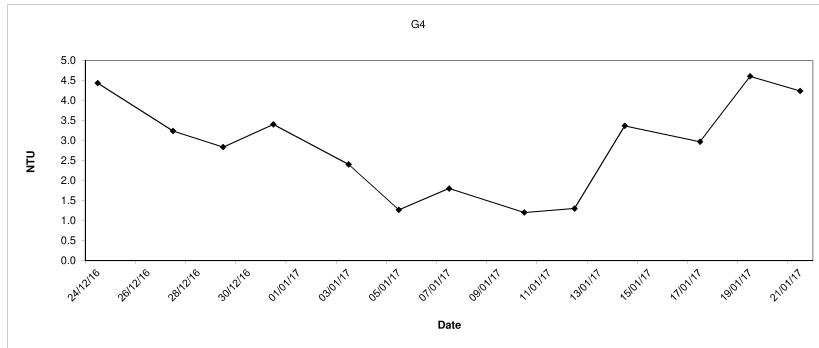
C3



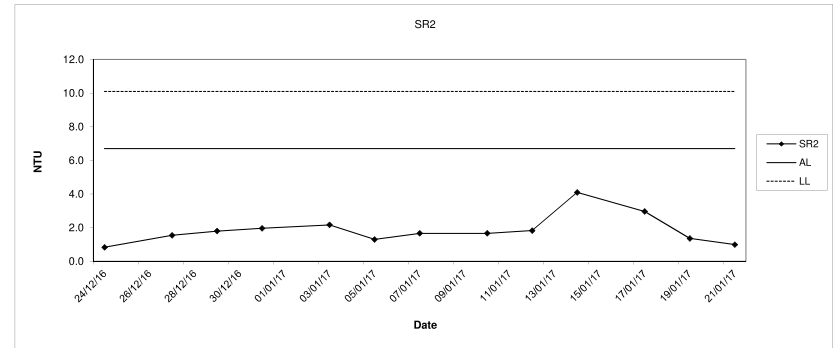
G3



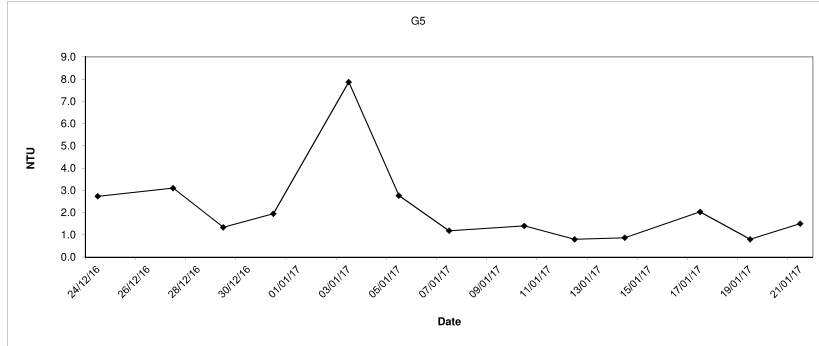
Turbidity (Depth average) at Mid-Flood Tide



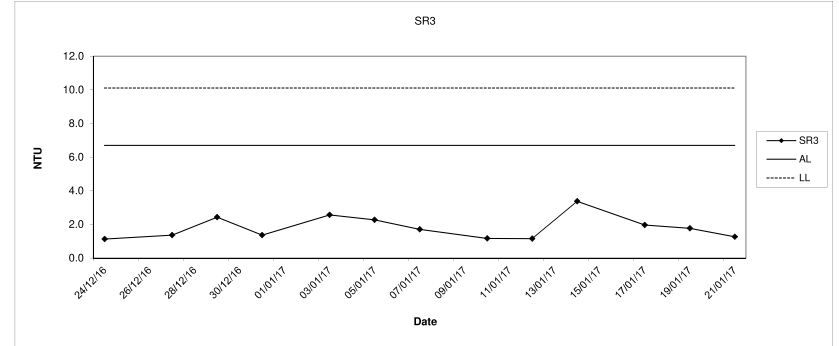
Turbidity (Depth average) at Mid-Flood Tide



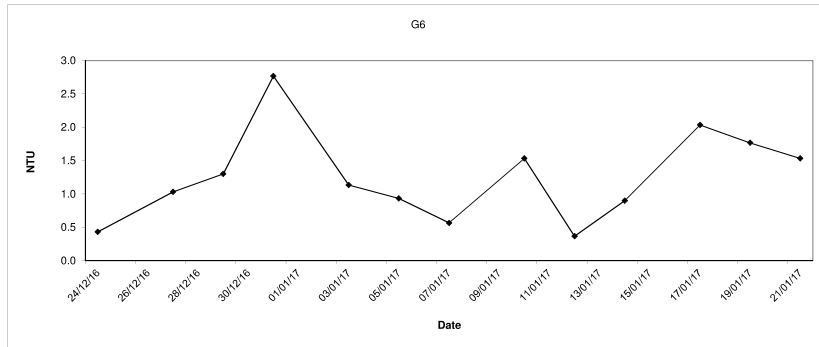
G5



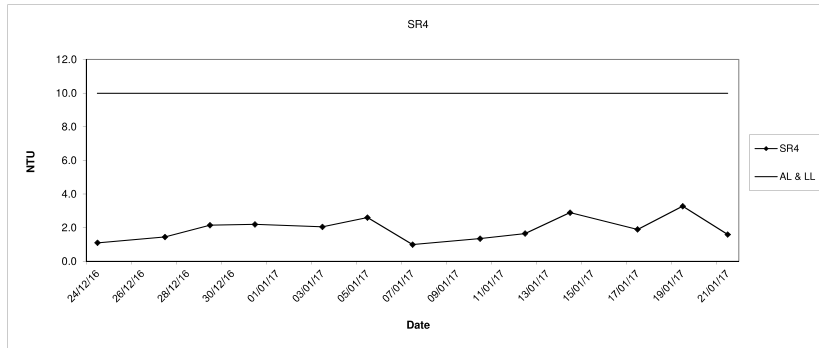
SR3



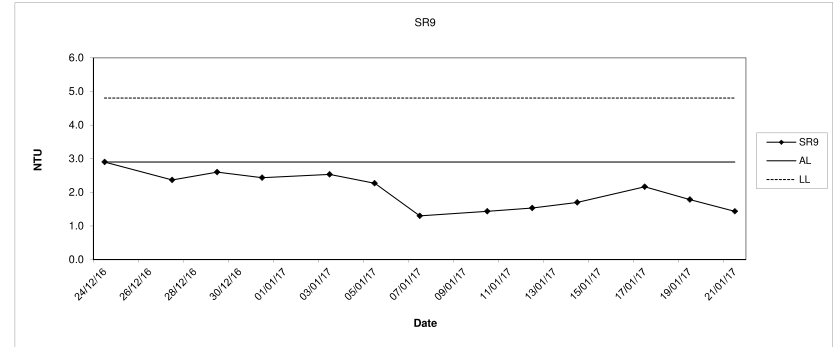
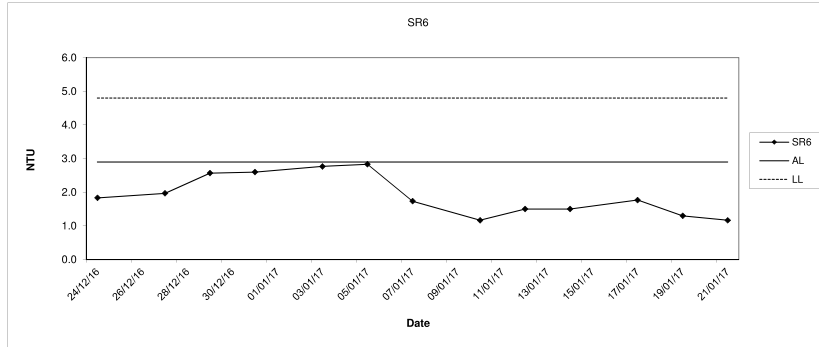
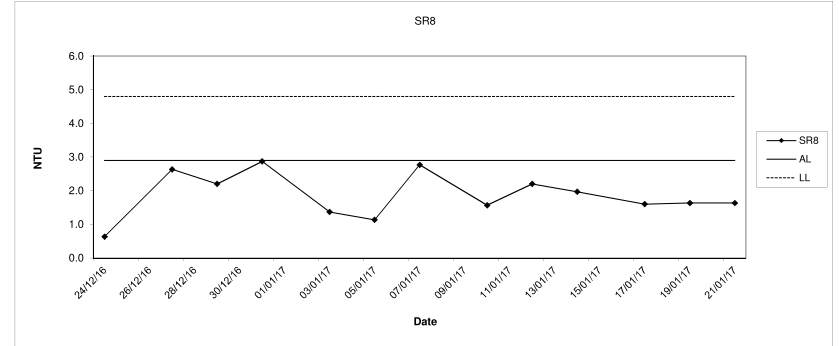
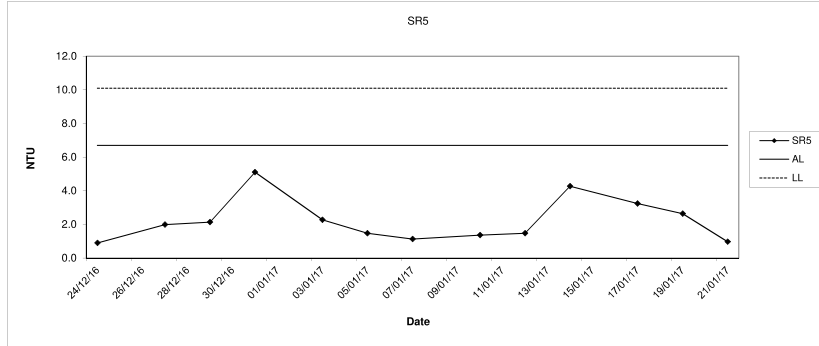
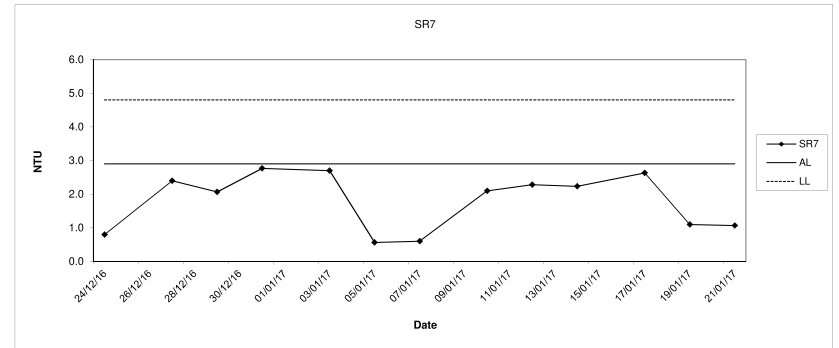
G6



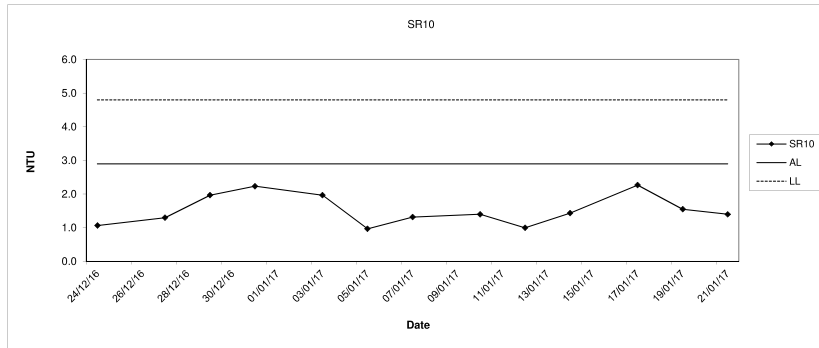
Turbidity (Depth average) at Mid-Flood Tide



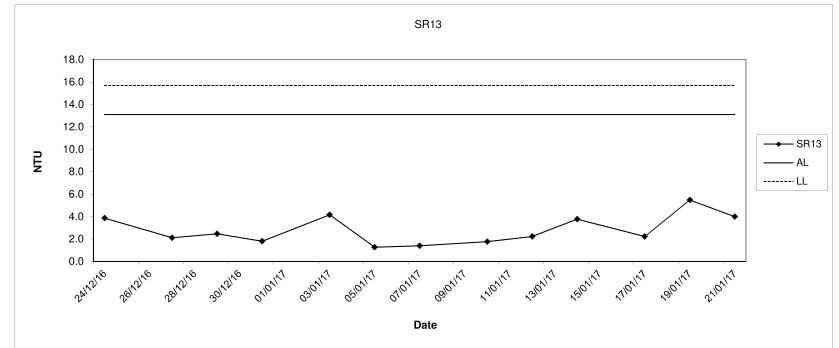
Turbidity (Depth average) at Mid-Flood Tide



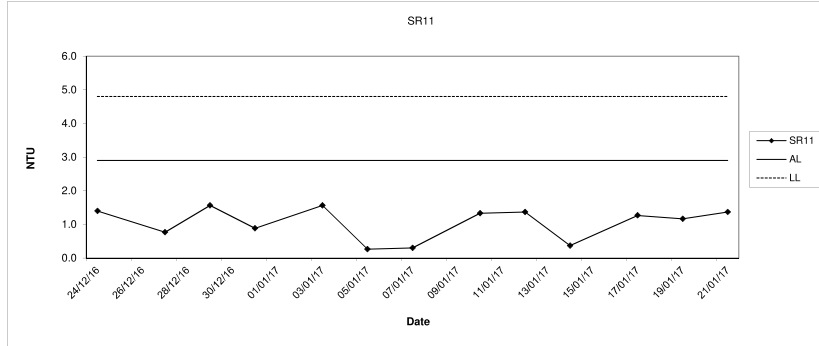
Turbidity (Depth average) at Mid-Flood Tide



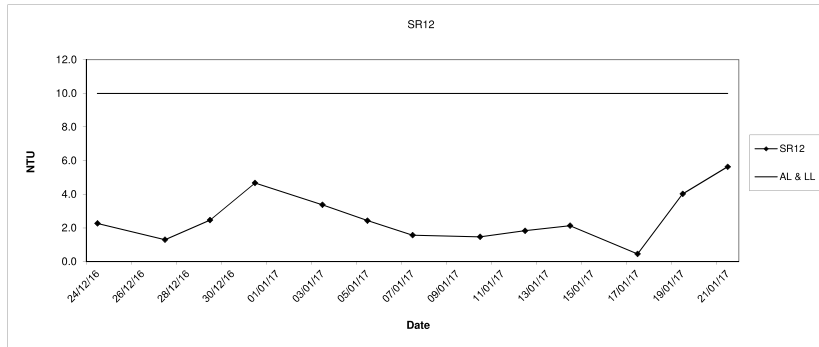
Turbidity (Depth average) at Mid-Flood Tide



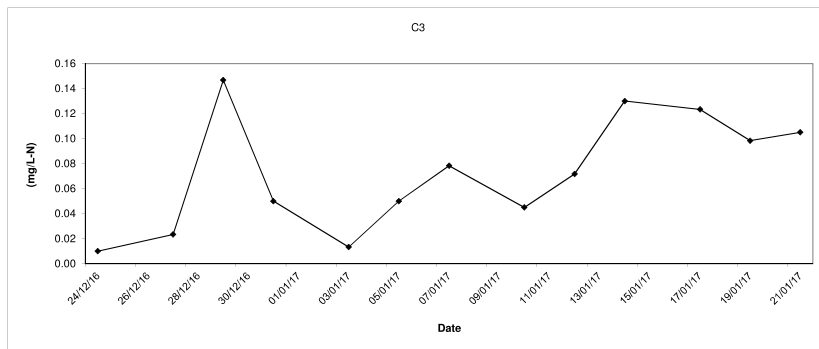
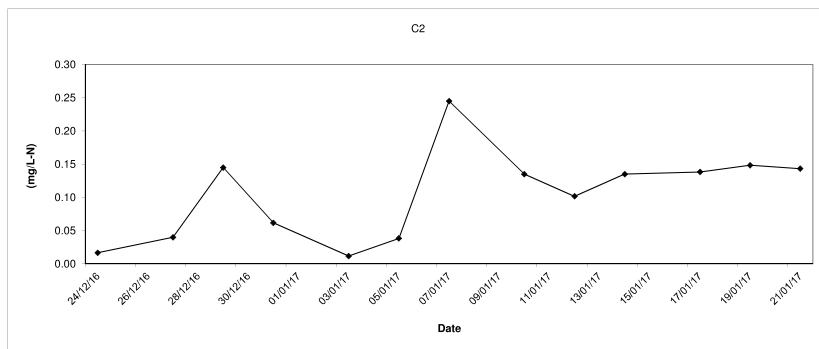
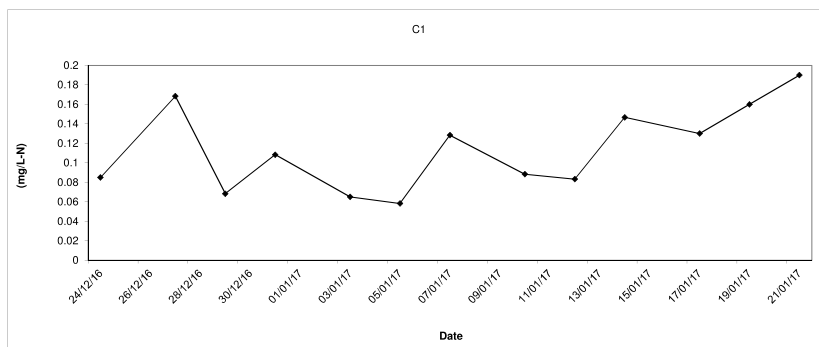
SR11



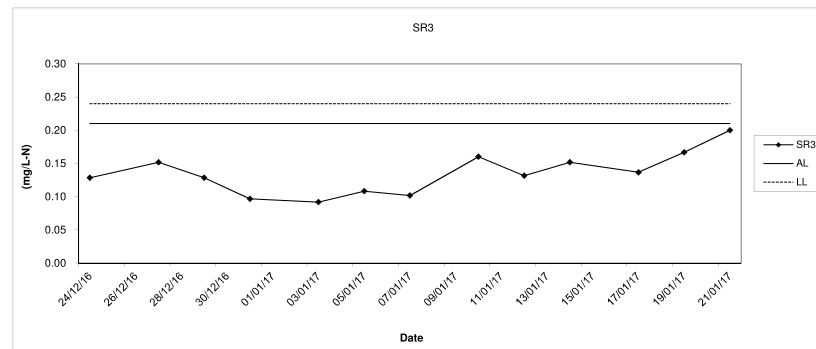
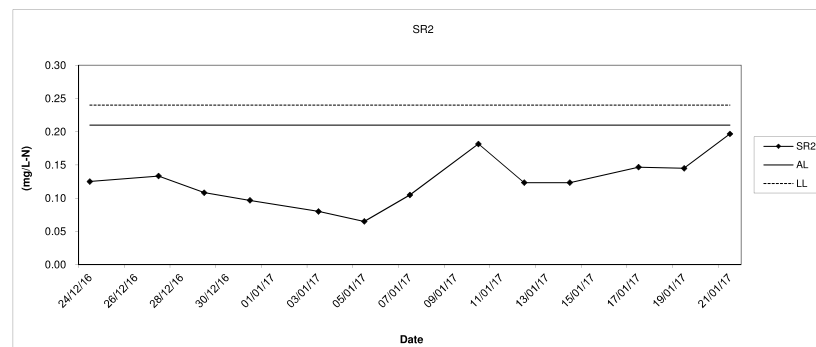
SR12



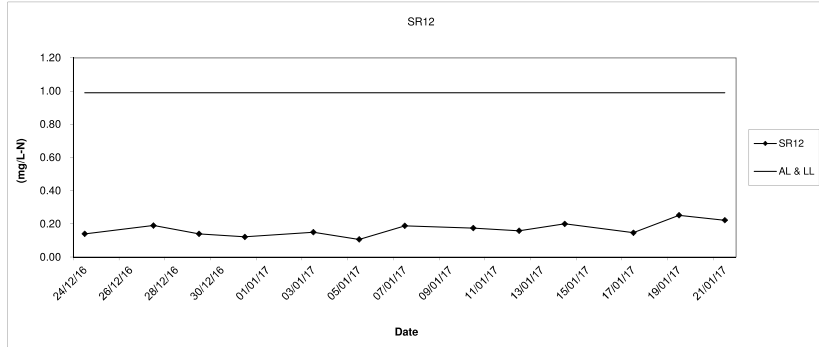
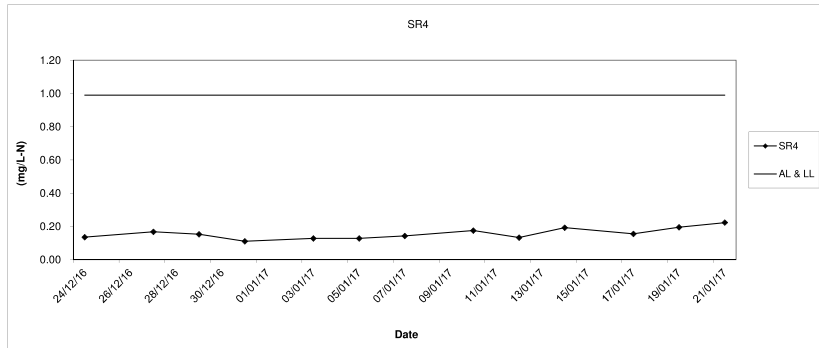
In-situ Ammonia (Depth average) at Mid-Flood Tide



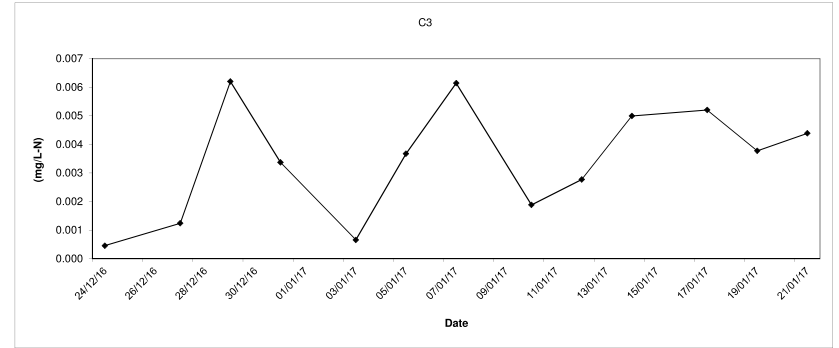
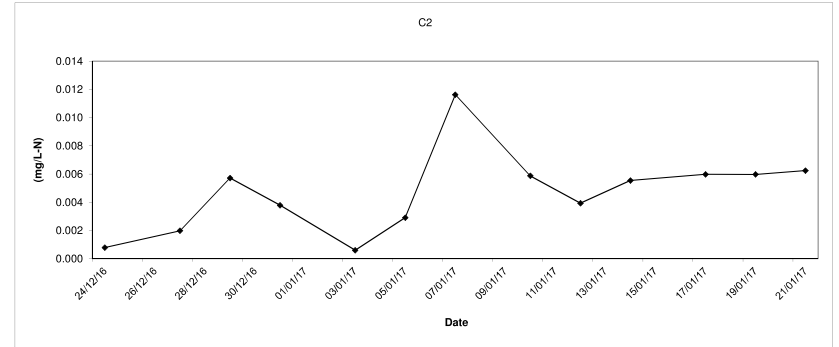
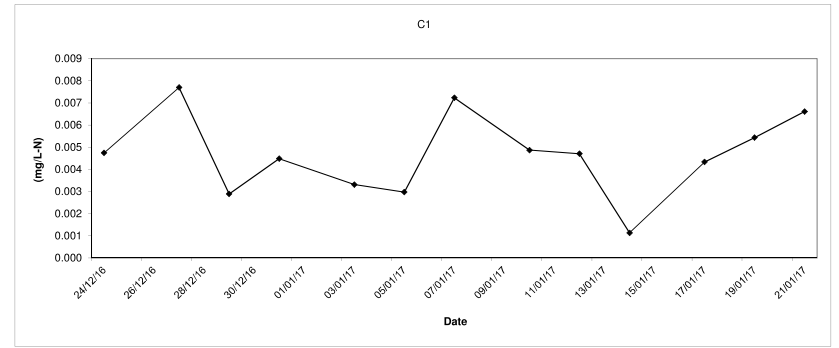
In-situ Ammonia (Depth average) at Mid-Flood Tide



In-situ Ammonia (Depth average) at Mid-Flood Tide

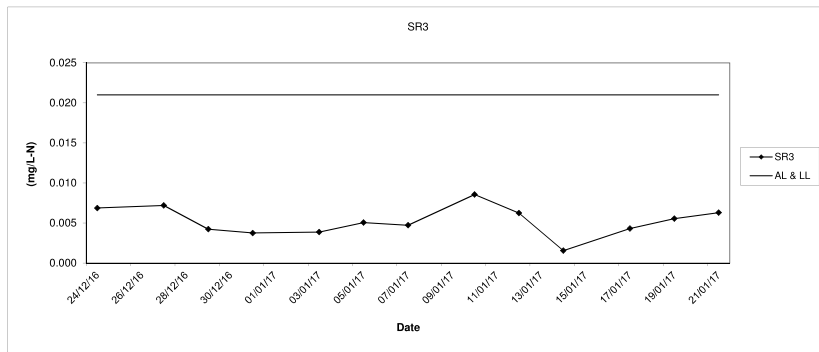
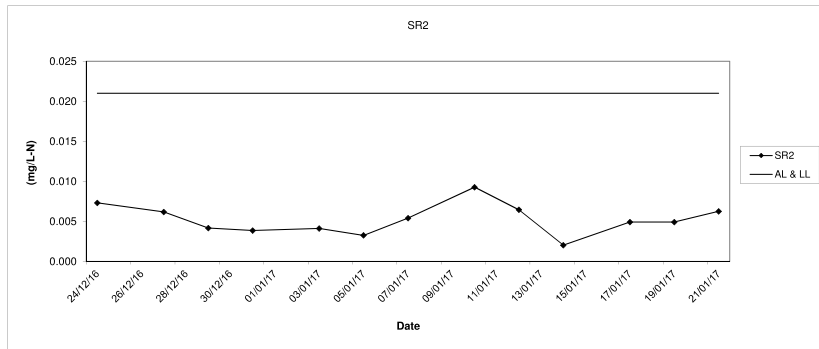


In-situ UIA (Depth average) at Mid-Flood Tide

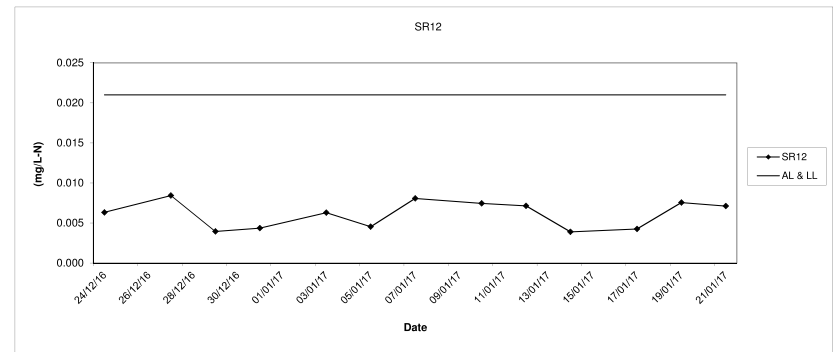
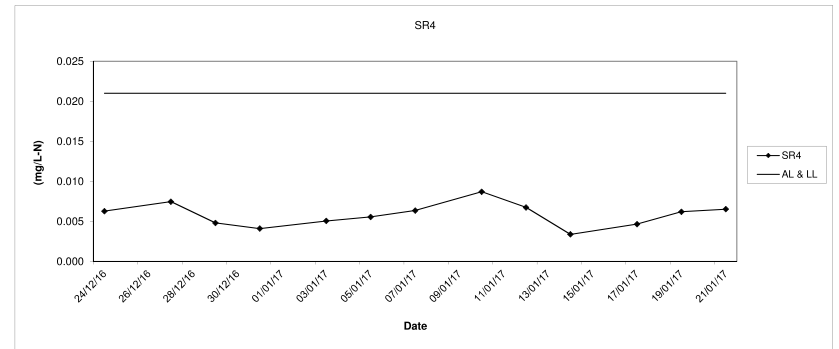




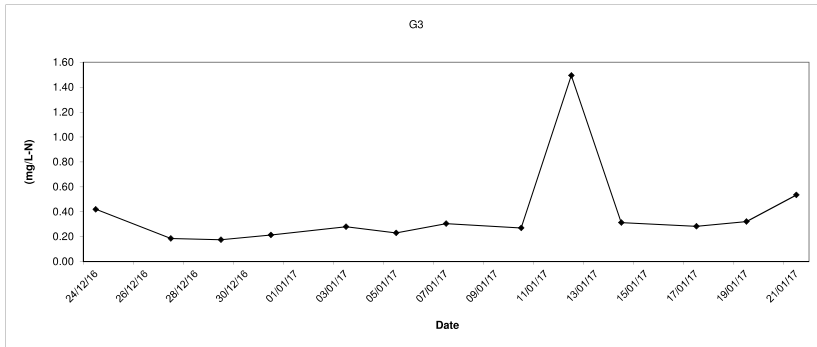
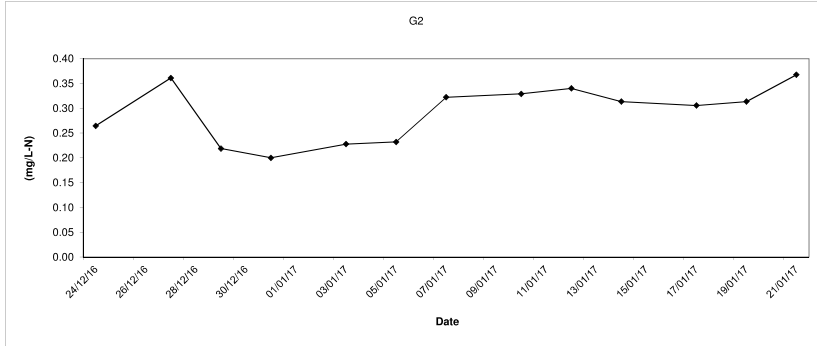
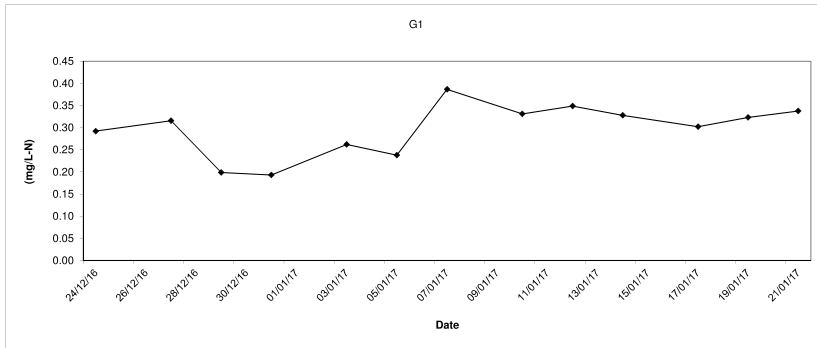
In-situ UIA (Depth average) at Mid-Flood Tide



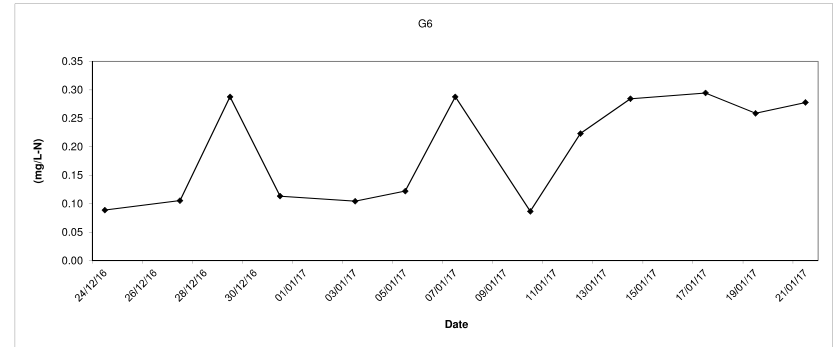
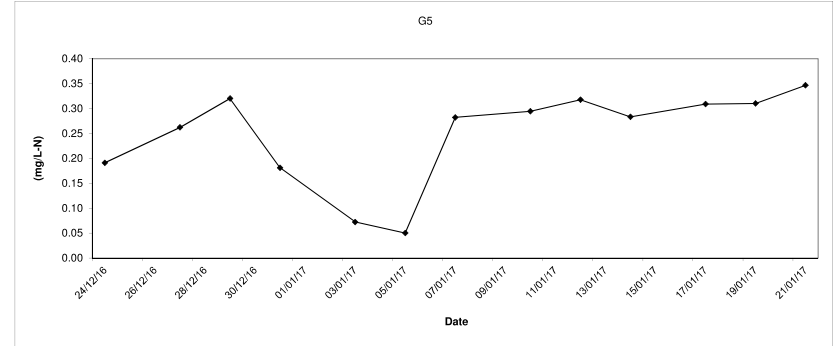
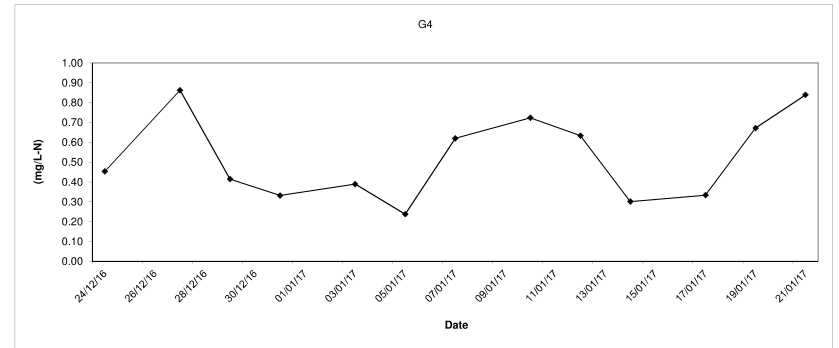
In-situ UIA (Depth average) at Mid-Flood Tide



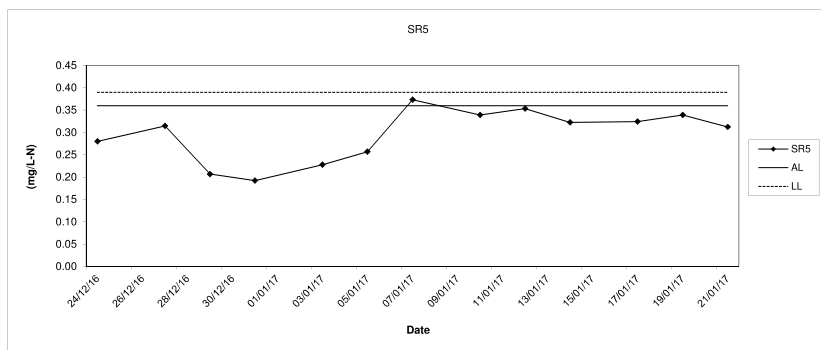
In-situ TIN (Depth average) at Mid-Flood Tide



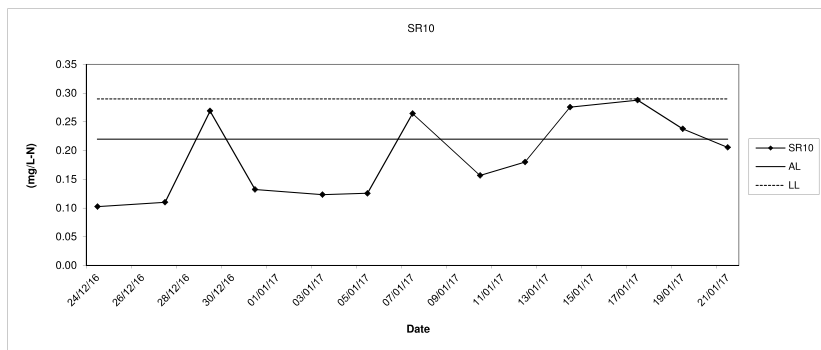
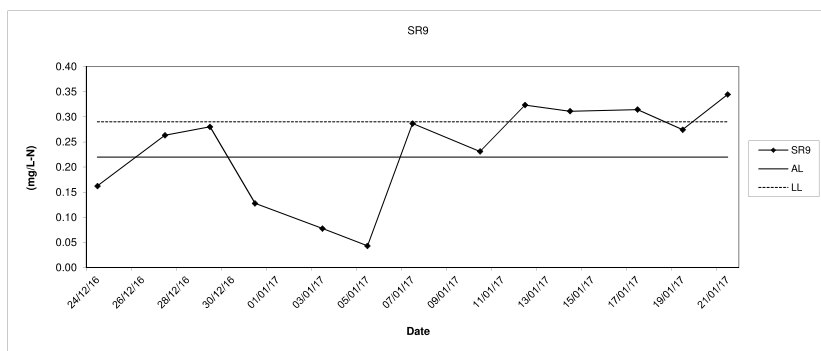
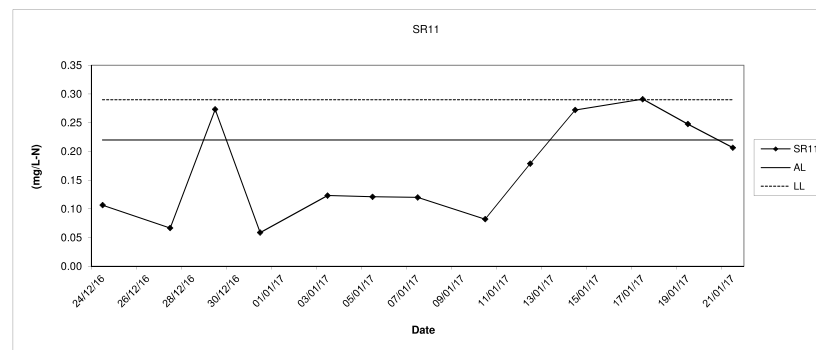
In-situ TIN (Depth average) at Mid-Flood Tide



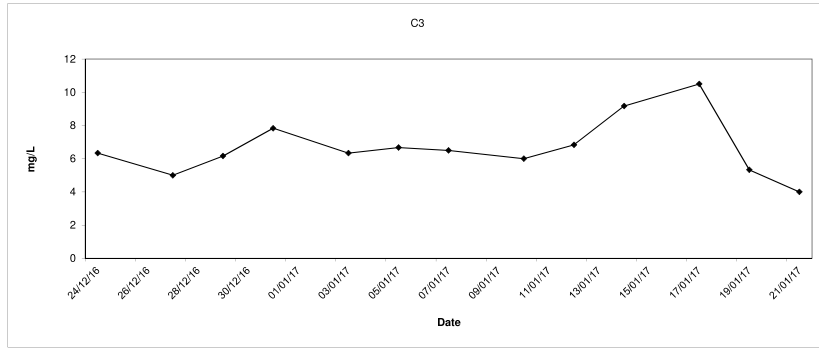
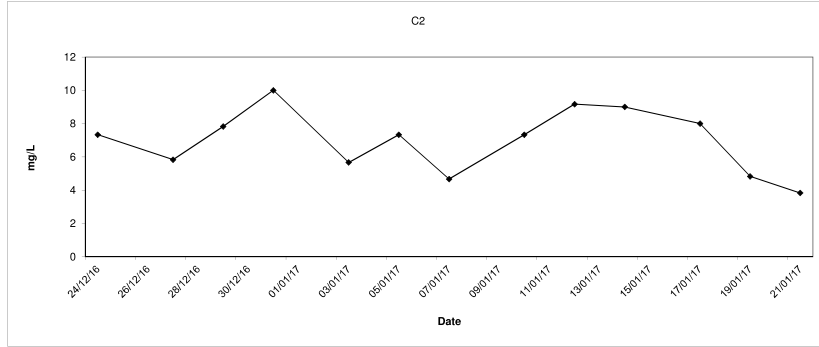
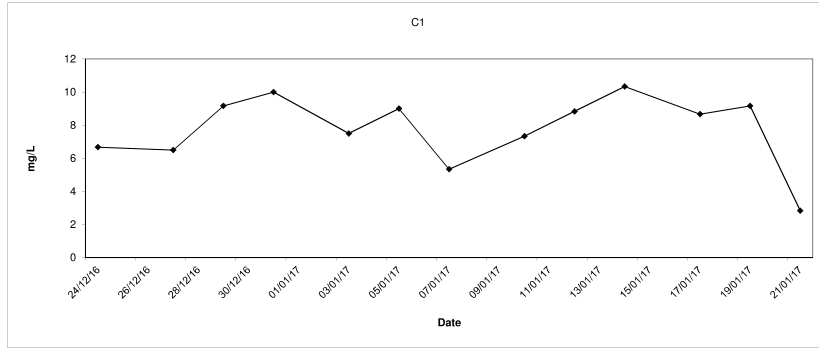
In-situ TIN (Depth average) at Mid-Flood Tide



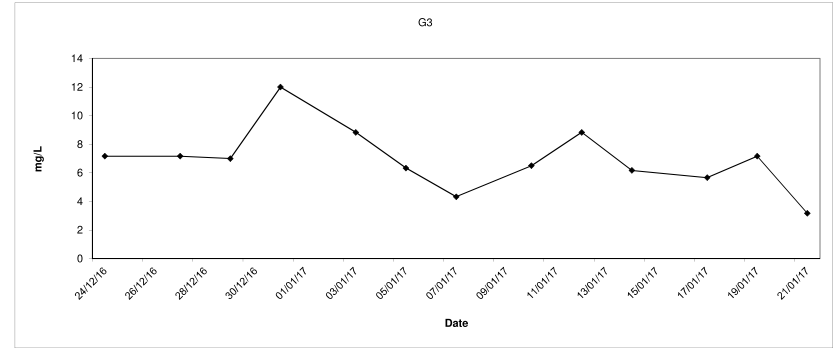
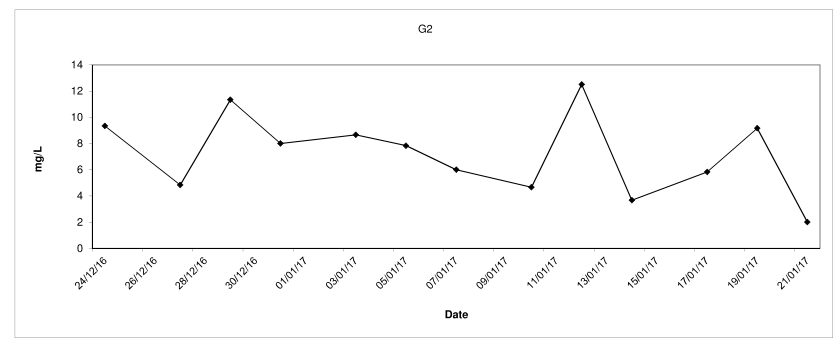
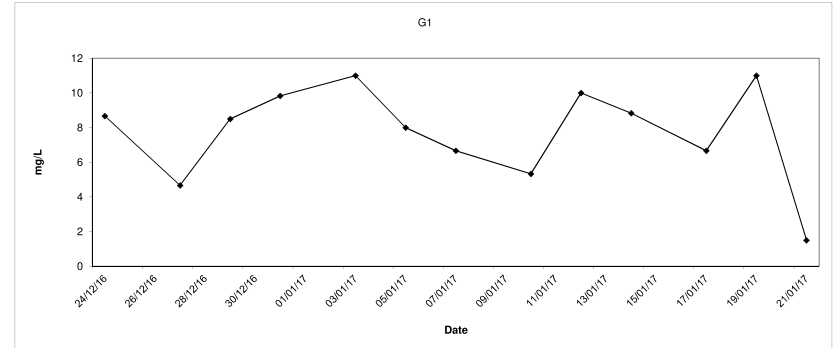
In-situ TIN (Depth average) at Mid-Flood Tide



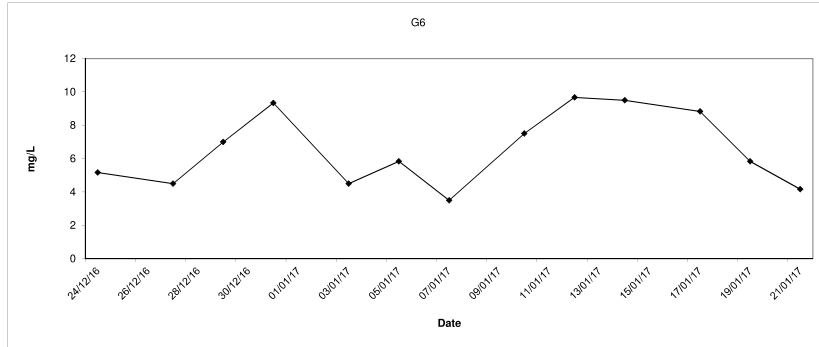
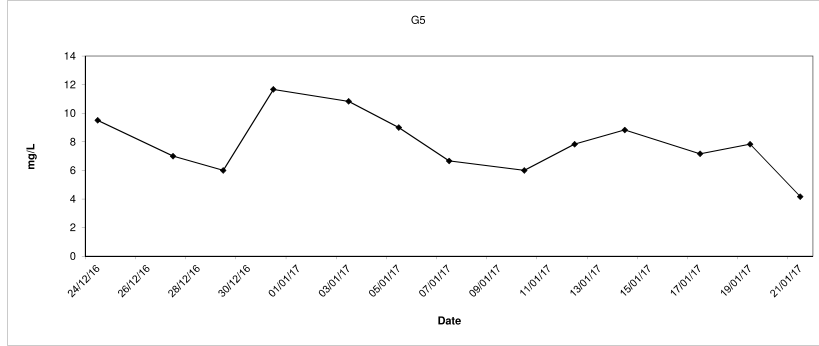
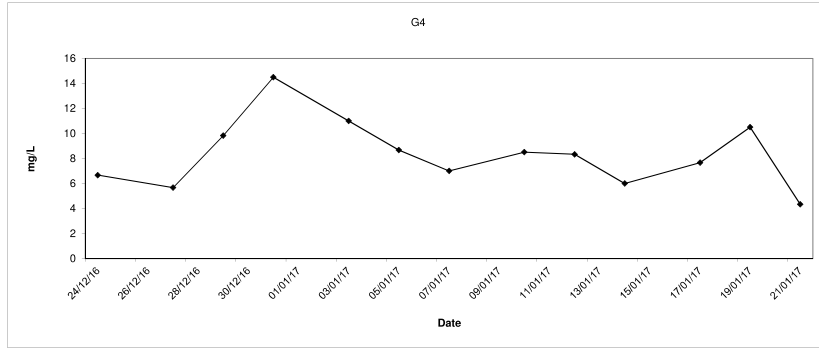
Total Suspended Solids (Depth average) at Mid-Flood Tide



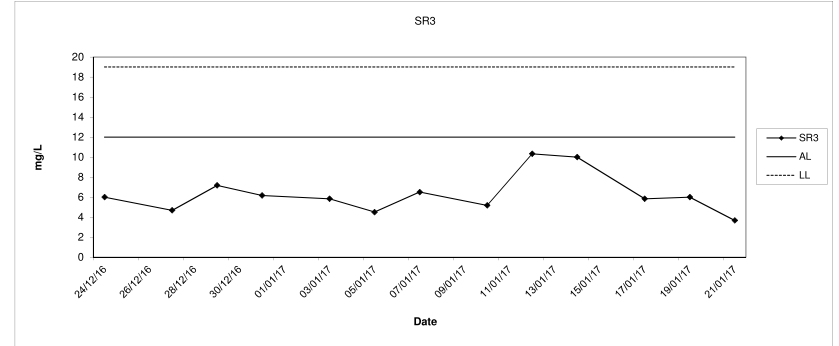
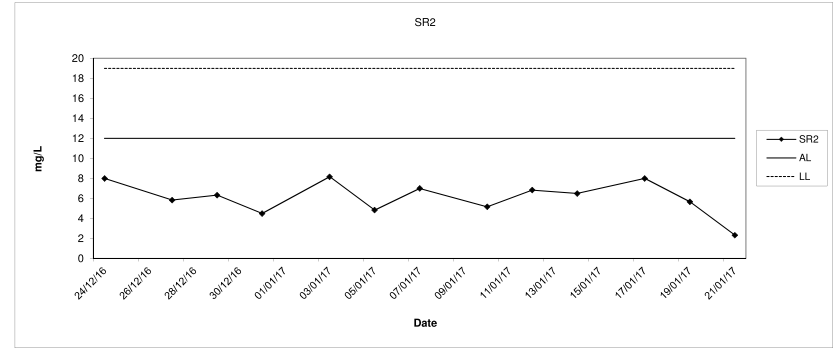
Total Suspended Solids (Depth average) at Mid-Flood Tide



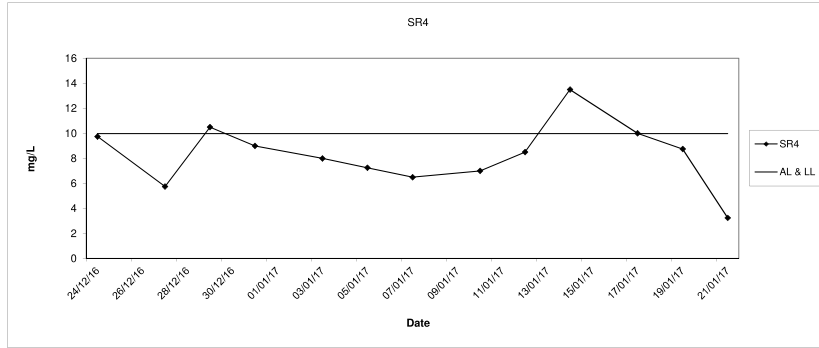
Total Suspended Solids (Depth average) at Mid-Flood Tide



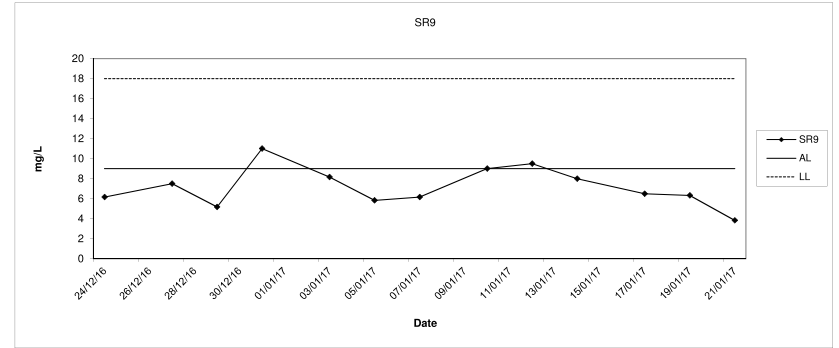
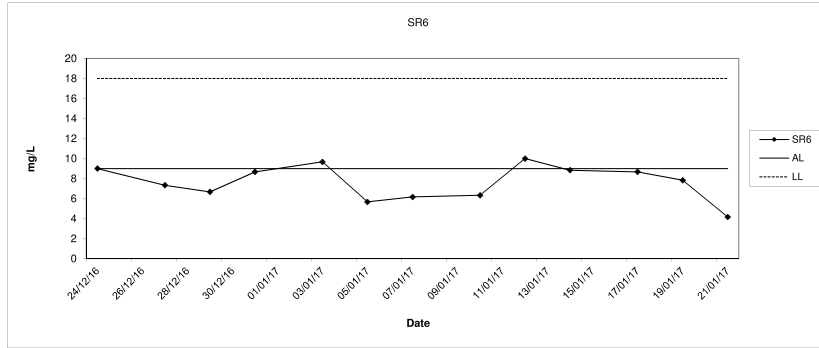
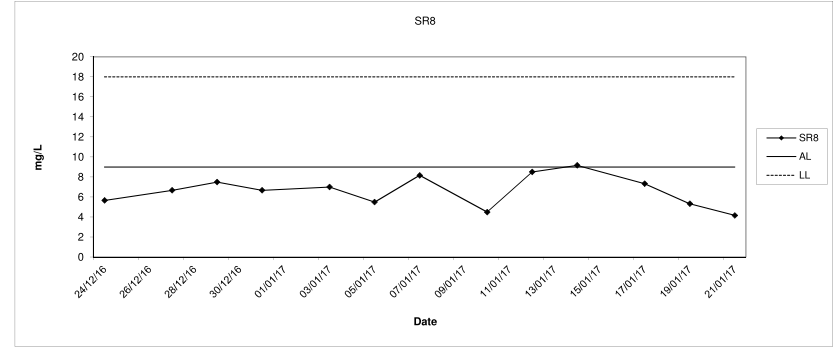
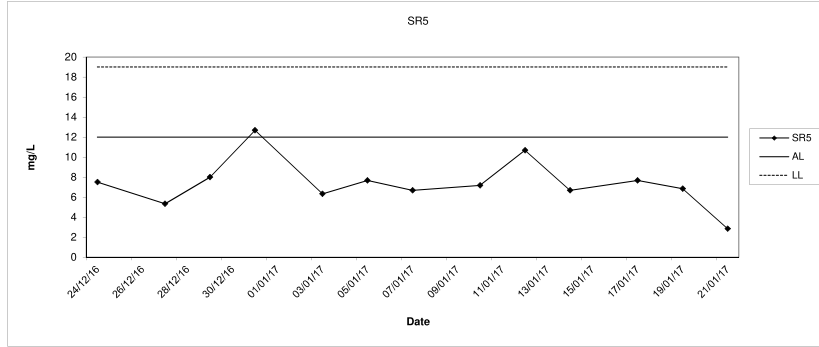
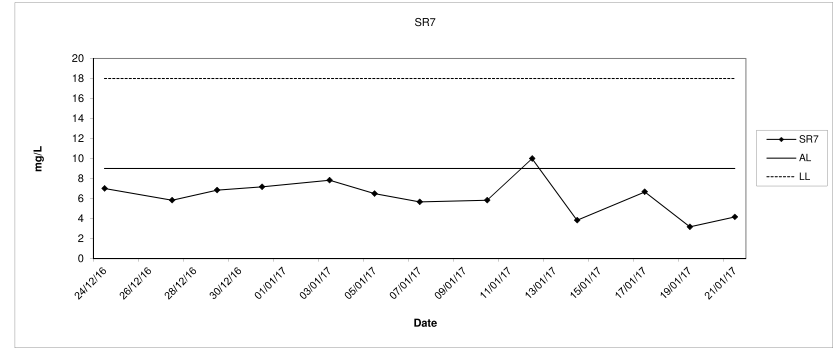
Total Suspended Solids (Depth average) at Mid-Flood Tide



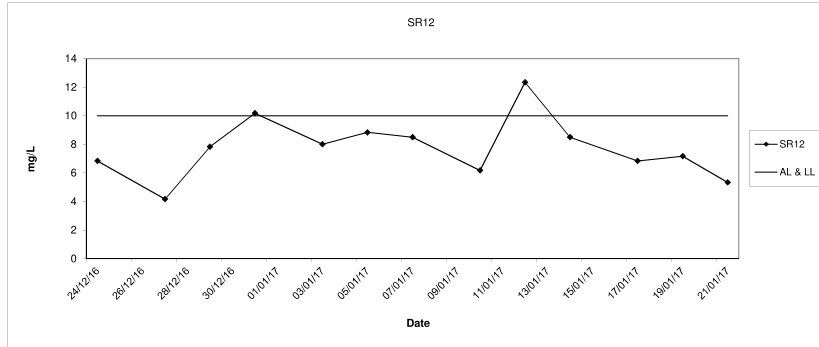
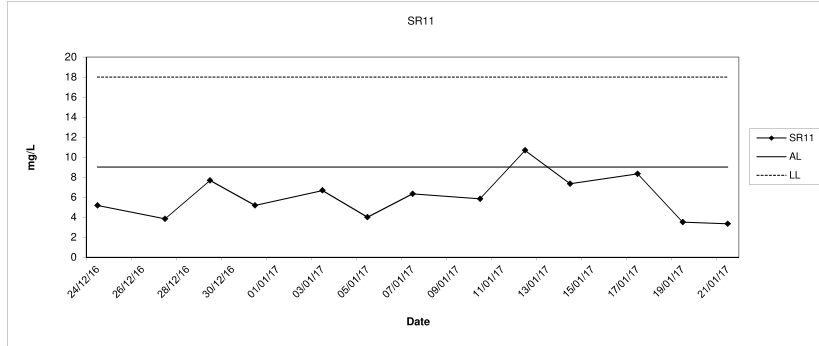
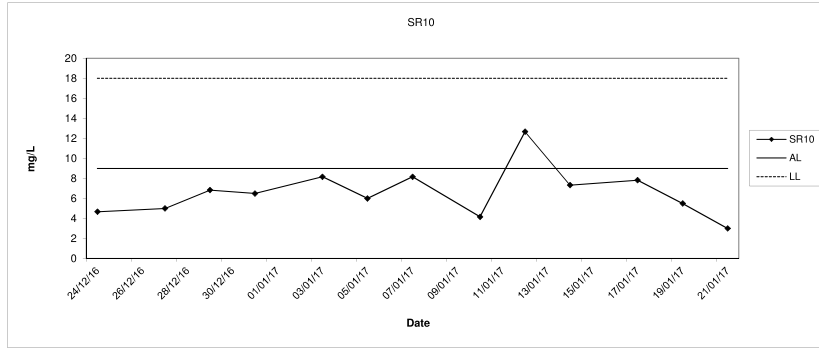
Total Suspended Solids (Depth average) at Mid-Flood Tide



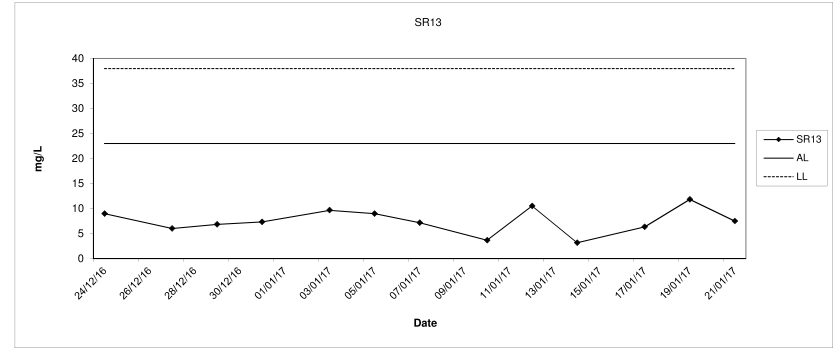
Total Suspended Solids (Depth average) at Mid-Flood Tide



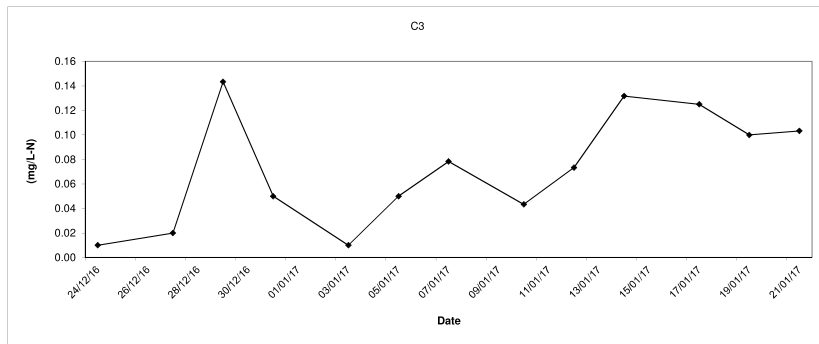
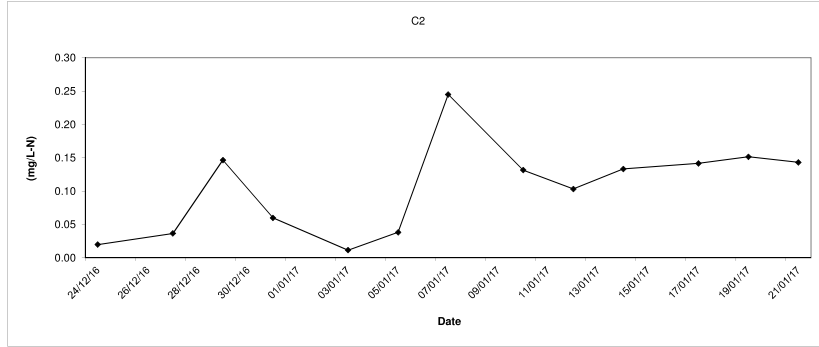
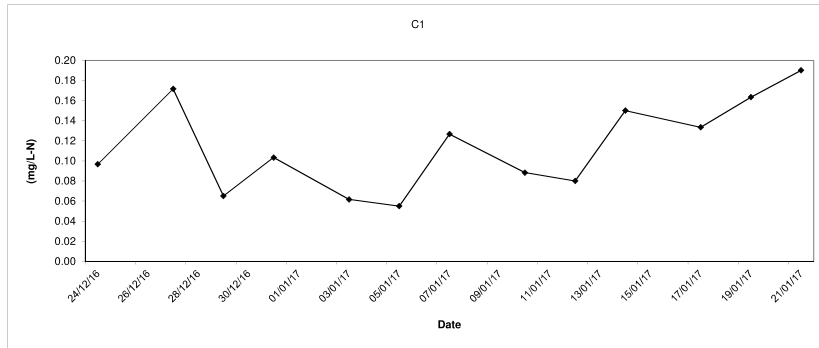
Total Suspended Solids (Depth average) at Mid-Flood Tide



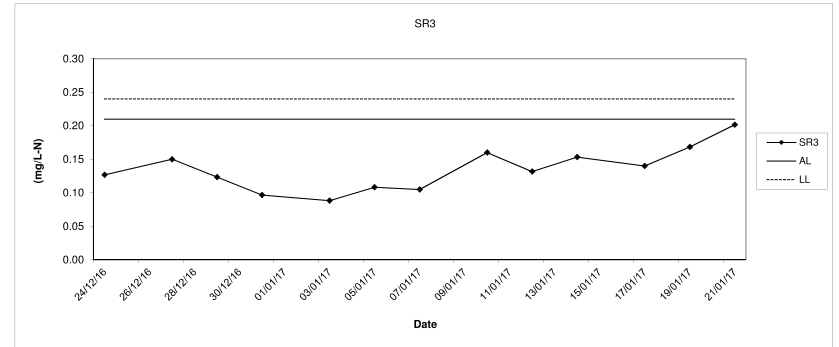
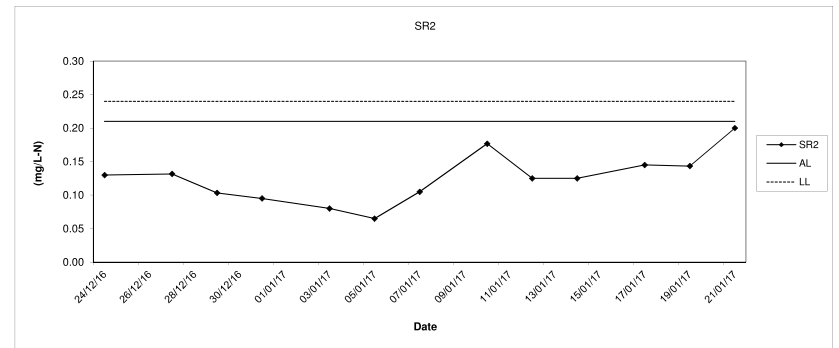
Total Suspended Solids (Depth average) at Mid-Flood Tide



Ammonia Nitrogen (Depth average) at Mid-Flood Tide

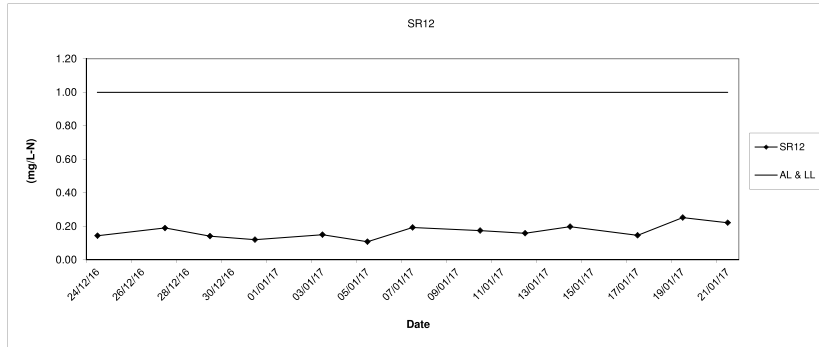
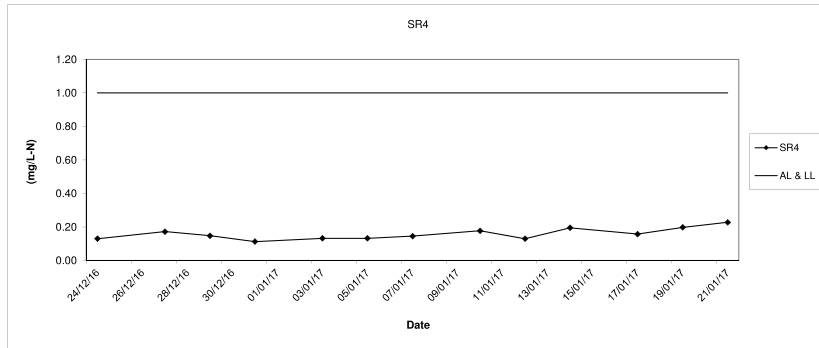


Ammonia Nitrogen (Depth average) at Mid-Flood Tide

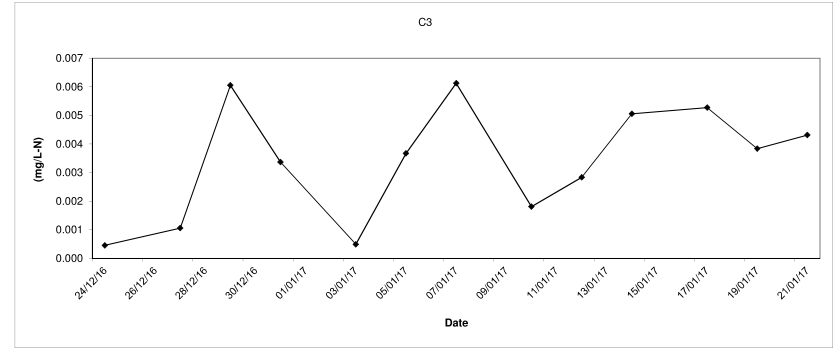
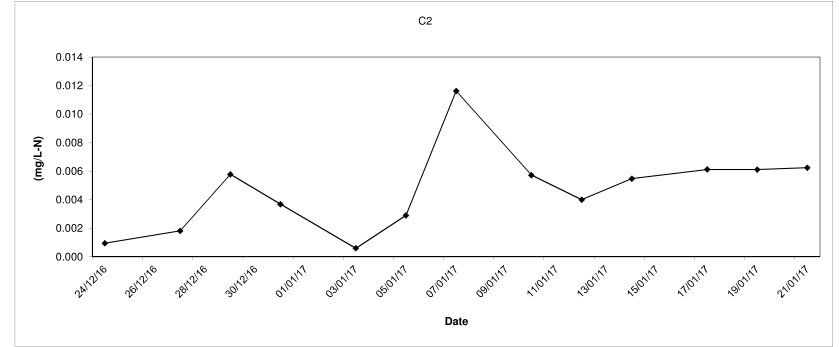
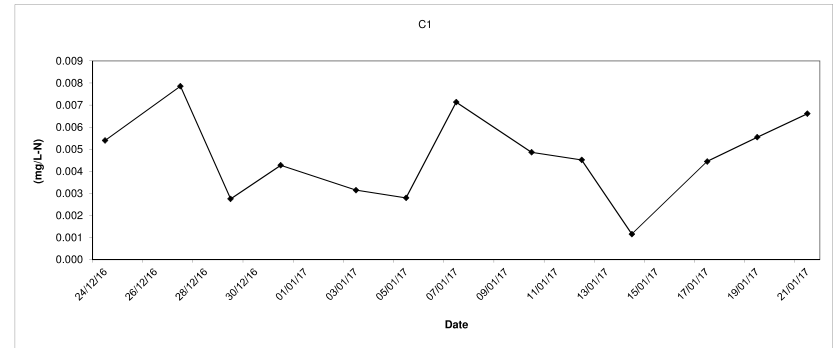




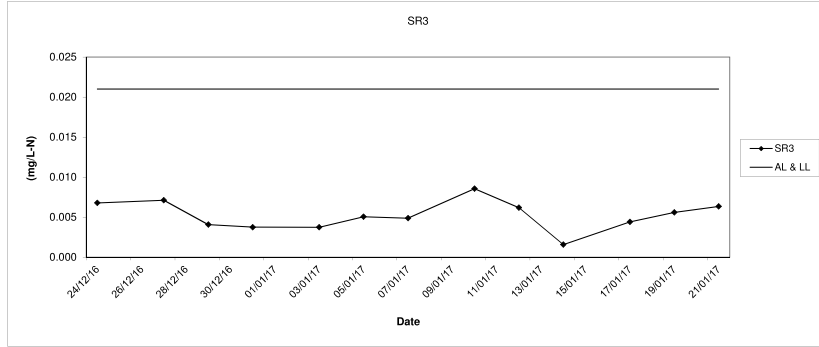
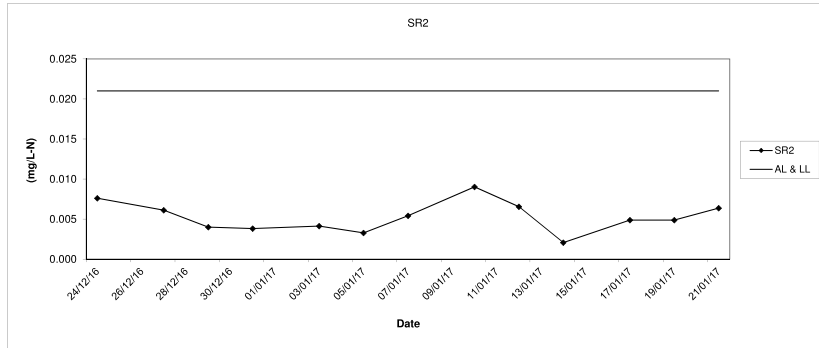
Ammonia Nitrogen (Depth average) at Mid-Flood Tide



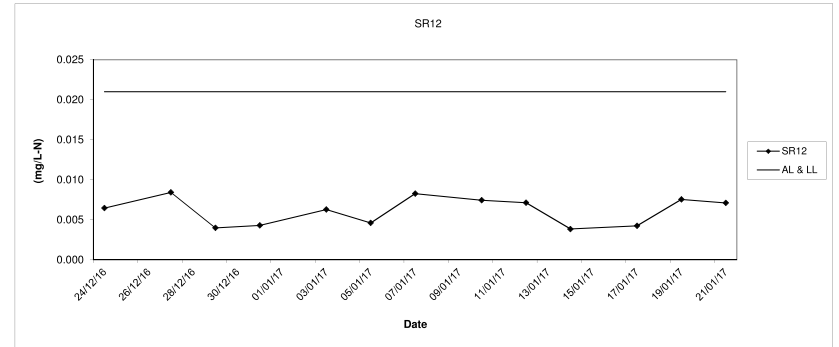
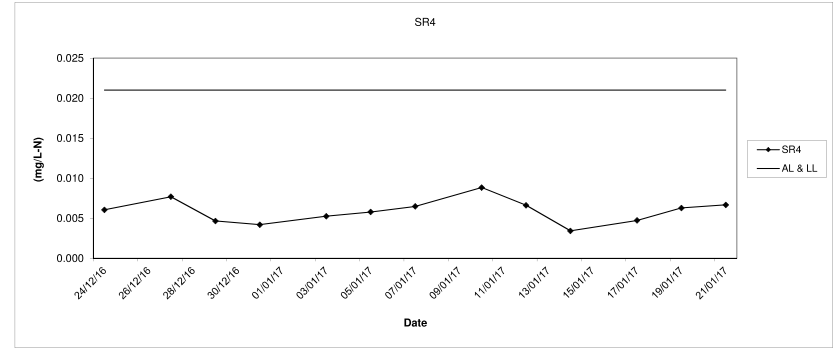
Laboratory Analysis UIA (Depth average) at Mid-Flood Tide



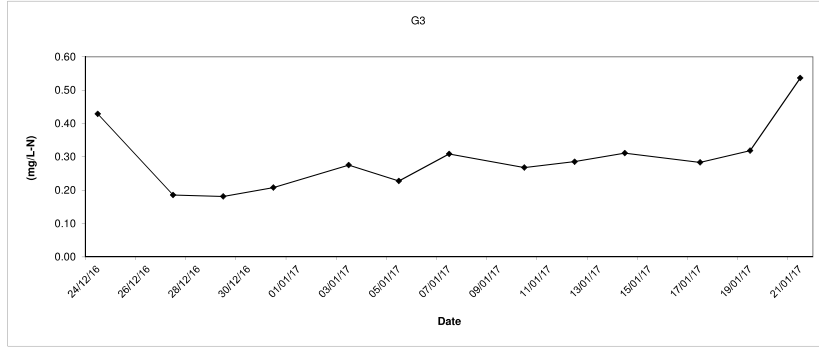
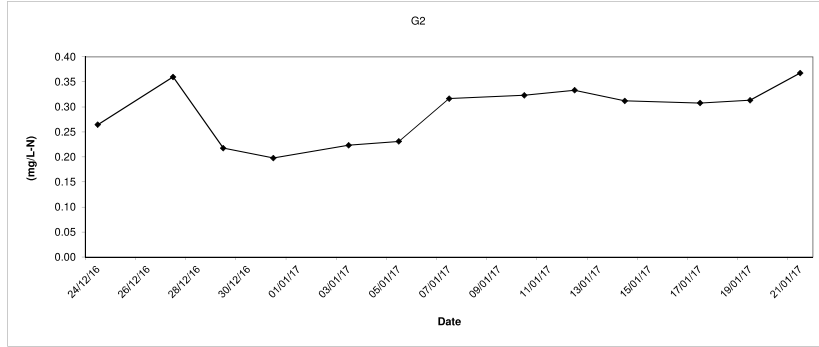
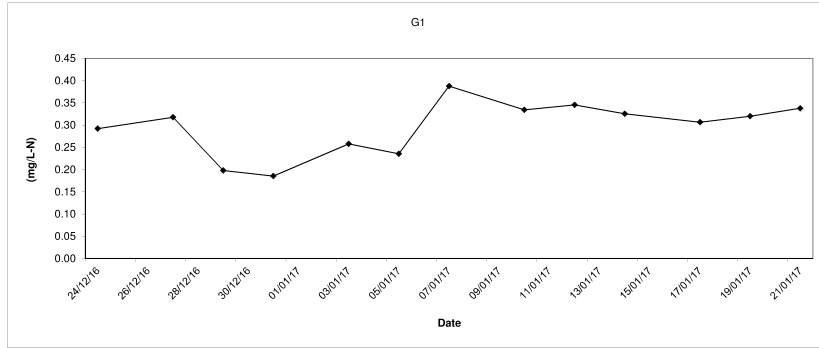
Laboratory Analysis UIA (Depth average) at Mid-Flood Tide



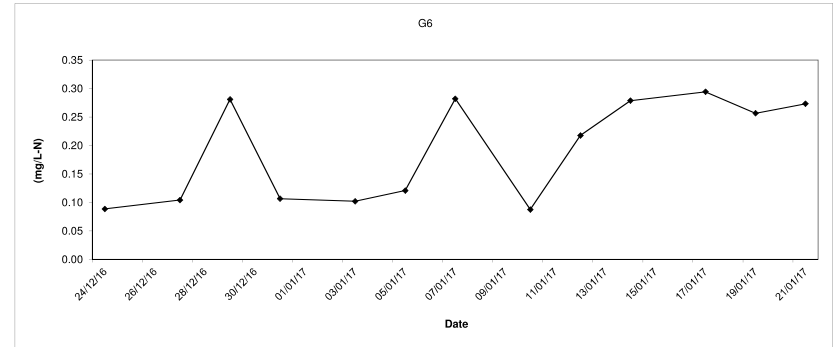
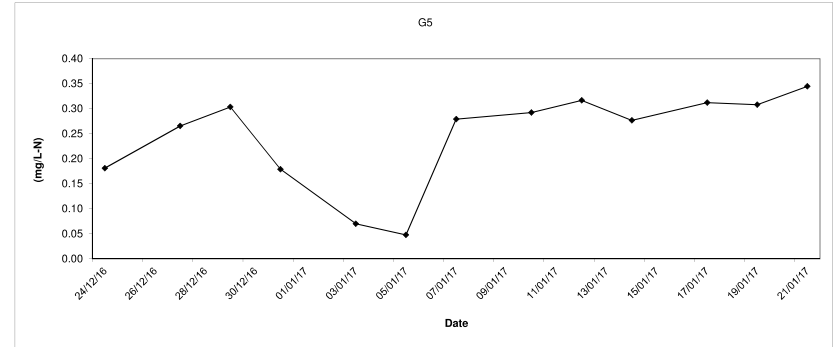
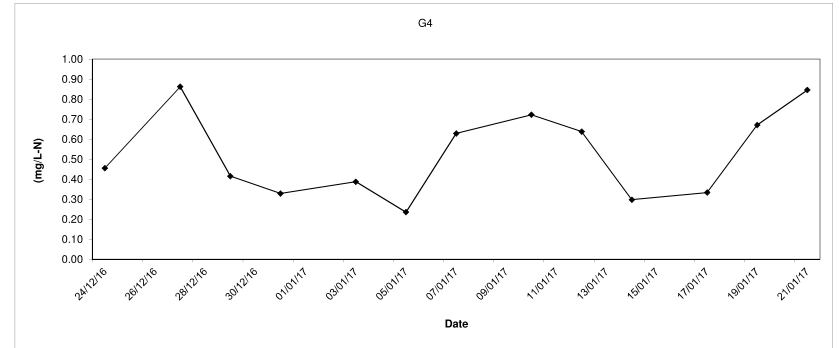
Laboratory Analysis UIA (Depth average) at Mid-Flood Tide



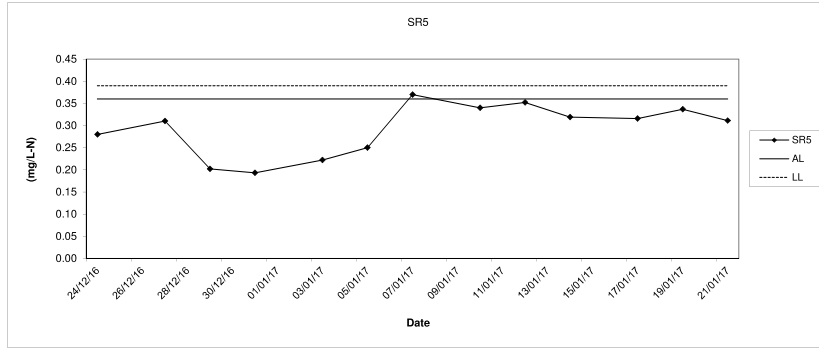
Laboratory Analysis TIN (Depth average) at Mid-Flood Tide



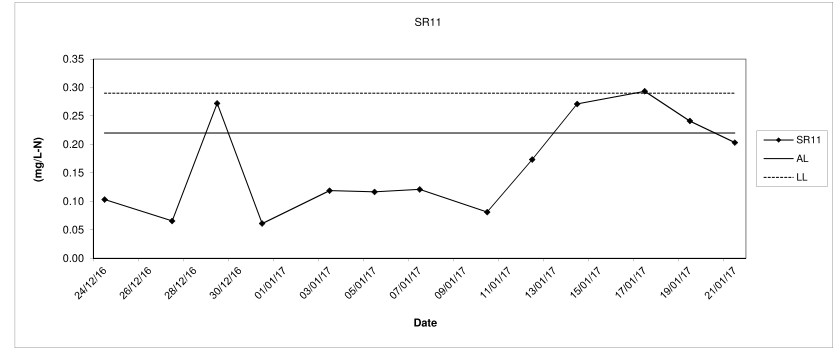
Laboratory Analysis TIN (Depth average) at Mid-Flood Tide



Laboratory Analysis TIN (Depth average) at Mid-Flood Tide



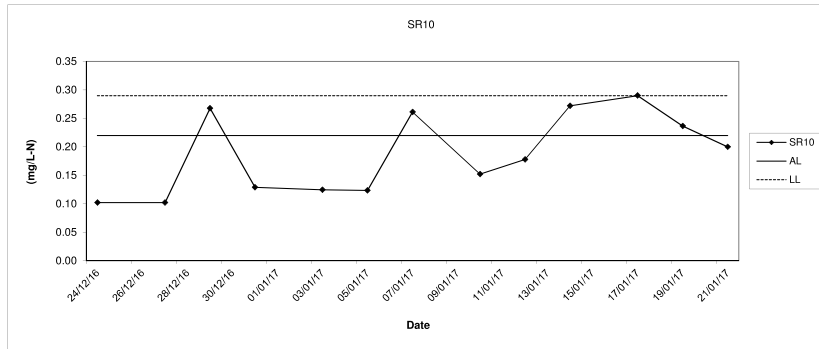
Laboratory Analysis TIN (Depth average) at Mid-Flood Tide



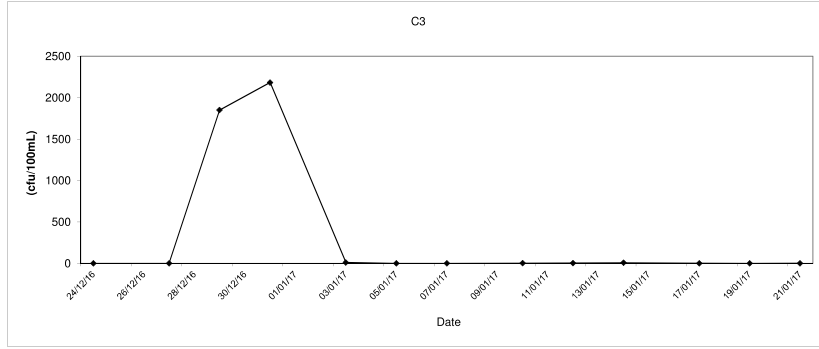
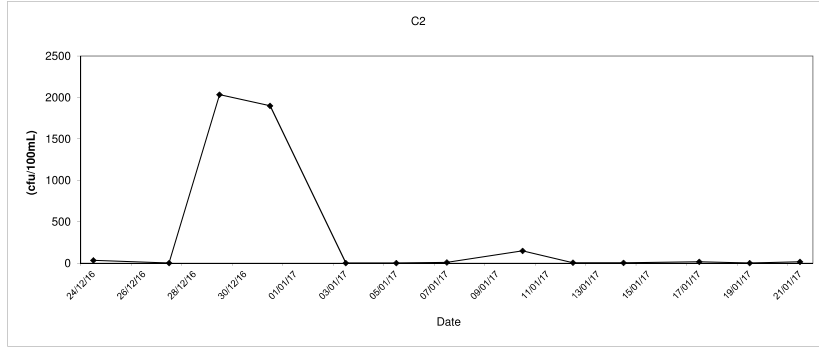
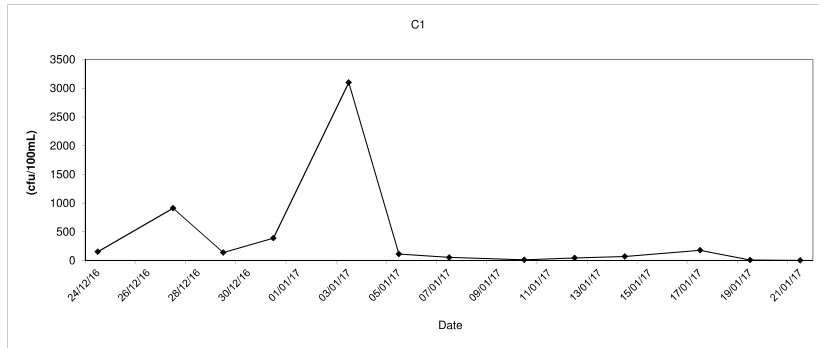
SR9



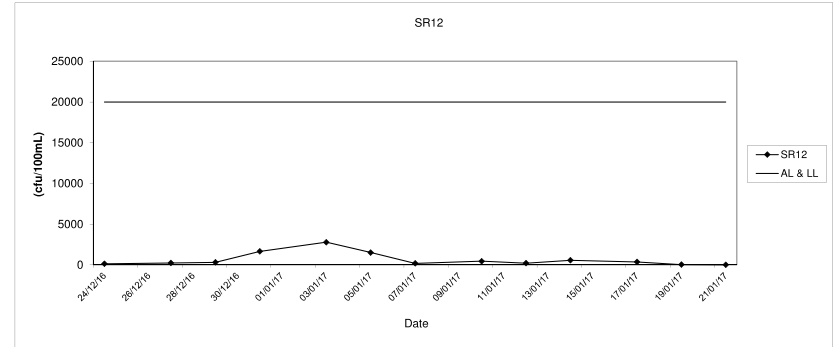
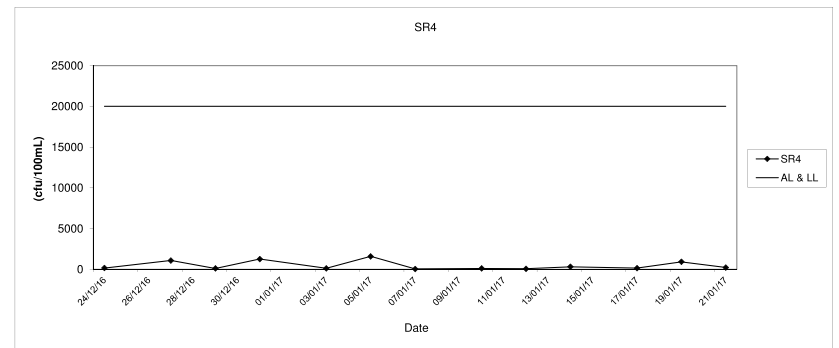
SR10



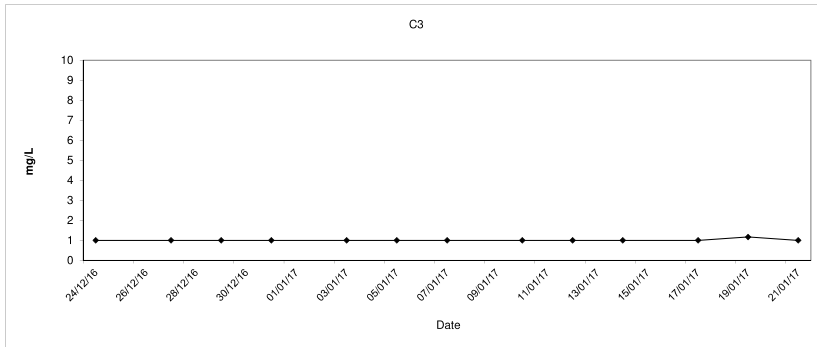
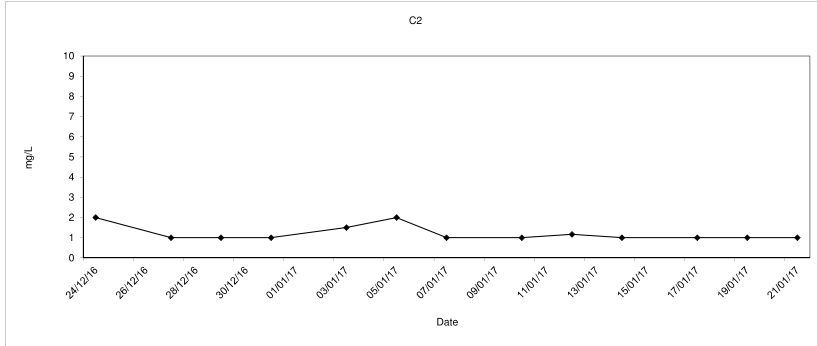
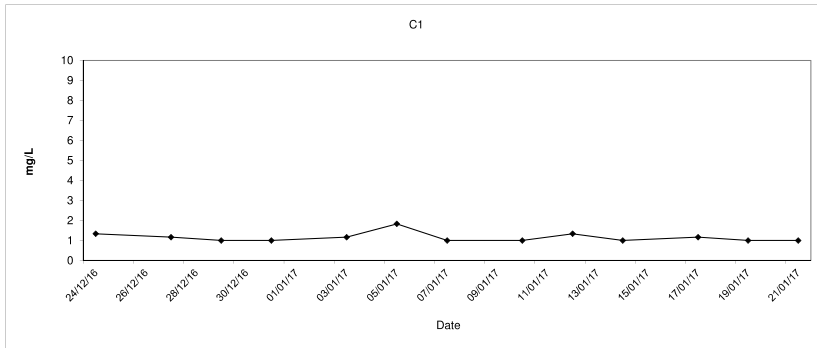
*E. coli* (Depth average) at Mid-Flood Tide



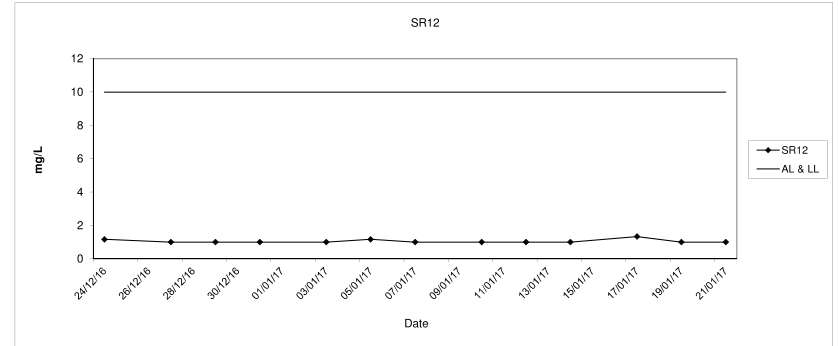
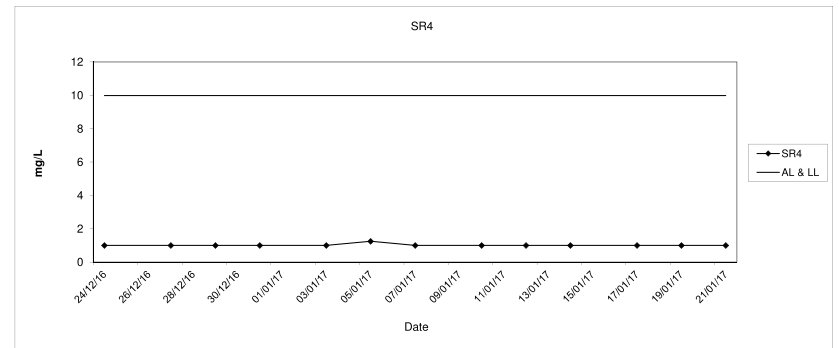
*E. coli* (Depth average) at Mid-Flood Tide



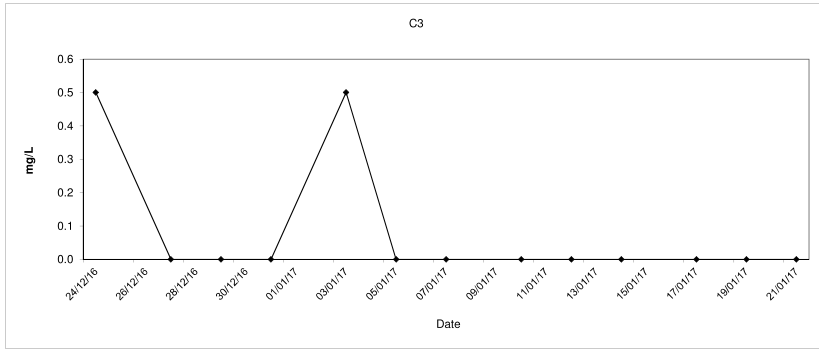
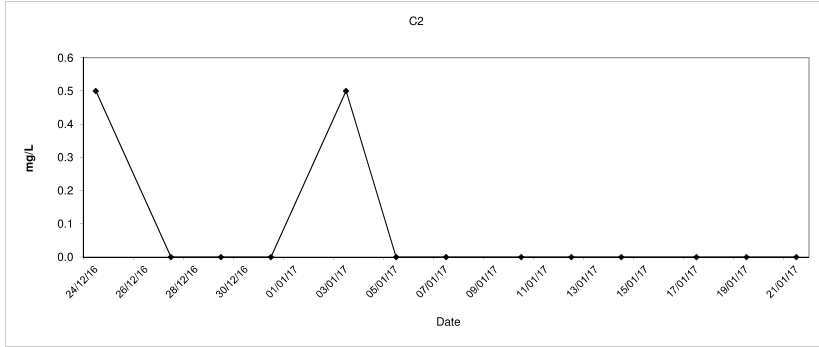
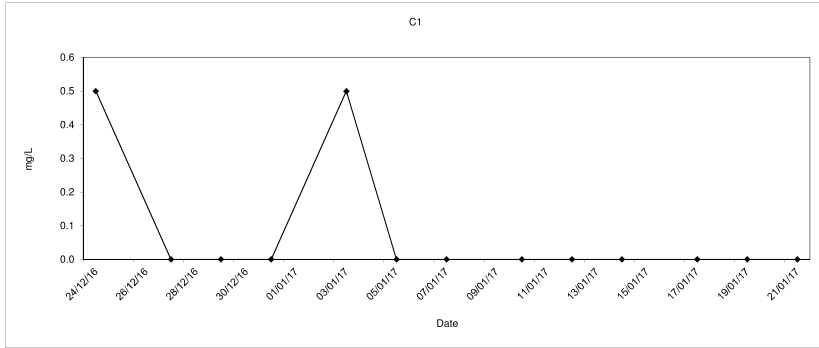
BOD<sub>5</sub> (Depth average) at Mid-Flood Tide



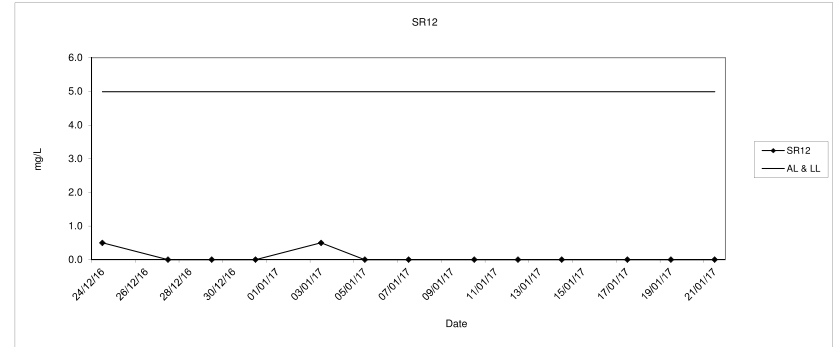
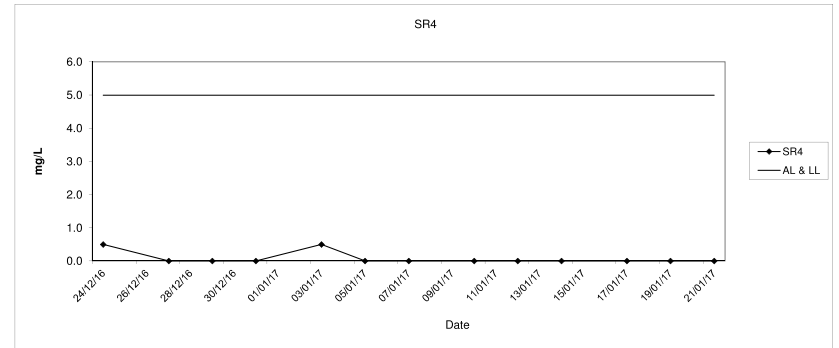
BOD<sub>5</sub> (Depth average) at Mid-Flood Tide



Synthetic Detergent (Depth average) at Mid-Flood Tide



Synthetic Detergent (Depth average) at Mid-Flood Tide



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

Appendix G

Water Quality Monitoring Results and Graphical Presentation – 24-hr Monitoring

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/23/2016 0:17	0.12				SR12	12/23/2016 0:17	0.16			
SR4	12/23/2016 0:37	0.10				SR12	12/23/2016 0:37	0.14			
SR4	12/23/2016 0:57	0.08				SR12	12/23/2016 0:57	0.17			
SR4	12/23/2016 1:17	0.08				SR12	12/23/2016 1:17	0.14			
SR4	12/23/2016 1:37	0.13				SR12	12/23/2016 1:37	0.15			
SR4	12/23/2016 1:57	0.08				SR12	12/23/2016 1:57	0.13			
SR4	12/23/2016 2:17	0.11				SR12	12/23/2016 2:17	0.13			
SR4	12/23/2016 2:37	0.10				SR12	12/23/2016 2:37	0.14			
SR4	12/23/2016 2:57	0.09				SR12	12/23/2016 2:57	0.15			
SR4	12/23/2016 3:17	0.10				SR12	12/23/2016 3:17	0.17			
SR4	12/23/2016 3:37	0.10				SR12	12/23/2016 3:37	0.17			
SR4	12/23/2016 3:57	0.08				SR12	12/23/2016 3:57	0.17			
SR4	12/23/2016 4:17	0.10				SR12	12/23/2016 4:17	0.15			
SR4	12/23/2016 4:37	0.09				SR12	12/23/2016 4:37	0.14			
SR4	12/23/2016 4:57	0.08				SR12	12/23/2016 4:57	0.16			
SR4	12/23/2016 5:17	0.12				SR12	12/23/2016 5:17	0.17			
SR4	12/23/2016 5:37	0.11				SR12	12/23/2016 5:37	0.13			
SR4	12/23/2016 5:57	0.12				SR12	12/23/2016 5:57	0.13			
SR4						SR12					
SR4	12/23/2016 6:37	0.09				SR12	12/23/2016 6:37	0.16			
SR4	12/23/2016 6:57	0.10				SR12	12/23/2016 6:57	0.14			
SR4	12/23/2016 7:17	0.11				SR12	12/23/2016 7:17	0.17			
SR4	12/23/2016 7:37	0.12				SR12	12/23/2016 7:37	0.14			
SR4	12/23/2016 7:57	0.08				SR12	12/23/2016 7:57	0.15			
SR4	12/23/2016 8:17	0.13				SR12	12/23/2016 8:17	0.16			
SR4	12/23/2016 8:37	0.10				SR12	12/23/2016 8:37	0.13			
SR4	12/23/2016 8:57	0.13				SR12	12/23/2016 8:57	0.14			
SR4	12/23/2016 9:17	0.08				SR12	12/23/2016 9:17	0.16			
SR4	12/23/2016 9:37	0.08				SR12	12/23/2016 9:37	0.14			
SR4	12/23/2016 9:57	0.12				SR12	12/23/2016 9:57	0.13			
SR4	12/23/2016 10:17	0.11				SR12	12/23/2016 10:17	0.13			
SR4	12/23/2016 10:37	0.09				SR12	12/23/2016 10:37	0.14			
SR4	12/23/2016 10:57	0.12				SR12	12/23/2016 10:57	0.15			
SR4	12/23/2016 11:17	0.12				SR12	12/23/2016 11:17	0.17			
SR4	12/23/2016 11:37	0.13				SR12	12/23/2016 11:37	0.13			
SR4	12/23/2016 11:57	0.09				SR12	12/23/2016 11:57	0.17			
SR4	12/23/2016 12:17	0.08				SR12	12/23/2016 12:17	0.16			
SR4	12/23/2016 12:37	0.12				SR12	12/23/2016 12:37	0.16			
SR4	12/23/2016 12:57	0.10				SR12	12/23/2016 12:57	0.13			
SR4	12/23/2016 13:17	0.07				SR12	12/23/2016 13:17	0.15			
SR4	12/23/2016 13:37	0.09				SR12	12/23/2016 13:37	0.17			
SR4	12/23/2016 13:57	0.10				SR12	12/23/2016 13:57	0.14			
SR4	12/23/2016 14:17	0.08				SR12	12/23/2016 14:17	0.16			
SR4	12/23/2016 14:37	0.07				SR12	12/23/2016 14:37	0.14			
SR4	12/23/2016 14:57	0.07				SR12	12/23/2016 14:57	0.13			
SR4	12/23/2016 15:17	0.07				SR12	12/23/2016 15:17	0.14			
SR4	12/23/2016 15:37	0.12				SR12	12/23/2016 15:37	0.13			
SR4	12/23/2016 15:57	0.10				SR12	12/23/2016 15:57	0.14			
SR4	12/23/2016 16:17	0.09				SR12	12/23/2016 16:17	0.13			
SR4	12/23/2016 16:37	0.09				SR12	12/23/2016 16:37	0.17			
SR4	12/23/2016 16:57	0.07				SR12	12/23/2016 16:57	0.13			
SR4	12/23/2016 17:17	0.10				SR12	12/23/2016 17:17	0.16			
SR4	12/23/2016 17:37	0.10				SR12	12/23/2016 17:37	0.14			
SR4	12/23/2016 17:57	0.09				SR12	12/23/2016 17:57	0.13			
SR4	12/23/2016 18:17	0.11				SR12	12/23/2016 18:17	0.16			
SR4	12/23/2016 18:37	0.12				SR12	12/23/2016 18:37	0.17			
SR4	12/23/2016 18:57	0.11				SR12	12/23/2016 18:57	0.13			
SR4	12/23/2016 19:17	0.09				SR12	12/23/2016 19:17	0.14			
SR4	12/23/2016 19:37	0.07				SR12	12/23/2016 19:37	0.14			
SR4	12/23/2016 19:57	0.08				SR12	12/23/2016 19:57	0.17			
SR4	12/23/2016 20:17	0.12				SR12	12/23/2016 20:17	0.15			
SR4	12/23/2016 20:37	0.08				SR12	12/23/2016 20:37	0.13			
SR4	12/23/2016 20:57	0.11				SR12	12/23/2016 20:57	0.15			
SR4	12/23/2016 21:17	0.09				SR12	12/23/2016 21:17	0.14			
SR4	12/23/2016 21:37	0.12				SR12	12/23/2016 21:37	0.13			
SR4	12/23/2016 21:57	0.07				SR12	12/23/2016 21:57	0.14			
SR4	12/23/2016 22:17	0.07				SR12	12/23/2016 22:17	0.15			
SR4	12/23/2016 22:37	0.10				SR12	12/23/2016 22:37	0.13			
SR4	12/23/2016 22:57	0.12				SR12	12/23/2016 22:57	0.16			
SR4	12/23/2016 23:17	0.08				SR12	12/23/2016 23:17	0.16			
SR4	12/23/2016 23:37	0.10				SR12	12/23/2016 23:37	0.17			
SR4	12/23/2016 23:57	0.11				SR12	12/23/2016 23:57	0.17			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12. SR13 monitoring station was under maintenance during 14:00-14:25.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/24/2016 0:17	0.08				SR12	12/24/2016 0:17	0.16			
SR4	12/24/2016 0:37	0.09				SR12	12/24/2016 0:37	0.14			
SR4	12/24/2016 0:57	0.12				SR12	12/24/2016 0:57	0.17			
SR4	12/24/2016 1:17	0.09				SR12	12/24/2016 1:17	0.13			
SR4	12/24/2016 1:37	0.07				SR12	12/24/2016 1:37	0.15			
SR4	12/24/2016 1:57	0.08				SR12	12/24/2016 1:57	0.16			
SR4	12/24/2016 2:17	0.10				SR12	12/24/2016 2:17	0.15			
SR4	12/24/2016 2:37	0.11				SR12	12/24/2016 2:37	0.17			
SR4	12/24/2016 2:57	0.09				SR12	12/24/2016 2:57	0.16			
SR4	12/24/2016 3:17	0.07				SR12	12/24/2016 3:17	0.13			
SR4	12/24/2016 3:37	0.12				SR12	12/24/2016 3:37	0.15			
SR4	12/24/2016 3:57	0.09				SR12	12/24/2016 3:57	0.14			
SR4	12/24/2016 4:17	0.09				SR12	12/24/2016 4:17	0.15			
SR4	12/24/2016 4:37	0.11				SR12	12/24/2016 4:37	0.14			
SR4	12/24/2016 4:57	0.10				SR12	12/24/2016 4:57	0.15			
SR4	12/24/2016 5:17	0.07				SR12	12/24/2016 5:17	0.14			
SR4	12/24/2016 5:37	0.10				SR12	12/24/2016 5:37	0.15			
SR4	12/24/2016 5:57	0.10				SR12	12/24/2016 5:57	0.16			
SR4						SR12					
SR4	12/24/2016 6:37	0.07				SR12	12/24/2016 6:37	0.13			
SR4	12/24/2016 6:57	0.08				SR12	12/24/2016 6:57	0.16			
SR4	12/24/2016 7:17	0.12				SR12	12/24/2016 7:17	0.17			
SR4	12/24/2016 7:37	0.07				SR12	12/24/2016 7:37	0.15			
SR4	12/24/2016 7:57	0.11				SR12	12/24/2016 7:57	0.15			
SR4	12/24/2016 8:17	0.08				SR12	12/24/2016 8:17	0.15			
SR4	12/24/2016 8:37	0.09				SR12	12/24/2016 8:37	0.14			
SR4	12/24/2016 8:57	0.07				SR12	12/24/2016 8:57	0.15			
SR4	12/24/2016 9:17	0.07				SR12	12/24/2016 9:17	0.17			
SR4	12/24/2016 9:37	0.08				SR12	12/24/2016 9:37	0.15			
SR4	12/24/2016 9:57	0.10				SR12	12/24/2016 9:57	0.16			
SR4	12/24/2016 10:17	0.09				SR12	12/24/2016 10:17	0.17			
SR4	12/24/2016 10:37	0.12				SR12	12/24/2016 10:37	0.15			
SR4	12/24/2016 10:57	0.10				SR12	12/24/2016 10:57	0.14			
SR4	12/24/2016 11:17	0.10				SR12	12/24/2016 11:17	0.16			
SR4	12/24/2016 11:37	0.10				SR12	12/24/2016 11:37	0.16			
SR4	12/24/2016 11:57	0.10				SR12	12/24/2016 11:57	0.14			
SR4	12/24/2016 12:17	0.09				SR12	12/24/2016 12:17	0.14			
SR4	12/24/2016 12:37	0.08				SR12	12/24/2016 12:37	0.16			
SR4	12/24/2016 12:57	0.09				SR12	12/24/2016 12:57	0.17			
SR4	12/24/2016 13:17	0.09				SR12	12/24/2016 13:17	0.15			
SR4	12/24/2016 13:37	0.11				SR12	12/24/2016 13:37	0.13			
SR4	12/24/2016 13:57	0.08				SR12	12/24/2016 13:57	0.17			
SR4	12/24/2016 14:17	0.09				SR12	12/24/2016 14:17	0.14			
SR4	12/24/2016 14:37	0.08				SR12	12/24/2016 14:37	0.15			
SR4	12/24/2016 14:57	0.12				SR12	12/24/2016 14:57	0.15			
SR4	12/24/2016 15:17	0.12				SR12	12/24/2016 15:17	0.15			
SR4	12/24/2016 15:37	0.11				SR12	12/24/2016 15:37	0.18			
SR4	12/24/2016 15:57	0.11				SR12	12/24/2016 15:57	0.17			
SR4	12/24/2016 16:17	0.09				SR12	12/24/2016 16:17	0.18			
SR4	12/24/2016 16:37	0.11				SR12	12/24/2016 16:37	0.18			
SR4	12/24/2016 16:57	0.08				SR12	12/24/2016 16:57	0.18			
SR4	12/24/2016 17:17	0.10				SR12	12/24/2016 17:17	0.17			
SR4	12/24/2016 17:37	0.12				SR12	12/24/2016 17:37	0.17			
SR4	12/24/2016 17:57	0.08				SR12	12/24/2016 17:57	0.18			
SR4	12/24/2016 18:17	0.09				SR12	12/24/2016 18:17	0.18			
SR4	12/24/2016 18:37	0.10				SR12	12/24/2016 18:37	0.17			
SR4	12/24/2016 18:57	0.12				SR12	12/24/2016 18:57	0.15			
SR4	12/24/2016 19:17	0.12				SR12	12/24/2016 19:17	0.15			
SR4	12/24/2016 19:37	0.08				SR12	12/24/2016 19:37	0.18			
SR4	12/24/2016 19:57	0.08				SR12	12/24/2016 19:57	0.17			
SR4	12/24/2016 20:17	0.11				SR12	12/24/2016 20:17	0.16			
SR4	12/24/2016 20:37	0.08				SR12	12/24/2016 20:37	0.16			
SR4	12/24/2016 20:57	0.11				SR12	12/24/2016 20:57	0.17			
SR4	12/24/2016 21:17	0.08				SR12	12/24/2016 21:17	0.17			
SR4	12/24/2016 21:37	0.09				SR12	12/24/2016 21:37	0.16			
SR4	12/24/2016 21:57	0.11				SR12	12/24/2016 21:57	0.15			
SR4	12/24/2016 22:17	0.11				SR12	12/24/2016 22:17	0.15			
SR4	12/24/2016 22:37	0.07				SR12	12/24/2016 22:37	0.16			
SR4	12/24/2016 22:57	0.07				SR12	12/24/2016 22:57	0.17			
SR4	12/24/2016 23:17	0.10				SR12	12/24/2016 23:17	0.17			
SR4	12/24/2016 23:37	0.12				SR12	12/24/2016 23:37	0.15			
SR4	12/24/2016 23:57	0.08				SR12	12/24/2016 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/25/2016 0:17	0.12				SR12	12/25/2016 0:17	0.15			
SR4	12/25/2016 0:37	0.10				SR12	12/25/2016 0:37	0.16			
SR4	12/25/2016 0:57	0.11				SR12	12/25/2016 0:57	0.16			
SR4	12/25/2016 1:17	0.08				SR12	12/25/2016 1:17	0.15			
SR4	12/25/2016 1:37	0.07				SR12	12/25/2016 1:37	0.16			
SR4	12/25/2016 1:57	0.08				SR12	12/25/2016 1:57	0.16			
SR4	12/25/2016 2:17	0.11				SR12	12/25/2016 2:17	0.18			
SR4	12/25/2016 2:37	0.12				SR12	12/25/2016 2:37	0.15			
SR4	12/25/2016 2:57	0.07				SR12	12/25/2016 2:57	0.18			
SR4	12/25/2016 3:17	0.07				SR12	12/25/2016 3:17	0.18			
SR4	12/25/2016 3:37	0.10				SR12	12/25/2016 3:37	0.18			
SR4	12/25/2016 3:57	0.11				SR12	12/25/2016 3:57	0.16			
SR4	12/25/2016 4:17	0.12				SR12	12/25/2016 4:17	0.17			
SR4	12/25/2016 4:37	0.10				SR12	12/25/2016 4:37	0.19			
SR4	12/25/2016 4:57	0.10				SR12	12/25/2016 4:57	0.19			
SR4	12/25/2016 5:17	0.10				SR12	12/25/2016 5:17	0.19			
SR4	12/25/2016 5:37	0.12				SR12	12/25/2016 5:37	0.17			
SR4	12/25/2016 5:57	0.08				SR12	12/25/2016 5:57	0.16			
SR4						SR12					
SR4	12/25/2016 6:37	0.12				SR12	12/25/2016 6:37	0.17			
SR4	12/25/2016 6:57	0.07				SR12	12/25/2016 6:57	0.16			
SR4	12/25/2016 7:17	0.09				SR12	12/25/2016 7:17	0.18			
SR4	12/25/2016 7:37	0.10				SR12	12/25/2016 7:37	0.19			
SR4	12/25/2016 7:57	0.10				SR12	12/25/2016 7:57	0.16			
SR4	12/25/2016 8:17	0.11				SR12	12/25/2016 8:17	0.16			
SR4	12/25/2016 8:37	0.12				SR12	12/25/2016 8:37	0.17			
SR4	12/25/2016 8:57	0.09				SR12	12/25/2016 8:57	0.17			
SR4	12/25/2016 9:17	0.10				SR12	12/25/2016 9:17	0.16			
SR4	12/25/2016 9:37	0.08				SR12	12/25/2016 9:37	0.16			
SR4	12/25/2016 9:57	0.08				SR12	12/25/2016 9:57	0.18			
SR4	12/25/2016 10:17	0.10				SR12	12/25/2016 10:17	0.18			
SR4	12/25/2016 10:37	0.08				SR12	12/25/2016 10:37	0.16			
SR4	12/25/2016 10:57	0.09				SR12	12/25/2016 10:57	0.19			
SR4	12/25/2016 11:17	0.07				SR12	12/25/2016 11:17	0.17			
SR4	12/25/2016 11:37	0.10				SR12	12/25/2016 11:37	0.17			
SR4	12/25/2016 11:57	0.10				SR12	12/25/2016 11:57	0.18			
SR4	12/25/2016 12:17	0.09				SR12	12/25/2016 12:17	0.16			
SR4	12/25/2016 12:37	0.07				SR12	12/25/2016 12:37	0.19			
SR4	12/25/2016 12:57	0.08				SR12	12/25/2016 12:57	0.19			
SR4	12/25/2016 13:17	0.10				SR12	12/25/2016 13:17	0.16			
SR4	12/25/2016 13:37	0.12				SR12	12/25/2016 13:37	0.16			
SR4	12/25/2016 13:57	0.08				SR12	12/25/2016 13:57	0.16			
SR4	12/25/2016 14:17	0.11				SR12	12/25/2016 14:17	0.18			
SR4	12/25/2016 14:37	0.12				SR12	12/25/2016 14:37	0.19			
SR4	12/25/2016 14:57	0.10				SR12	12/25/2016 14:57	0.19			
SR4	12/25/2016 15:17	0.07				SR12	12/25/2016 15:17	0.18			
SR4	12/25/2016 15:37	0.08				SR12	12/25/2016 15:37	0.19			
SR4	12/25/2016 15:57	0.07				SR12	12/25/2016 15:57	0.16			
SR4	12/25/2016 16:17	0.08				SR12	12/25/2016 16:17	0.19			
SR4	12/25/2016 16:37	0.13				SR12	12/25/2016 16:37	0.16			
SR4	12/25/2016 16:57	0.12				SR12	12/25/2016 16:57	0.15			
SR4	12/25/2016 17:17	0.09				SR12	12/25/2016 17:17	0.15			
SR4	12/25/2016 17:37	0.08				SR12	12/25/2016 17:37	0.15			
SR4	12/25/2016 17:57	0.12				SR12	12/25/2016 17:57	0.15			
SR4	12/25/2016 18:17	0.09				SR12	12/25/2016 18:17	0.16			
SR4	12/25/2016 18:37	0.09				SR12	12/25/2016 18:37	0.16			
SR4	12/25/2016 18:57	0.07				SR12	12/25/2016 18:57	0.15			
SR4	12/25/2016 19:17	0.10				SR12	12/25/2016 19:17	0.18			
SR4	12/25/2016 19:37	0.07				SR12	12/25/2016 19:37	0.18			
SR4	12/25/2016 19:57	0.13				SR12	12/25/2016 19:57	0.18			
SR4	12/25/2016 20:17	0.10				SR12	12/25/2016 20:17	0.16			
SR4	12/25/2016 20:37	0.11				SR12	12/25/2016 20:37	0.19			
SR4	12/25/2016 20:57	0.11				SR12	12/25/2016 20:57	0.16			
SR4	12/25/2016 21:17	0.07				SR12	12/25/2016 21:17	0.17			
SR4	12/25/2016 21:37	0.12				SR12	12/25/2016 21:37	0.19			
SR4	12/25/2016 21:57	0.11				SR12	12/25/2016 21:57	0.18			
SR4	12/25/2016 22:17	0.07				SR12	12/25/2016 22:17	0.19			
SR4	12/25/2016 22:37	0.12				SR12	12/25/2016 22:37	0.15			
SR4	12/25/2016 22:57	0.13				SR12	12/25/2016 22:57	0.19			
SR4	12/25/2016 23:17	0.07				SR12	12/25/2016 23:17	0.19			
SR4	12/25/2016 23:37	0.10				SR12	12/25/2016 23:37	0.18			
SR4	12/25/2016 23:57	0.10				SR12	12/25/2016 23:57	0.16			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/26/2016 0:17	0.09				SR12	12/26/2016 0:17	0.17			
SR4	12/26/2016 0:37	0.11				SR12	12/26/2016 0:37	0.19			
SR4	12/26/2016 0:57	0.08				SR12	12/26/2016 0:57	0.16			
SR4	12/26/2016 1:17	0.13				SR12	12/26/2016 1:17	0.18			
SR4	12/26/2016 1:37	0.08				SR12	12/26/2016 1:37	0.19			
SR4	12/26/2016 1:57	0.12				SR12	12/26/2016 1:57	0.17			
SR4	12/26/2016 2:17	0.13				SR12	12/26/2016 2:17	0.16			
SR4	12/26/2016 2:37	0.08				SR12	12/26/2016 2:37	0.15			
SR4	12/26/2016 2:57	0.07				SR12	12/26/2016 2:57	0.17			
SR4	12/26/2016 3:17	0.12				SR12	12/26/2016 3:17	0.19			
SR4	12/26/2016 3:37	0.09				SR12	12/26/2016 3:37	0.18			
SR4	12/26/2016 3:57	0.08				SR12	12/26/2016 3:57	0.16			
SR4	12/26/2016 4:17	0.10				SR12	12/26/2016 4:17	0.15			
SR4	12/26/2016 4:37	0.10				SR12	12/26/2016 4:37	0.16			
SR4	12/26/2016 4:57	0.11				SR12	12/26/2016 4:57	0.17			
SR4	12/26/2016 5:17	0.13				SR12	12/26/2016 5:17	0.16			
SR4	12/26/2016 5:37	0.08				SR12	12/26/2016 5:37	0.18			
SR4	12/26/2016 5:57	0.11				SR12	12/26/2016 5:57	0.18			
SR4						SR12					
SR4	12/26/2016 6:37	0.10				SR12	12/26/2016 6:37	0.16			
SR4	12/26/2016 6:57	0.09				SR12	12/26/2016 6:57	0.16			
SR4	12/26/2016 7:17	0.09				SR12	12/26/2016 7:17	0.17			
SR4	12/26/2016 7:37	0.09				SR12	12/26/2016 7:37	0.17			
SR4	12/26/2016 7:57	0.11				SR12	12/26/2016 7:57	0.16			
SR4	12/26/2016 8:17	0.08				SR12	12/26/2016 8:17	0.18			
SR4	12/26/2016 8:37	0.10				SR12	12/26/2016 8:37	0.18			
SR4	12/26/2016 8:57	0.08				SR12	12/26/2016 8:57	0.16			
SR4	12/26/2016 9:17	0.14				SR12	12/26/2016 9:17	0.17			
SR4	12/26/2016 9:37	0.08				SR12	12/26/2016 9:37	0.19			
SR4	12/26/2016 9:57	0.11				SR12	12/26/2016 9:57	0.17			
SR4	12/26/2016 10:17	0.14				SR12	12/26/2016 10:17	0.19			
SR4	12/26/2016 10:37	0.11				SR12	12/26/2016 10:37	0.16			
SR4	12/26/2016 10:57	0.13				SR12	12/26/2016 10:57	0.16			
SR4	12/26/2016 11:17	0.11				SR12	12/26/2016 11:17	0.16			
SR4	12/26/2016 11:37	0.08				SR12	12/26/2016 11:37	0.19			
SR4	12/26/2016 11:57	0.09				SR12	12/26/2016 11:57	0.19			
SR4	12/26/2016 12:17	0.12				SR12	12/26/2016 12:17	0.17			
SR4	12/26/2016 12:37	0.10				SR12	12/26/2016 12:37	0.17			
SR4	12/26/2016 12:57	0.11				SR12	12/26/2016 12:57	0.18			
SR4	12/26/2016 13:17	0.13				SR12	12/26/2016 13:17	0.18			
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SR4	12/26/2016 13:57	0.11				SR12	12/26/2016 13:57	0.19			
SR4	12/26/2016 14:17	0.12				SR12	12/26/2016 14:17	0.16			
SR4	12/26/2016 14:37	0.09				SR12	12/26/2016 14:37	0.16			
SR4	12/26/2016 14:57	0.12				SR12	12/26/2016 14:57	0.17			
SR4	12/26/2016 15:17	0.09				SR12	12/26/2016 15:17	0.17			
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SR4	12/26/2016 16:17	0.14				SR12	12/26/2016 16:17	0.17			
SR4	12/26/2016 16:37	0.12				SR12	12/26/2016 16:37	0.16			
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SR4	12/26/2016 17:17	0.15				SR12	12/26/2016 17:17	0.19			
SR4	12/26/2016 17:37	0.14				SR12	12/26/2016 17:37	0.18			
SR4	12/26/2016 17:57	0.16				SR12	12/26/2016 17:57	0.20			
SR4	12/26/2016 18:17	0.16				SR12	12/26/2016 18:17	0.18			
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SR4	12/26/2016 18:57	0.16				SR12	12/26/2016 18:57	0.20			
SR4	12/26/2016 19:17	0.15				SR12	12/26/2016 19:17	0.18			
SR4	12/26/2016 19:37	0.17				SR12	12/26/2016 19:37	0.18			
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SR4	12/26/2016 20:17	0.16				SR12	12/26/2016 20:17	0.19			
SR4	12/26/2016 20:37	0.15				SR12	12/26/2016 20:37	0.20			
SR4	12/26/2016 20:57	0.16				SR12	12/26/2016 20:57	0.19			
SR4	12/26/2016 21:17	0.16				SR12	12/26/2016 21:17	0.20			
SR4	12/26/2016 21:37	0.17				SR12	12/26/2016 21:37	0.20			
SR4	12/26/2016 21:57	0.17				SR12	12/26/2016 21:57	0.17			
SR4	12/26/2016 22:17	0.14				SR12	12/26/2016 22:17	0.17			
SR4	12/26/2016 22:37	0.15				SR12	12/26/2016 22:37	0.18			
SR4	12/26/2016 22:57	0.16				SR12	12/26/2016 22:57	0.18			
SR4	12/26/2016 23:17	0.17				SR12	12/26/2016 23:17	0.20			
SR4	12/26/2016 23:37	0.15				SR12	12/26/2016 23:37	0.17			
SR4	12/26/2016 23:57	0.14				SR12	12/26/2016 23:57	0.19			

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Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/27/2016 0:17	0.14				SR12	12/27/2016 0:17	0.18			
SR4	12/27/2016 0:37	0.14				SR12	12/27/2016 0:37	0.20			
SR4	12/27/2016 0:57	0.14				SR12	12/27/2016 0:57	0.20			
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SR4	12/27/2016 1:57	0.16				SR12	12/27/2016 1:57	0.17			
SR4	12/27/2016 2:17	0.15				SR12	12/27/2016 2:17	0.18			
SR4	12/27/2016 2:37	0.15				SR12	12/27/2016 2:37	0.20			
SR4	12/27/2016 2:57	0.16				SR12	12/27/2016 2:57	0.20			
SR4	12/27/2016 3:17	0.17				SR12	12/27/2016 3:17	0.19			
SR4	12/27/2016 3:37	0.17				SR12	12/27/2016 3:37	0.20			
SR4	12/27/2016 3:57	0.14				SR12	12/27/2016 3:57	0.20			
SR4	12/27/2016 4:17	0.14				SR12	12/27/2016 4:17	0.17			
SR4	12/27/2016 4:37	0.15				SR12	12/27/2016 4:37	0.18			
SR4	12/27/2016 4:57	0.17				SR12	12/27/2016 4:57	0.20			
SR4	12/27/2016 5:17	0.17				SR12	12/27/2016 5:17	0.20			
SR4	12/27/2016 5:37	0.14				SR12	12/27/2016 5:37	0.17			
SR4	12/27/2016 5:57	0.17				SR12	12/27/2016 5:57	0.18			
SR4						SR12					
SR4	12/27/2016 6:37	0.17				SR12	12/27/2016 6:37	0.18			
SR4	12/27/2016 6:57	0.15				SR12	12/27/2016 6:57	0.20			
SR4	12/27/2016 7:17	0.15				SR12	12/27/2016 7:17	0.19			
SR4	12/27/2016 7:37	0.16				SR12	12/27/2016 7:37	0.19			
SR4	12/27/2016 7:57	0.18				SR12	12/27/2016 7:57	0.18			
SR4	12/27/2016 8:17	0.15				SR12	12/27/2016 8:17	0.18			
SR4	12/27/2016 8:37	0.18				SR12	12/27/2016 8:37	0.21			
SR4	12/27/2016 8:57	0.15				SR12	12/27/2016 8:57	0.20			
SR4	12/27/2016 9:17	0.17				SR12	12/27/2016 9:17	0.18			
SR4	12/27/2016 9:37	0.15				SR12	12/27/2016 9:37	0.22			
SR4	12/27/2016 9:57	0.16				SR12	12/27/2016 9:57	0.18			
SR4	12/27/2016 10:17	0.15				SR12	12/27/2016 10:17	0.19			
SR4	12/27/2016 10:37	0.17				SR12	12/27/2016 10:37	0.19			
SR4	12/27/2016 10:57	0.15				SR12	12/27/2016 10:57	0.20			
SR4	12/27/2016 11:17	0.18				SR12	12/27/2016 11:17	0.22			
SR4	12/27/2016 11:37	0.18				SR12	12/27/2016 11:37	0.20			
SR4	12/27/2016 11:57	0.17				SR12	12/27/2016 11:57	0.21			
SR4	12/27/2016 12:17	0.18				SR12	12/27/2016 12:17	0.22			
SR4	12/27/2016 12:37	0.16				SR12	12/27/2016 12:37	0.21			
SR4	12/27/2016 12:57	0.18				SR12	12/27/2016 12:57	0.20			
SR4	12/27/2016 13:17	0.15				SR12	12/27/2016 13:17	0.20			
SR4	12/27/2016 13:37	0.16				SR12	12/27/2016 13:37	0.20			
SR4	12/27/2016 13:57	0.17				SR12	12/27/2016 13:57	0.20			
SR4	12/27/2016 14:17	0.17				SR12	12/27/2016 14:17	0.22			
SR4	12/27/2016 14:37	0.18				SR12	12/27/2016 14:37	0.21			
SR4	12/27/2016 14:57	0.18				SR12	12/27/2016 14:57	0.18			
SR4	12/27/2016 15:17	0.17				SR12	12/27/2016 15:17	0.22			
SR4	12/27/2016 15:37	0.16				SR12	12/27/2016 15:37	0.22			
SR4	12/27/2016 15:57	0.15				SR12	12/27/2016 15:57	0.18			
SR4	12/27/2016 16:17	0.16				SR12	12/27/2016 16:17	0.18			
SR4	12/27/2016 16:37	0.18				SR12	12/27/2016 16:37	0.20			
SR4	12/27/2016 16:57	0.15				SR12	12/27/2016 16:57	0.20			
SR4	12/27/2016 17:17	0.18				SR12	12/27/2016 17:17	0.18			
SR4	12/27/2016 17:37	0.18				SR12	12/27/2016 17:37	0.20			
SR4	12/27/2016 17:57	0.15				SR12	12/27/2016 17:57	0.19			
SR4	12/27/2016 18:17	0.17				SR12	12/27/2016 18:17	0.18			
SR4	12/27/2016 18:37	0.15				SR12	12/27/2016 18:37	0.19			
SR4	12/27/2016 18:57	0.16				SR12	12/27/2016 18:57	0.18			
SR4	12/27/2016 19:17	0.17				SR12	12/27/2016 19:17	0.17			
SR4	12/27/2016 19:37	0.14				SR12	12/27/2016 19:37	0.20			
SR4	12/27/2016 19:57	0.17				SR12	12/27/2016 19:57	0.19			
SR4	12/27/2016 20:17	0.15				SR12	12/27/2016 20:17	0.18			
SR4	12/27/2016 20:37	0.17				SR12	12/27/2016 20:37	0.21			
SR4	12/27/2016 20:57	0.15				SR12	12/27/2016 20:57	0.21			
SR4	12/27/2016 21:17	0.14				SR12	12/27/2016 21:17	0.20			
SR4	12/27/2016 21:37	0.14				SR12	12/27/2016 21:37	0.20			
SR4	12/27/2016 21:57	0.15				SR12	12/27/2016 21:57	0.19			
SR4	12/27/2016 22:17	0.17				SR12	12/27/2016 22:17	0.18			
SR4	12/27/2016 22:37	0.16				SR12	12/27/2016 22:37	0.20			
SR4	12/27/2016 22:57	0.16				SR12	12/27/2016 22:57	0.20			
SR4	12/27/2016 23:17	0.17				SR12	12/27/2016 23:17	0.19			
SR4	12/27/2016 23:37	0.16				SR12	12/27/2016 23:37	0.21			
SR4	12/27/2016 23:57	0.16				SR12	12/27/2016 23:57	0.18			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/28/2016 0:17	0.14				SR12	12/28/2016 0:17	0.21			
SR4	12/28/2016 0:37	0.15				SR12	12/28/2016 0:37	0.20			
SR4	12/28/2016 0:57	0.17				SR12	12/28/2016 0:57	0.18			
SR4	12/28/2016 1:17	0.16				SR12	12/28/2016 1:17	0.21			
SR4	12/28/2016 1:37	0.17				SR12	12/28/2016 1:37	0.17			
SR4	12/28/2016 1:57	0.15				SR12	12/28/2016 1:57	0.18			
SR4	12/28/2016 2:17	0.15				SR12	12/28/2016 2:17	0.21			
SR4	12/28/2016 2:37	0.15				SR12	12/28/2016 2:37	0.18			
SR4	12/28/2016 2:57	0.16				SR12	12/28/2016 2:57	0.18			
SR4	12/28/2016 3:17	0.17				SR12	12/28/2016 3:17	0.19			
SR4	12/28/2016 3:37	0.16				SR12	12/28/2016 3:37	0.21			
SR4	12/28/2016 3:57	0.14				SR12	12/28/2016 3:57	0.19			
SR4	12/28/2016 4:17	0.16				SR12	12/28/2016 4:17	0.17			
SR4	12/28/2016 4:37	0.15				SR12	12/28/2016 4:37	0.19			
SR4	12/28/2016 4:57	0.14				SR12	12/28/2016 4:57	0.18			
SR4	12/28/2016 5:17	0.15				SR12	12/28/2016 5:17	0.17			
SR4	12/28/2016 5:37	0.14				SR12	12/28/2016 5:37	0.20			
SR4	12/28/2016 5:57	0.14				SR12	12/28/2016 5:57	0.18			
SR4						SR12					
SR4	12/28/2016 6:37	0.15				SR12	12/28/2016 6:37	0.20			
SR4	12/28/2016 6:57	0.17				SR12	12/28/2016 6:57	0.18			
SR4	12/28/2016 7:17	0.16				SR12	12/28/2016 7:17	0.18			
SR4	12/28/2016 7:37	0.14				SR12	12/28/2016 7:37	0.16			
SR4	12/28/2016 7:57	0.14				SR12	12/28/2016 7:57	0.17			
SR4	12/28/2016 8:17	0.14				SR12	12/28/2016 8:17	0.17			
SR4	12/28/2016 8:37	0.14				SR12	12/28/2016 8:37	0.17			
SR4	12/28/2016 8:57	0.17				SR12	12/28/2016 8:57	0.20			
SR4	12/28/2016 9:17	0.17				SR12	12/28/2016 9:17	0.20			
SR4	12/28/2016 9:37	0.15				SR12	12/28/2016 9:37	0.19			
SR4	12/28/2016 9:57	0.17				SR12	12/28/2016 9:57	0.17			
SR4						SR12	12/28/2016 10:17	0.19			
SR4						SR12	12/28/2016 10:37	0.18			
SR4						SR12	12/28/2016 10:57	0.16			
SR4						SR12	12/28/2016 11:17	0.19			
SR4	12/28/2016 11:37	0.16				SR12	12/28/2016 11:37	0.18			
SR4	12/28/2016 11:57	0.15				SR12	12/28/2016 11:57	0.20			
SR4	12/28/2016 12:17	0.16				SR12	12/28/2016 12:17	0.17			
SR4	12/28/2016 12:37	0.17				SR12	12/28/2016 12:37	0.16			
SR4	12/28/2016 12:57	0.15				SR12	12/28/2016 12:57	0.19			
SR4	12/28/2016 13:17	0.17				SR12					
SR4	12/28/2016 13:37	0.16				SR12					
SR4	12/28/2016 13:57	0.16				SR12					
SR4	12/28/2016 14:17	0.15				SR12					
SR4	12/28/2016 14:37	0.17				SR12	12/28/2016 14:37	0.19			
SR4	12/28/2016 14:57	0.15				SR12	12/28/2016 14:57	0.16			
SR4	12/28/2016 15:17	0.17				SR12	12/28/2016 15:17	0.20			
SR4	12/28/2016 15:37	0.16				SR12	12/28/2016 15:37	0.18			
SR4	12/28/2016 15:57	0.17				SR12	12/28/2016 15:57	0.19			
SR4	12/28/2016 16:17	0.15				SR12	12/28/2016 16:17	0.16			
SR4	12/28/2016 16:37	0.15				SR12	12/28/2016 16:37	0.19			
SR4	12/28/2016 16:57	0.14				SR12	12/28/2016 16:57	0.20			
SR4	12/28/2016 17:17	0.15				SR12	12/28/2016 17:17	0.20			
SR4	12/28/2016 17:37	0.17				SR12	12/28/2016 17:37	0.19			
SR4	12/28/2016 17:57	0.17				SR12	12/28/2016 17:57	0.20			
SR4	12/28/2016 18:17	0.17				SR12	12/28/2016 18:17	0.18			
SR4	12/28/2016 18:37	0.15				SR12	12/28/2016 18:37	0.18			
SR4	12/28/2016 18:57	0.15				SR12	12/28/2016 18:57	0.17			
SR4	12/28/2016 19:17	0.15				SR12	12/28/2016 19:17	0.20			
SR4	12/28/2016 19:37	0.14				SR12	12/28/2016 19:37	0.17			
SR4	12/28/2016 19:57	0.15				SR12	12/28/2016 19:57	0.02			
SR4	12/28/2016 20:17	0.14				SR12	12/28/2016 20:17	0.15			
SR4	12/28/2016 20:37	0.15				SR12	12/28/2016 20:37	0.17			
SR4	12/28/2016 20:57	0.15				SR12	12/28/2016 20:57	0.17			
SR4	12/28/2016 21:17	0.13				SR12	12/28/2016 21:17	0.14			
SR4	12/28/2016 21:37	0.16				SR12	12/28/2016 21:37	0.14			
SR4	12/28/2016 21:57	0.13				SR12	12/28/2016 21:57	0.14			
SR4	12/28/2016 22:17	0.14				SR12	12/28/2016 22:17	0.16			
SR4	12/28/2016 22:37	0.13				SR12	12/28/2016 22:37	0.17			
SR4	12/28/2016 22:57	0.14				SR12	12/28/2016 22:57	0.15			
SR4	12/28/2016 23:17	0.13				SR12	12/28/2016 23:17	0.17			
SR4	12/28/2016 23:37	0.16				SR12	12/28/2016 23:37	0.15			
SR4	12/28/2016 23:57	0.13				SR12	12/28/2016 23:57	0.17			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 10:01-11:16.

SR12 monitoring station was under maintenance during 13:06-14:16.

SR13 monitoring station was under maintenance during 15:35-15:55.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/29/2016 0:17	0.16				SR12	12/29/2016 0:17	0.17			
SR4	12/29/2016 0:37	0.16				SR12	12/29/2016 0:37	0.14			
SR4	12/29/2016 0:57	0.16				SR12	12/29/2016 0:57	0.14			
SR4	12/29/2016 1:17	0.16				SR12	12/29/2016 1:17	0.15			
SR4	12/29/2016 1:37	0.16				SR12	12/29/2016 1:37	0.14			
SR4	12/29/2016 1:57	0.14				SR12	12/29/2016 1:57	0.14			
SR4	12/29/2016 2:17	0.14				SR12	12/29/2016 2:17	0.17			
SR4	12/29/2016 2:37	0.15				SR12	12/29/2016 2:37	0.17			
SR4	12/29/2016 2:57	0.15				SR12	12/29/2016 2:57	0.17			
SR4	12/29/2016 3:17	0.16				SR12	12/29/2016 3:17	0.14			
SR4	12/29/2016 3:37	0.16				SR12	12/29/2016 3:37	0.15			
SR4	12/29/2016 3:57	0.16				SR12	12/29/2016 3:57	0.15			
SR4	12/29/2016 4:17	0.13				SR12	12/29/2016 4:17	0.16			
SR4	12/29/2016 4:37	0.14				SR12	12/29/2016 4:37	0.16			
SR4	12/29/2016 4:57	0.13				SR12	12/29/2016 4:57	0.17			
SR4	12/29/2016 5:17	0.13				SR12	12/29/2016 5:17	0.15			
SR4	12/29/2016 5:37	0.15				SR12	12/29/2016 5:37	0.16			
SR4	12/29/2016 5:57	0.15				SR12	12/29/2016 5:57	0.14			
SR4						SR12					
SR4	12/29/2016 6:37	0.13				SR12	12/29/2016 6:37	0.15			
SR4	12/29/2016 6:57	0.14				SR12	12/29/2016 6:57	0.16			
SR4	12/29/2016 7:17	0.16				SR12	12/29/2016 7:17	0.14			
SR4	12/29/2016 7:37	0.16				SR12	12/29/2016 7:37	0.15			
SR4	12/29/2016 7:57	0.15				SR12	12/29/2016 7:57	0.16			
SR4	12/29/2016 8:17	0.13				SR12	12/29/2016 8:17	0.17			
SR4	12/29/2016 8:37	0.14				SR12	12/29/2016 8:37	0.15			
SR4	12/29/2016 8:57	0.12				SR12	12/29/2016 8:57	0.16			
SR4	12/29/2016 9:17	0.16				SR12	12/29/2016 9:17	0.16			
SR4	12/29/2016 9:37	0.15				SR12	12/29/2016 9:37	0.15			
SR4	12/29/2016 9:57	0.14				SR12	12/29/2016 9:57	0.13			
SR4	12/29/2016 10:17	0.14				SR12	12/29/2016 10:17	0.13			
SR4	12/29/2016 10:37	0.13				SR12	12/29/2016 10:37	0.15			
SR4	12/29/2016 10:57	0.16				SR12	12/29/2016 10:57	0.14			
SR4	12/29/2016 11:17	0.12				SR12	12/29/2016 11:17	0.15			
SR4	12/29/2016 11:37	0.15				SR12	12/29/2016 11:37	0.13			
SR4	12/29/2016 11:57	0.16				SR12	12/29/2016 11:57	0.14			
SR4	12/29/2016 12:17	0.14				SR12	12/29/2016 12:17	0.13			
SR4	12/29/2016 12:37	0.16				SR12	12/29/2016 12:37	0.16			
SR4	12/29/2016 12:57	0.13				SR12	12/29/2016 12:57	0.16			
SR4	12/29/2016 13:17	0.14				SR12	12/29/2016 13:17	0.14			
SR4	12/29/2016 13:37	0.15				SR12	12/29/2016 13:37	0.14			
SR4	12/29/2016 13:57	0.16				SR12	12/29/2016 13:57	0.14			
SR4	12/29/2016 14:17	0.13				SR12	12/29/2016 14:17	0.15			
SR4	12/29/2016 14:37	0.12				SR12	12/29/2016 14:37	0.15			
SR4	12/29/2016 14:57	0.15				SR12	12/29/2016 14:57	0.16			
SR4	12/29/2016 15:17	0.15				SR12	12/29/2016 15:17	0.14			
SR4	12/29/2016 15:37	0.13				SR12	12/29/2016 15:37	0.15			
SR4	12/29/2016 15:57	0.15				SR12	12/29/2016 15:57	0.16			
SR4	12/29/2016 16:17	0.16				SR12	12/29/2016 16:17	0.16			
SR4	12/29/2016 16:37	0.16				SR12	12/29/2016 16:37	0.16			
SR4	12/29/2016 16:57	0.12				SR12	12/29/2016 16:57	0.13			
SR4	12/29/2016 17:17	0.14				SR12	12/29/2016 17:17	0.16			
SR4	12/29/2016 17:37	0.14				SR12	12/29/2016 17:37	0.16			
SR4	12/29/2016 17:57	0.14				SR12	12/29/2016 17:57	0.14			
SR4	12/29/2016 18:17	0.13				SR12	12/29/2016 18:17	0.13			
SR4	12/29/2016 18:37	0.12				SR12	12/29/2016 18:37	0.13			
SR4	12/29/2016 18:57	0.15				SR12	12/29/2016 18:57	0.15			
SR4	12/29/2016 19:17	0.12				SR12	12/29/2016 19:17	0.13			
SR4	12/29/2016 19:37	0.15				SR12	12/29/2016 19:37	0.14			
SR4	12/29/2016 19:57	0.13				SR12	12/29/2016 19:57	0.13			
SR4	12/29/2016 20:17	0.16				SR12	12/29/2016 20:17	0.13			
SR4	12/29/2016 20:37	0.12				SR12	12/29/2016 20:37	0.15			
SR4	12/29/2016 20:57	0.16				SR12	12/29/2016 20:57	0.14			
SR4	12/29/2016 21:17	0.12				SR12	12/29/2016 21:17	0.13			
SR4	12/29/2016 21:37	0.11				SR12	12/29/2016 21:37	0.15			
SR4	12/29/2016 21:57	0.13				SR12	12/29/2016 21:57	0.14			
SR4	12/29/2016 22:17	0.11				SR12	12/29/2016 22:17	0.15			
SR4	12/29/2016 22:37	0.12				SR12	12/29/2016 22:37	0.15			
SR4	12/29/2016 22:57	0.12				SR12	12/29/2016 22:57	0.15			
SR4	12/29/2016 23:17	0.11				SR12	12/29/2016 23:17	0.14			
SR4	12/29/2016 23:37	0.11				SR12	12/29/2016 23:37	0.16			
SR4	12/29/2016 23:57	0.15				SR12	12/29/2016 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 11:10-11:30.

SR9 monitoring station was under maintenance during 8:40-9:05.

SR10 monitoring station was under maintenance during 10:50-10:40.

SR11 monitoring station was under maintenance during 11:10-11:30.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/30/2016 0:17	0.12				SR12	12/30/2016 0:17	0.17			
SR4	12/30/2016 0:37	0.13				SR12	12/30/2016 0:37	0.17			
SR4	12/30/2016 0:57	0.11				SR12	12/30/2016 0:57	0.14			
SR4	12/30/2016 1:17	0.11				SR12	12/30/2016 1:17	0.16			
SR4	12/30/2016 1:37	0.15				SR12	12/30/2016 1:37	0.14			
SR4	12/30/2016 1:57	0.11				SR12	12/30/2016 1:57	0.16			
SR4	12/30/2016 2:17	0.14				SR12	12/30/2016 2:17	0.16			
SR4	12/30/2016 2:37	0.13				SR12	12/30/2016 2:37	0.16			
SR4	12/30/2016 2:57	0.14				SR12	12/30/2016 2:57	0.15			
SR4	12/30/2016 3:17	0.11				SR12	12/30/2016 3:17	0.14			
SR4	12/30/2016 3:37	0.15				SR12	12/30/2016 3:37	0.14			
SR4	12/30/2016 3:57	0.15				SR12	12/30/2016 3:57	0.17			
SR4	12/30/2016 4:17	0.11				SR12	12/30/2016 4:17	0.14			
SR4	12/30/2016 4:37	0.14				SR12	12/30/2016 4:37	0.17			
SR4	12/30/2016 4:57	0.11				SR12	12/30/2016 4:57	0.15			
SR4	12/30/2016 5:17	0.11				SR12	12/30/2016 5:17	0.17			
SR4	12/30/2016 5:37	0.14				SR12	12/30/2016 5:37	0.14			
SR4	12/30/2016 5:57	0.13				SR12	12/30/2016 5:57	0.16			
SR4						SR12					
SR4	12/30/2016 6:37	0.15				SR12	12/30/2016 6:37	0.15			
SR4	12/30/2016 6:57	0.12				SR12	12/30/2016 6:57	0.15			
SR4	12/30/2016 7:17	0.13				SR12	12/30/2016 7:17	0.16			
SR4	12/30/2016 7:37	0.11				SR12	12/30/2016 7:37	0.16			
SR4	12/30/2016 7:57	0.13				SR12	12/30/2016 7:57	0.17			
SR4	12/30/2016 8:17	0.13				SR12	12/30/2016 8:17	0.17			
SR4	12/30/2016 8:37	0.14				SR12	12/30/2016 8:37	0.17			
SR4	12/30/2016 8:57	0.15				SR12	12/30/2016 8:57	0.14			
SR4	12/30/2016 9:17	0.12				SR12	12/30/2016 9:17	0.14			
SR4	12/30/2016 9:37	0.11				SR12	12/30/2016 9:37	0.16			
SR4	12/30/2016 9:57	0.13				SR12					
SR4	12/30/2016 10:17	0.11				SR12					
SR4	12/30/2016 10:37	0.12				SR12					
SR4	12/30/2016 10:57	0.13				SR12					
SR4	12/30/2016 11:17	0.12				SR12	12/30/2016 11:17	0.14			
SR4	12/30/2016 11:37	0.14				SR12	12/30/2016 11:37	0.18			
SR4	12/30/2016 11:57	0.14				SR12	12/30/2016 11:57	0.18			
SR4						SR12	12/30/2016 12:17	0.15			
SR4						SR12	12/30/2016 12:37	0.14			
SR4						SR12	12/30/2016 12:57	0.17			
SR4						SR12	12/30/2016 13:17	0.18			
SR4	12/30/2016 13:37	0.13				SR12	12/30/2016 13:37	0.14			
SR4	12/30/2016 13:57	0.11				SR12	12/30/2016 13:57	0.16			
SR4	12/30/2016 14:17	0.12				SR12	12/30/2016 14:17	0.16			
SR4	12/30/2016 14:37	0.14				SR12	12/30/2016 14:37	0.14			
SR4	12/30/2016 14:57	0.12				SR12	12/30/2016 14:57	0.17			
SR4	12/30/2016 15:17	0.13				SR12	12/30/2016 15:17	0.15			
SR4	12/30/2016 15:37	0.14				SR12	12/30/2016 15:37	0.14			
SR4	12/30/2016 15:57	0.13				SR12	12/30/2016 15:57	0.14			
SR4	12/30/2016 16:17	0.11				SR12	12/30/2016 16:17	0.18			
SR4	12/30/2016 16:37	0.12				SR12	12/30/2016 16:37	0.15			
SR4	12/30/2016 16:57	0.13				SR12	12/30/2016 16:57	0.17			
SR4	12/30/2016 17:17	0.13				SR12	12/30/2016 17:17	0.18			
SR4	12/30/2016 17:37	0.11				SR12	12/30/2016 17:37	0.14			
SR4	12/30/2016 17:57	0.11				SR12	12/30/2016 17:57	0.18			
SR4	12/30/2016 18:17	0.11				SR12	12/30/2016 18:17	0.18			
SR4	12/30/2016 18:37	0.12				SR12	12/30/2016 18:37	0.14			
SR4	12/30/2016 18:57	0.14				SR12	12/30/2016 18:57	0.16			
SR4	12/30/2016 19:17	0.11				SR12	12/30/2016 19:17	0.14			
SR4	12/30/2016 19:37	0.14				SR12	12/30/2016 19:37	0.16			
SR4	12/30/2016 19:57	0.11				SR12	12/30/2016 19:57	0.16			
SR4	12/30/2016 20:17	0.12				SR12	12/30/2016 20:17	0.17			
SR4	12/30/2016 20:37	0.14				SR12	12/30/2016 20:37	0.16			
SR4	12/30/2016 20:57	0.11				SR12	12/30/2016 20:57	0.17			
SR4	12/30/2016 21:17	0.11				SR12	12/30/2016 21:17	0.16			
SR4	12/30/2016 21:37	0.11				SR12	12/30/2016 21:37	0.14			
SR4	12/30/2016 21:57	0.13				SR12	12/30/2016 21:57	0.14			
SR4	12/30/2016 22:17	0.13				SR12	12/30/2016 22:17	0.14			
SR4	12/30/2016 22:37	0.12				SR12	12/30/2016 22:37	0.14			
SR4	12/30/2016 22:57	0.14				SR12	12/30/2016 22:57	0.16			
SR4	12/30/2016 23:17	0.13				SR12	12/30/2016 23:17	0.16			
SR4	12/30/2016 23:37	0.13				SR12	12/30/2016 23:37	0.13			
SR4	12/30/2016 23:57	0.11				SR12	12/30/2016 23:57	0.13			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 12:06-13:11.

SR12 monitoring station was under maintenance during 9:41-11:01.

SR13 monitoring station was under maintenance during 15:35-15:55.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	12/31/2016 0:17	0.12				SR12	12/31/2016 0:17	0.14			
SR4	12/31/2016 0:37	0.12				SR12	12/31/2016 0:37	0.13			
SR4	12/31/2016 0:57	0.11				SR12	12/31/2016 0:57	0.13			
SR4	12/31/2016 1:17	0.13				SR12	12/31/2016 1:17	0.17			
SR4	12/31/2016 1:37	0.14				SR12	12/31/2016 1:37	0.18			
SR4	12/31/2016 1:57	0.12				SR12	12/31/2016 1:57	0.13			
SR4	12/31/2016 2:17	0.12				SR12	12/31/2016 2:17	0.13			
SR4	12/31/2016 2:37	0.13				SR12	12/31/2016 2:37	0.13			
SR4	12/31/2016 2:57	0.14				SR12	12/31/2016 2:57	0.16			
SR4	12/31/2016 3:17	0.14				SR12	12/31/2016 3:17	0.16			
SR4	12/31/2016 3:37	0.14				SR12	12/31/2016 3:37	0.18			
SR4	12/31/2016 3:57	0.13				SR12	12/31/2016 3:57	0.15			
SR4	12/31/2016 4:17	0.13				SR12	12/31/2016 4:17	0.14			
SR4	12/31/2016 4:37	0.11				SR12	12/31/2016 4:37	0.17			
SR4	12/31/2016 4:57	0.13				SR12	12/31/2016 4:57	0.16			
SR4	12/31/2016 5:17	0.12				SR12	12/31/2016 5:17	0.16			
SR4	12/31/2016 5:37	0.13				SR12	12/31/2016 5:37	0.16			
SR4	12/31/2016 5:57	0.13				SR12	12/31/2016 5:57	0.13			
SR4						SR12					
SR4	12/31/2016 6:37	0.11				SR12	12/31/2016 6:37	0.15			
SR4	12/31/2016 6:57	0.13				SR12	12/31/2016 6:57	0.18			
SR4	12/31/2016 7:17	0.12				SR12	12/31/2016 7:17	0.13			
SR4	12/31/2016 7:37	0.12				SR12	12/31/2016 7:37	0.17			
SR4	12/31/2016 7:57	0.13				SR12	12/31/2016 7:57	0.13			
SR4	12/31/2016 8:17	0.14				SR12	12/31/2016 8:17	0.15			
SR4	12/31/2016 8:37	0.12				SR12	12/31/2016 8:37	0.14			
SR4	12/31/2016 8:57	0.11				SR12	12/31/2016 8:57	0.16			
SR4	12/31/2016 9:17	0.14				SR12	12/31/2016 9:17	0.18			
SR4	12/31/2016 9:37	0.12				SR12	12/31/2016 9:37	0.16			
SR4	12/31/2016 9:57	0.13				SR12	12/31/2016 9:57	0.17			
SR4	12/31/2016 10:17	0.12				SR12	12/31/2016 10:17	0.15			
SR4	12/31/2016 10:37	0.11				SR12	12/31/2016 10:37	0.13			
SR4	12/31/2016 10:57	0.11				SR12	12/31/2016 10:57	0.16			
SR4	12/31/2016 11:17	0.11				SR12	12/31/2016 11:17	0.15			
SR4	12/31/2016 11:37	0.12				SR12	12/31/2016 11:37	0.17			
SR4	12/31/2016 11:57	0.13				SR12	12/31/2016 11:57	0.16			
SR4	12/31/2016 12:17	0.14				SR12	12/31/2016 12:17	0.15			
SR4	12/31/2016 12:37	0.11				SR12	12/31/2016 12:37	0.13			
SR4	12/31/2016 12:57	0.13				SR12	12/31/2016 12:57	0.15			
SR4	12/31/2016 13:17	0.12				SR12	12/31/2016 13:17	0.18			
SR4	12/31/2016 13:37	0.11				SR12	12/31/2016 13:37	0.17			
SR4	12/31/2016 13:57	0.11				SR12	12/31/2016 13:57	0.18			
SR4	12/31/2016 14:17	0.14				SR12	12/31/2016 14:17	0.18			
SR4	12/31/2016 14:37	0.13				SR12	12/31/2016 14:37	0.14			
SR4	12/31/2016 14:57	0.13				SR12	12/31/2016 14:57	0.17			
SR4	12/31/2016 15:17	0.11				SR12	12/31/2016 15:17	0.14			
SR4	12/31/2016 15:37	0.11				SR12	12/31/2016 15:37	0.17			
SR4	12/31/2016 15:57	0.13				SR12	12/31/2016 15:57	0.13			
SR4	12/31/2016 16:17	0.14				SR12	12/31/2016 16:17	0.16			
SR4	12/31/2016 16:37	0.14				SR12	12/31/2016 16:37	0.18			
SR4	12/31/2016 16:57	0.11				SR12	12/31/2016 16:57	0.18			
SR4	12/31/2016 17:17	0.13				SR12	12/31/2016 17:17	0.15			
SR4	12/31/2016 17:37	0.12				SR12	12/31/2016 17:37	0.13			
SR4	12/31/2016 17:57	0.12				SR12	12/31/2016 17:57	0.13			
SR4	12/31/2016 18:17	0.13				SR12	12/31/2016 18:17	0.16			
SR4	12/31/2016 18:37	0.12				SR12	12/31/2016 18:37	0.13			
SR4	12/31/2016 18:57	0.14				SR12	12/31/2016 18:57	0.15			
SR4	12/31/2016 19:17	0.12				SR12	12/31/2016 19:17	0.13			
SR4	12/31/2016 19:37	0.14				SR12	12/31/2016 19:37	0.16			
SR4	12/31/2016 19:57	0.14				SR12	12/31/2016 19:57	0.18			
SR4	12/31/2016 20:17	0.12				SR12	12/31/2016 20:17	0.18			
SR4	12/31/2016 20:37	0.12				SR12	12/31/2016 20:37	0.18			
SR4	12/31/2016 20:57	0.14				SR12	12/31/2016 20:57	0.18			
SR4	12/31/2016 21:17	0.12				SR12	12/31/2016 21:17	0.16			
SR4	12/31/2016 21:37	0.14				SR12	12/31/2016 21:37	0.17			
SR4	12/31/2016 21:57	0.13				SR12	12/31/2016 21:57	0.14			
SR4	12/31/2016 22:17	0.12				SR12	12/31/2016 22:17	0.13			
SR4	12/31/2016 22:37	0.14				SR12	12/31/2016 22:37	0.16			
SR4	12/31/2016 22:57	0.12				SR12	12/31/2016 22:57	0.13			
SR4	12/31/2016 23:17	0.14				SR12	12/31/2016 23:17	0.16			
SR4	12/31/2016 23:37	0.11				SR12	12/31/2016 23:37	0.17			
SR4	12/31/2016 23:57	0.12				SR12	12/31/2016 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 12:15-12:35.

SR9 monitoring station was under maintenance during 9:30-9:50.

SR10 monitoring station was under maintenance during 11:05-11:25.

SR11 monitoring station was under maintenance during 12:05-12:30.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/1/2017 0:17	0.10				SR12	1/1/2017 0:17	0.16			
SR4	1/1/2017 0:37	0.10				SR12	1/1/2017 0:37	0.13			
SR4	1/1/2017 0:57	0.12				SR12	1/1/2017 0:57	0.12			
SR4	1/1/2017 1:17	0.09				SR12	1/1/2017 1:17	0.15			
SR4	1/1/2017 1:37	0.09				SR12	1/1/2017 1:37	0.12			
SR4	1/1/2017 1:57	0.10				SR12	1/1/2017 1:57	0.11			
SR4	1/1/2017 2:17	0.09				SR12	1/1/2017 2:17	0.11			
SR4	1/1/2017 2:37	0.12				SR12	1/1/2017 2:37	0.13			
SR4	1/1/2017 2:57	0.11				SR12	1/1/2017 2:57	0.11			
SR4	1/1/2017 3:17	0.12				SR12	1/1/2017 3:17	0.12			
SR4	1/1/2017 3:37	0.12				SR12	1/1/2017 3:37	0.12			
SR4	1/1/2017 3:57	0.13				SR12	1/1/2017 3:57	0.12			
SR4	1/1/2017 4:17	0.12				SR12	1/1/2017 4:17	0.15			
SR4	1/1/2017 4:37	0.12				SR12	1/1/2017 4:37	0.12			
SR4	1/1/2017 4:57	0.10				SR12	1/1/2017 4:57	0.13			
SR4	1/1/2017 5:17	0.11				SR12	1/1/2017 5:17	0.12			
SR4	1/1/2017 5:37	0.10				SR12	1/1/2017 5:37	0.13			
SR4	1/1/2017 5:57	0.09				SR12	1/1/2017 5:57	0.12			
SR4						SR12					
SR4	1/1/2017 6:37	0.13				SR12	1/1/2017 6:37	0.14			
SR4	1/1/2017 6:57	0.13				SR12	1/1/2017 6:57	0.11			
SR4	1/1/2017 7:17	0.10				SR12	1/1/2017 7:17	0.14			
SR4	1/1/2017 7:37	0.09				SR12	1/1/2017 7:37	0.11			
SR4	1/1/2017 7:57	0.10				SR12	1/1/2017 7:57	0.12			
SR4	1/1/2017 8:17	0.09				SR12	1/1/2017 8:17	0.11			
SR4	1/1/2017 8:37	0.11				SR12	1/1/2017 8:37	0.12			
SR4	1/1/2017 8:57	0.11				SR12	1/1/2017 8:57	0.15			
SR4	1/1/2017 9:17	0.11				SR12	1/1/2017 9:17	0.13			
SR4	1/1/2017 9:37	0.10				SR12	1/1/2017 9:37	0.13			
SR4	1/1/2017 9:57	0.10				SR12	1/1/2017 9:57	0.13			
SR4	1/1/2017 10:17	0.12				SR12	1/1/2017 10:17	0.11			
SR4	1/1/2017 10:37	0.11				SR12	1/1/2017 10:37	0.14			
SR4	1/1/2017 10:57	0.11				SR12	1/1/2017 10:57	0.13			
SR4	1/1/2017 11:17	0.11				SR12	1/1/2017 11:17	0.15			
SR4	1/1/2017 11:37	0.11				SR12	1/1/2017 11:37	0.15			
SR4	1/1/2017 11:57	0.09				SR12	1/1/2017 11:57	0.12			
SR4	1/1/2017 12:17	0.11				SR12	1/1/2017 12:17	0.15			
SR4	1/1/2017 12:37	0.09				SR12	1/1/2017 12:37	0.15			
SR4	1/1/2017 12:57	0.13				SR12	1/1/2017 12:57	0.11			
SR4	1/1/2017 13:17	0.13				SR12	1/1/2017 13:17	0.13			
SR4	1/1/2017 13:37	0.11				SR12	1/1/2017 13:37	0.10			
SR4	1/1/2017 13:57	0.13				SR12	1/1/2017 13:57	0.10			
SR4	1/1/2017 14:17	0.11				SR12	1/1/2017 14:17	0.12			
SR4	1/1/2017 14:37	0.12				SR12	1/1/2017 14:37	0.14			
SR4	1/1/2017 14:57	0.12				SR12	1/1/2017 14:57	0.14			
SR4	1/1/2017 15:17	0.13				SR12	1/1/2017 15:17	0.12			
SR4	1/1/2017 15:37	0.12				SR12	1/1/2017 15:37	0.13			
SR4	1/1/2017 15:57	0.10				SR12	1/1/2017 15:57	0.11			
SR4	1/1/2017 16:17	0.09				SR12	1/1/2017 16:17	0.10			
SR4	1/1/2017 16:37	0.09				SR12	1/1/2017 16:37	0.14			
SR4	1/1/2017 16:57	0.11				SR12	1/1/2017 16:57	0.14			
SR4	1/1/2017 17:17	0.10				SR12	1/1/2017 17:17	0.10			
SR4	1/1/2017 17:37	0.11				SR12	1/1/2017 17:37	0.14			
SR4	1/1/2017 17:57	0.09				SR12	1/1/2017 17:57	0.11			
SR4	1/1/2017 18:17	0.13				SR12	1/1/2017 18:17	0.10			
SR4	1/1/2017 18:37	0.14				SR12	1/1/2017 18:37	0.11			
SR4	1/1/2017 18:57	0.13				SR12	1/1/2017 18:57	0.14			
SR4	1/1/2017 19:17	0.11				SR12	1/1/2017 19:17	0.11			
SR4	1/1/2017 19:37	0.13				SR12	1/1/2017 19:37	0.10			
SR4	1/1/2017 19:57	0.13				SR12	1/1/2017 19:57	0.10			
SR4	1/1/2017 20:17	0.13				SR12	1/1/2017 20:17	0.10			
SR4	1/1/2017 20:37	0.12				SR12	1/1/2017 20:37	0.12			
SR4	1/1/2017 20:57	0.14				SR12	1/1/2017 20:57	0.12			
SR4	1/1/2017 21:17	0.11				SR12	1/1/2017 21:17	0.14			
SR4	1/1/2017 21:37	0.11				SR12	1/1/2017 21:37	0.11			
SR4	1/1/2017 21:57	0.11				SR12	1/1/2017 21:57	0.11			
SR4	1/1/2017 22:17	0.12				SR12	1/1/2017 22:17	0.11			
SR4	1/1/2017 22:37	0.11				SR12	1/1/2017 22:37	0.12			
SR4	1/1/2017 22:57	0.12				SR12	1/1/2017 22:57	0.12			
SR4	1/1/2017 23:17	0.14				SR12	1/1/2017 23:17	0.14			
SR4	1/1/2017 23:37	0.11				SR12	1/1/2017 23:37	0.14			
SR4	1/1/2017 23:57	0.14				SR12	1/1/2017 23:57	0.11			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/2/2017 0:17	0.12				SR12	1/2/2017 0:17	0.13			
SR4	1/2/2017 0:37	0.14				SR12	1/2/2017 0:37	0.12			
SR4	1/2/2017 0:57	0.12				SR12	1/2/2017 0:57	0.10			
SR4	1/2/2017 1:17	0.13				SR12	1/2/2017 1:17	0.10			
SR4	1/2/2017 1:37	0.12				SR12	1/2/2017 1:37	0.14			
SR4	1/2/2017 1:57	0.14				SR12	1/2/2017 1:57	0.12			
SR4	1/2/2017 2:17	0.13				SR12	1/2/2017 2:17	0.13			
SR4	1/2/2017 2:37	0.14				SR12	1/2/2017 2:37	0.10			
SR4	1/2/2017 2:57	0.13				SR12	1/2/2017 2:57	0.09			
SR4	1/2/2017 3:17	0.13				SR12	1/2/2017 3:17	0.10			
SR4	1/2/2017 3:37	0.11				SR12	1/2/2017 3:37	0.10			
SR4	1/2/2017 3:57	0.13				SR12	1/2/2017 3:57	0.11			
SR4	1/2/2017 4:17	0.13				SR12	1/2/2017 4:17	0.10			
SR4	1/2/2017 4:37	0.14				SR12	1/2/2017 4:37	0.13			
SR4	1/2/2017 4:57	0.12				SR12	1/2/2017 4:57	0.10			
SR4	1/2/2017 5:17	0.12				SR12	1/2/2017 5:17	0.13			
SR4	1/2/2017 5:37	0.14				SR12	1/2/2017 5:37	0.12			
SR4	1/2/2017 5:57	0.13				SR12	1/2/2017 5:57	0.09			
SR4						SR12					
SR4	1/2/2017 6:37	0.12				SR12	1/2/2017 6:37	0.11			
SR4	1/2/2017 6:57	0.12				SR12	1/2/2017 6:57	0.10			
SR4	1/2/2017 7:17	0.15				SR12	1/2/2017 7:17	0.13			
SR4	1/2/2017 7:37	0.12				SR12	1/2/2017 7:37	0.13			
SR4	1/2/2017 7:57	0.14				SR12	1/2/2017 7:57	0.09			
SR4	1/2/2017 8:17	0.14				SR12	1/2/2017 8:17	0.09			
SR4	1/2/2017 8:37	0.15				SR12	1/2/2017 8:37	0.13			
SR4	1/2/2017 8:57	0.15				SR12	1/2/2017 8:57	0.09			
SR4	1/2/2017 9:17	0.15				SR12	1/2/2017 9:17	0.10			
SR4	1/2/2017 9:37	0.14				SR12	1/2/2017 9:37	0.09			
SR4	1/2/2017 9:57	0.15				SR12	1/2/2017 9:57	0.12			
SR4						SR12	1/2/2017 10:17	0.13			
SR4						SR12	1/2/2017 10:37	0.13			
SR4						SR12	1/2/2017 10:57	0.11			
SR4						SR12	1/2/2017 11:17	0.11			
SR4						SR12	1/2/2017 11:37	0.10			
SR4	1/2/2017 11:57	0.15				SR12	1/2/2017 11:57	0.12			
SR4	1/2/2017 12:17	0.15				SR12	1/2/2017 12:17	0.10			
SR4	1/2/2017 12:37	0.15				SR12	1/2/2017 12:37	0.10			
SR4	1/2/2017 12:57	0.12				SR12	1/2/2017 12:57	0.13			
SR4	1/2/2017 13:17	0.15				SR12					
SR4	1/2/2017 13:37	0.14				SR12					
SR4	1/2/2017 13:57	0.12				SR12					
SR4	1/2/2017 14:17	0.13				SR12					
SR4	1/2/2017 14:37	0.13				SR12	1/2/2017 14:37	0.12			
SR4	1/2/2017 14:57	0.15				SR12	1/2/2017 14:57	0.11			
SR4	1/2/2017 15:17	0.14				SR12	1/2/2017 15:17	0.12			
SR4	1/2/2017 15:37	0.12				SR12	1/2/2017 15:37	0.11			
SR4	1/2/2017 15:57	0.12				SR12	1/2/2017 15:57	0.14			
SR4	1/2/2017 16:17	0.13				SR12	1/2/2017 16:17	0.13			
SR4	1/2/2017 16:37	0.15				SR12	1/2/2017 16:37	0.14			
SR4	1/2/2017 16:57	0.13				SR12	1/2/2017 16:57	0.14			
SR4	1/2/2017 17:17	0.12				SR12	1/2/2017 17:17	0.11			
SR4	1/2/2017 17:37	0.13				SR12	1/2/2017 17:37	0.12			
SR4	1/2/2017 17:57	0.12				SR12	1/2/2017 17:57	0.12			
SR4	1/2/2017 18:17	0.12				SR12	1/2/2017 18:17	0.14			
SR4	1/2/2017 18:37	0.15				SR12	1/2/2017 18:37	0.11			
SR4	1/2/2017 18:57	0.13				SR12	1/2/2017 18:57	0.14			
SR4	1/2/2017 19:17	0.12				SR12	1/2/2017 19:17	0.14			
SR4	1/2/2017 19:37	0.13				SR12	1/2/2017 19:37	0.11			
SR4	1/2/2017 19:57	0.14				SR12	1/2/2017 19:57	0.11			
SR4	1/2/2017 20:17	0.14				SR12	1/2/2017 20:17	0.12			
SR4	1/2/2017 20:37	0.16				SR12	1/2/2017 20:37	0.12			
SR4	1/2/2017 20:57	0.14				SR12	1/2/2017 20:57	0.13			
SR4	1/2/2017 21:17	0.13				SR12	1/2/2017 21:17	0.12			
SR4	1/2/2017 21:37	0.14				SR12	1/2/2017 21:37	0.11			
SR4	1/2/2017 21:57	0.16				SR12	1/2/2017 21:57	0.13			
SR4	1/2/2017 22:17	0.15				SR12	1/2/2017 22:17	0.12			
SR4	1/2/2017 22:37	0.15				SR12	1/2/2017 22:37	0.13			
SR4	1/2/2017 22:57	0.15				SR12	1/2/2017 22:57	0.14			
SR4	1/2/2017 23:17	0.13				SR12	1/2/2017 23:17	0.12			
SR4	1/2/2017 23:37	0.15				SR12	1/2/2017 23:37	0.13			
SR4	1/2/2017 23:57	0.14				SR12	1/2/2017 23:57	0.12			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 10:06-11:31.

SR12 monitoring station was under maintenance during 13:11-14:21.

SR13 monitoring station was under maintenance during 16:30-16:50.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/3/2017 0:17	0.13				SR12	1/3/2017 0:17	0.13			
SR4	1/3/2017 0:37	0.15				SR12	1/3/2017 0:37	0.13			
SR4	1/3/2017 0:57	0.13				SR12	1/3/2017 0:57	0.13			
SR4	1/3/2017 1:17	0.14				SR12	1/3/2017 1:17	0.11			
SR4	1/3/2017 1:37	0.16				SR12	1/3/2017 1:37	0.12			
SR4	1/3/2017 1:57	0.14				SR12	1/3/2017 1:57	0.12			
SR4	1/3/2017 2:17	0.16				SR12	1/3/2017 2:17	0.12			
SR4	1/3/2017 2:37	0.15				SR12	1/3/2017 2:37	0.13			
SR4	1/3/2017 2:57	0.16				SR12	1/3/2017 2:57	0.12			
SR4	1/3/2017 3:17	0.13				SR12	1/3/2017 3:17	0.16			
SR4	1/3/2017 3:37	0.13				SR12	1/3/2017 3:37	0.15			
SR4	1/3/2017 3:57	0.15				SR12	1/3/2017 3:57	0.13			
SR4	1/3/2017 4:17	0.14				SR12	1/3/2017 4:17	0.13			
SR4	1/3/2017 4:37	0.14				SR12	1/3/2017 4:37	0.15			
SR4	1/3/2017 4:57	0.14				SR12	1/3/2017 4:57	0.14			
SR4	1/3/2017 5:17	0.13				SR12	1/3/2017 5:17	0.15			
SR4	1/3/2017 5:37	0.13				SR12	1/3/2017 5:37	0.14			
SR4	1/3/2017 5:57	0.14				SR12	1/3/2017 5:57	0.15			
SR4						SR12					
SR4	1/3/2017 6:37	0.16				SR12	1/3/2017 6:37	0.13			
SR4	1/3/2017 6:57	0.14				SR12	1/3/2017 6:57	0.15			
SR4	1/3/2017 7:17	0.15				SR12	1/3/2017 7:17	0.14			
SR4	1/3/2017 7:37	0.16				SR12	1/3/2017 7:37	0.14			
SR4	1/3/2017 7:57	0.14				SR12	1/3/2017 7:57	0.13			
SR4	1/3/2017 8:17	0.14				SR12	1/3/2017 8:17	0.15			
SR4	1/3/2017 8:37	0.14				SR12	1/3/2017 8:37	0.16			
SR4	1/3/2017 8:57	0.15				SR12	1/3/2017 8:57	0.15			
SR4	1/3/2017 9:17	0.17				SR12	1/3/2017 9:17	0.13			
SR4	1/3/2017 9:37	0.14				SR12	1/3/2017 9:37	0.15			
SR4	1/3/2017 9:57	0.17				SR12	1/3/2017 9:57	0.16			
SR4	1/3/2017 10:17	0.17				SR12	1/3/2017 10:17	0.15			
SR4	1/3/2017 10:37	0.17				SR12	1/3/2017 10:37	0.16			
SR4	1/3/2017 10:57	0.17				SR12	1/3/2017 10:57	0.16			
SR4	1/3/2017 11:17	0.14				SR12	1/3/2017 11:17	0.14			
SR4	1/3/2017 11:37	0.14				SR12	1/3/2017 11:37	0.16			
SR4	1/3/2017 11:57	0.15				SR12	1/3/2017 11:57	0.16			
SR4	1/3/2017 12:17	0.15				SR12	1/3/2017 12:17	0.14			
SR4	1/3/2017 12:37	0.18				SR12	1/3/2017 12:37	0.16			
SR4	1/3/2017 12:57	0.17				SR12	1/3/2017 12:57	0.13			
SR4	1/3/2017 13:17	0.17				SR12	1/3/2017 13:17	0.13			
SR4	1/3/2017 13:37	0.17				SR12	1/3/2017 13:37	0.15			
SR4	1/3/2017 13:57	0.16				SR12	1/3/2017 13:57	0.13			
SR4	1/3/2017 14:17	0.17				SR12	1/3/2017 14:17	0.16			
SR4	1/3/2017 14:37	0.15				SR12	1/3/2017 14:37	0.15			
SR4	1/3/2017 14:57	0.17				SR12	1/3/2017 14:57	0.16			
SR4	1/3/2017 15:17	0.18				SR12	1/3/2017 15:17	0.16			
SR4	1/3/2017 15:37	0.18				SR12	1/3/2017 15:37	0.16			
SR4	1/3/2017 15:57	0.15				SR12	1/3/2017 15:57	0.11			
SR4	1/3/2017 16:17	0.17				SR12	1/3/2017 16:17	0.11			
SR4	1/3/2017 16:37	0.17				SR12	1/3/2017 16:37	0.13			
SR4	1/3/2017 16:57	0.16				SR12	1/3/2017 16:57	0.11			
SR4	1/3/2017 17:17	0.15				SR12	1/3/2017 17:17	0.12			
SR4	1/3/2017 17:37	0.17				SR12	1/3/2017 17:37	0.12			
SR4	1/3/2017 17:57	0.18				SR12	1/3/2017 17:57	0.14			
SR4	1/3/2017 18:17	0.17				SR12	1/3/2017 18:17	0.14			
SR4	1/3/2017 18:37	0.18				SR12	1/3/2017 18:37	0.12			
SR4	1/3/2017 18:57	0.15				SR12	1/3/2017 18:57	0.14			
SR4	1/3/2017 19:17	0.12				SR12	1/3/2017 19:17	0.14			
SR4	1/3/2017 19:37	0.12				SR12	1/3/2017 19:37	0.11			
SR4	1/3/2017 19:57	0.14				SR12	1/3/2017 19:57	0.14			
SR4	1/3/2017 20:17	0.15				SR12	1/3/2017 20:17	0.14			
SR4	1/3/2017 20:37	0.15				SR12	1/3/2017 20:37	0.14			
SR4	1/3/2017 20:57	0.14				SR12	1/3/2017 20:57	0.11			
SR4	1/3/2017 21:17	0.13				SR12	1/3/2017 21:17	0.12			
SR4	1/3/2017 21:37	0.15				SR12	1/3/2017 21:37	0.13			
SR4	1/3/2017 21:57	0.13				SR12	1/3/2017 21:57	0.13			
SR4	1/3/2017 22:17	0.12				SR12	1/3/2017 22:17	0.14			
SR4	1/3/2017 22:37	0.14				SR12	1/3/2017 22:37	0.11			
SR4	1/3/2017 22:57	0.14				SR12	1/3/2017 22:57	0.13			
SR4	1/3/2017 23:17	0.15				SR12	1/3/2017 23:17	0.12			
SR4	1/3/2017 23:37	0.14				SR12	1/3/2017 23:37	0.11			
SR4	1/3/2017 23:57	0.12				SR12	1/3/2017 23:57	0.14			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 13:45-14:05.

SR9 monitoring station was under maintenance during 11:20-11:40.

SR10 monitoring station was under maintenance during 14:05-14:25.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/4/2017 0:17	0.15				SR12	1/4/2017 0:17	0.11			
SR4	1/4/2017 0:37	0.15				SR12	1/4/2017 0:37	0.14			
SR4	1/4/2017 0:57	0.13				SR12	1/4/2017 0:57	0.12			
SR4	1/4/2017 1:17	0.13				SR12	1/4/2017 1:17	0.12			
SR4	1/4/2017 1:37	0.14				SR12	1/4/2017 1:37	0.12			
SR4	1/4/2017 1:57	0.14				SR12	1/4/2017 1:57	0.13			
SR4	1/4/2017 2:17	0.13				SR12	1/4/2017 2:17	0.12			
SR4	1/4/2017 2:37	0.12				SR12	1/4/2017 2:37	0.13			
SR4	1/4/2017 2:57	0.12				SR12	1/4/2017 2:57	0.13			
SR4	1/4/2017 3:17	0.12				SR12	1/4/2017 3:17	0.13			
SR4	1/4/2017 3:37	0.14				SR12	1/4/2017 3:37	0.11			
SR4	1/4/2017 3:57	0.15				SR12	1/4/2017 3:57	0.14			
SR4	1/4/2017 4:17	0.15				SR12	1/4/2017 4:17	0.14			
SR4	1/4/2017 4:37	0.12				SR12	1/4/2017 4:37	0.16			
SR4	1/4/2017 4:57	0.14				SR12	1/4/2017 4:57	0.13			
SR4	1/4/2017 5:17	0.13				SR12	1/4/2017 5:17	0.16			
SR4	1/4/2017 5:37	0.13				SR12	1/4/2017 5:37	0.17			
SR4	1/4/2017 5:57	0.12				SR12	1/4/2017 5:57	0.15			
SR4						SR12					
SR4	1/4/2017 6:37	0.13				SR12	1/4/2017 6:37	0.15			
SR4	1/4/2017 6:57	0.12				SR12	1/4/2017 6:57	0.16			
SR4	1/4/2017 7:17	0.12				SR12	1/4/2017 7:17	0.14			
SR4	1/4/2017 7:37	0.13				SR12	1/4/2017 7:37	0.17			
SR4	1/4/2017 7:57	0.11				SR12	1/4/2017 7:57	0.17			
SR4	1/4/2017 8:17	0.12				SR12	1/4/2017 8:17	0.15			
SR4	1/4/2017 8:37	0.13				SR12	1/4/2017 8:37	0.17			
SR4	1/4/2017 8:57	0.13				SR12	1/4/2017 8:57	0.14			
SR4	1/4/2017 9:17	0.10				SR12	1/4/2017 9:17	0.13			
SR4	1/4/2017 9:37	0.12				SR12	1/4/2017 9:37	0.14			
SR4	1/4/2017 9:57	0.12				SR12	1/4/2017 9:57	0.16			
SR4	1/4/2017 10:17	0.10				SR12					
SR4	1/4/2017 10:37	0.10				SR12					
SR4	1/4/2017 10:57	0.12				SR12					
SR4	1/4/2017 11:17	0.13				SR12					
SR4	1/4/2017 11:37	0.12				SR12	1/4/2017 11:37	0.13			
SR4	1/4/2017 11:57	0.10				SR12	1/4/2017 11:57	0.17			
SR4						SR12	1/4/2017 12:17	0.15			
SR4						SR12	1/4/2017 12:37	0.15			
SR4						SR12	1/4/2017 12:57	0.16			
SR4						SR12	1/4/2017 13:17	0.13			
SR4	1/4/2017 13:37	0.11				SR12	1/4/2017 13:37	0.17			
SR4	1/4/2017 13:57	0.12				SR12	1/4/2017 13:57	0.16			
SR4	1/4/2017 14:17	0.13				SR12	1/4/2017 14:17	0.13			
SR4	1/4/2017 14:37	0.11				SR12	1/4/2017 14:37	0.16			
SR4	1/4/2017 14:57	0.12				SR12	1/4/2017 14:57	0.16			
SR4	1/4/2017 15:17	0.11				SR12	1/4/2017 15:17	0.16			
SR4	1/4/2017 15:37	0.10				SR12	1/4/2017 15:37	0.15			
SR4	1/4/2017 15:57	0.13				SR12	1/4/2017 15:57	0.13			
SR4	1/4/2017 16:17	0.11				SR12	1/4/2017 16:17	0.14			
SR4	1/4/2017 16:37	0.13				SR12	1/4/2017 16:37	0.15			
SR4	1/4/2017 16:57	0.11				SR12	1/4/2017 16:57	0.13			
SR4	1/4/2017 17:17	0.12				SR12	1/4/2017 17:17	0.12			
SR4	1/4/2017 17:37	0.11				SR12	1/4/2017 17:37	0.12			
SR4	1/4/2017 17:57	0.10				SR12	1/4/2017 17:57	0.14			
SR4	1/4/2017 18:17	0.12				SR12	1/4/2017 18:17	0.13			
SR4	1/4/2017 18:37	0.13				SR12	1/4/2017 18:37	0.14			
SR4	1/4/2017 18:57	0.13				SR12	1/4/2017 18:57	0.12			
SR4	1/4/2017 19:17	0.11				SR12	1/4/2017 19:17	0.14			
SR4	1/4/2017 19:37	0.13				SR12	1/4/2017 19:37	0.12			
SR4	1/4/2017 19:57	0.12				SR12	1/4/2017 19:57	0.12			
SR4	1/4/2017 20:17	0.11				SR12	1/4/2017 20:17	0.14			
SR4	1/4/2017 20:37	0.10				SR12	1/4/2017 20:37	0.14			
SR4	1/4/2017 20:57	0.10				SR12	1/4/2017 20:57	0.13			
SR4	1/4/2017 21:17	0.12				SR12	1/4/2017 21:17	0.13			
SR4	1/4/2017 21:37	0.09				SR12	1/4/2017 21:37	0.13			
SR4	1/4/2017 21:57	0.11				SR12	1/4/2017 21:57	0.13			
SR4	1/4/2017 22:17	0.10				SR12	1/4/2017 22:17	0.14			
SR4	1/4/2017 22:37	0.10				SR12	1/4/2017 22:37	0.13			
SR4	1/4/2017 22:57	0.09				SR12	1/4/2017 22:57	0.12			
SR4	1/4/2017 23:17	0.09				SR12	1/4/2017 23:17	0.14			
SR4	1/4/2017 23:37	0.09				SR12	1/4/2017 23:37	0.12			
SR4	1/4/2017 23:57	0.11				SR12	1/4/2017 23:57	0.13			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 12:11-13:16.

SR12 monitoring station was under maintenance during 10:11-11:11.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/5/2017 0:17	0.12				SR12	1/5/2017 0:17	0.11			
SR4	1/5/2017 0:37	0.09				SR12	1/5/2017 0:37	0.11			
SR4	1/5/2017 0:57	0.10				SR12	1/5/2017 0:57	0.14			
SR4	1/5/2017 1:17	0.11				SR12	1/5/2017 1:17	0.12			
SR4	1/5/2017 1:37	0.10				SR12	1/5/2017 1:37	0.11			
SR4	1/5/2017 1:57	0.12				SR12	1/5/2017 1:57	0.11			
SR4	1/5/2017 2:17	0.11				SR12	1/5/2017 2:17	0.12			
SR4	1/5/2017 2:37	0.11				SR12	1/5/2017 2:37	0.14			
SR4	1/5/2017 2:57	0.12				SR12	1/5/2017 2:57	0.13			
SR4	1/5/2017 3:17	0.12				SR12	1/5/2017 3:17	0.12			
SR4	1/5/2017 3:37	0.11				SR12	1/5/2017 3:37	0.11			
SR4	1/5/2017 3:57	0.09				SR12	1/5/2017 3:57	0.12			
SR4	1/5/2017 4:17	0.09				SR12	1/5/2017 4:17	0.13			
SR4	1/5/2017 4:37	0.12				SR12	1/5/2017 4:37	0.11			
SR4	1/5/2017 4:57	0.12				SR12	1/5/2017 4:57	0.11			
SR4	1/5/2017 5:17	0.10				SR12	1/5/2017 5:17	0.11			
SR4	1/5/2017 5:37	0.10				SR12	1/5/2017 5:37	0.13			
SR4	1/5/2017 5:57	0.11				SR12	1/5/2017 5:57	0.13			
SR4						SR12					
SR4	1/5/2017 6:37	0.11				SR12	1/5/2017 6:37	0.10			
SR4	1/5/2017 6:57	0.10				SR12	1/5/2017 6:57	0.12			
SR4	1/5/2017 7:17	0.10				SR12	1/5/2017 7:17	0.09			
SR4	1/5/2017 7:37	0.09				SR12	1/5/2017 7:37	0.10			
SR4	1/5/2017 7:57	0.11				SR12	1/5/2017 7:57	0.09			
SR4	1/5/2017 8:17	0.11				SR12	1/5/2017 8:17	0.11			
SR4	1/5/2017 8:37	0.09				SR12	1/5/2017 8:37	0.13			
SR4	1/5/2017 8:57	0.08				SR12	1/5/2017 8:57	0.12			
SR4	1/5/2017 9:17	0.07				SR12	1/5/2017 9:17	0.13			
SR4	1/5/2017 9:37	0.09				SR12	1/5/2017 9:37	0.12			
SR4	1/5/2017 9:57	0.09				SR12	1/5/2017 9:57	0.13			
SR4	1/5/2017 10:17	0.07				SR12	1/5/2017 10:17	0.10			
SR4	1/5/2017 10:37	0.09				SR12	1/5/2017 10:37	0.11			
SR4	1/5/2017 10:57	0.09				SR12	1/5/2017 10:57	0.12			
SR4	1/5/2017 11:17	0.09				SR12	1/5/2017 11:17	0.11			
SR4	1/5/2017 11:37	0.08				SR12	1/5/2017 11:37	0.11			
SR4	1/5/2017 11:57	0.07				SR12	1/5/2017 11:57	0.12			
SR4	1/5/2017 12:17	0.09				SR12	1/5/2017 12:17	0.13			
SR4	1/5/2017 12:37	0.09				SR12	1/5/2017 12:37	0.12			
SR4	1/5/2017 12:57	0.07				SR12	1/5/2017 12:57	0.10			
SR4	1/5/2017 13:17	0.07				SR12	1/5/2017 13:17	0.11			
SR4	1/5/2017 13:37	0.08				SR12	1/5/2017 13:37	0.10			
SR4	1/5/2017 13:57	0.07				SR12	1/5/2017 13:57	0.13			
SR4	1/5/2017 14:17	0.09				SR12	1/5/2017 14:17	0.09			
SR4	1/5/2017 14:37	0.07				SR12	1/5/2017 14:37	0.11			
SR4	1/5/2017 14:57	0.07				SR12	1/5/2017 14:57	0.11			
SR4	1/5/2017 15:17	0.08				SR12	1/5/2017 15:17	0.11			
SR4	1/5/2017 15:37	0.08				SR12	1/5/2017 15:37	0.09			
SR4	1/5/2017 15:57	0.09				SR12	1/5/2017 15:57	0.10			
SR4	1/5/2017 16:17	0.07				SR12	1/5/2017 16:17	0.12			
SR4	1/5/2017 16:37	0.07				SR12	1/5/2017 16:37	0.13			
SR4	1/5/2017 16:57	0.09				SR12	1/5/2017 16:57	0.13			
SR4	1/5/2017 17:17	0.07				SR12	1/5/2017 17:17	0.11			
SR4	1/5/2017 17:37	0.09				SR12	1/5/2017 17:37	0.09			
SR4	1/5/2017 17:57	0.07				SR12	1/5/2017 17:57	0.11			
SR4	1/5/2017 18:17	0.07				SR12	1/5/2017 18:17	0.10			
SR4	1/5/2017 18:37	0.08				SR12	1/5/2017 18:37	0.08			
SR4	1/5/2017 18:57	0.07				SR12	1/5/2017 18:57	0.10			
SR4	1/5/2017 19:17	0.07				SR12	1/5/2017 19:17	0.07			
SR4	1/5/2017 19:37	0.09				SR12	1/5/2017 19:37	0.08			
SR4	1/5/2017 19:57	0.08				SR12	1/5/2017 19:57	0.08			
SR4	1/5/2017 20:17	0.08				SR12	1/5/2017 20:17	0.10			
SR4	1/5/2017 20:37	0.08				SR12	1/5/2017 20:37	0.09			
SR4	1/5/2017 20:57	0.08				SR12	1/5/2017 20:57	0.09			
SR4	1/5/2017 21:17	0.08				SR12	1/5/2017 21:17	0.09			
SR4	1/5/2017 21:37	0.08				SR12	1/5/2017 21:37	0.10			
SR4	1/5/2017 21:57	0.11				SR12	1/5/2017 21:57	0.08			
SR4	1/5/2017 22:17	0.08				SR12	1/5/2017 22:17	0.09			
SR4	1/5/2017 22:37	0.11				SR12	1/5/2017 22:37	0.07			
SR4	1/5/2017 22:57	0.08				SR12	1/5/2017 22:57	0.10			
SR4	1/5/2017 23:17	0.11				SR12	1/5/2017 23:17	0.08			
SR4	1/5/2017 23:37	0.08				SR12	1/5/2017 23:37	0.10			
SR4	1/5/2017 23:57	0.11				SR12	1/5/2017 23:57	0.07			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 15:25-15:45.

SR9 monitoring station was under maintenance during 12:50-13:10.

SR11 monitoring station was under maintenance during 15:30-15:50.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/6/2017 0:17	0.08				SR12	1/6/2017 0:17	0.09			
SR4	1/6/2017 0:37	0.10				SR12	1/6/2017 0:37	0.09			
SR4	1/6/2017 0:57	0.09				SR12	1/6/2017 0:57	0.07			
SR4	1/6/2017 1:17	0.10				SR12	1/6/2017 1:17	0.10			
SR4	1/6/2017 1:37	0.09				SR12	1/6/2017 1:37	0.10			
SR4	1/6/2017 1:57	0.09				SR12	1/6/2017 1:57	0.07			
SR4	1/6/2017 2:17	0.08				SR12	1/6/2017 2:17	0.08			
SR4	1/6/2017 2:37	0.09				SR12	1/6/2017 2:37	0.10			
SR4	1/6/2017 2:57	0.08				SR12	1/6/2017 2:57	0.08			
SR4	1/6/2017 3:17	0.10				SR12	1/6/2017 3:17	0.09			
SR4	1/6/2017 3:37	0.11				SR12	1/6/2017 3:37	0.09			
SR4	1/6/2017 3:57	0.11				SR12	1/6/2017 3:57	0.09			
SR4	1/6/2017 4:17	0.09				SR12	1/6/2017 4:17	0.09			
SR4	1/6/2017 4:37	0.09				SR12	1/6/2017 4:37	0.07			
SR4	1/6/2017 4:57	0.08				SR12	1/6/2017 4:57	0.10			
SR4	1/6/2017 5:17	0.09				SR12	1/6/2017 5:17	0.07			
SR4	1/6/2017 5:37	0.08				SR12	1/6/2017 5:37	0.09			
SR4	1/6/2017 5:57	0.09				SR12	1/6/2017 5:57	0.10			
SR4						SR12					
SR4	1/6/2017 6:37	0.09				SR12	1/6/2017 6:37	0.07			
SR4	1/6/2017 6:57	0.10				SR12	1/6/2017 6:57	0.07			
SR4	1/6/2017 7:17	0.08				SR12	1/6/2017 7:17	0.10			
SR4	1/6/2017 7:37	0.08				SR12	1/6/2017 7:37	0.10			
SR4	1/6/2017 7:57	0.10				SR12	1/6/2017 7:57	0.10			
SR4	1/6/2017 8:17	0.11				SR12	1/6/2017 8:17	0.12			
SR4	1/6/2017 8:37	0.09				SR12	1/6/2017 8:37	0.09			
SR4	1/6/2017 8:57	0.08				SR12	1/6/2017 8:57	0.10			
SR4	1/6/2017 9:17	0.08				SR12	1/6/2017 9:17	0.12			
SR4	1/6/2017 9:37	0.11				SR12	1/6/2017 9:37	0.11			
SR4	1/6/2017 9:57	0.11				SR12	1/6/2017 9:57	0.09			
SR4	1/6/2017 10:17	0.13				SR12	1/6/2017 10:17	0.09			
SR4	1/6/2017 10:37	0.14				SR12	1/6/2017 10:37	0.11			
SR4	1/6/2017 10:57	0.12				SR12	1/6/2017 10:57	0.10			
SR4	1/6/2017 11:17	0.14				SR12	1/6/2017 11:17	0.11			
SR4	1/6/2017 11:37	0.14				SR12	1/6/2017 11:37	0.12			
SR4	1/6/2017 11:57	0.12				SR12	1/6/2017 11:57	0.12			
SR4	1/6/2017 12:17	0.11				SR12	1/6/2017 12:17	0.10			
SR4	1/6/2017 12:37	0.12				SR12	1/6/2017 12:37	0.09			
SR4	1/6/2017 12:57	0.12				SR12	1/6/2017 12:57	0.11			
SR4	1/6/2017 13:17	0.11				SR12	1/6/2017 13:17	0.12			
SR4	1/6/2017 13:37	0.12				SR12	1/6/2017 13:37	0.09			
SR4	1/6/2017 13:57	0.13				SR12	1/6/2017 13:57	0.11			
SR4	1/6/2017 14:17	0.14				SR12	1/6/2017 14:17	0.11			
SR4	1/6/2017 14:37	0.12				SR12	1/6/2017 14:37	0.11			
SR4	1/6/2017 14:57	0.11				SR12	1/6/2017 14:57	0.12			
SR4	1/6/2017 15:17	0.13				SR12	1/6/2017 15:17	0.10			
SR4	1/6/2017 15:37	0.14				SR12	1/6/2017 15:37	0.10			
SR4	1/6/2017 15:57	0.11				SR12	1/6/2017 15:57	0.10			
SR4	1/6/2017 16:17	0.14				SR12	1/6/2017 16:17	0.11			
SR4	1/6/2017 16:37	0.11				SR12	1/6/2017 16:37	0.11			
SR4	1/6/2017 16:57	0.11				SR12	1/6/2017 16:57	0.10			
SR4	1/6/2017 17:17	0.13				SR12	1/6/2017 17:17	0.11			
SR4	1/6/2017 17:37	0.13				SR12	1/6/2017 17:37	0.09			
SR4	1/6/2017 17:57	0.11				SR12	1/6/2017 17:57	0.12			
SR4	1/6/2017 18:17	0.13				SR12	1/6/2017 18:17	0.09			
SR4	1/6/2017 18:37	0.12				SR12	1/6/2017 18:37	0.09			
SR4	1/6/2017 18:57	0.12				SR12	1/6/2017 18:57	0.12			
SR4	1/6/2017 19:17	0.14				SR12	1/6/2017 19:17	0.12			
SR4	1/6/2017 19:37	0.11				SR12	1/6/2017 19:37	0.12			
SR4	1/6/2017 19:57	0.12				SR12	1/6/2017 19:57	0.12			
SR4	1/6/2017 20:17	0.11				SR12	1/6/2017 20:17	0.12			
SR4	1/6/2017 20:37	0.11				SR12	1/6/2017 20:37	0.15			
SR4	1/6/2017 20:57	0.14				SR12	1/6/2017 20:57	0.15			
SR4	1/6/2017 21:17	0.12				SR12	1/6/2017 21:17	0.13			
SR4	1/6/2017 21:37	0.11				SR12	1/6/2017 21:37	0.14			
SR4	1/6/2017 21:57	0.13				SR12	1/6/2017 21:57	0.13			
SR4	1/6/2017 22:17	0.11				SR12	1/6/2017 22:17	0.14			
SR4	1/6/2017 22:37	0.11				SR12	1/6/2017 22:37	0.12			
SR4	1/6/2017 22:57	0.12				SR12	1/6/2017 22:57	0.15			
SR4	1/6/2017 23:17	0.13				SR12	1/6/2017 23:17	0.12			
SR4	1/6/2017 23:37	0.11				SR12	1/6/2017 23:37	0.13			
SR4	1/6/2017 23:57	0.13				SR12	1/6/2017 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12. SR5 monitoring station was under maintenance during 15:25-15:45.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/7/2017 0:17	0.11				SR12	1/7/2017 0:17	0.12			
SR4	1/7/2017 0:37	0.13				SR12	1/7/2017 0:37	0.15			
SR4	1/7/2017 0:57	0.12				SR12	1/7/2017 0:57	0.14			
SR4	1/7/2017 1:17	0.14				SR12	1/7/2017 1:17	0.15			
SR4	1/7/2017 1:37	0.14				SR12	1/7/2017 1:37	0.15			
SR4	1/7/2017 1:57	0.11				SR12	1/7/2017 1:57	0.12			
SR4	1/7/2017 2:17	0.14				SR12	1/7/2017 2:17	0.13			
SR4	1/7/2017 2:37	0.13				SR12	1/7/2017 2:37	0.13			
SR4	1/7/2017 2:57	0.12				SR12	1/7/2017 2:57	0.14			
SR4	1/7/2017 3:17	0.12				SR12	1/7/2017 3:17	0.14			
SR4	1/7/2017 3:37	0.14				SR12	1/7/2017 3:37	0.13			
SR4	1/7/2017 3:57	0.11				SR12	1/7/2017 3:57	0.12			
SR4	1/7/2017 4:17	0.11				SR12	1/7/2017 4:17	0.12			
SR4	1/7/2017 4:37	0.13				SR12	1/7/2017 4:37	0.12			
SR4	1/7/2017 4:57	0.14				SR12	1/7/2017 4:57	0.15			
SR4	1/7/2017 5:17	0.13				SR12	1/7/2017 5:17	0.15			
SR4	1/7/2017 5:37	0.11				SR12	1/7/2017 5:37	0.12			
SR4	1/7/2017 5:57	0.14				SR12	1/7/2017 5:57	0.12			
SR4						SR12					
SR4	1/7/2017 6:37	0.11				SR12	1/7/2017 6:37	0.12			
SR4	1/7/2017 6:57	0.11				SR12	1/7/2017 6:57	0.12			
SR4	1/7/2017 7:17	0.14				SR12	1/7/2017 7:17	0.15			
SR4	1/7/2017 7:37	0.13				SR12	1/7/2017 7:37	0.14			
SR4	1/7/2017 7:57	0.11				SR12	1/7/2017 7:57	0.14			
SR4	1/7/2017 8:17	0.14				SR12	1/7/2017 8:17	0.14			
SR4	1/7/2017 8:37	0.11				SR12	1/7/2017 8:37	0.12			
SR4	1/7/2017 8:57	0.14				SR12	1/7/2017 8:57	0.15			
SR4	1/7/2017 9:17	0.14				SR12	1/7/2017 9:17	0.12			
SR4	1/7/2017 9:37	0.14				SR12	1/7/2017 9:37	0.15			
SR4	1/7/2017 9:57	0.11				SR12	1/7/2017 9:57	0.13			
SR4	1/7/2017 10:17	0.11				SR12	1/7/2017 10:17	0.14			
SR4	1/7/2017 10:37	0.13				SR12	1/7/2017 10:37	0.13			
SR4	1/7/2017 10:57	0.14				SR12	1/7/2017 10:57	0.13			
SR4	1/7/2017 11:17	0.14				SR12	1/7/2017 11:17	0.12			
SR4	1/7/2017 11:37	0.16				SR12	1/7/2017 11:37	0.14			
SR4	1/7/2017 11:57	0.17				SR12	1/7/2017 11:57	0.15			
SR4	1/7/2017 12:17	0.14				SR12	1/7/2017 12:17	0.13			
SR4	1/7/2017 12:37	0.15				SR12	1/7/2017 12:37	0.13			
SR4	1/7/2017 12:57	0.13				SR12	1/7/2017 12:57	0.15			
SR4	1/7/2017 13:17	0.14				SR12	1/7/2017 13:17	0.13			
SR4	1/7/2017 13:37	0.15				SR12	1/7/2017 13:37	0.14			
SR4	1/7/2017 13:57	0.13				SR12	1/7/2017 13:57	0.13			
SR4	1/7/2017 14:17	0.16				SR12	1/7/2017 14:17	0.15			
SR4	1/7/2017 14:37	0.13				SR12	1/7/2017 14:37	0.15			
SR4	1/7/2017 14:57	0.13				SR12	1/7/2017 14:57	0.15			
SR4	1/7/2017 15:17	0.15				SR12	1/7/2017 15:17	0.15			
SR4	1/7/2017 15:37	0.15				SR12	1/7/2017 15:37	0.13			
SR4	1/7/2017 15:57	0.17				SR12	1/7/2017 15:57	0.15			
SR4	1/7/2017 16:17	0.16				SR12	1/7/2017 16:17	0.13			
SR4	1/7/2017 16:37	0.17				SR12	1/7/2017 16:37	0.12			
SR4	1/7/2017 16:57	0.15				SR12	1/7/2017 16:57	0.15			
SR4	1/7/2017 17:17	0.13				SR12	1/7/2017 17:17	0.12			
SR4	1/7/2017 17:37	0.15				SR12	1/7/2017 17:37	0.12			
SR4	1/7/2017 17:57	0.14				SR12	1/7/2017 17:57	0.15			
SR4	1/7/2017 18:17	0.14				SR12	1/7/2017 18:17	0.14			
SR4	1/7/2017 18:37	0.17				SR12	1/7/2017 18:37	0.12			
SR4	1/7/2017 18:57	0.17				SR12	1/7/2017 18:57	0.12			
SR4	1/7/2017 19:17	0.17				SR12	1/7/2017 19:17	0.12			
SR4	1/7/2017 19:37	0.15				SR12	1/7/2017 19:37	0.14			
SR4	1/7/2017 19:57	0.15				SR12	1/7/2017 19:57	0.14			
SR4	1/7/2017 20:17	0.13				SR12	1/7/2017 20:17	0.12			
SR4	1/7/2017 20:37	0.15				SR12	1/7/2017 20:37	0.14			
SR4	1/7/2017 20:57	0.14				SR12	1/7/2017 20:57	0.14			
SR4	1/7/2017 21:17	0.14				SR12	1/7/2017 21:17	0.14			
SR4	1/7/2017 21:37	0.14				SR12	1/7/2017 21:37	0.17			
SR4	1/7/2017 21:57	0.17				SR12	1/7/2017 21:57	0.17			
SR4	1/7/2017 22:17	0.17				SR12	1/7/2017 22:17	0.16			
SR4	1/7/2017 22:37	0.14				SR12	1/7/2017 22:37	0.16			
SR4	1/7/2017 22:57	0.16				SR12	1/7/2017 22:57	0.15			
SR4	1/7/2017 23:17	0.15				SR12	1/7/2017 23:17	0.15			
SR4	1/7/2017 23:37	0.17				SR12	1/7/2017 23:37	0.16			
SR4	1/7/2017 23:57	0.16				SR12	1/7/2017 23:57	0.16			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.  
SR10 monitoring station was under maintenance during 10:20-10:40.  
SR11 monitoring station was under maintenance during 11:10-11:30.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/8/2017 0:17	0.14				SR12	1/8/2017 0:17	0.16			
SR4	1/8/2017 0:37	0.14				SR12	1/8/2017 0:37	0.20			
SR4	1/8/2017 0:57	0.15				SR12	1/8/2017 0:57	0.17			
SR4	1/8/2017 1:17	0.15				SR12	1/8/2017 1:17	0.16			
SR4	1/8/2017 1:37	0.14				SR12	1/8/2017 1:37	0.19			
SR4	1/8/2017 1:57	0.16				SR12	1/8/2017 1:57	0.17			
SR4	1/8/2017 2:17	0.16				SR12	1/8/2017 2:17	0.19			
SR4	1/8/2017 2:37	0.18				SR12	1/8/2017 2:37	0.17			
SR4	1/8/2017 2:57	0.16				SR12	1/8/2017 2:57	0.20			
SR4	1/8/2017 3:17	0.16				SR12	1/8/2017 3:17	0.20			
SR4	1/8/2017 3:37	0.15				SR12	1/8/2017 3:37	0.19			
SR4	1/8/2017 3:57	0.18				SR12	1/8/2017 3:57	0.18			
SR4	1/8/2017 4:17	0.14				SR12	1/8/2017 4:17	0.19			
SR4	1/8/2017 4:37	0.17				SR12	1/8/2017 4:37	0.16			
SR4	1/8/2017 4:57	0.16				SR12	1/8/2017 4:57	0.19			
SR4	1/8/2017 5:17	0.14				SR12	1/8/2017 5:17	0.19			
SR4	1/8/2017 5:37	0.17				SR12	1/8/2017 5:37	0.18			
SR4	1/8/2017 5:57	0.18				SR12	1/8/2017 5:57	0.16			
SR4						SR12					
SR4	1/8/2017 6:37	0.17				SR12	1/8/2017 6:37	0.19			
SR4	1/8/2017 6:57	0.17				SR12	1/8/2017 6:57	0.18			
SR4	1/8/2017 7:17	0.16				SR12	1/8/2017 7:17	0.20			
SR4	1/8/2017 7:37	0.15				SR12	1/8/2017 7:37	0.17			
SR4	1/8/2017 7:57	0.17				SR12	1/8/2017 7:57	0.17			
SR4	1/8/2017 8:17	0.18				SR12	1/8/2017 8:17	0.18			
SR4	1/8/2017 8:37	0.17				SR12	1/8/2017 8:37	0.19			
SR4	1/8/2017 8:57	0.14				SR12	1/8/2017 8:57	0.17			
SR4	1/8/2017 9:17	0.17				SR12	1/8/2017 9:17	0.19			
SR4	1/8/2017 9:37	0.16				SR12	1/8/2017 9:37	0.19			
SR4	1/8/2017 9:57	0.14				SR12	1/8/2017 9:57	0.16			
SR4	1/8/2017 10:17	0.17				SR12	1/8/2017 10:17	0.16			
SR4	1/8/2017 10:37	0.18				SR12	1/8/2017 10:37	0.20			
SR4	1/8/2017 10:57	0.15				SR12	1/8/2017 10:57	0.17			
SR4	1/8/2017 11:17	0.14				SR12	1/8/2017 11:17	0.18			
SR4	1/8/2017 11:37	0.14				SR12	1/8/2017 11:37	0.19			
SR4	1/8/2017 11:57	0.16				SR12	1/8/2017 11:57	0.18			
SR4	1/8/2017 12:17	0.17				SR12	1/8/2017 12:17	0.16			
SR4	1/8/2017 12:37	0.15				SR12	1/8/2017 12:37	0.17			
SR4	1/8/2017 12:57	0.17				SR12	1/8/2017 12:57	0.16			
SR4	1/8/2017 13:17	0.18				SR12	1/8/2017 13:17	0.20			
SR4	1/8/2017 13:37	0.19				SR12	1/8/2017 13:37	0.19			
SR4	1/8/2017 13:57	0.18				SR12	1/8/2017 13:57	0.18			
SR4	1/8/2017 14:17	0.17				SR12	1/8/2017 14:17	0.17			
SR4	1/8/2017 14:37	0.16				SR12	1/8/2017 14:37	0.18			
SR4	1/8/2017 14:57	0.15				SR12	1/8/2017 14:57	0.20			
SR4	1/8/2017 15:17	0.16				SR12	1/8/2017 15:17	0.17			
SR4	1/8/2017 15:37	0.15				SR12	1/8/2017 15:37	0.16			
SR4	1/8/2017 15:57	0.18				SR12	1/8/2017 15:57	0.17			
SR4	1/8/2017 16:17	0.19				SR12	1/8/2017 16:17	0.19			
SR4	1/8/2017 16:37	0.18				SR12	1/8/2017 16:37	0.18			
SR4	1/8/2017 16:57	0.17				SR12	1/8/2017 16:57	0.16			
SR4	1/8/2017 17:17	0.16				SR12	1/8/2017 17:17	0.17			
SR4	1/8/2017 17:37	0.16				SR12	1/8/2017 17:37	0.19			
SR4	1/8/2017 17:57	0.19				SR12	1/8/2017 17:57	0.20			
SR4	1/8/2017 18:17	0.18				SR12	1/8/2017 18:17	0.16			
SR4	1/8/2017 18:37	0.19				SR12	1/8/2017 18:37	0.17			
SR4	1/8/2017 18:57	0.16				SR12	1/8/2017 18:57	0.20			
SR4	1/8/2017 19:17	0.15				SR12	1/8/2017 19:17	0.19			
SR4	1/8/2017 19:37	0.18				SR12	1/8/2017 19:37	0.16			
SR4	1/8/2017 19:57	0.18				SR12	1/8/2017 19:57	0.19			
SR4	1/8/2017 20:17	0.16				SR12	1/8/2017 20:17	0.20			
SR4	1/8/2017 20:37	0.19				SR12	1/8/2017 20:37	0.19			
SR4	1/8/2017 20:57	0.17				SR12	1/8/2017 20:57	0.17			
SR4	1/8/2017 21:17	0.19				SR12	1/8/2017 21:17	0.17			
SR4	1/8/2017 21:37	0.18				SR12	1/8/2017 21:37	0.19			
SR4	1/8/2017 21:57	0.18				SR12	1/8/2017 21:57	0.20			
SR4	1/8/2017 22:17	0.17				SR12	1/8/2017 22:17	0.16			
SR4	1/8/2017 22:37	0.17				SR12	1/8/2017 22:37	0.19			
SR4	1/8/2017 22:57	0.19				SR12	1/8/2017 22:57	0.18			
SR4	1/8/2017 23:17	0.15				SR12	1/8/2017 23:17	0.17			
SR4	1/8/2017 23:37	0.15				SR12	1/8/2017 23:37	0.20			
SR4	1/8/2017 23:57	0.17				SR12	1/8/2017 23:57	0.19			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/9/2017 0:17	0.17				SR12	1/9/2017 0:17	0.20			
SR4	1/9/2017 0:37	0.18				SR12	1/9/2017 0:37	0.16			
SR4	1/9/2017 0:57	0.16				SR12	1/9/2017 0:57	0.18			
SR4	1/9/2017 1:17	0.17				SR12	1/9/2017 1:17	0.19			
SR4	1/9/2017 1:37	0.15				SR12	1/9/2017 1:37	0.20			
SR4	1/9/2017 1:57	0.15				SR12	1/9/2017 1:57	0.19			
SR4	1/9/2017 2:17	0.17				SR12	1/9/2017 2:17	0.20			
SR4	1/9/2017 2:37	0.15				SR12	1/9/2017 2:37	0.16			
SR4	1/9/2017 2:57	0.19				SR12	1/9/2017 2:57	0.18			
SR4	1/9/2017 3:17	0.19				SR12	1/9/2017 3:17	0.16			
SR4	1/9/2017 3:37	0.17				SR12	1/9/2017 3:37	0.16			
SR4	1/9/2017 3:57	0.15				SR12	1/9/2017 3:57	0.18			
SR4	1/9/2017 4:17	0.16				SR12	1/9/2017 4:17	0.17			
SR4	1/9/2017 4:37	0.18				SR12	1/9/2017 4:37	0.16			
SR4	1/9/2017 4:57	0.16				SR12	1/9/2017 4:57	0.20			
SR4	1/9/2017 5:17	0.19				SR12	1/9/2017 5:17	0.17			
SR4	1/9/2017 5:37	0.19				SR12	1/9/2017 5:37	0.16			
SR4	1/9/2017 5:57	0.15				SR12	1/9/2017 5:57	0.18			
SR4						SR12					
SR4	1/9/2017 6:37	0.18				SR12	1/9/2017 6:37	0.16			
SR4	1/9/2017 6:57	0.18				SR12	1/9/2017 6:57	0.16			
SR4	1/9/2017 7:17	0.17				SR12	1/9/2017 7:17	0.17			
SR4	1/9/2017 7:37	0.19				SR12	1/9/2017 7:37	0.18			
SR4	1/9/2017 7:57	0.16				SR12	1/9/2017 7:57	0.17			
SR4	1/9/2017 8:17	0.19				SR12	1/9/2017 8:17	0.20			
SR4	1/9/2017 8:37	0.18				SR12	1/9/2017 8:37	0.17			
SR4	1/9/2017 8:57	0.19				SR12	1/9/2017 8:57	0.17			
SR4	1/9/2017 9:17	0.16				SR12	1/9/2017 9:17	0.18			
SR4	1/9/2017 9:37	0.18				SR12	1/9/2017 9:37	0.16			
SR4	1/9/2017 9:57	0.17				SR12					
SR4	1/9/2017 10:17	0.19				SR12					
SR4	1/9/2017 10:37	0.16				SR12					
SR4	1/9/2017 10:57	0.20				SR12					
SR4	1/9/2017 11:17	0.17				SR12	1/9/2017 11:17	0.19			
SR4	1/9/2017 11:37	0.18				SR12	1/9/2017 11:37	0.17			
SR4	1/9/2017 11:57	0.20				SR12	1/9/2017 11:57	0.16			
SR4						SR12	1/9/2017 12:17	0.20			
SR4						SR12	1/9/2017 12:37	0.16			
SR4						SR12	1/9/2017 12:57	0.20			
SR4						SR12	1/9/2017 13:17	0.19			
SR4	1/9/2017 13:37	0.16				SR12	1/9/2017 13:37	0.17			
SR4	1/9/2017 13:57	0.20				SR12	1/9/2017 13:57	0.16			
SR4	1/9/2017 14:17	0.17				SR12	1/9/2017 14:17	0.16			
SR4	1/9/2017 14:37	0.17				SR12	1/9/2017 14:37	0.17			
SR4	1/9/2017 14:57	0.17				SR12	1/9/2017 14:57	0.17			
SR4	1/9/2017 15:17	0.19				SR12	1/9/2017 15:17	0.17			
SR4	1/9/2017 15:37	0.17				SR12	1/9/2017 15:37	0.16			
SR4	1/9/2017 15:57	0.16				SR12	1/9/2017 15:57	0.20			
SR4	1/9/2017 16:17	0.18				SR12	1/9/2017 16:17	0.20			
SR4	1/9/2017 16:37	0.16				SR12	1/9/2017 16:37	0.19			
SR4	1/9/2017 16:57	0.18				SR12	1/9/2017 16:57	0.16			
SR4	1/9/2017 17:17	0.16				SR12	1/9/2017 17:17	0.19			
SR4	1/9/2017 17:37	0.18				SR12	1/9/2017 17:37	0.16			
SR4	1/9/2017 17:57	0.18				SR12	1/9/2017 17:57	0.19			
SR4	1/9/2017 18:17	0.19				SR12	1/9/2017 18:17	0.16			
SR4	1/9/2017 18:37	0.20				SR12	1/9/2017 18:37	0.20			
SR4	1/9/2017 18:57	0.18				SR12	1/9/2017 18:57	0.16			
SR4	1/9/2017 19:17	0.19				SR12	1/9/2017 19:17	0.16			
SR4	1/9/2017 19:37	0.17				SR12	1/9/2017 19:37	0.20			
SR4	1/9/2017 19:57	0.17				SR12	1/9/2017 19:57	0.18			
SR4	1/9/2017 20:17	0.16				SR12	1/9/2017 20:17	0.17			
SR4	1/9/2017 20:37	0.20				SR12	1/9/2017 20:37	0.19			
SR4	1/9/2017 20:57	0.16				SR12	1/9/2017 20:57	0.17			
SR4	1/9/2017 21:17	0.18				SR12	1/9/2017 21:17	0.17			
SR4	1/9/2017 21:37	0.19				SR12	1/9/2017 21:37	0.20			
SR4	1/9/2017 21:57	0.17				SR12	1/9/2017 21:57	0.18			
SR4	1/9/2017 22:17	0.18				SR12	1/9/2017 22:17	0.19			
SR4	1/9/2017 22:37	0.16				SR12	1/9/2017 22:37	0.18			
SR4	1/9/2017 22:57	0.19				SR12	1/9/2017 22:57	0.17			
SR4	1/9/2017 23:17	0.16				SR12	1/9/2017 23:17	0.19			
SR4	1/9/2017 23:37	0.18				SR12	1/9/2017 23:37	0.20			
SR4	1/9/2017 23:57	0.17				SR12	1/9/2017 23:57	0.20			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 12:06-13:11.

SR12 monitoring station was under maintenance during 9:41-10:46.

SR13 monitoring station was under maintenance during 15:10-15:35.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/10/2017 0:17	0.17				SR12	1/10/2017 0:17	0.20			
SR4	1/10/2017 0:37	0.16				SR12	1/10/2017 0:37	0.19			
SR4	1/10/2017 0:57	0.18				SR12	1/10/2017 0:57	0.18			
SR4	1/10/2017 1:17	0.20				SR12	1/10/2017 1:17	0.20			
SR4	1/10/2017 1:37	0.17				SR12	1/10/2017 1:37	0.16			
SR4	1/10/2017 1:57	0.16				SR12	1/10/2017 1:57	0.20			
SR4	1/10/2017 2:17	0.17				SR12	1/10/2017 2:17	0.18			
SR4	1/10/2017 2:37	0.18				SR12	1/10/2017 2:37	0.18			
SR4	1/10/2017 2:57	0.20				SR12	1/10/2017 2:57	0.19			
SR4	1/10/2017 3:17	0.18				SR12	1/10/2017 3:17	0.19			
SR4	1/10/2017 3:37	0.20				SR12	1/10/2017 3:37	0.19			
SR4	1/10/2017 3:57	0.18				SR12	1/10/2017 3:57	0.20			
SR4	1/10/2017 4:17	0.20				SR12	1/10/2017 4:17	0.20			
SR4	1/10/2017 4:37	0.20				SR12	1/10/2017 4:37	0.16			
SR4	1/10/2017 4:57	0.18				SR12	1/10/2017 4:57	0.18			
SR4	1/10/2017 5:17	0.19				SR12	1/10/2017 5:17	0.18			
SR4	1/10/2017 5:37	0.20				SR12	1/10/2017 5:37	0.20			
SR4	1/10/2017 5:57	0.17				SR12	1/10/2017 5:57	0.18			
SR4						SR12					
SR4	1/10/2017 6:37	0.17				SR12	1/10/2017 6:37	0.20			
SR4	1/10/2017 6:57	0.17				SR12	1/10/2017 6:57	0.17			
SR4	1/10/2017 7:17	0.19				SR12	1/10/2017 7:17	0.17			
SR4	1/10/2017 7:37	0.18				SR12	1/10/2017 7:37	0.16			
SR4	1/10/2017 7:57	0.17				SR12	1/10/2017 7:57	0.16			
SR4	1/10/2017 8:17	0.19				SR12	1/10/2017 8:17	0.17			
SR4	1/10/2017 8:37	0.18				SR12	1/10/2017 8:37	0.20			
SR4	1/10/2017 8:57	0.19				SR12	1/10/2017 8:57	0.16			
SR4	1/10/2017 9:17	0.16				SR12	1/10/2017 9:17	0.16			
SR4	1/10/2017 9:37	0.20				SR12	1/10/2017 9:37	0.20			
SR4	1/10/2017 9:57	0.19				SR12	1/10/2017 9:57	0.19			
SR4	1/10/2017 10:17	0.16				SR12	1/10/2017 10:17	0.16			
SR4	1/10/2017 10:37	0.18				SR12	1/10/2017 10:37	0.17			
SR4	1/10/2017 10:57	0.18				SR12	1/10/2017 10:57	0.18			
SR4	1/10/2017 11:17	0.17				SR12	1/10/2017 11:17	0.16			
SR4	1/10/2017 11:37	0.18				SR12	1/10/2017 11:37	0.17			
SR4	1/10/2017 11:57	0.20				SR12	1/10/2017 11:57	0.16			
SR4	1/10/2017 12:17	0.16				SR12	1/10/2017 12:17	0.16			
SR4	1/10/2017 12:37	0.16				SR12	1/10/2017 12:37	0.18			
SR4	1/10/2017 12:57	0.17				SR12	1/10/2017 12:57	0.18			
SR4	1/10/2017 13:17	0.17				SR12	1/10/2017 13:17	0.20			
SR4	1/10/2017 13:37	0.20				SR12	1/10/2017 13:37	0.16			
SR4	1/10/2017 13:57	0.16				SR12	1/10/2017 13:57	0.18			
SR4	1/10/2017 14:17	0.18				SR12	1/10/2017 14:17	0.19			
SR4	1/10/2017 14:37	0.16				SR12	1/10/2017 14:37	0.19			
SR4	1/10/2017 14:57	0.20				SR12	1/10/2017 14:57	0.19			
SR4	1/10/2017 15:17	0.16				SR12	1/10/2017 15:17	0.20			
SR4	1/10/2017 15:37	0.18				SR12	1/10/2017 15:37	0.18			
SR4	1/10/2017 15:57	0.16				SR12	1/10/2017 15:57	0.16			
SR4	1/10/2017 16:17	0.18				SR12	1/10/2017 16:17	0.20			
SR4	1/10/2017 16:37	0.17				SR12	1/10/2017 16:37	0.18			
SR4	1/10/2017 16:57	0.17				SR12	1/10/2017 16:57	0.17			
SR4	1/10/2017 17:17	0.20				SR12	1/10/2017 17:17	0.17			
SR4	1/10/2017 17:37	0.18				SR12	1/10/2017 17:37	0.20			
SR4	1/10/2017 17:57	0.17				SR12	1/10/2017 17:57	0.17			
SR4	1/10/2017 18:17	0.17				SR12	1/10/2017 18:17	0.16			
SR4	1/10/2017 18:37	0.16				SR12	1/10/2017 18:37	0.16			
SR4	1/10/2017 18:57	0.17				SR12	1/10/2017 18:57	0.16			
SR4	1/10/2017 19:17	0.17				SR12	1/10/2017 19:17	0.17			
SR4	1/10/2017 19:37	0.19				SR12	1/10/2017 19:37	0.16			
SR4	1/10/2017 19:57	0.17				SR12	1/10/2017 19:57	0.19			
SR4	1/10/2017 20:17	0.19				SR12	1/10/2017 20:17	0.17			
SR4	1/10/2017 20:37	0.20				SR12	1/10/2017 20:37	0.20			
SR4	1/10/2017 20:57	0.20				SR12	1/10/2017 20:57	0.18			
SR4	1/10/2017 21:17	0.20				SR12	1/10/2017 21:17	0.18			
SR4	1/10/2017 21:37	0.18				SR12	1/10/2017 21:37	0.19			
SR4	1/10/2017 21:57	0.20				SR12	1/10/2017 21:57	0.20			
SR4	1/10/2017 22:17	0.19				SR12	1/10/2017 22:17	0.20			
SR4	1/10/2017 22:37	0.20				SR12	1/10/2017 22:37	0.17			
SR4	1/10/2017 22:57	0.16				SR12	1/10/2017 22:57	0.16			
SR4	1/10/2017 23:17	0.18				SR12	1/10/2017 23:17	0.17			
SR4	1/10/2017 23:37	0.16				SR12	1/10/2017 23:37	0.18			
SR4	1/10/2017 23:57	0.19				SR12	1/10/2017 23:57	0.16			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 12:40-13:05.

SR9 monitoring station was under maintenance during 10:35-10:55.

SR10 monitoring station was under maintenance during 12:20-12:40.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/11/2017 0:17	0.16				SR12	1/11/2017 0:17	0.17			
SR4	1/11/2017 0:37	0.20				SR12	1/11/2017 0:37	0.17			
SR4	1/11/2017 0:57	0.20				SR12	1/11/2017 0:57	0.16			
SR4	1/11/2017 1:17	0.16				SR12	1/11/2017 1:17	0.17			
SR4	1/11/2017 1:37	0.16				SR12	1/11/2017 1:37	0.17			
SR4	1/11/2017 1:57	0.17				SR12	1/11/2017 1:57	0.15			
SR4	1/11/2017 2:17	0.19				SR12	1/11/2017 2:17	0.16			
SR4	1/11/2017 2:37	0.18				SR12	1/11/2017 2:37	0.16			
SR4	1/11/2017 2:57	0.18				SR12	1/11/2017 2:57	0.16			
SR4	1/11/2017 3:17	0.17				SR12	1/11/2017 3:17	0.18			
SR4	1/11/2017 3:37	0.18				SR12	1/11/2017 3:37	0.16			
SR4	1/11/2017 3:57	0.20				SR12	1/11/2017 3:57	0.17			
SR4	1/11/2017 4:17	0.16				SR12	1/11/2017 4:17	0.16			
SR4	1/11/2017 4:37	0.19				SR12	1/11/2017 4:37	0.16			
SR4	1/11/2017 4:57	0.19				SR12	1/11/2017 4:57	0.18			
SR4	1/11/2017 5:17	0.19				SR12	1/11/2017 5:17	0.16			
SR4	1/11/2017 5:37	0.17				SR12	1/11/2017 5:37	0.15			
SR4	1/11/2017 5:57	0.16				SR12	1/11/2017 5:57	0.16			
SR4						SR12					
SR4	1/11/2017 6:37	0.20				SR12	1/11/2017 6:37	0.15			
SR4	1/11/2017 6:57	0.17				SR12	1/11/2017 6:57	0.17			
SR4	1/11/2017 7:17	0.17				SR12	1/11/2017 7:17	0.15			
SR4	1/11/2017 7:37	0.18				SR12	1/11/2017 7:37	0.16			
SR4	1/11/2017 7:57	0.17				SR12	1/11/2017 7:57	0.16			
SR4	1/11/2017 8:17	0.17				SR12	1/11/2017 8:17	0.15			
SR4	1/11/2017 8:37	0.17				SR12	1/11/2017 8:37	0.16			
SR4	1/11/2017 8:57	0.16				SR12	1/11/2017 8:57	0.16			
SR4	1/11/2017 9:17	0.20				SR12	1/11/2017 9:17	0.15			
SR4	1/11/2017 9:37	0.19				SR12	1/11/2017 9:37	0.18			
SR4	1/11/2017 9:57	0.19				SR12	1/11/2017 9:57	0.16			
SR4	1/11/2017 10:17	0.18				SR12	1/11/2017 10:17	0.16			
SR4	1/11/2017 10:37	0.19				SR12	1/11/2017 10:37	0.15			
SR4	1/11/2017 10:57	0.19				SR12	1/11/2017 10:57	0.16			
SR4	1/11/2017 11:17	0.18				SR12	1/11/2017 11:17	0.15			
SR4	1/11/2017 11:37	0.17				SR12	1/11/2017 11:37	0.18			
SR4	1/11/2017 11:57	0.16				SR12	1/11/2017 11:57	0.15			
SR4	1/11/2017 12:17	0.18				SR12	1/11/2017 12:17	0.18			
SR4	1/11/2017 12:37	0.17				SR12	1/11/2017 12:37	0.15			
SR4	1/11/2017 12:57	0.18				SR12	1/11/2017 12:57	0.18			
SR4	1/11/2017 13:17	0.19				SR12	1/11/2017 13:17	0.18			
SR4	1/11/2017 13:37	0.16				SR12	1/11/2017 13:37	0.17			
SR4	1/11/2017 13:57	0.16				SR12	1/11/2017 13:57	0.15			
SR4	1/11/2017 14:17	0.18				SR12	1/11/2017 14:17	0.17			
SR4	1/11/2017 14:37	0.17				SR12	1/11/2017 14:37	0.16			
SR4	1/11/2017 14:57	0.16				SR12	1/11/2017 14:57	0.17			
SR4	1/11/2017 15:17	0.19				SR12	1/11/2017 15:17	0.15			
SR4	1/11/2017 15:37	0.16				SR12	1/11/2017 15:37	0.18			
SR4	1/11/2017 15:57	0.17				SR12	1/11/2017 15:57	0.15			
SR4	1/11/2017 16:17	0.16				SR12	1/11/2017 16:17	0.15			
SR4	1/11/2017 16:37	0.16				SR12	1/11/2017 16:37	0.16			
SR4	1/11/2017 16:57	0.17				SR12	1/11/2017 16:57	0.15			
SR4	1/11/2017 17:17	0.17				SR12	1/11/2017 17:17	0.18			
SR4	1/11/2017 17:37	0.19				SR12	1/11/2017 17:37	0.15			
SR4	1/11/2017 17:57	0.18				SR12	1/11/2017 17:57	0.18			
SR4	1/11/2017 18:17	0.19				SR12	1/11/2017 18:17	0.17			
SR4	1/11/2017 18:37	0.17				SR12	1/11/2017 18:37	0.18			
SR4	1/11/2017 18:57	0.18				SR12	1/11/2017 18:57	0.16			
SR4	1/11/2017 19:17	0.16				SR12	1/11/2017 19:17	0.14			
SR4	1/11/2017 19:37	0.17				SR12	1/11/2017 19:37	0.17			
SR4	1/11/2017 19:57	0.19				SR12	1/11/2017 19:57	0.18			
SR4	1/11/2017 20:17	0.19				SR12	1/11/2017 20:17	0.18			
SR4	1/11/2017 20:37	0.16				SR12	1/11/2017 20:37	0.15			
SR4	1/11/2017 20:57	0.17				SR12	1/11/2017 20:57	0.15			
SR4	1/11/2017 21:17	0.16				SR12	1/11/2017 21:17	0.15			
SR4	1/11/2017 21:37	0.16				SR12	1/11/2017 21:37	0.18			
SR4	1/11/2017 21:57	0.17				SR12	1/11/2017 21:57	0.15			
SR4	1/11/2017 22:17	0.19				SR12	1/11/2017 22:17	0.18			
SR4	1/11/2017 22:37	0.19				SR12	1/11/2017 22:37	0.15			
SR4	1/11/2017 22:57	0.19				SR12	1/11/2017 22:57	0.15			
SR4	1/11/2017 23:17	0.18				SR12	1/11/2017 23:17	0.15			
SR4	1/11/2017 23:37	0.19				SR12	1/11/2017 23:37	0.18			
SR4	1/11/2017 23:57	0.15				SR12	1/11/2017 23:57	0.16			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.  
SR13 monitoring station was under maintenance during 14:50-15:10.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/12/2017 0:17	0.17				SR12	1/12/2017 0:17	0.18			
SR4	1/12/2017 0:37	0.17				SR12	1/12/2017 0:37	0.16			
SR4	1/12/2017 0:57	0.19				SR12	1/12/2017 0:57	0.16			
SR4	1/12/2017 1:17	0.15				SR12	1/12/2017 1:17	0.15			
SR4	1/12/2017 1:37	0.18				SR12	1/12/2017 1:37	0.15			
SR4	1/12/2017 1:57	0.17				SR12	1/12/2017 1:57	0.15			
SR4	1/12/2017 2:17	0.16				SR12	1/12/2017 2:17	0.16			
SR4	1/12/2017 2:37	0.15				SR12	1/12/2017 2:37	0.16			
SR4	1/12/2017 2:57	0.18				SR12	1/12/2017 2:57	0.18			
SR4	1/12/2017 3:17	0.19				SR12	1/12/2017 3:17	0.16			
SR4	1/12/2017 3:37	0.19				SR12	1/12/2017 3:37	0.17			
SR4	1/12/2017 3:57	0.17				SR12	1/12/2017 3:57	0.14			
SR4	1/12/2017 4:17	0.16				SR12	1/12/2017 4:17	0.17			
SR4	1/12/2017 4:37	0.16				SR12	1/12/2017 4:37	0.16			
SR4	1/12/2017 4:57	0.19				SR12	1/12/2017 4:57	0.16			
SR4	1/12/2017 5:17	0.18				SR12	1/12/2017 5:17	0.17			
SR4	1/12/2017 5:37	0.17				SR12	1/12/2017 5:37	0.16			
SR4	1/12/2017 5:57	0.18				SR12	1/12/2017 5:57	0.15			
SR4						SR12					
SR4	1/12/2017 6:37	0.14				SR12	1/12/2017 6:37	0.18			
SR4	1/12/2017 6:57	0.17				SR12	1/12/2017 6:57	0.14			
SR4	1/12/2017 7:17	0.18				SR12	1/12/2017 7:17	0.17			
SR4	1/12/2017 7:37	0.14				SR12	1/12/2017 7:37	0.14			
SR4	1/12/2017 7:57	0.18				SR12	1/12/2017 7:57	0.15			
SR4	1/12/2017 8:17	0.16				SR12	1/12/2017 8:17	0.18			
SR4	1/12/2017 8:37	0.18				SR12	1/12/2017 8:37	0.17			
SR4	1/12/2017 8:57	0.14				SR12	1/12/2017 8:57	0.15			
SR4	1/12/2017 9:17	0.14				SR12	1/12/2017 9:17	0.14			
SR4	1/12/2017 9:37	0.15				SR12	1/12/2017 9:37	0.17			
SR4	1/12/2017 9:57	0.17				SR12	1/12/2017 9:57	0.15			
SR4	1/12/2017 10:17	0.13				SR12	1/12/2017 10:17	0.13			
SR4	1/12/2017 10:37	0.13				SR12	1/12/2017 10:37	0.16			
SR4	1/12/2017 10:57	0.16				SR12	1/12/2017 10:57	0.14			
SR4	1/12/2017 11:17	0.14				SR12	1/12/2017 11:17	0.17			
SR4	1/12/2017 11:37	0.16				SR12	1/12/2017 11:37	0.15			
SR4	1/12/2017 11:57	0.14				SR12	1/12/2017 11:57	0.16			
SR4	1/12/2017 12:17	0.15				SR12	1/12/2017 12:17	0.16			
SR4	1/12/2017 12:37	0.15				SR12	1/12/2017 12:37	0.15			
SR4	1/12/2017 12:57	0.13				SR12	1/12/2017 12:57	0.15			
SR4	1/12/2017 13:17	0.14				SR12	1/12/2017 13:17	0.16			
SR4	1/12/2017 13:37	0.15				SR12	1/12/2017 13:37	0.17			
SR4	1/12/2017 13:57	0.14				SR12	1/12/2017 13:57	0.14			
SR4	1/12/2017 14:17	0.13				SR12	1/12/2017 14:17	0.15			
SR4	1/12/2017 14:37	0.16				SR12	1/12/2017 14:37	0.16			
SR4	1/12/2017 14:57	0.15				SR12	1/12/2017 14:57	0.13			
SR4	1/12/2017 15:17	0.17				SR12	1/12/2017 15:17	0.14			
SR4	1/12/2017 15:37	0.16				SR12	1/12/2017 15:37	0.17			
SR4	1/12/2017 15:57	0.15				SR12	1/12/2017 15:57	0.14			
SR4	1/12/2017 16:17	0.17				SR12	1/12/2017 16:17	0.15			
SR4	1/12/2017 16:37	0.17				SR12	1/12/2017 16:37	0.17			
SR4	1/12/2017 16:57	0.17				SR12	1/12/2017 16:57	0.17			
SR4	1/12/2017 17:17	0.16				SR12	1/12/2017 17:17	0.17			
SR4	1/12/2017 17:37	0.14				SR12	1/12/2017 17:37	0.17			
SR4	1/12/2017 17:57	0.15				SR12	1/12/2017 17:57	0.13			
SR4	1/12/2017 18:17	0.17				SR12	1/12/2017 18:17	0.13			
SR4	1/12/2017 18:37	0.13				SR12	1/12/2017 18:37	0.13			
SR4	1/12/2017 18:57	0.17				SR12	1/12/2017 18:57	0.16			
SR4	1/12/2017 19:17	0.15				SR12	1/12/2017 19:17	0.14			
SR4	1/12/2017 19:37	0.14				SR12	1/12/2017 19:37	0.15			
SR4	1/12/2017 19:57	0.14				SR12	1/12/2017 19:57	0.13			
SR4	1/12/2017 20:17	0.15				SR12	1/12/2017 20:17	0.14			
SR4	1/12/2017 20:37	0.16				SR12	1/12/2017 20:37	0.13			
SR4	1/12/2017 20:57	0.15				SR12	1/12/2017 20:57	0.16			
SR4	1/12/2017 21:17	0.16				SR12	1/12/2017 21:17	0.16			
SR4	1/12/2017 21:37	0.17				SR12	1/12/2017 21:37	0.14			
SR4	1/12/2017 21:57	0.16				SR12	1/12/2017 21:57	0.13			
SR4	1/12/2017 22:17	0.15				SR12	1/12/2017 22:17	0.13			
SR4	1/12/2017 22:37	0.13				SR12	1/12/2017 22:37	0.14			
SR4	1/12/2017 22:57	0.17				SR12	1/12/2017 22:57	0.14			
SR4	1/12/2017 23:17	0.17				SR12	1/12/2017 23:17	0.13			
SR4	1/12/2017 23:37	0.17				SR12	1/12/2017 23:37	0.13			
SR4	1/12/2017 23:57	0.13				SR12	1/12/2017 23:57	0.17			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 13:35-13:55.

SR9 monitoring station was under maintenance during 11:20-11:40.

SR11 monitoring station was under maintenance during 13:40-14:00.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/13/2017 0:17	0.13				SR12	1/13/2017 0:17	0.15			
SR4	1/13/2017 0:37	0.17				SR12	1/13/2017 0:37	0.13			
SR4	1/13/2017 0:57	0.15				SR12	1/13/2017 0:57	0.16			
SR4	1/13/2017 1:17	0.13				SR12	1/13/2017 1:17	0.16			
SR4	1/13/2017 1:37	0.15				SR12	1/13/2017 1:37	0.17			
SR4	1/13/2017 1:57	0.16				SR12	1/13/2017 1:57	0.17			
SR4	1/13/2017 2:17	0.15				SR12	1/13/2017 2:17	0.14			
SR4	1/13/2017 2:37	0.14				SR12	1/13/2017 2:37	0.17			
SR4	1/13/2017 2:57	0.16				SR12	1/13/2017 2:57	0.17			
SR4	1/13/2017 3:17	0.18				SR12	1/13/2017 3:17	0.16			
SR4	1/13/2017 3:37	0.16				SR12	1/13/2017 3:37	0.15			
SR4	1/13/2017 3:57	0.15				SR12	1/13/2017 3:57	0.15			
SR4	1/13/2017 4:17	0.15				SR12	1/13/2017 4:17	0.18			
SR4	1/13/2017 4:37	0.19				SR12	1/13/2017 4:37	0.15			
SR4	1/13/2017 4:57	0.18				SR12	1/13/2017 4:57	0.16			
SR4	1/13/2017 5:17	0.18				SR12	1/13/2017 5:17	0.14			
SR4	1/13/2017 5:37	0.15				SR12	1/13/2017 5:37	0.15			
SR4	1/13/2017 5:57	0.17				SR12	1/13/2017 5:57	0.15			
SR4						SR12					
SR4	1/13/2017 6:37	0.15				SR12	1/13/2017 6:37	0.15			
SR4	1/13/2017 6:57	0.15				SR12	1/13/2017 6:57	0.15			
SR4	1/13/2017 7:17	0.17				SR12	1/13/2017 7:17	0.14			
SR4	1/13/2017 7:37	0.18				SR12	1/13/2017 7:37	0.15			
SR4	1/13/2017 7:57	0.19				SR12	1/13/2017 7:57	0.18			
SR4	1/13/2017 8:17	0.15				SR12	1/13/2017 8:17	0.15			
SR4	1/13/2017 8:37	0.15				SR12	1/13/2017 8:37	0.15			
SR4	1/13/2017 8:57	0.16				SR12	1/13/2017 8:57	0.16			
SR4	1/13/2017 9:17	0.16				SR12	1/13/2017 9:17	0.18			
SR4	1/13/2017 9:37	0.19				SR12					
SR4	1/13/2017 9:57	0.17				SR12					
SR4	1/13/2017 10:17	0.16				SR12					
SR4	1/13/2017 10:37	0.15				SR12					
SR4	1/13/2017 10:57	0.16				SR12					
SR4	1/13/2017 11:17	0.15				SR12	1/13/2017 11:17	0.16			
SR4	1/13/2017 11:37	0.18				SR12	1/13/2017 11:37	0.14			
SR4	1/13/2017 11:57	0.19				SR12	1/13/2017 11:57	0.14			
SR4						SR12	1/13/2017 12:17	0.17			
SR4						SR12	1/13/2017 12:37	0.15			
SR4						SR12	1/13/2017 12:57	0.16			
SR4						SR12	1/13/2017 13:17	0.18			
SR4	1/13/2017 13:37	0.17				SR12	1/13/2017 13:37	0.18			
SR4	1/13/2017 13:57	0.15				SR12	1/13/2017 13:57	0.16			
SR4	1/13/2017 14:17	0.18				SR12	1/13/2017 14:17	0.17			
SR4	1/13/2017 14:37	0.19				SR12	1/13/2017 14:37	0.16			
SR4	1/13/2017 14:57	0.18				SR12	1/13/2017 14:57	0.14			
SR4	1/13/2017 15:17	0.16				SR12	1/13/2017 15:17	0.15			
SR4	1/13/2017 15:37	0.16				SR12	1/13/2017 15:37	0.16			
SR4	1/13/2017 15:57	0.19				SR12	1/13/2017 15:57	0.16			
SR4	1/13/2017 16:17	0.15				SR12	1/13/2017 16:17	0.15			
SR4	1/13/2017 16:37	0.19				SR12	1/13/2017 16:37	0.15			
SR4	1/13/2017 16:57	0.15				SR12	1/13/2017 16:57	0.15			
SR4	1/13/2017 17:17	0.17				SR12	1/13/2017 17:17	0.17			
SR4	1/13/2017 17:37	0.15				SR12	1/13/2017 17:37	0.15			
SR4	1/13/2017 17:57	0.15				SR12	1/13/2017 17:57	0.14			
SR4	1/13/2017 18:17	0.19				SR12	1/13/2017 18:17	0.17			
SR4	1/13/2017 18:37	0.19				SR12	1/13/2017 18:37	0.14			
SR4	1/13/2017 18:57	0.19				SR12	1/13/2017 18:57	0.17			
SR4	1/13/2017 19:17	0.18				SR12	1/13/2017 19:17	0.16			
SR4	1/13/2017 19:37	0.19				SR12	1/13/2017 19:37	0.15			
SR4	1/13/2017 19:57	0.19				SR12	1/13/2017 19:57	0.18			
SR4	1/13/2017 20:17	0.18				SR12	1/13/2017 20:17	0.16			
SR4	1/13/2017 20:37	0.16				SR12	1/13/2017 20:37	0.16			
SR4	1/13/2017 20:57	0.19				SR12	1/13/2017 20:57	0.15			
SR4	1/13/2017 21:17	0.19				SR12	1/13/2017 21:17	0.16			
SR4	1/13/2017 21:37	0.19				SR12	1/13/2017 21:37	0.17			
SR4	1/13/2017 21:57	0.16				SR12	1/13/2017 21:57	0.18			
SR4	1/13/2017 22:17	0.20				SR12	1/13/2017 22:17	0.21			
SR4	1/13/2017 22:37	0.16				SR12	1/13/2017 22:37	0.20			
SR4	1/13/2017 22:57	0.18				SR12	1/13/2017 22:57	0.19			
SR4	1/13/2017 23:17	0.17				SR12	1/13/2017 23:17	0.19			
SR4	1/13/2017 23:37	0.20				SR12	1/13/2017 23:37	0.19			
SR4	1/13/2017 23:57	0.20				SR12	1/13/2017 23:57	0.20			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 12:11-13:16.

SR12 monitoring station was under maintenance during 9:36-10:46.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/14/2017 0:17	0.20				SR12	1/14/2017 0:17	0.17			
SR4	1/14/2017 0:37	0.19				SR12	1/14/2017 0:37	0.17			
SR4	1/14/2017 0:57	0.20				SR12	1/14/2017 0:57	0.18			
SR4	1/14/2017 1:17	0.18				SR12	1/14/2017 1:17	0.18			
SR4	1/14/2017 1:37	0.18				SR12	1/14/2017 1:37	0.17			
SR4	1/14/2017 1:57	0.18				SR12	1/14/2017 1:57	0.20			
SR4	1/14/2017 2:17	0.17				SR12	1/14/2017 2:17	0.21			
SR4	1/14/2017 2:37	0.17				SR12	1/14/2017 2:37	0.19			
SR4	1/14/2017 2:57	0.16				SR12	1/14/2017 2:57	0.21			
SR4	1/14/2017 3:17	0.20				SR12	1/14/2017 3:17	0.20			
SR4	1/14/2017 3:37	0.16				SR12	1/14/2017 3:37	0.17			
SR4	1/14/2017 3:57	0.18				SR12	1/14/2017 3:57	0.18			
SR4	1/14/2017 4:17	0.19				SR12	1/14/2017 4:17	0.18			
SR4	1/14/2017 4:37	0.17				SR12	1/14/2017 4:37	0.18			
SR4	1/14/2017 4:57	0.20				SR12	1/14/2017 4:57	0.18			
SR4	1/14/2017 5:17	0.20				SR12	1/14/2017 5:17	0.17			
SR4	1/14/2017 5:37	0.16				SR12	1/14/2017 5:37	0.20			
SR4	1/14/2017 5:57	0.18				SR12	1/14/2017 5:57	0.19			
SR4						SR12					
SR4	1/14/2017 6:37	0.19				SR12	1/14/2017 6:37	0.20			
SR4	1/14/2017 6:57	0.17				SR12	1/14/2017 6:57	0.17			
SR4	1/14/2017 7:17	0.17				SR12	1/14/2017 7:17	0.21			
SR4	1/14/2017 7:37	0.18				SR12	1/14/2017 7:37	0.19			
SR4	1/14/2017 7:57	0.16				SR12	1/14/2017 7:57	0.17			
SR4	1/14/2017 8:17	0.20				SR12	1/14/2017 8:17	0.18			
SR4	1/14/2017 8:37	0.20				SR12	1/14/2017 8:37	0.21			
SR4	1/14/2017 8:57	0.16				SR12	1/14/2017 8:57	0.17			
SR4	1/14/2017 9:17	0.17				SR12	1/14/2017 9:17	0.18			
SR4	1/14/2017 9:37	0.16				SR12	1/14/2017 9:37	0.19			
SR4	1/14/2017 9:57	0.19				SR12	1/14/2017 9:57	0.18			
SR4	1/14/2017 10:17	0.17				SR12	1/14/2017 10:17	0.20			
SR4	1/14/2017 10:37	0.16				SR12	1/14/2017 10:37	0.19			
SR4	1/14/2017 10:57	0.18				SR12	1/14/2017 10:57	0.21			
SR4	1/14/2017 11:17	0.19				SR12	1/14/2017 11:17	0.17			
SR4	1/14/2017 11:37	0.20				SR12	1/14/2017 11:37	0.19			
SR4	1/14/2017 11:57	0.19				SR12	1/14/2017 11:57	0.17			
SR4	1/14/2017 12:17	0.17				SR12	1/14/2017 12:17	0.20			
SR4	1/14/2017 12:37	0.17				SR12	1/14/2017 12:37	0.20			
SR4	1/14/2017 12:57	0.17				SR12	1/14/2017 12:57	0.17			
SR4	1/14/2017 13:17	0.19				SR12	1/14/2017 13:17	0.19			
SR4	1/14/2017 13:37	0.17				SR12	1/14/2017 13:37	0.19			
SR4	1/14/2017 13:57	0.20				SR12	1/14/2017 13:57	0.19			
SR4	1/14/2017 14:17	0.18				SR12	1/14/2017 14:17	0.19			
SR4	1/14/2017 14:37	0.21				SR12	1/14/2017 14:37	0.18			
SR4	1/14/2017 14:57	0.21				SR12	1/14/2017 14:57	0.18			
SR4	1/14/2017 15:17	0.21				SR12	1/14/2017 15:17	0.19			
SR4	1/14/2017 15:37	0.21				SR12	1/14/2017 15:37	0.19			
SR4	1/14/2017 15:57	0.21				SR12	1/14/2017 15:57	0.18			
SR4	1/14/2017 16:17	0.17				SR12	1/14/2017 16:17	0.21			
SR4	1/14/2017 16:37	0.18				SR12	1/14/2017 16:37	0.22			
SR4	1/14/2017 16:57	0.18				SR12	1/14/2017 16:57	0.21			
SR4	1/14/2017 17:17	0.18				SR12	1/14/2017 17:17	0.20			
SR4	1/14/2017 17:37	0.21				SR12	1/14/2017 17:37	0.20			
SR4	1/14/2017 17:57	0.20				SR12	1/14/2017 17:57	0.21			
SR4	1/14/2017 18:17	0.18				SR12	1/14/2017 18:17	0.18			
SR4	1/14/2017 18:37	0.17				SR12	1/14/2017 18:37	0.22			
SR4	1/14/2017 18:57	0.18				SR12	1/14/2017 18:57	0.18			
SR4	1/14/2017 19:17	0.17				SR12	1/14/2017 19:17	0.20			
SR4	1/14/2017 19:37	0.17				SR12	1/14/2017 19:37	0.19			
SR4	1/14/2017 19:57	0.18				SR12	1/14/2017 19:57	0.21			
SR4	1/14/2017 20:17	0.17				SR12	1/14/2017 20:17	0.18			
SR4	1/14/2017 20:37	0.20				SR12	1/14/2017 20:37	0.21			
SR4	1/14/2017 20:57	0.21				SR12	1/14/2017 20:57	0.20			
SR4	1/14/2017 21:17	0.18				SR12	1/14/2017 21:17	0.21			
SR4	1/14/2017 21:37	0.21				SR12	1/14/2017 21:37	0.21			
SR4	1/14/2017 21:57	0.18				SR12	1/14/2017 21:57	0.22			
SR4	1/14/2017 22:17	0.17				SR12	1/14/2017 22:17	0.19			
SR4	1/14/2017 22:37	0.18				SR12	1/14/2017 22:37	0.19			
SR4	1/14/2017 22:57	0.19				SR12	1/14/2017 22:57	0.20			
SR4	1/14/2017 23:17	0.18				SR12	1/14/2017 23:17	0.19			
SR4	1/14/2017 23:37	0.18				SR12	1/14/2017 23:37	0.18			
SR4	1/14/2017 23:57	0.18				SR12	1/14/2017 23:57	0.19			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.  
SR10 monitoring station was under maintenance during 12:10-12:30.  
SR11 monitoring station was under maintenance during 12:55-13:15.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/15/2017 0:17	0.20				SR12	1/15/2017 0:17	0.20			
SR4	1/15/2017 0:37	0.21				SR12	1/15/2017 0:37	0.22			
SR4	1/15/2017 0:57	0.21				SR12	1/15/2017 0:57	0.20			
SR4	1/15/2017 1:17	0.19				SR12	1/15/2017 1:17	0.20			
SR4	1/15/2017 1:37	0.20				SR12	1/15/2017 1:37	0.18			
SR4	1/15/2017 1:57	0.21				SR12	1/15/2017 1:57	0.19			
SR4	1/15/2017 2:17	0.21				SR12	1/15/2017 2:17	0.19			
SR4	1/15/2017 2:37	0.19				SR12	1/15/2017 2:37	0.19			
SR4	1/15/2017 2:57	0.17				SR12	1/15/2017 2:57	0.18			
SR4	1/15/2017 3:17	0.18				SR12	1/15/2017 3:17	0.18			
SR4	1/15/2017 3:37	0.19				SR12	1/15/2017 3:37	0.19			
SR4	1/15/2017 3:57	0.20				SR12	1/15/2017 3:57	0.22			
SR4	1/15/2017 4:17	0.19				SR12	1/15/2017 4:17	0.18			
SR4	1/15/2017 4:37	0.17				SR12	1/15/2017 4:37	0.20			
SR4	1/15/2017 4:57	0.18				SR12	1/15/2017 4:57	0.18			
SR4	1/15/2017 5:17	0.20				SR12	1/15/2017 5:17	0.20			
SR4	1/15/2017 5:37	0.19				SR12	1/15/2017 5:37	0.20			
SR4	1/15/2017 5:57	0.17				SR12	1/15/2017 5:57	0.20			
SR4						SR12					
SR4	1/15/2017 6:37	0.17				SR12	1/15/2017 6:37	0.20			
SR4	1/15/2017 6:57	0.21				SR12	1/15/2017 6:57	0.21			
SR4	1/15/2017 7:17	0.17				SR12	1/15/2017 7:17	0.19			
SR4	1/15/2017 7:37	0.21				SR12	1/15/2017 7:37	0.22			
SR4	1/15/2017 7:57	0.20				SR12	1/15/2017 7:57	0.20			
SR4	1/15/2017 8:17	0.18				SR12	1/15/2017 8:17	0.22			
SR4	1/15/2017 8:37	0.17				SR12	1/15/2017 8:37	0.18			
SR4	1/15/2017 8:57	0.17				SR12	1/15/2017 8:57	0.18			
SR4	1/15/2017 9:17	0.20				SR12	1/15/2017 9:17	0.19			
SR4	1/15/2017 9:37	0.17				SR12	1/15/2017 9:37	0.16			
SR4	1/15/2017 9:57	0.20				SR12	1/15/2017 9:57	0.16			
SR4	1/15/2017 10:17	0.19				SR12	1/15/2017 10:17	0.17			
SR4	1/15/2017 10:37	0.17				SR12	1/15/2017 10:37	0.16			
SR4	1/15/2017 10:57	0.19				SR12	1/15/2017 10:57	0.20			
SR4	1/15/2017 11:17	0.18				SR12	1/15/2017 11:17	0.18			
SR4	1/15/2017 11:37	0.16				SR12	1/15/2017 11:37	0.19			
SR4	1/15/2017 11:57	0.20				SR12	1/15/2017 11:57	0.18			
SR4	1/15/2017 12:17	0.19				SR12	1/15/2017 12:17	0.17			
SR4	1/15/2017 12:37	0.16				SR12	1/15/2017 12:37	0.19			
SR4	1/15/2017 12:57	0.18				SR12	1/15/2017 12:57	0.19			
SR4	1/15/2017 13:17	0.20				SR12	1/15/2017 13:17	0.20			
SR4	1/15/2017 13:37	0.19				SR12	1/15/2017 13:37	0.16			
SR4	1/15/2017 13:57	0.20				SR12	1/15/2017 13:57	0.17			
SR4	1/15/2017 14:17	0.16				SR12	1/15/2017 14:17	0.18			
SR4	1/15/2017 14:37	0.17				SR12	1/15/2017 14:37	0.19			
SR4	1/15/2017 14:57	0.19				SR12	1/15/2017 14:57	0.19			
SR4	1/15/2017 15:17	0.19				SR12	1/15/2017 15:17	0.19			
SR4	1/15/2017 15:37	0.20				SR12	1/15/2017 15:37	0.17			
SR4	1/15/2017 15:57	0.17				SR12	1/15/2017 15:57	0.17			
SR4	1/15/2017 16:17	0.18				SR12	1/15/2017 16:17	0.20			
SR4	1/15/2017 16:37	0.18				SR12	1/15/2017 16:37	0.16			
SR4	1/15/2017 16:57	0.17				SR12	1/15/2017 16:57	0.19			
SR4	1/15/2017 17:17	0.20				SR12	1/15/2017 17:17	0.16			
SR4	1/15/2017 17:37	0.20				SR12	1/15/2017 17:37	0.19			
SR4	1/15/2017 17:57	0.18				SR12	1/15/2017 17:57	0.17			
SR4	1/15/2017 18:17	0.18				SR12	1/15/2017 18:17	0.17			
SR4	1/15/2017 18:37	0.18				SR12	1/15/2017 18:37	0.16			
SR4	1/15/2017 18:57	0.20				SR12	1/15/2017 18:57	0.20			
SR4	1/15/2017 19:17	0.19				SR12	1/15/2017 19:17	0.17			
SR4	1/15/2017 19:37	0.18				SR12	1/15/2017 19:37	0.16			
SR4	1/15/2017 19:57	0.19				SR12	1/15/2017 19:57	0.17			
SR4	1/15/2017 20:17	0.17				SR12	1/15/2017 20:17	0.18			
SR4	1/15/2017 20:37	0.18				SR12	1/15/2017 20:37	0.18			
SR4	1/15/2017 20:57	0.19				SR12	1/15/2017 20:57	0.19			
SR4	1/15/2017 21:17	0.17				SR12	1/15/2017 21:17	0.18			
SR4	1/15/2017 21:37	0.18				SR12	1/15/2017 21:37	0.17			
SR4	1/15/2017 21:57	0.18				SR12	1/15/2017 21:57	0.20			
SR4	1/15/2017 22:17	0.17				SR12	1/15/2017 22:17	0.16			
SR4	1/15/2017 22:37	0.20				SR12	1/15/2017 22:37	0.20			
SR4	1/15/2017 22:57	0.20				SR12	1/15/2017 22:57	0.18			
SR4	1/15/2017 23:17	0.16				SR12	1/15/2017 23:17	0.16			
SR4	1/15/2017 23:37	0.19				SR12	1/15/2017 23:37	0.20			
SR4	1/15/2017 23:57	0.17				SR12	1/15/2017 23:57	0.16			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/16/2017 0:17	0.17				SR12	1/16/2017 0:17	0.17			
SR4	1/16/2017 0:37	0.19				SR12	1/16/2017 0:37	0.17			
SR4	1/16/2017 0:57	0.16				SR12	1/16/2017 0:57	0.17			
SR4	1/16/2017 1:17	0.16				SR12	1/16/2017 1:17	0.18			
SR4	1/16/2017 1:37	0.17				SR12	1/16/2017 1:37	0.19			
SR4	1/16/2017 1:57	0.17				SR12	1/16/2017 1:57	0.19			
SR4	1/16/2017 2:17	0.16				SR12	1/16/2017 2:17	0.16			
SR4	1/16/2017 2:37	0.18				SR12	1/16/2017 2:37	0.17			
SR4	1/16/2017 2:57	0.16				SR12	1/16/2017 2:57	0.17			
SR4	1/16/2017 3:17	0.16				SR12	1/16/2017 3:17	0.18			
SR4	1/16/2017 3:37	0.16				SR12	1/16/2017 3:37	0.16			
SR4	1/16/2017 3:57	0.17				SR12	1/16/2017 3:57	0.19			
SR4	1/16/2017 4:17	0.16				SR12	1/16/2017 4:17	0.16			
SR4	1/16/2017 4:37	0.16				SR12	1/16/2017 4:37	0.16			
SR4	1/16/2017 4:57	0.18				SR12	1/16/2017 4:57	0.16			
SR4	1/16/2017 5:17	0.15				SR12	1/16/2017 5:17	0.16			
SR4	1/16/2017 5:37	0.15				SR12	1/16/2017 5:37	0.15			
SR4	1/16/2017 5:57	0.17				SR12	1/16/2017 5:57	0.19			
SR4						SR12					
SR4	1/16/2017 6:37	0.18				SR12	1/16/2017 6:37	0.15			
SR4	1/16/2017 6:57	0.17				SR12	1/16/2017 6:57	0.18			
SR4	1/16/2017 7:17	0.17				SR12	1/16/2017 7:17	0.18			
SR4	1/16/2017 7:37	0.16				SR12	1/16/2017 7:37	0.19			
SR4	1/16/2017 7:57	0.16				SR12	1/16/2017 7:57	0.16			
SR4	1/16/2017 8:17	0.18				SR12	1/16/2017 8:17	0.17			
SR4	1/16/2017 8:37	0.18				SR12	1/16/2017 8:37	0.17			
SR4	1/16/2017 8:57	0.16				SR12	1/16/2017 8:57	0.15			
SR4	1/16/2017 9:17	0.15				SR12	1/16/2017 9:17	0.15			
SR4	1/16/2017 9:37	0.16				SR12	1/16/2017 9:37	0.16			
SR4	1/16/2017 9:57	0.16				SR12	1/16/2017 9:57	0.19			
SR4	1/16/2017 10:17	0.18				SR12	1/16/2017 10:17	0.15			
SR4	1/16/2017 10:37	0.18				SR12	1/16/2017 10:37	0.19			
SR4	1/16/2017 10:57	0.16				SR12	1/16/2017 10:57	0.16			
SR4	1/16/2017 11:17	0.18				SR12	1/16/2017 11:17	0.15			
SR4	1/16/2017 11:37	0.15				SR12	1/16/2017 11:37	0.17			
SR4	1/16/2017 11:57	0.18				SR12	1/16/2017 11:57	0.15			
SR4	1/16/2017 12:17	0.15				SR12	1/16/2017 12:17	0.16			
SR4	1/16/2017 12:37	0.18				SR12	1/16/2017 12:37	0.19			
SR4	1/16/2017 12:57	0.17				SR12	1/16/2017 12:57	0.16			
SR4	1/16/2017 13:17	0.18				SR12	1/16/2017 13:17	0.18			
SR4	1/16/2017 13:37	0.18				SR12	1/16/2017 13:37	0.17			
SR4	1/16/2017 13:57	0.15				SR12	1/16/2017 13:57	0.19			
SR4	1/16/2017 14:17	0.15				SR12	1/16/2017 14:17	0.15			
SR4	1/16/2017 14:37	0.15				SR12	1/16/2017 14:37	0.19			
SR4	1/16/2017 14:57	0.17				SR12	1/16/2017 14:57	0.17			
SR4	1/16/2017 15:17	0.16				SR12	1/16/2017 15:17	0.19			
SR4	1/16/2017 15:37	0.15				SR12	1/16/2017 15:37	0.18			
SR4	1/16/2017 15:57	0.15				SR12	1/16/2017 15:57	0.16			
SR4	1/16/2017 16:17	0.15				SR12	1/16/2017 16:17	0.15			
SR4	1/16/2017 16:37	0.16				SR12	1/16/2017 16:37	0.15			
SR4	1/16/2017 16:57	0.16				SR12	1/16/2017 16:57	0.18			
SR4	1/16/2017 17:17	0.18				SR12	1/16/2017 17:17	0.18			
SR4	1/16/2017 17:37	0.15				SR12	1/16/2017 17:37	0.19			
SR4	1/16/2017 17:57	0.18				SR12	1/16/2017 17:57	0.16			
SR4	1/16/2017 18:17	0.17				SR12	1/16/2017 18:17	0.19			
SR4	1/16/2017 18:37	0.15				SR12	1/16/2017 18:37	0.18			
SR4	1/16/2017 18:57	0.15				SR12	1/16/2017 18:57	0.17			
SR4	1/16/2017 19:17	0.18				SR12	1/16/2017 19:17	0.15			
SR4	1/16/2017 19:37	0.16				SR12	1/16/2017 19:37	0.19			
SR4	1/16/2017 19:57	0.14				SR12	1/16/2017 19:57	0.15			
SR4	1/16/2017 20:17	0.16				SR12	1/16/2017 20:17	0.16			
SR4	1/16/2017 20:37	0.17				SR12	1/16/2017 20:37	0.15			
SR4	1/16/2017 20:57	0.17				SR12	1/16/2017 20:57	0.18			
SR4	1/16/2017 21:17	0.17				SR12	1/16/2017 21:17	0.17			
SR4	1/16/2017 21:37	0.16				SR12	1/16/2017 21:37	0.18			
SR4	1/16/2017 21:57	0.14				SR12	1/16/2017 21:57	0.15			
SR4	1/16/2017 22:17	0.14				SR12	1/16/2017 22:17	0.17			
SR4	1/16/2017 22:37	0.16				SR12	1/16/2017 22:37	0.14			
SR4	1/16/2017 22:57	0.17				SR12	1/16/2017 22:57	0.15			
SR4	1/16/2017 23:17	0.16				SR12	1/16/2017 23:17	0.14			
SR4	1/16/2017 23:37	0.15				SR12	1/16/2017 23:37	0.16			
SR4	1/16/2017 23:57	0.14				SR12	1/16/2017 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 9:31-10:36.

SR12 monitoring station was under maintenance during 13:01-14:01.

SR13 monitoring station was under maintenance during 15:15-15:35.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/17/2017 0:17	0.17				SR12	1/17/2017 0:17	0.18			
SR4	1/17/2017 0:37	0.17				SR12	1/17/2017 0:37	0.14			
SR4	1/17/2017 0:57	0.16				SR12	1/17/2017 0:57	0.14			
SR4	1/17/2017 1:17	0.14				SR12	1/17/2017 1:17	0.14			
SR4	1/17/2017 1:37	0.15				SR12	1/17/2017 1:37	0.16			
SR4	1/17/2017 1:57	0.17				SR12	1/17/2017 1:57	0.18			
SR4	1/17/2017 2:17	0.14				SR12	1/17/2017 2:17	0.18			
SR4	1/17/2017 2:37	0.15				SR12	1/17/2017 2:37	0.15			
SR4	1/17/2017 2:57	0.16				SR12	1/17/2017 2:57	0.15			
SR4	1/17/2017 3:17	0.14				SR12	1/17/2017 3:17	0.15			
SR4	1/17/2017 3:37	0.16				SR12	1/17/2017 3:37	0.14			
SR4	1/17/2017 3:57	0.17				SR12	1/17/2017 3:57	0.15			
SR4	1/17/2017 4:17	0.16				SR12	1/17/2017 4:17	0.14			
SR4	1/17/2017 4:37	0.17				SR12	1/17/2017 4:37	0.14			
SR4	1/17/2017 4:57	0.16				SR12	1/17/2017 4:57	0.18			
SR4	1/17/2017 5:17	0.16				SR12	1/17/2017 5:17	0.18			
SR4	1/17/2017 5:37	0.16				SR12	1/17/2017 5:37	0.18			
SR4	1/17/2017 5:57	0.16				SR12	1/17/2017 5:57	0.16			
SR4						SR12					
SR4	1/17/2017 6:37	0.16				SR12	1/17/2017 6:37	0.14			
SR4	1/17/2017 6:57	0.16				SR12	1/17/2017 6:57	0.18			
SR4	1/17/2017 7:17	0.15				SR12	1/17/2017 7:17	0.16			
SR4	1/17/2017 7:37	0.16				SR12	1/17/2017 7:37	0.14			
SR4	1/17/2017 7:57	0.14				SR12	1/17/2017 7:57	0.18			
SR4	1/17/2017 8:17	0.17				SR12	1/17/2017 8:17	0.15			
SR4	1/17/2017 8:37	0.16				SR12	1/17/2017 8:37	0.15			
SR4	1/17/2017 8:57	0.15				SR12	1/17/2017 8:57	0.18			
SR4	1/17/2017 9:17	0.16				SR12	1/17/2017 9:17	0.17			
SR4	1/17/2017 9:37	0.15				SR12	1/17/2017 9:37	0.17			
SR4	1/17/2017 9:57	0.16				SR12	1/17/2017 9:57	0.18			
SR4	1/17/2017 10:17	0.16				SR12	1/17/2017 10:17	0.17			
SR4	1/17/2017 10:37	0.15				SR12	1/17/2017 10:37	0.15			
SR4	1/17/2017 10:57	0.14				SR12	1/17/2017 10:57	0.15			
SR4	1/17/2017 11:17	0.14				SR12	1/17/2017 11:17	0.15			
SR4	1/17/2017 11:37	0.15				SR12	1/17/2017 11:37	0.18			
SR4	1/17/2017 11:57	0.16				SR12	1/17/2017 11:57	0.14			
SR4	1/17/2017 12:17	0.16				SR12	1/17/2017 12:17	0.18			
SR4	1/17/2017 12:37	0.14				SR12	1/17/2017 12:37	0.17			
SR4	1/17/2017 12:57	0.15				SR12	1/17/2017 12:57	0.18			
SR4	1/17/2017 13:17	0.14				SR12	1/17/2017 13:17	0.17			
SR4	1/17/2017 13:37	0.15				SR12	1/17/2017 13:37	0.16			
SR4	1/17/2017 13:57	0.15				SR12	1/17/2017 13:57	0.17			
SR4	1/17/2017 14:17	0.15				SR12	1/17/2017 14:17	0.19			
SR4	1/17/2017 14:37	0.15				SR12	1/17/2017 14:37	0.17			
SR4	1/17/2017 14:57	0.16				SR12	1/17/2017 14:57	0.18			
SR4	1/17/2017 15:17	0.18				SR12	1/17/2017 15:17	0.15			
SR4	1/17/2017 15:37	0.14				SR12	1/17/2017 15:37	0.17			
SR4	1/17/2017 15:57	0.14				SR12	1/17/2017 15:57	0.18			
SR4	1/17/2017 16:17	0.17				SR12	1/17/2017 16:17	0.18			
SR4	1/17/2017 16:37	0.16				SR12	1/17/2017 16:37	0.16			
SR4	1/17/2017 16:57	0.17				SR12	1/17/2017 16:57	0.19			
SR4	1/17/2017 17:17	0.18				SR12	1/17/2017 17:17	0.18			
SR4	1/17/2017 17:37	0.15				SR12	1/17/2017 17:37	0.16			
SR4	1/17/2017 17:57	0.18				SR12	1/17/2017 17:57	0.18			
SR4	1/17/2017 18:17	0.14				SR12	1/17/2017 18:17	0.15			
SR4	1/17/2017 18:37	0.15				SR12	1/17/2017 18:37	0.16			
SR4	1/17/2017 18:57	0.18				SR12	1/17/2017 18:57	0.18			
SR4	1/17/2017 19:17	0.18				SR12	1/17/2017 19:17	0.18			
SR4	1/17/2017 19:37	0.17				SR12	1/17/2017 19:37	0.18			
SR4	1/17/2017 19:57	0.18				SR12	1/17/2017 19:57	0.15			
SR4	1/17/2017 20:17	0.15				SR12	1/17/2017 20:17	0.17			
SR4	1/17/2017 20:37	0.17				SR12	1/17/2017 20:37	0.17			
SR4	1/17/2017 20:57	0.17				SR12	1/17/2017 20:57	0.19			
SR4	1/17/2017 21:17	0.18				SR12	1/17/2017 21:17	0.19			
SR4	1/17/2017 21:37	0.16				SR12	1/17/2017 21:37	0.19			
SR4	1/17/2017 21:57	0.15				SR12	1/17/2017 21:57	0.15			
SR4	1/17/2017 22:17	0.16				SR12	1/17/2017 22:17	0.17			
SR4	1/17/2017 22:37	0.17				SR12	1/17/2017 22:37	0.16			
SR4	1/17/2017 22:57	0.17				SR12	1/17/2017 22:57	0.15			
SR4	1/17/2017 23:17	0.16				SR12	1/17/2017 23:17	0.17			
SR4	1/17/2017 23:37	0.17				SR12	1/17/2017 23:37	0.17			
SR4	1/17/2017 23:57	0.14				SR12	1/17/2017 23:57	0.15			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 12:55-13:15.

SR9 monitoring station was under maintenance during 10:45-11:05.

SR10 monitoring station was under maintenance during 12:50-13:10.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/18/2017 0:17	0.16				SR12	1/18/2017 0:17	0.17			
SR4	1/18/2017 0:37	0.15				SR12	1/18/2017 0:37	0.16			
SR4	1/18/2017 0:57	0.16				SR12	1/18/2017 0:57	0.19			
SR4	1/18/2017 1:17	0.16				SR12	1/18/2017 1:17	0.18			
SR4	1/18/2017 1:37	0.18				SR12	1/18/2017 1:37	0.16			
SR4	1/18/2017 1:57	0.15				SR12	1/18/2017 1:57	0.15			
SR4	1/18/2017 2:17	0.15				SR12	1/18/2017 2:17	0.19			
SR4	1/18/2017 2:37	0.15				SR12	1/18/2017 2:37	0.18			
SR4	1/18/2017 2:57	0.17				SR12	1/18/2017 2:57	0.19			
SR4	1/18/2017 3:17	0.14				SR12	1/18/2017 3:17	0.17			
SR4	1/18/2017 3:37	0.16				SR12	1/18/2017 3:37	0.15			
SR4	1/18/2017 3:57	0.17				SR12	1/18/2017 3:57	0.19			
SR4	1/18/2017 4:17	0.16				SR12	1/18/2017 4:17	0.17			
SR4	1/18/2017 4:37	0.15				SR12	1/18/2017 4:37	0.17			
SR4	1/18/2017 4:57	0.18				SR12	1/18/2017 4:57	0.16			
SR4	1/18/2017 5:17	0.17				SR12	1/18/2017 5:17	0.18			
SR4	1/18/2017 5:37	0.16				SR12	1/18/2017 5:37	0.16			
SR4	1/18/2017 5:57	0.14				SR12	1/18/2017 5:57	0.15			
SR4						SR12					
SR4	1/18/2017 6:37	0.17				SR12	1/18/2017 6:37	0.16			
SR4	1/18/2017 6:57	0.17				SR12	1/18/2017 6:57	0.15			
SR4	1/18/2017 7:17	0.18				SR12	1/18/2017 7:17	0.19			
SR4	1/18/2017 7:37	0.17				SR12	1/18/2017 7:37	0.19			
SR4	1/18/2017 7:57	0.17				SR12	1/18/2017 7:57	0.20			
SR4	1/18/2017 8:17	0.18				SR12	1/18/2017 8:17	0.23			
SR4	1/18/2017 8:37	0.17				SR12	1/18/2017 8:37	0.22			
SR4	1/18/2017 8:57	0.15				SR12	1/18/2017 8:57	0.24			
SR4	1/18/2017 9:17	0.18				SR12	1/18/2017 9:17	0.18			
SR4	1/18/2017 9:37	0.17				SR12					
SR4	1/18/2017 9:57	0.17				SR12					
SR4	1/18/2017 10:17	0.19				SR12					
SR4	1/18/2017 10:37	0.19				SR12					
SR4	1/18/2017 10:57	0.19				SR12					
SR4	1/18/2017 11:17	0.18				SR12	1/18/2017 11:17	0.21			
SR4	1/18/2017 11:37	0.15				SR12	1/18/2017 11:37	0.21			
SR4	1/18/2017 11:57	0.15				SR12	1/18/2017 11:57	0.23			
SR4						SR12	1/18/2017 12:17	0.21			
SR4						SR12	1/18/2017 12:37	0.21			
SR4						SR12	1/18/2017 12:57	0.22			
SR4						SR12	1/18/2017 13:17	0.22			
SR4	1/18/2017 13:37	0.17				SR12	1/18/2017 13:37	0.18			
SR4	1/18/2017 13:57	0.15				SR12	1/18/2017 13:57	0.24			
SR4	1/18/2017 14:17	0.16				SR12	1/18/2017 14:17	0.19			
SR4	1/18/2017 14:37	0.16				SR12	1/18/2017 14:37	0.20			
SR4	1/18/2017 14:57	0.18				SR12	1/18/2017 14:57	0.23			
SR4	1/18/2017 15:17	0.19				SR12	1/18/2017 15:17	0.24			
SR4	1/18/2017 15:37	0.17				SR12	1/18/2017 15:37	0.24			
SR4	1/18/2017 15:57	0.18				SR12	1/18/2017 15:57	0.18			
SR4	1/18/2017 16:17	0.19				SR12	1/18/2017 16:17	0.23			
SR4	1/18/2017 16:37	0.19				SR12	1/18/2017 16:37	0.18			
SR4	1/18/2017 16:57	0.18				SR12	1/18/2017 16:57	0.24			
SR4	1/18/2017 17:17	0.19				SR12	1/18/2017 17:17	0.18			
SR4	1/18/2017 17:37	0.15				SR12	1/18/2017 17:37	0.19			
SR4	1/18/2017 17:57	0.16				SR12	1/18/2017 17:57	0.20			
SR4	1/18/2017 18:17	0.15				SR12	1/18/2017 18:17	0.22			
SR4	1/18/2017 18:37	0.15				SR12	1/18/2017 18:37	0.18			
SR4	1/18/2017 18:57	0.16				SR12	1/18/2017 18:57	0.22			
SR4	1/18/2017 19:17	0.18				SR12	1/18/2017 19:17	0.18			
SR4	1/18/2017 19:37	0.15				SR12	1/18/2017 19:37	0.19			
SR4	1/18/2017 19:57	0.16				SR12	1/18/2017 19:57	0.19			
SR4	1/18/2017 20:17	0.17				SR12	1/18/2017 20:17	0.18			
SR4	1/18/2017 20:37	0.17				SR12	1/18/2017 20:37	0.23			
SR4	1/18/2017 20:57	0.17				SR12	1/18/2017 20:57	0.20			
SR4	1/18/2017 21:17	0.19				SR12	1/18/2017 21:17	0.22			
SR4	1/18/2017 21:37	0.19				SR12	1/18/2017 21:37	0.19			
SR4	1/18/2017 21:57	0.18				SR12	1/18/2017 21:57	0.18			
SR4	1/18/2017 22:17	0.15				SR12	1/18/2017 22:17	0.20			
SR4	1/18/2017 22:37	0.16				SR12	1/18/2017 22:37	0.22			
SR4	1/18/2017 22:57	0.16				SR12	1/18/2017 22:57	0.21			
SR4	1/18/2017 23:17	0.17				SR12	1/18/2017 23:17	0.21			
SR4	1/18/2017 23:37	0.17				SR12	1/18/2017 23:37	0.23			
SR4	1/18/2017 23:57	0.16				SR12	1/18/2017 23:57	0.19			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR4 monitoring station was under maintenance during 12:11-13:16.

SR12 monitoring station was under maintenance during 9:36-10:46.

















24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/19/2017 0:17	0.16				SR12	1/19/2017 0:17	0.24			
SR4	1/19/2017 0:37	0.18				SR12	1/19/2017 0:37	0.21			
SR4	1/19/2017 0:57	0.19				SR12	1/19/2017 0:57	0.20			
SR4	1/19/2017 1:17	0.15				SR12	1/19/2017 1:17	0.23			
SR4	1/19/2017 1:37	0.18				SR12	1/19/2017 1:37	0.23			
SR4	1/19/2017 1:57	0.15				SR12	1/19/2017 1:57	0.18			
SR4	1/19/2017 2:17	0.19				SR12	1/19/2017 2:17	0.24			
SR4	1/19/2017 2:37	0.15				SR12	1/19/2017 2:37	0.22			
SR4	1/19/2017 2:57	0.20				SR12	1/19/2017 2:57	0.23			
SR4	1/19/2017 3:17	0.16				SR12	1/19/2017 3:17	0.23			
SR4	1/19/2017 3:37	0.18				SR12	1/19/2017 3:37	0.21			
SR4	1/19/2017 3:57	0.19				SR12	1/19/2017 3:57	0.24			
SR4	1/19/2017 4:17	0.19				SR12	1/19/2017 4:17	0.19			
SR4	1/19/2017 4:37	0.17				SR12	1/19/2017 4:37	0.19			
SR4	1/19/2017 4:57	0.15				SR12	1/19/2017 4:57	0.20			
SR4	1/19/2017 5:17	0.16				SR12	1/19/2017 5:17	0.18			
SR4	1/19/2017 5:37	0.19				SR12	1/19/2017 5:37	0.18			
SR4	1/19/2017 5:57	0.19				SR12	1/19/2017 5:57	0.22			
SR4						SR12					
SR4	1/19/2017 6:37	0.18				SR12	1/19/2017 6:37	0.20			
SR4	1/19/2017 6:57	0.16				SR12	1/19/2017 6:57	0.20			
SR4	1/19/2017 7:17	0.19				SR12	1/19/2017 7:17	0.23			
SR4	1/19/2017 7:37	0.19				SR12	1/19/2017 7:37	0.20			
SR4	1/19/2017 7:57	0.18				SR12	1/19/2017 7:57	0.19			
SR4	1/19/2017 8:17	0.15				SR12	1/19/2017 8:17	0.23			
SR4	1/19/2017 8:37	0.17				SR12	1/19/2017 8:37	0.19			
SR4	1/19/2017 8:57	0.20				SR12	1/19/2017 8:57	0.23			
SR4	1/19/2017 9:17	0.16				SR12	1/19/2017 9:17	0.24			
SR4	1/19/2017 9:37	0.17				SR12	1/19/2017 9:37	0.19			
SR4	1/19/2017 9:57	0.19				SR12	1/19/2017 9:57	0.22			
SR4	1/19/2017 10:17	0.15				SR12	1/19/2017 10:17	0.19			
SR4	1/19/2017 10:37	0.19				SR12	1/19/2017 10:37	0.20			
SR4	1/19/2017 10:57	0.17				SR12	1/19/2017 10:57	0.22			
SR4	1/19/2017 11:17	0.17				SR12	1/19/2017 11:17	0.18			
SR4	1/19/2017 11:37	0.20				SR12	1/19/2017 11:37	0.19			
SR4	1/19/2017 11:57	0.15				SR12	1/19/2017 11:57	0.19			
SR4	1/19/2017 12:17	0.17				SR12	1/19/2017 12:17	0.21			
SR4	1/19/2017 12:37	0.20				SR12	1/19/2017 12:37	0.18			
SR4	1/19/2017 12:57	0.20				SR12	1/19/2017 12:57	0.21			
SR4	1/19/2017 13:17	0.15				SR12	1/19/2017 13:17	0.18			
SR4	1/19/2017 13:37	0.19				SR12	1/19/2017 13:37	0.21			
SR4	1/19/2017 13:57	0.19				SR12	1/19/2017 13:57	0.20			
SR4	1/19/2017 14:17	0.20				SR12	1/19/2017 14:17	0.24			
SR4	1/19/2017 14:37	0.16				SR12	1/19/2017 14:37	0.19			
SR4	1/19/2017 14:57	0.20				SR12	1/19/2017 14:57	0.19			
SR4	1/19/2017 15:17	0.18				SR12	1/19/2017 15:17	0.24			
SR4	1/19/2017 15:37	0.17				SR12	1/19/2017 15:37	0.23			
SR4	1/19/2017 15:57	0.19				SR12	1/19/2017 15:57	0.19			
SR4	1/19/2017 16:17	0.19				SR12	1/19/2017 16:17	0.23			
SR4	1/19/2017 16:37	0.16				SR12	1/19/2017 16:37	0.22			
SR4	1/19/2017 16:57	0.15				SR12	1/19/2017 16:57	0.19			
SR4	1/19/2017 17:17	0.16				SR12	1/19/2017 17:17	0.21			
SR4	1/19/2017 17:37	0.16				SR12	1/19/2017 17:37	0.21			
SR4	1/19/2017 17:57	0.18				SR12	1/19/2017 17:57	0.24			
SR4	1/19/2017 18:17	0.20				SR12	1/19/2017 18:17	0.22			
SR4	1/19/2017 18:37	0.23				SR12	1/19/2017 18:37	0.20			
SR4	1/19/2017 18:57	0.21				SR12	1/19/2017 18:57	0.18			
SR4	1/19/2017 19:17	0.20				SR12	1/19/2017 19:17	0.22			
SR4	1/19/2017 19:37	0.20				SR12	1/19/2017 19:37	0.22			
SR4	1/19/2017 19:57	0.23				SR12	1/19/2017 19:57	0.24			
SR4	1/19/2017 20:17	0.21				SR12	1/19/2017 20:17	0.23			
SR4	1/19/2017 20:37	0.19				SR12	1/19/2017 20:37	0.24			
SR4	1/19/2017 20:57	0.20				SR12	1/19/2017 20:57	0.20			
SR4	1/19/2017 21:17	0.20				SR12	1/19/2017 21:17	0.22			
SR4	1/19/2017 21:37	0.20				SR12	1/19/2017 21:37	0.22			
SR4	1/19/2017 21:57	0.20				SR12	1/19/2017 21:57	0.24			
SR4	1/19/2017 22:17	0.23				SR12	1/19/2017 22:17	0.22			
SR4	1/19/2017 22:37	0.21				SR12	1/19/2017 22:37	0.25			
SR4	1/19/2017 22:57	0.19				SR12	1/19/2017 22:57	0.25			
SR4	1/19/2017 23:17	0.20				SR12	1/19/2017 23:17	0.23			
SR4	1/19/2017 23:37	0.22				SR12	1/19/2017 23:37	0.20			
SR4	1/19/2017 23:57	0.23				SR12	1/19/2017 23:57	0.25			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.

SR5 monitoring station was under maintenance during 13:40-14:00.

SR9 monitoring station was under maintenance during 11:30-11:50.

SR11 monitoring station was under maintenance during 13:50-14:10.



24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR4	1/20/2017 0:01	21.18	92.9	6.36	4.3	SR4	1/20/2017 6:01	21.30	97.1	6.65	3.1	SR4	1/20/2017 12:01	21.22	94.2	6.45	6.9	SR4	1/20/2017 18:01	21.33	98.8	6.77	7.6
SR4	1/20/2017 0:06	21.17	99.0	6.78	2.6	SR4	1/20/2017 6:06	21.33	97.2	6.66	5.7	SR4	1/20/2017 12:06	21.35	99.1	6.79	5.2	SR4	1/20/2017 18:06	21.23	95.6	6.55	2.5
SR4	1/20/2017 0:11	21.18	96.2	6.59	2.8	SR4	1/20/2017 6:11	21.28	97.4	6.67	5.6	SR4	1/20/2017 12:11	21.35	96.9	6.64	6.6	SR4	1/20/2017 18:11	21.35	95.2	6.52	5.7
SR4	1/20/2017 0:16	21.23	94.8	6.49	6.1	SR4	1/20/2017 6:16	21.15	98.8	6.77	7.0	SR4	1/20/2017 12:16	21.14	95.2	6.52	3.4	SR4	1/20/2017 18:16	21.22	92.6	6.34	4.9
SR4	1/20/2017 0:21	21.16	97.1	6.65	5.7	SR4	1/20/2017 6:21	21.11	95.2	6.52	4.8	SR4	1/20/2017 12:21	21.25	95.3	6.53	4.6	SR4	1/20/2017 18:21	21.25	99.3	6.80	7.7
SR4	1/20/2017 0:26	21.25	92.3	6.32	2.5	SR4	1/20/2017 6:26	21.11	99.3	6.80	6.5	SR4	1/20/2017 12:26	21.25	98.1	6.72	6.3	SR4	1/20/2017 18:26	21.26	97.4	6.67	4.3
SR4	1/20/2017 0:31	21.12	98.7	6.76	5.9	SR4	1/20/2017 6:31	21.16	97.8	6.70	2.6	SR4	1/20/2017 12:31	21.27	93.9	6.43	4.9	SR4	1/20/2017 18:31	21.13	98.3	6.73	3.2
SR4	1/20/2017 0:36	21.20	98.4	6.74	6.3	SR4	1/20/2017 6:36	21.31	94.5	6.47	5.8	SR4	1/20/2017 12:36	21.21	93.7	6.42	5.5	SR4	1/20/2017 18:36	21.24	98.6	6.75	5.3
SR4	1/20/2017 0:41	21.26	98.6	6.75	6.4	SR4	1/20/2017 6:41	21.25	92.3	6.32	2.8	SR4	1/20/2017 12:41	21.18	98.0	6.71	5.3	SR4	1/20/2017 18:41	21.34	95.9	6.57	7.2
SR4	1/20/2017 0:46	21.26	93.3	6.39	6.8	SR4	1/20/2017 6:46	21.23	99.4	6.81	5.9	SR4	1/20/2017 12:46	21.17	94.3	6.46	7.4	SR4	1/20/2017 18:46	21.13	98.0	6.71	5.2
SR4	1/20/2017 0:51	21.32	98.1	6.72	7.4	SR4	1/20/2017 6:51	21.26	99.0	6.78	6.6	SR4	1/20/2017 12:51	21.15	92.1	6.31	7.0	SR4	1/20/2017 18:51	21.33	97.1	6.65	3.6
SR4	1/20/2017 0:56	21.26	93.7	6.42	3.5	SR4	1/20/2017 6:56	21.12	93.3	6.39	2.9	SR4	1/20/2017 12:56	21.14	94.6	6.48	2.3	SR4	1/20/2017 18:56	21.33	92.1	6.31	2.8
SR4	1/20/2017 1:01	21.25	93.1	6.38	3.6	SR4	1/20/2017 7:01	21.29	93.7	6.42	6.3	SR4	1/20/2017 13:01	21.32	98.3	6.73	3.1	SR4	1/20/2017 19:01	21.25	98.8	6.77	5.6
SR4	1/20/2017 1:06	21.27	99.4	6.81	7.5	SR4	1/20/2017 7:06	21.31	94.9	6.50	5.8	SR4	1/20/2017 13:06	21.28	92.6	6.34	2.8	SR4	1/20/2017 19:06	21.28	98.1	6.72	2.5
SR4	1/20/2017 1:11	21.27	97.1	6.65	3.4	SR4	1/20/2017 7:11	21.13	92.1	6.31	2.3	SR4	1/20/2017 13:11	21.25	96.2	6.59	6.0	SR4	1/20/2017 19:11	21.27	92.0	6.30	4.3
SR4	1/20/2017 1:16	21.21	97.1	6.65	5.7	SR4	1/20/2017 7:16	21.23	98.3	6.73	6.9	SR4	1/20/2017 13:16	21.22	99.1	6.79	3.5	SR4	1/20/2017 19:16	21.29	99.1	6.79	3.8
SR4	1/20/2017 1:21	21.19	94.3	6.46	3.2	SR4	1/20/2017 7:21	21.26	95.8	6.56	5.3	SR4	1/20/2017 13:21	21.32	92.0	6.30	5.2	SR4	1/20/2017 19:21	21.29	93.4	6.40	5.2
SR4	1/20/2017 1:26	21.27	97.7	6.69	7.1	SR4	1/20/2017 7:26	21.22	93.0	6.37	4.1	SR4	1/20/2017 13:26	21.20	99.0	6.78	2.3	SR4	1/20/2017 19:26	21.11	96.4	6.60	4.1
SR4	1/20/2017 1:31	21.25	94.5	6.47	6.6	SR4	1/20/2017 7:31	21.14	93.1	6.38	5.4	SR4	1/20/2017 13:31	21.34	98.0	6.71	6.4	SR4	1/20/2017 19:31	21.23	96.9	6.64	5.6
SR4	1/20/2017 1:36	21.27	95.0	6.51	5.1	SR4	1/20/2017 7:36	21.25	93.4	6.40	6.7	SR4	1/20/2017 13:36	21.16	99.4	6.81	2.4	SR4	1/20/2017 19:36	21.16	97.2	6.66	4.4
SR4	1/20/2017 1:41	21.14	98.8	6.77	2.9	SR4	1/20/2017 7:41	21.30	97.8	6.70	2.5	SR4	1/20/2017 13:41	21.26	97.4	6.67	6.1	SR4	1/20/2017 19:41	21.12	96.9	6.64	7.2
SR4	1/20/2017 1:46	21.21	92.1	6.31	7.4	SR4	1/20/2017 7:46	21.14	97.5	6.68	2.5	SR4	1/20/2017 13:46	21.11	95.8	6.56	6.3	SR4	1/20/2017 19:46	21.24	95.6	6.55	4.3
SR4	1/20/2017 1:51	21.31	97.8	6.70	7.4	SR4	1/20/2017 7:51	21.35	95.5	6.54	2.5	SR4	1/20/2017 13:51	21.34	96.1	6.58	5.2	SR4	1/20/2017 19:51	21.14	92.7	6.35	6.1
SR4	1/20/2017 1:56	21.24	94.0	6.44	2.4	SR4	1/20/2017 7:56	21.27	94.9	6.50	7.7	SR4	1/20/2017 13:56	21.21	91.8	6.29	7.5	SR4	1/20/2017 19:56	21.34	98.7	6.76	5.1
SR4	1/20/2017 2:01	21.15	98.1	6.72	5.2	SR4	1/20/2017 8:01	21.32	96.8	6.63	2.9	SR4	1/20/2017 14:01	21.34	97.2	6.66	6.1	SR4	1/20/2017 20:01	21.15	99.4	6.81	3.3
SR4	1/20/2017 2:06	21.31	92.7	6.35	2.3	SR4	1/20/2017 8:06	21.33	95.2	6.52	4.2	SR4	1/20/2017 14:06	21.21	93.9	6.43	2.8	SR4	1/20/2017 20:06	21.33	93.3	6.39	2.9
SR4	1/20/2017 2:11	21.33	92.0	6.30	4.3	SR4	1/20/2017 8:11	21.13	97.2	6.66	3.7	SR4	1/20/2017 14:11	21.24	96.5	6.61	4.4	SR4	1/20/2017 20:11	21.17	96.1	6.58	5.5
SR4	1/20/2017 2:16	21.31	95.6	6.55	3.0	SR4	1/20/2017 8:16	21.13	93.3	6.39	3.3	SR4	1/20/2017 14:16	21.28	98.1	6.72	3.8	SR4	1/20/2017 20:16	21.30	95.0	6.51	6.5
SR4	1/20/2017 2:21	21.28	92.3	6.32	5.5	SR4	1/20/2017 8:21	21.30	98.4	6.74	6.8	SR4	1/20/2017 14:21	21.27	93.6	6.41	5.8	SR4	1/20/2017 20:21	21.33	95.8	6.56	5.8
SR4	1/20/2017 2:26	21.16	96.9	6.64	5.7	SR4	1/20/2017 8:26	21.16	95.3	6.53	3.9	SR4	1/20/2017 14:26	21.35	94.2	6.45	3.6	SR4	1/20/2017 20:26	21.13	97.2	6.66	4.3
SR4	1/20/2017 2:31	21.13	92.3	6.32	3.8	SR4	1/20/2017 8:31	21.14	93.3	6.39	5.0	SR4	1/20/2017 14:31	21.17	93.1	6.38	4.6	SR4	1/20/2017 20:31	21.23	98.3	6.73	3.8
SR4	1/20/2017 2:36	21.13	94.2	6.45	3.1	SR4	1/20/2017 8:36	21.19	96.8	6.63	3.2	SR4	1/20/2017 14:36	21.15	99.0	6.78	5.6	SR4	1/20/2017 20:36	21.35	92.7	6.35	2.6
SR4	1/20/2017 2:41	21.22	99.0	6.78	3.4	SR4	1/20/2017 8:41	21.21	99.4	6.81	7.3	SR4	1/20/2017 14:41	21.22	94.3	6.46	2.5	SR4	1/20/2017 20:41	21.21	93.9	6.43	5.3
SR4	1/20/2017 2:46	21.34	94.2	6.45	3.5	SR4	1/20/2017 8:46	21.33	96.9	6.64	5.3	SR4	1/20/2017 14:46	21.21	94.3	6.46	6.5	SR4	1/20/2017 20:46	21.15	98.0	6.71	2.7
SR4	1/20/2017 2:51	21.35	94.0	6.44	4.3	SR4	1/20/2017 8:51	21.18	93.0	6.37	3.5	SR4	1/20/2017 14:51	21.12	91.8	6.29	6.5	SR4	1/20/2017 20:51	21.24	95.6	6.55	4.5
SR4	1/20/2017 2:56	21.21	94.3	6.46	7.1	SR4	1/20/2017 8:56	21.25	93.7	6.42	3.0	SR4	1/20/2017 14:56	21.12	93.4	6.40	5.7	SR4	1/20/2017 20:56	21.17	94.5	6.47	2.9
SR4	1/20/2017 3:01	21.26	91.8	6.29	4.0	SR4	1/20/2017 9:01	21.34	97.4	6.67	6.5	SR4	1/20/2017 15:01	21.24	96.1	6.58	5.6	SR4	1/20/2017 21:01	21.28	95.9	6.57	2.5
SR4	1/20/2017 3:06	21.31	92.6	6.34	4.0	SR4	1/20/2017 9:06	21.35	96.1	6.58	4.0	SR4	1/20/2017 15:06	21.28	97.5	6.68	4.7	SR4	1/20/2017 21:06	21.14	98.6	6.75	3.7
SR4	1/20/2017 3:11	21.26	96.5	6.61	7.6	SR4	1/20/2017 9:11	21.14	99.4	6.81	2.8	SR4	1/20/2017 15:11	21.31	95.0	6.51	4.9	SR4	1/20/2017 21:11	21.12	97.2	6.66	3.0
SR4	1/20/2017 3:16	21.23	98.3	6.73	7.6	SR4	1/20/2017 9:16	21.14	96.9	6.64	3.1	SR4	1/20/2017 15:16	21.25	99.4	6.81	4.8	SR4	1/20/2017 21:16	21.27	98.7	6.76	3.6
SR4	1/20/2017 3:21	21.30	96.9	6.64	4.8	SR4	1/20/2017 9:21	21.13	98.3	6.73	4.9	SR4	1/20/2017 15:21	21.18	99.3	6.80	4.3	SR4	1/20/2017 21:21	21.23	96.4	6.60	5.4
SR4	1/20/2017 3:26	21.34	91.8	6.29	6.7	SR4	1/20/2017 9:26	21.13	98.7	6.76	2.8	SR4	1/20/2017 15:26	21.12	91.8	6.29	7.7	SR4	1/20/2017 21:26	21.15	93.7	6.42	5.1
SR4	1/20/2017 3:31	21.26	99.3	6.80	3.7	SR4	1/20/2017 9:31	21.33	94.5	6.47	5.9	SR4	1/20/2017 15:31	21.17	92.0	6.30	3.7	SR4	1/20/2017 21:31	21.34	98.1	6.72	3.1
SR4	1/20/2017 3:36	21.15	95.0	6.51	5.3	SR4	1/20/2017 9:36	21.14	95.2	6.52	6.8	SR4	1/20/2017 15:36	21.25	97.4	6.67	6.6	SR4	1/20/2017 21:36	21.25	93.1	6.38	7.7
SR4	1/20/2017 3:41	21.21	93.0	6.37	4.4	SR4	1/20/2017 9:41	21.16	92.0	6.30	7.5	SR4	1/20/2017 15:41	21.18	93.1	6.38	7.0	SR4	1/20/2017 21:41	21.33	96.4	6.60	4.4
SR4	1/20/2017 3:46	21.18	98.4	6.74	7.6	SR4	1/20/2017 9:46	21.17	98.4	6.74	3.6	SR4	1/20/2017 15:46	21.21	93.1	6.38	2.5	SR4	1/20/2017 21:46	21.32	95.2	6.52	2.8
SR4	1/20/2017 3:51	21.30	98.3	6.73	5.5	SR4	1/20/2017 9:51	21.27	96.7	6.62	4.9	SR4	1/20/2017 15:51	21.25	98.0	6.71	3.7	SR4	1/20/2017 21:51	21.34	98.0	6.71	6.3
SR4	1/20/2017 3:56	21.18	98.3	6.73	3.4	SR4	1/20/2017 9:56	21.25	96.5	6.61													



## 24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR9	1/20/2017 0:00	21.52	115.4	7.85	2.5	SR9	1/20/2017 6:00	21.49	121.7	8.28	3.3	SR9	1/20/2017 12:00	21.35	121.0	8.23	3.0	SR9	1/20/2017 18:00	21.45	120.4	8.19	1.8
SR9	1/20/2017 0:05	21.37	119.5	8.13	0.4	SR9	1/20/2017 6:05	21.33	122.6	8.34	0.8	SR9	1/20/2017 12:05	21.53	121.3	8.25	2.1	SR9	1/20/2017 18:05	21.34	118.0	8.03	2.1
SR9	1/20/2017 0:10	21.40	123.3	8.39	2.0	SR9	1/20/2017 6:10	21.45	122.2	8.31	1.3	SR9	1/20/2017 12:10	21.37	115.4	7.85	2.8	SR9	1/20/2017 18:10	21.39	120.4	8.19	0.6
SR9	1/20/2017 0:15	21.56	119.2	8.11	0.3	SR9	1/20/2017 6:15	21.54	119.4	8.12	2.7	SR9	1/20/2017 12:15	21.57	120.7	8.21	3.2	SR9	1/20/2017 18:15	21.55	117.2	7.97	2.7
SR9	1/20/2017 0:20	21.46	115.4	7.85	0.3	SR9	1/20/2017 6:20	21.42	120.2	8.18	3.2	SR9	1/20/2017 12:20	21.48	116.4	7.92	2.7	SR9	1/20/2017 18:20	21.43	116.3	7.91	2.4
SR9	1/20/2017 0:25	21.32	118.8	8.08	1.4	SR9	1/20/2017 6:25	21.34	123.3	8.39	1.2	SR9	1/20/2017 12:25	21.37	118.9	8.09	2.2	SR9	1/20/2017 18:25	21.37	115.5	7.86	1.5
SR9	1/20/2017 0:30	21.59	121.4	8.26	3.3	SR9	1/20/2017 6:30	21.43	118.9	8.09	3.3	SR9	1/20/2017 12:30	21.51	116.9	7.95	2.6	SR9	1/20/2017 18:30	21.47	116.0	7.89	1.3
SR9	1/20/2017 0:35	21.41	118.9	8.09	1.0	SR9	1/20/2017 6:35	21.31	118.9	8.09	2.7	SR9	1/20/2017 12:35	21.51	122.9	8.36	2.7	SR9	1/20/2017 18:35	21.56	123.0	8.37	2.5
SR9	1/20/2017 0:40	21.46	120.7	8.21	1.4	SR9	1/20/2017 6:40	21.55	117.3	7.98	3.3	SR9	1/20/2017 12:40	21.32	116.6	7.93	2.4	SR9	1/20/2017 18:40	21.56	120.7	8.21	1.4
SR9	1/20/2017 0:45	21.34	119.8	8.15	1.3	SR9	1/20/2017 6:45	21.54	118.5	8.06	2.0	SR9	1/20/2017 12:45	21.49	115.7	7.87	2.9	SR9	1/20/2017 18:45	21.38	121.7	8.28	0.4
SR9	1/20/2017 0:50	21.55	121.1	8.24	1.6	SR9	1/20/2017 6:50	21.37	120.5	8.20	1.7	SR9	1/20/2017 12:50	21.51	119.5	8.13	2.9	SR9	1/20/2017 18:50	21.42	123.0	8.37	3.2
SR9	1/20/2017 0:55	21.43	123.3	8.39	2.4	SR9	1/20/2017 6:55	21.52	120.7	8.21	0.3	SR9	1/20/2017 12:55	21.54	118.0	8.03	1.0	SR9	1/20/2017 18:55	21.33	121.3	8.25	1.4
SR9	1/20/2017 1:00	21.55	116.1	7.90	0.6	SR9	1/20/2017 7:00	21.59	118.8	8.08	1.1	SR9	1/20/2017 13:00	21.51	115.7	7.87	3.3	SR9	1/20/2017 19:00	21.37	115.4	7.85	2.2
SR9	1/20/2017 1:05	21.44	120.8	8.22	1.5	SR9	1/20/2017 7:05	21.43	121.4	8.26	1.4	SR9	1/20/2017 13:05	21.31	121.3	8.25	2.1	SR9	1/20/2017 19:05	21.42	115.2	7.84	1.2
SR9	1/20/2017 1:10	21.57	116.3	7.91	3.0	SR9	1/20/2017 7:10	21.58	116.4	7.92	2.0	SR9	1/20/2017 13:10	21.37	122.3	8.32	0.8	SR9	1/20/2017 19:10	21.43	122.6	8.34	2.5
SR9	1/20/2017 1:15	21.44	120.2	8.18	1.9	SR9	1/20/2017 7:15	21.40	115.1	7.83	0.9	SR9	1/20/2017 13:15	21.43	120.5	8.20	3.1	SR9	1/20/2017 19:15	21.33	118.3	8.05	1.4
SR9	1/20/2017 1:20	21.50	121.6	8.27	0.8	SR9	1/20/2017 7:20	21.49	117.9	8.02	0.3	SR9	1/20/2017 13:20	21.45	117.7	8.01	2.2	SR9	1/20/2017 19:20	21.50	120.8	8.22	7.8
SR9	1/20/2017 1:25	21.50	118.5	8.06	1.4	SR9	1/20/2017 7:25	21.50	116.4	7.92	1.1	SR9	1/20/2017 13:25	21.58	115.4	7.85	2.6	SR9	1/20/2017 19:25	21.41	121.3	8.25	1.3
SR9	1/20/2017 1:30	21.49	123.0	8.37	0.3	SR9	1/20/2017 7:30	21.56	121.0	8.23	0.4	SR9	1/20/2017 13:30	21.45	115.2	7.84	2.9	SR9	1/20/2017 19:30	21.44	123.2	8.38	1.8
SR9	1/20/2017 1:35	21.54	118.2	8.04	2.4	SR9	1/20/2017 7:35	21.59	121.6	8.27	3.3	SR9	1/20/2017 13:35	21.32	120.7	8.21	0.9	SR9	1/20/2017 19:35	21.55	115.5	7.86	0.3
SR9	1/20/2017 1:40	21.52	116.6	7.93	2.6	SR9	1/20/2017 7:40	21.33	122.7	8.35	2.1	SR9	1/20/2017 13:40	21.47	115.2	7.84	0.5	SR9	1/20/2017 19:40	21.45	120.0	8.16	2.2
SR9	1/20/2017 1:45	21.51	122.7	8.35	3.3	SR9	1/20/2017 7:45	21.31	123.0	8.37	9.1	SR9	1/20/2017 13:45	21.40	121.7	8.28	1.3	SR9	1/20/2017 19:45	21.57	123.3	8.39	1.6
SR9	1/20/2017 1:50	21.59	116.7	7.94	1.3	SR9	1/20/2017 7:50	21.47	118.0	8.03	1.5	SR9	1/20/2017 13:50	21.35	115.7	7.87	2.2	SR9	1/20/2017 19:50	21.49	117.5	7.99	3.1
SR9	1/20/2017 1:55	21.50	121.0	8.23	0.3	SR9	1/20/2017 7:55	21.59	121.1	8.24	3.3	SR9	1/20/2017 13:55	21.36	122.5	8.33	0.8	SR9	1/20/2017 19:55	21.37	118.3	8.05	0.8
SR9	1/20/2017 2:00	21.53	116.4	7.92	3.1	SR9	1/20/2017 8:00	21.49	117.3	7.98	1.2	SR9	1/20/2017 14:00	21.50	119.4	8.12	1.4	SR9	1/20/2017 20:00	21.47	116.4	7.92	3.1
SR9	1/20/2017 2:05	21.40	121.0	8.23	2.2	SR9	1/20/2017 8:05	21.38	118.8	8.08	3.0	SR9	1/20/2017 14:05	21.32	115.4	7.85	3.1	SR9	1/20/2017 20:05	21.40	119.5	8.13	1.5
SR9	1/20/2017 2:10	21.40	119.8	8.15	0.5	SR9	1/20/2017 8:10	21.53	117.3	7.98	3.0	SR9	1/20/2017 14:10	21.45	119.2	8.11	0.5	SR9	1/20/2017 20:10	21.45	121.6	8.27	1.4
SR9	1/20/2017 2:15	21.52	118.3	8.05	3.0	SR9	1/20/2017 8:15	21.33	123.0	8.37	1.0	SR9	1/20/2017 14:15	21.58	118.2	8.04	1.6	SR9	1/20/2017 20:15	21.49	116.6	7.93	2.7
SR9	1/20/2017 2:20	21.48	118.0	8.03	1.7	SR9	1/20/2017 8:20	21.34	115.1	7.83	0.4	SR9	1/20/2017 14:20	21.33	117.5	7.99	1.0	SR9	1/20/2017 20:20	21.49	123.3	8.39	2.4
SR9	1/20/2017 2:25	21.40	117.2	7.97	3.2	SR9	1/20/2017 8:25	21.49	115.8	7.88	1.7	SR9	1/20/2017 14:25	21.44	118.9	8.09	2.9	SR9	1/20/2017 20:25	21.41	117.7	8.01	2.4
SR9	1/20/2017 2:30	21.35	115.2	7.84	2.1	SR9	1/20/2017 8:30	21.56	119.1	8.10	2.1	SR9	1/20/2017 14:30	21.48	116.4	7.92	3.2	SR9	1/20/2017 20:30	21.49	119.5	8.13	1.7
SR9	1/20/2017 2:35	21.58	121.9	8.29	2.9	SR9	1/20/2017 8:35	21.59	116.3	7.91	0.8	SR9	1/20/2017 14:35	21.57	122.9	8.36	2.6	SR9	1/20/2017 20:35	21.56	117.5	7.99	3.1
SR9	1/20/2017 2:40	21.37	118.6	8.07	0.7	SR9	1/20/2017 8:40	21.40	120.1	8.17	2.0	SR9	1/20/2017 14:40	21.33	118.3	8.05	3.3	SR9	1/20/2017 20:40	21.47	121.6	8.27	0.4
SR9	1/20/2017 2:45	21.38	121.6	8.27	3.0	SR9	1/20/2017 8:45	21.52	117.5	7.99	1.4	SR9	1/20/2017 14:45	21.48	121.3	8.25	3.1	SR9	1/20/2017 20:45	21.31	118.3	8.05	2.7
SR9	1/20/2017 2:50	21.49	116.7	7.94	0.9	SR9	1/20/2017 8:50	21.34	121.7	8.28	1.4	SR9	1/20/2017 14:50	21.50	115.7	7.87	2.5	SR9	1/20/2017 20:50	21.33	115.8	7.88	2.0
SR9	1/20/2017 2:55	21.46	122.0	8.30	0.9	SR9	1/20/2017 8:55	21.53	123.0	8.37	1.3	SR9	1/20/2017 14:55	21.57	121.7	8.28	2.2	SR9	1/20/2017 20:55	21.47	122.0	8.30	2.8
SR9	1/20/2017 3:00	21.33	120.1	8.17	3.2	SR9	1/20/2017 9:00	21.32	118.5	8.06	2.5	SR9	1/20/2017 15:00	21.57	119.8	8.15	1.1	SR9	1/20/2017 21:00	21.39	119.4	8.12	3.1
SR9	1/20/2017 3:05	21.39	121.1	8.24	0.9	SR9	1/20/2017 9:05	21.48	122.6	8.34	2.4	SR9	1/20/2017 15:05	21.37	117.0	7.96	2.3	SR9	1/20/2017 21:05	21.48	122.0	8.30	3.0
SR9	1/20/2017 3:10	21.43	121.6	8.27	1.1	SR9	1/20/2017 9:10	21.36	115.4	7.85	0.4	SR9	1/20/2017 15:10	21.40	115.2	7.84	8.6	SR9	1/20/2017 21:10	21.38	119.4	8.12	3.3
SR9	1/20/2017 3:15	21.32	121.6	8.27	3.2	SR9	1/20/2017 9:15	21.34	123.0	8.37	2.3	SR9	1/20/2017 15:15	21.57	120.2	8.18	4.4	SR9	1/20/2017 21:15	21.43	115.4	7.85	1.0
SR9	1/20/2017 3:20	21.38	116.9	7.95	1.7	SR9	1/20/2017 9:20	21.39	117.2	7.97	2.5	SR9	1/20/2017 15:20	21.48	116.0	7.89	2.8	SR9	1/20/2017 21:20	21.56	115.2	7.84	0.9
SR9	1/20/2017 3:25	21.50	116.0	7.89	0.7	SR9	1/20/2017 9:25	21.58	120.1	8.17	0.8	SR9	1/20/2017 15:25	21.36	120.5	8.20	3.3	SR9	1/20/2017 21:25	21.55	122.2	8.31	1.1
SR9	1/20/2017 3:30	21.58	122.0	8.30	1.6	SR9	1/20/2017 9:30	21.56	122.7	8.35	1.5	SR9	1/20/2017 15:30	21.48	116.1	7.90	2.1	SR9	1/20/2017 21:30	21.42	117.9	8.02	0.4
SR9	1/20/2017 3:35	21.35	115.4	7.85	0.6	SR9	1/20/2017 9:35	21.32	122.2	8.31	1.1	SR9	1/20/2017 15:35	21.50	115.5	7.86	3.0	SR9	1/20/2017 21:35	21.52	120.0	8.16	2.6
SR9	1/20/2017 3:40	21.40	122.6	8.34	3.2	SR9	1/20/2017 9:40	21.57	122.3	8.32	0.5	SR9	1/20/2017 15:40	21.57	118.5	8.06	2.2	SR9	1/20/2017 21:40	21.38	121.1	8.24	0.4
SR9	1/20/2017 3:45	21.39	123.0	8.37	1.0	SR9	1/20/2017 9:45	21.57	116.1	7.90	0.3	SR9	1/20/2017 15:45	21.54	115.4	7.85	0.6	SR9	1/20/2017 21:45	21.34	119.2	8.11	3.2
SR9	1/20/2017 3:50	21.54	123.2	8.38	1.3	SR9	1/20/2017 9:50	21.49	119.4	8.12	3.1	SR9	1/20/2017 15:50	21.34	119.1</								



## 24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR11	1/20/2017 0:00	21.35	112.5	7.65	0.8	SR11	1/20/2017 6:00	21.48	117.0	7.96	1.4	SR11	1/20/2017 12:00	21.35	116.7	7.94	0.9	SR11	1/20/2017 18:00	21.61	119.2	8.11	0.9
SR11	1/20/2017 0:05	21.43	112.3	7.64	2.1	SR11	1/20/2017 6:05	21.62	110.8	7.54	2.0	SR11	1/20/2017 12:05	21.62	112.5	7.65	2.3	SR11	1/20/2017 18:05	21.53	112.0	7.62	2.6
SR11	1/20/2017 0:10	21.42	110.0	7.48	2.1	SR11	1/20/2017 6:10	21.63	119.1	8.10	0.8	SR11	1/20/2017 12:10	21.64	119.5	8.13	1.7	SR11	1/20/2017 18:10	21.56	112.6	7.66	0.4
SR11	1/20/2017 0:15	21.35	112.9	7.68	2.4	SR11	1/20/2017 6:15	21.62	117.2	7.97	1.0	SR11	1/20/2017 12:15	21.63	116.0	7.89	1.5	SR11	1/20/2017 18:15	21.42	110.7	7.53	0.4
SR11	1/20/2017 0:20	21.44	110.1	7.49	0.5	SR11	1/20/2017 6:20	21.52	115.4	7.85	1.2	SR11	1/20/2017 12:20	21.47	110.4	7.51	1.4	SR11	1/20/2017 18:20	21.54	114.4	7.78	1.9
SR11	1/20/2017 0:25	21.46	117.2	7.97	1.5	SR11	1/20/2017 6:25	21.47	110.0	7.48	1.1	SR11	1/20/2017 12:25	21.40	120.0	8.16	0.6	SR11	1/20/2017 18:25	21.63	112.7	7.67	1.9
SR11	1/20/2017 0:30	21.40	119.7	8.14	0.9	SR11	1/20/2017 6:30	21.64	115.7	7.87	0.4	SR11	1/20/2017 12:30	21.36	109.1	7.42	1.6	SR11	1/20/2017 18:30	21.46	113.6	7.73	2.5
SR11	1/20/2017 0:35	21.62	115.7	7.87	2.6	SR11	1/20/2017 6:35	21.46	110.7	7.53	1.2	SR11	1/20/2017 12:35	21.52	118.5	8.06	0.4	SR11	1/20/2017 18:35	21.51	112.2	7.63	1.8
SR11	1/20/2017 0:40	21.51	114.8	7.81	2.6	SR11	1/20/2017 6:40	21.43	110.5	7.52	0.4	SR11	1/20/2017 12:40	21.55	111.1	7.56	1.8	SR11	1/20/2017 18:40	21.54	119.7	8.14	1.2
SR11	1/20/2017 0:45	21.54	112.7	7.67	2.8	SR11	1/20/2017 6:45	21.59	109.1	7.42	0.9	SR11	1/20/2017 12:45	21.53	119.5	8.13	0.5	SR11	1/20/2017 18:45	21.65	112.2	7.63	1.8
SR11	1/20/2017 0:50	21.42	118.2	8.04	2.3	SR11	1/20/2017 6:50	21.40	114.8	7.81	1.9	SR11	1/20/2017 12:50	21.42	112.2	7.63	0.6	SR11	1/20/2017 18:50	21.36	110.7	7.53	1.6
SR11	1/20/2017 0:55	21.65	115.1	7.83	0.4	SR11	1/20/2017 6:55	21.36	119.5	8.13	0.3	SR11	1/20/2017 12:55	21.55	113.2	7.70	2.1	SR11	1/20/2017 18:55	21.38	120.1	8.17	1.8
SR11	1/20/2017 1:00	21.60	111.1	7.56	2.3	SR11	1/20/2017 7:00	21.45	115.8	7.88	1.1	SR11	1/20/2017 13:00	21.46	111.3	7.57	0.6	SR11	1/20/2017 19:00	21.42	113.9	7.75	1.2
SR11	1/20/2017 1:05	21.40	112.9	7.68	1.5	SR11	1/20/2017 7:05	21.45	119.7	8.14	1.2	SR11	1/20/2017 13:05	21.42	111.3	7.57	1.0	SR11	1/20/2017 19:05	21.37	109.7	7.46	2.4
SR11	1/20/2017 1:10	21.35	119.7	8.14	1.0	SR11	1/20/2017 7:10	21.41	109.5	7.45	2.3	SR11	1/20/2017 13:10	21.61	119.2	8.11	2.1	SR11	1/20/2017 19:10	21.44	118.5	8.06	2.4
SR11	1/20/2017 1:15	21.45	109.7	7.46	0.8	SR11	1/20/2017 7:15	21.45	111.1	7.56	2.4	SR11	1/20/2017 13:15	21.66	112.9	7.68	1.7	SR11	1/20/2017 19:15	21.59	110.1	7.49	0.4
SR11	1/20/2017 1:20	21.40	109.7	7.46	0.4	SR11	1/20/2017 7:20	21.48	109.8	7.47	2.5	SR11	1/20/2017 13:20	21.53	119.7	8.14	1.2	SR11	1/20/2017 19:20	21.47	111.7	7.60	1.0
SR11	1/20/2017 1:25	21.52	109.7	7.46	2.8	SR11	1/20/2017 7:25	21.55	114.1	7.76	0.4	SR11	1/20/2017 13:25	21.65	110.1	7.49	2.0	SR11	1/20/2017 19:25	21.45	114.5	7.79	3.0
SR11	1/20/2017 1:30	21.52	108.9	7.41	2.2	SR11	1/20/2017 7:30	21.62	109.2	7.43	0.9	SR11	1/20/2017 13:30	21.52	118.5	8.06	2.3	SR11	1/20/2017 19:30	21.40	113.3	7.71	2.8
SR11	1/20/2017 1:35	21.65	113.9	7.75	1.7	SR11	1/20/2017 7:35	21.50	114.1	7.76	0.6	SR11	1/20/2017 13:35	21.64	118.0	8.03	2.2	SR11	1/20/2017 19:35	21.59	118.8	8.08	1.9
SR11	1/20/2017 1:40	21.41	109.7	7.46	0.4	SR11	1/20/2017 7:40	21.62	112.5	7.65	1.9	SR11	1/20/2017 13:40	21.56	117.0	7.96	1.4	SR11	1/20/2017 19:40	21.66	111.0	7.55	0.9
SR11	1/20/2017 1:45	21.57	109.5	7.45	1.2	SR11	1/20/2017 7:45	21.66	117.5	7.99	0.9	SR11	1/20/2017 13:45	21.44	116.3	7.91	1.6	SR11	1/20/2017 19:45	21.61	119.2	8.11	1.7
SR11	1/20/2017 1:50	21.40	113.8	7.74	0.4	SR11	1/20/2017 7:50	21.40	112.5	7.65	2.3	SR11	1/20/2017 13:50	21.54	113.3	7.71	1.5	SR11	1/20/2017 19:50	21.61	111.1	7.56	1.5
SR11	1/20/2017 1:55	21.58	116.0	7.89	1.7	SR11	1/20/2017 7:55	21.62	116.4	7.92	4.9	SR11	1/20/2017 13:55	21.45	111.9	7.61	0.9	SR11	1/20/2017 19:55	21.58	116.0	7.89	2.1
SR11	1/20/2017 2:00	21.52	114.2	7.77	1.6	SR11	1/20/2017 8:00	21.65	118.9	8.09	0.7	SR11	1/20/2017 14:00	21.59	118.6	8.07	1.5	SR11	1/20/2017 20:00	21.42	117.7	8.01	0.5
SR11	1/20/2017 2:05	21.36	113.2	7.70	0.4	SR11	1/20/2017 8:05	21.49	119.1	8.10	2.3	SR11	1/20/2017 14:05	21.57	117.7	8.01	2.5	SR11	1/20/2017 20:05	21.40	113.9	7.75	2.6
SR11	1/20/2017 2:10	21.54	108.9	7.41	2.7	SR11	1/20/2017 8:10	21.36	114.5	7.79	1.9	SR11	1/20/2017 14:10	21.37	113.0	7.69	0.6	SR11	1/20/2017 20:10	21.60	110.4	7.51	2.9
SR11	1/20/2017 2:15	21.61	112.5	7.65	1.5	SR11	1/20/2017 8:15	21.41	120.0	8.16	0.5	SR11	1/20/2017 14:15	21.38	117.2	7.97	1.6	SR11	1/20/2017 20:15	21.64	115.1	7.83	0.3
SR11	1/20/2017 2:20	21.38	115.1	7.83	2.0	SR11	1/20/2017 8:20	21.35	120.2	8.18	0.9	SR11	1/20/2017 14:20	21.44	118.3	8.05	2.9	SR11	1/20/2017 20:20	21.53	110.7	7.53	2.3
SR11	1/20/2017 2:25	21.59	109.5	7.45	2.7	SR11	1/20/2017 8:25	21.38	116.7	7.94	3.0	SR11	1/20/2017 14:25	21.52	114.8	7.81	1.5	SR11	1/20/2017 20:25	21.55	112.9	7.68	2.7
SR11	1/20/2017 2:30	21.60	119.2	8.11	1.9	SR11	1/20/2017 8:30	21.65	118.5	8.06	0.9	SR11	1/20/2017 14:30	21.59	117.6	8.00	2.3	SR11	1/20/2017 20:30	21.60	112.5	7.65	0.4
SR11	1/20/2017 2:35	21.45	115.0	7.82	0.7	SR11	1/20/2017 8:35	21.42	118.3	8.05	0.8	SR11	1/20/2017 14:35	21.41	115.8	7.88	1.6	SR11	1/20/2017 20:35	21.45	117.6	8.00	1.2
SR11	1/20/2017 2:40	21.44	111.7	7.60	2.2	SR11	1/20/2017 8:40	21.63	114.8	7.81	0.4	SR11	1/20/2017 14:40	21.54	114.5	7.79	1.2	SR11	1/20/2017 20:40	21.50	111.7	7.60	2.0
SR11	1/20/2017 2:45	21.62	117.2	7.97	1.3	SR11	1/20/2017 8:45	21.41	111.7	7.60	2.9	SR11	1/20/2017 14:45	21.55	111.7	7.60	2.5	SR11	1/20/2017 20:45	21.48	117.0	7.96	1.1
SR11	1/20/2017 2:50	21.38	111.6	7.59	0.7	SR11	1/20/2017 8:50	21.45	117.7	8.01	0.6	SR11	1/20/2017 14:50	21.59	117.6	8.00	2.3	SR11	1/20/2017 20:50	21.51	111.4	7.58	0.9
SR11	1/20/2017 2:55	21.48	117.2	7.97	2.1	SR11	1/20/2017 8:55	21.59	120.1	8.17	0.7	SR11	1/20/2017 14:55	21.51	119.5	8.13	1.7	SR11	1/20/2017 20:55	21.42	116.7	7.94	1.1
SR11	1/20/2017 3:00	21.65	113.2	7.70	2.1	SR11	1/20/2017 9:00	21.57	114.4	7.78	2.2	SR11	1/20/2017 15:00	21.35	119.4	8.12	1.1	SR11	1/20/2017 21:00	21.57	110.3	7.50	2.4
SR11	1/20/2017 3:05	21.38	110.1	7.49	2.6	SR11	1/20/2017 9:05	21.54	111.3	7.57	1.4	SR11	1/20/2017 15:05	21.47	111.1	7.56	0.9	SR11	1/20/2017 21:05	21.36	118.3	8.05	2.9
SR11	1/20/2017 3:10	21.62	110.7	7.53	1.0	SR11	1/20/2017 9:10	21.54	115.2	7.84	2.2	SR11	1/20/2017 15:10	21.62	119.2	8.11	1.1	SR11	1/20/2017 21:10	21.40	113.2	7.70	2.7
SR11	1/20/2017 3:15	21.59	111.7	7.60	0.3	SR11	1/20/2017 9:15	21.51	120.0	8.16	4.8	SR11	1/20/2017 15:15	21.37	115.4	7.85	0.4	SR11	1/20/2017 21:15	21.35	114.8	7.81	1.2
SR11	1/20/2017 3:20	21.59	111.7	7.60	2.3	SR11	1/20/2017 9:20	21.49	109.1	7.42	2.3	SR11	1/20/2017 15:20	21.55	114.7	7.80	2.2	SR11	1/20/2017 21:20	21.55	110.8	7.54	1.7
SR11	1/20/2017 3:25	21.42	117.3	7.98	2.7	SR11	1/20/2017 9:25	21.41	109.5	7.45	0.9	SR11	1/20/2017 15:25	21.44	112.6	7.66	2.0	SR11	1/20/2017 21:25	21.53	116.4	7.92	0.6
SR11	1/20/2017 3:30	21.52	110.0	7.48	2.1	SR11	1/20/2017 9:30	21.47	111.6	7.59	1.2	SR11	1/20/2017 15:30	21.41	108.9	7.41	2.4	SR11	1/20/2017 21:30	21.47	120.1	8.17	2.6
SR11	1/20/2017 3:35	21.38	111.1	7.56	1.7	SR11	1/20/2017 9:35	21.57	120.2	8.18	0.4	SR11	1/20/2017 15:35	21.56	112.7	7.67	2.8	SR11	1/20/2017 21:35	21.42	109.7	7.46	1.3
SR11	1/20/2017 3:40	21.48	118.2	8.04	1.2	SR11	1/20/2017 9:40	21.57	120.0	8.16	2.4	SR11	1/20/2017 15:40	21.55	120.4	8.19	2.5	SR11	1/20/2017 21:40	21.35	113.0	7.69	1.9
SR11	1/20/2017 3:45	21.47	110.1	7.49	1.5	SR11	1/20/2017 9:45	21.57	112.6	7.66	2.8	SR11	1/20/2017 15:45	21.53	117.2	7.97	0.9	SR11	1/20/2017 21:45	21.41	112.5	7.65	

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR12	1/20/2017 0:01	21.10	97.6	6.64	3.8	SR12	1/20/2017 6:01	21.13	96.4	6.56	2.5	SR12	1/20/2017 12:01	21.17	100.4	6.83	1.6	SR12	1/20/2017 18:01	21.26	97.0	6.60	1.8
SR12	1/20/2017 0:06	21.18	97.6	6.64	1.7	SR12	1/20/2017 6:06	21.24	99.1	6.74	<b>10.8</b>	SR12	1/20/2017 12:06	21.13	95.1	6.47	4.9	SR12	1/20/2017 18:06	21.13	98.6	6.71	3.5
SR12	1/20/2017 0:11	21.27	96.9	6.59	2.9	SR12	1/20/2017 6:11	21.14	97.2	6.61	4.0	SR12	1/20/2017 12:11	21.24	96.9	6.59	3.3	SR12	1/20/2017 18:11	21.11	100.3	6.82	1.8
SR12	1/20/2017 0:16	21.25	100.3	6.82	2.1	SR12	1/20/2017 6:16	21.17	97.2	6.61	4.6	SR12	1/20/2017 12:16	21.15	99.5	6.77	4.8	SR12	1/20/2017 18:16	21.15	100.4	6.83	3.1
SR12	1/20/2017 0:21	21.24	96.0	6.53	2.5	SR12	1/20/2017 6:21	21.29	101.1	6.88	3.0	SR12	1/20/2017 12:21	21.17	95.1	6.47	2.6	SR12	1/20/2017 18:21	21.26	100.7	6.85	2.2
SR12	1/20/2017 0:26	21.30	95.8	6.52	3.0	SR12	1/20/2017 6:26	21.12	95.1	6.47	4.5	SR12	1/20/2017 12:26	21.26	96.0	6.53	4.0	SR12	1/20/2017 18:26	21.10	95.6	6.50	4.9
SR12	1/20/2017 0:31	21.12	99.7	6.78	4.2	SR12	1/20/2017 6:31	21.24	96.6	6.57	3.4	SR12	1/20/2017 12:31	21.19	97.2	6.61	2.9	SR12	1/20/2017 18:31	21.08	98.8	6.72	2.3
SR12	1/20/2017 0:36	21.12	96.3	6.55	2.6	SR12	1/20/2017 6:36	21.25	101.3	6.89	2.7	SR12	1/20/2017 12:36	21.15	96.7	6.58	2.9	SR12	1/20/2017 18:36	21.27	95.6	6.50	1.9
SR12	1/20/2017 0:41	21.18	100.4	6.83	4.7	SR12	1/20/2017 6:41	21.17	96.6	6.57	1.5	SR12	1/20/2017 12:41	21.31	97.3	6.62	2.4	SR12	1/20/2017 18:41	21.22	94.5	6.43	3.5
SR12	1/20/2017 0:46	21.27	101.3	6.89	1.9	SR12	1/20/2017 6:46	21.20	100.5	6.84	2.1	SR12	1/20/2017 12:46	21.25	95.8	6.52	1.9	SR12	1/20/2017 18:46	21.25	95.7	6.51	3.2
SR12	1/20/2017 0:51	21.30	101.0	6.87	3.6	SR12	1/20/2017 6:51	21.24	101.0	6.87	1.2	SR12	1/20/2017 12:51	21.30	98.9	6.73	4.8	SR12	1/20/2017 18:51	21.26	94.7	6.44	4.4
SR12	1/20/2017 0:56	21.24	95.6	6.50	1.5	SR12	1/20/2017 6:56	21.24	97.5	6.63	2.8	SR12	1/20/2017 12:56	21.19	96.1	6.54	3.9	SR12	1/20/2017 18:56	21.30	100.1	6.81	2.1
SR12	1/20/2017 1:01	21.12	101.0	6.87	2.5	SR12	1/20/2017 7:01	21.24	95.3	6.48	1.1	SR12	1/20/2017 13:01	21.11	98.5	6.70	4.1	SR12	1/20/2017 19:01	21.11	100.8	6.86	1.6
SR12	1/20/2017 1:06	21.15	97.3	6.62	4.2	SR12	1/20/2017 7:06	21.29	94.7	6.44	3.0	SR12	1/20/2017 13:06	21.27	96.3	6.55	4.9	SR12	1/20/2017 19:06	21.23	98.6	6.71	1.2
SR12	1/20/2017 1:11	21.12	98.0	6.67	1.7	SR12	1/20/2017 7:11	21.14	99.4	6.76	3.5	SR12	1/20/2017 13:11	21.23	95.7	6.51	4.5	SR12	1/20/2017 19:11	21.08	97.3	6.62	1.7
SR12	1/20/2017 1:16	21.23	100.0	6.80	2.1	SR12	1/20/2017 7:16	21.19	96.1	6.54	4.2	SR12	1/20/2017 13:16	21.10	95.6	6.50	2.5	SR12	1/20/2017 19:16	21.26	98.5	6.70	3.8
SR12	1/20/2017 1:21	21.12	95.1	6.47	2.9	SR12	1/20/2017 7:21	21.19	101.0	6.87	1.3	SR12	1/20/2017 13:21	21.14	94.4	6.42	4.2	SR12	1/20/2017 19:21	21.17	97.5	6.63	1.6
SR12	1/20/2017 1:26	21.14	97.2	6.61	1.1	SR12	1/20/2017 7:26	21.24	95.1	6.47	4.2	SR12	1/20/2017 13:26	21.29	98.6	6.71	4.3	SR12	1/20/2017 19:26	21.15	97.5	6.63	3.7
SR12	1/20/2017 1:31	21.25	95.4	6.49	1.4	SR12	1/20/2017 7:31	21.11	99.8	6.79	1.3	SR12	1/20/2017 13:31	21.23	98.0	6.67	1.2	SR12	1/20/2017 19:31	21.25	98.2	6.68	2.9
SR12	1/20/2017 1:36	21.15	93.9	6.39	4.6	SR12	1/20/2017 7:36	21.16	98.8	6.72	4.4	SR12	1/20/2017 13:36	21.16	100.0	6.80	2.1	SR12	1/20/2017 19:36	21.23	98.6	6.71	2.4
SR12	1/20/2017 1:41	21.15	100.0	6.80	4.0	SR12	1/20/2017 7:41	21.29	96.6	6.57	2.1	SR12	1/20/2017 13:41	21.08	100.4	6.83	2.2	SR12	1/20/2017 19:41	21.21	101.3	6.89	4.0
SR12	1/20/2017 1:46	21.28	99.1	6.74	2.8	SR12	1/20/2017 7:46	21.15	94.2	6.41	4.7	SR12	1/20/2017 13:46	21.15	96.9	6.59	3.7	SR12	1/20/2017 19:46	21.31	97.0	6.60	1.2
SR12	1/20/2017 1:51	21.24	97.3	6.62	2.0	SR12	1/20/2017 7:51	21.27	98.2	6.68	1.2	SR12	1/20/2017 13:51	21.24	101.1	6.88	4.3	SR12	1/20/2017 19:51	21.16	94.4	6.42	4.9
SR12	1/20/2017 1:56	21.11	97.2	6.61	4.7	SR12	1/20/2017 7:56	21.11	97.3	6.62	3.7	SR12	1/20/2017 13:56	21.22	97.5	6.63	4.5	SR12	1/20/2017 19:56	21.10	96.0	6.53	1.2
SR12	1/20/2017 2:01	21.15	98.9	6.73	1.9	SR12	1/20/2017 8:01	21.22	97.2	6.61	3.2	SR12	1/20/2017 14:01	21.20	99.2	6.75	2.8	SR12	1/20/2017 20:01	21.21	97.0	6.60	1.1
SR12	1/20/2017 2:06	21.14	98.9	6.73	2.0	SR12	1/20/2017 8:06	21.13	95.6	6.50	1.5	SR12	1/20/2017 14:06	21.18	98.2	6.68	3.3	SR12	1/20/2017 20:06	21.27	100.8	6.86	1.5
SR12	1/20/2017 2:11	21.21	97.0	6.60	2.6	SR12	1/20/2017 8:11	21.29	96.3	6.55	2.2	SR12	1/20/2017 14:11	21.19	96.7	6.58	1.4	SR12	1/20/2017 20:11	21.19	98.5	6.70	1.6
SR12	1/20/2017 2:16	21.11	97.5	6.63	4.7	SR12	1/20/2017 8:16	21.10	93.9	6.39	4.1	SR12	1/20/2017 14:16	21.25	95.7	6.51	1.6	SR12	1/20/2017 20:16	21.22	98.3	6.69	3.3
SR12	1/20/2017 2:21	21.22	96.7	6.58	1.5	SR12	1/20/2017 8:21	21.21	94.1	6.40	1.9	SR12	1/20/2017 14:21	21.16	99.7	6.78	4.2	SR12	1/20/2017 20:21	21.22	94.7	6.44	4.1
SR12	1/20/2017 2:26	21.14	98.9	6.73	3.7	SR12	1/20/2017 8:26	21.30	101.1	6.88	4.8	SR12	1/20/2017 14:26	21.13	99.7	6.78	2.2	SR12	1/20/2017 20:26	21.15	100.5	6.84	1.3
SR12	1/20/2017 2:31	21.28	100.1	6.81	<b>14.4</b>	SR12	1/20/2017 8:31	21.19	98.0	6.67	3.0	SR12	1/20/2017 14:31	21.25	94.8	6.45	1.7	SR12	1/20/2017 20:31	21.10	97.5	6.63	2.9
SR12	1/20/2017 2:36	21.14	97.3	6.62	4.0	SR12	1/20/2017 8:36	21.26	94.7	6.44	2.6	SR12	1/20/2017 14:36	21.20	95.0	6.46	2.6	SR12	1/20/2017 20:36	21.30	98.8	6.72	3.8
SR12	1/20/2017 2:41	21.21	94.4	6.42	1.1	SR12	1/20/2017 8:41	21.09	100.0	6.80	3.5	SR12	1/20/2017 14:41	21.20	98.2	6.68	4.6	SR12	1/20/2017 20:41	21.20	97.5	6.63	3.6
SR12	1/20/2017 2:46	21.10	99.8	6.79	1.4	SR12	1/20/2017 8:46	21.24	94.5	6.43	3.7	SR12	1/20/2017 14:46	21.14	99.7	6.78	3.5	SR12	1/20/2017 20:46	21.14	100.1	6.81	3.3
SR12	1/20/2017 2:51	21.18	96.1	6.54	3.0	SR12	1/20/2017 8:51	21.12	101.3	6.89	4.5	SR12	1/20/2017 14:51	21.28	95.0	6.46	4.0	SR12	1/20/2017 20:51	21.15	95.6	6.50	2.4
SR12	1/20/2017 2:56	21.22	96.6	6.57	1.1	SR12	1/20/2017 8:56	21.28	101.3	6.89	4.0	SR12	1/20/2017 14:56	21.26	100.4	6.83	2.9	SR12	1/20/2017 20:56	21.14	98.3	6.69	2.1
SR12	1/20/2017 3:01	21.23	93.9	6.39	3.9	SR12	1/20/2017 9:01	21.22	100.7	6.85	2.2	SR12	1/20/2017 15:01	21.13	94.4	6.42	1.7	SR12	1/20/2017 21:01	21.31	96.4	6.56	3.9
SR12	1/20/2017 3:06	21.12	96.0	6.53	3.6	SR12	1/20/2017 9:06	21.21	96.6	6.57	2.6	SR12	1/20/2017 15:06	21.21	97.5	6.63	3.6	SR12	1/20/2017 21:06	21.10	94.5	6.43	1.6
SR12	1/20/2017 3:11	21.18	94.5	6.43	2.9	SR12	1/20/2017 9:11	21.13	98.6	6.71	4.5	SR12	1/20/2017 15:11	21.10	94.8	6.45	4.4	SR12	1/20/2017 21:11	21.31	98.8	6.72	4.6
SR12	1/20/2017 3:16	21.21	100.8	6.86	3.6	SR12	1/20/2017 9:16	21.12	97.5	6.63	3.6	SR12	1/20/2017 15:16	21.13	94.1	6.40	2.4	SR12	1/20/2017 21:16	21.28	95.6	6.50	1.9
SR12	1/20/2017 3:21	21.13	94.8	6.45	2.6	SR12	1/20/2017 9:21	21.20	99.4	6.76	9.7	SR12	1/20/2017 15:21	21.10	98.6	6.71	2.3	SR12	1/20/2017 21:21	21.24	97.3	6.62	1.4
SR12	1/20/2017 3:26	21.13	100.3	6.82	3.5	SR12	1/20/2017 9:26	21.10	96.4	6.56	4.4	SR12	1/20/2017 15:26	21.08	100.5	6.84	2.6	SR12	1/20/2017 21:26	21.12	99.8	6.79	1.9
SR12	1/20/2017 3:31	21.22	98.5	6.70	4.5	SR12	1/20/2017 9:31	21.26	97.2	6.61	4.4	SR12	1/20/2017 15:31	21.31	95.0	6.46	1.4	SR12	1/20/2017 21:31	21.10	99.1	6.74	3.0
SR12	1/20/2017 3:36	21.16	100.8	6.86	4.5	SR12	1/20/2017 9:36	21.23	98.3	6.69	1.3	SR12	1/20/2017 15:36	21.14	94.1	6.40	3.4	SR12	1/20/2017 21:36	21.16	101.1	6.88	4.8
SR12	1/20/2017 3:41	21.11	98.2	6.68	2.9	SR12	1/20/2017 9:41	21.10	96.9	6.59	2.0	SR12	1/20/2017 15:41	21.13	98.0	6.67	3.8	SR12	1/20/2017 21:41	21.26	99.5	6.77	2.0
SR12	1/20/2017 3:46	21.10	94.8	6.45	3.2	SR12	1/20/2017 9:46	21.31	100.0	6.80	1.4	SR12	1/20/2017 15:46	21.15	95.3	6.48	4.8	SR12	1/20/2017 21:46	21.10	96.6	6.57	3.6
SR12	1/20/2017 3:51	21.10	97.0	6.60	4.5	SR12	1/20/2017 9:51	21.21	94.5	6.43</													

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR13	1/20/2017 0:00	21.14	108.5	7.48	3.6	SR13	1/20/2017 6:00	21.25	108.8	7.50	4.4	SR13	1/20/2017 12:00	21.24	106.4	7.34	2.6	SR13	1/20/2017 18:00	21.14	103.5	7.14	4.3
SR13	1/20/2017 0:05	21.23	105.7	7.29	2.6	SR13	1/20/2017 6:05	21.25	103.1	7.11	3.5	SR13	1/20/2017 12:05	21.25	102.2	7.05	3.9	SR13	1/20/2017 18:05	21.16	103.5	7.14	3.7
SR13	1/20/2017 0:10	21.08	104.1	7.18	4.4	SR13	1/20/2017 6:10	21.19	103.8	7.16	0.9	SR13	1/20/2017 12:10	21.21	104.4	7.20	4.0	SR13	1/20/2017 18:10	21.24	107.7	7.43	3.3
SR13	1/20/2017 0:15	21.27	106.7	7.36	3.1	SR13	1/20/2017 6:15	21.21	107.0	7.38	3.8	SR13	1/20/2017 12:15	21.11	108.0	7.45	1.5	SR13	1/20/2017 18:15	21.17	109.5	7.55	4.5
SR13	1/20/2017 0:20	21.14	105.4	7.27	1.9	SR13	1/20/2017 6:20	21.23	107.7	7.43	1.1	SR13	1/20/2017 12:20	21.23	103.2	7.12	0.9	SR13	1/20/2017 18:20	21.06	106.7	7.36	4.9
SR13	1/20/2017 0:25	21.06	109.6	7.56	1.2	SR13	1/20/2017 6:25	21.06	105.0	7.24	4.2	SR13	1/20/2017 12:25	21.14	110.1	7.59	0.9	SR13	1/20/2017 18:25	21.15	103.1	7.11	4.9
SR13	1/20/2017 0:30	21.08	106.3	7.33	2.7	SR13	1/20/2017 6:30	21.18	103.2	7.12	2.1	SR13	1/20/2017 12:30	21.06	101.5	7.00	3.3	SR13	1/20/2017 18:30	21.27	105.7	7.29	4.5
SR13	1/20/2017 0:35	21.18	108.8	7.50	1.1	SR13	1/20/2017 6:35	21.08	106.3	7.33	1.1	SR13	1/20/2017 12:35	21.18	109.3	7.54	1.5	SR13	1/20/2017 18:35	21.08	102.7	7.08	0.8
SR13	1/20/2017 0:40	21.25	110.1	7.59	3.0	SR13	1/20/2017 6:40	21.07	108.9	7.51	3.2	SR13	1/20/2017 12:40	21.28	109.8	7.57	3.3	SR13	1/20/2017 18:40	21.05	104.5	7.21	1.5
SR13	1/20/2017 0:45	21.08	107.9	7.44	14.4	SR13	1/20/2017 6:45	21.26	105.7	7.29	4.1	SR13	1/20/2017 12:45	21.21	103.5	7.14	1.9	SR13	1/20/2017 18:45	21.25	109.2	7.53	3.8
SR13	1/20/2017 0:50	21.17	107.9	7.44	1.6	SR13	1/20/2017 6:50	21.17	109.6	7.56	1.5	SR13	1/20/2017 12:50	21.06	102.7	7.08	4.0	SR13	1/20/2017 18:50	21.20	109.2	7.53	3.5
SR13	1/20/2017 0:55	21.15	104.4	7.20	1.4	SR13	1/20/2017 6:55	21.13	110.1	7.59	1.4	SR13	1/20/2017 12:55	21.25	104.1	7.18	4.6	SR13	1/20/2017 18:55	21.08	104.3	7.19	1.2
SR13	1/20/2017 1:00	21.15	103.0	7.10	1.3	SR13	1/20/2017 7:00	21.21	108.6	7.49	4.4	SR13	1/20/2017 13:00	21.25	106.0	7.31	2.3	SR13	1/20/2017 19:00	21.24	103.7	7.15	1.5
SR13	1/20/2017 1:05	21.26	110.3	7.61	4.7	SR13	1/20/2017 7:05	21.28	101.9	7.03	3.6	SR13	1/20/2017 13:05	21.22	106.1	7.32	2.0	SR13	1/20/2017 19:05	21.26	109.0	7.52	4.5
SR13	1/20/2017 1:10	21.05	105.7	7.29	1.3	SR13	1/20/2017 7:10	21.23	106.3	7.33	4.9	SR13	1/20/2017 13:10	21.08	106.0	7.31	3.3	SR13	1/20/2017 19:10	21.12	109.6	7.56	3.7
SR13	1/20/2017 1:15	21.14	106.1	7.32	3.1	SR13	1/20/2017 7:15	21.23	101.9	7.03	2.5	SR13	1/20/2017 13:15	21.24	103.4	7.13	1.8	SR13	1/20/2017 19:15	21.28	110.3	7.61	3.6
SR13	1/20/2017 1:20	21.18	104.5	7.21	2.2	SR13	1/20/2017 7:20	21.28	109.0	7.52	1.7	SR13	1/20/2017 13:20	21.25	109.3	7.54	1.2	SR13	1/20/2017 19:20	21.27	108.2	7.46	4.2
SR13	1/20/2017 1:25	21.13	108.8	7.50	3.0	SR13	1/20/2017 7:25	21.11	107.0	7.38	4.5	SR13	1/20/2017 13:25	21.24	102.4	7.06	0.9	SR13	1/20/2017 19:25	21.20	110.2	7.60	2.7
SR13	1/20/2017 1:30	21.20	104.3	7.19	4.5	SR13	1/20/2017 7:30	21.06	106.9	7.37	0.8	SR13	1/20/2017 13:30	21.24	102.2	7.05	4.1	SR13	1/20/2017 19:30	21.28	106.3	7.33	3.4
SR13	1/20/2017 1:35	21.22	104.3	7.19	4.5	SR13	1/20/2017 7:35	21.09	101.6	7.01	4.9	SR13	1/20/2017 13:35	21.28	101.5	7.00	4.5	SR13	1/20/2017 19:35	21.14	107.4	7.41	3.3
SR13	1/20/2017 1:40	21.24	101.9	7.03	3.0	SR13	1/20/2017 7:40	21.12	106.9	7.37	2.1	SR13	1/20/2017 13:40	21.13	106.9	7.37	2.7	SR13	1/20/2017 19:40	21.08	105.4	7.27	3.2
SR13	1/20/2017 1:45	21.13	105.4	7.27	2.0	SR13	1/20/2017 7:45	21.20	101.9	7.03	4.1	SR13	1/20/2017 13:45	21.13	106.7	7.36	1.9	SR13	1/20/2017 19:45	21.21	108.6	7.49	3.3
SR13	1/20/2017 1:50	21.25	106.1	7.32	3.7	SR13	1/20/2017 7:50	21.25	109.0	7.52	2.9	SR13	1/20/2017 13:50	21.11	109.3	7.54	4.9	SR13	1/20/2017 19:50	21.07	101.9	7.03	1.5
SR13	1/20/2017 1:55	21.12	104.7	7.22	1.9	SR13	1/20/2017 7:55	21.07	105.3	7.26	4.8	SR13	1/20/2017 13:55	21.20	103.1	7.11	4.4	SR13	1/20/2017 19:55	21.09	110.1	7.59	2.4
SR13	1/20/2017 2:00	21.20	108.8	7.50	3.9	SR13	1/20/2017 8:00	21.19	107.6	7.42	2.4	SR13	1/20/2017 14:00	21.25	105.9	7.30	1.3	SR13	1/20/2017 20:00	21.16	108.5	7.48	2.9
SR13	1/20/2017 2:05	21.20	106.4	7.34	0.9	SR13	1/20/2017 8:05	21.09	101.9	7.03	3.2	SR13	1/20/2017 14:05	21.18	108.5	7.48	1.4	SR13	1/20/2017 20:05	21.24	103.7	7.15	2.3
SR13	1/20/2017 2:10	21.21	106.1	7.32	3.2	SR13	1/20/2017 8:10	21.06	109.5	7.55	2.4	SR13	1/20/2017 14:10	21.19	106.6	7.35	1.5	SR13	1/20/2017 20:10	21.13	107.3	7.40	2.9
SR13	1/20/2017 2:15	21.25	102.5	7.07	1.4	SR13	1/20/2017 8:15	21.28	104.7	7.22	3.0	SR13	1/20/2017 14:15	21.06	109.8	7.57	2.4	SR13	1/20/2017 20:15	21.13	107.7	7.43	1.3
SR13	1/20/2017 2:20	21.16	107.3	7.40	1.0	SR13	1/20/2017 8:20	21.28	102.5	7.07	4.7	SR13	1/20/2017 14:20	21.13	102.1	7.04	0.8	SR13	1/20/2017 20:20	21.26	108.6	7.49	4.5
SR13	1/20/2017 2:25	21.24	101.6	7.01	2.1	SR13	1/20/2017 8:25	21.10	109.0	7.52	4.0	SR13	1/20/2017 14:25	21.15	109.5	7.55	1.7	SR13	1/20/2017 20:25	21.18	101.8	7.02	4.0
SR13	1/20/2017 2:30	21.20	106.4	7.34	1.9	SR13	1/20/2017 8:30	21.28	102.2	7.05	1.4	SR13	1/20/2017 14:30	21.10	109.8	7.57	1.8	SR13	1/20/2017 20:30	21.10	110.2	7.60	3.3
SR13	1/20/2017 2:35	21.08	102.7	7.08	4.8	SR13	1/20/2017 8:35	21.18	107.6	7.42	1.1	SR13	1/20/2017 14:35	21.11	108.3	7.47	4.2	SR13	1/20/2017 20:35	21.25	102.2	7.05	3.0
SR13	1/20/2017 2:40	21.25	106.3	7.33	4.5	SR13	1/20/2017 8:40	21.14	109.0	7.52	3.6	SR13	1/20/2017 14:40	21.07	106.1	7.32	4.8	SR13	1/20/2017 20:40	21.05	102.1	7.04	0.8
SR13	1/20/2017 2:45	21.28	101.6	7.01	3.5	SR13	1/20/2017 8:45	21.17	107.2	7.39	2.1	SR13	1/20/2017 14:45	21.16	103.1	7.11	3.0	SR13	1/20/2017 20:45	21.20	105.6	7.28	1.3
SR13	1/20/2017 2:50	21.16	106.7	7.36	1.6	SR13	1/20/2017 8:50	21.18	102.4	7.06	2.4	SR13						SR13	1/20/2017 20:50	21.16	102.7	7.08	3.2
SR13	1/20/2017 2:55	21.16	109.0	7.52	2.1	SR13	1/20/2017 8:55	21.24	101.9	7.03	3.9	SR13						SR13	1/20/2017 20:55	21.24	105.9	7.30	4.9
SR13	1/20/2017 3:00	21.14	106.4	7.34	3.1	SR13	1/20/2017 9:00	21.05	108.6	7.49	3.3	SR13						SR13	1/20/2017 21:00	21.06	106.7	7.36	1.3
SR13	1/20/2017 3:05	21.15	109.6	7.56	3.8	SR13	1/20/2017 9:05	21.07	109.2	7.53	1.0	SR13	1/20/2017 15:05	21.11	110.1	7.59	0.8	SR13	1/20/2017 21:05	21.19	103.5	7.14	3.9
SR13	1/20/2017 3:10	21.06	105.7	7.29	4.1	SR13	1/20/2017 9:10	21.06	107.2	7.39	4.7	SR13	1/20/2017 15:10	21.28	106.7	7.36	3.5	SR13	1/20/2017 21:10	21.15	110.1	7.59	2.6
SR13	1/20/2017 3:15	21.11	109.5	7.55	1.9	SR13	1/20/2017 9:15	21.22	106.3	7.33	3.3	SR13	1/20/2017 15:15	21.23	103.7	7.15	3.2	SR13	1/20/2017 21:15	21.24	107.9	7.44	1.1
SR13	1/20/2017 3:20	21.11	107.9	7.44	3.0	SR13	1/20/2017 9:20	21.22	101.9	7.03	3.9	SR13	1/20/2017 15:20	21.11	103.1	7.11	4.3	SR13	1/20/2017 21:20	21.27	106.4	7.34	2.2
SR13	1/20/2017 3:25	21.22	103.0	7.10	2.2	SR13	1/20/2017 9:25	21.26	106.0	7.31	1.2	SR13	1/20/2017 15:25	21.17	103.4	7.13	2.9	SR13	1/20/2017 21:25	21.23	103.4	7.13	1.5
SR13	1/20/2017 3:30	21.13	104.8	7.23	1.8	SR13	1/20/2017 9:30	21.26	105.1	7.25	3.9	SR13	1/20/2017 15:30	21.13	104.0	7.17	4.2	SR13	1/20/2017 21:30	21.28	109.5	7.55	3.4
SR13	1/20/2017 3:35	21.07	106.6	7.35	1.4	SR13	1/20/2017 9:35	21.27	101.8	7.02	4.9	SR13	1/20/2017 15:35	21.26	105.0	7.24	3.4	SR13	1/20/2017 21:35	21.08	103.0	7.10	4.0
SR13	1/20/2017 3:40	21.12	104.1	7.18	3.9	SR13	1/20/2017 9:40	21.24	108.9	7.51	4.3	SR13	1/20/2017 15:40	21.22	108.6	7.49	2.4	SR13	1/20/2017 21:40	21.05	106.9	7.37	3.6
SR13	1/20/2017 3:45	21.18	103.2	7.12	3.4	SR13	1/20/2017 9:45	21.06	108.2	7.46	2.8	SR13	1/20/2017 15:45	21.15	108.0	7.45	1.5	SR13	1/20/2017 21:45	21.23	109.6	7.56	3.8
SR13	1/20/2017 3:50	21.20	101.5	7.00	3.4	SR13	1/20/2017 9:50																

24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/20/2017 0:17	0.22				SR12	1/20/2017 0:17	0.21			
SR4	1/20/2017 0:37	0.21				SR12	1/20/2017 0:37	0.20			
SR4	1/20/2017 0:57	0.21				SR12	1/20/2017 0:57	0.22			
SR4	1/20/2017 1:17	0.20				SR12	1/20/2017 1:17	0.24			
SR4	1/20/2017 1:37	0.23				SR12	1/20/2017 1:37	0.25			
SR4	1/20/2017 1:57	0.23				SR12	1/20/2017 1:57	0.21			
SR4	1/20/2017 2:17	0.19				SR12	1/20/2017 2:17	0.20			
SR4	1/20/2017 2:37	0.20				SR12	1/20/2017 2:37	0.20			
SR4	1/20/2017 2:57	0.21				SR12	1/20/2017 2:57	0.21			
SR4	1/20/2017 3:17	0.21				SR12	1/20/2017 3:17	0.20			
SR4	1/20/2017 3:37	0.22				SR12	1/20/2017 3:37	0.22			
SR4	1/20/2017 3:57	0.23				SR12	1/20/2017 3:57	0.21			
SR4	1/20/2017 4:17	0.20				SR12	1/20/2017 4:17	0.20			
SR4	1/20/2017 4:37	0.23				SR12	1/20/2017 4:37	0.21			
SR4	1/20/2017 4:57	0.19				SR12	1/20/2017 4:57	0.23			
SR4	1/20/2017 5:17	0.20				SR12	1/20/2017 5:17	0.25			
SR4	1/20/2017 5:37	0.23				SR12	1/20/2017 5:37	0.22			
SR4	1/20/2017 5:57	0.21				SR12	1/20/2017 5:57	0.23			
SR4						SR12					
SR4	1/20/2017 6:37	0.20				SR12	1/20/2017 6:37	0.25			
SR4	1/20/2017 6:57	0.19				SR12	1/20/2017 6:57	0.24			
SR4	1/20/2017 7:17	0.21				SR12	1/20/2017 7:17	0.20			
SR4	1/20/2017 7:37	0.22				SR12	1/20/2017 7:37	0.25			
SR4	1/20/2017 7:57	0.22				SR12	1/20/2017 7:57	0.20			
SR4	1/20/2017 8:17	0.21				SR12	1/20/2017 8:17	0.23			
SR4	1/20/2017 8:37	0.21				SR12	1/20/2017 8:37	0.25			
SR4	1/20/2017 8:57	0.19				SR12	1/20/2017 8:57	0.20			
SR4	1/20/2017 9:17	0.19				SR12	1/20/2017 9:17	0.21			
SR4	1/20/2017 9:37	0.21				SR12	1/20/2017 9:37	0.23			
SR4	1/20/2017 9:57	0.19				SR12	1/20/2017 9:57	0.21			
SR4	1/20/2017 10:17	0.23				SR12	1/20/2017 10:17	0.25			
SR4	1/20/2017 10:37	0.22				SR12	1/20/2017 10:37	0.23			
SR4	1/20/2017 10:57	0.19				SR12	1/20/2017 10:57	0.23			
SR4	1/20/2017 11:17	0.20				SR12	1/20/2017 11:17	0.21			
SR4	1/20/2017 11:37	0.23				SR12	1/20/2017 11:37	0.21			
SR4	1/20/2017 11:57	0.20				SR12	1/20/2017 11:57	0.20			
SR4	1/20/2017 12:17	0.21				SR12	1/20/2017 12:17	0.22			
SR4	1/20/2017 12:37	0.23				SR12	1/20/2017 12:37	0.20			
SR4	1/20/2017 12:57	0.23				SR12	1/20/2017 12:57	0.25			
SR4	1/20/2017 13:17	0.25				SR12	1/20/2017 13:17	0.24			
SR4	1/20/2017 13:37	0.25				SR12	1/20/2017 13:37	0.22			
SR4	1/20/2017 13:57	0.23				SR12	1/20/2017 13:57	0.21			
SR4	1/20/2017 14:17	0.24				SR12	1/20/2017 14:17	0.24			
SR4	1/20/2017 14:37	0.23				SR12	1/20/2017 14:37	0.24			
SR4	1/20/2017 14:57	0.23				SR12	1/20/2017 14:57	0.22			
SR4	1/20/2017 15:17	0.23				SR12	1/20/2017 15:17	0.25			
SR4	1/20/2017 15:37	0.21				SR12	1/20/2017 15:37	0.23			
SR4	1/20/2017 15:57	0.21				SR12	1/20/2017 15:57	0.23			
SR4	1/20/2017 16:17	0.23				SR12	1/20/2017 16:17	0.25			
SR4	1/20/2017 16:37	0.22				SR12	1/20/2017 16:37	0.24			
SR4	1/20/2017 16:57	0.23				SR12	1/20/2017 16:57	0.23			
SR4	1/20/2017 17:17	0.21				SR12	1/20/2017 17:17	0.21			
SR4	1/20/2017 17:37	0.21				SR12	1/20/2017 17:37	0.25			
SR4	1/20/2017 17:57	0.21				SR12	1/20/2017 17:57	0.22			
SR4	1/20/2017 18:17	0.22				SR12	1/20/2017 18:17	0.25			
SR4	1/20/2017 18:37	0.24				SR12	1/20/2017 18:37	0.24			
SR4	1/20/2017 18:57	0.21				SR12	1/20/2017 18:57	0.23			
SR4	1/20/2017 19:17	0.24				SR12	1/20/2017 19:17	0.22			
SR4	1/20/2017 19:37	0.22				SR12	1/20/2017 19:37	0.23			
SR4	1/20/2017 19:57	0.21				SR12	1/20/2017 19:57	0.23			
SR4	1/20/2017 20:17	0.22				SR12	1/20/2017 20:17	0.21			
SR4	1/20/2017 20:37	0.22				SR12	1/20/2017 20:37	0.23			
SR4	1/20/2017 20:57	0.25				SR12	1/20/2017 20:57	0.23			
SR4	1/20/2017 21:17	0.21				SR12	1/20/2017 21:17	0.21			
SR4	1/20/2017 21:37	0.22				SR12	1/20/2017 21:37	0.24			
SR4	1/20/2017 21:57	0.24				SR12	1/20/2017 21:57	0.25			
SR4	1/20/2017 22:17	0.25				SR12	1/20/2017 22:17	0.21			
SR4	1/20/2017 22:37	0.24				SR12	1/20/2017 22:37	0.21			
SR4	1/20/2017 22:57	0.24				SR12	1/20/2017 22:57	0.23			
SR4	1/20/2017 23:17	0.23				SR12	1/20/2017 23:17	0.25			
SR4	1/20/2017 23:37	0.22				SR12	1/20/2017 23:37	0.21			
SR4	1/20/2017 23:57	0.25				SR12	1/20/2017 23:57	0.22			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12. SR13 monitoring station was under maintenance during 14:45-15:05.



## 24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR4	1/21/2017 0:01	21.32	91.6	6.36	6.1	SR4	1/21/2017 6:01	21.27	94.0	6.53	5.5	SR4	1/21/2017 12:01	21.43	90.1	6.26	4.2	SR4	1/21/2017 18:01	21.39	91.9	6.38	7.2
SR4	1/21/2017 0:06	21.21	94.5	6.56	4.5	SR4	1/21/2017 6:06	21.19	89.3	6.20	7.4	SR4	1/21/2017 12:06	21.26	89.9	6.24	5.9	SR4	1/21/2017 18:06	21.33	92.9	6.45	7.4
SR4	1/21/2017 0:11	21.20	88.8	6.17	3.3	SR4	1/21/2017 6:11	21.26	95.8	6.65	5.9	SR4	1/21/2017 12:11	21.19	91.9	6.38	7.7	SR4	1/21/2017 18:11	21.27	91.4	6.35	6.8
SR4	1/21/2017 0:16	21.32	91.9	6.38	4.2	SR4	1/21/2017 6:16	21.39	95.5	6.63	4.9	SR4	1/21/2017 12:16	21.37	92.9	6.45	5.3	SR4	1/21/2017 18:16	21.24	90.4	6.28	6.6
SR4	1/21/2017 0:21	21.42	91.3	6.34	4.9	SR4	1/21/2017 6:21	21.19	93.3	6.48	8.1	SR4	1/21/2017 12:21	21.42	93.9	6.52	6.6	SR4	1/21/2017 18:21	21.42	94.8	6.58	5.4
SR4	1/21/2017 0:26	21.42	90.0	6.25	7.3	SR4	1/21/2017 6:26	21.32	90.3	6.27	4.7	SR4	1/21/2017 12:26	21.40	94.8	6.58	5.0	SR4	1/21/2017 18:26	21.39	89.7	6.23	4.6
SR4	1/21/2017 0:31	21.42	95.9	6.66	4.7	SR4	1/21/2017 6:31	21.38	89.4	6.21	7.6	SR4	1/21/2017 12:31	21.42	89.4	6.21	6.6	SR4	1/21/2017 18:31	21.17	90.7	6.30	5.2
SR4	1/21/2017 0:36	21.17	93.3	6.48	7.7	SR4	1/21/2017 6:36	21.43	95.2	6.61	7.2	SR4	1/21/2017 12:36	21.34	95.0	6.60	5.9	SR4	1/21/2017 18:36	21.37	88.4	6.14	5.7
SR4	1/21/2017 0:41	21.40	91.6	6.36	5.2	SR4	1/21/2017 6:41	21.38	91.7	6.37	5.2	SR4	1/21/2017 12:41	21.32	89.9	6.24	5.6	SR4	1/21/2017 18:41	21.33	91.3	6.34	4.7
SR4	1/21/2017 0:46	21.37	95.9	6.66	6.3	SR4	1/21/2017 6:46	21.33	95.0	6.60	5.5	SR4	1/21/2017 12:46	21.34	90.3	6.27	5.6	SR4	1/21/2017 18:46	21.44	88.4	6.14	3.9
SR4	1/21/2017 0:51	21.43	94.3	6.55	3.3	SR4	1/21/2017 6:51	21.29	89.6	6.22	6.1	SR4	1/21/2017 12:51	21.40	88.7	6.16	7.7	SR4	1/21/2017 18:51	21.36	96.6	6.71	4.9
SR4	1/21/2017 0:56	21.31	87.4	6.07	7.0	SR4	1/21/2017 6:56	21.16	89.9	6.24	6.6	SR4	1/21/2017 12:56	21.28	87.7	6.09	4.4	SR4	1/21/2017 18:56	21.30	92.3	6.41	4.3
SR4	1/21/2017 1:01	21.32	92.9	6.45	4.6	SR4	1/21/2017 7:01	21.42	93.2	6.47	7.6	SR4	1/21/2017 13:01	21.25	87.7	6.09	5.3	SR4	1/21/2017 19:01	21.35	90.3	6.27	6.5
SR4	1/21/2017 1:06	21.32	92.7	6.44	4.6	SR4	1/21/2017 7:06	21.31	94.6	6.57	7.8	SR4	1/21/2017 13:06	21.30	87.4	6.07	6.3	SR4	1/21/2017 19:06	21.37	92.4	6.42	4.3
SR4	1/21/2017 1:11	21.30	95.0	6.60	4.3	SR4	1/21/2017 7:11	21.33	89.0	6.18	4.5	SR4	1/21/2017 13:11	21.44	92.6	6.43	3.7	SR4	1/21/2017 19:11	21.41	90.4	6.28	4.8
SR4	1/21/2017 1:16	21.26	94.9	6.59	6.8	SR4	1/21/2017 7:16	21.42	92.4	6.42	4.6	SR4	1/21/2017 13:16	21.34	90.9	6.31	3.5	SR4	1/21/2017 19:16	21.35	94.9	6.59	7.7
SR4	1/21/2017 1:21	21.16	91.2	6.33	4.1	SR4	1/21/2017 7:21	21.29	93.9	6.52	7.0	SR4	1/21/2017 13:21	21.33	89.1	6.19	5.9	SR4	1/21/2017 19:21	21.41	95.6	6.64	6.9
SR4	1/21/2017 1:26	21.40	95.5	6.63	3.7	SR4	1/21/2017 7:26	21.30	91.9	6.38	7.7	SR4	1/21/2017 13:26	21.16	90.7	6.30	5.2	SR4	1/21/2017 19:26	21.36	95.6	6.64	7.6
SR4	1/21/2017 1:31	21.40	89.0	6.18	7.5	SR4	1/21/2017 7:31	21.19	91.7	6.37	3.9	SR4	1/21/2017 13:31	21.41	94.3	6.55	4.0	SR4	1/21/2017 19:31	21.28	96.2	6.68	4.5
SR4	1/21/2017 1:36	21.23	87.6	6.08	5.5	SR4	1/21/2017 7:36	21.17	95.6	6.64	4.4	SR4	1/21/2017 13:36	21.39	90.7	6.30	5.8	SR4	1/21/2017 19:36	21.24	89.6	6.22	6.5
SR4	1/21/2017 1:41	21.24	92.7	6.44	6.1	SR4	1/21/2017 7:41	21.38	96.3	6.69	5.9	SR4	1/21/2017 13:41	21.29	93.6	6.50	6.0	SR4	1/21/2017 19:41	21.22	90.3	6.27	5.0
SR4	1/21/2017 1:46	21.36	93.9	6.52	3.9	SR4	1/21/2017 7:46	21.21	95.0	6.60	6.2	SR4	1/21/2017 13:46	21.18	90.1	6.26	8.0	SR4	1/21/2017 19:46	21.24	88.6	6.15	4.0
SR4	1/21/2017 1:51	21.38	91.4	6.35	7.8	SR4	1/21/2017 7:51	21.19	95.3	6.62	5.5	SR4	1/21/2017 13:51	21.43	92.4	6.42	4.0	SR4	1/21/2017 19:51	21.24	87.6	6.08	6.1
SR4	1/21/2017 1:56	21.23	91.7	6.37	7.9	SR4	1/21/2017 7:56	21.41	88.8	6.17	7.9	SR4	1/21/2017 13:56	21.44	90.6	6.29	5.6	SR4	1/21/2017 19:56	21.39	88.6	6.15	5.6
SR4	1/21/2017 2:01	21.34	88.3	6.13	5.7	SR4	1/21/2017 8:01	21.35	95.6	6.64	4.7	SR4	1/21/2017 14:01	21.38	92.4	6.42	7.5	SR4	1/21/2017 20:01	21.44	93.7	6.51	5.3
SR4	1/21/2017 2:06	21.19	94.8	6.58	5.8	SR4	1/21/2017 8:06	21.38	96.3	6.69	4.4	SR4	1/21/2017 14:06	21.16	88.8	6.17	7.0	SR4	1/21/2017 20:06	21.20	87.7	6.09	3.3
SR4	1/21/2017 2:11	21.39	91.9	6.38	5.7	SR4	1/21/2017 8:11	21.19	89.6	6.22	4.9	SR4	1/21/2017 14:11	21.43	93.2	6.47	4.9	SR4	1/21/2017 20:11	21.24	92.6	6.43	4.7
SR4	1/21/2017 2:16	21.44	92.4	6.42	6.3	SR4	1/21/2017 8:16	21.32	88.0	6.11	7.2	SR4	1/21/2017 14:16	21.27	92.7	6.44	7.3	SR4	1/21/2017 20:16	21.22	91.7	6.37	6.3
SR4	1/21/2017 2:21	21.26	91.3	6.34	6.9	SR4	1/21/2017 8:21	21.32	90.7	6.30	6.4	SR4	1/21/2017 14:21	21.23	91.4	6.35	3.3	SR4	1/21/2017 20:21	21.41	89.0	6.18	7.3
SR4	1/21/2017 2:26	21.21	90.1	6.26	7.2	SR4	1/21/2017 8:26	21.31	89.0	6.18	4.8	SR4	1/21/2017 14:26	21.25	91.0	6.32	5.5	SR4	1/21/2017 20:26	21.27	94.3	6.55	5.1
SR4	1/21/2017 2:31	21.29	89.4	6.21	6.4	SR4	1/21/2017 8:31	21.20	94.3	6.55	7.2	SR4	1/21/2017 14:31	21.36	89.0	6.18	5.5	SR4	1/21/2017 20:31	21.44	93.5	6.49	6.2
SR4	1/21/2017 2:36	21.17	87.3	6.06	3.8	SR4	1/21/2017 8:36	21.41	96.3	6.69	5.7	SR4	1/21/2017 14:36	21.20	89.3	6.20	3.9	SR4	1/21/2017 20:36	21.36	93.5	6.49	3.3
SR4	1/21/2017 2:41	21.41	89.6	6.22	7.6	SR4	1/21/2017 8:41	21.37	89.9	6.24	5.9	SR4	1/21/2017 14:41	21.29	95.5	6.63	6.1	SR4	1/21/2017 20:41	21.35	94.8	6.58	6.5
SR4	1/21/2017 2:46	21.34	93.2	6.47	3.9	SR4	1/21/2017 8:46	21.43	94.8	6.58	4.2	SR4	1/21/2017 14:46	21.30	93.5	6.49	5.2	SR4	1/21/2017 20:46	21.36	91.0	6.32	6.8
SR4	1/21/2017 2:51	21.32	96.3	6.69	5.4	SR4	1/21/2017 8:51	21.38	89.7	6.23	6.3	SR4	1/21/2017 14:51	21.39	96.5	6.70	3.6	SR4	1/21/2017 20:51	21.20	94.6	6.57	7.8
SR4	1/21/2017 2:56	21.40	95.2	6.61	6.1	SR4	1/21/2017 8:56	21.23	94.5	6.56	6.9	SR4	1/21/2017 14:56	21.17	90.0	6.25	3.5	SR4	1/21/2017 20:56	21.38	92.6	6.43	3.7
SR4	1/21/2017 3:01	21.41	91.6	6.36	4.6	SR4	1/21/2017 9:01	21.19	90.0	6.25	5.5	SR4	1/21/2017 15:01	21.16	89.6	6.22	7.3	SR4	1/21/2017 21:01	21.34	94.6	6.57	6.3
SR4	1/21/2017 3:06	21.35	90.9	6.31	5.9	SR4	1/21/2017 9:06	21.19	87.7	6.09	5.0	SR4	1/21/2017 15:06	21.38	91.0	6.32	3.5	SR4	1/21/2017 21:06	21.41	90.3	6.27	4.2
SR4	1/21/2017 3:11	21.30	90.1	6.26	4.9	SR4	1/21/2017 9:11	21.25	96.0	6.67	6.2	SR4	1/21/2017 15:11	21.30	93.7	6.51	7.4	SR4	1/21/2017 21:11	21.20	94.0	6.53	6.7
SR4	1/21/2017 3:16	21.24	90.3	6.27	7.5	SR4	1/21/2017 9:16	21.18	89.3	6.20	4.3	SR4	1/21/2017 15:16	21.22	89.7	6.23	4.4	SR4	1/21/2017 21:16	21.39	96.3	6.69	6.5
SR4	1/21/2017 3:21	21.41	96.0	6.67	6.0	SR4	1/21/2017 9:21	21.26	96.3	6.69	3.6	SR4	1/21/2017 15:21	21.21	92.3	6.41	8.1	SR4	1/21/2017 21:21	21.30	88.1	6.12	6.3
SR4	1/21/2017 3:26	21.33	89.0	6.18	5.1	SR4	1/21/2017 9:26	21.35	88.6	6.15	5.3	SR4	1/21/2017 15:26	21.18	94.0	6.53	3.6	SR4	1/21/2017 21:26	21.42	93.7	6.51	5.4
SR4	1/21/2017 3:31	21.26	95.0	6.60	5.2	SR4	1/21/2017 9:31	21.25	91.4	6.35	4.0	SR4	1/21/2017 15:31	21.43	90.6	6.29	5.7	SR4	1/21/2017 21:31	21.36	89.1	6.19	3.6
SR4	1/21/2017 3:36	21.37	94.2	6.54	5.1	SR4	1/21/2017 9:36	21.18	92.4	6.42	5.6	SR4	1/21/2017 15:36	21.27	95.0	6.60	5.0	SR4	1/21/2017 21:36	21.40	95.3	6.62	4.9
SR4	1/21/2017 3:41	21.34	95.3	6.62	3.7	SR4	1/21/2017 9:41	21.27	94.9	6.59	7.0	SR4	1/21/2017 15:41	21.40	95.5	6.63	5.7	SR4	1/21/2017 21:41	21.20	92.3	6.41	6.7
SR4	1/21/2017 3:46	21.25	87.7	6.09	4.9	SR4	1/21/2017 9:46	21.22	91.0	6.32	4.9	SR4	1/21/2017 15:46	21.25	87.1	6.05	7.7	SR4	1/21/2017 21:46	21.31	92.4	6.42	7.3
SR4	1/21/2017 3:51	21.17	87.7	6.09	4.2	SR4	1/21/2017 9:51	21.17	88.4	6.14	3.8	SR4	1/21/2017 15:51	21.37	88.7	6.16	5.2	SR4	1/21/2017 21:51	21.17	90.3	6.27	6.9
SR4	1/21/2017 3:56	21.28	92.0	6.39	4.6	SR4	1/21/2017 9:56	21.42	90.1	6.26	6.3												



24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR9	1/21/2017 0:00	21.44	114.6	7.85	2.4	SR9	1/21/2017 6:00	21.45	110.1	7.54	0.5	SR9	1/21/2017 12:00	21.58	114.6	7.85	1.8	SR9	1/21/2017 18:00	21.66	111.8	7.66	0.3
SR9	1/21/2017 0:05	21.40	116.7	7.99	0.7	SR9	1/21/2017 6:05	21.57	116.8	8.00	2.8	SR9	1/21/2017 12:05	21.51	115.3	7.90	1.3	SR9	1/21/2017 18:05	21.63	115.0	7.88	1.3
SR9	1/21/2017 0:10	21.55	114.9	7.87	1.4	SR9	1/21/2017 6:10	21.62	111.7	7.65	2.8	SR9	1/21/2017 12:10	21.50	110.1	7.54	2.0	SR9	1/21/2017 18:10	21.47	114.3	7.83	1.3
SR9	1/21/2017 0:15	21.55	115.2	7.89	2.0	SR9	1/21/2017 6:15	21.42	110.2	7.55	1.8	SR9	1/21/2017 12:15	21.61	110.8	7.59	2.8	SR9	1/21/2017 18:15	21.60	110.5	7.57	1.9
SR9	1/21/2017 0:20	21.48	112.3	7.69	0.6	SR9	1/21/2017 6:20	21.61	111.1	7.61	2.4	SR9	1/21/2017 12:20	21.54	113.7	7.79	0.8	SR9	1/21/2017 18:20	21.65	111.4	7.63	0.6
SR9	1/21/2017 0:25	21.55	110.7	7.58	2.6	SR9	1/21/2017 6:25	21.48	113.3	7.76	1.4	SR9	1/21/2017 12:25	21.43	110.5	7.57	1.6	SR9	1/21/2017 18:25	21.40	114.3	7.83	1.2
SR9	1/21/2017 0:30	21.48	110.4	7.56	2.4	SR9	1/21/2017 6:30	21.52	112.7	7.72	1.9	SR9	1/21/2017 12:30	21.45	116.5	7.98	0.9	SR9	1/21/2017 18:30	21.45	113.6	7.78	2.7
SR9	1/21/2017 0:35	21.66	114.5	7.84	1.7	SR9	1/21/2017 6:35	21.56	113.4	7.77	2.2	SR9	1/21/2017 12:35	21.64	111.0	7.60	2.9	SR9	1/21/2017 18:35	21.41	116.9	8.01	2.8
SR9	1/21/2017 0:40	21.53	110.1	7.54	2.7	SR9	1/21/2017 6:40	21.48	113.2	7.75	2.7	SR9	1/21/2017 12:40	21.63	115.9	7.94	1.4	SR9	1/21/2017 18:40	21.47	109.8	7.52	1.1
SR9	1/21/2017 0:45	21.42	111.5	7.64	0.3	SR9	1/21/2017 6:45	21.49	114.5	7.84	0.5	SR9	1/21/2017 12:45	21.40	111.0	7.60	0.8	SR9	1/21/2017 18:45	21.64	113.7	7.79	0.5
SR9	1/21/2017 0:50	21.50	113.9	7.80	2.3	SR9	1/21/2017 6:50	21.45	116.1	7.95	1.2	SR9	1/21/2017 12:50	21.61	115.3	7.90	1.1	SR9	1/21/2017 18:50	21.47	116.7	7.99	2.0
SR9	1/21/2017 0:55	21.57	112.6	7.71	3.9	SR9	1/21/2017 6:55	21.62	113.6	7.78	0.3	SR9	1/21/2017 12:55	21.60	110.7	7.58	0.8	SR9	1/21/2017 18:55	21.57	111.4	7.63	1.1
SR9	1/21/2017 1:00	21.47	116.2	7.96	2.8	SR9	1/21/2017 7:00	21.64	112.9	7.73	2.4	SR9	1/21/2017 13:00	21.50	112.7	7.72	1.6	SR9	1/21/2017 19:00	21.65	113.3	7.76	3.0
SR9	1/21/2017 1:05	21.47	109.6	7.51	2.8	SR9	1/21/2017 7:05	21.66	116.8	8.00	2.1	SR9	1/21/2017 13:05	21.41	115.3	7.90	2.0	SR9	1/21/2017 19:05	21.47	112.1	7.68	2.7
SR9	1/21/2017 1:10	21.48	109.6	7.51	0.6	SR9	1/21/2017 7:10	21.55	113.7	7.79	0.9	SR9	1/21/2017 13:10	21.44	112.4	7.70	2.0	SR9	1/21/2017 19:10	21.49	116.7	7.99	0.8
SR9	1/21/2017 1:15	21.52	113.4	7.77	0.6	SR9	1/21/2017 7:15	21.65	116.5	7.98	0.6	SR9	1/21/2017 13:15	21.57	111.5	7.64	0.9	SR9	1/21/2017 19:15	21.43	111.7	7.65	0.7
SR9	1/21/2017 1:20	21.59	116.5	7.98	1.2	SR9	1/21/2017 7:20	21.62	116.2	7.96	0.6	SR9	1/21/2017 13:20	21.55	114.8	7.86	1.1	SR9	1/21/2017 19:20	21.54	110.8	7.59	0.5
SR9	1/21/2017 1:25	21.53	112.6	7.71	0.6	SR9	1/21/2017 7:25	21.61	111.0	7.60	1.1	SR9	1/21/2017 13:25	21.41	112.3	7.69	2.5	SR9	1/21/2017 19:25	21.50	111.4	7.63	0.9
SR9	1/21/2017 1:30	21.41	114.2	7.82	2.1	SR9	1/21/2017 7:30	21.42	113.7	7.79	1.0	SR9	1/21/2017 13:30	21.45	113.4	7.77	2.8	SR9	1/21/2017 19:30	21.41	115.9	7.94	2.7
SR9	1/21/2017 1:35	21.46	115.8	7.93	1.6	SR9	1/21/2017 7:35	21.62	109.6	7.51	0.3	SR9	1/21/2017 13:35	21.42	115.9	7.94	0.6	SR9	1/21/2017 19:35	21.46	112.4	7.70	2.7
SR9	1/21/2017 1:40	21.56	115.8	7.93	1.3	SR9	1/21/2017 7:40	21.48	111.0	7.60	1.9	SR9	1/21/2017 13:40	21.48	114.8	7.86	2.2	SR9	1/21/2017 19:40	21.62	114.5	7.84	1.1
SR9	1/21/2017 1:45	21.49	112.6	7.71	1.2	SR9	1/21/2017 7:45	21.44	114.2	7.82	1.0	SR9	1/21/2017 13:45	21.49	113.3	7.76	1.7	SR9	1/21/2017 19:45	21.64	115.2	7.89	0.3
SR9	1/21/2017 1:50	21.58	113.2	7.75	1.0	SR9	1/21/2017 7:50	21.63	109.8	7.52	2.4	SR9	1/21/2017 13:50	21.64	113.6	7.78	0.6	SR9	1/21/2017 19:50	21.57	111.7	7.65	1.1
SR9	1/21/2017 1:55	21.52	114.3	7.83	2.4	SR9	1/21/2017 7:55	21.41	114.5	7.84	0.6	SR9	1/21/2017 13:55	21.43	109.8	7.52	1.6	SR9	1/21/2017 19:55	21.44	112.1	7.68	1.3
SR9	1/21/2017 2:00	21.59	111.3	7.62	1.6	SR9	1/21/2017 8:00	21.49	114.3	7.83	0.6	SR9	1/21/2017 14:00	21.61	114.9	7.87	0.7	SR9	1/21/2017 20:00	21.43	111.3	7.62	0.6
SR9	1/21/2017 2:05	21.47	113.4	7.77	2.3	SR9	1/21/2017 8:05	21.55	112.4	7.70	1.0	SR9	1/21/2017 14:05	21.48	116.4	7.97	1.3	SR9	1/21/2017 20:05	21.57	115.0	7.88	1.1
SR9	1/21/2017 2:10	21.45	115.0	7.88	1.2	SR9	1/21/2017 8:10	21.48	111.8	7.66	2.5	SR9	1/21/2017 14:10	21.64	109.6	7.51	1.3	SR9	1/21/2017 20:10	21.57	116.4	7.97	0.7
SR9	1/21/2017 2:15	21.42	116.5	7.98	1.9	SR9	1/21/2017 8:15	21.51	111.1	7.61	3.3	SR9	1/21/2017 14:15	21.65	115.3	7.90	2.5	SR9	1/21/2017 20:15	21.46	112.4	7.70	3.0
SR9	1/21/2017 2:20	21.40	111.5	7.64	2.2	SR9	1/21/2017 8:20	21.56	116.2	7.96	0.3	SR9	1/21/2017 14:20	21.64	116.4	7.97	0.6	SR9	1/21/2017 20:20	21.63	115.3	7.90	1.5
SR9	1/21/2017 2:25	21.55	115.3	7.90	2.2	SR9	1/21/2017 8:25	21.42	110.4	7.56	0.7	SR9	1/21/2017 14:25	21.55	111.7	7.65	1.6	SR9	1/21/2017 20:25	21.65	114.8	7.86	0.8
SR9	1/21/2017 2:30	21.40	113.2	7.75	1.9	SR9	1/21/2017 8:30	21.64	116.5	7.98	2.7	SR9	1/21/2017 14:30	21.44	116.1	7.95	1.6	SR9	1/21/2017 20:30	21.50	112.4	7.70	1.2
SR9	1/21/2017 2:35	21.46	112.3	7.69	1.1	SR9	1/21/2017 8:35	21.60	111.3	7.62	1.6	SR9	1/21/2017 14:35	21.60	111.5	7.64	2.9	SR9	1/21/2017 20:35	21.66	115.5	7.91	0.8
SR9	1/21/2017 2:40	21.63	115.8	7.93	1.8	SR9	1/21/2017 8:40	21.60	116.1	7.95	2.7	SR9	1/21/2017 14:40	21.50	116.4	7.97	2.9	SR9	1/21/2017 20:40	21.52	116.7	7.99	1.8
SR9	1/21/2017 2:45	21.55	110.8	7.59	1.0	SR9	1/21/2017 8:45	21.50	114.5	7.84	2.0	SR9	1/21/2017 14:45	21.61	111.8	7.66	3.0	SR9	1/21/2017 20:45	21.40	115.3	7.90	1.1
SR9	1/21/2017 2:50	21.54	114.2	7.82	0.4	SR9	1/21/2017 8:50	21.51	116.5	7.98	4.1	SR9	1/21/2017 14:50	21.46	114.9	7.87	2.8	SR9	1/21/2017 20:50	21.52	115.6	7.92	0.5
SR9	1/21/2017 2:55	21.40	114.6	7.85	0.4	SR9	1/21/2017 8:55	21.42	111.4	7.63	1.8	SR9	1/21/2017 14:55	21.61	111.5	7.64	1.6	SR9	1/21/2017 20:55	21.61	110.2	7.55	0.7
SR9	1/21/2017 3:00	21.54	114.2	7.82	2.8	SR9	1/21/2017 9:00	21.56	110.8	7.59	2.0	SR9	1/21/2017 15:00	21.62	111.0	7.60	2.5	SR9	1/21/2017 21:00	21.65	114.6	7.85	0.5
SR9	1/21/2017 3:05	21.56	112.3	7.69	2.7	SR9	1/21/2017 9:05	21.59	112.0	7.67	2.3	SR9	1/21/2017 15:05	21.56	112.0	7.67	2.7	SR9	1/21/2017 21:05	21.54	114.0	7.81	2.6
SR9	1/21/2017 3:10	21.59	109.8	7.52	0.9	SR9	1/21/2017 9:10	21.49	114.3	7.83	6.9	SR9	1/21/2017 15:10	21.47	113.7	7.79	2.4	SR9	1/21/2017 21:10	21.57	113.4	7.77	2.0
SR9	1/21/2017 3:15	21.64	112.9	7.73	0.7	SR9	1/21/2017 9:15	21.62	111.1	7.61	0.4	SR9	1/21/2017 15:15	21.58	113.7	7.79	0.6	SR9	1/21/2017 21:15	21.51	115.9	7.94	2.5
SR9	1/21/2017 3:20	21.56	116.9	8.01	1.5	SR9	1/21/2017 9:20	21.47	113.4	7.77	2.8	SR9	1/21/2017 15:20	21.41	115.0	7.88	0.4	SR9	1/21/2017 21:20	21.54	116.8	8.00	1.4
SR9	1/21/2017 3:25	21.56	114.2	7.82	1.7	SR9	1/21/2017 9:25	21.59	115.9	7.94	2.5	SR9	1/21/2017 15:25	21.43	111.3	7.62	0.3	SR9	1/21/2017 21:25	21.41	109.6	7.51	1.6
SR9	1/21/2017 3:30	21.54	111.8	7.66	2.1	SR9	1/21/2017 9:30	21.41															

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR10	1/21/2017 0:00	21.38	103.0	7.10	2.6	SR10	1/21/2017 6:00	21.34	106.4	7.34	1.2	SR10	1/21/2017 12:00	21.38	100.9	6.96	2.1	SR10	1/21/2017 18:00	21.12	108.6	7.49	1.3
SR10	1/21/2017 0:05	21.26	103.4	7.13	1.8	SR10	1/21/2017 6:05	21.25	107.3	7.40	2.9	SR10	1/21/2017 12:05	21.23	103.0	7.10	0.2	SR10	1/21/2017 18:05	21.26	108.5	7.48	0.5
SR10	1/21/2017 0:10	21.15	105.9	7.30	2.4	SR10	1/21/2017 6:10	21.30	103.7	7.15	2.2	SR10	1/21/2017 12:10	21.38	101.2	6.98	1.3	SR10	1/21/2017 18:10	21.29	103.5	7.14	0.4
SR10	1/21/2017 0:15	21.20	105.4	7.27	2.2	SR10	1/21/2017 6:15	21.23	107.3	7.40	1.4	SR10	1/21/2017 12:15	21.21	99.2	6.84	0.3	SR10	1/21/2017 18:15	21.13	103.0	7.10	1.7
SR10	1/21/2017 0:20	21.22	99.8	6.88	0.8	SR10	1/21/2017 6:20	21.34	107.7	7.43	1.8	SR10	1/21/2017 12:20	21.31	102.5	7.07	0.9	SR10	1/21/2017 18:20	21.14	106.0	7.31	2.2
SR10	1/21/2017 0:25	21.27	106.1	7.32	2.1	SR10	1/21/2017 6:25	21.16	99.5	6.86	0.4	SR10	1/21/2017 12:25	21.23	102.4	7.06	1.1	SR10	1/21/2017 18:25	21.27	102.7	7.08	1.5
SR10	1/21/2017 0:30	21.26	108.3	7.47	1.3	SR10	1/21/2017 6:30	21.39	102.5	7.07	2.6	SR10	1/21/2017 12:30	21.27	103.5	7.14	0.2	SR10	1/21/2017 18:30	21.14	107.6	7.42	1.4
SR10	1/21/2017 0:35	21.28	106.9	7.37	2.3	SR10	1/21/2017 6:35	21.12	101.8	7.02	2.9	SR10	1/21/2017 12:35	21.21	101.2	6.98	2.1	SR10	1/21/2017 18:35	21.29	108.5	7.48	2.9
SR10	1/21/2017 0:40	21.21	107.4	7.41	1.0	SR10	1/21/2017 6:40	21.22	105.9	7.30	0.2	SR10	1/21/2017 12:40	21.16	100.9	6.96	1.1	SR10	1/21/2017 18:40	21.28	104.7	7.22	2.6
SR10	1/21/2017 0:45	21.17	104.8	7.23	2.4	SR10	1/21/2017 6:45	21.25	103.1	7.11	2.9	SR10	1/21/2017 12:45	21.22	105.7	7.29	3.0	SR10	1/21/2017 18:45	21.18	108.5	7.48	1.7
SR10	1/21/2017 0:50	21.37	106.9	7.37	2.8	SR10	1/21/2017 6:50	21.25	105.9	7.30	0.5	SR10	1/21/2017 12:50	21.23	105.0	7.24	1.3	SR10	1/21/2017 18:50	21.16	105.7	7.29	1.8
SR10	1/21/2017 0:55	21.38	106.4	7.34	2.1	SR10	1/21/2017 6:55	21.13	104.3	7.19	2.5	SR10	1/21/2017 12:55	21.12	104.1	7.18	1.6	SR10	1/21/2017 18:55	21.12	103.1	7.11	1.6
SR10	1/21/2017 1:00	21.18	100.6	6.94	0.8	SR10	1/21/2017 7:00	21.31	102.1	7.04	1.6	SR10	1/21/2017 13:00	21.35	100.5	6.93	1.1	SR10	1/21/2017 19:00	21.14	103.5	7.14	0.8
SR10	1/21/2017 1:05	21.18	104.8	7.23	1.3	SR10	1/21/2017 7:05	21.26	100.3	6.92	0.8	SR10	1/21/2017 13:05	21.28	103.1	7.11	0.7	SR10	1/21/2017 19:05	21.18	107.4	7.41	2.3
SR10	1/21/2017 1:10	21.28	108.3	7.47	1.1	SR10	1/21/2017 7:10	21.13	99.3	6.85	1.2	SR10	1/21/2017 13:10	21.23	104.1	7.18	2.7	SR10	1/21/2017 19:10	21.31	105.9	7.30	0.4
SR10	1/21/2017 1:15	21.36	106.4	7.34	1.8	SR10	1/21/2017 7:15	21.33	107.2	7.39	0.5	SR10	1/21/2017 13:15	21.12	103.2	7.12	0.8	SR10	1/21/2017 19:15	21.30	102.5	7.07	0.5
SR10	1/21/2017 1:20	21.39	106.4	7.34	1.5	SR10	1/21/2017 7:20	21.27	102.2	7.05	1.6	SR10	1/21/2017 13:20	21.23	99.5	6.86	1.9	SR10	1/21/2017 19:20	21.34	103.0	7.10	0.9
SR10	1/21/2017 1:25	21.35	106.3	7.33	1.1	SR10	1/21/2017 7:25	21.26	104.0	7.17	3.0	SR10	1/21/2017 13:25	21.17	100.6	6.94	0.5	SR10	1/21/2017 19:25	21.35	107.7	7.43	0.8
SR10	1/21/2017 1:30	21.13	103.0	7.10	0.9	SR10	1/21/2017 7:30	21.32	107.4	7.41	1.3	SR10	1/21/2017 13:30	21.12	99.9	6.89	3.1	SR10	1/21/2017 19:30	21.27	104.7	7.22	1.7
SR10	1/21/2017 1:35	21.24	104.1	7.18	0.9	SR10	1/21/2017 7:35	21.37	106.4	7.34	0.6	SR10	1/21/2017 13:35	21.34	104.1	7.18	0.7	SR10	1/21/2017 19:35	21.25	102.8	7.09	3.0
SR10	1/21/2017 1:40	21.22	107.4	7.41	1.9	SR10	1/21/2017 7:40	21.39	102.4	7.06	0.4	SR10	1/21/2017 13:40	21.27	107.9	7.44	1.8	SR10	1/21/2017 19:40	21.17	106.9	7.37	0.7
SR10	1/21/2017 1:45	21.39	106.9	7.37	2.2	SR10	1/21/2017 7:45	21.19	99.5	6.86	1.0	SR10	1/21/2017 13:45	21.12	104.4	7.20	1.5	SR10	1/21/2017 19:45	21.15	106.6	7.35	2.5
SR10	1/21/2017 1:50	21.27	107.7	7.43	3.1	SR10	1/21/2017 7:50	21.32	99.8	6.88	2.4	SR10	1/21/2017 13:50	21.22	104.4	7.20	2.2	SR10	1/21/2017 19:50	21.25	106.7	7.36	1.9
SR10	1/21/2017 1:55	21.28	107.6	7.42	0.2	SR10	1/21/2017 7:55	21.38	100.2	6.91	1.2	SR10	1/21/2017 13:55	21.38	101.1	6.97	2.7	SR10	1/21/2017 19:55	21.33	107.3	7.40	2.5
SR10	1/21/2017 2:00	21.21	102.5	7.07	1.7	SR10	1/21/2017 8:00	21.26	100.2	6.91	0.5	SR10	1/21/2017 14:00	21.21	105.9	7.30	0.9	SR10	1/21/2017 20:00	21.34	99.5	6.86	0.6
SR10	1/21/2017 2:05	21.15	100.9	6.96	0.5	SR10	1/21/2017 8:05	21.24	102.5	7.07	2.4	SR10	1/21/2017 14:05	21.21	108.5	7.48	0.4	SR10	1/21/2017 20:05	21.32	104.3	7.19	2.5
SR10	1/21/2017 2:10	21.30	107.4	7.41	2.3	SR10	1/21/2017 8:10	21.17	100.3	6.92	3.0	SR10	1/21/2017 14:10	21.37	104.3	7.19	2.3	SR10	1/21/2017 20:10	21.12	99.8	6.88	1.2
SR10	1/21/2017 2:15	21.26	104.1	7.18	1.0	SR10	1/21/2017 8:15	21.18	100.3	6.92	1.7	SR10	1/21/2017 14:15	21.36	104.8	7.23	2.3	SR10	1/21/2017 20:15	21.24	108.6	7.49	2.2
SR10	1/21/2017 2:20	21.18	100.5	6.93	1.1	SR10	1/21/2017 8:20	21.39	107.0	7.38	0.5	SR10	1/21/2017 14:20	21.15	107.3	7.40	1.9	SR10	1/21/2017 20:20	21.12	100.6	6.94	1.4
SR10	1/21/2017 2:25	21.31	105.9	7.30	2.6	SR10	1/21/2017 8:25	21.13	104.0	7.17	0.8	SR10	1/21/2017 14:25	21.13	101.6	7.01	0.4	SR10	1/21/2017 20:25	21.25	105.9	7.30	0.5
SR10	1/21/2017 2:30	21.16	108.5	7.48	2.0	SR10	1/21/2017 8:30	21.29	102.2	7.05	1.8	SR10	1/21/2017 14:30	21.18	103.0	7.10	1.9	SR10	1/21/2017 20:30	21.27	104.3	7.19	2.6
SR10	1/21/2017 2:35	21.33	105.3	7.26	1.0	SR10	1/21/2017 8:35	21.39	99.6	6.87	0.9	SR10	1/21/2017 14:35	21.13	103.1	7.11	2.5	SR10	1/21/2017 20:35	21.32	103.4	7.13	3.0
SR10	1/21/2017 2:40	21.39	100.6	6.94	0.9	SR10	1/21/2017 8:40	21.34	100.5	6.93	2.7	SR10	1/21/2017 14:40	21.39	101.5	7.00	1.4	SR10	1/21/2017 20:40	21.29	99.3	6.85	2.3
SR10	1/21/2017 2:45	21.18	105.4	7.27	3.0	SR10	1/21/2017 8:45	21.33	105.0	7.24	2.6	SR10	1/21/2017 14:45	21.23	105.3	7.26	0.8	SR10	1/21/2017 20:45	21.30	107.0	7.38	1.1
SR10	1/21/2017 2:50	21.15	105.6	7.28	3.0	SR10	1/21/2017 8:50	21.23	103.8	7.16	0.7	SR10	1/21/2017 14:50	21.29	99.3	6.85	1.1	SR10	1/21/2017 20:50	21.30	108.8	7.50	2.6
SR10	1/21/2017 2:55	21.38	99.3	6.85	3.1	SR10	1/21/2017 8:55	21.23	103.1	7.11	1.6	SR10	1/21/2017 14:55	21.26	103.8	7.16	2.0	SR10	1/21/2017 20:55	21.33	103.2	7.12	2.6
SR10	1/21/2017 3:00	21.24	108.6	7.49	2.9	SR10	1/21/2017 9:00	21.12	104.4	7.20	2.4	SR10	1/21/2017 15:00	21.28	102.5	7.07	0.8	SR10	1/21/2017 21:00	21.31	104.3	7.19	2.9
SR10	1/21/2017 3:05	21.19	100.1	6.90	1.6	SR10	1/21/2017 9:05	21.28	102.5	7.07	0.4	SR10	1/21/2017 15:05	21.31	106.1	7.32	1.3	SR10	1/21/2017 21:05	21.12	105.9	7.30	0.9
SR10	1/21/2017 3:10	21.23	107.0	7.38	1.1	SR10	1/21/2017 9:10	21.34	103.8	7.16	0.9	SR10	1/21/2017 15:10	21.38	102.1	7.04	0.4	SR10	1/21/2017 21:10	21.23	101.8	7.02	1.9
SR10	1/21/2017 3:15	21.37	100.8	6.95	2.9	SR10	1/21/2017 9:15	21.35	104.7	7.22	2.3	SR10	1/21/2017 15:15	21.35	101.2	6.98	2.7	SR10	1/21/2017 21:15	21.30	103.0	7.10	3.0
SR10	1/21/2017 3:20	21.32	107.9	7.44	2.0	SR10	1/21/2017 9:20	21.39	104.0	7.17	1.0	SR10	1/21/2017 15:20	21.17	100.5	6.93	0.3	SR10	1/21/2017 21:20	21.25	99.6	6.87	1.3
SR10	1/21/2017 3:25	21.34	105.3	7.26	1.6	SR10	1/21/2017 9:25	21.29	108.2	7.46	1.5	SR10	1/21/2017 15:25	21.38	100.9	6.96	0.3	SR10	1/21/2017 21:25	21.16	100.8	6.95	2.0
SR10	1/21/2017 3:30	21.14	103.4	7.13	2.9	SR10	1/21/2017 9:30	21.27	102.7	7.08	0.2	SR10	1/21/2017 15:30	21.33	106.3	7.33	0.9	SR10	1/21/2017 21:30	21.38	100.5	6.93	1.4
SR10	1/21/2017 3:35	21.19	103.1	7.11	2.6	SR10	1/21/2017 9:35	21.20	100.8	6.95	2.8	SR10	1/21/2017 15:35	21.37	99.6	6.87	2.8	SR10	1/21/2017 21:35	21.14	106.6	7.35	0.8
SR10	1/21/2017 3:40	21.37	105.9	7.30	1.8	SR10	1/21/2017 9:40	21.15	107.7	7.43	0.7	SR10	1/21/2017 15:40	21.34	101.8	7.02	0.6	SR10	1/21/2017 21:40	21.34	102.8	7.09	2.4
SR10	1/21/2017 3:45	21.31	100.8	6.95	0.4	SR10	1/21/2017 9:45	21.21	103.0	7.10	3.1	SR10	1/21/2017 15:45	21.23	104.1	7.18	1.8	SR10	1/21/2017 21:45	21.20	105.0	7.24	3.1
SR10	1/21/2017 3																						

## 24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR11	1/21/2017 0:00	21.32	110.8	7.64	2.0	SR11	1/21/2017 6:00	21.32	109.2	7.53	0.5	SR11	1/21/2017 12:00	21.36	104.8	7.23	1.8	SR11	1/21/2017 18:00	21.18	110.3	7.61	1.9
SR11	1/21/2017 0:05	21.33	110.1	7.59	2.4	SR11	1/21/2017 6:05	21.37	109.2	7.53	1.7	SR11	1/21/2017 12:05	21.18	104.5	7.21	2.3	SR11	1/21/2017 18:05	21.28	102.1	7.04	1.2
SR11	1/21/2017 0:10	21.30	102.2	7.05	0.9	SR11	1/21/2017 6:10	21.32	104.4	7.20	2.1	SR11	1/21/2017 12:10	21.19	105.1	7.25	2.5	SR11	1/21/2017 18:10	21.21	104.5	7.21	2.1
SR11	1/21/2017 0:15	21.41	101.6	7.01	0.8	SR11	1/21/2017 6:15	21.37	105.0	7.24	1.0	SR11	1/21/2017 12:15	21.19	111.1	7.66	2.6	SR11	1/21/2017 18:15	21.34	108.5	7.48	1.7
SR11	1/21/2017 0:20	21.21	102.7	7.08	1.1	SR11	1/21/2017 6:20	21.35	108.2	7.46	1.9	SR11	1/21/2017 12:20	21.35	102.8	7.09	2.2	SR11	1/21/2017 18:20	21.40	101.6	7.01	2.1
SR11	1/21/2017 0:25	21.34	103.4	7.13	0.8	SR11	1/21/2017 6:25	21.25	107.4	7.41	1.6	SR11	1/21/2017 12:25	21.33	105.1	7.25	2.2	SR11	1/21/2017 18:25	21.36	104.5	7.21	2.6
SR11	1/21/2017 0:30	21.31	105.6	7.28	1.6	SR11	1/21/2017 6:30	21.28	103.2	7.12	0.3	SR11	1/21/2017 12:30	21.26	106.0	7.31	0.7	SR11	1/21/2017 18:30	21.21	106.6	7.35	1.9
SR11	1/21/2017 0:35	21.25	107.3	7.40	1.6	SR11	1/21/2017 6:35	21.35	105.0	7.24	1.5	SR11	1/21/2017 12:35	21.24	103.8	7.16	0.9	SR11	1/21/2017 18:35	21.26	105.0	7.24	0.7
SR11	1/21/2017 0:40	21.34	101.9	7.03	1.0	SR11	1/21/2017 6:40	21.31	107.7	7.43	2.8	SR11	1/21/2017 12:40	21.27	106.4	7.34	0.8	SR11	1/21/2017 18:40	21.28	103.2	7.12	1.8
SR11	1/21/2017 0:45	21.26	109.0	7.52	2.2	SR11	1/21/2017 6:45	21.22	106.6	7.35	1.7	SR11	1/21/2017 12:45	21.36	110.8	7.64	2.7	SR11	1/21/2017 18:45	21.20	108.9	7.51	1.5
SR11	1/21/2017 0:50	21.41	110.3	7.61	1.6	SR11	1/21/2017 6:50	21.31	110.9	7.65	1.8	SR11	1/21/2017 12:50	21.37	102.7	7.08	2.6	SR11	1/21/2017 18:50	21.36	107.3	7.40	1.4
SR11	1/21/2017 0:55	21.39	104.4	7.20	2.4	SR11	1/21/2017 6:55	21.36	106.7	7.36	2.5	SR11	1/21/2017 12:55	21.32	107.0	7.38	1.1	SR11	1/21/2017 18:55	21.28	110.8	7.64	1.4
SR11	1/21/2017 1:00	21.18	109.9	7.58	2.2	SR11	1/21/2017 7:00	21.25	106.4	7.34	1.2	SR11	1/21/2017 13:00	21.21	107.4	7.41	1.4	SR11	1/21/2017 19:00	21.34	107.0	7.38	1.0
SR11	1/21/2017 1:05	21.17	104.4	7.20	1.9	SR11	1/21/2017 7:05	21.39	107.2	7.39	1.8	SR11	1/21/2017 13:05	21.37	104.7	7.22	1.8	SR11	1/21/2017 19:05	21.29	104.1	7.18	0.7
SR11	1/21/2017 1:10	21.38	106.7	7.36	1.2	SR11	1/21/2017 7:10	21.25	103.8	7.16	1.6	SR11	1/21/2017 13:10	21.40	105.3	7.26	2.8	SR11	1/21/2017 19:10	21.38	110.1	7.59	2.7
SR11	1/21/2017 1:15	21.33	104.7	7.22	2.2	SR11	1/21/2017 7:15	21.18	106.0	7.31	0.4	SR11	1/21/2017 13:15	21.27	102.7	7.08	0.3	SR11	1/21/2017 19:15	21.26	105.1	7.25	1.0
SR11	1/21/2017 1:20	21.25	103.0	7.10	2.8	SR11	1/21/2017 7:20	21.30	108.8	7.50	1.8	SR11	1/21/2017 13:20	21.30	109.2	7.53	2.2	SR11	1/21/2017 19:20	21.36	102.7	7.08	2.8
SR11	1/21/2017 1:25	21.27	110.1	7.59	1.8	SR11	1/21/2017 7:25	21.41	102.4	7.06	2.5	SR11	1/21/2017 13:25	21.32	107.7	7.43	0.5	SR11	1/21/2017 19:25	21.41	107.0	7.38	0.7
SR11	1/21/2017 1:30	21.33	104.3	7.19	1.7	SR11	1/21/2017 7:30	21.39	108.3	7.47	0.8	SR11	1/21/2017 13:30	21.31	102.5	7.07	2.3	SR11	1/21/2017 19:30	21.40	109.9	7.58	2.6
SR11	1/21/2017 1:35	21.39	103.2	7.12	1.7	SR11	1/21/2017 7:35	21.20	104.1	7.18	2.5	SR11	1/21/2017 13:35	21.29	109.3	7.54	0.9	SR11	1/21/2017 19:35	21.24	102.2	7.05	0.5
SR11	1/21/2017 1:40	21.40	110.5	7.62	0.4	SR11	1/21/2017 7:40	21.36	104.1	7.18	0.9	SR11	1/21/2017 13:40	21.26	101.8	7.02	0.8	SR11	1/21/2017 19:40	21.39	110.6	7.63	2.0
SR11	1/21/2017 1:45	21.41	110.9	7.65	0.3	SR11	1/21/2017 7:45	21.20	101.8	7.02	1.9	SR11	1/21/2017 13:45	21.19	104.5	7.21	2.4	SR11	1/21/2017 19:45	21.23	105.9	7.30	2.5
SR11	1/21/2017 1:50	21.21	101.8	7.02	2.1	SR11	1/21/2017 7:50	21.33	105.9	7.30	2.6	SR11	1/21/2017 13:50	21.29	109.3	7.54	1.2	SR11	1/21/2017 19:50	21.18	109.9	7.58	0.6
SR11	1/21/2017 1:55	21.30	105.4	7.27	1.4	SR11	1/21/2017 7:55	21.18	107.4	7.41	0.7	SR11	1/21/2017 13:55	21.23	110.5	7.62	0.6	SR11	1/21/2017 19:55	21.32	101.9	7.03	1.3
SR11	1/21/2017 2:00	21.38	103.8	7.16	2.4	SR11	1/21/2017 8:00	21.29	105.7	7.29	2.7	SR11	1/21/2017 14:00	21.31	106.3	7.33	2.5	SR11	1/21/2017 20:00	21.42	109.2	7.53	0.6
SR11	1/21/2017 2:05	21.24	104.4	7.20	1.8	SR11	1/21/2017 8:05	21.28	106.9	7.37	1.3	SR11	1/21/2017 14:05	21.39	106.0	7.31	0.3	SR11	1/21/2017 20:05	21.17	105.3	7.26	2.1
SR11	1/21/2017 2:10	21.17	106.3	7.33	2.4	SR11	1/21/2017 8:10	21.26	110.3	7.61	0.9	SR11	1/21/2017 14:10	21.27	102.7	7.08	1.3	SR11	1/21/2017 20:10	21.30	101.4	6.99	0.4
SR11	1/21/2017 2:15	21.27	102.4	7.06	0.5	SR11	1/21/2017 8:15	21.33	109.6	7.56	2.8	SR11	1/21/2017 14:15	21.27	110.1	7.59	0.3	SR11	1/21/2017 20:15	21.23	110.5	7.62	1.6
SR11	1/21/2017 2:20	21.31	106.4	7.34	1.4	SR11	1/21/2017 8:20	21.31	109.5	7.55	2.8	SR11	1/21/2017 14:20	21.38	105.9	7.30	1.0	SR11	1/21/2017 20:20	21.20	105.1	7.25	0.5
SR11	1/21/2017 2:25	21.26	106.6	7.35	1.4	SR11	1/21/2017 8:25	21.34	109.9	7.58	0.8	SR11	1/21/2017 14:25	21.20	109.5	7.55	2.5	SR11	1/21/2017 20:25	21.31	105.6	7.28	2.1
SR11	1/21/2017 2:30	21.36	103.5	7.14	1.9	SR11	1/21/2017 8:30	21.17	109.6	7.56	2.3	SR11	1/21/2017 14:30	21.41	102.4	7.06	2.8	SR11	1/21/2017 20:30	21.38	105.3	7.26	1.9
SR11	1/21/2017 2:35	21.24	104.5	7.21	1.8	SR11	1/21/2017 8:35	21.41	109.6	7.56	1.1	SR11	1/21/2017 14:35	21.19	109.0	7.52	1.2	SR11	1/21/2017 20:35	21.34	108.0	7.45	1.2
SR11	1/21/2017 2:40	21.38	101.8	7.02	1.1	SR11	1/21/2017 8:40	21.30	101.8	7.02	2.2	SR11	1/21/2017 14:40	21.35	105.4	7.27	2.8	SR11	1/21/2017 20:40	21.29	105.6	7.28	2.1
SR11	1/21/2017 2:45	21.42	102.7	7.08	2.6	SR11	1/21/2017 8:45	21.19	108.9	7.51	2.6	SR11	1/21/2017 14:45	21.20	109.2	7.53	2.4	SR11	1/21/2017 20:45	21.37	103.0	7.10	0.5
SR11	1/21/2017 2:50	21.40	102.5	7.07	0.7	SR11	1/21/2017 8:50	21.17	106.9	7.37	2.3	SR11	1/21/2017 14:50	21.24	106.1	7.32	0.8	SR11	1/21/2017 20:50	21.23	105.3	7.26	2.7
SR11	1/21/2017 2:55	21.28	108.9	7.51	0.5	SR11	1/21/2017 8:55	21.36	109.9	7.58	1.2	SR11	1/21/2017 14:55	21.19	110.9	7.65	0.8	SR11	1/21/2017 20:55	21.18	104.1	7.18	0.3
SR11	1/21/2017 3:00	21.25	104.8	7.23	1.4	SR11	1/21/2017 9:00	21.26	102.1	7.04	0.4	SR11	1/21/2017 15:00	21.31	106.4	7.34	1.6	SR11	1/21/2017 21:00	21.36	109.2	7.53	0.4
SR11	1/21/2017 3:05	21.24	111.1	7.66	0.7	SR11	1/21/2017 9:05	21.29	108.0	7.45	2.7	SR11	1/21/2017 15:05	21.37	107.6	7.42	0.4	SR11	1/21/2017 21:05	21.25	110.5	7.62	2.4
SR11	1/21/2017 3:10	21.26	110.6	7.63	0.4	SR11	1/21/2017 9:10	21.26	105.4	7.27	1.6	SR11	1/21/2017 15:10	21.40	106.4	7.34	1.3	SR11	1/21/2017 21:10	21.26	102.7	7.08	0.4
SR11	1/21/2017 3:15	21.36	106.0	7.31	0.6	SR11	1/21/2017 9:15	21.37	108.6	7.49	2.5	SR11	1/21/2017 15:15	21.17	107.0	7.38	0.8	SR11	1/21/2017 21:15	21.40	102.4	7.06	2.8
SR11	1/21/2017 3:20	21.32	102.5	7.07	0.4	SR11	1/21/2017 9:20	21.31	110.5	7.62	1.6	SR11	1/21/2017 15:20	21.17	109.2	7.53	1.0	SR11	1/21/2017 21:20	21.34	102.7	7.08	1.4
SR11	1/21/2017 3:25	21.19	109.9	7.58	0.8	SR11	1/21/2017 9:25	21.31	110.6	7.63	2.2	SR11	1/21/2017 15:25	21.25	104.4	7.20	2.1	SR11	1/21/2017 21:25	21.38	108.0	7.45	1.8
SR11	1/21/2017 3:30	21.20	108.3	7.47	1.8	SR11	1/21/2017 9:30	21.36	107.3	7.40	1.3	SR11	1/21/2017 15:30	21.27	107.7	7.43	2.6	SR11	1/21/2017 21:30	21.18	106.6	7.35	0.8
SR11	1/21/2017 3:35	21.19	105.4	7.27	1.6	SR11	1/21/2017 9:35	21.32	104.0	7.17	2.0	SR11	1/21/2017 15:35	21.36	103.8	7.16	1.1	SR11	1/21/2017 21:35	21.28	101.9	7.03	2.3
SR11	1/21/2017 3:40	21.38	102.8	7.09	2.7	SR11	1/21/2017 9:40	21.33	103.4	7.13	1.1	SR11	1/21/2017 15:40	21.21	107.4	7.41	1.8	SR11	1/21/2017 21:40	21.38	106.7	7.36	0.4
SR11	1/21/2017 3:45	21.18	110.5	7.62	0.4	SR11	1/21/2017 9:45	21.18	104.5	7.21	1.5	SR11	1/21/2017 15:45	21.17	110.3	7.61	2.5	SR11	1/21/2017 21:45	21.26	102.2	7.05	



## 24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR13	1/21/2017 0:00	21.30	106.4	7.34	3.3	SR13	1/21/2017 6:00	21.21	108.6	7.49	2.3	SR13	1/21/2017 12:00	21.38	106.3	7.33	2.3	SR13	1/21/2017 18:00	21.32	106.3	7.33	1.8
SR13	1/21/2017 0:05	21.33	100.2	6.91	2.5	SR13	1/21/2017 6:05	21.24	102.8	7.09	1.2	SR13	1/21/2017 12:05	21.33	106.7	7.36	2.6	SR13	1/21/2017 18:05	21.23	100.8	6.95	1.6
SR13	1/21/2017 0:10	21.21	102.2	7.05	2.7	SR13	1/21/2017 6:10	21.22	104.4	7.20	4.9	SR13	1/21/2017 12:10	21.30	107.7	7.43	4.1	SR13	1/21/2017 18:10	21.38	105.1	7.25	1.4
SR13	1/21/2017 0:15	21.30	104.7	7.22	2.2	SR13	1/21/2017 6:15	21.28	106.0	7.31	1.0	SR13	1/21/2017 12:15	21.38	108.0	7.45	1.9	SR13	1/21/2017 18:15	21.37	98.7	6.81	2.2
SR13	1/21/2017 0:20	21.31	100.1	6.90	1.0	SR13	1/21/2017 6:20	21.33	105.0	7.24	1.5	SR13	1/21/2017 12:20	21.37	99.6	6.87	2.1	SR13	1/21/2017 18:20	21.27	100.1	6.90	4.1
SR13	1/21/2017 0:25	21.29	101.9	7.03	4.8	SR13	1/21/2017 6:25	21.23	108.5	7.48	4.0	SR13	1/21/2017 12:25	21.36	106.6	7.35	1.7	SR13	1/21/2017 18:25	21.30	98.5	6.79	1.2
SR13	1/21/2017 0:30	21.12	106.6	7.35	3.5	SR13	1/21/2017 6:30	21.36	105.7	7.29	3.0	SR13	1/21/2017 12:30	21.25	103.4	7.13	2.3	SR13	1/21/2017 18:30	21.12	99.5	6.86	2.7
SR13	1/21/2017 0:35	21.20	101.2	6.98	3.0	SR13	1/21/2017 6:35	21.33	107.3	7.40	2.7	SR13	1/21/2017 12:35	21.24	99.5	6.86	4.1	SR13	1/21/2017 18:35	21.28	98.9	6.82	3.7
SR13	1/21/2017 0:40	21.26	106.6	7.35	4.8	SR13	1/21/2017 6:40	21.38	102.2	7.05	3.6	SR13	1/21/2017 12:40	21.30	101.9	7.03	2.1	SR13	1/21/2017 18:40	21.31	108.0	7.45	3.8
SR13	1/21/2017 0:45	21.25	104.8	7.23	3.1	SR13	1/21/2017 6:45	21.19	106.3	7.33	1.2	SR13	1/21/2017 12:45	21.30	98.9	6.82	4.6	SR13	1/21/2017 18:45	21.33	102.8	7.09	1.0
SR13	1/21/2017 0:50	21.33	104.3	7.19	1.4	SR13	1/21/2017 6:50	21.28	99.8	6.88	2.3	SR13	1/21/2017 12:50	21.13	99.6	6.87	1.2	SR13	1/21/2017 18:50	21.24	100.9	6.96	4.7
SR13	1/21/2017 0:55	21.28	103.2	7.12	5.1	SR13	1/21/2017 6:55	21.13	101.8	7.02	2.0	SR13	1/21/2017 12:55	21.21	104.3	7.19	2.5	SR13	1/21/2017 18:55	21.25	106.4	7.34	2.3
SR13	1/21/2017 1:00	21.28	106.6	7.35	5.0	SR13	1/21/2017 7:00	21.36	106.0	7.31	3.1	SR13	1/21/2017 13:00	21.28	100.6	6.94	3.4	SR13	1/21/2017 19:00	21.22	98.9	6.82	4.8
SR13	1/21/2017 1:05	21.35	101.4	6.99	3.8	SR13	1/21/2017 7:05	21.13	100.9	6.96	3.3	SR13	1/21/2017 13:05	21.34	103.5	7.14	1.2	SR13	1/21/2017 19:05	21.12	102.4	7.06	4.8
SR13	1/21/2017 1:10	21.37	100.2	6.91	4.1	SR13	1/21/2017 7:10	21.17	99.5	6.86	1.6	SR13	1/21/2017 13:10	21.35	107.0	7.38	2.0	SR13	1/21/2017 19:10	21.27	104.5	7.21	5.0
SR13	1/21/2017 1:15	21.30	101.5	7.00	4.6	SR13	1/21/2017 7:15	21.28	104.0	7.17	3.6	SR13	1/21/2017 13:15	21.19	99.0	6.83	2.7	SR13	1/21/2017 19:15	21.27	103.1	7.11	1.0
SR13	1/21/2017 1:20	21.15	104.3	7.19	5.1	SR13	1/21/2017 7:20	21.34	103.7	7.15	1.7	SR13	1/21/2017 13:20	21.12	98.9	6.82	3.9	SR13	1/21/2017 19:20	21.31	101.8	7.02	3.7
SR13	1/21/2017 1:25	21.23	106.9	7.37	3.2	SR13	1/21/2017 7:25	21.31	106.3	7.33	3.9	SR13	1/21/2017 13:25	21.27	106.7	7.36	3.3	SR13	1/21/2017 19:25	21.20	98.9	6.82	4.9
SR13	1/21/2017 1:30	21.30	108.3	7.47	4.3	SR13	1/21/2017 7:30	21.24	101.6	7.01	1.0	SR13	1/21/2017 13:30	21.35	99.0	6.83	9.1	SR13	1/21/2017 19:30	21.36	99.3	6.85	4.0
SR13	1/21/2017 1:35	21.34	103.4	7.13	3.6	SR13	1/21/2017 7:35	21.34	102.8	7.09	4.1	SR13	1/21/2017 13:35	21.26	99.6	6.87	3.0	SR13	1/21/2017 19:35	21.34	107.3	7.40	4.7
SR13	1/21/2017 1:40	21.21	100.3	6.92	1.1	SR13	1/21/2017 7:40	21.37	108.5	7.48	2.1	SR13	1/21/2017 13:40	21.39	101.9	7.03	4.5	SR13	1/21/2017 19:40	21.18	104.1	7.18	4.0
SR13	1/21/2017 1:45	21.12	99.8	6.88	4.6	SR13	1/21/2017 7:45	21.36	105.3	7.26	4.6	SR13	1/21/2017 13:45	21.37	105.4	7.27	3.9	SR13	1/21/2017 19:45	21.26	99.3	6.85	2.9
SR13	1/21/2017 1:50	21.17	100.2	6.91	4.9	SR13	1/21/2017 7:50	21.36	105.7	7.29	4.5	SR13	1/21/2017 13:50	21.20	105.4	7.27	3.5	SR13	1/21/2017 19:50	21.27	103.1	7.11	1.8
SR13	1/21/2017 1:55	21.17	107.0	7.38	2.5	SR13	1/21/2017 7:55	21.14	101.4	6.99	2.7	SR13	1/21/2017 13:55	21.39	104.4	7.20	3.1	SR13	1/21/2017 19:55	21.18	101.9	7.03	3.9
SR13	1/21/2017 2:00	21.15	102.1	7.04	1.7	SR13	1/21/2017 8:00	21.27	106.3	7.33	3.7	SR13	1/21/2017 14:00	21.24	98.6	6.80	1.4	SR13	1/21/2017 20:00	21.12	107.7	7.43	3.2
SR13	1/21/2017 2:05	21.25	104.1	7.18	3.2	SR13	1/21/2017 8:05	21.32	105.6	7.28	1.0	SR13	1/21/2017 14:05	21.35	102.2	7.05	2.5	SR13	1/21/2017 20:05	21.23	99.5	6.86	3.4
SR13	1/21/2017 2:10	21.28	101.6	7.01	2.1	SR13	1/21/2017 8:10	21.17	101.4	6.99	2.1	SR13	1/21/2017 14:10	21.33	108.3	7.47	4.5	SR13	1/21/2017 20:10	21.18	98.7	6.81	5.0
SR13	1/21/2017 2:15	21.19	104.3	7.19	1.7	SR13	1/21/2017 8:15	21.20	106.3	7.33	2.2	SR13	1/21/2017 14:15	21.28	104.1	7.18	3.8	SR13	1/21/2017 20:15	21.24	104.4	7.20	2.9
SR13	1/21/2017 2:20	21.34	108.6	7.49	3.9	SR13	1/21/2017 8:20	21.27	107.4	7.41	2.2	SR13	1/21/2017 14:20	21.15	104.8	7.23	5.1	SR13	1/21/2017 20:20	21.22	105.3	7.26	3.7
SR13	1/21/2017 2:25	21.18	102.1	7.04	3.1	SR13	1/21/2017 8:25	21.16	105.1	7.25	1.1	SR13	1/21/2017 14:25	21.30	99.6	6.87	2.7	SR13	1/21/2017 20:25	21.20	106.7	7.36	3.7
SR13	1/21/2017 2:30	21.32	107.7	7.43	3.9	SR13	1/21/2017 8:30	21.31	99.2	6.84	1.2	SR13	1/21/2017 14:30	21.24	105.4	7.27	1.7	SR13	1/21/2017 20:30	21.31	106.6	7.35	3.1
SR13	1/21/2017 2:35	21.35	104.5	7.21	1.3	SR13	1/21/2017 8:35	21.26	99.5	6.86	4.2	SR13	1/21/2017 14:35	21.21	102.5	7.07	3.6	SR13	1/21/2017 20:35	21.17	100.1	6.90	4.4
SR13	1/21/2017 2:40	21.37	102.2	7.05	4.3	SR13	1/21/2017 8:40	21.34	102.4	7.06	5.1	SR13	1/21/2017 14:40	21.14	103.5	7.14	3.1	SR13	1/21/2017 20:40	21.31	107.4	7.41	3.6
SR13	1/21/2017 2:45	21.15	102.4	7.06	4.3	SR13	1/21/2017 8:45	21.26	101.9	7.03	3.5	SR13	1/21/2017 14:45	21.21	98.6	6.80	1.3	SR13	1/21/2017 20:45	21.23	101.9	7.03	5.0
SR13	1/21/2017 2:50	21.13	104.5	7.21	3.9	SR13	1/21/2017 8:50	21.24	107.3	7.40	2.1	SR13	1/21/2017 14:50	21.19	102.5	7.07	2.8	SR13	1/21/2017 20:50	21.37	106.9	7.37	2.2
SR13	1/21/2017 2:55	21.23	107.3	7.40	1.7	SR13	1/21/2017 8:55	21.39	101.4	6.99	1.2	SR13	1/21/2017 14:55	21.12	107.2	7.39	2.4	SR13	1/21/2017 20:55	21.31	101.5	7.00	3.5
SR13	1/21/2017 3:00	21.34	103.4	7.13	3.9	SR13	1/21/2017 9:00	21.38	102.4	7.06	2.5	SR13	1/21/2017 15:00	21.18	108.6	7.49	2.1	SR13	1/21/2017 21:00	21.20	103.8	7.16	2.2
SR13	1/21/2017 3:05	21.25	98.5	6.79	3.6	SR13	1/21/2017 9:05	21.32	106.4	7.34	5.0	SR13	1/21/2017 15:05	21.25	107.4	7.41	5.0	SR13	1/21/2017 21:05	21.21	108.0	7.45	2.3
SR13	1/21/2017 3:10	21.31	104.5	7.21	2.8	SR13	1/21/2017 9:10	21.36	107.0	7.38	4.0	SR13	1/21/2017 15:10	21.12	105.9	7.30	2.9	SR13	1/21/2017 21:10	21.34	105.6	7.28	5.0
SR13	1/21/2017 3:15	21.37	107.2	7.39	1.0	SR13	1/21/2017 9:15	21.15	102.8	7.09	2.8	SR13	1/21/2017 15:15	21.20	99.2	6.84	2.9	SR13	1/21/2017 21:15	21.35	103.1	7.11	3.4
SR13	1/21/2017 3:20	21.14	103.4	7.13	4.2	SR13	1/21/2017 9:20	21.22	104.7	7.22	3.6	SR13	1/21/2017 15:20	21.21	101.8	7.02	3.9	SR13	1/21/2017 21:20	21.36	100.9	6.96	4.2
SR13	1/21/2017 3:25	21.28	103.8	7.16	3.9	SR13	1/21/2017 9:25	21.33	106.9	7.37	4.1	SR13	1/21/2017 15:25	21.18	104.1	7.18	3.2	SR13	1/21/2017 21:25	21.19	99.2	6.84	4.8
SR13	1/21/2017 3:30	21.35	99.8	6.88	1.3	SR13	1/21/2017 9:30	21.34	104.3	7.19	1.0	SR13	1/21/2017 15:30	21.30	108.5	7.48	3.7	SR13	1/21/2017 21:30	21.25	104.1	7.18	3.3
SR13	1/21/2017 3:35	21.17	105.9	7.30	2.3	SR13	1/21/2017 9:35	21.39	104.0	7.17	1.3	SR13	1/21/2017 15:35	21.16	101.1	6.97	4.1	SR13	1/21/2017 21:35	21.15	107.9	7.44	3.0
SR13	1/21/2017 3:40	21.27	102.1	7.04	4.1	SR13	1/21/2017 9:40	21.13	103.8	7.16	4.1	SR13	1/21/2017 15:40	21.38	105.4	7.27	5.0	SR13	1/21/2017 21:40	21.31	104.4	7.20	1.3
SR13	1/21/2017 3:45	21.37	108.8	7.50	2.2	SR13	1/21/2017 9:45	21.22	102.4	7.06	4.4	SR13	1/21/2017 15:45	21.14	105.6	7.28	4.3	SR13	1/21/2017 21:45	21.32	104.4	7.20	5.1
SR13	1/21/2017 3:50	21.24	105																				

24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/21/2017 0:17	0.23				SR12	1/21/2017 0:17	0.25			
SR4	1/21/2017 0:37	0.24				SR12	1/21/2017 0:37	0.24			
SR4	1/21/2017 0:57	0.23				SR12	1/21/2017 0:57	0.21			
SR4	1/21/2017 1:17	0.22				SR12	1/21/2017 1:17	0.21			
SR4	1/21/2017 1:37	0.23				SR12	1/21/2017 1:37	0.21			
SR4	1/21/2017 1:57	0.25				SR12	1/21/2017 1:57	0.22			
SR4	1/21/2017 2:17	0.24				SR12	1/21/2017 2:17	0.25			
SR4	1/21/2017 2:37	0.24				SR12	1/21/2017 2:37	0.24			
SR4	1/21/2017 2:57	0.21				SR12	1/21/2017 2:57	0.24			
SR4	1/21/2017 3:17	0.25				SR12	1/21/2017 3:17	0.24			
SR4	1/21/2017 3:37	0.25				SR12	1/21/2017 3:37	0.25			
SR4	1/21/2017 3:57	0.24				SR12	1/21/2017 3:57	0.24			
SR4	1/21/2017 4:17	0.21				SR12	1/21/2017 4:17	0.22			
SR4	1/21/2017 4:37	0.22				SR12	1/21/2017 4:37	0.21			
SR4	1/21/2017 4:57	0.24				SR12	1/21/2017 4:57	0.22			
SR4	1/21/2017 5:17	0.23				SR12	1/21/2017 5:17	0.21			
SR4	1/21/2017 5:37	0.25				SR12	1/21/2017 5:37	0.24			
SR4	1/21/2017 5:57	0.26				SR12	1/21/2017 5:57	0.23			
SR4						SR12					
SR4	1/21/2017 6:37	0.25				SR12	1/21/2017 6:37	0.25			
SR4	1/21/2017 6:57	0.26				SR12	1/21/2017 6:57	0.22			
SR4	1/21/2017 7:17	0.25				SR12	1/21/2017 7:17	0.26			
SR4	1/21/2017 7:37	0.26				SR12	1/21/2017 7:37	0.25			
SR4	1/21/2017 7:57	0.23				SR12	1/21/2017 7:57	0.26			
SR4	1/21/2017 8:17	0.22				SR12	1/21/2017 8:17	0.23			
SR4	1/21/2017 8:37	0.22				SR12	1/21/2017 8:37	0.22			
SR4	1/21/2017 8:57	0.22				SR12	1/21/2017 8:57	0.24			
SR4	1/21/2017 9:17	0.26				SR12	1/21/2017 9:17	0.26			
SR4	1/21/2017 9:37	0.24				SR12	1/21/2017 9:37	0.26			
SR4	1/21/2017 9:57	0.23				SR12	1/21/2017 9:57	0.25			
SR4	1/21/2017 10:17	0.23				SR12	1/21/2017 10:17	0.25			
SR4	1/21/2017 10:37	0.24				SR12	1/21/2017 10:37	0.26			
SR4	1/21/2017 10:57	0.24				SR12	1/21/2017 10:57	0.26			
SR4	1/21/2017 11:17	0.25				SR12	1/21/2017 11:17	0.26			
SR4	1/21/2017 11:37	0.26				SR12	1/21/2017 11:37	0.26			
SR4	1/21/2017 11:57	0.25				SR12	1/21/2017 11:57	0.26			
SR4	1/21/2017 12:17	0.25				SR12	1/21/2017 12:17	0.25			
SR4	1/21/2017 12:37	0.23				SR12	1/21/2017 12:37	0.24			
SR4	1/21/2017 12:57	0.26				SR12	1/21/2017 12:57	0.24			
SR4	1/21/2017 13:17	0.25				SR12	1/21/2017 13:17	0.23			
SR4	1/21/2017 13:37	0.25				SR12	1/21/2017 13:37	0.25			
SR4	1/21/2017 13:57	0.23				SR12	1/21/2017 13:57	0.23			
SR4	1/21/2017 14:17	0.23				SR12	1/21/2017 14:17	0.25			
SR4	1/21/2017 14:37	0.25				SR12	1/21/2017 14:37	0.24			
SR4	1/21/2017 14:57	0.22				SR12	1/21/2017 14:57	0.26			
SR4	1/21/2017 15:17	0.23				SR12	1/21/2017 15:17	0.25			
SR4	1/21/2017 15:37	0.24				SR12	1/21/2017 15:37	0.26			
SR4	1/21/2017 15:57	0.26				SR12	1/21/2017 15:57	0.24			
SR4	1/21/2017 16:17	0.26				SR12	1/21/2017 16:17	0.23			
SR4	1/21/2017 16:37	0.26				SR12	1/21/2017 16:37	0.23			
SR4	1/21/2017 16:57	0.23				SR12	1/21/2017 16:57	0.24			
SR4	1/21/2017 17:17	0.23				SR12	1/21/2017 17:17	0.26			
SR4	1/21/2017 17:37	0.23				SR12	1/21/2017 17:37	0.22			
SR4	1/21/2017 17:57	0.26				SR12	1/21/2017 17:57	0.26			
SR4	1/21/2017 18:17	0.22				SR12	1/21/2017 18:17	0.25			
SR4	1/21/2017 18:37	0.22				SR12	1/21/2017 18:37	0.24			
SR4	1/21/2017 18:57	0.26				SR12	1/21/2017 18:57	0.25			
SR4	1/21/2017 19:17	0.26				SR12	1/21/2017 19:17	0.26			
SR4	1/21/2017 19:37	0.23				SR12	1/21/2017 19:37	0.22			
SR4	1/21/2017 19:57	0.25				SR12	1/21/2017 19:57	0.24			
SR4	1/21/2017 20:17	0.23				SR12	1/21/2017 20:17	0.26			
SR4	1/21/2017 20:37	0.22				SR12	1/21/2017 20:37	0.24			
SR4	1/21/2017 20:57	0.22				SR12	1/21/2017 20:57	0.25			
SR4	1/21/2017 21:17	0.25				SR12	1/21/2017 21:17	0.25			
SR4	1/21/2017 21:37	0.26				SR12	1/21/2017 21:37	0.26			
SR4	1/21/2017 21:57	0.25				SR12	1/21/2017 21:57	0.23			
SR4	1/21/2017 22:17	0.22				SR12	1/21/2017 22:17	0.22			
SR4	1/21/2017 22:37	0.24				SR12	1/21/2017 22:37	0.23			
SR4	1/21/2017 22:57	0.23				SR12	1/21/2017 22:57	0.23			
SR4	1/21/2017 23:17	0.24				SR12	1/21/2017 23:17	0.26			
SR4	1/21/2017 23:37	0.25				SR12	1/21/2017 23:37	0.24			
SR4	1/21/2017 23:57	0.27				SR12	1/21/2017 23:57	0.26			

Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

Automatic Instrument calibration of NH3-N monitor was carried out during 5:57-6:37 at SR4 and SR12.  
SR10 monitoring station was under maintenance during 10:00-10:20.  
SR11 monitoring station was under maintenance during 10:50-11:10.



24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR4	1/22/2017 0:01	21.30	94.8	6.54	3.8	SR4	1/22/2017 6:01	21.25	87.6	6.04	5.8	SR4	1/22/2017 12:01	21.12	90.6	6.25	3.1	SR4	1/22/2017 18:01	21.02	94.8	6.54	6.0
SR4	1/22/2017 0:06	21.14	92.2	6.36	1.7	SR4	1/22/2017 6:06	21.02	89.6	6.18	1.7	SR4	1/22/2017 12:06	21.10	92.4	6.37	4.0	SR4	1/22/2017 18:06	21.19	86.4	5.96	3.9
SR4	1/22/2017 0:11	21.24	91.9	6.34	6.0	SR4	1/22/2017 6:11	21.10	88.0	6.07	3.6	SR4	1/22/2017 12:11	21.24	87.1	6.01	5.6	SR4	1/22/2017 18:11	21.28	95.4	6.58	3.5
SR4	1/22/2017 0:16	21.22	90.6	6.25	3.2	SR4	1/22/2017 6:16	21.08	86.7	5.98	4.6	SR4	1/22/2017 12:16	21.21	95.4	6.58	6.0	SR4	1/22/2017 18:16	21.21	94.0	6.48	1.5
SR4	1/22/2017 0:21	21.08	87.0	6.00	5.3	SR4	1/22/2017 6:21	21.29	91.6	6.32	5.5	SR4	1/22/2017 12:21	21.05	88.6	6.11	5.3	SR4	1/22/2017 18:21	21.14	86.7	5.98	2.6
SR4	1/22/2017 0:26	21.13	90.6	6.25	3.8	SR4	1/22/2017 6:26	21.27	90.3	6.23	5.4	SR4	1/22/2017 12:26	21.13	94.4	6.51	4.9	SR4	1/22/2017 18:26	21.20	92.7	6.39	2.7
SR4	1/22/2017 0:31	21.27	93.8	6.47	6.4	SR4	1/22/2017 6:31	21.09	88.9	6.13	5.9	SR4	1/22/2017 12:31	21.15	95.1	6.56	5.0	SR4	1/22/2017 18:31	21.27	94.1	6.49	6.5
SR4	1/22/2017 0:36	21.14	88.9	6.13	1.7	SR4	1/22/2017 6:36	21.12	94.8	6.54	4.3	SR4	1/22/2017 12:36	21.02	90.0	6.21	2.9	SR4	1/22/2017 18:36	21.22	92.2	6.36	2.8
SR4	1/22/2017 0:41	21.11	88.0	6.07	3.1	SR4	1/22/2017 6:41	21.24	89.5	6.17	2.7	SR4	1/22/2017 12:41	21.08	89.3	6.16	6.4	SR4	1/22/2017 18:41	21.15	90.0	6.21	6.6
SR4	1/22/2017 0:46	21.05	92.7	6.39	5.0	SR4	1/22/2017 6:46	21.11	92.9	6.41	6.5	SR4	1/22/2017 12:46	21.05	90.6	6.25	6.1	SR4	1/22/2017 18:46	21.14	88.5	6.10	6.3
SR4	1/22/2017 0:51	21.22	89.6	6.18	1.9	SR4	1/22/2017 6:51	21.18	94.7	6.53	3.8	SR4	1/22/2017 12:51	21.27	89.9	6.20	5.1	SR4	1/22/2017 18:51	21.09	91.1	6.28	6.0
SR4	1/22/2017 0:56	21.11	94.5	6.52	2.2	SR4	1/22/2017 6:56	21.06	94.0	6.48	5.0	SR4	1/22/2017 12:56	21.24	92.7	6.39	3.0	SR4	1/22/2017 18:56	21.15	87.4	6.03	2.9
SR4	1/22/2017 1:01	21.08	87.7	6.05	6.0	SR4	1/22/2017 7:01	21.24	95.0	6.55	4.6	SR4	1/22/2017 13:01	21.04	95.4	6.58	4.5	SR4	1/22/2017 19:01	21.27	94.0	6.48	3.5
SR4	1/22/2017 1:06	21.20	93.4	6.44	3.7	SR4	1/22/2017 7:06	21.02	90.6	6.25	6.4	SR4	1/22/2017 13:06	21.22	87.1	6.01	4.2	SR4	1/22/2017 19:06	21.12	94.4	6.51	1.5
SR4	1/22/2017 1:11	21.05	89.5	6.17	6.7	SR4	1/22/2017 7:11	21.20	95.7	6.60	7.0	SR4	1/22/2017 13:11	21.03	85.8	5.92	1.8	SR4	1/22/2017 19:11	21.15	89.6	6.18	5.4
SR4	1/22/2017 1:16	21.21	88.3	6.09	5.0	SR4	1/22/2017 7:16	21.11	95.3	6.57	2.7	SR4	1/22/2017 13:16	21.24	87.1	6.01	5.5	SR4	1/22/2017 19:16	21.29	89.6	6.18	2.0
SR4	1/22/2017 1:21	21.13	94.8	6.54	2.6	SR4	1/22/2017 7:21	21.19	92.1	6.35	5.5	SR4	1/22/2017 13:21	21.17	86.9	5.99	6.4	SR4	1/22/2017 19:21	21.03	91.8	6.33	4.6
SR4	1/22/2017 1:26	21.20	94.3	6.50	4.9	SR4	1/22/2017 7:26	21.11	88.9	6.13	3.5	SR4	1/22/2017 13:26	21.10	93.2	6.43	6.8	SR4	1/22/2017 19:26	21.17	88.2	6.08	2.2
SR4	1/22/2017 1:31	21.07	90.2	6.22	3.4	SR4	1/22/2017 7:31	21.05	86.1	5.94	6.3	SR4	1/22/2017 13:31	21.22	95.1	6.56	5.7	SR4	1/22/2017 19:31	21.30	95.3	6.57	6.2
SR4	1/22/2017 1:36	21.06	89.0	6.14	2.4	SR4	1/22/2017 7:36	21.27	94.7	6.53	4.9	SR4	1/22/2017 13:36	21.16	90.2	6.22	4.7	SR4	1/22/2017 19:36	21.11	93.1	6.42	4.4
SR4	1/22/2017 1:41	21.26	94.5	6.52	4.1	SR4	1/22/2017 7:41	21.08	90.6	6.25	3.9	SR4	1/22/2017 13:41	21.17	88.3	6.09	4.0	SR4	1/22/2017 19:41	21.14	87.3	6.02	4.7
SR4	1/22/2017 1:46	21.22	90.0	6.21	5.8	SR4	1/22/2017 7:46	21.08	90.0	6.21	4.0	SR4	1/22/2017 13:46	21.29	95.1	6.56	2.5	SR4	1/22/2017 19:46	21.20	90.9	6.27	1.6
SR4	1/22/2017 1:51	21.17	93.5	6.45	7.0	SR4	1/22/2017 7:51	21.08	91.1	6.28	5.3	SR4	1/22/2017 13:51	21.28	87.9	6.06	1.9	SR4	1/22/2017 19:51	21.16	92.4	6.37	4.8
SR4	1/22/2017 1:56	21.24	95.3	6.57	2.4	SR4	1/22/2017 7:56	21.19	93.1	6.42	4.8	SR4	1/22/2017 13:56	21.28	93.5	6.45	2.8	SR4	1/22/2017 19:56	21.23	95.0	6.55	5.0
SR4	1/22/2017 2:01	21.12	87.1	6.01	3.1	SR4	1/22/2017 8:01	21.26	87.0	6.00	2.8	SR4	1/22/2017 14:01	21.09	92.5	6.38	4.0	SR4	1/22/2017 20:01	21.17	95.6	6.59	1.8
SR4	1/22/2017 2:06	21.25	86.4	5.96	4.9	SR4	1/22/2017 8:06	21.23	88.9	6.13	6.0	SR4	1/22/2017 14:06	21.09	94.1	6.49	5.4	SR4	1/22/2017 20:06	21.12	89.2	6.15	5.3
SR4	1/22/2017 2:11	21.02	95.4	6.58	3.7	SR4	1/22/2017 8:11	21.17	88.7	6.12	4.9	SR4	1/22/2017 14:11	21.05	94.5	6.52	5.1	SR4	1/22/2017 20:11	21.17	86.9	5.99	4.8
SR4	1/22/2017 2:16	21.25	94.7	6.53	2.8	SR4	1/22/2017 8:16	21.23	90.0	6.21	4.2	SR4	1/22/2017 14:16	21.30	94.0	6.48	6.3	SR4	1/22/2017 20:16	21.17	88.7	6.12	4.2
SR4	1/22/2017 2:21	21.03	93.4	6.44	7.0	SR4	1/22/2017 8:21	21.04	89.0	6.14	3.5	SR4	1/22/2017 14:21	21.11	95.0	6.55	3.3	SR4	1/22/2017 20:21	21.25	88.2	6.08	5.8
SR4	1/22/2017 2:26	21.27	91.4	6.30	6.8	SR4	1/22/2017 8:26	21.10	94.8	6.54	1.6	SR4	1/22/2017 14:26	21.28	89.6	6.18	1.7	SR4	1/22/2017 20:26	21.07	91.6	6.32	3.3
SR4	1/22/2017 2:31	21.16	87.6	6.04	4.4	SR4	1/22/2017 8:31	21.24	89.2	6.15	4.0	SR4	1/22/2017 14:31	21.24	94.3	6.50	3.3	SR4	1/22/2017 20:31	21.23	88.2	6.08	4.8
SR4	1/22/2017 2:36	21.10	95.6	6.59	4.1	SR4	1/22/2017 8:36	21.09	85.8	5.92	3.4	SR4	1/22/2017 14:36	21.07	93.8	6.47	2.5	SR4	1/22/2017 20:36	21.29	95.3	6.57	6.6
SR4	1/22/2017 2:41	21.04	87.6	6.04	2.5	SR4	1/22/2017 8:41	21.30	87.0	6.00	4.6	SR4	1/22/2017 14:41	21.30	90.3	6.23	6.8	SR4	1/22/2017 20:41	21.19	86.3	5.95	1.6
SR4	1/22/2017 2:46	21.28	86.0	5.93	5.5	SR4	1/22/2017 8:46	21.30	88.9	6.13	2.9	SR4	1/22/2017 14:46	21.20	92.9	6.41	3.2	SR4	1/22/2017 20:46	21.24	86.4	5.96	5.0
SR4	1/22/2017 2:51	21.10	92.1	6.35	2.5	SR4	1/22/2017 8:51	21.11	95.7	6.60	6.1	SR4	1/22/2017 14:51	21.30	94.3	6.50	4.5	SR4	1/22/2017 20:51	21.16	89.0	6.14	1.7
SR4	1/22/2017 2:56	21.29	92.2	6.36	2.5	SR4	1/22/2017 8:56	21.05	85.8	5.92	4.6	SR4	1/22/2017 14:56	21.02	87.1	6.01	4.8	SR4	1/22/2017 20:56	21.05	90.5	6.24	3.8
SR4	1/22/2017 3:01	21.27	87.3	6.02	3.5	SR4	1/22/2017 9:01	21.13	91.9	6.34	2.7	SR4	1/22/2017 15:01	21.30	88.7	6.12	6.2	SR4	1/22/2017 21:01	21.28	86.9	5.99	2.1
SR4	1/22/2017 3:06	21.29	94.8	6.54	3.0	SR4	1/22/2017 9:06	21.13	86.9	5.99	2.4	SR4	1/22/2017 15:06	21.12	86.6	5.97	3.6	SR4	1/22/2017 21:06	21.16	88.5	6.10	2.0
SR4	1/22/2017 3:11	21.15	94.1	6.49	4.1	SR4	1/22/2017 9:11	21.20	90.8	6.26	3.2	SR4	1/22/2017 15:11	21.02	91.2	6.29	3.9	SR4	1/22/2017 21:11	21.25	86.6	5.97	6.6
SR4	1/22/2017 3:16	21.11	90.8	6.26	2.4	SR4	1/22/2017 9:16	21.27	92.4	6.37	5.4	SR4	1/22/2017 15:16	21.27	88.0	6.07	3.2	SR4	1/22/2017 21:16	21.09	87.0	6.00	5.7
SR4	1/22/2017 3:21	21.15	88.3	6.09	5.0	SR4	1/22/2017 9:21	21.30	93.1	6.42	3.1	SR4	1/22/2017 15:21	21.15	88.5	6.10	2.4	SR4	1/22/2017 21:21	21.05	89.9	6.20	6.0
SR4	1/22/2017 3:26	21.09	88.6	6.11	4.0	SR4	1/22/2017 9:26	21.27	92.9	6.41	4.6	SR4	1/22/2017 15:26	21.19	86.9	5.99	2.2	SR4	1/22/2017 21:26	21.05	91.8	6.33	1.9
SR4	1/22/2017 3:31	21.13	86.0	5.93	4.6	SR4	1/22/2017 9:31	21.21	87.0	6.00	3.4	SR4	1/22/2017 15:31	21.05	87.3	6.02	2.5	SR4	1/22/2017 21:31	21.25	86.6	5.97	5.2
SR4	1/22/2017 3:36	21.06	86.0	5.93	1.7	SR4	1/22/2017 9:36	21.13	89.8	6.19	6.8	SR4	1/22/2017 15:36	21.03	87.4	6.03	6.1	SR4	1/22/2017 21:36	21.09	86.1	5.94	2.4
SR4	1/22/2017 3:41	21.18	93.4	6.44	5.8	SR4	1/22/2017 9:41	21.13	87.0	6.00	4.3	SR4	1/22/2017 15:41	21.24	87.6	6.04	3.5	SR4	1/22/2017 21:41	21.04	92.5	6.38	2.7
SR4	1/22/2017 3:46	21.19	94.7	6.53	6.6	SR4	1/22/2017 9:46	21.06	86.6	5.97	3.1	SR4	1/22/2017 15:46	21.19	95.0	6.55	5.8	SR4	1/22/2017 21:46	21.17	90.0	6.21	6.9
SR4	1/22/2017 3:51	21.07	92.5	6.38	4.2	SR4	1/22/2017 9:51	21.29	90.3	6.23	4.4	SR4	1/22/2017 15:51	21.13	89.8	6.19	4.8	SR4	1/22/2017 21:51	21.02	94.8	6.54	4.4
SR4	1/22/2017 3:56	21.08	89.5	6.17	6.5	SR4	1/22/2017 9:56	21.															

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR5	1/22/2017 0:00	21.48	113.2	7.86	2.2	SR5	1/22/2017 6:00	21.61	114.8	7.97	3.3	SR5	1/22/2017 12:00	21.66	110.4	7.67	4.1	SR5	1/22/2017 18:00	21.42	113.9	7.91	1.4
SR5	1/22/2017 0:05	21.38	110.0	7.64	3.6	SR5	1/22/2017 6:05	21.56	112.8	7.83	4.2	SR5	1/22/2017 12:05	21.68	116.1	8.06	1.9	SR5	1/22/2017 18:05	21.54	116.5	8.09	2.9
SR5	1/22/2017 0:10	21.60	114.3	7.94	0.7	SR5	1/22/2017 6:10	21.60	110.3	7.66	3.6	SR5	1/22/2017 12:10	21.66	106.6	7.40	2.4	SR5	1/22/2017 18:10	21.45	112.3	7.80	3.0
SR5	1/22/2017 0:15	21.68	111.2	7.72	4.0	SR5	1/22/2017 6:15	21.58	112.2	7.79	0.9	SR5	1/22/2017 12:15	21.53	107.0	7.43	1.8	SR5	1/22/2017 18:15	21.37	113.8	7.90	1.1
SR5	1/22/2017 0:20	21.66	108.0	7.50	4.2	SR5	1/22/2017 6:20	21.63	114.2	7.93	1.2	SR5	1/22/2017 12:20	21.55	113.9	7.91	2.0	SR5	1/22/2017 18:20	21.48	116.4	8.08	3.2
SR5	1/22/2017 0:25	21.54	115.2	8.00	3.0	SR5	1/22/2017 6:25	21.61	112.9	7.84	3.6	SR5	1/22/2017 12:25	21.44	107.3	7.45	1.7	SR5	1/22/2017 18:25	21.45	116.9	8.12	4.5
SR5	1/22/2017 0:30	21.67	110.2	7.65	1.3	SR5	1/22/2017 6:30	21.38	106.7	7.41	1.2	SR5	1/22/2017 12:30	21.54	116.8	8.11	1.9	SR5	1/22/2017 18:30	21.52	117.9	8.19	2.6
SR5	1/22/2017 0:35	21.66	111.6	7.75	1.4	SR5	1/22/2017 6:35	21.66	112.6	7.82	3.6	SR5	1/22/2017 12:35	21.46	111.2	7.72	3.0	SR5	1/22/2017 18:35	21.49	108.1	7.51	4.0
SR5	1/22/2017 0:40	21.35	108.4	7.53	4.1	SR5	1/22/2017 6:40	21.69	107.4	7.46	2.6	SR5	1/22/2017 12:40	21.70	116.8	8.11	1.9	SR5	1/22/2017 18:40	21.64	107.3	7.45	1.4
SR5	1/22/2017 0:45	21.45	109.0	7.57	3.8	SR5	1/22/2017 6:45	21.50	112.8	7.83	2.0	SR5	1/22/2017 12:45	21.50	110.9	7.70	4.2	SR5	1/22/2017 18:45	21.50	116.5	8.09	2.1
SR5	1/22/2017 0:50	21.36	117.9	8.19	4.4	SR5	1/22/2017 6:50	21.55	108.4	7.53	2.0	SR5	1/22/2017 12:50	21.37	110.3	7.66	3.5	SR5	1/22/2017 18:50	21.55	107.1	7.44	3.5
SR5	1/22/2017 0:55	21.51	117.4	8.15	3.7	SR5	1/22/2017 6:55	21.35	113.9	7.91	4.5	SR5	1/22/2017 12:55	21.70	111.9	7.77	1.4	SR5	1/22/2017 18:55	21.70	116.5	8.09	4.0
SR5	1/22/2017 1:00	21.41	107.7	7.48	1.2	SR5	1/22/2017 7:00	21.64	116.4	8.08	4.3	SR5	1/22/2017 13:00	21.47	114.3	7.94	2.8	SR5	1/22/2017 19:00	21.39	116.8	8.11	2.3
SR5	1/22/2017 1:05	21.46	107.6	7.47	1.2	SR5	1/22/2017 7:05	21.36	108.7	7.55	0.7	SR5	1/22/2017 13:05	21.55	106.6	7.40	3.8	SR5	1/22/2017 19:05	21.62	115.9	8.05	1.8
SR5	1/22/2017 1:10	21.65	117.1	8.13	4.3	SR5	1/22/2017 7:10	21.49	109.7	7.62	2.9	SR5	1/22/2017 13:10	21.55	110.6	7.68	4.5	SR5	1/22/2017 19:10	21.61	110.2	7.65	4.4
SR5	1/22/2017 1:15	21.49	107.4	7.46	1.7	SR5	1/22/2017 7:15	21.55	108.9	7.56	1.2	SR5	1/22/2017 13:15	21.57	111.3	7.73	2.7	SR5	1/22/2017 19:15	21.36	110.6	7.68	1.4
SR5	1/22/2017 1:20	21.55	112.8	7.83	2.0	SR5	1/22/2017 7:20	21.52	109.9	7.63	2.6	SR5	1/22/2017 13:20	21.45	114.9	7.98	4.4	SR5	1/22/2017 19:20	21.65	110.2	7.65	1.9
SR5	1/22/2017 1:25	21.46	110.6	7.68	1.3	SR5	1/22/2017 7:25	21.47	113.3	7.87	1.4	SR5	1/22/2017 13:25	21.67	108.4	7.53	0.8	SR5	1/22/2017 19:25	21.69	108.4	7.53	1.9
SR5	1/22/2017 1:30	21.60	115.8	8.04	1.3	SR5	1/22/2017 7:30	21.51	116.9	8.12	4.3	SR5	1/22/2017 13:30	21.65	107.4	7.46	3.3	SR5	1/22/2017 19:30	21.62	108.4	7.53	1.8
SR5	1/22/2017 1:35	21.43	117.8	8.18	1.7	SR5	1/22/2017 7:35	21.40	110.6	7.68	3.3	SR5	1/22/2017 13:35	21.62	116.6	8.10	0.9	SR5	1/22/2017 19:35	21.37	113.8	7.90	2.9
SR5	1/22/2017 1:40	21.61	111.2	7.72	1.8	SR5	1/22/2017 7:40	21.48	114.9	7.98	3.0	SR5	1/22/2017 13:40	21.53	107.4	7.46	1.9	SR5	1/22/2017 19:40	21.35	109.0	7.57	1.6
SR5	1/22/2017 1:45	21.35	116.5	8.09	3.7	SR5	1/22/2017 7:45	21.40	108.3	7.52	4.2	SR5	1/22/2017 13:45	21.46	106.7	7.41	1.7	SR5	1/22/2017 19:45	21.61	107.4	7.46	2.8
SR5	1/22/2017 1:50	21.49	115.5	8.02	3.6	SR5	1/22/2017 7:50	21.69	115.1	7.99	4.4	SR5	1/22/2017 13:50	21.60	115.5	8.02	1.7	SR5	1/22/2017 19:50	21.47	106.7	7.41	0.8
SR5	1/22/2017 1:55	21.43	108.1	7.51	4.4	SR5	1/22/2017 7:55	21.60	111.3	7.73	3.1	SR5	1/22/2017 13:55	21.62	116.4	8.08	1.0	SR5	1/22/2017 19:55	21.35	113.8	7.90	0.8
SR5	1/22/2017 2:00	21.49	109.7	7.62	3.3	SR5	1/22/2017 8:00	21.52	107.4	7.46	1.0	SR5	1/22/2017 14:00	21.65	108.3	7.52	1.6	SR5	1/22/2017 20:00	21.65	106.7	7.41	3.6
SR5	1/22/2017 2:05	21.38	112.6	7.82	3.6	SR5	1/22/2017 8:05	21.53	114.0	7.92	1.9	SR5	1/22/2017 14:05	21.53	110.2	7.65	2.9	SR5	1/22/2017 20:05	21.67	112.5	7.81	4.3
SR5	1/22/2017 2:10	21.59	110.0	7.64	1.6	SR5	1/22/2017 8:10	21.57	117.1	8.13	4.1	SR5	1/22/2017 14:10	21.69	111.9	7.77	4.2	SR5	1/22/2017 20:10	21.48	113.9	7.91	0.7
SR5	1/22/2017 2:15	21.52	106.6	7.40	1.3	SR5	1/22/2017 8:15	21.48	109.3	7.59	1.0	SR5	1/22/2017 14:15	21.67	112.6	7.82	3.9	SR5	1/22/2017 20:15	21.39	115.3	8.01	2.3
SR5	1/22/2017 2:20	21.63	115.6	8.03	4.0	SR5	1/22/2017 8:20	21.51	110.0	7.64	3.7	SR5	1/22/2017 14:20	21.61	113.3	7.87	2.3	SR5	1/22/2017 20:20	21.38	108.0	7.50	1.8
SR5	1/22/2017 2:25	21.55	117.9	8.19	2.1	SR5	1/22/2017 8:25	21.51	115.6	8.03	2.2	SR5	1/22/2017 14:25	21.63	113.6	7.89	2.9	SR5	1/22/2017 20:25	21.45	110.6	7.68	1.6
SR5	1/22/2017 2:30	21.46	111.5	7.74	3.2	SR5	1/22/2017 8:30	21.53	114.2	7.93	0.7	SR5	1/22/2017 14:30	21.48	114.3	7.94	3.3	SR5	1/22/2017 20:30	21.58	115.9	8.05	2.6
SR5	1/22/2017 2:35	21.55	110.2	7.65	3.2	SR5	1/22/2017 8:35	21.62	114.8	7.97	2.1	SR5	1/22/2017 14:35	21.68	112.9	7.84	2.8	SR5	1/22/2017 20:35	21.45	110.3	7.66	1.2
SR5	1/22/2017 2:40	21.41	112.6	7.82	3.3	SR5	1/22/2017 8:40	21.45	110.9	7.70	1.2	SR5	1/22/2017 14:40	21.35	111.9	7.77	1.4	SR5	1/22/2017 20:40	21.44	107.7	7.48	2.6
SR5	1/22/2017 2:45	21.52	117.1	8.13	0.8	SR5	1/22/2017 8:45	21.38	106.8	7.42	2.4	SR5	1/22/2017 14:45	21.62	106.7	7.41	2.5	SR5	1/22/2017 20:45	21.52	115.6	8.03	1.0
SR5	1/22/2017 2:50	21.70	109.3	7.59	4.5	SR5	1/22/2017 8:50	21.68	109.7	7.62	4.2	SR5	1/22/2017 14:50	21.57	115.6	8.03	3.3	SR5	1/22/2017 20:50	21.44	108.0	7.50	3.9
SR5	1/22/2017 2:55	21.62	107.4	7.46	1.4	SR5	1/22/2017 8:55	21.50	110.4	7.67	1.5	SR5	1/22/2017 14:55	21.51	106.6	7.40	0.9	SR5	1/22/2017 20:55	21.41	113.6	7.89	3.6
SR5	1/22/2017 3:00	21.35	116.9	8.12	2.9	SR5	1/22/2017 9:00	21.56	110.0	7.64	2.7	SR5	1/22/2017 15:00	21.55	107.0	7.43	3.9	SR5	1/22/2017 21:00	21.52	116.8	8.11	1.9
SR5	1/22/2017 3:05	21.35	106.7	7.41	4.3	SR5	1/22/2017 9:05	21.45	107.9	7.49	1.5	SR5	1/22/2017 15:05	21.43	117.9	8.19	1.6	SR5	1/22/2017 21:05	21.59	108.1	7.51	2.3
SR5	1/22/2017 3:10	21.67	114.3	7.94	3.2	SR5	1/22/2017 9:10	21.55	114.8	7.97	2.7	SR5	1/22/2017 15:10	21.45	117.4	8.15	3.3	SR5	1/22/2017 21:10	21.36	111.9	7.77	1.1
SR5	1/22/2017 3:15	21.69	111.3	7.73	3.9	SR5	1/22/2017 9:15	21.55	111.6	7.75	1.4	SR5	1/22/2017 15:15	21.67	110.6	7.68	1.3	SR5	1/22/2017 21:15	21.55	112.5	7.81	3.7
SR5	1/22/2017 3:20	21.61	114.9	7.98	0.8	SR5	1/22/2017 9:20	21.40	116.6	8.10	2.7	SR5	1/22/2017 15:20	21.55	111.0	7.71	2.1	SR5	1/22/2017 21:20	21.52	109.4	7.60	3.8
SR5	1/22/2017 3:25	21.51	107.7	7.48	1.9	SR5	1/22/2017 9:25	21.67	109.2	7.58	1.8	SR5	1/22/2017 15:25	21.65	108.1	7.51	2.8	SR5	1/22/2017 21:25	21.40	116.9	8.12	1.0
SR5	1/22/2017 3:30	21.66	112.8	7.83	3.1	SR5	1/22/2017 9:30	21.68	108.9	7.56	2.8	SR5	1/22/2017 15:30	21.37	116.1	8.06	2.0	SR5	1/22/2017 21:30	21.45	112.3	7.80	3.9
SR5	1/22/2017 3:35	21.44	109.0	7.57	3.5	SR5	1/22/2017 9:35	21.68	115.3	8.01	2.1	SR5	1/22/2017 15:35	21.66	107.3	7.45	0.9	SR5	1/22/2017 21:35	21.57	112.6	7.82	2.6
SR5	1/22/2017 3:40	21.60	111.9	7.77	4.4	SR5	1/22/2017 9:40	21.56	110.7	7.69	2.6	SR5	1/22/2017 15:40	21.45	114.2	7.93	3.5	SR5	1/22/2017 21:40	21.70	115.5	8.02	0.7
SR5	1/22/2017 3:45	21.43	114.0	7.92	2.0	SR5	1/22/2017 9:45	21.35	115.2	8.00	1.8	SR5	1/22/2017 15:45	21.61	115.2	8.00	2.3	SR5	1/22/2017 21:45	21.35	112.5	7.81	4.0
SR5	1/22/2017 3:50	21.46	110.4	7.67	4.0	SR5	1/22/2017 9:50	21.62	114.2	7.93	1.5	SR5	1/22/2017 15:50	21.38									

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR9	1/22/2017 0:00	21.42	109.7	7.62	1.5	SR9	1/22/2017 6:00	21.34	111.6	7.75	2.1	SR9	1/22/2017 12:00	21.48	110.3	7.66	0.9	SR9	1/22/2017 18:00	21.36	107.6	7.47	1.5
SR9	1/22/2017 0:05	21.57	113.8	7.90	1.8	SR9	1/22/2017 6:05	21.43	113.9	7.91	1.4	SR9	1/22/2017 12:05	21.50	111.7	7.76	1.9	SR9	1/22/2017 18:05	21.33	112.5	7.81	1.6
SR9	1/22/2017 0:10	21.54	110.0	7.64	2.2	SR9	1/22/2017 6:10	21.47	113.8	7.90	1.2	SR9	1/22/2017 12:10	21.50	107.3	7.45	0.6	SR9	1/22/2017 18:10	21.35	114.0	7.92	0.3
SR9	1/22/2017 0:15	21.44	114.6	7.96	1.0	SR9	1/22/2017 6:15	21.42	111.3	7.73	1.9	SR9	1/22/2017 12:15	21.53	111.2	7.72	1.8	SR9	1/22/2017 18:15	21.35	113.9	7.91	0.4
SR9	1/22/2017 0:20	21.57	107.6	7.47	1.4	SR9	1/22/2017 6:20	21.53	107.9	7.49	2.0	SR9	1/22/2017 12:20	21.57	111.2	7.72	2.1	SR9	1/22/2017 18:20	21.55	110.7	7.69	0.9
SR9	1/22/2017 0:25	21.52	113.5	7.88	2.4	SR9	1/22/2017 6:25	21.50	114.2	7.93	2.8	SR9	1/22/2017 12:25	21.41	109.7	7.62	1.7	SR9	1/22/2017 18:25	21.46	110.9	7.70	2.6
SR9	1/22/2017 0:30	21.55	107.7	7.48	0.8	SR9	1/22/2017 6:30	21.47	109.7	7.62	0.6	SR9	1/22/2017 12:30	21.39	110.9	7.70	1.9	SR9	1/22/2017 18:30	21.42	113.9	7.91	2.9
SR9	1/22/2017 0:35	21.34	113.5	7.88	2.8	SR9	1/22/2017 6:35	21.41	114.5	7.95	1.5	SR9	1/22/2017 12:35	21.37	112.0	7.78	2.4	SR9	1/22/2017 18:35	21.47	112.9	7.84	1.8
SR9	1/22/2017 0:40	21.39	113.5	7.88	1.0	SR9	1/22/2017 6:40	21.34	109.4	7.60	0.3	SR9	1/22/2017 12:40	21.33	107.3	7.45	2.5	SR9	1/22/2017 18:40	21.38	111.6	7.75	2.2
SR9	1/22/2017 0:45	21.53	111.0	7.71	0.8	SR9	1/22/2017 6:45	21.52	110.7	7.69	2.1	SR9	1/22/2017 12:45	21.47	107.6	7.47	2.7	SR9	1/22/2017 18:45	21.39	109.3	7.59	2.1
SR9	1/22/2017 0:50	21.48	110.7	7.69	2.6	SR9	1/22/2017 6:50	21.36	107.0	7.43	0.7	SR9	1/22/2017 12:50	21.37	110.4	7.67	1.9	SR9	1/22/2017 18:50	21.38	111.0	7.71	1.8
SR9	1/22/2017 0:55	21.40	114.2	7.93	2.4	SR9	1/22/2017 6:55	21.41	107.0	7.43	0.4	SR9	1/22/2017 12:55	21.39	111.0	7.71	1.5	SR9	1/22/2017 18:55	21.45	108.4	7.53	0.5
SR9	1/22/2017 1:00	21.55	109.0	7.57	2.5	SR9	1/22/2017 7:00	21.48	107.9	7.49	0.7	SR9	1/22/2017 13:00	21.37	115.1	7.99	0.4	SR9	1/22/2017 19:00	21.54	108.7	7.55	1.3
SR9	1/22/2017 1:05	21.41	115.1	7.99	0.9	SR9	1/22/2017 7:05	21.44	109.3	7.59	2.6	SR9	1/22/2017 13:05	21.51	111.0	7.71	0.7	SR9	1/22/2017 19:05	21.38	109.7	7.62	2.0
SR9	1/22/2017 1:10	21.46	108.6	7.54	0.6	SR9	1/22/2017 7:10	21.47	108.1	7.51	2.4	SR9	1/22/2017 13:10	21.47	113.8	7.90	2.7	SR9	1/22/2017 19:10	21.41	114.3	7.94	1.8
SR9	1/22/2017 1:15	21.49	107.0	7.43	1.0	SR9	1/22/2017 7:15	21.41	108.4	7.53	2.1	SR9	1/22/2017 13:15	21.36	107.3	7.45	1.3	SR9	1/22/2017 19:15	21.50	108.4	7.53	0.5
SR9	1/22/2017 1:20	21.50	110.9	7.70	0.9	SR9	1/22/2017 7:20	21.39	113.5	7.88	2.1	SR9	1/22/2017 13:20	21.36	109.2	7.58	2.0	SR9	1/22/2017 19:20	21.46	109.3	7.59	0.5
SR9	1/22/2017 1:25	21.38	111.2	7.72	1.8	SR9	1/22/2017 7:25	21.38	110.9	7.70	0.6	SR9	1/22/2017 13:25	21.46	107.4	7.46	0.3	SR9	1/22/2017 19:25	21.33	107.1	7.44	1.5
SR9	1/22/2017 1:30	21.36	113.9	7.91	2.2	SR9	1/22/2017 7:30	21.55	107.0	7.43	2.8	SR9	1/22/2017 13:30	21.37	107.7	7.48	1.6	SR9	1/22/2017 19:30	21.45	109.7	7.62	2.2
SR9	1/22/2017 1:35	21.51	111.3	7.73	1.3	SR9	1/22/2017 7:35	21.36	108.7	7.55	2.2	SR9	1/22/2017 13:35	21.48	110.4	7.67	1.1	SR9	1/22/2017 19:35	21.46	108.3	7.52	2.9
SR9	1/22/2017 1:40	21.56	115.1	7.99	1.5	SR9	1/22/2017 7:40	21.52	109.7	7.62	1.3	SR9	1/22/2017 13:40	21.52	108.6	7.54	1.1	SR9	1/22/2017 19:40	21.33	113.9	7.91	2.6
SR9	1/22/2017 1:45	21.56	109.2	7.58	2.3	SR9	1/22/2017 7:45	21.53	110.7	7.69	0.3	SR9	1/22/2017 13:45	21.52	107.1	7.44	0.8	SR9	1/22/2017 19:45	21.57	108.9	7.56	2.0
SR9	1/22/2017 1:50	21.34	111.6	7.75	1.1	SR9	1/22/2017 7:50	21.51	112.9	7.84	1.7	SR9	1/22/2017 13:50	21.53	107.3	7.45	2.7	SR9	1/22/2017 19:50	21.34	108.4	7.53	1.5
SR9	1/22/2017 1:55	21.35	109.9	7.63	0.6	SR9	1/22/2017 7:55	21.43	110.7	7.69	0.9	SR9	1/22/2017 13:55	21.40	111.3	7.73	1.4	SR9	1/22/2017 19:55	21.54	107.6	7.47	2.1
SR9	1/22/2017 2:00	21.35	109.0	7.57	1.9	SR9	1/22/2017 8:00	21.54	113.9	7.91	1.6	SR9	1/22/2017 14:00	21.42	113.5	7.88	0.3	SR9	1/22/2017 20:00	21.34	112.8	7.83	1.9
SR9	1/22/2017 2:05	21.52	107.0	7.43	2.2	SR9	1/22/2017 8:05	21.56	110.3	7.66	2.2	SR9	1/22/2017 14:05	21.54	109.6	7.61	0.6	SR9	1/22/2017 20:05	21.53	113.9	7.91	1.0
SR9	1/22/2017 2:10	21.53	112.6	7.82	2.1	SR9	1/22/2017 8:10	21.38	113.0	7.85	1.6	SR9	1/22/2017 14:10	21.48	114.0	7.92	1.5	SR9	1/22/2017 20:10	21.35	111.5	7.74	1.3
SR9	1/22/2017 2:15	21.46	112.2	7.79	0.3	SR9	1/22/2017 8:15	21.48	114.8	7.97	1.5	SR9	1/22/2017 14:15	21.44	111.3	7.73	1.5	SR9	1/22/2017 20:15	21.41	114.5	7.95	2.8
SR9	1/22/2017 2:20	21.34	107.9	7.49	1.0	SR9	1/22/2017 8:20	21.42	112.5	7.81	0.4	SR9	1/22/2017 14:20	21.46	112.8	7.83	0.7	SR9	1/22/2017 20:20	21.48	111.0	7.71	2.5
SR9	1/22/2017 2:25	21.54	108.1	7.51	0.3	SR9	1/22/2017 8:25	21.57	114.3	7.94	1.6	SR9	1/22/2017 14:25	21.33	111.9	7.77	0.7	SR9	1/22/2017 20:25	21.55	112.2	7.79	2.2
SR9	1/22/2017 2:30	21.56	112.3	7.80	2.5	SR9	1/22/2017 8:30	21.46	108.7	7.55	2.5	SR9	1/22/2017 14:30	21.38	110.2	7.65	0.9	SR9	1/22/2017 20:30	21.45	107.1	7.44	1.2
SR9	1/22/2017 2:35	21.33	114.5	7.95	2.1	SR9	1/22/2017 8:35	21.44	114.5	7.95	2.8	SR9	1/22/2017 14:35	21.39	113.9	7.91	2.4	SR9	1/22/2017 20:35	21.34	110.7	7.69	0.6
SR9	1/22/2017 2:40	21.50	109.2	7.58	1.9	SR9	1/22/2017 8:40	21.45	114.6	7.96	0.3	SR9	1/22/2017 14:40	21.36	114.2	7.93	1.3	SR9	1/22/2017 20:40	21.36	114.9	7.98	2.7
SR9	1/22/2017 2:45	21.46	112.3	7.80	1.5	SR9	1/22/2017 8:45	21.40	110.2	7.65	2.1	SR9	1/22/2017 14:45	21.41	107.9	7.49	2.2	SR9	1/22/2017 20:45	21.47	109.6	7.61	0.3
SR9	1/22/2017 2:50	21.56	108.7	7.55	1.2	SR9	1/22/2017 8:50	21.43	113.9	7.91	1.3	SR9	1/22/2017 14:50	21.39	107.3	7.45	1.5	SR9	1/22/2017 20:50	21.40	108.4	7.53	1.8
SR9	1/22/2017 2:55	21.42	109.4	7.60	2.7	SR9	1/22/2017 8:55	21.43	112.3	7.80	0.4	SR9	1/22/2017 14:55	21.52	108.4	7.53	2.1	SR9	1/22/2017 20:55	21.37	113.0	7.85	0.7
SR9	1/22/2017 3:00	21.52	113.8	7.90	1.3	SR9	1/22/2017 9:00	21.53	113.9	7.91	2.5	SR9	1/22/2017 15:00	21.54	108.1	7.51	0.8	SR9	1/22/2017 21:00	21.35	107.4	7.46	1.3
SR9	1/22/2017 3:05	21.52	108.6	7.54	0.4	SR9	1/22/2017 9:05	21.37	111.9	7.77	2.1	SR9	1/22/2017 15:05	21.53	109.6	7.61	0.9	SR9	1/22/2017 21:05	21.46	111.0	7.71	0.3
SR9	1/22/2017 3:10	21.37	111.0	7.71	2.4	SR9	1/22/2017 9:10	21.50	110.4	7.67	1.9	SR9	1/22/2017 15:10	21.49	112.9	7.84	1.5	SR9	1/22/2017 21:10	21.52	113.9	7.91	1.0
SR9	1/22/2017 3:15	21.54	110.9	7.70	0.3	SR9	1/22/2017 9:15	21.42	109.4	7.60	1.4	SR9	1/22/2017 15:15	21.35	112.3	7.80	2.0	SR9	1/22/2017 21:15	21.42	108.9	7.56	0.6
SR9	1/22/2017 3:20	21.38	107.3	7.45	0.3	SR9	1/22/2017 9:20	21.42	112.0	7.78	0.4	SR9	1/22/2017 15:20	21.54	110.4	7.67	1.6	SR9	1/22/2017 21:20	21.51	112.0	7.78	0.9
SR9	1/22/2017 3:25	21.44	114.9	7.98	2.8	SR9	1/22/2017 9:25	21.38	109.2	7.58	2.2	SR9	1/22/2017 15:25	21.51	110.0	7.64	1.5	SR9	1/22/2017 21:25	21.36	107.4	7.46	2.7
SR9	1/22/2017 3:30	21.56	111.3	7.73	2.5	SR9	1/22/2017 9:30	21.34	113.2	7.86	0.6	SR9	1/22/2017 15:30	21.36	111.6	7.75	1.9	SR9	1/22/2017 21:30	21.51	107.4	7.46	1.4
SR9	1/22/2017 3:35	21.45	114.2	7.93	0.5	SR9	1/22/2017 9:35	21.43	113.2	7.86	1.2	SR9	1/22/2017 15:35	21.43	109.3	7.59	1.9	SR9	1/22/2017 21:35	21.42	108.7	7.55	2.8
SR9	1/22/2017 3:40	21.51	110.6	7.68	0.7	SR9	1/22/2017 9:40	21.46	111.0	7.71	2.3	SR9	1/22/2017 15:40	21.52	108.4	7.53	0.7	SR9	1/22/2017 21:40	21.55	110.7	7.69	1.6
SR9	1/22/2017 3:45	21.39	110.6	7.68	1.2	SR9	1/22/2017 9:45	21.53	108.0	7.50	2.2	SR9	1/22/2017 15:45	21.34	111.9	7.77	1.3	SR9	1/22/2017 21:45	21.45	112.0	7.78	2.7
SR9	1/22/2017 3:50	21.37	111.9	7.77	0.3	SR9	1/22/2017 9:50	21.37	112.6	7.82	2.3	SR9	1/22/2017 15:50	21.37	110.2	7.65	1.1						

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR10	1/22/2017 0:00	21.09	100.9	6.91	2.6	SR10	1/22/2017 6:00	21.12	102.1	6.99	1.6	SR10	1/22/2017 12:00	21.27	102.9	7.05	0.3	SR10	1/22/2017 18:00	21.22	103.8	7.11	1.8
SR10	1/22/2017 0:05	21.20	105.7	7.24	0.2	SR10	1/22/2017 6:05	21.16	101.5	6.95	0.9	SR10	1/22/2017 12:05	21.21	104.4	7.15	0.8	SR10	1/22/2017 18:05	21.10	103.2	7.07	1.3
SR10	1/22/2017 0:10	21.09	97.8	6.70	2.1	SR10	1/22/2017 6:10	21.17	99.3	6.80	2.5	SR10	1/22/2017 12:10	21.25	102.8	7.04	1.5	SR10	1/22/2017 18:10	21.20	101.2	6.93	1.6
SR10	1/22/2017 0:15	21.10	101.2	6.93	1.0	SR10	1/22/2017 6:15	21.20	105.4	7.22	2.7	SR10	1/22/2017 12:15	21.21	104.5	7.16	0.4	SR10	1/22/2017 18:15	21.21	99.9	6.84	1.9
SR10	1/22/2017 0:20	21.28	101.8	6.97	1.3	SR10	1/22/2017 6:20	21.23	100.7	6.90	2.2	SR10	1/22/2017 12:20	21.20	103.1	7.06	0.3	SR10	1/22/2017 18:20	21.08	98.6	6.75	1.5
SR10	1/22/2017 0:25	21.09	100.7	6.90	2.2	SR10	1/22/2017 6:25	21.13	98.3	6.73	2.8	SR10	1/22/2017 12:25	21.20	97.8	6.70	1.9	SR10	1/22/2017 18:25	21.09	100.7	6.90	0.9
SR10	1/22/2017 0:30	21.26	102.2	7.00	2.1	SR10	1/22/2017 6:30	21.08	105.7	7.24	2.0	SR10	1/22/2017 12:30	21.21	100.9	6.91	2.2	SR10	1/22/2017 18:30	21.12	101.5	6.95	1.7
SR10	1/22/2017 0:35	21.15	98.1	6.72	0.7	SR10	1/22/2017 6:35	21.17	103.2	7.07	0.6	SR10	1/22/2017 12:35	21.17	100.2	6.86	1.9	SR10	1/22/2017 18:35	21.23	104.8	7.18	1.2
SR10	1/22/2017 0:40	21.21	99.7	6.83	0.6	SR10	1/22/2017 6:40	21.21	97.5	6.68	2.0	SR10	1/22/2017 12:40	21.24	100.0	6.85	1.9	SR10	1/22/2017 18:40	21.21	105.6	7.23	1.0
SR10	1/22/2017 0:45	21.19	101.2	6.93	2.3	SR10	1/22/2017 6:45	21.16	100.3	6.87	0.2	SR10	1/22/2017 12:45	21.23	100.0	6.85	0.8	SR10	1/22/2017 18:45	21.29	101.9	6.98	1.3
SR10	1/22/2017 0:50	21.21	105.7	7.24	2.2	SR10	1/22/2017 6:50	21.20	101.3	6.94	1.3	SR10	1/22/2017 12:50	21.19	101.6	6.96	1.4	SR10	1/22/2017 18:50	21.28	101.3	6.94	2.5
SR10	1/22/2017 0:55	21.14	97.4	6.67	1.9	SR10	1/22/2017 6:55	21.14	100.2	6.86	1.1	SR10	1/22/2017 12:55	21.30	99.9	6.84	1.3	SR10	1/22/2017 18:55	21.15	101.5	6.95	2.5
SR10	1/22/2017 1:00	21.24	97.2	6.66	1.9	SR10	1/22/2017 7:00	21.18	99.7	6.83	0.9	SR10	1/22/2017 13:00	21.07	100.7	6.90	1.4	SR10	1/22/2017 19:00	21.22	98.4	6.74	2.1
SR10	1/22/2017 1:05	21.25	97.5	6.68	1.6	SR10	1/22/2017 7:05	21.19	101.5	6.95	2.3	SR10	1/22/2017 13:05	21.12	103.7	7.10	0.6	SR10	1/22/2017 19:05	21.29	102.6	7.03	0.8
SR10	1/22/2017 1:10	21.24	105.6	7.23	0.8	SR10	1/22/2017 7:10	21.28	99.7	6.83	0.8	SR10	1/22/2017 13:10	21.09	99.9	6.84	2.7	SR10	1/22/2017 19:10	21.28	97.5	6.68	1.7
SR10	1/22/2017 1:15	21.09	102.2	7.00	2.4	SR10	1/22/2017 7:15	21.09	102.3	7.01	2.8	SR10	1/22/2017 13:15	21.30	105.3	7.21	1.9	SR10	1/22/2017 19:15	21.25	99.3	6.80	2.7
SR10	1/22/2017 1:20	21.24	99.9	6.84	0.5	SR10	1/22/2017 7:20	21.19	102.3	7.01	0.8	SR10	1/22/2017 13:20	21.25	98.3	6.73	0.3	SR10	1/22/2017 19:20	21.11	97.8	6.70	0.5
SR10	1/22/2017 1:25	21.18	101.9	6.98	2.1	SR10	1/22/2017 7:25	21.18	100.2	6.86	2.1	SR10	1/22/2017 13:25	21.10	105.4	7.22	2.5	SR10	1/22/2017 19:25	21.19	103.7	7.10	1.7
SR10	1/22/2017 1:30	21.26	101.9	6.98	0.3	SR10	1/22/2017 7:30	21.15	97.8	6.70	0.8	SR10	1/22/2017 13:30	21.26	103.2	7.07	0.9	SR10	1/22/2017 19:30	21.26	100.4	6.88	0.5
SR10	1/22/2017 1:35	21.13	98.0	6.71	1.0	SR10	1/22/2017 7:35	21.27	102.6	7.03	2.8	SR10	1/22/2017 13:35	21.30	103.4	7.08	1.4	SR10	1/22/2017 19:35	21.21	99.7	6.83	1.3
SR10	1/22/2017 1:40	21.19	101.5	6.95	1.7	SR10	1/22/2017 7:40	21.28	104.5	7.16	2.2	SR10	1/22/2017 13:40	21.21	105.7	7.24	0.8	SR10	1/22/2017 19:40	21.12	100.7	6.90	2.4
SR10	1/22/2017 1:45	21.29	105.4	7.22	1.0	SR10	1/22/2017 7:45	21.27	105.6	7.23	0.8	SR10	1/22/2017 13:45	21.22	98.0	6.71	1.6	SR10	1/22/2017 19:45	21.19	102.2	7.00	1.6
SR10	1/22/2017 1:50	21.16	101.6	6.96	1.9	SR10	1/22/2017 7:50	21.11	104.7	7.17	0.6	SR10	1/22/2017 13:50	21.16	102.9	7.05	2.3	SR10	1/22/2017 19:50	21.20	102.1	6.99	1.6
SR10	1/22/2017 1:55	21.12	98.0	6.71	0.5	SR10	1/22/2017 7:55	21.17	105.7	7.24	2.3	SR10	1/22/2017 13:55	21.07	101.9	6.98	0.8	SR10	1/22/2017 19:55	21.28	101.9	6.98	0.5
SR10	1/22/2017 2:00	21.23	104.4	7.15	0.2	SR10	1/22/2017 8:00	21.13	102.2	7.00	2.6	SR10	1/22/2017 14:00	21.18	101.0	6.92	1.2	SR10	1/22/2017 20:00	21.09	102.6	7.03	0.3
SR10	1/22/2017 2:05	21.13	105.7	7.24	2.0	SR10	1/22/2017 8:05	21.13	104.2	7.14	0.5	SR10	1/22/2017 14:05	21.16	102.3	7.01	0.2	SR10	1/22/2017 20:05	21.07	98.3	6.73	1.3
SR10	1/22/2017 2:10	21.22	99.0	6.78	0.8	SR10	1/22/2017 8:10	21.13	102.5	7.02	2.6	SR10	1/22/2017 14:10	21.13	103.8	7.11	0.2	SR10	1/22/2017 20:10	21.25	97.7	6.69	1.4
SR10	1/22/2017 2:15	21.28	105.1	7.20	2.4	SR10	1/22/2017 8:15	21.26	97.8	6.70	1.8	SR10	1/22/2017 14:15	21.21	104.1	7.13	1.6	SR10	1/22/2017 20:15	21.15	97.5	6.68	1.1
SR10	1/22/2017 2:20	21.11	104.4	7.15	1.8	SR10	1/22/2017 8:20	21.17	101.6	6.96	1.7	SR10	1/22/2017 14:20	21.29	97.5	6.68	0.5	SR10	1/22/2017 20:20	21.12	98.8	6.77	0.3
SR10	1/22/2017 2:25	21.19	103.8	7.11	0.9	SR10	1/22/2017 8:25	21.30	103.4	7.08	2.4	SR10	1/22/2017 14:25	21.14	103.1	7.06	1.8	SR10	1/22/2017 20:25	21.15	104.8	7.18	2.4
SR10	1/22/2017 2:30	21.20	98.1	6.72	0.3	SR10	1/22/2017 8:30	21.18	100.7	6.90	1.2	SR10	1/22/2017 14:30	21.07	103.1	7.06	2.6	SR10	1/22/2017 20:30	21.15	97.7	6.69	2.2
SR10	1/22/2017 2:35	21.29	101.0	6.92	2.5	SR10	1/22/2017 8:35	21.09	105.1	7.20	0.7	SR10	1/22/2017 14:35	21.19	101.5	6.95	2.8	SR10	1/22/2017 20:35	21.13	99.3	6.80	0.3
SR10	1/22/2017 2:40	21.11	102.8	7.04	2.8	SR10	1/22/2017 8:40	21.25	102.1	6.99	2.0	SR10	1/22/2017 14:40	21.21	98.4	6.74	1.6	SR10	1/22/2017 20:40	21.25	101.9	6.98	1.6
SR10	1/22/2017 2:45	21.22	101.6	6.96	2.5	SR10	1/22/2017 8:45	21.07	99.1	6.79	1.4	SR10	1/22/2017 14:45	21.30	100.0	6.85	2.4	SR10	1/22/2017 20:45	21.23	98.6	6.75	1.8
SR10	1/22/2017 2:50	21.21	104.2	7.14	1.7	SR10	1/22/2017 8:50	21.16	105.4	7.22	1.7	SR10	1/22/2017 14:50	21.14	105.3	7.21	1.2	SR10	1/22/2017 20:50	21.08	105.9	7.25	1.8
SR10	1/22/2017 2:55	21.07	98.4	6.74	2.0	SR10	1/22/2017 8:55	21.30	99.3	6.80	2.1	SR10	1/22/2017 14:55	21.08	97.2	6.66	1.3	SR10	1/22/2017 20:55	21.15	99.9	6.84	0.4
SR10	1/22/2017 3:00	21.07	102.9	7.05	2.7	SR10	1/22/2017 9:00	21.25	102.2	7.00	0.3	SR10	1/22/2017 15:00	21.20	105.7	7.24	2.5	SR10	1/22/2017 21:00	21.26	101.8	6.97	2.4
SR10	1/22/2017 3:05	21.22	100.2	6.86	1.0	SR10	1/22/2017 9:05	21.21	101.9	6.98	1.8	SR10	1/22/2017 15:05	21.10	100.4	6.88	0.5	SR10	1/22/2017 21:05	21.11	101.5	6.95	1.8
SR10	1/22/2017 3:10	21.21	101.5	6.95	0.5	SR10	1/22/2017 9:10	21.16	105.6	7.23	2.7	SR10	1/22/2017 15:10	21.13	105.0	7.19	0.7	SR10	1/22/2017 21:10	21.19	98.6	6.75	0.3
SR10	1/22/2017 3:15	21.12	103.5	7.09	1.7	SR10	1/22/2017 9:15	21.19	97.5	6.68	1.5	SR10	1/22/2017 15:15	21.16	104.1	7.13	0.2	SR10	1/22/2017 21:15	21.19	98.4	6.74	1.8
SR10	1/22/2017 3:20	21.19	97.8	6.70	0.7	SR10	1/22/2017 9:20	21.16	101.9	6.98	1.4	SR10	1/22/2017 15:20	21.29	98.6	6.75	2.0	SR10	1/22/2017 21:20	21.17	103.5	7.09	0.7
SR10	1/22/2017 3:25	21.17	100.6	6.89	2.7	SR10	1/22/2017 9:25	21.15	102.5	7.02	1.3	SR10	1/22/2017 15:25	21.07	103.5	7.09	0.5	SR10	1/22/2017 21:25	21.07	97.8	6.70	1.1
SR10	1/22/2017 3:30	21.07	100.0	6.85	1.8	SR10	1/22/2017 9:30	21.08	105.0	7.19	0.5	SR10	1/22/2017 15:30	21.10	105.7	7.24	2.8	SR10	1/22/2017 21:30	21.12	100.3	6.87	0.6
SR10	1/22/2017 3:35	21.09	102.9	7.05	1.0	SR10	1/22/2017 9:35	21.12	103.4	7.08	1.8	SR10	1/22/2017 15:35	21.19	97.2	6.66	0.7	SR10	1/22/2017 21:35	21.26	102.9	7.05	2.7
SR10	1/22/2017 3:40	21.20	102.1	6.99	2.1	SR10	1/22/2017 9:40	21.24	103.8	7.11	1.5	SR10	1/22/2017 15:40	21.22	105.6	7.23	1.2	SR10	1/22/2017 21:40	21.16	100.7	6.90	2.7
SR10	1/22/2017 3:45	21.13	105.9	7.25	2.3	SR10	1/22/2017 9:45	21.12	98.6	6.75	2.5	SR10	1/22/2017 15:45	21.07	99.4	6.81	2.8	SR10	1/22/2017 21:45	21.14	101.3	6.94	1.6
SR10	1/22/2017 3:50	21.1																					

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR11	1/22/2017 0:00	21.27	100.3	6.92	2.3	SR11	1/22/2017 6:00	21.36	98.7	6.81	2.2	SR11	1/22/2017 12:00	21.41	103.7	7.15	1.6	SR11	1/22/2017 18:00	21.33	104.3	7.19	0.6
SR11	1/22/2017 0:05	21.46	105.4	7.27	0.7	SR11	1/22/2017 6:05	21.46	100.5	6.93	2.8	SR11	1/22/2017 12:05	21.32	101.9	7.03	0.7	SR11	1/22/2017 18:05	21.48	105.4	7.27	2.5
SR11	1/22/2017 0:10	21.36	101.9	7.03	0.4	SR11	1/22/2017 6:10	21.43	98.0	6.76	0.8	SR11	1/22/2017 12:10	21.29	103.4	7.13	2.2	SR11	1/22/2017 18:10	21.34	102.4	7.06	2.6
SR11	1/22/2017 0:15	21.25	101.5	7.00	0.5	SR11	1/22/2017 6:15	21.45	98.6	6.80	0.7	SR11	1/22/2017 12:15	21.44	104.4	7.20	2.2	SR11	1/22/2017 18:15	21.27	101.5	7.00	1.5
SR11	1/22/2017 0:20	21.40	100.3	6.92	0.4	SR11	1/22/2017 6:20	21.47	106.1	7.32	2.6	SR11	1/22/2017 12:20	21.26	105.4	7.27	2.6	SR11	1/22/2017 18:20	21.41	103.8	7.16	1.3
SR11	1/22/2017 0:25	21.47	104.1	7.18	2.2	SR11	1/22/2017 6:25	21.44	103.5	7.14	1.6	SR11	1/22/2017 12:25	21.50	98.7	6.81	1.3	SR11	1/22/2017 18:25	21.38	99.3	6.85	0.6
SR11	1/22/2017 0:30	21.35	102.7	7.08	0.6	SR11	1/22/2017 6:30	21.42	101.9	7.03	1.4	SR11	1/22/2017 12:30	21.49	101.8	7.02	0.9	SR11	1/22/2017 18:30	21.31	100.8	6.95	1.8
SR11	1/22/2017 0:35	21.31	106.0	7.31	0.6	SR11	1/22/2017 6:35	21.42	99.9	6.89	2.2	SR11	1/22/2017 12:35	21.22	105.0	7.24	1.0	SR11	1/22/2017 18:35	21.32	105.3	7.26	1.1
SR11	1/22/2017 0:40	21.33	104.4	7.20	1.1	SR11	1/22/2017 6:40	21.29	104.7	7.22	1.4	SR11	1/22/2017 12:40	21.41	104.5	7.21	0.6	SR11	1/22/2017 18:40	21.46	99.6	6.87	0.9
SR11	1/22/2017 0:45	21.37	98.9	6.82	2.8	SR11	1/22/2017 6:45	21.30	101.9	7.03	2.8	SR11	1/22/2017 12:45	21.34	97.9	6.75	2.8	SR11	1/22/2017 18:45	21.43	101.2	6.98	2.6
SR11	1/22/2017 0:50	21.44	103.2	7.12	0.5	SR11	1/22/2017 6:50	21.42	101.8	7.02	1.6	SR11	1/22/2017 12:50	21.37	98.6	6.80	2.6	SR11	1/22/2017 18:50	21.49	102.4	7.06	2.0
SR11	1/22/2017 0:55	21.32	97.9	6.75	1.1	SR11	1/22/2017 6:55	21.23	103.5	7.14	1.4	SR11	1/22/2017 12:55	21.28	102.7	7.08	1.4	SR11	1/22/2017 18:55	21.35	104.5	7.21	0.3
SR11	1/22/2017 1:00	21.37	100.5	6.93	2.1	SR11	1/22/2017 7:00	21.32	104.3	7.19	0.5	SR11	1/22/2017 13:00	21.22	100.8	6.95	1.4	SR11	1/22/2017 19:00	21.43	98.6	6.80	0.3
SR11	1/22/2017 1:05	21.50	102.5	7.07	1.5	SR11	1/22/2017 7:05	21.35	105.6	7.28	2.6	SR11	1/22/2017 13:05	21.33	105.3	7.26	2.6	SR11	1/22/2017 19:05	21.30	98.9	6.82	2.4
SR11	1/22/2017 1:10	21.36	103.1	7.11	2.7	SR11	1/22/2017 7:10	21.28	101.9	7.03	0.3	SR11	1/22/2017 13:10	21.24	101.9	7.03	1.4	SR11	1/22/2017 19:10	21.36	104.0	7.17	0.9
SR11	1/22/2017 1:15	21.41	105.0	7.24	2.5	SR11	1/22/2017 7:15	21.50	105.7	7.29	2.0	SR11	1/22/2017 13:15	21.46	101.5	7.00	1.5	SR11	1/22/2017 19:15	21.45	101.8	7.02	1.5
SR11	1/22/2017 1:20	21.46	98.0	6.76	1.6	SR11	1/22/2017 7:20	21.22	103.5	7.14	0.5	SR11	1/22/2017 13:20	21.35	100.5	6.93	1.3	SR11	1/22/2017 19:20	21.30	106.1	7.32	1.0
SR11	1/22/2017 1:25	21.33	101.1	6.97	1.6	SR11	1/22/2017 7:25	21.37	106.0	7.31	0.6	SR11	1/22/2017 13:25	21.44	101.8	7.02	1.2	SR11	1/22/2017 19:25	21.26	101.2	6.98	2.2
SR11	1/22/2017 1:30	21.34	103.5	7.14	2.1	SR11	1/22/2017 7:30	21.40	99.8	6.88	0.7	SR11	1/22/2017 13:30	21.27	103.0	7.10	2.1	SR11	1/22/2017 19:30	21.39	105.3	7.26	2.5
SR11	1/22/2017 1:35	21.34	104.7	7.22	0.6	SR11	1/22/2017 7:35	21.46	98.0	6.76	2.8	SR11	1/22/2017 13:35	21.37	105.9	7.30	0.9	SR11	1/22/2017 19:35	21.29	100.9	6.96	1.1
SR11	1/22/2017 1:40	21.31	104.8	7.23	1.2	SR11	1/22/2017 7:40	21.44	104.0	7.17	1.5	SR11	1/22/2017 13:40	21.35	105.4	7.27	0.3	SR11	1/22/2017 19:40	21.37	102.4	7.06	2.8
SR11	1/22/2017 1:45	21.35	104.3	7.19	1.1	SR11	1/22/2017 7:45	21.31	98.6	6.80	1.7	SR11	1/22/2017 13:45	21.34	101.4	6.99	0.6	SR11	1/22/2017 19:45	21.28	101.9	7.03	2.2
SR11	1/22/2017 1:50	21.44	99.6	6.87	2.7	SR11	1/22/2017 7:50	21.48	97.7	6.74	1.7	SR11	1/22/2017 13:50	21.40	99.9	6.89	2.2	SR11	1/22/2017 19:50	21.39	99.5	6.86	0.8
SR11	1/22/2017 1:55	21.28	102.8	7.09	2.7	SR11	1/22/2017 7:55	21.28	100.1	6.90	2.7	SR11	1/22/2017 13:55	21.31	100.2	6.91	1.5	SR11	1/22/2017 19:55	21.40	102.2	7.05	1.9
SR11	1/22/2017 2:00	21.35	100.8	6.95	1.4	SR11	1/22/2017 8:00	21.35	99.2	6.84	0.7	SR11	1/22/2017 14:00	21.34	105.7	7.29	2.5	SR11	1/22/2017 20:00	21.31	102.7	7.08	0.3
SR11	1/22/2017 2:05	21.44	103.5	7.14	2.8	SR11	1/22/2017 8:05	21.40	98.0	6.76	2.0	SR11	1/22/2017 14:05	21.50	99.5	6.86	1.3	SR11	1/22/2017 20:05	21.32	99.5	6.86	0.5
SR11	1/22/2017 2:10	21.29	103.0	7.10	2.2	SR11	1/22/2017 8:10	21.38	101.6	7.01	2.2	SR11	1/22/2017 14:10	21.37	98.7	6.81	0.5	SR11	1/22/2017 20:10	21.42	99.8	6.88	1.4
SR11	1/22/2017 2:15	21.43	102.5	7.07	0.8	SR11	1/22/2017 8:15	21.44	104.1	7.18	2.7	SR11	1/22/2017 14:15	21.37	103.4	7.13	1.2	SR11	1/22/2017 20:15	21.35	105.9	7.30	1.5
SR11	1/22/2017 2:20	21.39	103.2	7.12	1.2	SR11	1/22/2017 8:20	21.29	99.5	6.86	2.6	SR11	1/22/2017 14:20	21.38	101.9	7.03	1.7	SR11	1/22/2017 20:20	21.41	103.5	7.14	2.6
SR11	1/22/2017 2:25	21.34	101.8	7.02	2.2	SR11	1/22/2017 8:25	21.43	100.2	6.91	2.2	SR11	1/22/2017 14:25	21.41	103.7	7.15	0.5	SR11	1/22/2017 20:25	21.31	98.5	6.79	2.8
SR11	1/22/2017 2:30	21.36	99.5	6.86	1.9	SR11	1/22/2017 8:30	21.45	98.5	6.79	0.3	SR11	1/22/2017 14:30	21.28	101.5	7.00	1.4	SR11	1/22/2017 20:30	21.50	106.1	7.32	0.4
SR11	1/22/2017 2:35	21.43	105.4	7.27	1.6	SR11	1/22/2017 8:35	21.42	101.6	7.01	1.2	SR11	1/22/2017 14:35	21.39	104.0	7.17	1.1	SR11	1/22/2017 20:35	21.35	98.2	6.77	1.7
SR11	1/22/2017 2:40	21.44	101.5	7.00	1.5	SR11	1/22/2017 8:40	21.48	102.1	7.04	0.7	SR11	1/22/2017 14:40	21.49	101.8	7.02	0.6	SR11	1/22/2017 20:40	21.44	103.5	7.14	1.1
SR11	1/22/2017 2:45	21.40	101.5	7.00	0.5	SR11	1/22/2017 8:45	21.23	105.4	7.27	0.4	SR11	1/22/2017 14:45	21.26	103.1	7.11	1.8	SR11	1/22/2017 20:45	21.43	99.6	6.87	0.4
SR11	1/22/2017 2:50	21.33	104.3	7.19	2.5	SR11	1/22/2017 8:50	21.45	105.4	7.27	2.3	SR11	1/22/2017 14:50	21.29	104.8	7.23	0.8	SR11	1/22/2017 20:50	21.46	103.1	7.11	1.1
SR11	1/22/2017 2:55	21.35	103.8	7.16	0.6	SR11	1/22/2017 8:55	21.35	103.8	7.16	0.7	SR11	1/22/2017 14:55	21.37	100.1	6.90	2.7	SR11	1/22/2017 20:55	21.46	97.9	6.75	1.5
SR11	1/22/2017 3:00	21.41	102.7	7.08	1.0	SR11	1/22/2017 9:00	21.22	104.8	7.23	1.0	SR11	1/22/2017 15:00	21.30	104.1	7.18	0.3	SR11	1/22/2017 21:00	21.48	104.0	7.17	0.6
SR11	1/22/2017 3:05	21.39	98.7	6.81	1.4	SR11	1/22/2017 9:05	21.28	101.6	7.01	1.6	SR11	1/22/2017 15:05	21.40	100.9	6.96	2.2	SR11	1/22/2017 21:05	21.29	99.0	6.83	1.5
SR11	1/22/2017 3:10	21.29	100.8	6.95	0.5	SR11	1/22/2017 9:10	21.26	97.9	6.75	2.3	SR11	1/22/2017 15:10	21.43	103.5	7.14	2.5	SR11	1/22/2017 21:10	21.23	105.6	7.28	1.0
SR11	1/22/2017 3:15	21.42	99.5	6.86	1.4	SR11	1/22/2017 9:15	21.35	99.0	6.83	1.3	SR11	1/22/2017 15:15	21.26	105.4	7.27	2.7	SR11	1/22/2017 21:15	21.38	100.3	6.92	0.8
SR11	1/22/2017 3:20	21.25	98.2	6.77	2.5	SR11	1/22/2017 9:20	21.44	98.6	6.80	0.7	SR11	1/22/2017 15:20	21.28	105.9	7.30	1.8	SR11	1/22/2017 21:20	21.42	105.4	7.27	0.4
SR11	1/22/2017 3:25	21.47	99.3	6.85	1.4	SR11	1/22/2017 9:25	21.37	103.4	7.13	0.6	SR11	1/22/2017 15:25	21.43	104.1	7.18	2.5	SR11	1/22/2017 21:25	21.33	106.1	7.32	1.5
SR11	1/22/2017 3:30	21.47	98.9	6.82	2.1	SR11	1/22/2017 9:30	21.32	106.0	7.31	1.2	SR11	1/22/2017 15:30	21.24	101.9	7.03	2.7	SR11	1/22/2017 21:30	21.49	101.2	6.98	2.0
SR11	1/22/2017 3:35	21.49	104.4	7.20	1.2	SR11	1/22/2017 9:35	21.36	100.5	6.93	0.4	SR11	1/22/2017 15:35	21.47	103.8	7.16	2.3	SR11	1/22/2017 21:35	21.39	105.3	7.26	0.3
SR11	1/22/2017 3:40	21.42	101.4	6.99	0.7	SR11	1/22/2017 9:40	21.40	104.7	7.22	2.4	SR11	1/22/2017 15:40	21.45	105.1	7.25	1.0	SR11	1/22/2017 21:40	21.32	100.2	6.91	0.5
SR11	1/22/2017 3:45	21.22	103.7	7.15	1.4	SR11	1/22/2017 9:45	21.22	99.2	6.84	0.3	SR11	1/22/2017 15:45	21.44	101.4	6.99	0.4	SR11	1/22/2017 21:45	21.36	102.8	7.09	0.4
SR11	1/22/2017 3:50																						

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR12	1/22/2017 0:01	21.39	93.3	6.48	2.0	SR12	1/22/2017 6:01	21.28	93.9	6.52	4.3	SR12	1/22/2017 12:01	21.26	92.6	6.43	2.2	SR12	1/22/2017 18:01	21.41	89.7	6.23	2.9
SR12	1/22/2017 0:06	21.42	92.7	6.44	4.2	SR12	1/22/2017 6:06	21.46	88.1	6.12	3.9	SR12	1/22/2017 12:06	21.46	90.1	6.26	4.0	SR12	1/22/2017 18:06	21.37	92.6	6.43	2.7
SR12	1/22/2017 0:11	21.39	93.7	6.51	2.8	SR12	1/22/2017 6:11	21.27	92.9	6.45	4.8	SR12	1/22/2017 12:11	21.33	88.0	6.11	1.9	SR12	1/22/2017 18:11	21.37	91.6	6.36	2.7
SR12	1/22/2017 0:16	21.40	90.9	6.31	3.7	SR12	1/22/2017 6:16	21.32	89.1	6.19	3.4	SR12	1/22/2017 12:16	21.25	92.6	6.43	3.4	SR12	1/22/2017 18:16	21.43	94.8	6.58	4.4
SR12	1/22/2017 0:21	21.37	93.5	6.49	4.2	SR12	1/22/2017 6:21	21.40	91.3	6.34	4.1	SR12	1/22/2017 12:21	21.26	89.6	6.22	3.7	SR12	1/22/2017 18:21	21.39	94.3	6.55	4.8
SR12	1/22/2017 0:26	21.34	88.4	6.14	3.7	SR12	1/22/2017 6:26	21.42	89.3	6.20	3.5	SR12	1/22/2017 12:26	21.33	88.1	6.12	3.6	SR12	1/22/2017 18:26	21.32	94.8	6.58	3.9
SR12	1/22/2017 0:31	21.40	94.2	6.54	2.2	SR12	1/22/2017 6:31	21.40	94.6	6.57	4.8	SR12	1/22/2017 12:31	21.39	93.7	6.51	4.2	SR12	1/22/2017 18:31	21.27	92.4	6.42	2.9
SR12	1/22/2017 0:36	21.40	87.6	6.08	3.1	SR12	1/22/2017 6:36	21.49	93.9	6.52	2.4	SR12	1/22/2017 12:36	21.27	88.0	6.11	2.6	SR12	1/22/2017 18:36	21.29	90.0	6.25	1.9
SR12	1/22/2017 0:41	21.26	94.2	6.54	3.9	SR12	1/22/2017 6:41	21.33	91.0	6.32	3.7	SR12	1/22/2017 12:41	21.41	87.4	6.07	3.9	SR12	1/22/2017 18:41	21.48	94.9	6.59	3.2
SR12	1/22/2017 0:46	21.41	93.9	6.52	3.0	SR12	1/22/2017 6:46	21.40	92.7	6.44	4.1	SR12	1/22/2017 12:46	21.47	90.9	6.31	3.8	SR12	1/22/2017 18:46	21.32	87.3	6.06	3.2
SR12	1/22/2017 0:51	21.30	88.0	6.11	2.5	SR12	1/22/2017 6:51	21.32	87.8	6.10	3.0	SR12	1/22/2017 12:51	21.27	89.9	6.24	3.1	SR12	1/22/2017 18:51	21.29	88.4	6.14	3.3
SR12	1/22/2017 0:56	21.44	87.6	6.08	1.9	SR12	1/22/2017 6:56	21.43	88.4	6.14	3.6	SR12	1/22/2017 12:56	21.25	92.9	6.45	3.1	SR12	1/22/2017 18:56	21.42	90.1	6.26	2.4
SR12	1/22/2017 1:01	21.34	94.3	6.55	4.3	SR12	1/22/2017 7:01	21.49	94.8	6.58	4.4	SR12	1/22/2017 13:01	21.27	92.4	6.42	3.9	SR12	1/22/2017 19:01	21.44	88.6	6.15	3.0
SR12	1/22/2017 1:06	21.27	91.7	6.37	4.0	SR12	1/22/2017 7:06	21.35	90.6	6.29	2.8	SR12	1/22/2017 13:06	21.41	94.8	6.58	3.9	SR12	1/22/2017 19:06	21.29	91.7	6.37	3.3
SR12	1/22/2017 1:11	21.40	94.3	6.55	3.4	SR12	1/22/2017 7:11	21.31	87.4	6.07	2.7	SR12	1/22/2017 13:11	21.37	88.3	6.13	2.3	SR12	1/22/2017 19:11	21.39	88.1	6.12	4.0
SR12	1/22/2017 1:16	21.42	92.4	6.42	4.7	SR12	1/22/2017 7:16	21.47	87.3	6.06	4.8	SR12	1/22/2017 13:16	21.46	93.2	6.47	4.1	SR12	1/22/2017 19:16	21.45	90.3	6.27	2.8
SR12	1/22/2017 1:21	21.33	91.2	6.33	3.0	SR12	1/22/2017 7:21	21.46	87.3	6.06	4.8	SR12	1/22/2017 13:21	21.40	91.4	6.35	3.9	SR12	1/22/2017 19:21	21.29	93.0	6.46	2.1
SR12	1/22/2017 1:26	21.38	91.4	6.35	3.1	SR12	1/22/2017 7:26	21.42	93.2	6.47	3.1	SR12	1/22/2017 13:26	21.26	94.5	6.56	4.3	SR12	1/22/2017 19:26	21.41	91.2	6.33	4.7
SR12	1/22/2017 1:31	21.28	94.5	6.56	2.4	SR12	1/22/2017 7:31	21.29	89.6	6.22	3.5	SR12	1/22/2017 13:31	21.43	91.7	6.37	4.8	SR12	1/22/2017 19:31	21.46	89.6	6.22	3.3
SR12	1/22/2017 1:36	21.43	90.1	6.26	3.3	SR12	1/22/2017 7:36	21.28	87.7	6.09	1.9	SR12	1/22/2017 13:36	21.49	89.4	6.21	2.0	SR12	1/22/2017 19:36	21.47	87.4	6.07	4.2
SR12	1/22/2017 1:41	21.33	90.3	6.27	2.8	SR12	1/22/2017 7:41	21.44	93.6	6.50	3.8	SR12	1/22/2017 13:41	21.48	90.1	6.26	4.2	SR12	1/22/2017 19:41	21.26	88.8	6.17	3.7
SR12	1/22/2017 1:46	21.33	91.0	6.32	3.6	SR12	1/22/2017 7:46	21.33	88.0	6.11	3.8	SR12	1/22/2017 13:46	21.33	92.3	6.41	4.2	SR12	1/22/2017 19:46	21.31	93.6	6.50	4.6
SR12	1/22/2017 1:51	21.38	92.4	6.42	3.9	SR12	1/22/2017 7:51	21.45	88.6	6.15	3.4	SR12	1/22/2017 13:51	21.43	94.2	6.54	4.7	SR12	1/22/2017 19:51	21.45	88.0	6.11	3.8
SR12	1/22/2017 1:56	21.46	91.2	6.33	3.1	SR12	1/22/2017 7:56	21.31	89.0	6.18	2.2	SR12	1/22/2017 13:56	21.44	90.1	6.26	2.3	SR12	1/22/2017 19:56	21.25	89.7	6.23	3.1
SR12	1/22/2017 2:01	21.40	87.3	6.06	3.5	SR12	1/22/2017 8:01	21.28	90.0	6.25	4.4	SR12	1/22/2017 14:01	21.34	90.4	6.28	2.4	SR12	1/22/2017 20:01	21.49	92.7	6.44	2.3
SR12	1/22/2017 2:06	21.36	94.5	6.56	2.2	SR12	1/22/2017 8:06	21.29	91.0	6.32	9.9	SR12	1/22/2017 14:06	21.35	90.0	6.25	2.9	SR12	1/22/2017 20:06	21.32	91.0	6.32	2.8
SR12	1/22/2017 2:11	21.36	87.3	6.06	4.5	SR12	1/22/2017 8:11	21.38	94.0	6.53	2.5	SR12	1/22/2017 14:11	21.47	91.6	6.36	1.9	SR12	1/22/2017 20:11	21.46	94.0	6.53	2.3
SR12	1/22/2017 2:16	21.44	91.2	6.33	2.9	SR12	1/22/2017 8:16	21.42	91.9	6.38	3.5	SR12	1/22/2017 14:16	21.37	88.4	6.14	3.7	SR12	1/22/2017 20:16	21.32	91.4	6.35	4.4
SR12	1/22/2017 2:21	21.33	92.6	6.43	4.5	SR12	1/22/2017 8:21	21.25	88.1	6.12	1.9	SR12	1/22/2017 14:21	21.41	93.9	6.52	2.4	SR12	1/22/2017 20:21	21.29	90.6	6.29	3.6
SR12	1/22/2017 2:26	21.48	88.3	6.13	2.5	SR12	1/22/2017 8:26	21.46	88.4	6.14	2.9	SR12	1/22/2017 14:26	21.26	89.3	6.20	3.2	SR12	1/22/2017 20:26	21.36	88.1	6.12	3.8
SR12	1/22/2017 2:31	21.35	94.3	6.55	3.6	SR12	1/22/2017 8:31	21.49	90.4	6.28	2.7	SR12	1/22/2017 14:31	21.33	92.7	6.44	2.8	SR12	1/22/2017 20:31	21.41	90.1	6.26	4.1
SR12	1/22/2017 2:36	21.31	87.1	6.05	3.2	SR12	1/22/2017 8:36	21.45	90.0	6.25	10.2	SR12	1/22/2017 14:36	21.35	94.2	6.54	3.1	SR12	1/22/2017 20:36	21.25	90.1	6.26	3.9
SR12	1/22/2017 2:41	21.35	94.3	6.55	3.2	SR12	1/22/2017 8:41	21.38	94.9	6.59	3.9	SR12	1/22/2017 14:41	21.49	89.4	6.21	7.9	SR12	1/22/2017 20:41	21.35	91.3	6.34	2.3
SR12	1/22/2017 2:46	21.47	88.8	6.17	4.1	SR12	1/22/2017 8:46	21.41	90.3	6.27	1.9	SR12	1/22/2017 14:46	21.30	90.0	6.25	10.1	SR12	1/22/2017 20:46	21.39	91.7	6.37	4.4
SR12	1/22/2017 2:51	21.48	93.7	6.51	1.9	SR12	1/22/2017 8:51	21.44	90.9	6.31	4.5	SR12	1/22/2017 14:51	21.27	93.9	6.52	3.7	SR12	1/22/2017 20:51	21.46	93.9	6.52	4.6
SR12	1/22/2017 2:56	21.41	88.4	6.14	4.1	SR12	1/22/2017 8:56	21.34	89.7	6.23	3.2	SR12	1/22/2017 14:56	21.27	93.5	6.49	4.8	SR12	1/22/2017 20:56	21.31	94.9	6.59	1.9
SR12	1/22/2017 3:01	21.31	89.4	6.21	2.0	SR12	1/22/2017 9:01	21.38	89.0	6.18	3.9	SR12	1/22/2017 15:01	21.27	90.6	6.29	3.1	SR12	1/22/2017 21:01	21.35	94.0	6.53	4.8
SR12	1/22/2017 3:06	21.38	89.6	6.22	4.7	SR12	1/22/2017 9:06	21.40	90.0	6.25	2.9	SR12	1/22/2017 15:06	21.33	91.4	6.35	2.5	SR12	1/22/2017 21:06	21.40	92.2	6.40	2.8
SR12	1/22/2017 3:11	21.29	88.4	6.14	2.6	SR12	1/22/2017 9:11	21.35	92.0	6.39	4.6	SR12	1/22/2017 15:11	21.48	93.6	6.50	3.5	SR12	1/22/2017 21:11	21.25	93.6	6.50	4.3
SR12	1/22/2017 3:16	21.34	88.8	6.17	2.8	SR12	1/22/2017 9:16	21.26	91.2	6.33	2.8	SR12	1/22/2017 15:16	21.35	89.7	6.23	2.5	SR12	1/22/2017 21:16	21.46	94.9	6.59	4.7
SR12	1/22/2017 3:21	21.27	89.6	6.22	4.7	SR12	1/22/2017 9:21	21.38	88.8	6.17	4.0	SR12	1/22/2017 15:21	21.40	94.3	6.55	3.4	SR12	1/22/2017 21:21	21.30	90.9	6.31	2.5
SR12	1/22/2017 3:26	21.36	94.6	6.57	2.0	SR12	1/22/2017 9:26	21.26	94.2	6.54	4.8	SR12	1/22/2017 15:26	21.42	91.7	6.37	2.6	SR12	1/22/2017 21:26	21.49	88.1	6.12	3.9
SR12	1/22/2017 3:31	21.49	94.2	6.54	3.7	SR12	1/22/2017 9:31	21.31	90.4	6.28	4.1	SR12	1/22/2017 15:31	21.49	88.8	6.17	3.7	SR12	1/22/2017 21:31	21.45	89.7	6.23	3.1
SR12	1/22/2017 3:36	21.29	89.9	6.24	2.5	SR12	1/22/2017 9:36	21.41	90.1	6.26	2.8	SR12	1/22/2017 15:36	21.46	90.9	6.31	4.7	SR12	1/22/2017 21:36	21.49	88.4	6.14	2.6
SR12	1/22/2017 3:41	21.38	91.9	6.38	4.4	SR12	1/22/2017 9:41	21.46	89.1	6.19	2.4	SR12	1/22/2017 15:41	21.47	93.5	6.49	4.6	SR12	1/22/2017 21:41	21.34	89.3	6.20	4.4
SR12	1/22/2017 3:46	21.39	90.1	6.26	4.8	SR12	1/22/2017 9:46	21.27	87.4	6.07	2.5	SR12	1/22/2017 15:46	21.32	88.6	6.15	4.7	SR12	1/22/2017 21:46	21.49	89.9	6.24	2.2
SR12	1/22/2017 3:51	21.39	90.0	6.25	3.3	SR12	1/22/2017 9:51	21.34	92.4	6.42	4.7	SR12	1/22/2017 15:51	21.25	89.6	6.22	3.9						

24-hr Water Quality Monitoring

Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)	Station	Timestamp	Temp (°C)	DO (%)	DO (mg/L)	Tur (NTU)
SR13	1/22/2017 0:00	21.39	97.6	6.73	4.2	SR13	1/22/2017 6:00	21.45	105.3	7.26	2.4	SR13	1/22/2017 12:00	21.18	105.0	7.24	3.1	SR13	1/22/2017 18:00	21.22	98.7	6.81	4.7
SR13	1/22/2017 0:05	21.27	101.1	6.97	5.1	SR13	1/22/2017 6:05	21.45	103.0	7.10	3.9	SR13	1/22/2017 12:05	21.29	96.3	6.64	3.9	SR13	1/22/2017 18:05	21.44	101.9	7.03	1.8
SR13	1/22/2017 0:10	21.36	97.2	6.70	4.3	SR13	1/22/2017 6:10	21.39	106.6	7.35	2.4	SR13	1/22/2017 12:10	21.21	101.4	6.99	4.8	SR13	1/22/2017 18:10	21.42	98.7	6.81	3.0
SR13	1/22/2017 0:15	21.20	100.3	6.92	1.3	SR13	1/22/2017 6:15	21.42	104.3	7.19	4.7	SR13	1/22/2017 12:15	21.39	96.7	6.67	3.6	SR13	1/22/2017 18:15	21.46	102.2	7.05	3.2
SR13	1/22/2017 0:20	21.32	100.8	6.95	4.4	SR13	1/22/2017 6:20	21.29	106.9	7.37	1.1	SR13	1/22/2017 12:20	21.31	100.8	6.95	3.6	SR13	1/22/2017 18:20	21.40	105.1	7.25	1.3
SR13	1/22/2017 0:25	21.43	102.5	7.07	3.0	SR13	1/22/2017 6:25	21.39	100.6	6.94	3.6	SR13	1/22/2017 12:25	21.45	96.6	6.66	2.3	SR13	1/22/2017 18:25	21.39	103.7	7.15	2.8
SR13	1/22/2017 0:30	21.34	96.4	6.65	2.6	SR13	1/22/2017 6:30	21.26	98.3	6.78	1.4	SR13	1/22/2017 12:30	21.44	104.5	7.21	3.5	SR13	1/22/2017 18:30	21.19	107.0	7.38	2.5
SR13	1/22/2017 0:35	21.26	105.7	7.29	3.7	SR13	1/22/2017 6:35	21.46	100.3	6.92	4.5	SR13	1/22/2017 12:35	21.44	103.0	7.10	2.4	SR13	1/22/2017 18:35	21.43	98.2	6.77	1.5
SR13	1/22/2017 0:40	21.23	105.0	7.24	5.1	SR13	1/22/2017 6:40	21.38	99.2	6.84	3.8	SR13	1/22/2017 12:40	21.42	102.5	7.07	4.9	SR13	1/22/2017 18:40	21.37	106.7	7.36	2.9
SR13	1/22/2017 0:45	21.44	98.3	6.78	1.4	SR13	1/22/2017 6:45	21.46	97.4	6.72	3.7	SR13	1/22/2017 12:45	21.42	99.0	6.83	3.6	SR13	1/22/2017 18:45	21.22	96.0	6.62	4.0
SR13	1/22/2017 0:50	21.37	98.0	6.76	2.4	SR13	1/22/2017 6:50	21.19	105.6	7.28	1.2	SR13	1/22/2017 12:50	21.35	99.3	6.85	1.0	SR13	1/22/2017 18:50	21.20	99.2	6.84	3.0
SR13	1/22/2017 0:55	21.23	98.7	6.81	1.0	SR13	1/22/2017 6:55	21.28	101.4	6.99	1.7	SR13	1/22/2017 12:55	21.47	104.7	7.22	2.1	SR13	1/22/2017 18:55	21.43	103.1	7.11	1.4
SR13	1/22/2017 1:00	21.38	99.2	6.84	2.5	SR13	1/22/2017 7:00	21.35	96.0	6.62	4.3	SR13	1/22/2017 13:00	21.28	101.1	6.97	1.5	SR13	1/22/2017 19:00	21.34	96.1	6.63	1.7
SR13	1/22/2017 1:05	21.28	104.7	7.22	3.2	SR13	1/22/2017 7:05	21.27	101.1	6.97	2.3	SR13	1/22/2017 13:05	21.34	97.6	6.73	3.8	SR13	1/22/2017 19:05	21.35	105.1	7.25	3.7
SR13	1/22/2017 1:10	21.42	99.3	6.85	3.7	SR13	1/22/2017 7:10	21.21	97.0	6.69	5.1	SR13	1/22/2017 13:10	21.32	99.9	6.89	4.3	SR13	1/22/2017 19:10	21.32	96.3	6.64	1.0
SR13	1/22/2017 1:15	21.45	101.9	7.03	5.1	SR13	1/22/2017 7:15	21.38	98.9	6.82	3.9	SR13	1/22/2017 13:15	21.19	103.5	7.14	3.2	SR13	1/22/2017 19:15	21.32	101.8	7.02	4.8
SR13	1/22/2017 1:20	21.47	97.9	6.75	2.5	SR13	1/22/2017 7:20	21.30	99.6	6.87	3.0	SR13	1/22/2017 13:20	21.22	101.4	6.99	3.9	SR13	1/22/2017 19:20	21.31	100.2	6.91	2.7
SR13	1/22/2017 1:25	21.18	97.6	6.73	4.4	SR13	1/22/2017 7:25	21.26	101.9	7.03	5.1	SR13	1/22/2017 13:25	21.23	100.1	6.90	3.5	SR13	1/22/2017 19:25	21.44	105.4	7.27	4.0
SR13	1/22/2017 1:30	21.32	105.7	7.29	1.6	SR13	1/22/2017 7:30	21.44	97.7	6.74	3.1	SR13	1/22/2017 13:30	21.28	105.0	7.24	1.1	SR13	1/22/2017 19:30	21.28	97.4	6.72	3.7
SR13	1/22/2017 1:35	21.20	101.2	6.98	1.9	SR13	1/22/2017 7:35	21.19	100.9	6.96	5.0	SR13	1/22/2017 13:35	21.20	101.4	6.99	2.8	SR13	1/22/2017 19:35	21.24	97.2	6.70	5.0
SR13	1/22/2017 1:40	21.35	99.9	6.89	1.7	SR13	1/22/2017 7:40	21.34	96.6	6.66	2.5	SR13	1/22/2017 13:40	21.23	99.5	6.86	1.6	SR13	1/22/2017 19:40	21.18	106.4	7.34	3.3
SR13	1/22/2017 1:45	21.36	103.0	7.10	4.4	SR13	1/22/2017 7:45	21.31	104.7	7.22	2.5	SR13	1/22/2017 13:45	21.30	103.8	7.16	3.1	SR13	1/22/2017 19:45	21.39	98.6	6.80	2.6
SR13	1/22/2017 1:50	21.30	103.1	7.11	1.0	SR13	1/22/2017 7:50	21.47	96.0	6.62	3.7	SR13	1/22/2017 13:50	21.25	101.1	6.97	3.8	SR13	1/22/2017 19:50	21.20	96.1	6.63	4.5
SR13	1/22/2017 1:55	21.20	101.4	6.99	3.6	SR13	1/22/2017 7:55	21.25	102.4	7.06	2.8	SR13	1/22/2017 13:55	21.31	100.2	6.91	2.8	SR13	1/22/2017 19:55	21.18	107.0	7.38	4.4
SR13	1/22/2017 2:00	21.30	100.2	6.91	3.8	SR13	1/22/2017 8:00	21.35	102.4	7.06	3.3	SR13	1/22/2017 14:00	21.36	106.9	7.37	2.2	SR13	1/22/2017 20:00	21.45	96.9	6.68	2.3
SR13	1/22/2017 2:05	21.23	98.3	6.78	3.5	SR13	1/22/2017 8:05	21.28	101.9	7.03	2.9	SR13	1/22/2017 14:05	21.19	105.3	7.26	5.0	SR13	1/22/2017 20:05	21.38	104.3	7.19	3.4
SR13	1/22/2017 2:10	21.39	104.0	7.17	1.9	SR13	1/22/2017 8:10	21.41	97.3	6.71	4.2	SR13	1/22/2017 14:10	21.45	105.9	7.30	1.5	SR13	1/22/2017 20:10	21.42	97.2	6.70	4.1
SR13	1/22/2017 2:15	21.43	106.4	7.34	3.9	SR13	1/22/2017 8:15	21.39	102.5	7.07	4.5	SR13	1/22/2017 14:15	21.39	102.4	7.06	4.0	SR13	1/22/2017 20:15	21.18	104.3	7.19	2.9
SR13	1/22/2017 2:20	21.20	98.3	6.78	4.8	SR13	1/22/2017 8:20	21.18	103.4	7.13	1.4	SR13	1/22/2017 14:20	21.42	98.6	6.80	4.1	SR13	1/22/2017 20:20	21.31	106.9	7.37	1.1
SR13	1/22/2017 2:25	21.47	105.6	7.28	3.3	SR13	1/22/2017 8:25	21.43	102.1	7.04	4.8	SR13	1/22/2017 14:25	21.44	103.1	7.11	3.2	SR13	1/22/2017 20:25	21.28	104.5	7.21	3.8
SR13	1/22/2017 2:30	21.47	105.3	7.26	1.4	SR13	1/22/2017 8:30	21.36	106.0	7.31	4.3	SR13	1/22/2017 14:30	21.36	99.8	6.88	1.8	SR13	1/22/2017 20:30	21.39	98.0	6.76	2.6
SR13	1/22/2017 2:35	21.34	98.7	6.81	2.5	SR13	1/22/2017 8:35	21.25	101.9	7.03	4.2	SR13	1/22/2017 14:35	21.28	96.3	6.64	2.6	SR13	1/22/2017 20:35	21.44	96.1	6.63	1.3
SR13	1/22/2017 2:40	21.21	103.4	7.13	2.4	SR13	1/22/2017 8:40	21.36	98.9	6.82	4.9	SR13	1/22/2017 14:40	21.39	104.8	7.23	3.3	SR13	1/22/2017 20:40	21.47	100.1	6.90	5.1
SR13	1/22/2017 2:45	21.44	99.6	6.87	3.9	SR13	1/22/2017 8:45	21.20	102.2	7.05	1.7	SR13	1/22/2017 14:45	21.24	105.7	7.29	3.0	SR13	1/22/2017 20:45	21.43	103.8	7.16	4.1
SR13	1/22/2017 2:50	21.44	103.2	7.12	2.3	SR13	1/22/2017 8:50	21.41	98.6	6.80	1.4	SR13	1/22/2017 14:50	21.21	105.9	7.30	4.8	SR13	1/22/2017 20:50	21.32	101.8	7.02	1.3
SR13	1/22/2017 2:55	21.28	106.7	7.36	4.3	SR13	1/22/2017 8:55	21.38	96.6	6.66	4.6	SR13	1/22/2017 14:55	21.41	102.2	7.05	2.6	SR13	1/22/2017 20:55	21.47	97.0	6.69	2.6
SR13	1/22/2017 3:00	21.41	102.5	7.07	2.4	SR13	1/22/2017 9:00	21.45	104.1	7.18	2.6	SR13	1/22/2017 15:00	21.18	101.4	6.99	3.6	SR13	1/22/2017 21:00	21.26	97.6	6.73	4.9
SR13	1/22/2017 3:05	21.35	100.6	6.94	4.9	SR13	1/22/2017 9:05	21.22	105.1	7.25	2.3	SR13	1/22/2017 15:05	21.40	96.1	6.63	3.9	SR13	1/22/2017 21:05	21.41	96.3	6.64	3.6
SR13	1/22/2017 3:10	21.43	99.8	6.88	2.4	SR13	1/22/2017 9:10	21.31	104.4	7.20	2.2	SR13	1/22/2017 15:10	21.27	103.8	7.16	3.5	SR13	1/22/2017 21:10	21.19	104.4	7.20	1.5
SR13	1/22/2017 3:15	21.38	101.6	7.01	4.4	SR13	1/22/2017 9:15	21.21	101.1	6.97	3.3	SR13	1/22/2017 15:15	21.47	99.2	6.84	1.0	SR13	1/22/2017 21:15	21.29	104.0	7.17	4.1
SR13	1/22/2017 3:20	21.41	104.1	7.18	3.2	SR13	1/22/2017 9:20	21.27	105.9	7.30	2.4	SR13	1/22/2017 15:20	21.19	98.7	6.81	2.2	SR13	1/22/2017 21:20	21.31	103.8	7.16	1.3
SR13	1/22/2017 3:25	21.27	99.6	6.87	1.5	SR13	1/22/2017 9:25	21.30	97.2	6.70	3.1	SR13	1/22/2017 15:25	21.21	100.5	6.93	1.6	SR13	1/22/2017 21:25	21.34	99.5	6.86	4.1
SR13	1/22/2017 3:30	21.31	96.3	6.64	4.0	SR13	1/22/2017 9:30	21.31	103.4	7.13	2.7	SR13	1/22/2017 15:30	21.37	101.2	6.98	2.1	SR13	1/22/2017 21:30	21.35	101.4	6.99	5.1
SR13	1/22/2017 3:35	21.34	99.9	6.89	3.8	SR13	1/22/2017 9:35	21.32	96.6	6.66	3.2	SR13	1/22/2017 15:35	21.33	99.2	6.84	2.2	SR13	1/22/2017 21:35	21.37	102.1	7.04	4.0
SR13	1/22/2017 3:40	21.35	105.7	7.29	2.9	SR13	1/22/2017 9:40	21.27	100.3	6.92	1.8	SR13	1/22/2017 15:40	21.33	100.3	6.92	4.2	SR13	1/22/2017 21:40	21.22	98.6	6.80	2.7
SR13	1/22/2017 3:45	21.30	104.8	7.23	4.2	SR13	1/22/2017 9:45	21.30	97.7	6.74	4.4	SR13	1/22/2017 15:45	21.27	100.9	6.96	4.3	SR13	1/22/2017 21:45	21.35	106.4	7.34	4.3
SR13	1/22/2017 3:50	21.37	101.1	6.																			

24-hr Water Quality Monitoring

Station	Timestamp	NH <sub>3</sub> (mg/L)				Station	Timestamp	NH <sub>3</sub> (mg/L)			
SR4	1/22/2017 0:17	0.27				SR12	1/22/2017 0:17	0.23			
SR4	1/22/2017 0:37	0.27				SR12	1/22/2017 0:37	0.25			
SR4	1/22/2017 0:57	0.23				SR12	1/22/2017 0:57	0.23			
SR4	1/22/2017 1:17	0.25				SR12	1/22/2017 1:17	0.23			
SR4	1/22/2017 1:37	0.24				SR12	1/22/2017 1:37	0.25			
SR4	1/22/2017 1:57	0.23				SR12	1/22/2017 1:57	0.21			
SR4	1/22/2017 2:17	0.24				SR12	1/22/2017 2:17	0.22			
SR4	1/22/2017 2:37	0.27				SR12	1/22/2017 2:37	0.23			
SR4	1/22/2017 2:57	0.25				SR12	1/22/2017 2:57	0.25			
SR4	1/22/2017 3:17	0.24				SR12	1/22/2017 3:17	0.22			
SR4	1/22/2017 3:37	0.27				SR12	1/22/2017 3:37	0.21			
SR4	1/22/2017 3:57	0.24				SR12	1/22/2017 3:57	0.25			
SR4	1/22/2017 4:17	0.23				SR12	1/22/2017 4:17	0.22			
SR4	1/22/2017 4:37	0.25				SR12	1/22/2017 4:37	0.23			
SR4	1/22/2017 4:57	0.25				SR12	1/22/2017 4:57	0.25			
SR4	1/22/2017 5:17	0.27				SR12	1/22/2017 5:17	0.22			
SR4	1/22/2017 5:37	0.23				SR12	1/22/2017 5:37	0.24			
SR4	1/22/2017 5:57	0.25				SR12	1/22/2017 5:57	0.21			
SR4						SR12					
SR4	1/22/2017 6:37	0.27				SR12	1/22/2017 6:37	0.23			
SR4	1/22/2017 6:57	0.27				SR12	1/22/2017 6:57	0.23			
SR4	1/22/2017 7:17	0.25				SR12	1/22/2017 7:17	0.21			
SR4	1/22/2017 7:37	0.26				SR12	1/22/2017 7:37	0.22			
SR4	1/22/2017 7:57	0.25				SR12	1/22/2017 7:57	0.22			
SR4	1/22/2017 8:17	0.27				SR12	1/22/2017 8:17	0.25			
SR4	1/22/2017 8:37	0.24				SR12	1/22/2017 8:37	0.22			
SR4	1/22/2017 8:57	0.25				SR12	1/22/2017 8:57	0.24			
SR4	1/22/2017 9:17	0.26				SR12	1/22/2017 9:17	0.21			
SR4	1/22/2017 9:37	0.25				SR12	1/22/2017 9:37	0.25			
SR4	1/22/2017 9:57	0.26				SR12	1/22/2017 9:57	0.21			
SR4	1/22/2017 10:17	0.26				SR12	1/22/2017 10:17	0.24			
SR4	1/22/2017 10:37	0.27				SR12	1/22/2017 10:37	0.23			
SR4	1/22/2017 10:57	0.26				SR12	1/22/2017 10:57	0.22			
SR4	1/22/2017 11:17	0.27				SR12	1/22/2017 11:17	0.22			
SR4	1/22/2017 11:37	0.24				SR12	1/22/2017 11:37	0.25			
SR4	1/22/2017 11:57	0.27				SR12	1/22/2017 11:57	0.23			
SR4	1/22/2017 12:17	0.24				SR12	1/22/2017 12:17	0.25			
SR4	1/22/2017 12:37	0.23				SR12	1/22/2017 12:37	0.25			
SR4	1/22/2017 12:57	0.23				SR12	1/22/2017 12:57	0.25			
SR4	1/22/2017 13:17	0.25				SR12	1/22/2017 13:17	0.23			
SR4	1/22/2017 13:37	0.24				SR12	1/22/2017 13:37	0.23			
SR4	1/22/2017 13:57	0.26				SR12	1/22/2017 13:57	0.24			
SR4	1/22/2017 14:17	0.25				SR12	1/22/2017 14:17	0.21			
SR4	1/22/2017 14:37	0.25				SR12	1/22/2017 14:37	0.24			
SR4	1/22/2017 14:57	0.24				SR12	1/22/2017 14:57	0.24			
SR4	1/22/2017 15:17	0.25				SR12	1/22/2017 15:17	0.22			
SR4	1/22/2017 15:37	0.27				SR12	1/22/2017 15:37	0.25			
SR4	1/22/2017 15:57	0.23				SR12	1/22/2017 15:57	0.21			
SR4	1/22/2017 16:17	0.24				SR12	1/22/2017 16:17	0.23			
SR4	1/22/2017 16:37	0.27				SR12	1/22/2017 16:37	0.23			
SR4	1/22/2017 16:57	0.27				SR12	1/22/2017 16:57	0.21			
SR4	1/22/2017 17:17	0.24				SR12	1/22/2017 17:17	0.23			
SR4	1/22/2017 17:37	0.27				SR12	1/22/2017 17:37	0.23			
SR4	1/22/2017 17:57	0.23				SR12	1/22/2017 17:57	0.25			
SR4	1/22/2017 18:17	0.26				SR12	1/22/2017 18:17	0.21			
SR4	1/22/2017 18:37	0.23				SR12	1/22/2017 18:37	0.23			
SR4	1/22/2017 18:57	0.25				SR12	1/22/2017 18:57	0.24			
SR4	1/22/2017 19:17	0.27				SR12	1/22/2017 19:17	0.22			
SR4	1/22/2017 19:37	0.27				SR12	1/22/2017 19:37	0.22			
SR4	1/22/2017 19:57	0.26				SR12	1/22/2017 19:57	0.24			
SR4	1/22/2017 20:17	0.26				SR12	1/22/2017 20:17	0.21			
SR4	1/22/2017 20:37	0.25				SR12	1/22/2017 20:37	0.24			
SR4	1/22/2017 20:57	0.25				SR12	1/22/2017 20:57	0.20			
SR4	1/22/2017 21:17	0.25				SR12	1/22/2017 21:17	0.22			
SR4	1/22/2017 21:37	0.25				SR12	1/22/2017 21:37	0.20			
SR4	1/22/2017 21:57	0.26				SR12	1/22/2017 21:57	0.21			
SR4	1/22/2017 22:17	0.27				SR12	1/22/2017 22:17	0.21			
SR4	1/22/2017 22:37	0.23				SR12	1/22/2017 22:37	0.20			
SR4	1/22/2017 22:57	0.26				SR12	1/22/2017 22:57	0.23			
SR4	1/22/2017 23:17	0.23				SR12	1/22/2017 23:17	0.20			
SR4	1/22/2017 23:37	0.27				SR12	1/22/2017 23:37	0.23			
SR4	1/22/2017 23:57	0.25				SR12	1/22/2017 23:57	0.22			

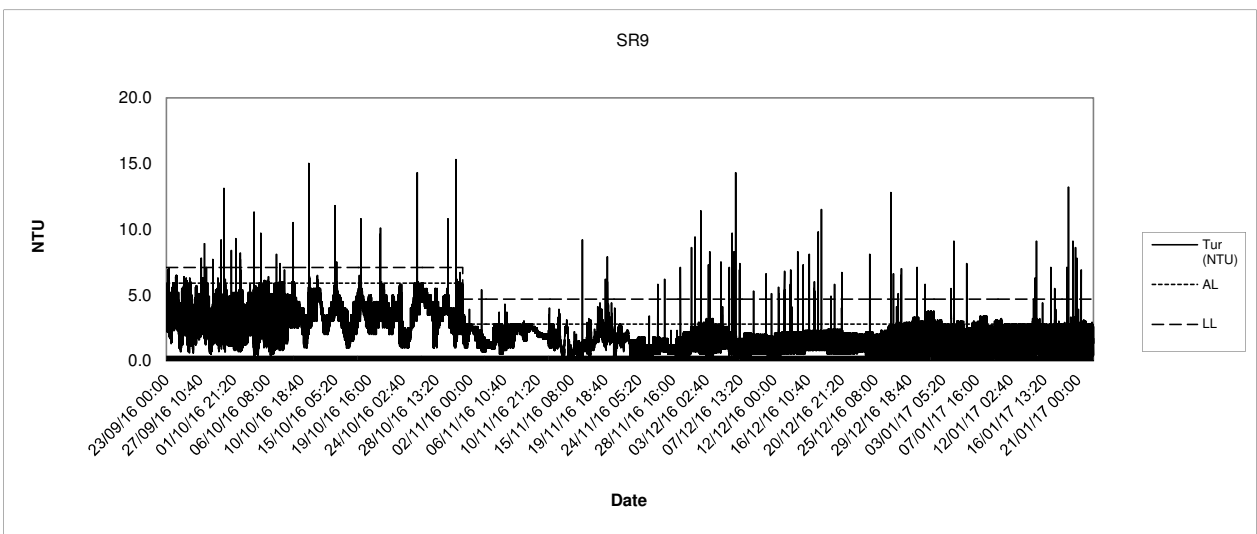
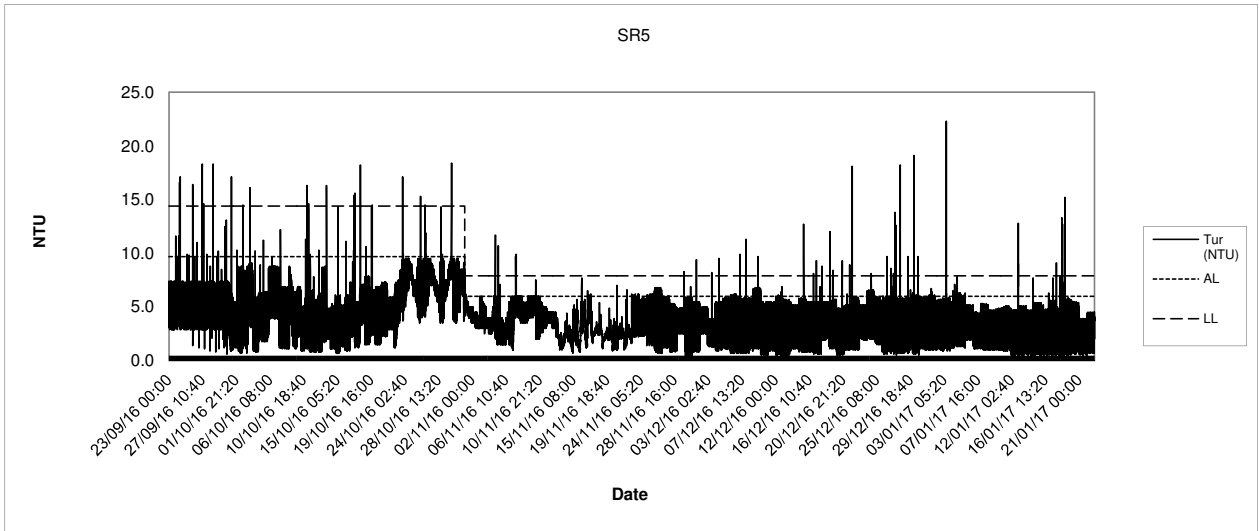
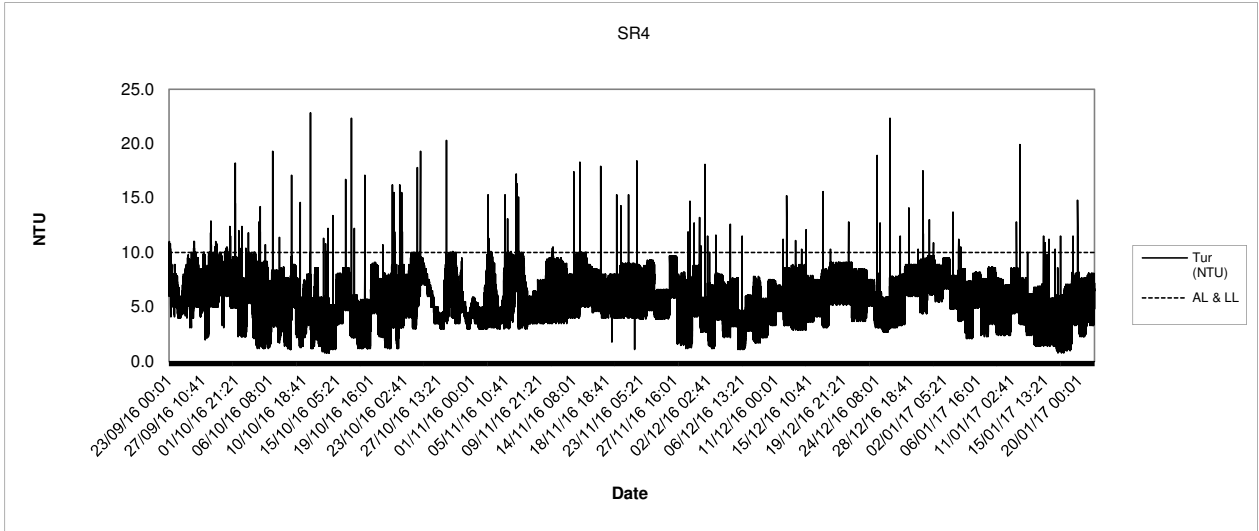
Remark: Fonts with underline: Action Level Exceedance

**Fonts in Bold with underline: Limit Level Exceedance**

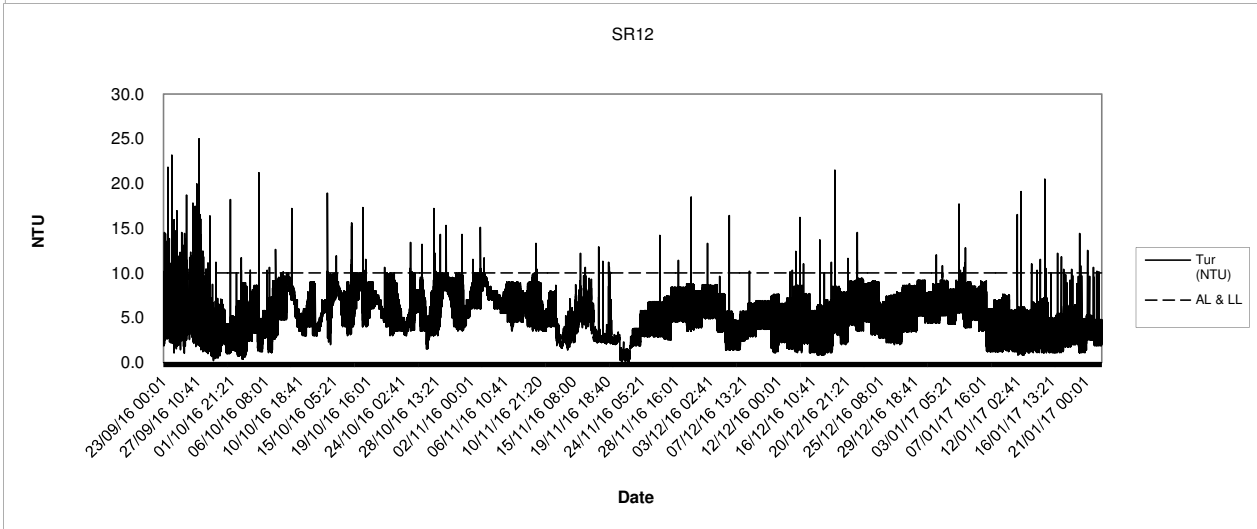
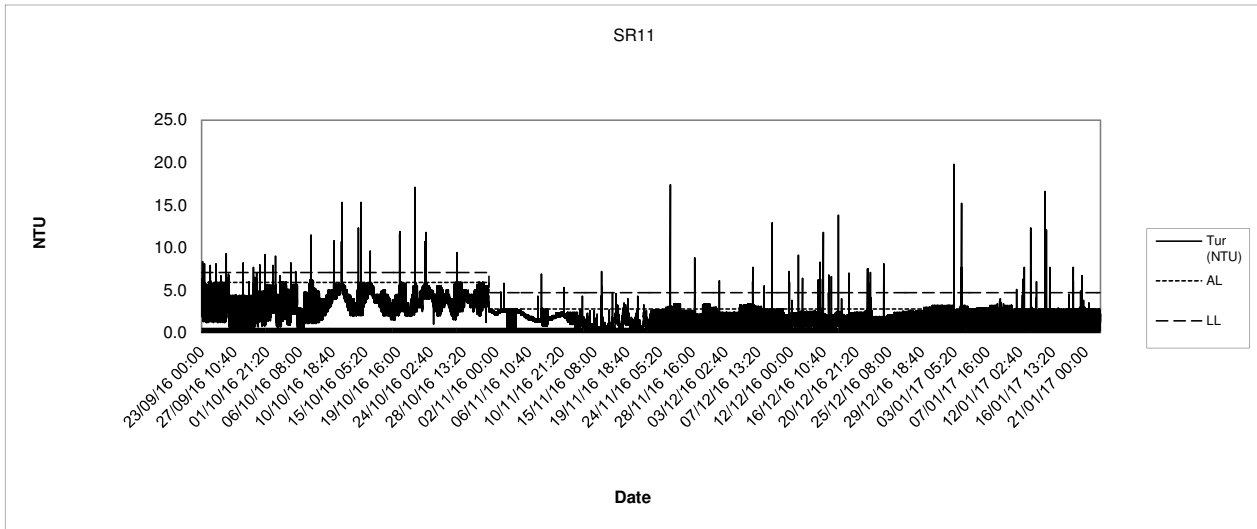
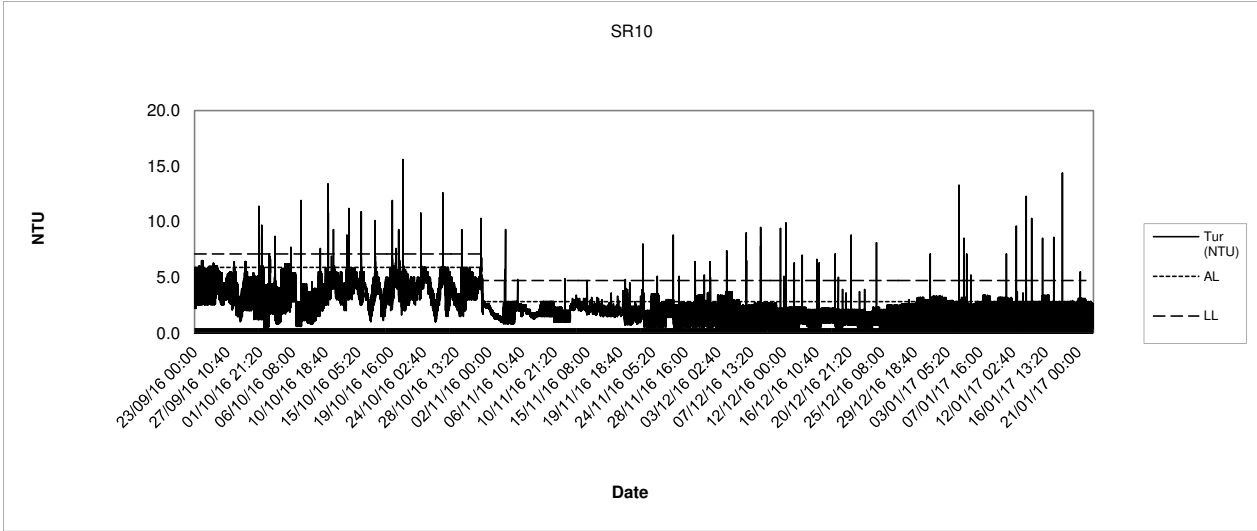
Automatic instrument calibration of NH<sub>3</sub>-N monitor was carried out during 5:57-6:37 at SR4 and SR12.



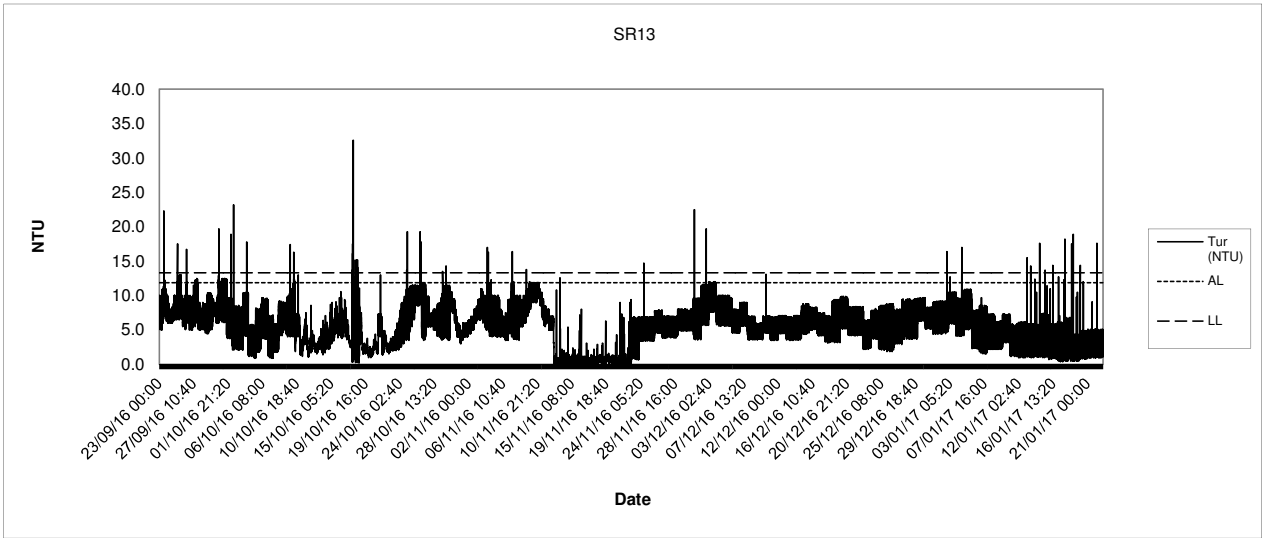
### Turbidity 24-hr Water Quality Monitoring



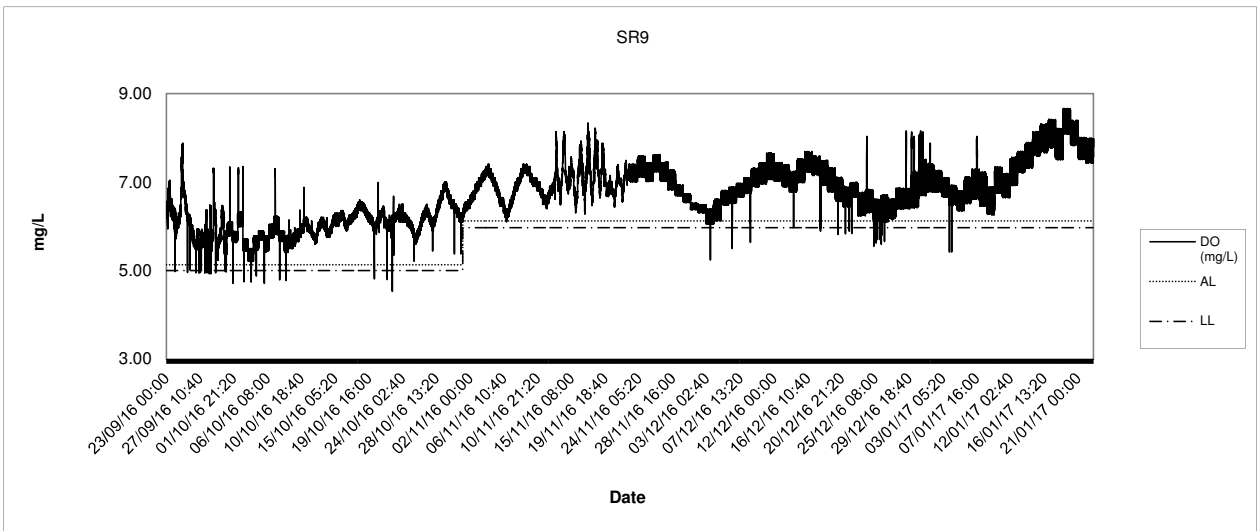
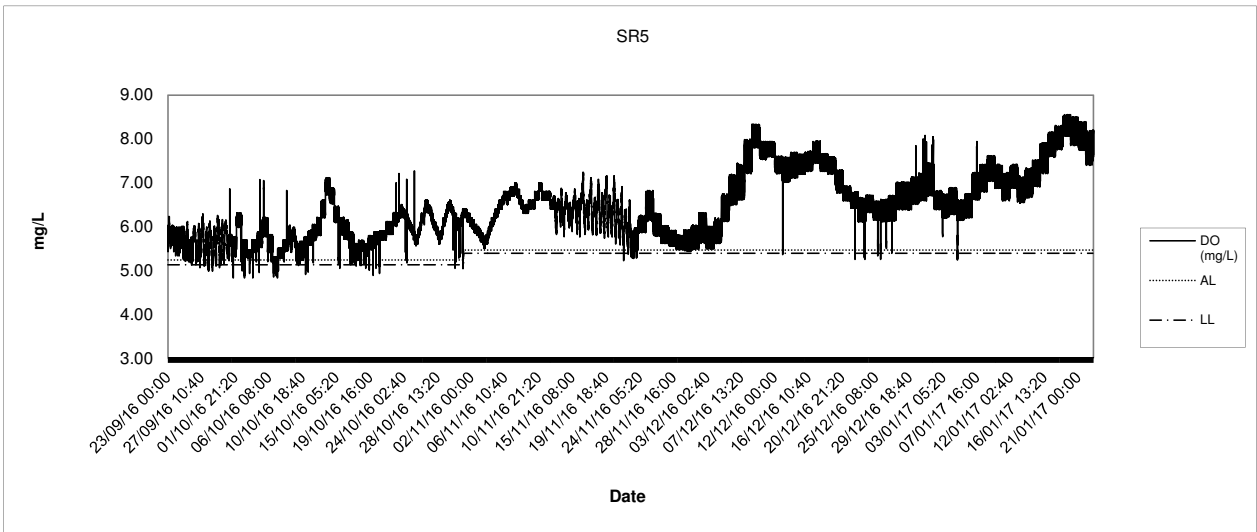
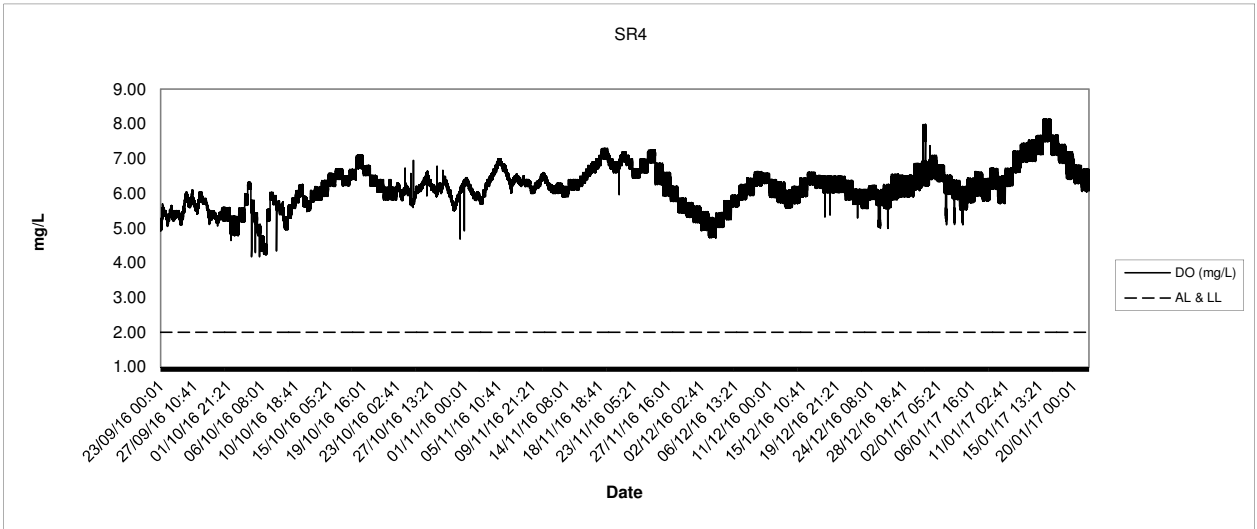
### Turbidity 24-hr Water Quality Monitoring



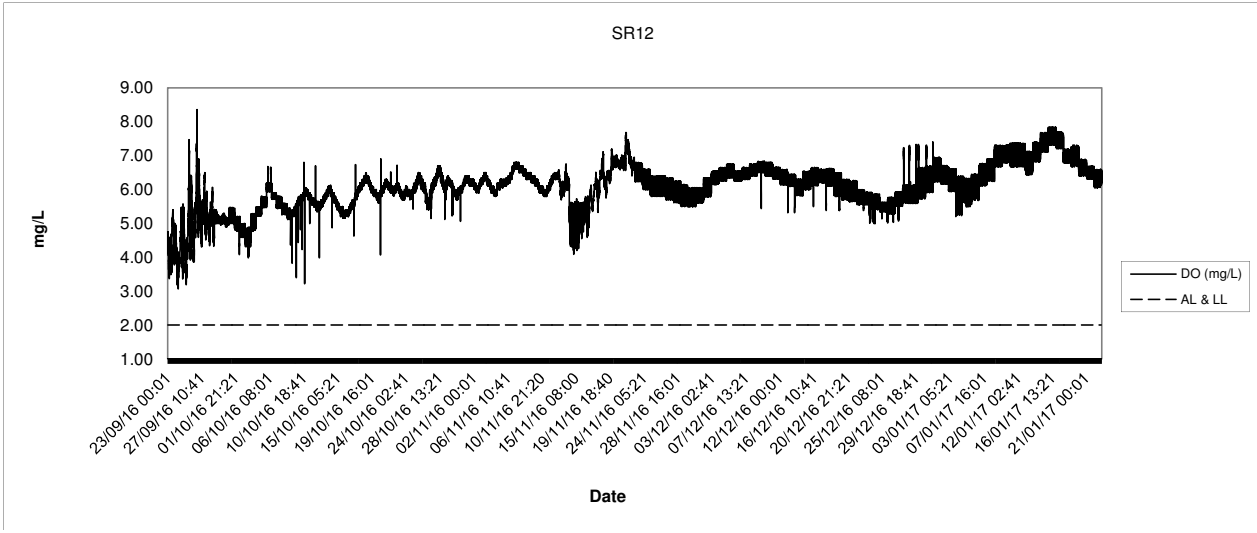
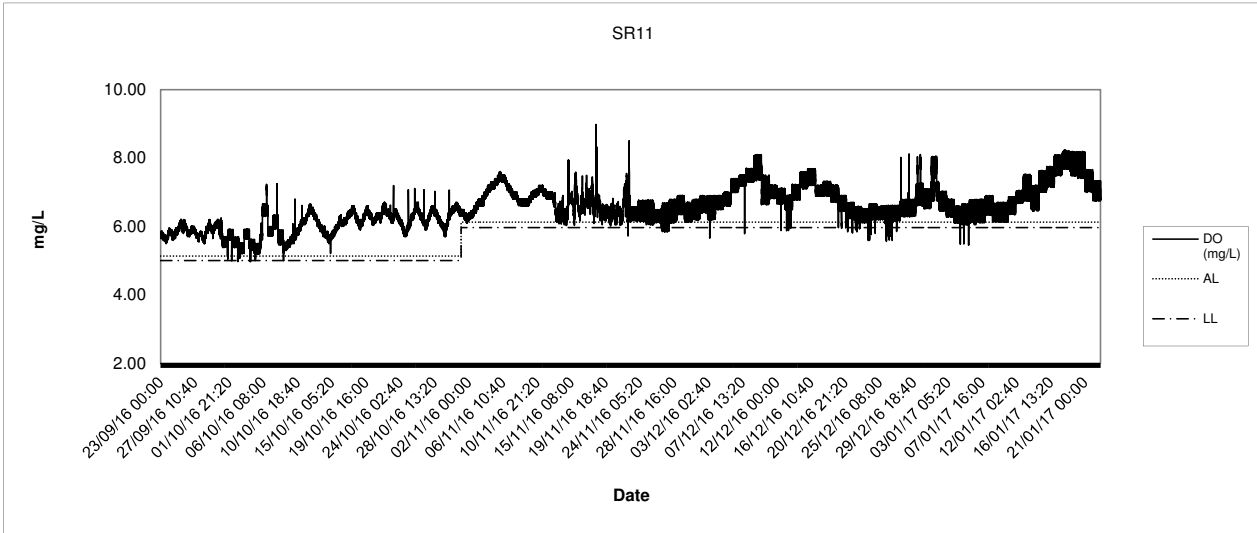
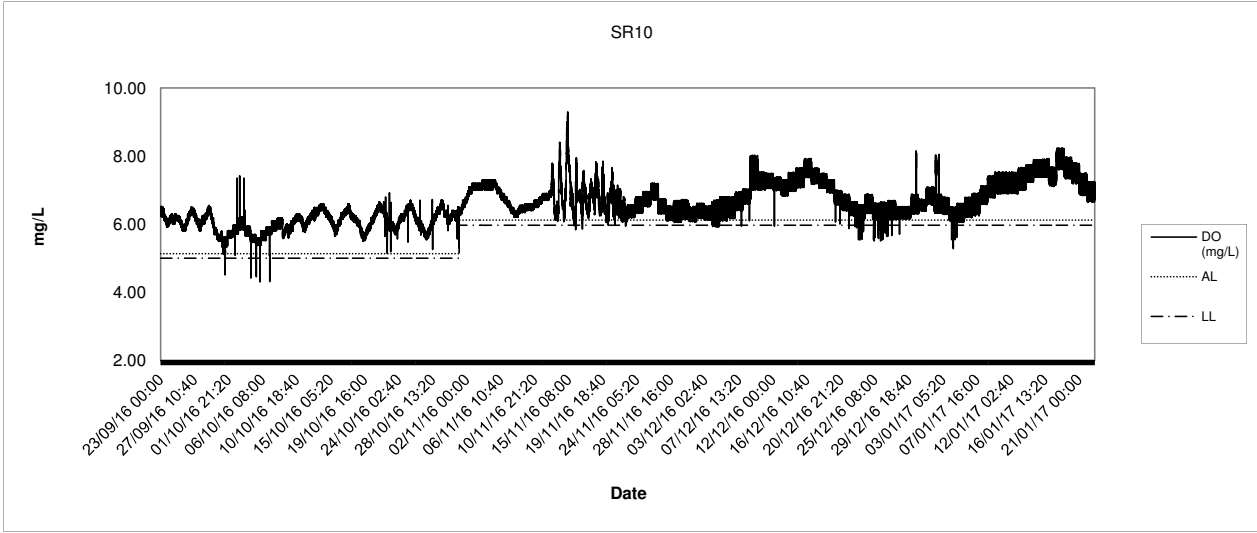
### Turbidity 24-hr Water Quality Monitoring



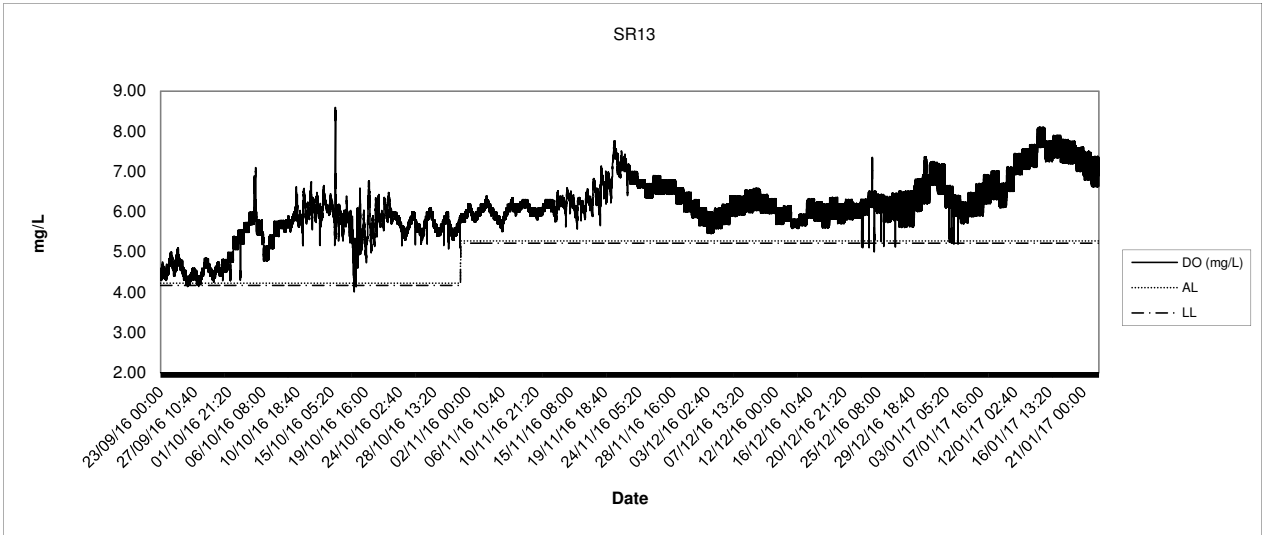
Dissolved Oxygen  
24-hr Water Quality Monitoring



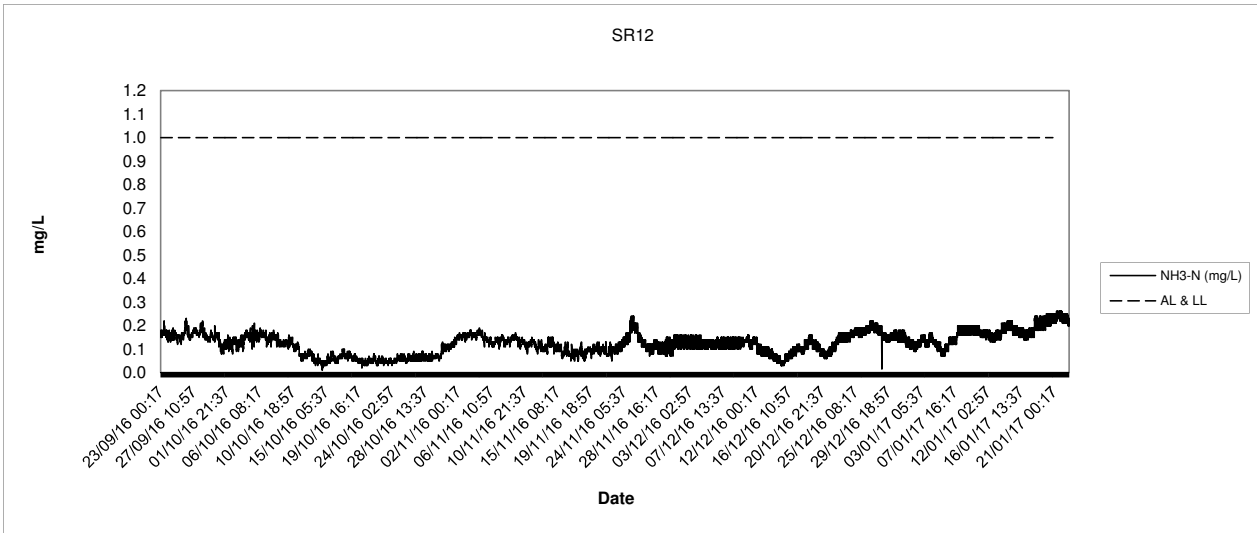
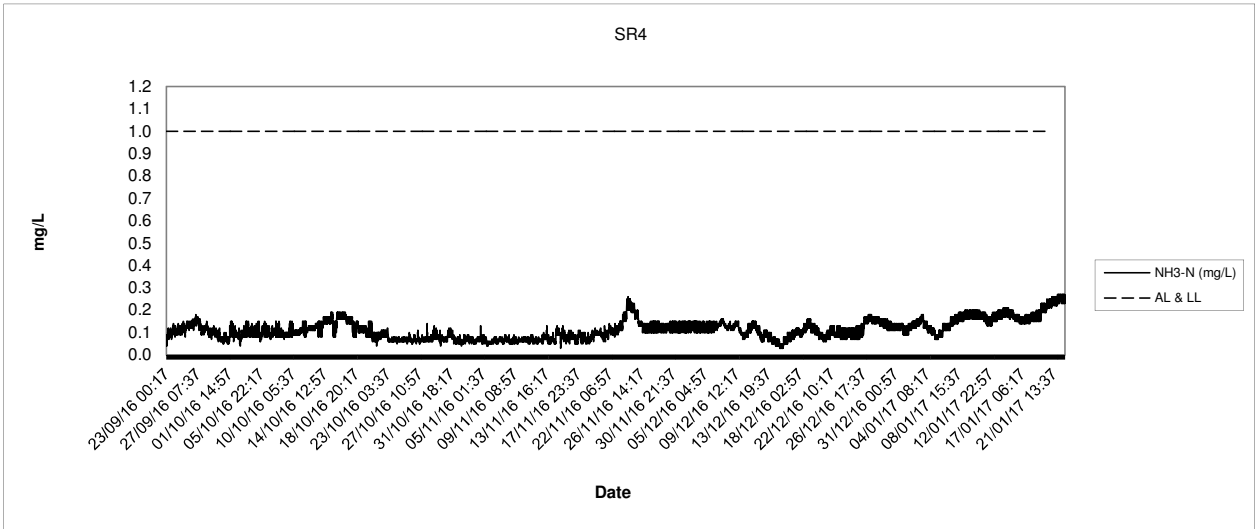
Dissolved Oxygen  
24-hr Water Quality Monitoring



Dissolved Oxygen  
24-hr Water Quality Monitoring



**Ammonia-N  
24-hr Water Quality Monitoring**



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : [mcl@fugro.com.hk](mailto:mcl@fugro.com.hk)

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Report No.: 0394/13/ED/0353B

Appendix H  
Event and Action Plans



## Typical Event and Action Plan for Water Quality for Construction Phase

Event	Action			
	ET Leader	IEC	ER	Contractor
<b>Action Level</b>				
Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm finding;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC and Contractor;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with IEC and Contractor; and</li> <li>6. Repeat measurement on next day of exceedance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC on the proposed mitigation measures; and</li> <li>2. Make agreement on the mitigation measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with ET and IEC and propose mitigation measures to IEC and ER; and</li> <li>6. Implement the agreed mitigation measures.</li> </ol>
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm finding;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC and Contractor;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with IEC and Contractor;</li> <li>6. Ensure mitigation measures are implemented;</li> <li>7. Prepare to increase the monitoring frequency to daily; and</li> <li>8. Repeat measurement on next day of exceedance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC on the proposed mitigation measures;</li> <li>2. Make agreement on the mitigation measures to be implemented; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; and</li> <li>6. Implement the agreed mitigation measures.</li> </ol>
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm finding;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC and Contractor;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with IEC and Contractor;</li> <li>6. Ensure mitigation measures are implemented;</li> <li>7. Prepare to increase the monitoring frequency to daily; and</li> <li>8. Repeat measurement on next day of exceedance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC on the proposed mitigation measures;</li> <li>2. Make agreement on the mitigation measures to be implemented; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; and</li> <li>6. Implement the agreed mitigation measures.</li> </ol>
<b>Limit Level</b>				
Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm finding;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC, Contractor and EPD, if the exceedance is recorded at Fish Culture Zone, AFCD should be informed. If the exceedance is recorded at WSD Flushing Water intakes, WSD should be informed;</li> <li>4. Check monitoring data, all plant, equipment</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; and</li> <li>2. Request Contractor to critically review the working methods;</li> <li>3. Make agreement on the mitigation measures to be implemented; and</li> <li>4. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days; and</li> <li>6. Implement the agreed mitigation measures.</li> </ol>

Event	Action			
	ET Leader	IEC	ER	Contractor
	<p>and Contractor's working methods;</p> <p>5. Discuss mitigation measures with IEC, ER and Contractor;</p> <p>6. Ensure mitigation measures are implemented; and</p> <p>7. Increase the monitoring frequency to daily until no exceedance of Limit level.</p>			
Exceedance for two or more consecutive samples	<p>1. Repeat in-situ measurement to confirm finding;</p> <p>2. Identify source(s) of impact;</p> <p>3. Inform IEC, Contractor and EPD, if the exceedance is recorded at Fish Culture Zone, AFCD should be informed. If the exceedance is recorded at WSD Flushing Water intakes, WSD should be informed;</p> <p>4. Check monitoring data, all plant, equipment and Contractor's working methods;</p> <p>5. Discuss mitigation measures with IEC, ER and Contractor;</p> <p>6. Ensure mitigation measures are implemented; and</p> <p>7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.</p>	<p>1. Discuss with ET and Contractor on the mitigation measures;</p> <p>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</p> <p>3. Assess the effectiveness of the implemented mitigation measures.</p>	<p>1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; and</p> <p>2. Request Contractor to critically review the working methods;</p> <p>3. Make agreement on the mitigation measures to be implemented;</p> <p>4. Assess the effectiveness of the implemented mitigation measures; and</p> <p>5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit Level.</p>	<p>1. Inform the ER and confirm notification of the non-compliance in writing;</p> <p>2. Rectify unacceptable practice;</p> <p>3. Check all plant and equipment;</p> <p>4. Consider changes of working methods;</p> <p>5. Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days;</p> <p>6. Implement the agreed mitigation measures; and</p> <p>7. As directed by the ER, to slow down or to stop all or part of the marine work or construction activities.</p>

## Event and Action Plan for 24-hour Water Quality Monitoring

Event	Action			
	ET Leader	Contractor	ER	IEC
Action Level				
On Action Level exceedance of turbidity or DO (mg/L) (over a period of 30-minute), or exceedance of ammonia (mg/L) (over a period of 60-minute). Notification is sent to ET, Contractor, ER, EPD, AFCD and WSD automatically via email	<ol style="list-style-type: none"> <li>1. Check data and determine if the exceedance was due to equipment problem. If so, fix the problem within 1 working day. Continue monitoring</li> <li>2. Carry out investigation as soon as possible after identification of exceedance. Check monitoring data (including data from regular water quality), all plant, equipment and Contractor's working methods;</li> <li>3. Report the initial investigation results to the Contractor within 24 hours of identification of exceedance. Advise contractor if exceedance may be due to contractor's construction works.</li> <li>4. Conduct water quality monitoring at the mariculture/ WSD flushing water intake station with exceedance recorded and gradient stations in vicinity within 18 hours of identification of exceedance if the exceedance may be due to the works. Parameters to monitor include DO (mg/L), turbidity and SS.</li> <li>5. Report the monitoring data to the Contractor within 48 hours of identification of exceedance. Advise contractor if exceedance is due to contractor's construction works.</li> <li>6. Discuss mitigation measures with IEC, ER and Contractor within 2 working days of submission of the investigation results.</li> <li>7. Ensure mitigation measures are implemented;</li> <li>8. Closely monitor the concerned 24-hr station.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check all plant and equipment;</li> <li>2. Consider changes of working methods;</li> <li>3. Rectify unacceptable practice;</li> <li>4. Submit the monitoring data and results of the investigation to IEC and ER within 48 hours of the identification of an exceedance Inform EPD, AFCD and WSD of the results;</li> <li>5. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 2 working days of submission of the investigation results;</li> <li>6. Implement the agreed mitigation measures within reasonable time scale</li> </ol>	<ol style="list-style-type: none"> <li>1. Request Contractor to critically review the working methods;</li> <li>2. Discuss with IEC, ET and Contractor on the proposed mitigation measures;</li> <li>3. Ensure remedial measures are properly implemented</li> <li>4. Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET</li> <li>2. Confirm ET assessment if exceedance is due /not due to the works</li> <li>3. Discuss with ET, ER and Contractor on the mitigation measures</li> <li>4. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly</li> <li>5. Assess the effectiveness of the implemented mitigation measures</li> </ol>
Limit Level				
On Limit Level exceedance of turbidity or DO (mg/L) (over a period of 30-minute or exceedance of ammonia (mg/L) (over a period of 60-minute). Notification is sent to ET, Contractor, ER, EPD, AFCD and	<ol style="list-style-type: none"> <li>1. Check data and determine if the exceedance was due to equipment problem. If so, fix the problem within 1 working day. Continue monitoring</li> <li>2. Carry out investigation as soon as possible after identification of exceedance. Check monitoring data (including data from regular water quality), all plant, equipment and Contractor's working methods;</li> </ol>	<ol style="list-style-type: none"> <li>1. Check all plant and equipment;</li> <li>2. Consider changes of working methods;</li> <li>3. Rectify unacceptable practice;</li> <li>4. Submit the monitoring data and results of the investigation to IEC and ER within 48 hours of the identification of an exceedance Inform EPD, AFCD and WSD of the results;</li> <li>5. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within</li> </ol>	<ol style="list-style-type: none"> <li>1. Request Contractor to critically review the working methods;</li> <li>2. Discuss with IEC, ET and Contractor on the proposed mitigation measures;</li> <li>3. Ensure remedial measures are properly implemented</li> <li>4. Assess the effectiveness of the implemented mitigation measures;</li> <li>5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET</li> <li>2. Confirm ET assessment if exceedance is due /not due to the works</li> <li>3. Discuss with ET, ER and Contractor on the mitigation measures</li> <li>4. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly</li> <li>5. Assess the effectiveness of the implemented mitigation measures</li> </ol>

Event	Action			
	ET Leader	Contractor	ER	IEC
WSD automatically via email	<p>3. Report the initial investigation results to the Contractor within 24 hours of identification of exceedance. Advise contractor if exceedance may be due to contractor's construction works.</p> <p>4. Conduct water quality monitoring at the all monitoring stations within 18 hours of identification of exceedance if the exceedance may be due to the works. Parameters to monitor include DO (mg/L), turbidity and SS.</p> <p>5. Report the monitoring data to the Contractor within 48 hours of identification of exceedance. Advise contractor if exceedance is due to contractor's construction works.</p> <p>6. Discuss mitigation measures with IEC, ER and Contractor within 2 working days of submission of the investigation results.</p> <p>7. Ensure mitigation measures are implemented;</p> <p>8. Closely monitor the concerned 24-hr station.</p>	<p>2 working days of submission of the investigation results;</p> <p>6. Implement the agreed mitigation measures within reasonable time scale;</p> <p>7. As directed by ER, to slow down or stop all or part of the marine work or construction activities.</p>	<p>part of the marine work until no exceedance of Limit Level.</p>	

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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Report No.: 0394/13/ED/0353B

Appendix I

Details of Notification of Exceedances

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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Report No.: 0394/13/ED/0353B

Routine Impact Monitoring

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161224 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	24/12/2016					
Time: (hh:mm)	Mid-Flood:	13:35	Mid-Ebb:	07:49		
Monitoring Location:	SR9 - Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	Turbidity:	AL / LL
	TIN(Lab):	AL / LL	TSS :	AL / LL	TIN(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at MF					
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input type="checkbox"/> _____ _____ _____ _____ _____						

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March



**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161227 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	27/12/2016					
Time: (hh:mm)	Mid-Flood:	15:19	Mid-Ebb:	09:38		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.26 (AL) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.26 (AL) / LL	TSS :	AL / LL	TIN(Lab):	0.27 (AL) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.86mg/L (G4) ME: 0.34mg/L (G2)	MF: 0.86mg/L (G4) ME: 0.34mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	Downstream: ( ) mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
	TIN:	0.26				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:	0.27				
	<input type="checkbox"/> _____					
	_____					
	_____					
	_____					

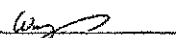
**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161229 /IM/SR4					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	29/12/2016					
Time: (hh:mm)	Mid-Flood:	08:10	Mid-Ebb:	12:25		
Monitoring Location:	SR4 – Tsuen Wan, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M):	2/2 mg/L;	NH3-N:	<1/<1 mg/L ;		
	DO (B):	2/2 mg/L;	Turbidity:	<10/<10 NTU;		
	Total Suspended Solids :	<10/<10 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	___ AL / LL	DO (B):	___ AL / LL	DO (S&M):	___ AL / LL
	Turbidity:	___ AL / LL	NH3-N(In-situ):	___ AL / LL	Turbidity:	___ AL / LL
	NH3-N(Lab):	___ AL / LL	TSS :	11 AL / <input checked="" type="radio"/> LL	NH3-N(Lab):	___ AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input checked="" type="checkbox"/> Upstream Control Station ( or gradient station ) exceeded AL/LL					MF: 10mg/L (G4) ME: 11mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		NH3-N: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	NH3-N: _____					
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,  
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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mel@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161229 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	29/12/2016					
Time: (hh:mm)	Mid-Flood:	07:52	Mid-Ebb:	12:40		
Monitoring Location:	SR9 - Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS	: 9 / 18 mg/L		: / mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(in-situ):	0.28 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.28 (A) / LL	TSS :	AL / LL	TIN(Lab):	0.28 (A) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
	<input checked="" type="checkbox"/> No increasing trend towards the Project at ME:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Downstream: 0.29mg/L (G5)	Downstream: 0.28mg/L (G5)
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: 0.30mg/L (G6)	Downstream: 0.30mg/L (G6)	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.					
	Mid-Flood:	DO (S&M):	_____	DO (B):	_____	Turbidity: _____
		TIN:	0.28		_____	_____
	Mid-Ebb:	DO (S&M):	_____	DO (B):	_____	Turbidity: _____
	TIN:	0.28		_____	_____	
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07 / 02 / 2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161229 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	29/12/2016					
Time: (hh:mm)	Mid-Flood:	08:56	Mid-Ebb:	11:28		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M): AL / LL DO (B): AL / LL	
	Turbidity:	AL / LL	TIN(In-situ):	0.27 (A) / LL	Turbidity: AL / LL TIN(In-situ): 0.31 AL / (L)	
	TIN(Lab):	0.27 (A) / LL		TIN(Lab):	0.30 AL / (L)	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
<input checked="" type="checkbox"/> No increasing trend towards the Project at ME:	Upstream:	( )mg/L	Upstream:	( )mg/L	Upstream:	( )NTU
	Downstream:	( )mg/L	Downstream:	( )mg/L	Downstream:	( )NTU
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream:	( )mg/L	Downstream:	( )mg/L	Downstream:	( )NTU
					0.29mg/L (G5)	0.28mg/L (G5)
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:	0.27			
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN:	0.31			
	<input type="checkbox"/> _____ _____ _____ _____					

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colln Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

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NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161229 /M/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	29/12/2016					
Time: (hh:mm)	Mid-Flood:	09:32	Mid-Ebb:	11:00		
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS:	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.27 AL / LL	Turbidity:	AL / LL
	TIN(Lab):	0.27 AL / LL		AL / LL	TIN(Lab):	0.30 AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
	<input checked="" type="checkbox"/> No increasing trend towards the Project at ME:	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU	Downstream: 0.29mg/L (G5)	Downstream: 0.28mg/L (G5)
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) NTU	Downstream: 0.30mg/L (G6)	Downstream: 0.30mg/L (G6)	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,

5 Lok Yi Street,

17 M.S. Castle Peak Road,

Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238


Fax : (852)-24508032

Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					


Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:

AL – Action Level

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DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

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TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161229 /M/SR12					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	29/12/2016					
Time: (hh:mm)	Mid-Flood:	07:51	Mid-Ebb:	12:43		
Monitoring Location:	SR12 – Tsing Yi, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M):	2/2 mg/L;	NH3-N:	<1/<1 mg/L ;		
	DO (B):	2/2 mg/L;	Turbidity:	<10/<10 NTU;		
	Total Suspended Solids :	<10/<10 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Food:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	NH3-N(in-situ):	AL / LL	Turbidity:	AL / LL
	NH3-N(Lab):	AL / LL	TSS :	AL / LL	NH3-N(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME					
	<input type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL					
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L	
	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		NH3-N:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	NH3-N:					
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
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	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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**Interim Notification of Environmental Quality Limits Exceedances  
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Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161231 /IM/SR5					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2016					
Time: (hh:mm)	Mid-Flood:	09:30	Mid-Ebb:	12:46		
Monitoring Location:	SR5 – Ma Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	Turbidity:	10.8/15.0 NTU;		
	DO (B):	4.11/4.04 mg/L;	TIN	0.45/0.50 <sub>(wet season)</sub> or 0.36/0.39 <sub>(dry season)</sub> mg/L		
	TSS	: 12 / 19 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	Turbidity:	AL / LL
	TIN(Lab):	AL / LL	TSS :	13 <input checked="" type="checkbox"/> AL / LL	TIN(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					MF: 15mg/L (G4) ME: 14mg/L (G1)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	TIN: _____					
<input type="checkbox"/> _____ _____ _____ _____						

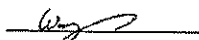
**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk


**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161231 /IM/SR6					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2016					
Time: (hh:mm)	Mid-Flood:	07:40	Mid-Ebb:	14:45		
Monitoring Location:	SR6 – Kau Yi Chau, Corals					
Action Level / Limit Level:	DO (S&M):	5.00/4.82 mg/L;	Turbidity:	4.0/8.7 NTU;		
	DO (B):	4.41/4.25 mg/L;				
	TSS :	9/18 mg/L			mg/L	
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M):		AL / LL	DO (B):	AL / LL
		Turbidity:	AL / LL	TSS :	AL / LL	TSS :
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME					✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU			
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	<input type="checkbox"/> _____					
	_____					
	_____					
	_____					

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Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yyyy): 07/02/2017

Notes:

- Abbreviation:

AL – Action Level

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DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161231 /IM/SR8				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	31/12/2016				
Time: (hh:mm)	Mid-Flood:	09:40	Mid-Ebb:	13:25	
Monitoring Location:	SR8 – Shek Kok Tsui, Corals				
Action Level / Limit Level:	DO (S&M):	5.00/4.82 mg/L;	Turbidity:	4.0/8.7 NTU;	
	DO (B):	4.41/4.25 mg/L;			
	TSS :	9/18 mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M): AL / LL DO (B): AL / LL
	Turbidity:	AL / LL		Turbidity:	AL / LL TSS : 10 <input checked="" type="checkbox"/> / LL
		AL / LL			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input type="checkbox"/> Station at Upstream Location at MF				
	<input checked="" type="checkbox"/> Upstream Control Station (Station for TIN) exceeded AL/LL				ME: 14mg/L (G1)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	
<input checked="" type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	<input type="checkbox"/> _____ _____ _____ _____				

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17 M.S. Castle Peak Road,  
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Email : mol@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
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Tel : (852)-24508238  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20161231 /M/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2016					
Time: (hh:mm)	Mid-Flood:	08:30	Mid-Ebb:	14:05		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	Turbidity:	AL / LL
	TIN(Lab):	AL / LL	TSS :	11 (AL) / LL	TIN(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN	TSS
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF					✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					MF: 15mg/L (G4) ME: 14mg/L (G1)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU	Upstream: _____ ( ) mg/L	
	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) NTU	Downstream: _____ ( ) mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____				
<input type="checkbox"/> _____						
_____						
_____						
_____						

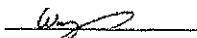
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5 Lok Yi Street,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
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Email : mci@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20161231 /M/SR12					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2016					
Time: (hh:mm)	Mid-Flood:	08:13	Mid-Ebb:	13:40		
Monitoring Location:	SR12 - Tsing Yi, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M):	2/2 mg/L;	NH3-N:	<1/<1 mg/L ;		
	DO (B):	2/2 mg/L;	Turbidity:	<10/<10 NTU;		
	Total Suspended Solids :	<10/<10 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	NH3-N(In-situ):	AL / LL	Turbidity:	AL / LL
	NH3-N(Lab):	AL / LL	TSS :	10 AL / LL	NH3-N(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					MF: 15mg/L (G4)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		NH3-N: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	NH3-N: _____					
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,  
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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07 / 02 / 2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
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- Wet Season: April to October; Dry Season: November to March

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17 M.S. Castle Peak Road,  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170103 /M/SR6 a							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	03/01/2017							
Time: (hh:mm)	Mid-Flood:	09:41	Mid-Ebb:	16:56				
Monitoring Location:	SR6 - Kau Yi Chau, Corals							
Action Level / Limit Level:	DO (S&M):	5.00/4.82 mg/L;	Turbidity:	4.0/8.7 NTU;				
	DO (B):	4.41/4.25 mg/L;						
	TSS :	9/18 mg/L			mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:						
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TSS :	10 <input checked="" type="checkbox"/> / LL	Turbidity:	AL / LL	TSS :	AL / LL
		AL / LL		AL / LL		AL / LL		AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:							
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS			
	Findings / Evidences							
	<input type="checkbox"/> Station at Upstream Location at ME							
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL							
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU				
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU					
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.							
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.							
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.							
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:				
		_____	_____	_____				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:				
		_____	_____	_____				
	<input type="checkbox"/> _____							
	_____							
	_____							
	_____							

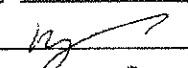
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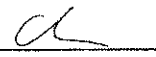
**MaterialLab**

	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yyyy): 07/02/2017**Notes:**

- Abbreviation:

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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**Interim Notification of Environmental Quality Limits Exceedances  
 Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170103 /IM/SR7							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	03/01/2017							
Time: (hh:mm)	Mid-Flood: 10:00		Mid-Ebb: 17:40					
Monitoring Location:	SR7 – Green Island, Corals							
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L		Turbidity: 2.9 / 4.8 NTU					
	DO (B): 6.11 / 6.04 mg/L							
	TSS : 9 / 18 mg/L							
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	:	AL / LL	Turbidity:	AL / LL	:	AL / LL
	TSS :	AL / LL	:	AL / LL	TSS :	10	AL / LL	:
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS			
	Findings / Evidences							
	<input type="checkbox"/> Station at Upstream Location at MF							
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL				ME: 11mg/L (G3)			
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU				
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU					
<input checked="" type="checkbox"/> No Dredging Works carried out.								
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓			
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.							
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____				
		_____	_____	_____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____				
	_____	_____	_____					
	<input type="checkbox"/> Dredging works conducted at Portion ____/____/____ of the Project. According to Contractor, dredged rate was ____/____/____ m <sup>3</sup> /day at Portion ____/____/____ respectively.							

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	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
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- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170105 /IM/SR7					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	05/01/2017					
Time: (hh:mm)	Mid-Flood:	11:30	Mid-Ebb:	18:30		
Monitoring Location:	SR7 - Green Island, Corals					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	Turbidity:	2.9 / 4.8 NTU		
	DO (B):	6.11 / 6.04 mg/L				
	TSS :	9 / 18 mg/L			mg/L	
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	___ AL / LL	DO (B):	___ AL / LL	DO (S&M):	___ AL / LL
	Turbidity:	___ AL / LL	___ :	___ AL / LL	Turbidity:	___ AL / LL
	TSS :	___ AL / LL	___ :	___ AL / LL	TSS :	11 <u>AL</u> / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS	
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at MF					
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					
	<input checked="" type="checkbox"/> No increasing / decreasing (for <del>DO</del> ) trend across the Project at ME	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU	Upstream: 7 mg/L (G2)	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) NTU	Downstream: 6 mg/L (G4)		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	<input type="checkbox"/> Dredging works conducted at Portion ____ / ____ / ____ of the Project. According to Contractor, dredged rate was ____ / ____ / ____ m <sup>3</sup> /day at Portion ____ / ____ / ____ respectively.					

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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170107 /IM/SR5					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/01/2017					
Time: (hh:mm)	Mid-Flood:	10:25	Mid-Ebb:	08:55		
Monitoring Location:	SR5 – Ma Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5.45 / 5.39 mg/L	Turbidity:	6.7 / 10.1 NTU		
	DO (B):	5.43 / 5.27 mg/L	TIN	0.45/0.50 <sub>(wet season)</sub> or 0.36/0.39 <sub>(dry season)</sub> mg/L		
	TSS	12 / 19 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M): AL / LL DO (B): AL / LL	
	Turbidity:	AL / LL	TIN(In-situ):	0.37 (A) / LL	Turbidity: AL / LL TIN(In-situ): 0.37 (A) / LL	
	TIN(Lab):	0.37 (A) / LL		AL / LL	TIN(Lab): 0.37 (A) / LL AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station <small>(or gradient station for TIN)</small> exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.33mg/L (G2)	MF: 0.63mg/L (G4) ME: 0.33mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: 0.37				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	TIN: 0.37					
<input type="checkbox"/> _____ _____ _____ _____						

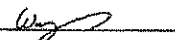
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Fugro Development Centre,  
5 Lok Yi Street,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170107 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/01/2017					
Time: (hh:mm)	Mid-Flood:	11:49	Mid-Ebb:	07:00		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.29 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.28 (A) / LL	TSS :	AL / LL	TIN(Lab):	0.28 (A) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.33mg/L (G2)	MF: 0.63mg/L (G4) ME: 0.33mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input type="checkbox"/> _____ _____ _____ _____						

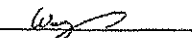
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yyyy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170107 /M/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwal Tsing Container Basin and Its Approach Channel					
Date:	07/01/2017					
Time: (hh:mm)	Mid-Flood:	10:39	Mid-Ebb:	08:07		
Monitoring Location:	SR10 - Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 (wet season) Or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS:	9 / 18 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.26 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.26 (A) / LL		AL / LL	TIN(Lab):	0.27 (A) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.33mg/L (G2)	MF: 0.63mg/L (G4) ME: 0.33mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input type="checkbox"/> _____ _____ _____ _____						

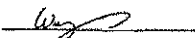
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Fugro Development Centre,  
 5 Lok Yi Street,  
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Tel : (852)-24508238  
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**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170110 /IM/SR4					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	10/01/2017					
Time: (hh:mm)	Mid-Flood: 14:04	Mid-Ebb: 10:09				
Monitoring Location:	SR4 - Tsuen Wan, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M): 2/2 mg/L; DO (B): 2/2 mg/L; Total Suspended Solids : <10/<10 mg/L	NH3-N: <1/<1 mg/L ; Turbidity: <10/<10 NTU;				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL		
	NH3-N(Lab): _____ AL / LL	TSS : _____ AL / LL	NH3-N(Lab): _____ AL / LL	TSS : 11 AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME					✓
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): _____ NH3-N: _____	DO (B): _____	Turbidity: _____			
	Mid-Ebb: DO (S&M): _____ NH3-N: _____	DO (B): _____	Turbidity: _____			
	<input type="checkbox"/> _____ _____ _____					

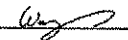
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**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street, Tel : (852)-24508238  
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Tai Lam, Tuen Mun, N.T., Hong Kong. Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170110 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	10/01/2017					
Time: (hh:mm)	Mid-Flood:	15:14	Mid-Ebb:	09:39		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.23 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.23 (A) / LL	TSS :	AL / LL	TIN(Lab):	0.23 (A) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input type="checkbox"/> _____ _____ _____ _____						

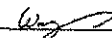
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 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017

## Notes:

- Abbreviation:

AL - Action Level

DO (B) - Dissolved Oxygen (Bottom)

DO (S&amp;M) - Dissolved Oxygen (Surface &amp; Middle)

LL - Limit Level

ME - Mid Ebb

MF - Mid Flood

NH3-N (In-situ) - Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) - Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) - Total Inorganic Nitrogen (In-situ results)

TIN (Lab) - Total Inorganic Nitrogen (Laboratory results)

TSS - Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR4					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/01/2017					
Time: (hh:mm)	Mid-Flood: 16:07		Mid-Ebb: 11:10			
Monitoring Location:	SR4 - Tsuen Wan, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M): 2/2 mg/L;	NH3-N: <1/<1 mg/L ;	DO (B): 2/2 mg/L;	Turbidity: <10/<10 NTU;	Total Suspended Solids : <10/<10 mg/L	
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood: DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	Mid-Ebb: DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	Turbidity: _____ AL / LL	
	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL	TSS : _____ AL / LL	
	NH3-N(Lab): _____ AL / LL	TSS : _____ AL / LL	NH3-N(Lab): _____ AL / LL	TSS : 10 AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME					✓
	<input type="checkbox"/> Upstream Control Station ( or gradient station ) exceeded AL/LL					
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ NH3-N: _____ DO (B): _____ Turbidity: _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ NH3-N: _____ DO (B): _____ Turbidity: _____ <input type="checkbox"/> _____ _____ _____ _____					

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mol@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March



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 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.  
 Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
 Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	12/01/2017				
Time: (hh:mm)	Mid-Flood: 17:10		Mid-Ebb: 10:30		
Monitoring Location:	SR6 - Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 5.00/4.82 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9/18 mg/L		Turbidity: 4.0/8.7 NTU; : / mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	TSS : AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input type="checkbox"/> Station at Upstream Location at ME				
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				
<input checked="" type="checkbox"/> No increasing trend towards the Project at MF:	Upstream:	Upstream:	Upstream:	Downstream:	
	( ) mg/L	( ) mg/L	( ) NTU	9mg/L (G3)	
<input checked="" type="checkbox"/> No Dredging Works carried out.	Downstream:	Downstream:	Downstream:	Downstream:	
	( ) mg/L	( ) mg/L	( ) NTU	13mg/L (G2)	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	<input type="checkbox"/> _____				
	_____				
	_____				
	_____				

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508288  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 27/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR7				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and Its Approach Channel				
Date:	12/01/2017				
Time: (hh:mm)	Mid-Flood:	17:30	Mid-Ebb:	09:52	
Monitoring Location:	SR7 – Green Island, Corals				
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	Turbidity:	2.9 / 4.8 NTU	
	DO (B):	6.11 / 6.04 mg/L			
	TSS :	9 / 18 mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M):	___ AL / LL	DO (B):	___ AL / LL	DO (S&M):
	Turbidity:	___ AL / LL		Turbidity:	___ AL / LL
	TSS :	10 (A) / LL		TSS :	___ AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL				
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	
<input checked="" type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	<input type="checkbox"/> Dredging works conducted at Portion ___/___/___ of the Project. According to Contractor, dredged rate was ___/___/___ m <sup>3</sup> /day at Portion ___/___/___ respectively.				


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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR9				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	12/01/2017				
Time: (hh:mm)	Mid-Flood:	16:30	Mid-Ebb:	09:52	
Monitoring Location:	SR9 – Cheung Sha Wan FCZ				
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN : 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L Turbidity: 2.9 / 4.8 NTU			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.32 AL / (L)	DO (B): _____ AL / LL TIN(in-situ): 0.32 AL / (L) TSS : 10 (A) / LL	Mid-Ebb:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.31 AL / (L) TSS : _____ AL / LL
	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)   TIN (Lab)
	<input checked="" type="checkbox"/> Station at Upstream Location at MF			✓	✓   ✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				ME:0.33mg/L (G2)   ME:0.33mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.				
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓   ✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M): _____ TIN: 0.32	DO (B): _____	Turbidity: _____	
	Mid-Ebb:	DO (S&M): _____ TIN: 0.31	DO (B): _____	Turbidity: _____	
	<input type="checkbox"/> _____ _____ _____ _____				

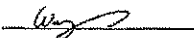
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 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mci@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

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NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/01/2017					
Time: (hh:mm)	Mid-Flood:	15:10	Mid-Ebb:	12:30		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	Turbidity:	AL / LL
	TIN(Lab):	AL / LL	TSS :	13 <input checked="" type="checkbox"/> AL / LL	TIN(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	
	Repeat In-situ measurement was done.					
Remarks: (tick / fill in as appropriate)	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
<input type="checkbox"/> _____ _____ _____ _____ _____						

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/01/2017					
Time: (hh:mm)	Mid-Flood:	14:30	Mid-Ebb:	13:30		
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS:	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(in-situ):	AL / LL	Turbidity:	AL / LL
	TIN(Lab):	AL / LL	TSS:	11 <input checked="" type="checkbox"/> AL / LL	TIN(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	
	<input type="checkbox"/> Upstream Control Station <small>(or gradient station for TIN)</small> exceeded AL/LL					
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
<input type="checkbox"/> _____ _____ _____ _____ _____						

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07 / 02 / 2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (in-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170112 /IM/SR12					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/01/2017					
Time: (hh:mm)	Mid-Flood: 16:19	Mid-Ebb: 10:53				
Monitoring Location:	SR12 – Tsing Yi, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M): 2/2 mg/L; DO (B): 2/2 mg/L; Total Suspended Solids : <10/<10 mg/L	NH3-N: <1/<1 mg/L ; Turbidity: <10/<10 NTU;				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL NH3-N(Lab): _____ AL / LL	DO (B): _____ AL / LL NH3-N(In-situ): _____ AL / LL TSS : 12 AL / LL	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL NH3-N(Lab): _____ AL / LL	DO (B): _____ AL / LL NH3-N(In-situ): _____ AL / LL TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					
<input checked="" type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Downstream: 9mg/L (G3) Downstream: 13mg/L (G2)	
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): _____ NH3-N: _____	DO (B): _____	Turbidity: _____			
	Mid-Ebb: DO (S&M): _____ NH3-N: _____	DO (B): _____	Turbidity: _____			
	<input type="checkbox"/> _____ _____ _____ _____					

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
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	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
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- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170114 /IM/SR4					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/01/2017					
Time: (hh:mm)	Mid-Flood:	09:47	Mid-Ebb:	13:40		
Monitoring Location:	SR4 - Tsuen Wan, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M):	2/2 mg/L;	NH3-N:	<1/<1 mg/L ;		
	DO (B):	2/2 mg/L;	Turbidity:	<10/<10 NTU;		
	Total Suspended Solids :	<10/<10 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	NH3-N(In-situ):	AL / LL	Turbidity:	AL / LL
	NH3-N(Lab):	AL / LL	TSS :	14 AL / LL	NH3-N(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					MF: 10mg/L (G6)
	<input type="checkbox"/> No Increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		NH3-N: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	NH3-N: _____					
<input type="checkbox"/> _____ _____ _____ _____						

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170114 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	14/01/2017				
Time: (hh:mm)	Mid-Flood:	09:30	Mid-Ebb:	12:00	
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M):	5.00/4.82 mg/L;	Turbidity:	4.0/8.7 NTU;	
	DO (B):	4.41/4.25 mg/L;			
	TSS :	9/18 mg/L			mg/L
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M): AL / LL DO (B): AL / LL
	Turbidity:	AL / LL	TSS :	AL / LL	Turbidity: AL / LL TSS : 11 (A) / LL
		AL / LL		AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at ME				✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	
	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU		
<input checked="" type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.				
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:	
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:	
	<input type="checkbox"/> _____				
	_____				
	_____				
	_____				

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07 / 02 / 2017

Notes:

- Abbreviation:
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- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
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- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170114 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/01/2017					
Time: (hh:mm)	Mid-Flood:	10:10	Mid-Ebb:	12:40		
Monitoring Location:	SR9 - Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN (in-situ):	0.31 AL / LL	Turbidity:	AL / LL
	TIN (Lab):	0.31 AL / LL	TSS :	AL / LL	TIN (Lab):	0.30 AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	
	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	<input type="checkbox"/> _____ _____ _____ _____					

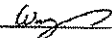
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
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Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170114 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/01/2017					
Time: (hh:mm)	Mid-Flood: 11:30	Mid-Ebb: 14:00				
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> OR 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): ___ AL / LL DO (B): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.27 (A) / LL	DO (B): ___ AL / LL TIN(in-situ): 0.28 (A) / LL	DO (S&M): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.29 (A) / LL	DO (B): ___ AL / LL TIN(in-situ): 0.29 (A) / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.					
	Mid-Flood: DO (S&M): _____ TIN: 0.28	DO (B): _____	Turbidity: _____			
Mid-Ebb: DO (S&M): _____ TIN: 0.29	DO (B): _____	Turbidity: _____				
<input type="checkbox"/> _____ _____ _____ _____						


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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yyyy): 07 / 02 / 2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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**Interim Notification of Environmental Quality Limits Exceedances  
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Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170114 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/01/2017					
Time: (hh:mm)	Mid-Flood: 11:55	Mid-Ebb: 14:40				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> OR 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.27 (A) / LL	DO (B): ___ AL / LL TIN(In-situ): 0.27 (A) / LL	DO (S&M): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.29 (A) / LL	DO (B): ___ AL / LL TIN(In-situ): 0.29 (A) / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): _____ TIN: 0.27	DO (B): _____	Turbidity: _____			
	Mid-Ebb: DO (S&M): _____ TIN: 0.29	DO (B): _____	Turbidity: _____			
	<input type="checkbox"/> _____ _____ _____ _____					


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Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170117 /IM/SR4					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	17/01/2017					
Time: (hh:mm)	Mid-Flood:	11:12	Mid-Ebb:	15:30		
Monitoring Location:	SR4 - Tsuen Wan, WSD Flushing Water Intake					
Action Level / Limit Level:	DO (S&M):	2/2 mg/L;	NH3-N:	<1/<1 mg/L ;		
	DO (B):	2/2 mg/L;	Turbidity:	<10/<10 NTU;		
	Total Suspended Solids :	<10/<10 mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	NH3-N(In-situ):	AL / LL	Turbidity:	AL / LL
	NH3-N(Lab):	AL / LL	TSS :	10 AL (U)	NH3-N(Lab):	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS
	Findings / Evidences					
	<input type="checkbox"/> Station at Upstream Location at ME					
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL					MF: 11mg/L (C3)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		NH3-N: _____				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	NH3-N: _____					
<input type="checkbox"/> _____ _____ _____ _____						

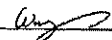
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk


**Materialab**

	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yyyy): 07/02/2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170117 /IM/SR6					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	17/01/2017					
Time: (hh:mm)	Mid-Flood:	09:38	Mid-Ebb:	16:39		
Monitoring Location:	SR6 - Kau Yi Chau, Corals					
Action Level / Limit Level:	DO (S&M):	5.00/4.82 mg/L;	Turbidity:	4.0/8.7 NTU;		
	DO (B):	4.41/4.25 mg/L;				
	TSS :	9/18 mg/L		/ mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TSS :	AL / LL	Turbidity:	AL / LL
		AL / LL		AL / LL	TSS :	10 @ / LL
		AL / LL		AL / LL		AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at ME				✓	
	<input type="checkbox"/> Upstream Control Station (or gradient station for TSS) exceeded AL/LL					
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU			
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	<input type="checkbox"/> _____ _____ _____ _____					

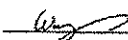
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Fugro Development Centre,  
 6 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

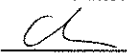
**Materialab**

	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

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NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170117 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	17/01/2017					
Time: (hh:mm)	Mid-Flood: 10:11	Mid-Ebb: 16:01				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU				
	TSS : 9 / 18 mg/L					
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): <u>    </u> AL / LL	DO (B): <u>    </u> AL / LL	DO (S&M): <u>    </u> AL / LL	DO (B): <u>    </u> AL / LL		
	Turbidity: <u>    </u> AL / LL	TIN(In-situ): <u>0.31</u> AL / <u>(L)</u>	Turbidity: <u>    </u> AL / LL	TIN(In-situ): <u>0.32</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.32</u> AL / <u>(L)</u>	TSS : <u>    </u> AL / LL	TIN(Lab): <u>0.31</u> AL / <u>(L)</u>	TSS : <u>    </u> AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				ME:0.30mg/L (G1)	ME:0.30mg/L (G1)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): <u>    </u>	DO (B): <u>    </u>	Turbidity: <u>    </u>		
		TIN: <u>0.31</u>				
	Mid-Ebb:	DO (S&M): <u>    </u>	DO (B): <u>    </u>	Turbidity: <u>    </u>		
	TIN: <u>0.32</u>					
<input type="checkbox"/> _____ _____ _____ _____ _____						


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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mci@fugro.com.hk


**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170117 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	17/01/2017					
Time: (hh:mm)	Mid-Flood: 11:13	Mid-Ebb: 14:40				
Monitoring Location:	SR10 - Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.29 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.29 (A) / LL TSS : AL / LL	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.29 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.29 (A) / LL TSS : 11 (A) / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
		Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station) exceeded AL/LL			ME: 11mg/L (G1)	ME:0.30mg/L (G1)	ME:0.30mg/L (G1)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): TIN: 0.29	DO (B):	Turbidity:			
	Mid-Ebb: DO (S&M): TIN: 0.29	DO (B):	Turbidity:			

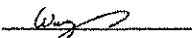
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
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- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170117 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	17/01/2017					
Time: (hh:mm)	Mid-Flood: 11:40		Mid-Ebb: 14:50			
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L		TIN: 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L Turbidity: 2.9 / 4.8 NTU mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	Turbidity: AL / LL	TIN (in-situ): 0.30 AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF			✓	✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL			ME: 11mg/L (G1)	ME: 0.30mg/L (G1)	ME: 0.30mg/L (G1)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) NTU Downstream: ( ) NTU	Upstream: ( ) mg/L Downstream: ( ) mg/L	
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): TIN: 0.29	DO (B):	Turbidity:		
Mid-Ebb:	DO (S&M): TIN: 0.30	DO (B):	Turbidity:			


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Fugro Development Centre,  
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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**Materialab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL - Action Level

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NH3-N (Lab) - Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) - Total Inorganic Nitrogen (In-situ results)

TIN (Lab) - Total Inorganic Nitrogen (Laboratory results)

TSS - Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170119 /IM/SR4						
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel						
Date:	19/01/2017						
Time: (hh:mm)	Mid-Flood: 12:01	Mid-Ebb: 17:00					
Monitoring Location:	SR4 - Tsuen Wan, WSD Flushing Water Intake						
Action Level / Limit Level:	DO (S&M): 2/2 mg/L; DO (B): 2/2 mg/L; Total Suspended Solids : <10/<10 mg/L	NH3-N: <1/<1 mg/L ; Turbidity: <10/<10 NTU;					
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:					
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL			
	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL	Turbidity: _____ AL / LL	NH3-N(In-situ): _____ AL / LL			
	NH3-N(Lab): _____ AL / LL	TSS : _____ AL / LL	NH3-N(Lab): _____ AL / LL	TSS : 11 AL / LL			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____						
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	NH3-N	TSS	
	Findings / Evidences						
	<input checked="" type="checkbox"/> Station at Upstream Location at ME						✓
	<input type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL						
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU	Upstream: _____ ( ) mg/L		
	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) NTU	Downstream: _____ ( ) mg/L			
<input checked="" type="checkbox"/> No Dredging Works carried out.							
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ NH3-N: _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ NH3-N: _____ <input type="checkbox"/> _____ _____ _____ _____						


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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

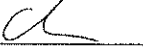
**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	NH3-N	
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/02/2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170119 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	19/01/2017					
Time: (hh:mm)	Mid-Flood: 10:50	Mid-Ebb: 17:35				
Monitoring Location:	SR9 - Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L				
	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU				
	TSS : 9 / 18 mg/L					
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: AL / LL	TIN(In-situ): 0.27 AL / LL	Turbidity: AL / LL	TIN(In-situ): 0.29 AL / LL		
	TIN(Lab): 0.27 AL / LL	TSS : AL / LL	TIN(Lab): 0.29 AL / LL	TSS : AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L	
	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
				✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): 0.27	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN: 0.29				
<input type="checkbox"/> _____ _____ _____ _____						

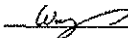
**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yyyy): 07 / 02 / 2017

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170119 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	19/01/2017					
Time: (hh:mm)	Mid-Flood: 12:10	Mid-Ebb: 16:35				
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.24 (A) / LL	DO (B): ___ AL / LL TIN(In-situ): 0.24 (A) / LL TSS : ___ AL / LL	DO (S&M): ___ AL / LL Turbidity: ___ AL / LL TIN(Lab): 0.25 (A) / LL	DO (B): ___ AL / LL TIN(In-situ): 0.25 (A) / LL TSS : ___ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ___ ( ) mg/L Downstream: ___ ( ) mg/L	Upstream: ___ ( ) mg/L Downstream: ___ ( ) mg/L	Upstream: ___ ( ) NTU Downstream: ___ ( ) NTU	Upstream: ___ ( ) mg/L Downstream: ___ ( ) mg/L	
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat in-situ measurement was done.					
	Mid-Flood: DO (S&M): 0.24 TIN: _____ Mid-Ebb: DO (S&M): 0.25 TIN: _____	DO (B): _____ DO (B): _____	Turbidity: _____ Turbidity: _____			

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
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- LL – Limit Level
- ME – Mid Ebb
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- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170119 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	19/01/2017					
Time: (hh:mm)	Mid-Flood: 13:06	Mid-Ebb: 15:45				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.24 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.25 (A) / LL TSS : AL / LL	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.25 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.24 (A) / LL TSS : AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station) exceeded AL/LL				ME:0.31mg/L (G2)	ME:0.31mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) NTU Downstream: ( ) NTU	Upstream: ( ) mg/L Downstream: ( ) mg/L	
Conclusion	<input checked="" type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): 0.25 TIN: _____ Mid-Ebb: DO (S&M): 0.24 TIN: _____	DO (B): _____ DO (B): _____	Turbidity: _____ Turbidity: _____			

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 07/02/2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 07/02/2017

Notes:

- Abbreviation:
- AL – Action Level
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- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
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- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20170121 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	21/01/2017					
Time: (hh:mm)	Mid-Flood: 11:20	Mid-Ebb: 07:20				
Monitoring Location:	SR9 - Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN Turbidity: 2.9 / 4.8 NTU	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN (In-situ): <u>0.34</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN (In-situ): <u>0.35</u> AL / <u>(L)</u>		
	TIN (Lab): <u>0.34</u> AL / <u>(L)</u>	TSS : _____ AL / LL	TIN (Lab): <u>0.35</u> AL / <u>(L)</u>	TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input type="checkbox"/> Silt curtain in proper condition <input type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)   TIN (Lab)	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				ME:0.33mg/L (G2)	ME:0.33mg/L (G2)
	<input type="checkbox"/> No increasing trend towards the Project at MF:	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU Downstream: _____ ( ) NTU	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	
<input checked="" type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: <u>0.34</u>	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: <u>0.35</u>	DO (B): _____	Turbidity: _____		
	<input type="checkbox"/>	_____				


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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07 / 02 / 2017

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07 / 02 / 2017**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

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LL – Limit Level

ME – Mid Ebb

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NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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**MaterialLab**

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Report No.: 0394/13/ED/0353B

Appendix J

Environmental Mitigation Implementation Schedule

EIA Ref	EM& A Ref	No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measure	Location of the measure	When to implement the measure?	Implementation Status
		A	Water Quality					
3.8	2.9		<u>Use of Silt Screens</u>	Minimize the effect of potential increase in SS levels at the seawater intakes	Contractor	WSD8, WSD9 and EMSD1	Construction Phase	Implemented
	A1	Silt Screens shall be installed at the flushing water intakes WSRs WSD1, WSD8, <del>WSD9</del> and EMSD1 to minimise the effect of potential increase in SS levels at the seawater intakes.						
3.8	2.9		<u>Use of Silt Curtains</u>	Minimize the release of suspended soil from the dredging area	Contractor	Construction Work Sites	Construction Phase	NA-no dredging work carried out in reporting month
	A2	To minimize the potential SS impact from dredging, deployment of silt curtains around the grab dredgers is recommended; and  Before commencement of dredging works, the holder of the Environmental Permit shall submit detailed proposal of the design and arrangement of the frame type silt curtain to EPD for approval.						
3.10	2.9	A3	Water Quality Monitoring Program	Perform water quality monitoring at sensitive receivers during construction phase	ET	Monitoring Locations as stated in Table 2.1 of the EM&A Manual	Construction Phase	Implemented
			Water quality monitoring shall be carried out in accordance with Section 2 of the Environmental Monitoring and Audit (EM&A) Manual.  Event and Action Plan (EAP) for water quality shall be followed in case of any exceedance in action and limit level.					
3.8 (EP Ref 3)	-		Dredging Operation	Minimize potential adverse effect as a result of dredging activities	Contractor	Construction Work Sites	Construction Phase	NA-no dredging work carried out in reporting month
	A4	Only two types of dredgers are allowed for this Project: (a) grab dredger with closed grab, and (b) <del>cutter suction dredger</del> spud pole grab dredger.						
	A5	The speed of any construction vessels shall not exceed 10 knots when passing through the area of the Project.						
	A6	No more than <del>three</del> two grab dredgers with closed grab ( <del>or one cutter suction dredger with two closed grab dredgers</del> ) shall be operated within the Project Area at any one time for the Project.						
	A7	Only one closed grab dredger <del>or one cutter suction dredger</del> shall be operated in Zone 2B and during which no other closed grab dredger shall be allowed in other zones within the Project Area.						
	A8	No more than one grab dredger with closed grab ( <del>or one cutter suction dredger</del> ) shall be operated within each of the five main zones at any one time for the Project in which the cutter suction dredger shall only be operated in Zones 2 and 4 with maximum dredging rate of 700 m <sup>3</sup> in 30 minutes in any given hour (max. 8,400 m <sup>3</sup> /day, based on a 12-hour operation per day).						
	A9	The maximum dredging rate for closed grab dredger at Rambler Channel – Zones 1 to 2 (subzones Z1A, Z1B, Z2A, Z2B and Z2C) shall follow the Dredging Plan for the Hotspot, as shown in EP-426/2011/A.						
	A10	The maximum dredging rate for closed grab dredger at Rambler Channel – Zones 3 to 4 (subzones Z3A to Z4B) shall not exceed 1,600 m <sup>3</sup> per day during dry season or 3,440 m <sup>3</sup> per day during wet season as shown in EP-426/2011/A.						
	A11	The maximum dredging rate for closed grab dredger at Rambler Channel – Zones 5 to 6 (subzones Z5A, Z5B and Z6A) shall not exceed 4,000 m <sup>3</sup> per day during both dry and wet seasons as shown in EP-426/2011/A.						
	A12	The maximum dredging rate for closed grab dredger at Rambler Channel –						

EIA Ref	EM& A Ref	No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measure	Location of the measure	When to implement the measure?	Implementation Status
			Zones 5 to 8 (subzones Z5C, Z6B, Z6C, Z6D, Z7 and Z8) shall not exceed 4,000 m <sup>3</sup> per day during both dry and wet seasons as shown in EP-426/2011/A.					
		A13	The maximum dredging rate for closed grab dredger at Northern Fairway – Zones 9 to 12 shall not exceed 4,000 m <sup>3</sup> per day during both dry and wet seasons as shown in EP-426/2011/A.					
		A14	The maximum dredging rate for closed grab dredger at Western Fairway – Zone 13A shall not exceed 4,000 m <sup>3</sup> per day during both dry and wet seasons as shown in EP-426/2011/A.					
		A15	The maximum dredging rate for closed grab dredger at Western Fairway – Zone 13B shall not exceed 4,000 m <sup>3</sup> per day during both dry and wet seasons as shown in EP-426/2011/A.					
		A16	<del>The dredging pump of cutter suction dredger shall be operated during cutting to reduce the sediment loss to water body.</del>					NA-no CSD employed
		A17	Project dredging works within Zone 1 to 6 (including sub-zones) of the Container Basin shall not be carried out at the same time with Terminal Operator's maintenance dredging activities.					NA-No Terminal Operator's maintenance dredging carried out
		A18	<del>Cutter suction dredger is only to be deployed for the removal of harder material during daytime only (07:00 to 19:00) in Zone 2 (including subzones) of the Container Basin.</del>					NA-no CSD employed
		A19	In case of rainstorm warning in effect during dredging works, the dredged material on barge shall be covered properly before transportation to disposal site.					NA-no dredging material generated
		A20	In case of exceedance of SS and NH <sub>3</sub> -N at the Tsing Yi WSD flushing intake due to dredging operation is evidenced, the Contractor shall propose mitigation measures not limited to reducing dredging rate. If exceedance persists, the Contractor shall propose not to undertake dredging operation in close proximity to the Tsing Yi flushing water intake during flood tide. The Contractor shall liaise with the ETL, IEC, ER, EPD and WSD for the proposed mitigation measures.					NA-no exceedance due to dredging operation
		A21	If further mitigation measures are required due to continuous exceedance of SS and NH <sub>3</sub> -N, consideration shall then be given to dredge only on the state of the tide which would avoid migration of SS towards the WSD and EMSD intakes.					NA-no exceedance due to dredging operation
		A22	Dredging sub-zone Z2B where high NH <sub>3</sub> -N in sediment is found shall be isolated with dredging works to be carried out towards the end of construction programme.					NA-no dredging works in such area
		A23	Administrative control in terms of dredging rate adjustment in controlling the release of contaminants shall be employed as mitigation measures.					Implemented
		A24	Field trials shall be carried out to propose the most effective dredging process and rate to control the release of ammoniacal nitrogen and UIA into the water column and achieve compliance at the WSD1 seawater intake (NH <sub>3</sub> -N) and at the beaches for UIA.					Implemented

EIA Ref	EM& A Ref	No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measure	Location of the measure	When to implement the measure?	Implementation Status
			Capital dredging works in dredging sub-zone Z2B (Figure 1.2h refers) should not therefore be carried out until the proposed method and rate are confirmed.					
		A25	Detailed dredging plan shall be prepared providing details of individual dredging subzones and dredging rate taking into account of the field trial results.					Implemented
3.8	-		<u>Other Good Site Practices for Dredging</u>	Minimize potential adverse effect as a result of dredging activities	Contractor	Construction Work Sites	Construction Phase	NA-no dredging work carried out in reporting month
		A26	All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.					
		A27	The speed of all Contractor's vessels should be controlled within the works area to prevent propeller wash from stirring up the seabed sediments.					
		A28	All barges / dredgers used should be fitted with tight fitting seals to their bottom openings to prevent leakage of material.					
		A29	Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds.					
		A30	No overflow of dredged mud should be allowed. Barges or hopper should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation.					
		<b>B</b>	<b>Waste Management</b>					
			<u>Good Site Practices</u>	Minimize potential adverse effect arising from the handling of dredged material	Contractor	Construction Work Sites (General)	Construction Phase	
4.5	3.3	B1	Obtain the profile of different sediment categories and careful planning of sediment removal.					Implemented
		B2	Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.					Implemented
		B3	Training of site personnel in proper waste management and chemical handling procedures.					Implemented
		B4	Provision of sufficient waste disposal points and regular collection of waste.					Implemented
		B5	Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting sediment material is not anticipated.					Implemented
		B6	Use well maintained PME on site.					Implemented
			<u>General Refuse</u>	Minimize the adverse effect arising from the handling of site general refuse	Contractor	Construction Work Sites (General)	Construction Phase	
4.5	3.3	B7	General refuse should be stored in enclosed bins. A reputable waste collector should be employed by the contractor to remove general refuse from the site.					Implemented
			<u>Chemical Waste</u>	Minimize the adverse effect arising from the handling of site chemical waste	Contractor	Construction Work Site	Construction Phase	
4.5	3.3	B8	If chemical wastes are produced at the construction site, the Contractor shall be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes shall be used, and incompatible chemicals should be stored separately. Appropriate labels shall be securely attached on each chemical waste container indicating the corresponding					Implemented

EIA Ref	EM& A Ref	No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measure	Location of the measure	When to implement the measure?	Implementation Status
			chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.					
4.5	3.3		<b>Marine Dredged Sediment</b>	Control of transportation and disposal of dredged material in a manner to minimize potential impacts on water quality	Contractor	Construction Work Site	Construction Phase	NA-no marine dredged sediment generated in the reporting month
		B9	Control of transportation and disposal of dredged material in a manner to minimize potential impacts on water quality.					
		B10	Bottom opening of barges will be fitted with tight fitting seals to prevent leakage of material. Excess material shall be cleaned from the decks and exposed fittings of barges and dredgers before the vessel is moved.					
		B11	Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the EPD.					
		B12	Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.					
		B13	Sediment Quality Report shall be prepared and submit to EPD under DASO.					
		B14	If disposal of Type 3 sediment is identified, agreement with EPD shall be reached regarding the treatment of sediment before disposal.					
		B15	Project works shall not be carried out before obtaining confirmation from MFC on disposal option.					
		B16	Follow strictly all conditions stipulated in the dumping permit.					
		<b>C</b>	<b>Marine Ecology</b>	Review and assess the potential adverse effect on marine ecology	Contractor	Construction Work Sites	Construction Phase	Implemented
5.7	4.1	C1	Water quality monitoring results shall be reviewed from time to time to assess if there were any impact to marine ecology due to dredging operation.					
		<b>D</b>	<b>Fisheries</b>	Review and assess the potential adverse effect on fisheries	Contractor	Construction Work Sites	Construction Phase	Implemented
6.7	5.1	D1	Water quality monitoring results shall be reviewed from time to time to assess if there were any impact to fisheries due to dredging operation.					
		<b>E</b>	<b>Hazard to Life</b>		Contractor	Construction Work Sites (General)	Construction Phase	Implemented
7.8.2	6.2	E1	Sound communication channel shall be established with the oil companies, Marine Department, and Fire Services Department for effective notification and emergency evacuation in case of accidents.					
		E2	Proper safety and emergency training shall be given to the relevant operation staff at the dredging site. Emergency plans and procedures should be prepared and drills should be performed periodically.					
		<b>F</b>	<b>Landscape Visual and Glare</b>	Minimize landscape and visual impacts during construction phase	Contractor	Construction activities' area	Throughout design, construction phase	Implemented
8.9 Table 8-3 & 8-6	7.2	F1	Visa shields to the lights of dredgers shall be provided.					
		F2	The light source shall not point directly to any VSRs.					
		F3	Lights shall be switched off if they are not in use.					
		<b>G</b>	<b>Cultural Heritage</b>	Minimize potential marine archaeological	Contractor	Locations of the 20	During Construction	
9.5	8		<b>Monitoring Brief</b>					

EIA Ref	EM& A Ref	No.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to Address	Who to implement the measure	Location of the measure	When to implement the measure?	Implementation Status
		G1	A monitoring brief shall be conducted during the dredging. It shall only be required during dredging at the locations of the 20 unidentified sonar contacts and masked areas and does not need to cover all of the dredging activities. Dredging staff should be briefed about the possibility of locating archaeological objects and a marine archaeologist shall be available to monitor the dredged spoil and provide advice. If material indicative of archaeological remains is retrieved, the AMO should be contacted as soon as possible.	impact during dredging activities		unidentified sonar contacts and masked areas	works	NA- no archaeological deposit was found during reporting period.
		<b>H</b>	<b>Noise</b>					
10.8	9		<u>Good Site Practices</u>	Control and minimize the generation of undue noise nuisance	Contractor	Construction Work Sites (Along the alignment of dredging)	Construction Phase	
	H1	Only well-maintained plant shall be operated on-site and plant should be serviced regularly during the construction program.	Implemented					
	H2	Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum.	Implemented					
	H3	Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from nearby NSRs.	Implemented					
	H4	If dredging is to be carried out during restricted hours, work locations close to NSRs shall be avoided.	NA-no dredging work carried out in reporting month					
		<b>I</b>	<b>Construction Dust</b>					
11.7	10		<u>Dust Control</u>	Good site practice to control dust and odour impact to the nearby sensitive receivers	Contractor	Construction Work Sites (General)	Construction Phase	
	I1	Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, shall be adhered to during the construction period.	Implemented					
			<u>Odour</u>		Contractor	Construction Work Sites (General)	Construction Phase	
	I2	To minimize potential odour emissions, if dredged sediment is anticipated to be placed on barge for more than a day the load shall be properly covered as far as practicable to minimise the exposed area and potential odour.	NA-no work in such condition					
	I3	If dredged sediment is found to be malodorous it shall be removed from site as soon as possible within one hour after the barge being filled up.	NA-no work in such condition					



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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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Report No.: 0394/13/ED/0353B

Appendix K  
Waste Generation in Reporting Period

Name of Department : Civil Engineering and Development Department  
 Contract No. : CV/2013/04

**Monthly Summary Waste Flow Table for 2017 (year)**

Year	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Broken Concrete (see Note 4)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000 m <sup>3</sup> )	(in '000 m <sup>3</sup> )	(in '000 m <sup>3</sup> )	(in '000 m <sup>3</sup> )	(in '000 m <sup>3</sup> )	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 m <sup>3</sup> )
2017										
Jan	nil	nil	nil	nil	nil	nil	nil	nil	nil	0.01
Feb										
Mar										
Apr										
May										
Jun										
Jul										
Aug										
Sep										
Oct										
Nov										
Dec										
<b>Total</b>	nil	nil	nil	nil	nil	nil	nil	nil	nil	0.01

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (3) Broken concrete for recycling into aggregates

### Monthly Summary of Sediment Disposal (2014 - 2017)

Marine Sediment Type	Type 1 – Open Sea Disposal	Type 2 – Confined Marine Disposal	Type 3 – Special Treatment / Disposal
Month	Monthly Quantity (m <sup>3</sup> )	Monthly Quantity (m <sup>3</sup> )	Monthly Quantity (m <sup>3</sup> )
<b>2014</b>			
Jan-Dec	549,430	99,660	nil
<b>2015</b>			
Jan-Dec	938,560	372,370	nil
<b>2016</b>			
January	12,580	22,290	nil
February	47,980	30,300	nil
March	34,550	20,070	nil
April	31,040	14,540	nil
May	23,960	20,490	1,260
June	29,950	26,820	nil
July	9,500	18,040	nil
August	6,300	700	nil
September	nil	nil	nil
October	nil	nil	nil
November	nil	nil	nil
December	nil	nil	nil
<b>2017</b>			
January	nil	nil	nil
Total	1,683,850	625,280	1,260

### Yearly Summary Waste Flow Table

Year	Estimated Annual Quantities of Inert C&D Materials (in '000m <sup>3</sup> )										Estimated Annual of C&D Wastes									
	Total Quantity Generated		Broken Concrete (see Note 3)		Reused in the Contract		Reused in other Projects		Disposed as Public Fill		Metals		Paper/cardboard packaging		Plastics (see Note 2)		Chemical Waste		Others, e.g. general refuse	
	(a)		(b)		(c)		(d)		(a-b-c-d)		(in '000 kg)		(in '000 kg)		(in '000 kg)		(in '000 kg)		(in '000 m <sup>3</sup> )	
	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.
2013	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.003	0.01
2014	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.2	0.16
2015	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	13	14.4	0.2	0.12
2016	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	17	Nil	0.2	0.12
2017	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	10	-	0.15	-
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2020																				
2021																				
Grand Total	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	40	14.4	0.753	0.41

**Notes:**

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
- (3) Broken concrete for recycling into aggregates.

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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Report No.: 0394/13/ED/0353B

Appendix L

Weather Conditions for the Reporting Month

**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
 Profit Industrial Building,  
 1-15 Kwai Fung Crescent,  
 Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



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Date	Air Temperature			Mean Relative Humidity (%)	Total Rainfall (mm)
	Maximum (deg. C)	Mean (deg. C)	Minimum (deg. C)		
<b>December 2016</b>					
23	21.9	20.2	19.1	73	Trace
24	19.5	18.1	16.9	76	3.7
25	20.3	19.5	18.4	82	Trace
26	23.7	21.4	19.5	80	0
27	21.8	16.6	12.8	61	0
28	15.7	14	11.5	60	0
29	17.9	15.9	13.9	54	0
30	18.6	16.6	14.8	60	0
31	20.7	18.2	15.6	74	0
<b>January 2017</b>					
1	20.8	19.2	18.4	80	0
2	23.3	20.2	18.4	81	0
3	21.3	20	18.9	83	0
4	21.7	19.9	18.7	80	0
5	23.4	21.1	18.9	80	0
6	25	21.6	19.7	80	0
7	22.8	21.1	19.7	79	0
8	25.5	22.6	20.5	76	0
9	21.8	20.6	19.7	78	0
10	20.5	19.4	18.8	79	0
11	19.7	19.1	18.2	80	0
12	20.3	19	16.9	81	Trace
13	17.1	15.9	15.1	84	0.5
14	16.5	15.7	14.5	87	1
15	16.8	15.5	14.3	85	1.5
16	17.4	16.3	14.7	80	0.4
17	19.2	18	16.7	76	0
18	20	18.9	18	86	Trace
19	24.1	20.4	18.7	85	0
20	20.6	18.3	16.2	69	Trace
21	19	16.7	14.6	67	0
22	19.8	16.4	13.6	58	0

Source: Hong Kong Observatory

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**MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent,  
Kwai Fong, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

---

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Report No.: 0394/13/ED/0353B

Appendix M

Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)

# MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

# MaterialLab

## Proposal on Removal of Some Water Quality Monitoring Stations After Resumption of Marine Construction Works (Dredging Works and Marine Works of the Northern Part of Kwai Tsing Container Basin Only)

December 2016

**Client :** China International Water & Electric Corporation

**Project:** Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel – CV/2013/04

**Report No.:** 0394/13/ED/03321

Project Proponent:

Civil Engineering & Development Department  
101 Princess Margaret Road,  
Homantin,  
Kowloon, Hong Kong.

Prepared by: Wingo So

Reviewed by: Cyrus Lai

Certified by: \_\_\_\_\_

  
Colin Yung

Environmental Team Leader for  
MaterialLab Consultants Limited



# MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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## FIGURES:

Figure 1	Location of Remaining Work Area
Figure 2	Location of Existing Monitoring Stations
Figure 3	Location of Corresponding EPD Water Monitoring Stations
Figure 4	Locations of the Proposed Alternative Control Stations and the Remaining Impact Stations

## APPENDICES:

Appendix A	Historical Data of Corresponding EPD Reference Stations
Appendix B	Analytical Results of Reviewed Impact Monitoring Stations
Appendix C	Relevant Notification of Exceedances
Appendix D	Graphical Presentation of Analytical Results of G1 and G4

## 1. INTRODUCTION

- 1.1 Under the Contract No. CV/2013/04, China International Water & Electric Corporation Limited (CIWE) was appointed as the main contractor for the dredging works, to dredge tentatively 4.0 million cubic metres of sediment from the seabed of Kwai Tsing Container Basin, as well as portions of Northern Fairway and Western Fairway, to provide sufficient depth of container basin and approach channel to Kwai Tsing Container Terminal (KTCT) for the safe navigation of Ultra Large Container Ships (ULCS).
- 1.2 The Civil Engineering & Development Department, HKSAR (CEDD) was the project proponent. Mott MacDonald Hong Kong Ltd. (MMHK) was commissioned by CEDD as the Engineer for the Project. Ramboll Environ Hong Kong Limited (REHK) and Materialab Consultants Limited (MCL) were appointed as the Independent Environmental Checker (IEC) and Environmental Team (ET) respectively of the Project in accordance with Environmental Permit No. EP-426/2011/A condition 2.1 and 2.2. The EM&A programme under this Contract is governed by EP-426/2011/A, EM&A Manual (AEIAR-156/2010) and "Environmental Monitoring and Audit of Total Inorganic Nitrogen" (EPD Letter Ref: (34) in Ax(1) to EP2/N3/C/57Pt.7)).
- 1.3 Refer to the Proposal for Temporary Suspension of Impact Water Quality Monitoring (Ref. no.: 0394/13/ED/0326F), which was agreed by EPD and relevant parties, the impact water quality monitoring is temporary suspended until further notice. The dredging works under the Project was substantially completed as referred to the Engineer's letter (ref.: PEJ/CMH/SP/ii/C259053/M15/900/L-0314) dated on 27 May 2016. Only the remaining works at Portion A (i.e. area outside Berth KC5 and Tsing Yi Submarine Outfall) will be carried out in the future. The locations of the remaining work areas are fallen within Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A, shown in **Figure 1**.

## 2. BACKGROUND OF REVIEW

- 2.1 Refer to the approved EIA report, the worst case scenarios assumed that 3 grab dredgers operated simultaneously within "Portion A" (i.e. Sub-zones Z1A, Z1B, Z2A1, Z2A2, Z2A3, Z2B1, Z2B2, Z2C1, Z2C2, Z2C3, Z2C4, Z3A, Z3B, Z4A and Z4B stated in the EP-426/2011/A) and other Portions of the Project area with 4000 m<sup>3</sup>/day/dredger which was the maximum daily dredging rate per dredger. The scale of dredging of the remaining works will be significantly lower than the worst case assumption in the approved EIA report as only one grab dredger will operate in the northern part of Portion A (i.e. Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A). In addition, based on the survey conducted in the approved EIA report and the latest survey done by CIWE, the profile of sediment outside Berth KC5 of the remaining works area consisted of hard material, i.e. hard alluvium and rock, as such the formation rate of the sediment plume will be expected lower than the EIA prediction, while the sediment plume for dredging works at Tsing Yi Submarine Outfall area may be similar to EIA prediction, review of historical data will be necessary to investigate the water quality impact to monitoring stations due to the works in the remaining work areas. Though one of the remaining works area will involve the dredging works in Hotspot area (i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A), however based on the survey conducted by CIWE, the dredging of sediment in Hotspot area (i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A) has been completed. The status of the completion of the dredging of sediment in Hotspot area has been mentioned in the Monthly EM&A Report in March to July 2016.

- 2.2 Refer to Section 2.1.4 of the EM&A Manual, ET Leader shall propose updated monitoring locations and seek approval from the IEC and EPD in any case that the status and locations of water sensitive receivers and the marine activities may change. Based on the above reasons mentioned in Section 2.1 of this proposal, MCL is appointed to propose the removal of some monitoring stations that will not be subject to the Project impact.

### 3. METHODOLOGY OF REVIEW

- 3.1 As dredging works and marine works will only be carried out at areas outside Berth KC5 and Tsing Yi Submarine Outfall at Subzones Z1A, Z2B1, Z2B2 and Z2C1 in future. Sensitive receivers with farther distance from the remaining works area will be expected to have less Project impact. With such assumption, the impact on SR6, SR7, SR8, SR9, SR10 and SR11 will be reviewed in this proposal. The detailed information of the reviewed impact monitoring station is summarised in **Table 3.1**. The locations of the existing monitoring stations are shown in **Figure 2**.

**Table 3.1** Locations of Reviewed Impact Monitoring Stations

Water Monitoring Station		Easting	Northing
SR6	Kau Yi Chau, Corals	825655.637	816444.509
SR7	Green Island, Corals	829830.065	815996.449
SR8	Shek Kok Tsui, Corals	828562.803	811100.522
SR9	Cheung Sha Wan, Fish Culture Zone	818700.675	810910.924
SR10	Lo Tik Wan, Fish Culture Zone	831528.007	809237.067
SR11	Sok Kwu Wan, Fish Culture Zone	831721.774	807839.924

- 3.2 The review of this proposal is based on comparison of the historical data in routine impact water quality monitoring which only dredging works were carried out at Portion A ("Portion A Dredging") (including the monitoring data of dredging works in Hotspot area, i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A ) with historical data (from 2011 to 2013, prior to the dredging work of the Project was started) from corresponding EPD monitoring stations. The dates that only dredging works were carried out at Portion A is shown in **Table 3.2**. The closest EPD monitoring stations of water control zones were used as reference stations for the data analysis. Data of Portion A Dredging (in monthly mean) including Dissolved Oxygen (S&M), Dissolved Oxygen (B), Turbidity, Total Suspended Solids for SR6, SR7, SR8, SR9, SR10 and SR11 and Total Inorganic Nitrogen (In-situ) and Total Inorganic Nitrogen (Lab) for SR9, SR10 and SR11, were compared with the monthly average of the historical data (from 2011 to 2013, prior to the dredging work of the Project was started) from their corresponding EPD monitoring stations in dry seasons and wet seasons. Details of the historical data of Corresponding EPD monitoring stations are presented in **Appendix A**. The period of data of Corresponding EPD monitoring stations used for analysis are shown in **Table 3.3**. Locations of the corresponding EPD monitoring stations are shown in **Figure 3**. The comparison between the data in routine impact water quality monitoring with only dredging works were carried out at Portion A ("Portion A Dredging") and the historical data (from 2011 to 2013) from corresponding EPD monitoring stations is indicated in various charts that presented in **Appendix B**.

**Table 3.2** Dates That Only Dredging Works Were Carried out at Portion A

Season	Dates That Only Dredging Works Were Carried out at Portion A		
Dry Season	2014: 14 Nov, 27 Nov, 29 Nov, 2 Dec,	2015: 3 Nov, 7 Nov, 12 Nov, 21 Nov 24 Dec, 31 Dec	2016: 7 Jan, 9 Jan, 23 Feb, 10 Mar, 15 Mar, 22 Mar, 24 Mar
Wet Season	2014: 14 Aug 11 Sep, 30 Sep	2015: 2 June, 3 Sep, 12 Sep, 26 Sep, 29 Sep, 6 Oct	2016: 7 Apr, 12 Apr, 16 Apr, 23 Apr, 30 Apr, 21 May, 31 May, 4 June, 7 June, 9 June, 11 June, 14 June, 18 June, 25 June, 28 June, 2 July, 9 July, 12 July

**Remark:**

In accordance with the definition in EP-426/2011/A, Wet Seasons refer to April to October, Dry Seasons refer to November to March.

**Table 3.3** Period of Data of Corresponding EPD Station Used for Analysis

Corresponding EPD Monitoring Station	Impact Monitoring Station for Analysis	Period of Data Used for Analysis
SM9	SR6	Dry Seasons: Jan 2011 - March 2011 Nov 2011 - March 2012 Nov 2012 - Dec 2013 Wet Seasons: Apr 2011 - Oct 2011 Apr 2012 - Oct 2012 Apr 2013 - Oct 2013
VM8	SR7	
WM1	SR8	
SM12	SR9	
SM3	SR10	
SM4	SR11	

3.3 To supplement the analysis, data of Portion A Dredging (including the monitoring data of dredging works in Hotspot area, i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A ) were also compared with those data that no dredging works were carried out (“No Works”). For SR6, SR7, SR8, SR9, SR10 and SR11, data are taken in monthly mean for Dissolved Oxygen (S&M), Dissolved Oxygen (B), Turbidity, Total Suspended Solids. Monthly mean of Total Inorganic Nitrogen (In-situ) and Total Inorganic Nitrogen (Lab) were analyzed only in SR9, SR10 and SR11. The monthly mean is produced by averaging all the monitoring data collected for each parameter in the same month. For months involving dredging at Portion A only or involving any marine construction works, the monitoring data in those months were used for analysis in this proposal, and vice versa. The monthly mean of monitoring data used for analysis is summarized in **Table 3.4**.

**Table 3.4** Monthly Mean of Monitoring Data Used for Analysis

Mode of Monitoring Data	Impact Station for Analysis	Parameter for Analysis	Season <sup>^</sup>	#Period of Data Used for Analysis
"Portion A Dredging"	SR6, SR7, SR8, *SR9, *SR10, *SR11	DO (S&M), DO (B), Turbidity, SS, TIN (In-situ)*, TIN (Lab)*	Dry	Nov-14, Dec-14, Nov-15, Dec-15, Jan-16, Feb-16, Mar-16
			Wet	Aug-14, Sep-14, Jun-15, Sep-15, Oct-15, Apr-16, May-16, Jun-16, Jul-16
"No Works"	SR6, SR7, SR8, *SR9, *SR10, *SR11	DO (S&M), DO (B), Turbidity, SS, TIN (In-situ)*, TIN (Lab)*	Dry	Dec-15, Nov-16, Mar-16
			Wet	Apr-14, May-14, Aug-14, Jun-15, Jul-15, Sep-15, Apr-16, May-16, Jun-16, Jul-16, Aug-16

Remark:

\*Monthly mean of TIN (In-situ) and TIN (Lab) are analyzed in SR9, SR10 and SR11 only.

<sup>^</sup> In accordance with the definition in EP-426/2011/A, Wet Seasons refer to April to October, Dry Seasons refer to November to March.

<sup>#</sup> The monthly mean is produced by averaging all the monitoring data collected for each parameter in the same month. For months involving dredging at Portion A only or involving any marine construction works, the monitoring data in those months were used for analysis in this proposal, and vice versa.

- 3.4 Due to the proximity of SR2 (Casam, Gazetted Beach), SR3 (Approach, Gazetted Beach), SR4 (Tsuen Wan, WSD Flushing Water Intake), SR5 (Ma Wan, Fish Culture Zone), SR12 (Tsing Yi, WSD Flushing Water Intake) and SR13 (EMSD Cooling Water Intake for Kwai Chung Hospital) to the remaining works area of Project, SR2, SR3, SR4, SR5, SR12 and SR13 are not considered to be reviewed in this proposal.
- 3.5 Refer to the Proposal for Temporary Suspension of Impact Water Quality Monitoring (Ref. no.: 0394/13/ED/0326F), which was agreed by EPD and relevant parties, since at the beginning of the water quality monitoring works, WSD9 - WSD Flushing Water Intake Near Hong Kong Garden, which was mentioned in the agreed EIA Report (AEIAR-156/2010), i.e. SR1, had been verified on site that the flushing water intake point did not exist. Therefore SR1 is proposed to be removed in the future water quality monitoring works if the marine construction works are resumed, and will not be further reviewed in this proposal.

**4. INTERPRETATION OF ANALYSIS**

- 4.1 The graphical results of the comparison between data in routine impact water quality monitoring with only dredging works were carried out at Portion A ("Portion A Dredging") and the historical data (from 2011 to 2013) from corresponding EPD monitoring stations, and the graphical results of the comparison between "Portion A Dredging" and "No Works" are presented in **Appendix B**.

General Observation

- 4.2 In comparison with the results of Portion A Dredging in SR6, SR7, SR8, SR9, SR10 and SR11 and the historical data of their Corresponding EPD monitoring stations, similar distributions for DO (S&M), DO (B), SS and Turbidity were found in general. Most of the data of DO (S&M) and DO (B) in Portion A Dredging in SR6, SR7, SR8, SR10 and SR11, and most SS data in Portion A Dredging in SR6, SR7, SR8, SR9, SR10 and SR11 were close to the historical data of their Corresponding EPD monitoring stations. Most of the Turbidity data of Portion A Dredging in SR6, SR7, SR8, SR9, SR10 and SR11 were even lower than the historical data of their Corresponding EPD monitoring stations.

- 4.3 In addition, when comparing the the results of Portion A Dredging and No Works, similar distributions for DO (S&M), DO (B), SS and Turbidity in SR6, SR7, SR8, SR9, SR10 and SR11, TIN (In-situ) and TIN (Lab) in SR9, SR10 and SR11 were found in general. The results of Portion A Dredging for DO (S&M), DO (B), SS and Turbidity were close to the results of No Works in SR6, SR7, SR8, SR9, SR10 and SR11 in general. The results of Portion A Dredging for TIN (In-situ) and TIN (Lab) were also close to the results of No Works in SR9, SR10 and SR11 in general.
- 4.4 However, seasonal discrepancies were found in DO (S&M) and DO (B) for SR9, TIN (In-situ) and TIN (Lab) for SR9, SR10 and SR11, when comparing the result of Portion A Dredging with the historical data of their Corresponding EPD monitoring stations.
- Seasonal Discrepancies in DO (S&M) and DO (B) for SR9: Portion A Dredging vs EPD monitoring station
- 4.5 When comparing the results of DO (S&M) and DO (B) of Portion A Dredging in SR9, to the historical data of its Corresponding EPD monitoring station (SM12), most of the data of DO (S&M) and DO (B) in Portion A Dredging in SR9 were close to the historical data of SM12 in dry season, but in wet season, both DO (S&M) and DO (B) of Portion A Dredging in SR9 were below the historical data of SM12. However when comparing the results between Portion A Dredging and No Works in SR9, most data of DO (S&M) and DO (B) were close to the results of No Works, therefore there was no evidence to show the low DO (S&M) and DO (B) levels in SR9 in wet season were due to the Project.
- 4.6 In addition, when comparing the fluctuation between Portion A Dredging in SR9 to the historical data of SM12 for DO (S&M) and DO (B) in wet season, the extent of the percentage change were similar for both DO (S&M) and DO (B) in wet season, indicating that the discrepancies between Portion A Dredging in SR9 and the historical data of SM12 for DO (S&M) and DO (B) in wet season were not due to the Project. The percentage change of DO (S&M) and DO (B) of Portion A Dredging in SR9 and the historical data of its Corresponding EPD monitoring station (SM12) are shown in **Appendix B**.
- Seasonal Discrepancies in TIN (In-situ) and TIN (Lab) for 4 FCZs: Portion A Dredging vs EPD monitoring stations
- 4.7 For the results of Portion A Dredging of TIN (In-situ) and TIN (Lab) in SR9, SR10 and SR11, most of the Portion A Dredging data for TIN (Lab) and TIN (In-situ) were close, but slightly higher than the historical data of their Corresponding EPD monitoring stations in dry season. But in wet season, both TIN (in-situ) and TIN (lab) levels in SR9, SR10 and SR11 were significantly higher than their Corresponding EPD monitoring stations. However, when comparing the results between Portion A Dredging and No Works in SR9, SR10 and SR11, both TIN levels were relatively high in SR9, SR10 and SR11 in wet season, therefore there was no evidence to conclude that the high TIN levels in SR9, SR10 and SR11 in wet season were due to the Project.
- 4.8 In addition, when comparing the fluctuation between Portion A Dredging in SR9, SR10 and SR11 to the historical data of their Corresponding EPD monitoring stations for TIN (In-situ) and TIN (Lab) in wet season, the extent of the percentage change were similar for both TIN (In-situ) and TIN (Lab) in wet season, except that there was dramatic increase in levels of TIN (In-situ) and TIN (Lab) for Portion A Dredging in SR9, SR10 and SR11 from May to June as the TIN levels for Portion A Dredging are particularly low in May, causing a significant elevation from May to June. The discrepancies between Portion A Dredging in SR9, SR10 and SR11 and the historical data of their Corresponding EPD monitoring stations for TIN (In-situ) and TIN (Lab) in wet season were not due to the Project. The percentage change of TIN (In-situ) and TIN (Lab) of Portion A Dredging in SR9, SR10 and SR11 and the historical data of their Corresponding EPD monitoring station are shown in **Appendix B**.

Portion A Dredging vs Action/ Limit Levels

4.9 In comparison with results of Portion A Dredging in SR6, SR7, SR8, SR9, SR10 and SR11 and their corresponding Action/ Limit Levels, most of the Portion A Dredging data of DO (S&M), DO (B), Turbidity, SS in SR6, SR7, SR8, SR9, SR10 and SR11 did not exceed the Action/ Limit Level except for TIN (In-situ) and TIN (Lab) in SR9, SR10 and SR11. The exceedance records of the monthly mean of Portion A Dredging are summarized in **Table 4.1**.

**Table 4.1 The Exceedance Records of the Monthly Mean of Portion A Dredging**

Monitoring Station	Season	Exceedance Level	Parameter						Total
			DO (S&M)	DO (B)	Turbidity	SS	TIN (In-situ)	TIN (Lab)	
SR6	Dry	AL	0	0	0	0	NA	NA	0
		LL	0	0	0	0	NA	NA	0
	Wet	AL	0	0	0	0	NA	NA	0
		LL	2	1	0	0	NA	NA	3
SR7	Dry	AL	0	0	0	0	NA	NA	0
		LL	0	0	0	0	NA	NA	0
	Wet	AL	0	0	0	0	NA	NA	0
		LL	1	1	0	0	NA	NA	2
SR8	Dry	AL	0	0	0	0	NA	NA	0
		LL	0	0	0	0	NA	NA	0
	Wet	AL	0	0	1	0	NA	NA	1
		LL	2	2	0	0	NA	NA	4
SR9	Dry	AL	0	0	1	0	0	3	4
		LL	0	0	1	0	4	2	7
	Wet	AL	0	0	0	0	1	3	4
		LL	1	1	0	0	5	2	9
SR10	Dry	AL	0	0	0	0	1	1	2
		LL	0	0	0	0	1	1	2
	Wet	AL	0	0	0	0	0	0	0
		LL	2	1	0	0	4	2	9
SR11	Dry	AL	0	0	0	0	1	1	2
		LL	0	0	0	0	1	1	2
	Wet	AL	0	0	0	0	1	0	1
		LL	1	1	0	0	3	2	7
Total	Dry	AL	0	0	1	0	2	5	8
		LL	0	0	1	0	6	4	11
	Wet	AL	0	0	1	0	2	3	6
		LL	9	7	0	0	12	6	34

Remark:

NA – Not Applicable

Refer to the approved EM&A Manual (AEIAR-156/2010), TIN analysis is not required for SR6, SR7 and SR8.

4.10 Despite of the exceedance records of the monthly mean of Portion A Dredging, the results of No Works also showed similar distributions of the exceedance records.

SR6

4.11 For Portion A Dredging in SR6, 2 monthly means of DO (S&M) in August and September exceeded LL, 1 monthly mean of DO (B) in August exceeded LL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

SR7

4.12 For Portion A Dredging in SR7, 1 monthly mean of DO (S&M) in August- exceeded LL, 1 monthly mean of DO (B) in August exceeded LL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

SR8

- 4.13 For Portion A Dredging in SR8, 2 monthly means of DO (S&M) in August and September exceeded LL, 2 monthly means of DO (B) in August and September exceeded LL, 1 monthly mean of Turbidity in August exceeded AL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

SR9

- 4.14 For Portion A Dredging in SR9, 1 monthly mean of DO (S&M) in August exceeded LL, 1 monthly means of DO (B) in August exceeded LL, 1 monthly means of Turbidity in November exceeded AL, 1 monthly mean of Turbidity in December exceeded LL, 1 monthly mean of TIN (In-situ) in October exceeded AL, 9 monthly means of TIN (In-situ) in January, February, April, June, July, August, September, November and December exceeded LL, 6 monthly means of TIN (Lab) in March, April, August, October, November and December exceeded AL and 4 monthly means of TIN (In-situ) in January, February, June and July exceeded LL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

SR10

- 4.15 For Portion A Dredging in SR10, 2 monthly means of DO (S&M) in August and September exceeded LL, 1 monthly mean of DO (B) in August exceeded LL, 1 monthly mean of TIN (In-situ) in February-16 exceeded AL, 5 monthly mean of TIN (In-situ) in February, June, July, August, September exceeded LL, 1 monthly mean of TIN (Lab) in February exceeded AL and 3 monthly means of TIN (In-situ) in January, June and July exceeded LL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

SR11

- 4.16 For Portion A Dredging in SR11, 1 monthly mean of DO (S&M) in August exceeded LL, 1 monthly means of DO (B) in August exceeded LL, 2 monthly means of TIN (In-situ) in February and September exceeded AL, 4 monthly mean of TIN (In-situ) in January, June and July August exceeded LL, 1 monthly mean of TIN (Lab) in February exceeded AL and 3 monthly means of TIN (In-situ) in January, June and July exceeded LL. However, based on the finding from the investigation on the recorded cases of exceedances in the above months, the cause was found not related to the project.

- 4.17 Details of relevant Notification of Exceedance can be referred to **Appendix C**.

- 4.18 Based on the analysis of the results, it is concluded that no Project impact was found in SR6, SR7, SR8, SR9, SR10 and SR11 during dredging in Portion A (including the dredging works in Hotspot area, i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A ). Therefore, they are proposed to be removed,

## **5. REVIEW OF THE STATUS OF GRADIENT STATIONS, CONTROL STATIONS AND 24 HOUR MONITORING STATIONS**

- 5.1 Refer to Section 2.1.4 of the EM&A Manual, ET Leader shall propose updated monitoring locations and seek approval from the IEC and EPD in any case that the status and locations of water sensitive receivers and the marine activities may change. Therefore the status of Gradient Stations, Control Stations and 24 Hour Monitoring Stations should be reviewed. Existing Gradient Stations, Control Stations and 24 Hour Monitoring Stations are shown in **Figure 2**.

Review of G5 and G6

- 5.2 Based on the analytical results and the consideration of the scale of the remaining works, location of the remaining works areas and the removal of SR6, SR7, SR8, SR9, SR10 and



SR11 in Southern Water Control Zone, the function of the existing gradient stations laid in the Southern Water Control Zone (i.e. G5 and G6) will not be significant, and therefore will be proposed to be removed in the future.

Review of G3

- 5.3 By considering the remaining works will only be carried out in northern part of Portion A (i.e. Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A), the Project impact from the remaining works areas to other remaining sensitive receivers via G3 will not be significant based on the path of water current in both tides, thus G3 will be proposed to be removed.

Review of G2

- 5.4 Since SR5 are proposed to be retained during the remaining works in the future, G2 which located between SR5 and the Project area, will serve as the gradient station for SR5, thus G2 is proposed to be retained.

Review of G1 and G4

- 5.5 For G1 and G4, as they are further apart from the nearest proposed remaining Sensitive Receivers SR2 (Casam, Gazetted Beach) and SR13 (EMSD Cooling Water Intake for Kwai Chung Hospital) respectively and are located far away from the remaining works areas (Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A), the Project impact to G1 and G4 have to be reviewed by the similar approach as mentioned in Section 3 and Section 4 of this proposal. Data of Portion A Dredging in G1 and G4 for DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) are comparing with the historical data (from 2011 to 2013, prior to the dredging work of the Project was started) of their corresponding EPD monitoring stations. Also, to supplement the analysis, the data of Portion A Dredging in G1 and G4 for DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) are comparing with those of No Works. Details of the historical data of Corresponding EPD monitoring stations are presented in Appendix A. Locations of the corresponding EPD monitoring stations are shown in **Figure 3**. The graphical presentation of analytical results are shown in **Appendix D**.

Analytical Results of G1 - General Observation

- 5.6 When comparing the data of Portion A Dredging in G1 for DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) with the historical data of Corresponding EPD monitoring station (i.e. NM1), similar distributions were found in DO (S&M), DO (B), Turbidity and SS in general. Most of the data of Portion A Dredging for DO (S&M), DO (B), SS, TIN (In-situ) (dry season), TIN (Lab) (dry season) were close to the historical data of NM1. Most of the data of Portion A Dredging for Turbidity were even lower than the historical data of NM1.
- 5.7 In addition, when comparing the data of Portion A Dredging for with those of No Works, similar distributions were found in DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) in general. Most of the data of Portion A Dredging for DO (S&M), DO (B), Turbidity, SS, TIN (In-situ), TIN (Lab) were close to those of No Works.
- 5.8 However, seasonal discrepancies were found in TIN (In-situ) and TIN (Lab) for G1, when comparing the result of Portion A Dredging with the historical data of NM1.

- Seasonal Discrepancies in TIN (In-situ) and TIN (Lab) for G1: Portion A Dredging vs EPD monitoring station
- 5.9 For the results of Portion A Dredging of TIN (In-situ) and TIN (Lab) in G1, most of the Portion A Dredging data for TIN (Lab) and TIN (In-situ) were close to the historical data of NM1 in dry season. But in wet season, both TIN (in-situ) and TIN (lab) levels in G1 were significantly higher than NM1. However, when comparing the results between Portion A Dredging and No Works in G1, both TIN levels were relatively high in wet season, therefore there was no evidence to conclude that the high TIN levels in G1 in wet season were due to the Project.
- 5.10 In addition, when comparing the fluctuation between Portion A Dredging in G1 to the historical data of NM1 for TIN (In-situ) and TIN (Lab) in wet season, the extent of the percentage change were similar for both TIN (In-situ) and TIN (Lab) in wet season. Therefore the discrepancies between Portion A Dredging in G1 and the historical data of NM1 for TIN (In-situ) and TIN (Lab) in wet season were not due to the Project. The percentage change of TIN (In-situ) and TIN (Lab) of Portion A Dredging in G1 and the historical data of NM1 are shown in **Appendix D**.
- Analytical Results of G4 – General Observation
- 5.11 When comparing the data of Portion A Dredging in G4 for DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) with the historical data of Corresponding EPD monitoring station (i.e. VM15), similar distributions were found in DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) and TIN (Lab) in general. Most of the data of Portion A Dredging for Turbidity, SS, TIN (In-situ), TIN (Lab) were close to the historical data of VM15. Most of the data of Portion A Dredging for DO (S&M) and DO (B) were even higher than the historical data of VM15.
- 5.12 In addition, when comparing the data of Portion A Dredging for with those of No Works, similar distributions were found in DO (S&M), DO (B), Turbidity, SS, TIN (In-situ) (dry season) and TIN (Lab) (dry season) and the results were close in general. Variations were found in TIN (In-situ) (wet season) and TIN (Lab) (wet season), but no evidence was shown the data of Portion A Dredging were greater than those of No Works in general.
- 5.13 Based on the analytical results, it is concluded that no Project impact was found in G1 and G4.
- Review of Control Stations
- 5.14 By considering the remaining works will only be carried out in northern part of Portion A (i.e. Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A) and the scale of the remaining works, the status of existing Control Stations are proposed to be reviewed and relocated. Refer to Section 2.1.4 of the EM&A Manual, the criteria of the alternative control stations should be at locations representative of the project site in its undisturbed condition. Control stations should be located, as far as is practicable, both upstream and downstream of the works area.
- 5.15 As based on the analytical results, no Project impact was found in G1 and G4 in both upstream and downstream and they are far away from the nearest proposed remaining Sensitive Receivers SR5 (Ma Wan, Fish Culture Zone) and SR13 (EMSD Cooling Water Intake for Kwai Chung Hospital) respectively and also are located far away from the remaining works areas (Sub-zones Z1A, Z2B1, Z2B2 and Z2C1 stated in the EP-426/2011/A). Therefore G1 and G4 fulfill the criteria of the alternative control stations, as C1A and C2A respectively, to replace the existing Control Stations C1, C2 and C3. The locations of the proposed alternative control stations and the remaining impact stations are shown in **Table 5.1** and **Figure 4**.

Table 5.1 Locations of the Proposed Alternative Control Stations and Remaining impact Stations

Water Monitoring Station		Easting	Northing
SR2	Casam, Gazetted Beach	825723.225	825334.784
SR3	Approach, Gazetted Beach	826960.152	825260.726
SR4	Tsuen Wan, WSD Flushing Water Intake	829270.482	825382.994
SR5	Ma Wan, Fish Culture Zone	823758.839	823575.934
SR12	Tsing Yi, WSD Flushing Water Intake	829599.152	823262.269
SR13	EMSD Cooling Water Intake for Kwai Chung Hospital	831397.450	822002.433
G2	Gradient Station	825979.792	824683.158
C1A	Control Station	820626.195	822834.323
C2A	Control Station	830423.070	819431.722

5.16 The monitoring parameters and frequency for both in-situ measurement and laboratory analysis are for the remaining stations are referred to the Section 2.1.6 of the EM&A Manual (AEIAR-156/2010), except for C1A and C2A, as TIN analysis will be proposed to be carried out at control stations to provide a more comprehensive TIN background information for SR5 at the same tide of the day. The monitoring parameters and frequency for both in-situ measurement and laboratory analysis for the remaining monitoring stations are summarised in **Table 5.2**. Parameters for each remaining monitoring station are specified in **Table 5.3**.

Table 5.2 Monitoring Parameters and Frequency

Parameters	Monitoring Frequency
<u>In-situ Measurement</u> Turbidity (in NTU), pH, Dissolved Oxygen (in mg/L and %), Temperature (in °C), Salinity (in ppt), <sup>1</sup> Ammonia-N (in mg/L-N and UIA); <sup>2</sup> TIN: Ammonia-N (in mg/L), Nitrite (in mg/L), Nitrate (in mg/L) <u>Laboratory Analysis</u> <sup>1</sup> Ammonia-N (in mg/L-N and UIA), Suspended Solids (SS), <sup>2</sup> BOD <sub>5</sub> , <sup>2</sup> E.coli, <sup>2</sup> Synthetic Detergent; <sup>2</sup> TIN: Ammonia-N (in mg/L), Nitrite (in mg/L), Nitrate (in mg/L)	3 days per week, at mid-flood and mid-ebb tides (except detergent which shall be taken one day per month, at mid-flood and mid-ebb)  36 hours interval was allowed between subsequent sets of measurement.

Notes:

- Ammonia measurements and samples were taken at SR2, SR3, SR4, SR12, C1A and C2A only; UIA: In-situ unionized ammonia was calculated from in-situ measurement of NH<sub>3</sub>-N, temperature, pH and salinity; Laboratory determined unionized ammonia was calculated from analysed NH<sub>3</sub>-N from water samples and in-situ measurement of temperature, pH and salinity;
- Total Inorganic Nitrogen (TIN) measurements and samples were taken at SR5, G2, C1A, C2A only;
- BOD<sub>5</sub>, E.coli and Synthetic Detergent samples were taken at SR4, SR12, C1A, C2A only.

**Table 5.3** Water Quality Monitoring Parameters

ID	In-situ Measurement							Laboratory Analysis					
	pH	Temperature	Salinity	Turbidity	Dissolved Oxygen / Dissolved Oxygen%	NH <sub>3</sub> -N / UIA	TIN (NH <sub>3</sub> -N, NO <sub>2</sub> & NO <sub>3</sub> )	Suspended Solids	BOD <sub>5</sub>	E. coli	NH <sub>3</sub> -N / UIA	Synthetic Detergent	TIN (NH <sub>3</sub> -N, NO <sub>2</sub> & NO <sub>3</sub> )
SR2	○	○	○	○	○	○		○			○		
SR3	○	○	○	○	○	○		○			○		
SR4	○	○	○	○	○	○		○	○	○	○	○	
SR5	○	○	○	○	○		○	○					○
SR12	○	○	○	○	○	○		○	○	○	○	○	
SR13	○	○	○	○	○			○					
G2	○	○	○	○	○		○	○					○
C1A	○	○	○	○	○	○	○	○	○	○	○	○	○
C2A	○	○	○	○	○	○	○	○	○	○	○	○	○

Note:

1. UIA: In-situ unionized ammonia was calculated from in-situ measurement of NH<sub>3</sub>-N, temperature, pH and salinity; laboratory determined unionized ammonia was calculated from analysed NH<sub>3</sub>-N from water samples taken and in-situ measurement of temperature, pH and salinity.

5.17 Refer to Section 2.1.10 of the EM&A Manual, the propose of setting up of 24 hour monitoring station is to supplement the routine water quality monitoring activities, as due to removal of routine water quality monitoring at SR9, SR10 and SR11, 24 hour monitoring stations at the above stations are also proposed to be removed while 24 hour water quality monitoring at SR4, SR5, SR12 and SR13 will be retained during remaining works.

## 6. CONCLUSION

- 6.1 Refer to Section 2.1.4 of the EM&A Manual, MCL is appointed to propose the removal of some monitoring stations that may not be subject to the Project impact.
- 6.2 Based on the analysis of the results, it is concluded that no Project impact was found in SR6, SR7, SR8, SR9, SR10 and SR11 during dredging in Portion A (including dredging works in Hotspot area, i.e. Sub-zones Z2B1 and Z2B2 stated in the EP-426/2011/A ). Therefore, they are proposed to be removed.
- 6.3 Based on the consideration of the scale of the remaining works, location of the remaining works area and the removal of the sensitive receivers, the function of the some of the existing gradient stations will not be significant, and therefore will be proposed to be removed in the future. Two alternative control stations, C1A and C2A, which were used to be the gradient stations, G1 and G4, fulfill the criteria of the alternative control stations and will be proposed to replace the existing control stations to provide more representative reference information and the background of the water quality during impact water quality monitoring. G2 will be proposed to be retained to serve as the gradient station for SR5.
- 6.4 Refer to Section 2.1.10 of the EM&A Manual, the propose of setting up of 24 hour monitoring station is to supplement the routine water quality monitoring activities, as due to removal of routine water quality monitoring at SR9, SR10 and SR11, 24 hour monitoring stations at the above stations are also proposed to be removed while 24 hour water quality monitoring at SR4, SR5, SR12 and SR13 will be retained during remaining works.

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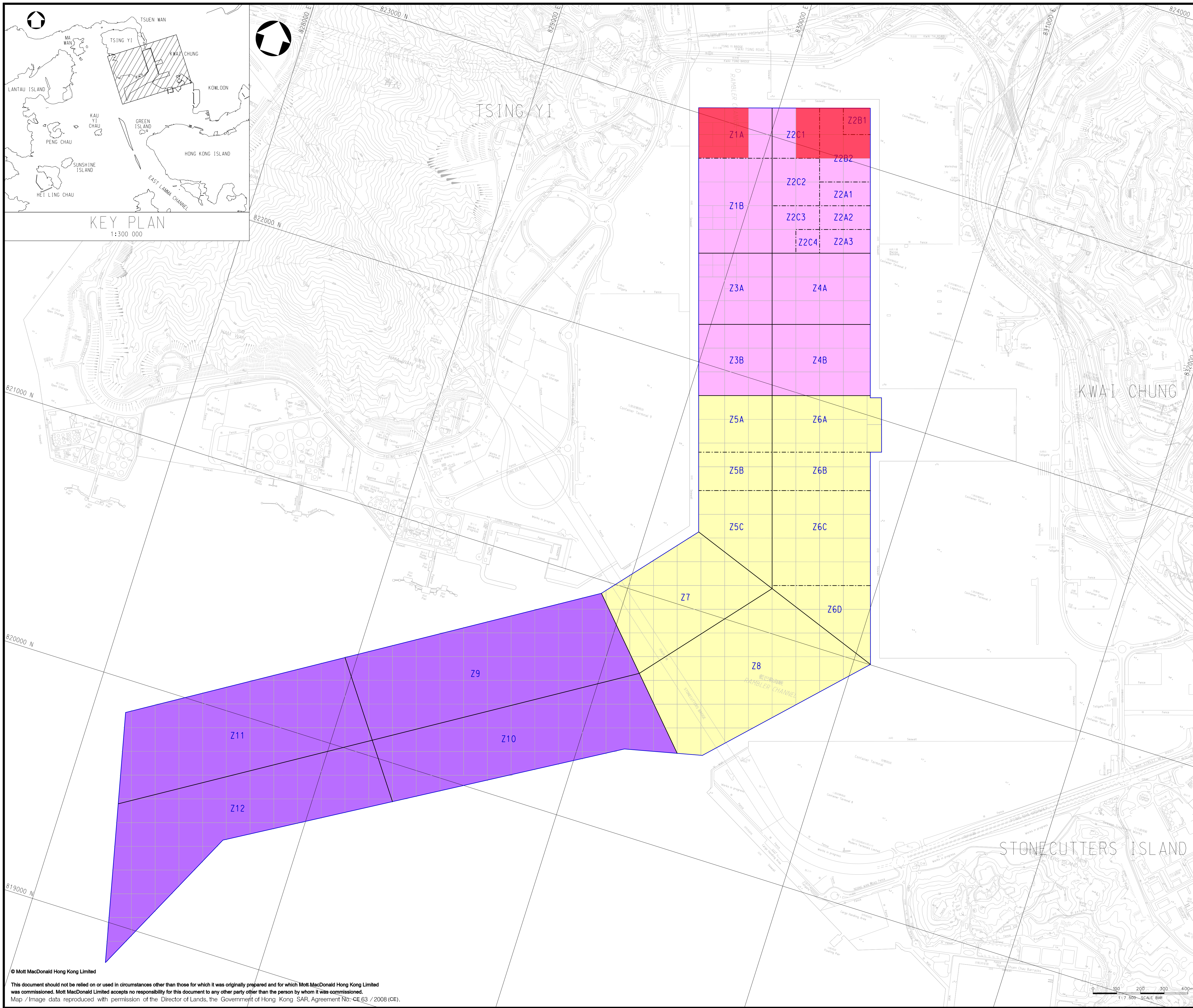
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Figure 1

Location of Remaining Work Area






- NOTES:**
1. THE CONTRACTOR SHALL REFER TO RELEVANT SECTION(S) AND APPENDICES OF THE PARTICULAR SPECIFICATION REGARDING SUB-ZONES.
  2. THE EXACT DEMARCATON OF THE ZONES SHALL BE REFERRED TO THE ENVIRONMENTAL PERMIT FOR THE PROJECT.


- LEGEND:**
- Z1, Z2, Z3 & Z4 (i.e. Portion A in the Project)
  - Z5, Z6, Z7 & Z8
  - Z9, Z10, Z11 & Z12
  - Z13A
  - Z13B
  - Z1A ZONE Z1A
  - Z1A Sub Zone Involving of Remaining Works

1	APR 13	WH	TENDER ADDENDUM NO. 1	SL	CMH
0	APR 13	WH	TENDER DRAWING	SL	CMH
Rev	Date	Drawn	Description	Ch'k'd	App'd



20/F AIA Kowloon Tower  
Landmark East  
100 How Ming Street  
Kwun Tong, Kowloon  
Hong Kong  
T +852 2828 5757  
F +852 2827 1823  
W www.mottmac.com.hk

Client



THE GOVERNMENT OF THE HONG KONG  
SPECIAL ADMINISTRATIVE REGION  
CIVIL ENGINEERING  
AND DEVELOPMENT DEPARTMENT

Project

**CONTRACT NO. : CV/2013/04  
DREDGING WORKS IN KWAI TSING  
CONTAINER BASIN AND ITS  
APPROACH CHANNEL**

Title

**SUB-ZONING PLAN FOR KWAI TSING  
CONTAINER BASIN, NORTHERN AND  
WESTERN FAIRWAY  
(SHEET 1 OF 2)**

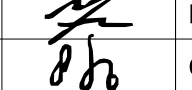





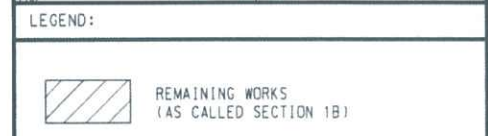
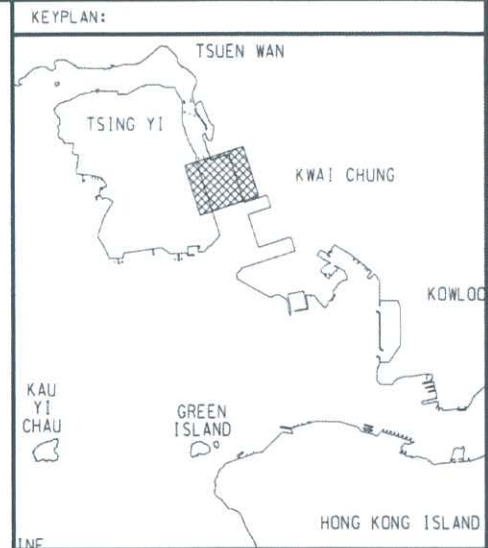

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Dwg check	FC		Approved	CMH	
Scale at A1	Status		Rev		
<b>1:7500</b>	<b>TEN</b>		<b>1</b>		
Drawing Number	<b>MMH/259053/GI/101</b>				

Figure 1a - Sub-zones of Remaining Work Areas






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 REMAINING WORKS IN  
 PORTION A (SECTION 1B)  
 SKETCH NO.: CV201304/SK/064

CONTRACT NO. CV/2013/04  
 DREDGING WORKS IN KWAI TSING  
 CONTAINER BASIN AND ITS  
 APPROACH CHANNEL  
 SCALE: 1:5000@A3 DATE: 25-MAY-2016  
 DESIGNED BY: CTP CHECKED BY: FC

Figure 1b - Locations of Remaining Work Areas



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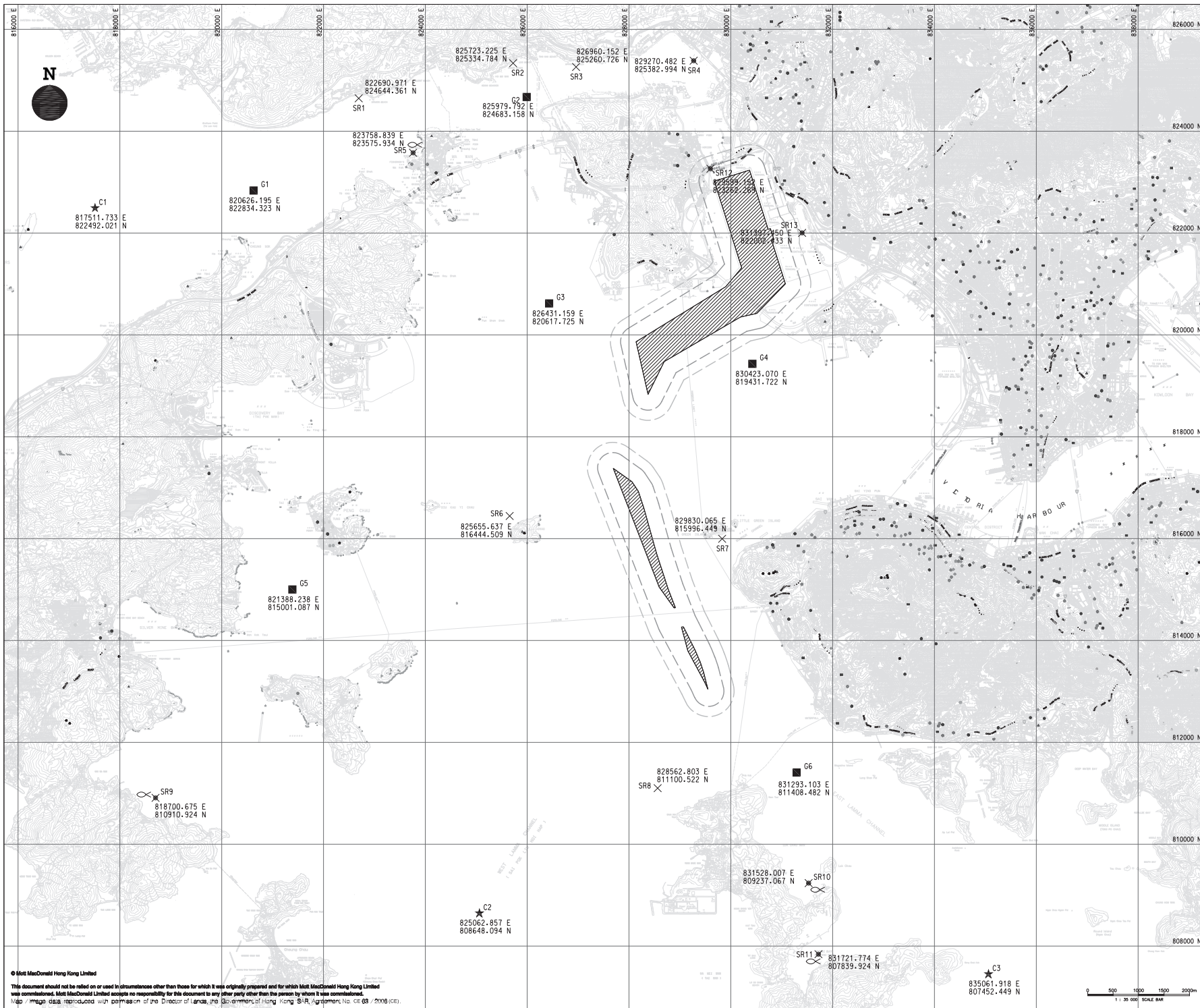
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Hong Kong.

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Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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### Figure 2

Location of Existing Monitoring Stations



**NOTES:**

1. ALL COORDINATES ARE IN HONG KONG METRIC GRID (1980).
2. THE CONTRACTOR SHALL REFER TO RELEVANT SECTION(S) AND APPENDICES OF THE PARTICULAR SPECIFICATION REGARDING THE WATER QUALITY MONITORING.

- LEGEND:**
- SITE BOUNDARY
  - X MONITORING STATION
  - ★ CONTROL STATION
  - GRADIENT STATION
  - 24-HRS MONITORING STATION
  - ⊗ FISH CULTURE ZONE

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Project  
**CONTRACT NO. : CV/2013/04  
 DREDGING WORKS IN KWAI TSING CONTAINER BASIN AND ITS APPROACH CHANNEL**

Title  
**PROVISIONAL LOCATION OF WATER QUALITY MONITORING STATIONS**

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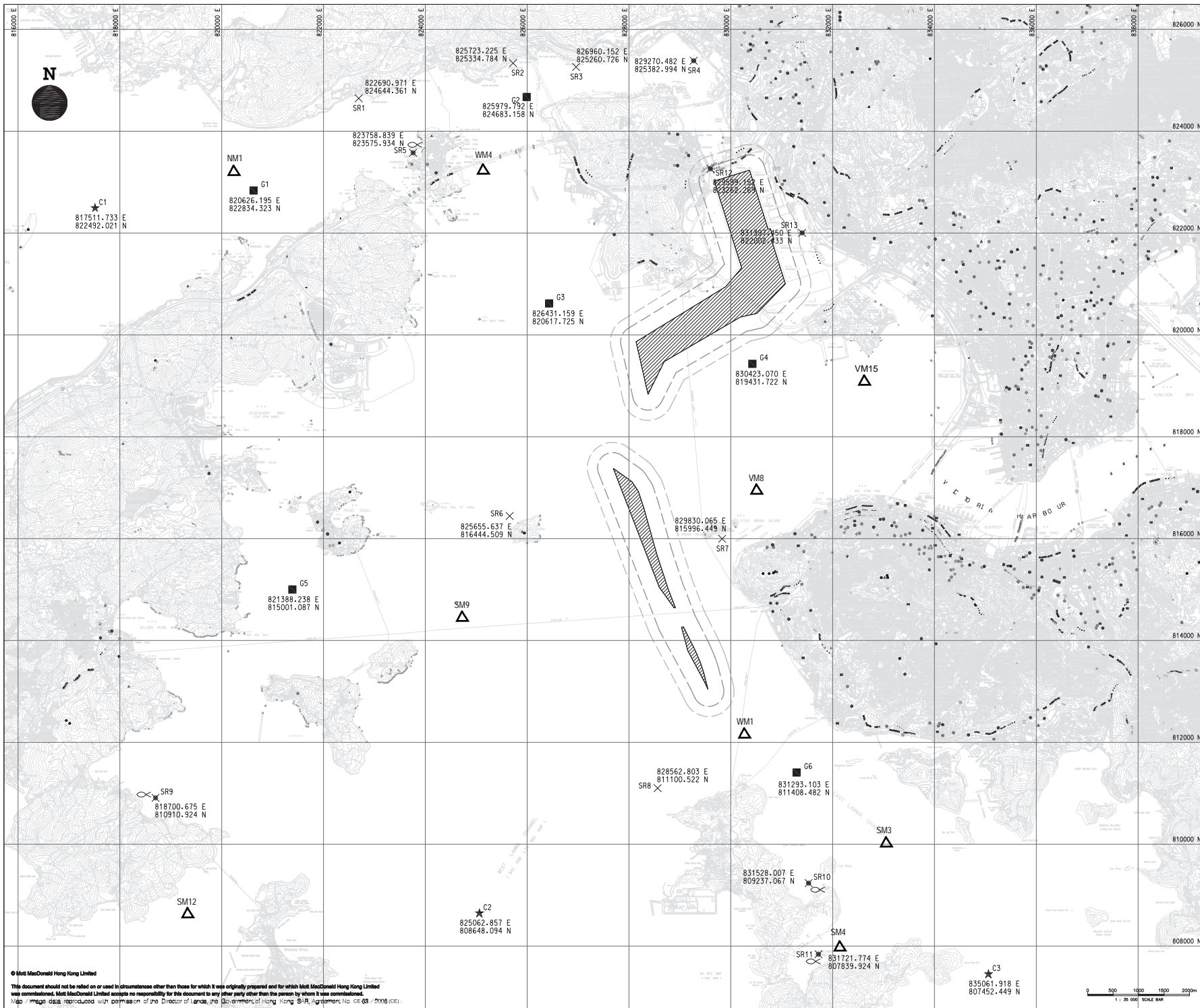
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### Figure 3

Location of Corresponding EPD Water Monitoring Stations





NOTES:  
 1. ALL COORDINATES ARE IN HONG KONG METRIC GRID (1980).  
 2. THE CONTRACTOR SHALL REFER TO RELEVANT SECTION(S) AND APPENDICES OF THE PARTICULAR SPECIFICATION REGARDING THE WATER QUALITY MONITORING.

- LEGEND:
- SITE BOUNDARY
  - × MONITORING STATION
  - ★ CONTROL STATION
  - GRADIENT STATION
  - 24-HRS MONITORING STATION
  - ∞ FISH CULTURE ZONE
  - △ EPD WATER QUALITY MONITORING STATION

1	APR 13	WH	TENDER ADDENDUM NO. 1	SL	CMH
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**DREDGING WORKS IN KWAI TSING CONTAINER BASIN AND ITS APPROACH CHANNEL**

Title  
**PROVISIONAL LOCATION OF WATER QUALITY MONITORING STATIONS**

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Drawing Number  
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Figure 3 - Location of Corresponding EPD Stations

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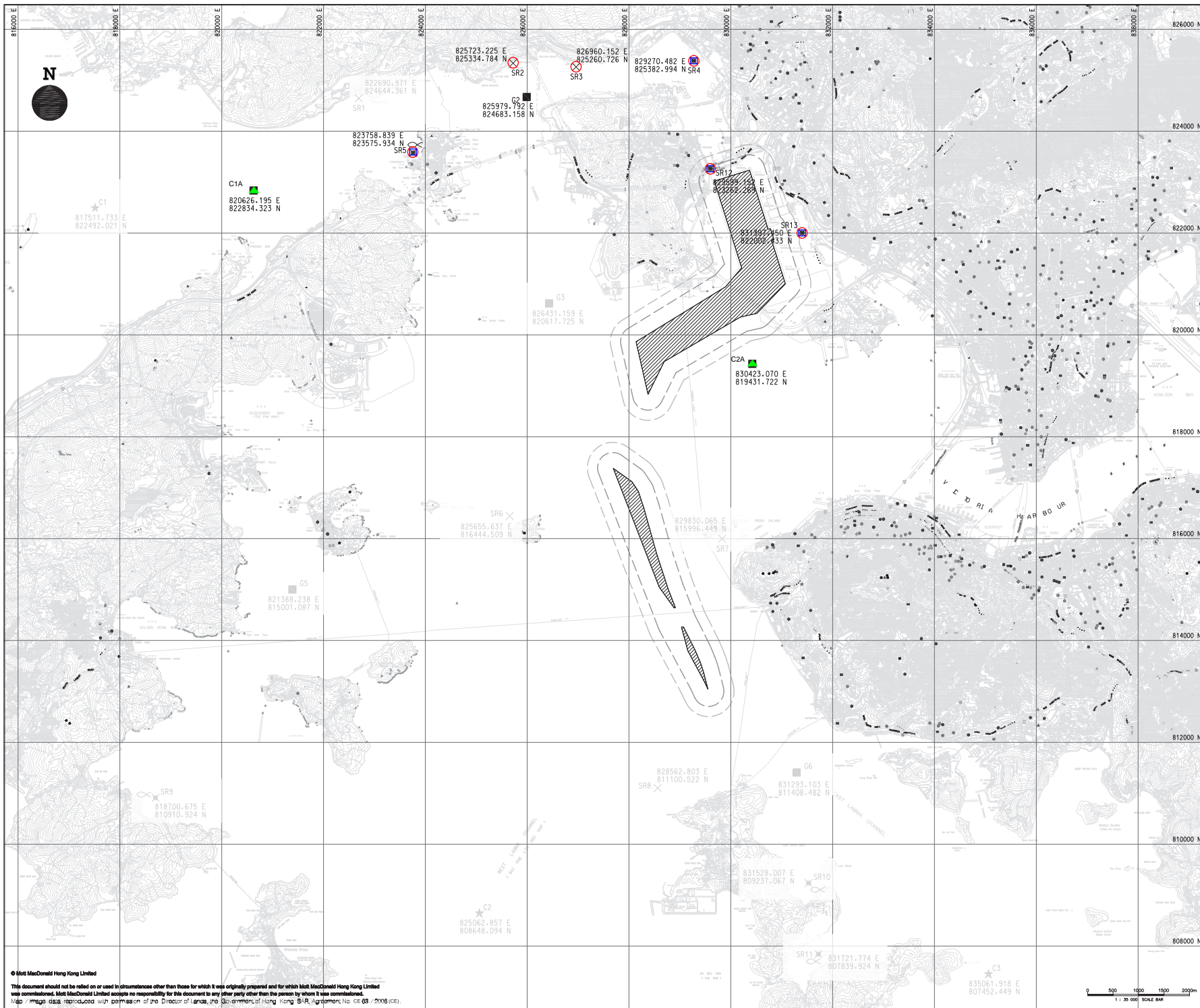
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### Figure 4

Locations of the Proposed Alternative Control Stations and the Remaining Impact Stations





NOTES:  
 1. ALL COORDINATES ARE IN HONG KONG METRIC GRID (1980).  
 2. THE CONTRACTOR SHALL REFER TO RELEVANT SECTION(S) AND APPENDICES OF THE PARTICULAR SPECIFICATION REGARDING THE WATER QUALITY MONITORING.

- LEGEND:
- SITE BOUNDARY
  - PROPOSED REMAINING MONITORING STATION
  - PROPOSED REMAINING 24 HOUR STATION
  - PROPOSED ALTERNATIVE CONTROL STATION
  - PROPOSED REMAINING GRADIENT STATION

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Project  
 CONTRACT NO. : CV/2013/04  
 DREDGING WORKS IN KWAI TSING CONTAINER BASIN AND ITS APPROACH CHANNEL

Title  
 PROVISIONAL LOCATION OF WATER QUALITY MONITORING STATIONS

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Figure 2 - Location of Monitoring Stations

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Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

### Appendix A

#### Historical Data of Corresponding EPD Reference Stations

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
Southern	SM9	1/7/2011	Surface Water	6.4	6.3	3.9
Southern	SM9	1/7/2011	Middle Water	6.9	7.5	4.0
Southern	SM9	1/7/2011	Bottom Water	6.9	5.6	4.4
Southern	SM9	2/11/2011	Surface Water	8.5	4.8	3.4
Southern	SM9	2/11/2011	Middle Water	8.7	4.5	2.8
Southern	SM9	2/11/2011	Bottom Water	8.6	5.7	3.6
Southern	SM9	3/2/2011	Surface Water	8.9	3.3	2.3
Southern	SM9	3/2/2011	Middle Water	7.6	3.9	2.7
Southern	SM9	3/2/2011	Bottom Water	7.5	5.0	2.8
Southern	SM9	4/1/2011	Surface Water	6.6	3.0	2.0
Southern	SM9	4/1/2011	Middle Water	6.6	3.3	2.3
Southern	SM9	4/1/2011	Bottom Water	6.5	3.7	2.9
Southern	SM9	5/18/2011	Surface Water	5.0	15.0	10.5
Southern	SM9	5/18/2011	Middle Water	4.9	14.0	9.3
Southern	SM9	5/18/2011	Bottom Water	4.7	21.0	15.0
Southern	SM9	6/10/2011	Surface Water	5.2	2.0	2.6
Southern	SM9	6/10/2011	Middle Water	4.9	3.0	3.4
Southern	SM9	6/10/2011	Bottom Water	4.2	4.9	7.0
Southern	SM9	7/11/2011	Surface Water	3.4	5.4	4.9
Southern	SM9	7/11/2011	Middle Water	3.3	8.0	4.4
Southern	SM9	7/11/2011	Bottom Water	2.9	8.2	5.5
Southern	SM9	8/4/2011	Surface Water	9.0	5.2	2.7
Southern	SM9	8/4/2011	Middle Water	7.9	4.5	2.5
Southern	SM9	8/4/2011	Bottom Water	5.7	4.8	2.9
Southern	SM9	9/14/2011	Surface Water	5.2	9.4	9.0
Southern	SM9	9/14/2011	Middle Water	5.1	12.0	7.0
Southern	SM9	9/14/2011	Bottom Water	4.9	14.0	10.4
Southern	SM9	10/24/2011	Surface Water	8.0	2.8	4.7
Southern	SM9	10/24/2011	Middle Water	7.5	5.4	2.9
Southern	SM9	10/24/2011	Bottom Water	7.2	6.9	3.9
Southern	SM9	11/10/2011	Surface Water	6.0	6.9	5.0
Southern	SM9	11/10/2011	Middle Water	6.0	6.8	4.9
Southern	SM9	11/10/2011	Bottom Water	6.1	7.3	4.9
Southern	SM9	12/9/2011	Surface Water	7.1	4.1	3.8
Southern	SM9	12/9/2011	Middle Water	7.2	4.9	3.4
Southern	SM9	12/9/2011	Bottom Water	7.1	3.9	3.9
Southern	SM9	1/12/2012	Surface Water	8.2	5.6	3.6
Southern	SM9	1/12/2012	Middle Water	8.3	5.9	3.4
Southern	SM9	1/12/2012	Bottom Water	8.2	8.3	3.7
Southern	SM9	2/20/2012	Surface Water	7.3	2.4	2.0
Southern	SM9	2/20/2012	Middle Water	7.4	2.2	1.7
Southern	SM9	2/20/2012	Bottom Water	7.4	2.6	1.7
Southern	SM9	3/16/2012	Surface Water	7.4	1.6	1.1
Southern	SM9	3/16/2012	Middle Water	7.4	2.0	1.3
Southern	SM9	3/16/2012	Bottom Water	7.3	2.3	1.4
Southern	SM9	4/10/2012	Surface Water	8.0	5.2	5.0
Southern	SM9	4/10/2012	Middle Water	8.0	5.5	5.1
Southern	SM9	4/10/2012	Bottom Water	8.1	7.9	5.2
Southern	SM9	5/11/2012	Surface Water	9.9	2.3	1.0
Southern	SM9	5/11/2012	Middle Water	9.9	2.2	0.9
Southern	SM9	5/11/2012	Bottom Water	8.4	1.7	1.0
Southern	SM9	6/22/2012	Surface Water	6.2	13.0	8.8
Southern	SM9	6/22/2012	Middle Water	6.1	12.0	11.9
Southern	SM9	6/22/2012	Bottom Water	6.1	29.0	22.1
Southern	SM9	7/9/2012	Surface Water	12.0	6.0	12.8
Southern	SM9	7/9/2012	Middle Water	8.7	5.6	11.9
Southern	SM9	7/9/2012	Bottom Water	6.6	5.6	12.6
Southern	SM9	8/10/2012	Surface Water	7.4	4.3	1.6
Southern	SM9	8/10/2012	Middle Water	5.3	4.5	3.1
Southern	SM9	8/10/2012	Bottom Water	4.5	7.6	5.9
Southern	SM9	9/14/2012	Surface Water	5.4	11.0	6.4
Southern	SM9	9/14/2012	Middle Water	5.5	12.0	7.5
Southern	SM9	9/14/2012	Bottom Water	4.9	15.0	9.8
Southern	SM9	10/26/2012	Surface Water	6.0	5.5	4.6
Southern	SM9	10/26/2012	Middle Water	6.1	5.9	5.0
Southern	SM9	10/26/2012	Bottom Water	6.1	7.4	6.7
Southern	SM9	11/9/2012	Surface Water	5.9	3.6	2.8
Southern	SM9	11/9/2012	Middle Water	6.1	4.3	3.2
Southern	SM9	11/9/2012	Bottom Water	6.1	5.9	7.2
Southern	SM9	12/7/2012	Surface Water	6.4	2.9	4.2
Southern	SM9	12/7/2012	Middle Water	6.5	5.0	3.8
Southern	SM9	12/7/2012	Bottom Water	6.6	8.0	6.4
Southern	SM9	1/4/2013	Surface Water	7.2	2.2	2.5
Southern	SM9	1/4/2013	Middle Water	7.2	2.5	2.4
Southern	SM9	1/4/2013	Bottom Water	7.3	3.0	2.3
Southern	SM9	2/18/2013	Surface Water	7.5	1.0	1.1
Southern	SM9	2/18/2013	Middle Water	7.2	1.1	1.1
Southern	SM9	2/18/2013	Bottom Water	7.2	0.9	1.0
Southern	SM9	3/13/2013	Surface Water	7.7	0.8	3.0
Southern	SM9	3/13/2013	Middle Water	7.7	0.9	1.0
Southern	SM9	3/13/2013	Bottom Water	7.6	1.1	0.9
Southern	SM9	4/25/2013	Surface Water	6.3	5.8	4.5
Southern	SM9	4/25/2013	Middle Water	6.2	10.0	8.2
Southern	SM9	4/25/2013	Bottom Water	6.2	9.1	8.4
Southern	SM9	5/29/2013	Surface Water	8.5	3.4	1.9
Southern	SM9	5/29/2013	Middle Water	7.0	4.2	1.9
Southern	SM9	5/29/2013	Bottom Water	4.6	5.9	14.9
Southern	SM9	6/14/2013	Surface Water	6.1	2.8	1.5
Southern	SM9	6/14/2013	Middle Water	5.9	4.7	1.7
Southern	SM9	6/14/2013	Bottom Water	4.6	4.1	2.9
Southern	SM9	7/17/2013	Surface Water	6.0	1.6	0.9
Southern	SM9	7/17/2013	Middle Water	6.1	2.0	0.7
Southern	SM9	7/17/2013	Bottom Water	5.0	3.8	1.6
Southern	SM9	8/28/2013	Surface Water	6.9	2.5	3.5
Southern	SM9	8/28/2013	Middle Water	6.0	5.3	3.6
Southern	SM9	8/28/2013	Bottom Water	4.4	9.3	4.3
Southern	SM9	9/25/2013	Surface Water	5.8	4.8	4.1
Southern	SM9	9/25/2013	Middle Water	5.8	4.5	4.3
Southern	SM9	9/25/2013	Bottom Water	5.3	8.9	6.0
Southern	SM9	10/17/2013	Surface Water	4.3	6.7	3.4
Southern	SM9	10/17/2013	Middle Water	5.8	5.3	3.8
Southern	SM9	10/17/2013	Bottom Water	6.0	6.6	4.0
Southern	SM9	11/14/2013	Surface Water	4.0	4.0	4.8
Southern	SM9	11/14/2013	Middle Water	5.9	4.7	5.1
Southern	SM9	11/14/2013	Bottom Water	5.9	6.5	4.4
Southern	SM9	12/14/2013	Surface Water	6.5	4.8	2.8
Southern	SM9	12/14/2013	Middle Water	6.6	5.1	3.1
Southern	SM9	12/14/2013	Bottom Water	6.6	5.7	3.2



Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
Victoria Harbour	VM8	1/21/2011	Surface Water	6.5	5.6	3.4
Victoria Harbour	VM8	1/21/2011	Middle Water	6.8	5.0	3.6
Victoria Harbour	VM8	1/21/2011	Bottom Water	7.0	7.1	4.7
Victoria Harbour	VM8	2/23/2011	Surface Water	6.9	4.6	4.2
Victoria Harbour	VM8	2/23/2011	Middle Water	7.0	4.7	3.8
Victoria Harbour	VM8	2/23/2011	Bottom Water	7.0	6.4	5.1
Victoria Harbour	VM8	3/23/2011	Surface Water	6.0	5.6	4.5
Victoria Harbour	VM8	3/23/2011	Middle Water	6.1	6.2	4.5
Victoria Harbour	VM8	3/23/2011	Bottom Water	6.2	5.1	4.9
Victoria Harbour	VM8	4/28/2011	Surface Water	5.9	2.6	2.6
Victoria Harbour	VM8	4/28/2011	Middle Water	5.1	3.9	2.3
Victoria Harbour	VM8	4/28/2011	Bottom Water	6.0	4.1	3.6
Victoria Harbour	VM8	5/13/2011	Surface Water	4.3	2.0	1.2
Victoria Harbour	VM8	5/13/2011	Middle Water	5.9	2.3	1.3
Victoria Harbour	VM8	5/13/2011	Bottom Water	5.0	2.5	2.1
Victoria Harbour	VM8	6/2/2011	Surface Water	4.6	3.9	3.9
Victoria Harbour	VM8	6/2/2011	Middle Water	5.2	4.3	3.9
Victoria Harbour	VM8	6/2/2011	Bottom Water	4.8	8.5	7.7
Victoria Harbour	VM8	7/22/2011	Surface Water	3.3	2.1	1.8
Victoria Harbour	VM8	7/22/2011	Middle Water	3.3	1.9	1.6
Victoria Harbour	VM8	7/22/2011	Bottom Water	2.7	5.7	5.4
Victoria Harbour	VM8	8/8/2011	Surface Water	7.7	2.5	1.7
Victoria Harbour	VM8	8/8/2011	Middle Water	6.3	3.3	2.0
Victoria Harbour	VM8	8/8/2011	Bottom Water	5.3	2.6	2.3
Victoria Harbour	VM8	9/7/2011	Surface Water	4.4	3.2	4.7
Victoria Harbour	VM8	9/7/2011	Middle Water	3.9	3.8	3.4
Victoria Harbour	VM8	9/7/2011	Bottom Water	3.6	4.6	7.0
Victoria Harbour	VM8	10/14/2011	Surface Water	4.8	5.2	3.3
Victoria Harbour	VM8	10/14/2011	Middle Water	4.9	9.3	4.1
Victoria Harbour	VM8	10/14/2011	Bottom Water	5.3	10.0	5.5
Victoria Harbour	VM8	11/3/2011	Surface Water	5.8	6.1	4.3
Victoria Harbour	VM8	11/3/2011	Middle Water	5.9	5.6	4.7
Victoria Harbour	VM8	11/3/2011	Bottom Water	5.7	6.0	5.8
Victoria Harbour	VM8	12/1/2011	Surface Water	5.8	9.4	6.6
Victoria Harbour	VM8	12/1/2011	Middle Water	5.8	11.0	7.1
Victoria Harbour	VM8	12/1/2011	Bottom Water	5.8	10.0	7.1
Victoria Harbour	VM8	1/26/2012	Surface Water	7.4	3.9	4.0
Victoria Harbour	VM8	1/26/2012	Middle Water	7.5	4.2	3.6
Victoria Harbour	VM8	1/26/2012	Bottom Water	7.6	5.2	4.0
Victoria Harbour	VM8	2/9/2012	Surface Water	7.3	6.0	3.4
Victoria Harbour	VM8	2/9/2012	Middle Water	7.3	5.6	3.3
Victoria Harbour	VM8	2/9/2012	Bottom Water	7.5	5.1	3.0
Victoria Harbour	VM8	3/1/2012	Surface Water	8.8	2.9	3.1
Victoria Harbour	VM8	3/1/2012	Middle Water	9.0	2.1	2.2
Victoria Harbour	VM8	3/1/2012	Bottom Water	9.2	2.1	2.0
Victoria Harbour	VM8	4/12/2012	Surface Water	7.8	2.6	2.9
Victoria Harbour	VM8	4/12/2012	Middle Water	7.8	3.6	3.1
Victoria Harbour	VM8	4/12/2012	Bottom Water	8.1	15.0	8.1
Victoria Harbour	VM8	5/4/2012	Surface Water	8.8	2.5	5.1
Victoria Harbour	VM8	5/4/2012	Middle Water	8.4	2.7	2.1
Victoria Harbour	VM8	5/4/2012	Bottom Water	6.0	2.3	3.8
Victoria Harbour	VM8	6/1/2012	Surface Water	6.3	2.2	2.7
Victoria Harbour	VM8	6/1/2012	Middle Water	6.5	3.6	3.0
Victoria Harbour	VM8	6/1/2012	Bottom Water	6.6	2.9	2.9
Victoria Harbour	VM8	7/4/2012	Surface Water	7.5	3.7	92.1
Victoria Harbour	VM8	7/4/2012	Middle Water	6.9	3.8	92.1
Victoria Harbour	VM8	7/4/2012	Bottom Water	4.6	3.2	90.9
Victoria Harbour	VM8	8/3/2012	Surface Water	4.6	2.0	1.6
Victoria Harbour	VM8	8/3/2012	Middle Water	4.4	3.3	2.1
Victoria Harbour	VM8	8/3/2012	Bottom Water	4.4	10.0	7.0
Victoria Harbour	VM8	9/6/2012	Surface Water	4.6	2.6	17.4
Victoria Harbour	VM8	9/6/2012	Middle Water	4.7	4.0	3.3
Victoria Harbour	VM8	9/6/2012	Bottom Water	4.7	4.5	4.0
Victoria Harbour	VM8	10/8/2012	Surface Water	5.5	2.4	2.4
Victoria Harbour	VM8	10/8/2012	Middle Water	5.6	2.8	2.2
Victoria Harbour	VM8	10/8/2012	Bottom Water	5.3	3.1	2.7
Victoria Harbour	VM8	11/5/2012	Surface Water	5.6	70.0	3.6
Victoria Harbour	VM8	11/5/2012	Middle Water	5.6	6.8	4.2
Victoria Harbour	VM8	11/5/2012	Bottom Water	5.7	14.0	7.8
Victoria Harbour	VM8	12/6/2012	Surface Water	6.0	5.3	4.8
Victoria Harbour	VM8	12/6/2012	Middle Water	6.3	5.7	4.8
Victoria Harbour	VM8	12/6/2012	Bottom Water	6.3	5.9	5.3
Victoria Harbour	VM8	1/18/2013	Surface Water	6.9	3.1	6.4
Victoria Harbour	VM8	1/18/2013	Middle Water	7.0	3.2	9.9
Victoria Harbour	VM8	1/18/2013	Bottom Water	7.3	3.5	9.8
Victoria Harbour	VM8	2/1/2013	Surface Water	7.0	5.7	3.9
Victoria Harbour	VM8	2/1/2013	Middle Water	7.0	6.3	3.7
Victoria Harbour	VM8	2/1/2013	Bottom Water	7.0	9.4	4.7
Victoria Harbour	VM8	3/1/2013	Surface Water	7.4	1.7	1.9
Victoria Harbour	VM8	3/1/2013	Middle Water	7.5	2.5	1.7
Victoria Harbour	VM8	3/1/2013	Bottom Water	7.5	7.1	4.0
Victoria Harbour	VM8	4/24/2013	Surface Water	6.2	1.8	3.3
Victoria Harbour	VM8	4/24/2013	Middle Water	6.4	2.5	2.1
Victoria Harbour	VM8	4/24/2013	Bottom Water	5.9	2.4	2.7
Victoria Harbour	VM8	5/24/2013	Surface Water	6.5	1.4	1.3
Victoria Harbour	VM8	5/24/2013	Middle Water	6.2	2.2	1.1
Victoria Harbour	VM8	5/24/2013	Bottom Water	5.2	2.5	1.8
Victoria Harbour	VM8	6/13/2013	Surface Water	5.6	2.0	1.0
Victoria Harbour	VM8	6/13/2013	Middle Water	4.3	2.2	1.4
Victoria Harbour	VM8	6/13/2013	Bottom Water	3.5	4.2	2.9
Victoria Harbour	VM8	7/29/2013	Surface Water	5.3	2.2	1.5
Victoria Harbour	VM8	7/29/2013	Middle Water	5.1	2.8	1.5
Victoria Harbour	VM8	7/29/2013	Bottom Water	4.5	3.6	2.8
Victoria Harbour	VM8	8/26/2013	Surface Water	4.7	2.1	2.8
Victoria Harbour	VM8	8/26/2013	Middle Water	3.8	4.2	3.4
Victoria Harbour	VM8	8/26/2013	Bottom Water	3.6	6.6	6.4
Victoria Harbour	VM8	9/12/2013	Surface Water	5.0	3.8	4.2
Victoria Harbour	VM8	9/12/2013	Middle Water	4.8	5.8	4.4
Victoria Harbour	VM8	9/12/2013	Bottom Water	4.7	22.0	12.0
Victoria Harbour	VM8	10/28/2013	Surface Water	5.1	4.2	5.1
Victoria Harbour	VM8	10/28/2013	Middle Water	5.2	3.9	5.2
Victoria Harbour	VM8	10/28/2013	Bottom Water	5.3	9.0	5.7
Victoria Harbour	VM8	11/22/2013	Surface Water	5.7	3.8	5.6
Victoria Harbour	VM8	11/22/2013	Middle Water	5.8	5.0	3.7
Victoria Harbour	VM8	11/22/2013	Bottom Water	5.8	9.3	5.9
Victoria Harbour	VM8	12/12/2013	Surface Water	4.3	3.5	2.6
Victoria Harbour	VM8	12/12/2013	Middle Water	5.7	5.2	3.7
Victoria Harbour	VM8	12/12/2013	Bottom Water	6.3	20.0	9.7

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
Western Buffer	WM1	1/21/2011	Surface Water	7.3	5.5	4.2
Western Buffer	WM1	1/21/2011	Middle Water	7.4	9.7	7.1
Western Buffer	WM1	1/21/2011	Bottom Water	7.4	11.0	7.0
Western Buffer	WM1	2/23/2011	Surface Water	7.2	2.4	3.7
Western Buffer	WM1	2/23/2011	Middle Water	7.3	4.2	3.2
Western Buffer	WM1	2/23/2011	Bottom Water	7.3	10.0	5.8
Western Buffer	WM1	3/23/2011	Surface Water	6.6	4.2	4.4
Western Buffer	WM1	3/23/2011	Middle Water	6.8	5.4	4.7
Western Buffer	WM1	3/23/2011	Bottom Water	6.8	5.3	3.3
Western Buffer	WM1	4/28/2011	Surface Water	8.2	0.9	1.3
Western Buffer	WM1	4/28/2011	Middle Water	6.3	3.9	2.7
Western Buffer	WM1	4/28/2011	Bottom Water	6.2	9.2	4.2
Western Buffer	WM1	5/13/2011	Surface Water	5.5	2.0	1.6
Western Buffer	WM1	5/13/2011	Middle Water	5.0	3.9	2.5
Western Buffer	WM1	5/13/2011	Bottom Water	4.8	8.1	8.2
Western Buffer	WM1	6/2/2011	Surface Water	5.6	2.2	2.2
Western Buffer	WM1	6/2/2011	Middle Water	5.4	2.9	2.4
Western Buffer	WM1	6/2/2011	Bottom Water	5.3	4.6	3.9
Western Buffer	WM1	7/22/2011	Surface Water	3.9	2.2	1.5
Western Buffer	WM1	7/22/2011	Middle Water	3.2	3.0	3.0
Western Buffer	WM1	7/22/2011	Bottom Water	2.7	9.4	7.3
Western Buffer	WM1	8/8/2011	Surface Water	8.2	2.9	1.7
Western Buffer	WM1	8/8/2011	Middle Water	3.8	2.5	1.9
Western Buffer	WM1	8/8/2011	Bottom Water	2.0	3.5	3.1
Western Buffer	WM1	9/7/2011	Surface Water	6.1	2.4	1.8
Western Buffer	WM1	9/7/2011	Middle Water	4.4	3.2	2.2
Western Buffer	WM1	9/7/2011	Bottom Water	2.9	5.0	4.1
Western Buffer	WM1	10/14/2011	Surface Water	5.6	4.2	2.8
Western Buffer	WM1	10/14/2011	Middle Water	5.8	5.2	3.5
Western Buffer	WM1	10/14/2011	Bottom Water	6.0	5.3	5.1
Western Buffer	WM1	11/3/2011	Surface Water	5.7	3.6	3.3
Western Buffer	WM1	11/3/2011	Middle Water	6.1	4.2	3.0
Western Buffer	WM1	11/3/2011	Bottom Water	6.2	11.0	10.0
Western Buffer	WM1	12/1/2011	Surface Water	6.0	4.4	3.5
Western Buffer	WM1	12/1/2011	Middle Water	6.2	6.3	4.8
Western Buffer	WM1	12/1/2011	Bottom Water	6.2	20.0	13.8
Western Buffer	WM1	1/26/2012	Surface Water	7.7	3.7	3.3
Western Buffer	WM1	1/26/2012	Middle Water	7.7	2.1	3.1
Western Buffer	WM1	1/26/2012	Bottom Water	7.8	9.6	7.3
Western Buffer	WM1	2/9/2012	Surface Water	7.6	2.9	2.9
Western Buffer	WM1	2/9/2012	Middle Water	7.8	4.0	2.9
Western Buffer	WM1	2/9/2012	Bottom Water	7.9	11.0	7.8
Western Buffer	WM1	3/1/2012	Surface Water	9.3	1.4	1.6
Western Buffer	WM1	3/1/2012	Middle Water	9.4	1.6	1.6
Western Buffer	WM1	3/1/2012	Bottom Water	9.6	3.2	2.7
Western Buffer	WM1	4/12/2012	Surface Water	8.3	1.9	2.3
Western Buffer	WM1	4/12/2012	Middle Water	8.4	2.3	2.5
Western Buffer	WM1	4/12/2012	Bottom Water	8.4	25.0	18.2
Western Buffer	WM1	5/4/2012	Surface Water	13.1	4.2	2.9
Western Buffer	WM1	5/4/2012	Middle Water	6.9	3.9	4.6
Western Buffer	WM1	5/4/2012	Bottom Water	6.8	7.6	5.8
Western Buffer	WM1	6/1/2012	Surface Water	7.2	2.0	2.8
Western Buffer	WM1	6/1/2012	Middle Water	7.3	2.0	2.1
Western Buffer	WM1	6/1/2012	Bottom Water	7.0	9.6	7.1
Western Buffer	WM1	7/4/2012	Surface Water	7.6	3.3	98.6
Western Buffer	WM1	7/4/2012	Middle Water	6.1	4.2	97.4
Western Buffer	WM1	7/4/2012	Bottom Water	5.0	17.0	98.3
Western Buffer	WM1	8/3/2012	Surface Water	4.0	2.1	1.7
Western Buffer	WM1	8/3/2012	Middle Water	4.8	2.6	3.6
Western Buffer	WM1	8/3/2012	Bottom Water	4.3	15.0	6.2
Western Buffer	WM1	9/6/2012	Surface Water	5.1	1.9	1.4
Western Buffer	WM1	9/6/2012	Middle Water	3.5	2.6	2.4
Western Buffer	WM1	9/6/2012	Bottom Water	2.1	7.9	5.6
Western Buffer	WM1	10/8/2012	Surface Water	5.5	3.3	2.6
Western Buffer	WM1	10/8/2012	Middle Water	5.5	2.9	2.6
Western Buffer	WM1	10/8/2012	Bottom Water	5.7	9.3	6.8
Western Buffer	WM1	11/5/2012	Surface Water	6.1	3.6	3.6
Western Buffer	WM1	11/5/2012	Middle Water	6.3	4.4	3.8
Western Buffer	WM1	11/5/2012	Bottom Water	6.2	26.0	21.5
Western Buffer	WM1	12/6/2012	Surface Water	6.6	3.9	3.4
Western Buffer	WM1	12/6/2012	Middle Water	6.8	3.5	4.1
Western Buffer	WM1	12/6/2012	Bottom Water	6.7	3.7	4.9
Western Buffer	WM1	1/18/2013	Surface Water	8.1	1.7	5.5
Western Buffer	WM1	1/18/2013	Middle Water	7.9	3.0	8.4
Western Buffer	WM1	1/18/2013	Bottom Water	8.0	3.6	10.9
Western Buffer	WM1	2/1/2013	Surface Water	7.5	1.6	1.2
Western Buffer	WM1	2/1/2013	Middle Water	7.6	2.0	1.6
Western Buffer	WM1	2/1/2013	Bottom Water	7.5	8.1	8.4
Western Buffer	WM1	3/1/2013	Surface Water	7.7	0.9	2.8
Western Buffer	WM1	3/1/2013	Middle Water	7.9	0.9	0.8
Western Buffer	WM1	3/1/2013	Bottom Water	8.0	1.6	1.7
Western Buffer	WM1	4/24/2013	Surface Water	5.9	1.8	2.6
Western Buffer	WM1	4/24/2013	Middle Water	6.9	4.7	4.4
Western Buffer	WM1	4/24/2013	Bottom Water	6.9	7.7	7.6
Western Buffer	WM1	5/24/2013	Surface Water	7.7	2.8	1.1
Western Buffer	WM1	5/24/2013	Middle Water	5.5	3.2	2.2
Western Buffer	WM1	5/24/2013	Bottom Water	5.2	5.7	4.0
Western Buffer	WM1	6/13/2013	Surface Water	6.8	1.8	0.5
Western Buffer	WM1	6/13/2013	Middle Water	3.4	2.0	2.0
Western Buffer	WM1	6/13/2013	Bottom Water	3.1	8.4	5.7
Western Buffer	WM1	7/29/2013	Surface Water	5.1	1.9	1.9
Western Buffer	WM1	7/29/2013	Middle Water	3.2	3.3	3.2
Western Buffer	WM1	7/29/2013	Bottom Water	3.1	25.0	19.0
Western Buffer	WM1	8/26/2013	Surface Water	4.9	2.1	4.2
Western Buffer	WM1	8/26/2013	Middle Water	3.8	7.0	7.2
Western Buffer	WM1	8/26/2013	Bottom Water	3.6	13.0	16.6
Western Buffer	WM1	9/12/2013	Surface Water	5.1	2.1	3.2
Western Buffer	WM1	9/12/2013	Middle Water	5.0	2.4	3.0
Western Buffer	WM1	9/12/2013	Bottom Water	4.8	11.0	10.1
Western Buffer	WM1	10/28/2013	Surface Water	5.8	2.9	3.9
Western Buffer	WM1	10/28/2013	Middle Water	5.9	2.9	4.3
Western Buffer	WM1	10/28/2013	Bottom Water	6.0	4.7	4.9
Western Buffer	WM1	11/22/2013	Surface Water	4.7	4.2	4.2
Western Buffer	WM1	11/22/2013	Middle Water	6.2	5.6	3.7
Western Buffer	WM1	11/22/2013	Bottom Water	6.3	16.0	10.9
Western Buffer	WM1	12/12/2013	Surface Water	4.6	3.2	2.5
Western Buffer	WM1	12/12/2013	Middle Water	7.0	3.5	2.8
Western Buffer	WM1	12/12/2013	Bottom Water	7.0	2.1	1.9

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)	Total Inorganic Nitrogen (mg/L)
Southern	SM12	1/7/2011	Surface Water	7.2	15.0	8.9	0.27
Southern	SM12	1/7/2011	Middle Water	7.2	15.0	8.4	0.28
Southern	SM12	1/7/2011	Bottom Water	7.3	17.0	9.6	0.27
Southern	SM12	2/11/2011	Surface Water	8.2	4.9	3.0	0.15
Southern	SM12	2/11/2011	Middle Water	8.3	4.6	2.9	0.15
Southern	SM12	2/11/2011	Bottom Water	8.2	4.9	3.3	0.14
Southern	SM12	3/2/2011	Surface Water	8.0	7.4	5.2	0.37
Southern	SM12	3/2/2011	Middle Water	8.0	7.7	5.1	0.38
Southern	SM12	3/2/2011	Bottom Water	7.9	13.0	5.3	0.32
Southern	SM12	4/1/2011	Surface Water	7.2	9.0	6.8	0.23
Southern	SM12	4/1/2011	Middle Water	7.2	9.2	6.7	0.21
Southern	SM12	4/1/2011	Bottom Water	7.1	9.0	6.6	0.21
Southern	SM12	5/18/2011	Surface Water	5.3	2.6	3.0	0.38
Southern	SM12	5/18/2011	Middle Water	5.6	<0.5	2.9	0.38
Southern	SM12	5/18/2011	Bottom Water	5.3	3.1	3.6	0.35
Southern	SM12	6/10/2011	Surface Water	5.3	0.6	1.1	0.38
Southern	SM12	6/10/2011	Middle Water	5.3	1.3	1.4	0.37
Southern	SM12	6/10/2011	Bottom Water	4.0	38.0	35.8	0.46
Southern	SM12	7/11/2011	Surface Water	3.2	2.4	1.7	0.51
Southern	SM12	7/11/2011	Middle Water	3.5	2.4	1.8	0.48
Southern	SM12	7/11/2011	Bottom Water	3.5	5.9	2.9	0.31
Southern	SM12	8/4/2011	Surface Water	7.6	5.4	2.7	0.14
Southern	SM12	8/4/2011	Middle Water	7.3	5.2	3.0	0.14
Southern	SM12	8/4/2011	Bottom Water	7.0	5.0	3.2	0.15
Southern	SM12	9/14/2011	Surface Water	6.9	6.6	3.8	0.09
Southern	SM12	9/14/2011	Middle Water	6.7	5.0	4.4	0.07
Southern	SM12	9/14/2011	Bottom Water	6.6	3.7	4.0	0.07
Southern	SM12	10/24/2011	Surface Water	7.4	6.1	4.5	0.09
Southern	SM12	10/24/2011	Middle Water	7.5	6.4	3.8	0.09
Southern	SM12	10/24/2011	Bottom Water	7.1	7.5	5.9	0.09
Southern	SM12	11/10/2011	Surface Water	6.2	16.0	11.1	0.24
Southern	SM12	11/10/2011	Middle Water	6.2	19.0	11.1	0.23
Southern	SM12	11/10/2011	Bottom Water	6.3	16.0	12.5	0.23
Southern	SM12	12/9/2011	Surface Water	7.0	12.0	9.6	0.26
Southern	SM12	12/9/2011	Middle Water	7.0	3.9	9.7	0.26
Southern	SM12	12/9/2011	Bottom Water	6.9	18.0	10.1	0.27
Southern	SM12	1/12/2012	Surface Water	9.4	13.0	9.1	0.16
Southern	SM12	1/12/2012	Middle Water	9.6	11.0	7.6	0.17
Southern	SM12	1/12/2012	Bottom Water	9.5	15.0	8.6	0.16
Southern	SM12	2/20/2012	Surface Water	8.0	7.1	5.1	0.30
Southern	SM12	2/20/2012	Middle Water	8.0	16.0	7.2	0.30
Southern	SM12	2/20/2012	Bottom Water	8.0	20.0	10.0	0.30
Southern	SM12	3/16/2012	Surface Water	7.7	4.1	2.8	0.34
Southern	SM12	3/16/2012	Middle Water	7.7	4.7	3.2	0.33
Southern	SM12	3/16/2012	Bottom Water	7.5	8.1	5.3	0.31
Southern	SM12	4/10/2012	Surface Water	8.5	3.1	2.8	0.28
Southern	SM12	4/10/2012	Middle Water	8.5	2.6	2.8	0.42
Southern	SM12	4/10/2012	Bottom Water	8.6	3.6	2.8	0.28
Southern	SM12	5/11/2012	Surface Water	10.8	2.5	1.2	0.85
Southern	SM12	5/11/2012	Middle Water	10.6	2.0	1.0	0.72
Southern	SM12	5/11/2012	Bottom Water	9.6	1.8	1.0	0.53
Southern	SM12	6/22/2012	Surface Water	7.7	7.6	5.2	0.38
Southern	SM12	6/22/2012	Middle Water	7.7	6.6	5.4	0.38
Southern	SM12	6/22/2012	Bottom Water	7.7	7.1	5.3	0.40
Southern	SM12	7/9/2012	Surface Water	11.4	4.2	16.8	0.62
Southern	SM12	7/9/2012	Middle Water	11.3	5.6	18.6	0.58
Southern	SM12	7/9/2012	Bottom Water	7.5	8.2	21.1	0.49
Southern	SM12	8/10/2012	Surface Water	8.0	3.9	1.7	0.29
Southern	SM12	8/10/2012	Middle Water	10.2	3.5	1.6	0.29
Southern	SM12	8/10/2012	Bottom Water	5.4	14.0	8.7	0.29
Southern	SM12	9/14/2012	Surface Water	7.1	3.7	2.3	0.17
Southern	SM12	9/14/2012	Middle Water	7.1	5.2	2.1	0.17
Southern	SM12	9/14/2012	Bottom Water	6.4	5.5	2.6	0.18
Southern	SM12	10/26/2012	Surface Water	6.2	4.2	3.9	0.26
Southern	SM12	10/26/2012	Middle Water	6.6	4.0	4.0	0.26
Southern	SM12	10/26/2012	Bottom Water	6.4	8.9	5.3	0.23
Southern	SM12	11/9/2012	Surface Water	6.2	9.3	7.2	0.26
Southern	SM12	11/9/2012	Middle Water	6.5	8.6	9.0	0.24
Southern	SM12	11/9/2012	Bottom Water	6.5	14.0	9.6	0.22
Southern	SM12	12/7/2012	Surface Water	6.9	7.3	7.2	0.32
Southern	SM12	12/7/2012	Middle Water	7.0	7.8	7.7	0.32
Southern	SM12	12/7/2012	Bottom Water	7.1	7.8	7.3	0.31
Southern	SM12	1/4/2013	Surface Water	7.4	4.4	5.3	0.11
Southern	SM12	1/4/2013	Middle Water	7.6	8.5	5.3	0.11
Southern	SM12	1/4/2013	Bottom Water	7.7	5.9	5.9	0.12
Southern	SM12	2/18/2013	Surface Water	7.7	1.6	2.0	0.26
Southern	SM12	2/18/2013	Middle Water	7.8	2.1	2.0	0.27
Southern	SM12	2/18/2013	Bottom Water	7.9	2.0	1.9	0.25
Southern	SM12	3/13/2013	Surface Water	8.3	0.5	2.4	0.21
Southern	SM12	3/13/2013	Middle Water	8.3	0.5	0.9	0.18
Southern	SM12	3/13/2013	Bottom Water	8.1	0.9	1.1	0.17
Southern	SM12	4/25/2013	Surface Water	7.2	1.6	1.8	0.19
Southern	SM12	4/25/2013	Middle Water	7.5	4.0	2.5	0.18
Southern	SM12	4/25/2013	Bottom Water	7.4	2.0	2.9	0.17
Southern	SM12	5/29/2013	Surface Water	9.3	2.2	2.3	0.65
Southern	SM12	5/29/2013	Middle Water	8.8	3.3	2.3	0.63
Southern	SM12	5/29/2013	Bottom Water	8.4	3.8	2.3	0.60
Southern	SM12	6/14/2013	Surface Water	6.9	2.1	1.0	0.20
Southern	SM12	6/14/2013	Middle Water	6.9	2.2	0.9	0.20
Southern	SM12	6/14/2013	Bottom Water	6.8	2.2	0.9	0.20
Southern	SM12	7/17/2013	Surface Water	7.6	1.0	0.8	0.35
Southern	SM12	7/17/2013	Middle Water	7.3	1.0	0.8	0.36
Southern	SM12	7/17/2013	Bottom Water	6.9	1.6	1.5	0.35
Southern	SM12	8/28/2013	Surface Water	11.5	3.4	2.2	0.48
Southern	SM12	8/28/2013	Middle Water	11.6	3.8	2.8	0.51
Southern	SM12	8/28/2013	Bottom Water	9.3	6.4	4.3	0.50
Southern	SM12	9/25/2013	Surface Water	5.7	7.2	7.3	0.45
Southern	SM12	9/25/2013	Middle Water	5.8	10.0	7.4	0.42
Southern	SM12	9/25/2013	Bottom Water	5.7	8.5	6.6	0.39
Southern	SM12	10/17/2013	Surface Water	4.2	5.7	3.6	0.23
Southern	SM12	10/17/2013	Middle Water	6.3	10.0	4.6	0.22
Southern	SM12	10/17/2013	Bottom Water	6.2	15.0	8.1	0.21
Southern	SM12	11/14/2013	Surface Water	4.1	13.0	10.9	0.15
Southern	SM12	11/14/2013	Middle Water	6.1	21.0	14.1	0.16
Southern	SM12	11/14/2013	Bottom Water	6.3	22.0	16.1	0.15
Southern	SM12	12/14/2013	Surface Water	7.1	4.4	3.3	0.12
Southern	SM12	12/14/2013	Middle Water	7.0	5.2	5.4	0.12
Southern	SM12	12/14/2013	Bottom Water	6.9	11.0	7.5	0.09

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)	Total Inorganic Nitrogen (mg/L)
Southern	SM3	1/13/2011	Surface Water	7.2	1.7	6.2	0.15
Southern	SM3	1/13/2011	Middle Water	7.2	2.7	2.6	0.15
Southern	SM3	1/13/2011	Bottom Water	7.2	2.7	2.9	0.15
Southern	SM3	2/17/2011	Surface Water	7.5	2.8	3.1	0.27
Southern	SM3	2/17/2011	Middle Water	7.6	3.7	3.5	0.26
Southern	SM3	2/17/2011	Bottom Water	7.7	4.7	4.1	0.25
Southern	SM3	3/3/2011	Surface Water	7.9	2.6	1.9	0.28
Southern	SM3	3/3/2011	Middle Water	7.8	3.8	2.7	0.27
Southern	SM3	3/3/2011	Bottom Water	7.9	6.2	3.9	0.25
Southern	SM3	4/7/2011	Surface Water	7.1	0.8	9.5	0.19
Southern	SM3	4/7/2011	Middle Water	7.1	1.3	0.8	0.16
Southern	SM3	4/7/2011	Bottom Water	7.1	2.0	1.0	0.14
Southern	SM3	5/25/2011	Surface Water	6.7	1.2	1.8	0.15
Southern	SM3	5/25/2011	Middle Water	5.8	2.5	2.1	0.07
Southern	SM3	5/25/2011	Bottom Water	5.5	5.4	5.0	0.07
Southern	SM3	6/27/2011	Surface Water	4.7	2.5	2.2	0.40
Southern	SM3	6/27/2011	Middle Water	4.2	4.6	5.0	0.19
Southern	SM3	6/27/2011	Bottom Water	3.4	7.2	6.5	0.14
Southern	SM3	7/20/2011	Surface Water	3.3	1.3	1.6	0.24
Southern	SM3	7/20/2011	Middle Water	3.3	3.0	2.7	0.12
Southern	SM3	7/20/2011	Bottom Water	3.1	16.0	10.2	0.08
Southern	SM3	8/12/2011	Surface Water	7.3	1.6	1.1	0.29
Southern	SM3	8/12/2011	Middle Water	1.7	1.5	1.2	0.17
Southern	SM3	8/12/2011	Bottom Water	1.3	3.5	2.5	0.17
Southern	SM3	9/9/2011	Surface Water	6.6	1.5	2.0	0.11
Southern	SM3	9/9/2011	Middle Water	4.0	1.9	2.0	0.17
Southern	SM3	9/9/2011	Bottom Water	2.7	3.7	2.9	0.16
Southern	SM3	10/7/2011	Surface Water	6.0	4.5	3.9	0.10
Southern	SM3	10/7/2011	Middle Water	6.0	5.1	4.8	0.09
Southern	SM3	10/7/2011	Bottom Water	6.0	5.3	4.6	0.09
Southern	SM3	11/9/2011	Surface Water	6.4	NA	4.9	NA
Southern	SM3	11/9/2011	Middle Water	6.3	NA	4.7	NA
Southern	SM3	11/9/2011	Bottom Water	6.4	NA	4.1	NA
Southern	SM3	12/7/2011	Surface Water	7.0	2.2	2.9	0.19
Southern	SM3	12/7/2011	Middle Water	6.9	2.8	3.3	0.18
Southern	SM3	12/7/2011	Bottom Water	6.9	15.0	3.5	0.18
Southern	SM3	1/11/2012	Surface Water	8.4	4.0	2.9	0.28
Southern	SM3	1/11/2012	Middle Water	8.4	4.8	3.2	0.27
Southern	SM3	1/11/2012	Bottom Water	8.4	5.8	3.7	0.28
Southern	SM3	2/22/2012	Surface Water	7.8	3.9	2.9	0.30
Southern	SM3	2/22/2012	Middle Water	7.9	2.8	3.6	0.31
Southern	SM3	2/22/2012	Bottom Water	7.8	4.7	3.7	0.31
Southern	SM3	3/26/2012	Surface Water	8.3	2.8	1.4	0.16
Southern	SM3	3/26/2012	Middle Water	8.3	2.7	1.4	0.15
Southern	SM3	3/26/2012	Bottom Water	8.1	6.4	5.6	0.15
Southern	SM3	4/11/2012	Surface Water	8.4	2.1	2.2	0.23
Southern	SM3	4/11/2012	Middle Water	8.5	2.1	2.3	0.18
Southern	SM3	4/11/2012	Bottom Water	8.5	2.3	2.5	0.18
Southern	SM3	5/18/2012	Surface Water	8.0	1.3	0.8	0.60
Southern	SM3	5/18/2012	Middle Water	5.3	1.3	1.8	0.16
Southern	SM3	5/18/2012	Bottom Water	4.6	4.2	3.8	0.14
Southern	SM3	6/20/2012	Surface Water	7.1	3.0	3.2	0.18
Southern	SM3	6/20/2012	Middle Water	7.3	2.6	2.4	0.10
Southern	SM3	6/20/2012	Bottom Water	6.9	6.1	4.6	0.10
Southern	SM3	7/20/2012	Surface Water	9.0	3.2	1.8	0.30
Southern	SM3	7/20/2012	Middle Water	3.3	6.4	5.1	0.14
Southern	SM3	7/20/2012	Bottom Water	3.6	8.3	6.1	0.13
Southern	SM3	8/9/2012	Surface Water	5.6	1.9	1.2	0.50
Southern	SM3	8/9/2012	Middle Water	3.8	2.3	3.0	0.18
Southern	SM3	8/9/2012	Bottom Water	3.6	4.3	3.1	0.13
Southern	SM3	9/22/2012	Surface Water	4.9	4.0	1.2	0.26
Southern	SM3	9/22/2012	Middle Water	5.1	7.1	3.2	0.17
Southern	SM3	9/22/2012	Bottom Water	5.0	10.0	3.8	0.15
Southern	SM3	10/25/2012	Surface Water	6.2	3.0	3.0	0.14
Southern	SM3	10/25/2012	Middle Water	6.3	2.3	2.6	0.11
Southern	SM3	10/25/2012	Bottom Water	6.4	1.4	2.4	0.10
Southern	SM3	11/22/2012	Surface Water	6.0	1.8	1.8	0.37
Southern	SM3	11/22/2012	Middle Water	6.4	2.3	2.4	0.20
Southern	SM3	11/22/2012	Bottom Water	6.3	3.0	3.6	0.17
Southern	SM3	12/17/2012	Surface Water	6.8	2.7	2.7	0.15
Southern	SM3	12/17/2012	Middle Water	7.0	2.8	3.0	0.20
Southern	SM3	12/17/2012	Bottom Water	7.0	5.1	4.4	0.20
Southern	SM3	1/21/2013	Surface Water	8.1	1.3	7.1	0.16
Southern	SM3	1/21/2013	Middle Water	8.3	2.3	7.7	0.14
Southern	SM3	1/21/2013	Bottom Water	8.4	2.8	7.8	0.13
Southern	SM3	2/27/2013	Surface Water	8.2	1.3	1.7	0.16
Southern	SM3	2/27/2013	Middle Water	8.3	0.9	1.2	0.14
Southern	SM3	2/27/2013	Bottom Water	8.3	2.4	1.9	0.13
Southern	SM3	3/21/2013	Surface Water	7.6	0.8	0.7	0.16
Southern	SM3	3/21/2013	Middle Water	7.7	0.6	0.8	0.09
Southern	SM3	3/21/2013	Bottom Water	7.3	0.7	1.9	0.08
Southern	SM3	4/17/2013	Surface Water	6.9	2.3	1.4	0.17
Southern	SM3	4/17/2013	Middle Water	7.1	2.0	1.5	0.09
Southern	SM3	4/17/2013	Bottom Water	7.1	5.3	1.5	0.07
Southern	SM3	5/30/2013	Surface Water	7.6	1.2	1.9	0.40
Southern	SM3	5/30/2013	Middle Water	5.0	1.4	2.0	0.18
Southern	SM3	5/30/2013	Bottom Water	4.7	3.1	2.5	0.14
Southern	SM3	6/20/2013	Surface Water	6.7	1.3	1.1	0.44
Southern	SM3	6/20/2013	Middle Water	5.0	4.3	2.7	0.14
Southern	SM3	6/20/2013	Bottom Water	4.7	3.3	3.2	0.13
Southern	SM3	7/12/2013	Surface Water	6.4	1.6	1.6	0.36
Southern	SM3	7/12/2013	Middle Water	3.2	1.7	1.9	0.14
Southern	SM3	7/12/2013	Bottom Water	3.7	5.6	4.7	0.10
Southern	SM3	8/23/2013	Surface Water	5.2	3.4	73.4	0.76
Southern	SM3	8/23/2013	Middle Water	4.3	3.7	8.4	0.27
Southern	SM3	8/23/2013	Bottom Water	3.9	13.0	14.6	0.16
Southern	SM3	9/18/2013	Surface Water	5.8	2.2	2.9	0.18
Southern	SM3	9/18/2013	Middle Water	5.9	1.7	2.0	0.10
Southern	SM3	9/18/2013	Bottom Water	5.3	4.0	4.9	0.09
Southern	SM3	10/10/2013	Surface Water	5.8	3.1	2.2	0.12
Southern	SM3	10/10/2013	Middle Water	5.9	2.6	2.0	0.11
Southern	SM3	10/10/2013	Bottom Water	5.8	3.2	2.4	0.12
Southern	SM3	11/25/2013	Surface Water	4.3	2.5	2.2	0.21
Southern	SM3	11/25/2013	Middle Water	6.6	2.8	2.4	0.20
Southern	SM3	11/25/2013	Bottom Water	6.6	3.1	2.6	0.20
Southern	SM3	12/16/2013	Surface Water	5.8	5.8	7.6	0.03
Southern	SM3	12/16/2013	Middle Water	7.0	6.6	5.4	0.10
Southern	SM3	12/16/2013	Bottom Water	6.9	7.2	5.5	0.08

Note: NA - Monitoring data was not recorded by EPD

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)	Total Inorganic Nitrogen (mg/L)
Southern	SM4	1/13/2011	Surface Water	7.1	2.0	2.8	0.17
Southern	SM4	1/13/2011	Middle Water	7.2	2.4	3.2	0.15
Southern	SM4	1/13/2011	Bottom Water	7.1	2.9	2.8	0.16
Southern	SM4	2/17/2011	Surface Water	7.5	2.1	2.2	0.27
Southern	SM4	2/17/2011	Middle Water	7.6	3.0	2.2	0.27
Southern	SM4	2/17/2011	Bottom Water	7.6	2.8	2.4	0.27
Southern	SM4	3/3/2011	Surface Water	7.9	3.2	2.4	0.35
Southern	SM4	3/3/2011	Middle Water	7.8	3.7	2.4	0.35
Southern	SM4	3/3/2011	Bottom Water	7.7	3.3	2.2	0.32
Southern	SM4	4/7/2011	Surface Water	7.2	1.0	0.6	0.23
Southern	SM4	4/7/2011	Middle Water	7.0	1.0	0.8	0.21
Southern	SM4	4/7/2011	Bottom Water	7.0	1.4	1.2	0.19
Southern	SM4	5/25/2011	Surface Water	5.9	1.0	1.2	0.21
Southern	SM4	5/25/2011	Middle Water	6.0	1.0	1.3	0.15
Southern	SM4	5/25/2011	Bottom Water	5.9	1.4	1.6	0.13
Southern	SM4	6/27/2011	Surface Water	5.1	2.6	1.9	0.34
Southern	SM4	6/27/2011	Middle Water	5.1	2.4	2.3	0.29
Southern	SM4	6/27/2011	Bottom Water	5.0	3.1	2.6	0.24
Southern	SM4	7/20/2011	Surface Water	3.4	1.6	1.8	0.40
Southern	SM4	7/20/2011	Middle Water	3.1	2.0	2.1	0.24
Southern	SM4	7/20/2011	Bottom Water	2.8	6.2	3.7	0.19
Southern	SM4	8/12/2011	Surface Water	7.4	1.6	1.2	0.21
Southern	SM4	8/12/2011	Middle Water	5.7	2.1	1.1	0.25
Southern	SM4	8/12/2011	Bottom Water	4.2	1.6	1.1	0.22
Southern	SM4	9/9/2011	Surface Water	7.2	1.4	1.3	0.07
Southern	SM4	9/9/2011	Middle Water	7.2	1.3	0.8	0.08
Southern	SM4	9/9/2011	Bottom Water	5.7	2.4	1.7	0.14
Southern	SM4	10/7/2011	Surface Water	5.7	4.4	6.7	0.15
Southern	SM4	10/7/2011	Middle Water	5.8	4.7	3.9	0.13
Southern	SM4	10/7/2011	Bottom Water	5.9	4.6	4.5	0.11
Southern	SM4	11/9/2011	Surface Water	5.9	NA	2.6	NA
Southern	SM4	11/9/2011	Middle Water	6.1	NA	3.5	NA
Southern	SM4	11/9/2011	Bottom Water	6.3	NA	4.7	NA
Southern	SM4	12/7/2011	Surface Water	6.8	2.2	2.8	0.20
Southern	SM4	12/7/2011	Middle Water	6.8	1.9	2.4	0.20
Southern	SM4	12/7/2011	Bottom Water	6.8	18.0	2.6	0.20
Southern	SM4	1/11/2012	Surface Water	9.3	4.3	2.5	0.27
Southern	SM4	1/11/2012	Middle Water	9.1	4.2	2.4	0.27
Southern	SM4	1/11/2012	Bottom Water	8.7	4.6	2.9	0.28
Southern	SM4	2/22/2012	Surface Water	7.6	2.4	2.0	0.37
Southern	SM4	2/22/2012	Middle Water	7.6	2.2	1.6	0.38
Southern	SM4	2/22/2012	Bottom Water	7.6	2.9	1.8	0.36
Southern	SM4	3/26/2012	Surface Water	8.4	4.0	2.2	0.16
Southern	SM4	3/26/2012	Middle Water	8.4	4.8	2.5	0.16
Southern	SM4	3/26/2012	Bottom Water	8.2	4.8	3.1	0.16
Southern	SM4	4/11/2012	Surface Water	8.3	1.8	2.2	0.25
Southern	SM4	4/11/2012	Middle Water	8.3	2.3	2.8	0.21
Southern	SM4	4/11/2012	Bottom Water	8.5	3.6	2.5	0.16
Southern	SM4	5/18/2012	Surface Water	7.7	0.8	0.8	0.54
Southern	SM4	5/18/2012	Middle Water	7.6	0.7	0.7	0.55
Southern	SM4	5/18/2012	Bottom Water	7.1	1.3	1.0	0.33
Southern	SM4	6/20/2012	Surface Water	6.8	2.8	2.5	0.12
Southern	SM4	6/20/2012	Middle Water	7.0	3.5	3.2	0.14
Southern	SM4	6/20/2012	Bottom Water	7.0	5.2	4.5	0.13
Southern	SM4	7/20/2012	Surface Water	7.6	3.1	1.6	0.29
Southern	SM4	7/20/2012	Middle Water	3.4	1.9	1.4	0.20
Southern	SM4	7/20/2012	Bottom Water	2.6	3.6	3.3	0.18
Southern	SM4	8/9/2012	Surface Water	6.6	2.7	1.4	0.41
Southern	SM4	8/9/2012	Middle Water	6.0	2.3	1.3	0.36
Southern	SM4	8/9/2012	Bottom Water	4.7	2.4	1.8	0.20
Southern	SM4	9/22/2012	Surface Water	5.0	4.0	0.8	0.28
Southern	SM4	9/22/2012	Middle Water	5.2	3.5	1.0	0.25
Southern	SM4	9/22/2012	Bottom Water	5.1	6.0	2.8	0.23
Southern	SM4	10/25/2012	Surface Water	6.2	2.9	3.2	0.11
Southern	SM4	10/25/2012	Middle Water	6.4	2.5	3.0	0.11
Southern	SM4	10/25/2012	Bottom Water	6.3	2.5	4.3	0.11
Southern	SM4	11/22/2012	Surface Water	6.2	1.9	2.0	0.22
Southern	SM4	11/22/2012	Middle Water	6.4	2.0	1.8	0.22
Southern	SM4	11/22/2012	Bottom Water	6.2	2.0	1.8	0.19
Southern	SM4	12/17/2012	Surface Water	6.7	2.1	2.4	0.28
Southern	SM4	12/17/2012	Middle Water	6.7	2.5	2.7	0.30
Southern	SM4	12/17/2012	Bottom Water	6.7	2.2	2.6	0.32
Southern	SM4	1/21/2013	Surface Water	8.5	1.3	6.4	0.15
Southern	SM4	1/21/2013	Middle Water	8.3	1.2	6.5	0.15
Southern	SM4	1/21/2013	Bottom Water	8.2	1.1	7.1	0.15
Southern	SM4	2/27/2013	Surface Water	8.3	1.4	1.3	0.18
Southern	SM4	2/27/2013	Middle Water	8.5	1.5	12.1	0.15
Southern	SM4	2/27/2013	Bottom Water	8.3	2.1	1.9	0.14
Southern	SM4	3/21/2013	Surface Water	7.5	0.5	1.0	0.20
Southern	SM4	3/21/2013	Middle Water	7.6	0.7	0.6	0.18
Southern	SM4	3/21/2013	Bottom Water	7.8	0.8	0.5	0.17
Southern	SM4	4/17/2013	Surface Water	6.5	1.3	1.5	0.19
Southern	SM4	4/17/2013	Middle Water	6.8	2.0	1.9	0.15
Southern	SM4	4/17/2013	Bottom Water	7.0	2.7	4.3	0.11
Southern	SM4	5/30/2013	Surface Water	6.2	1.8	1.6	0.55
Southern	SM4	5/30/2013	Middle Water	6.0	1.7	1.3	0.36
Southern	SM4	5/30/2013	Bottom Water	5.2	2.7	1.7	0.18
Southern	SM4	6/20/2013	Surface Water	6.7	0.9	1.0	0.20
Southern	SM4	6/20/2013	Middle Water	6.3	1.4	1.1	0.20
Southern	SM4	6/20/2013	Bottom Water	5.7	2.0	1.3	0.18
Southern	SM4	7/12/2013	Surface Water	8.1	1.9	1.4	0.36
Southern	SM4	7/12/2013	Middle Water	5.5	1.2	0.8	0.31
Southern	SM4	7/12/2013	Bottom Water	3.9	1.2	1.0	0.17
Southern	SM4	8/23/2013	Surface Water	4.7	3.4	129.0	0.65
Southern	SM4	8/23/2013	Middle Water	4.7	3.0	140.7	0.54
Southern	SM4	8/23/2013	Bottom Water	4.9	3.0	73.1	0.46
Southern	SM4	9/18/2013	Surface Water	5.9	2.6	2.7	0.23
Southern	SM4	9/18/2013	Middle Water	5.9	2.2	2.5	0.20
Southern	SM4	9/18/2013	Bottom Water	5.7	1.2	2.4	0.15
Southern	SM4	10/10/2013	Surface Water	5.7	3.4	2.2	0.17
Southern	SM4	10/10/2013	Middle Water	5.8	3.1	2.3	0.16
Southern	SM4	10/10/2013	Bottom Water	5.8	3.1	2.5	0.15
Southern	SM4	11/25/2013	Surface Water	5.3	2.1	1.7	0.25
Southern	SM4	11/25/2013	Middle Water	6.4	2.4	2.1	0.24
Southern	SM4	11/25/2013	Bottom Water	6.5	3.9	3.5	0.19
Southern	SM4	12/16/2013	Surface Water	4.3	4.1	3.6	0.13
Southern	SM4	12/16/2013	Middle Water	6.7	4.5	4.9	0.15
Southern	SM4	12/16/2013	Bottom Water	6.8	4.4	3.6	0.14

Note: NA - Monitoring result was not recorded by EPD

Historical Data of Corresponding EPD Reference Stations - NM1 (Reference Station of G1)

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)	Total Inorganic Nitrogen (mg/L)
North Western	NM1	1/10/2011	Surface Water	6.5	6.1	5.5	0.26
North Western	NM1	1/10/2011	Middle Water	6.7	12.0	7.6	0.25
North Western	NM1	1/10/2011	Bottom Water	6.7	16.0	9.5	0.27
North Western	NM1	2/16/2011	Surface Water	7.1	2.3	2.1	0.35
North Western	NM1	2/16/2011	Middle Water	7.1	3.6	2.8	0.35
North Western	NM1	2/16/2011	Bottom Water	7.1	4.4	3.2	0.35
North Western	NM1	3/11/2011	Surface Water	6.9	3.7	3.2	0.38
North Western	NM1	3/11/2011	Middle Water	6.9	3.8	3.4	0.41
North Western	NM1	3/11/2011	Bottom Water	6.9	3.7	3.6	0.39
North Western	NM1	4/4/2011	Surface Water	7.6	2.0	1.0	0.52
North Western	NM1	4/4/2011	Middle Water	7.1	2.9	1.4	0.46
North Western	NM1	4/4/2011	Bottom Water	6.9	3.4	2.0	0.42
North Western	NM1	5/23/2011	Surface Water	5.7	2.3	2.7	1.22
North Western	NM1	5/23/2011	Middle Water	5.3	3.5	5.7	0.53
North Western	NM1	5/23/2011	Bottom Water	5.3	10.0	9.2	0.29
North Western	NM1	6/20/2011	Surface Water	4.5	7.0	6.1	0.76
North Western	NM1	6/20/2011	Middle Water	3.6	11.0	7.7	0.33
North Western	NM1	6/20/2011	Bottom Water	3.4	18.0	11.8	0.27
North Western	NM1	7/18/2011	Surface Water	3.2	3.3	3.7	0.63
North Western	NM1	7/18/2011	Middle Water	2.9	8.6	7.1	0.38
North Western	NM1	7/18/2011	Bottom Water	2.5	12.0	9.1	0.28
North Western	NM1	8/15/2011	Surface Water	4.6	4.3	2.8	0.63
North Western	NM1	8/15/2011	Middle Water	3.0	6.6	4.0	0.40
North Western	NM1	8/15/2011	Bottom Water	2.6	11.0	8.6	0.38
North Western	NM1	9/28/2011	Surface Water	5.0	8.5	9.9	0.27
North Western	NM1	9/28/2011	Middle Water	4.9	18.0	19.0	0.25
North Western	NM1	9/28/2011	Bottom Water	4.9	32.0	21.6	0.25
North Western	NM1	10/26/2011	Surface Water	6.8	3.3	2.1	0.32
North Western	NM1	10/26/2011	Middle Water	6.8	2.9	2.6	0.30
North Western	NM1	10/26/2011	Bottom Water	6.6	4.7	3.9	0.27
North Western	NM1	11/16/2011	Surface Water	6.0	5.1	3.8	0.34
North Western	NM1	11/16/2011	Middle Water	5.8	8.7	6.0	0.30
North Western	NM1	11/16/2011	Bottom Water	5.7	17.0	8.6	0.30
North Western	NM1	12/12/2011	Surface Water	8.1	9.4	9.1	0.29
North Western	NM1	12/12/2011	Middle Water	6.8	11.0	7.8	0.28
North Western	NM1	12/12/2011	Bottom Water	6.8	9.4	7.9	0.28
North Western	NM1	1/5/2012	Surface Water	7.1	1.8	1.7	0.47
North Western	NM1	1/5/2012	Middle Water	7.1	1.9	1.6	0.49
North Western	NM1	1/5/2012	Bottom Water	7.1	2.2	1.7	0.49
North Western	NM1	2/3/2012	Surface Water	7.2	1.4	1.1	0.41
North Western	NM1	2/3/2012	Middle Water	7.2	1.4	1.5	0.42
North Western	NM1	2/3/2012	Bottom Water	7.2	1.7	1.6	0.41
North Western	NM1	3/19/2012	Surface Water	8.5	2.5	1.3	0.72
North Western	NM1	3/19/2012	Middle Water	7.3	3.2	1.9	0.63
North Western	NM1	3/19/2012	Bottom Water	7.1	4.6	2.8	0.54
North Western	NM1	4/25/2012	Surface Water	6.0	5.3	4.9	0.90
North Western	NM1	4/25/2012	Middle Water	5.9	8.0	5.4	0.51
North Western	NM1	4/25/2012	Bottom Water	5.9	9.5	6.4	0.45
North Western	NM1	5/21/2012	Surface Water	6.1	3.0	2.9	0.77
North Western	NM1	5/21/2012	Middle Water	5.3	5.0	3.9	0.57
North Western	NM1	5/21/2012	Bottom Water	5.3	5.3	4.4	0.50
North Western	NM1	6/21/2012	Surface Water	6.6	6.7	3.9	0.62
North Western	NM1	6/21/2012	Middle Water	6.0	11.0	8.7	0.40
North Western	NM1	6/21/2012	Bottom Water	6.0	10.0	7.8	0.35
North Western	NM1	7/13/2012	Surface Water	9.4	4.4	4.0	1.58
North Western	NM1	7/13/2012	Middle Water	3.7	4.2	3.2	0.50
North Western	NM1	7/13/2012	Bottom Water	2.2	12.0	9.9	0.28
North Western	NM1	8/16/2012	Surface Water	7.8	4.1	2.2	0.75
North Western	NM1	8/16/2012	Middle Water	3.4	5.1	3.6	0.35
North Western	NM1	8/16/2012	Bottom Water	3.2	6.6	4.3	0.34
North Western	NM1	9/13/2012	Surface Water	10.1	3.1	1.3	0.67
North Western	NM1	9/13/2012	Middle Water	4.7	6.1	3.8	0.42
North Western	NM1	9/13/2012	Bottom Water	3.0	8.5	5.9	0.37
North Western	NM1	10/15/2012	Surface Water	6.3	3.6	5.0	0.35
North Western	NM1	10/15/2012	Middle Water	6.0	8.3	8.5	0.32
North Western	NM1	10/15/2012	Bottom Water	5.8	9.9	8.7	0.30
North Western	NM1	11/8/2012	Surface Water	5.8	3.5	3.0	0.33
North Western	NM1	11/8/2012	Middle Water	6.1	3.3	3.6	0.34
North Western	NM1	11/8/2012	Bottom Water	5.9	4.8	4.3	0.31
North Western	NM1	12/5/2012	Surface Water	6.4	2.2	3.4	0.42
North Western	NM1	12/5/2012	Middle Water	6.2	4.7	5.7	0.35
North Western	NM1	12/5/2012	Bottom Water	6.2	5.2	6.9	0.35
North Western	NM1	1/14/2013	Surface Water	7.1	8.1	12.7	0.26
North Western	NM1	1/14/2013	Middle Water	7.1	11.0	13.1	0.28
North Western	NM1	1/14/2013	Bottom Water	7.1	13.0	14.2	0.27
North Western	NM1	2/25/2013	Surface Water	8.9	3.2	1.6	0.31
North Western	NM1	2/25/2013	Middle Water	8.1	2.2	1.8	0.27
North Western	NM1	2/25/2013	Bottom Water	7.9	2.5	2.3	0.26
North Western	NM1	3/20/2013	Surface Water	6.9	1.7	2.1	0.85
North Western	NM1	3/20/2013	Middle Water	6.6	0.8	1.6	0.39
North Western	NM1	3/20/2013	Bottom Water	6.7	1.6	1.6	0.32
North Western	NM1	4/8/2013	Surface Water	6.6	2.5	2.4	0.39
North Western	NM1	4/8/2013	Middle Water	6.7	3.1	2.4	0.30
North Western	NM1	4/8/2013	Bottom Water	6.7	3.2	2.1	0.28
North Western	NM1	5/6/2013	Surface Water	6.3	4.0	3.9	0.50
North Western	NM1	5/6/2013	Middle Water	6.2	2.7	2.7	0.32
North Western	NM1	5/6/2013	Bottom Water	6.0	5.9	4.2	0.33
North Western	NM1	6/3/2013	Surface Water	10.7	4.1	3.4	1.21
North Western	NM1	6/3/2013	Middle Water	4.5	2.3	2.0	0.48
North Western	NM1	6/3/2013	Bottom Water	3.9	7.0	4.7	0.27
North Western	NM1	7/8/2013	Surface Water	6.5	6.5	4.7	1.11
North Western	NM1	7/8/2013	Middle Water	3.3	4.7	3.8	0.40
North Western	NM1	7/8/2013	Bottom Water	3.0	6.1	4.8	0.31
North Western	NM1	8/16/2013	Surface Water	6.2	4.3	4.4	1.52
North Western	NM1	8/16/2013	Middle Water	5.7	6.0	5.2	1.26
North Western	NM1	8/16/2013	Bottom Water	4.0	13.0	10.9	1.42
North Western	NM1	9/6/2013	Surface Water	3.9	4.5	4.4	0.61
North Western	NM1	9/6/2013	Middle Water	3.2	8.4	8.5	0.48
North Western	NM1	9/6/2013	Bottom Water	3.1	11.0	10.8	0.47
North Western	NM1	10/21/2013	Surface Water	5.8	8.3	5.4	0.33
North Western	NM1	10/21/2013	Middle Water	5.6	14.0	8.2	0.30
North Western	NM1	10/21/2013	Bottom Water	5.5	16.0	8.8	0.30
North Western	NM1	11/11/2013	Surface Water	5.2	4.9	4.0	0.34
North Western	NM1	11/11/2013	Middle Water	5.9	6.6	5.2	0.32
North Western	NM1	11/11/2013	Bottom Water	5.7	7.1	7.4	0.30
North Western	NM1	12/5/2013	Surface Water	4.1	11.0	5.6	0.35
North Western	NM1	12/5/2013	Middle Water	6.4	19.0	6.8	0.34
North Western	NM1	12/5/2013	Bottom Water	6.4	13.0	22.1	0.34

Water Control Zone	Station	Dates	Depth	Dissolved Oxygen (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)	Total Inorganic Nitrogen (mg/L)
Victoria Harbour	VM15	1/12/2011	Surface Water	5.9	4.0	2.8	0.35
Victoria Harbour	VM15	1/12/2011	Middle Water	6.0	3.6	2.2	0.33
Victoria Harbour	VM15	1/12/2011	Bottom Water	6.0	2.4	2.1	0.33
Victoria Harbour	VM15	2/9/2011	Surface Water	6.7	2.0	1.4	0.47
Victoria Harbour	VM15	2/9/2011	Middle Water	6.7	1.9	1.4	0.41
Victoria Harbour	VM15	2/9/2011	Bottom Water	6.9	2.1	1.4	0.48
Victoria Harbour	VM15	3/16/2011	Surface Water	5.9	3.3	4.0	0.46
Victoria Harbour	VM15	3/16/2011	Middle Water	6.0	3.7	2.7	0.44
Victoria Harbour	VM15	3/16/2011	Bottom Water	6.0	7.8	2.8	0.39
Victoria Harbour	VM15	4/6/2011	Surface Water	5.7	3.1	2.0	0.46
Victoria Harbour	VM15	4/6/2011	Middle Water	5.7	3.2	2.1	0.45
Victoria Harbour	VM15	4/6/2011	Bottom Water	5.8	3.4	2.3	0.42
Victoria Harbour	VM15	5/11/2011	Surface Water	6.4	1.9	1.6	0.64
Victoria Harbour	VM15	5/11/2011	Middle Water	5.5	2.3	1.6	0.61
Victoria Harbour	VM15	5/11/2011	Bottom Water	4.8	2.7	2.3	0.60
Victoria Harbour	VM15	6/8/2011	Surface Water	4.8	1.1	0.4	0.64
Victoria Harbour	VM15	6/8/2011	Middle Water	4.6	0.6	0.6	0.64
Victoria Harbour	VM15	6/8/2011	Bottom Water	4.1	2.8	2.8	0.59
Victoria Harbour	VM15	7/8/2011	Surface Water	4.2	3.7	2.7	0.71
Victoria Harbour	VM15	7/8/2011	Middle Water	4.3	4.0	2.9	0.62
Victoria Harbour	VM15	7/8/2011	Bottom Water	3.6	7.0	10.0	0.52
Victoria Harbour	VM15	8/3/2011	Surface Water	4.3	3.7	2.1	0.45
Victoria Harbour	VM15	8/3/2011	Middle Water	3.9	3.1	2.4	0.47
Victoria Harbour	VM15	8/3/2011	Bottom Water	3.6	8.2	4.3	0.41
Victoria Harbour	VM15	9/2/2011	Surface Water	5.7	4.6	3.7	0.40
Victoria Harbour	VM15	9/2/2011	Middle Water	3.2	7.0	4.6	0.40
Victoria Harbour	VM15	9/2/2011	Bottom Water	3.1	9.3	6.7	0.38
Victoria Harbour	VM15	10/6/2011	Surface Water	4.7	7.7	7.9	0.27
Victoria Harbour	VM15	10/6/2011	Middle Water	4.8	12.0	6.8	0.28
Victoria Harbour	VM15	10/6/2011	Bottom Water	4.7	11.0	11.0	0.28
Victoria Harbour	VM15	11/2/2011	Surface Water	4.8	5.5	3.7	0.39
Victoria Harbour	VM15	11/2/2011	Middle Water	4.8	7.3	4.3	0.39
Victoria Harbour	VM15	11/2/2011	Bottom Water	4.8	8.9	5.9	0.38
Victoria Harbour	VM15	12/5/2011	Surface Water	5.9	5.0	4.1	0.43
Victoria Harbour	VM15	12/5/2011	Middle Water	5.9	6.2	4.4	0.43
Victoria Harbour	VM15	12/5/2011	Bottom Water	5.9	5.9	4.4	0.43
Victoria Harbour	VM15	1/4/2012	Surface Water	6.2	2.6	1.9	0.58
Victoria Harbour	VM15	1/4/2012	Middle Water	6.2	2.3	1.6	0.58
Victoria Harbour	VM15	1/4/2012	Bottom Water	6.1	4.0	2.7	0.59
Victoria Harbour	VM15	2/1/2012	Surface Water	6.4	2.1	2.0	0.47
Victoria Harbour	VM15	2/1/2012	Middle Water	6.4	2.5	2.1	0.47
Victoria Harbour	VM15	2/1/2012	Bottom Water	6.4	3.0	2.0	0.46
Victoria Harbour	VM15	3/8/2012	Surface Water	6.5	2.9	2.3	0.46
Victoria Harbour	VM15	3/8/2012	Middle Water	6.6	2.7	2.7	0.46
Victoria Harbour	VM15	3/8/2012	Bottom Water	6.7	2.4	2.3	0.48
Victoria Harbour	VM15	4/13/2012	Surface Water	8.0	2.3	2.6	0.64
Victoria Harbour	VM15	4/13/2012	Middle Water	7.2	2.4	2.5	0.61
Victoria Harbour	VM15	4/13/2012	Bottom Water	7.0	3.3	2.8	0.56
Victoria Harbour	VM15	5/2/2012	Surface Water	7.0	0.8	21.5	1.09
Victoria Harbour	VM15	5/2/2012	Middle Water	7.4	1.2	1.4	0.94
Victoria Harbour	VM15	5/2/2012	Bottom Water	5.3	3.3	2.6	0.69
Victoria Harbour	VM15	6/6/2012	Surface Water	6.2	5.8	4.0	0.43
Victoria Harbour	VM15	6/6/2012	Middle Water	6.1	4.1	2.6	0.41
Victoria Harbour	VM15	6/6/2012	Bottom Water	5.9	7.4	4.4	0.33
Victoria Harbour	VM15	7/5/2012	Surface Water	5.5	5.5	12.8	0.65
Victoria Harbour	VM15	7/5/2012	Middle Water	5.4	4.7	13.0	0.46
Victoria Harbour	VM15	7/5/2012	Bottom Water	5.2	6.3	10.1	0.64
Victoria Harbour	VM15	8/1/2012	Surface Water	4.7	1.2	1.6	0.47
Victoria Harbour	VM15	8/1/2012	Middle Water	4.2	2.8	2.7	0.44
Victoria Harbour	VM15	8/1/2012	Bottom Water	3.9	4.7	3.7	0.35
Victoria Harbour	VM15	9/12/2012	Surface Water	5.3	7.1	3.6	0.48
Victoria Harbour	VM15	9/12/2012	Middle Water	4.5	9.7	4.4	0.48
Victoria Harbour	VM15	9/12/2012	Bottom Water	4.3	86.0	10.3	0.38
Victoria Harbour	VM15	10/3/2012	Surface Water	4.5	7.5	5.2	0.34
Victoria Harbour	VM15	10/3/2012	Middle Water	4.5	7.7	6.0	0.35
Victoria Harbour	VM15	10/3/2012	Bottom Water	4.5	9.0	6.3	0.34
Victoria Harbour	VM15	11/1/2012	Surface Water	5.0	4.4	3.7	0.35
Victoria Harbour	VM15	11/1/2012	Middle Water	5.1	4.5	4.0	0.36
Victoria Harbour	VM15	11/1/2012	Bottom Water	5.0	7.0	5.9	0.34
Victoria Harbour	VM15	12/3/2012	Surface Water	5.2	5.2	4.7	0.37
Victoria Harbour	VM15	12/3/2012	Middle Water	5.3	5.9	4.8	0.37
Victoria Harbour	VM15	12/3/2012	Bottom Water	5.3	10.0	5.6	0.35
Victoria Harbour	VM15	1/2/2013	Surface Water	6.0	3.4	2.3	0.35
Victoria Harbour	VM15	1/2/2013	Middle Water	6.2	3.3	2.4	0.35
Victoria Harbour	VM15	1/2/2013	Bottom Water	6.1	3.7	3.3	0.35
Victoria Harbour	VM15	2/23/2013	Surface Water	6.5	1.9	3.6	0.18
Victoria Harbour	VM15	2/23/2013	Middle Water	7.1	1.8	1.5	0.20
Victoria Harbour	VM15	2/23/2013	Bottom Water	7.2	1.6	1.6	0.32
Victoria Harbour	VM15	3/11/2013	Surface Water	6.0	2.2	2.1	0.48
Victoria Harbour	VM15	3/11/2013	Middle Water	6.0	2.5	2.2	0.49
Victoria Harbour	VM15	3/11/2013	Bottom Water	6.0	3.4	2.7	0.48
Victoria Harbour	VM15	4/18/2013	Surface Water	5.7	2.6	1.4	0.51
Victoria Harbour	VM15	4/18/2013	Middle Water	5.6	2.4	1.4	0.50
Victoria Harbour	VM15	4/18/2013	Bottom Water	4.9	8.9	3.7	0.46
Victoria Harbour	VM15	5/23/2013	Surface Water	5.5	2.5	1.5	0.43
Victoria Harbour	VM15	5/23/2013	Middle Water	5.4	5.2	1.9	0.37
Victoria Harbour	VM15	5/23/2013	Bottom Water	4.5	9.0	3.5	0.35
Victoria Harbour	VM15	6/6/2013	Surface Water	6.8	1.1	1.2	0.47
Victoria Harbour	VM15	6/6/2013	Middle Water	6.0	1.9	1.1	0.41
Victoria Harbour	VM15	6/6/2013	Bottom Water	2.6	3.9	2.5	0.37
Victoria Harbour	VM15	7/4/2013	Surface Water	7.0	2.7	1.2	0.58
Victoria Harbour	VM15	7/4/2013	Middle Water	6.3	1.8	0.9	0.61
Victoria Harbour	VM15	7/4/2013	Bottom Water	1.6	4.5	2.4	0.64
Victoria Harbour	VM15	8/12/2013	Surface Water	5.2	2.5	3.2	0.51
Victoria Harbour	VM15	8/12/2013	Middle Water	4.5	4.2	2.3	0.52
Victoria Harbour	VM15	8/12/2013	Bottom Water	4.1	6.2	4.7	0.51
Victoria Harbour	VM15	9/9/2013	Surface Water	3.7	3.5	4.9	0.47
Victoria Harbour	VM15	9/9/2013	Middle Water	3.9	3.6	4.6	0.47
Victoria Harbour	VM15	9/9/2013	Bottom Water	3.9	7.5	6.6	0.43
Victoria Harbour	VM15	10/4/2013	Surface Water	4.2	5.9	3.6	0.32
Victoria Harbour	VM15	10/4/2013	Middle Water	4.3	7.0	3.9	0.31
Victoria Harbour	VM15	10/4/2013	Bottom Water	4.3	7.2	4.3	0.29
Victoria Harbour	VM15	11/8/2013	Surface Water	3.9	9.3	8.3	0.37
Victoria Harbour	VM15	11/8/2013	Middle Water	4.7	12.0	9.6	0.38
Victoria Harbour	VM15	11/8/2013	Bottom Water	4.8	14.0	8.9	0.38
Victoria Harbour	VM15	12/2/2013	Surface Water	4.8	4.1	3.8	0.36
Victoria Harbour	VM15	12/2/2013	Middle Water	5.5	4.4	2.9	0.37
Victoria Harbour	VM15	12/2/2013	Bottom Water	5.5	11.0	4.7	0.36

## **MATERIALAB CONSULTANTS LIMITED**

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

### Appendix B

#### Analytical Results of Reviewed Impact Monitoring Stations



Result of Analysis  
SR6 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)		
	Portion A	No Works	AL/ LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL
Dry Season												
November	6.66	NA	5.45/ 5.39	6.58	NA	5.43/ 5.27	2.3	NA	6.7/ 10.1	5	NA	12/ 19
December	6.79	7.18		6.76	7.16		1.2	2.7		4	7	
January	7.44	7.60		7.30	7.59		0.6	0.7		4	5	
February	8.10	NA		8.07	NA		1.7	NA		3	NA	
March	8.63	8.02		8.58	8.00		0.8	1.2		4	3	
Wet Season												
April	7.20	7.89	5.00/ 5.00	6.97	7.68	4.11/ 4.04	1.2	0.2	10.8/ 15.0	3	4	12/ 19
May	6.46	6.31		6.37	6.15		1.9	1.6		5	5	
June	6.34	5.86		5.79	5.42		1.7	1.1		4	4	
July	6.51	5.73		5.58	5.37		1.3	2.0		5	4	
August	<b><u>4.05</u></b>	5.59		<b><u>3.68</u></b>	4.69		4.3	2.2		5	5	
September	<b><u>4.96</u></b>	5.20		4.56	4.81		4.9	3.6		7	10	
October	5.47	NA		4.42	NA		1.1	NA		8	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

Action Level (AL) Exceedance - Text with Italic and Underline

**Limit Level (LL) Exceedance - Text with Italic, Bold and Underline**

Result of Analysis  
SR7 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)		
	Portion A	No Works	AL/ LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL
Dry Season												
November	6.78	NA	6.11/ 6.02	6.70	NA	6.11/ 6.04	2.0	NA	2.9/ 4.8	4	NA	9/ 18
December	7.07	6.92		6.96	6.81		1.5	1.7		4	5	
January	7.44	7.55		7.31	7.11		0.5	0.9		2	4	
February	7.95	NA		7.96	NA		1.4	NA		3	NA	
March	7.97	7.35		7.97	7.44		0.5	0.4		3	3	
Wet Season												
April	7.50	7.43	5.00/ 4.82	7.43	7.37	4.41/ 4.25	1.4	0.4	4.0/ 8.7	3	4	9/ 18
May	6.69	6.19		6.79	6.11		1.2	1.1		4	4	
June	6.21	5.84		4.93	5.17		1.5	1.8		3	3	
July	6.28	5.92		5.54	4.71		1.5	2.4		5	3	
August	<b><u>3.80</u></b>	5.42		<b><u>3.45</u></b>	4.47		3.2	2.0		4	4	
September	5.13	5.08		4.90	4.47		3.6	3.0		5	4	
October	5.95	NA		5.25	NA		2.7	NA		5	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

Action Level (AL) Exceedance - Text with Italic and Underline

**Limit Level (LL) Exceedance - Text with Italic, Bold and Underline**

Result of Analysis  
SR8 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)		
	Portion A	No Works	AL/ LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL
Dry Season												
November	6.85	NA	6.11/ 6.02	6.85	NA	6.11/ 6.04	1.6	NA	2.9/ 4.8	4	NA	9/ 18
December	7.35	7.37		7.25	7.35		1.5	2.0		3	6	
January	7.56	7.92		7.51	7.85		0.5	0.7		4	4	
February	8.18	NA		8.12	NA		1.2	NA		2	NA	
March	8.94	7.73		8.64	7.81		0.8	1.1		4	4	
Wet Season												
April	7.10	8.10	5.00/ 4.82	6.79	7.81	4.41/ 4.25	2.5	0.3	4.0/ 8.7	3	5	9/ 18
May	6.63	6.50		6.51	6.30		2.1	1.1		5	4	
June	6.16	6.25		5.80	5.56		3.3	1.2		4	3	
July	7.24	6.37		6.18	5.89		0.6	1.3		4	3	
August	<b><u>3.79</u></b>	6.43		<b><u>2.44</u></b>	6.21		<b><u>4.8</u></b>	0.8		4	4	
September	<b><u>4.71</u></b>	5.68		<b><u>3.94</u></b>	5.24		3.3	0.4		5	5	
October	5.03	NA		4.96	NA		2.3	NA		5	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

Action Level (AL) Exceedance - Text with Italic and Underline

**Limit Level (LL) Exceedance - Text with Italic, Bold and Underline**

Result of Analysis  
SR9 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)			TIN (mg/L) (In-situ)		TIN (mg/L) (Lab)		AL/LL
	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	Portion A	No Works	
Dry Season																	
November	6.66	NA	6.11/ 6.02	6.51	NA	6.11/ 6.04	<u>3.0</u>	NA	2.9/ 4.8	5	NA	9/ 18	<u>0.33</u>	NA	<u>0.27</u>	NA	0.22/ 0.29
December	6.52	7.30		6.47	7.29		<u>5.0</u>	2.2		6	5		<u>0.30</u>	<u>0.34</u>	<u>0.28</u>	<u>0.36</u>	
January	7.42	7.96		7.30	7.92		1.2	0.9		3	4		<u>0.40</u>	<u>0.29</u>	<u>0.42</u>	<u>0.29</u>	
February	8.13	NA		8.09	NA		2.4	NA		3	NA		<u>0.30</u>	NA	<u>0.30</u>	NA	
March	9.17	7.69		8.89	7.71		0.8	1.7		3	3		0.22	<u>0.34</u>	<u>0.23</u>	<u>0.35</u>	
Wet Season																	
April	7.37	8.62	5.00/ 5.00	7.04	8.09	4.41/ 4.25	1.8	0.5	4.0/ 8.7	3	5	9/ 18	<u>0.41</u>	0.30	<u>0.41</u>	0.36	0.37/ 0.49
May	6.92	6.67		6.52	6.23		1.9	1.4		4	4		0.23	<u>0.42</u>	0.24	<u>0.51</u>	
June	6.44	6.75		5.57	5.09		2.0	1.5		4	3		<u>0.57</u>	<u>0.61</u>	<u>0.59</u>	<u>0.62</u>	
July	6.57	7.84		5.47	6.49		1.5	1.6		5	4		<u>0.56</u>	<u>0.38</u>	<u>0.56</u>	0.36	
August	<u>3.89</u>	6.70		<u>3.15</u>	5.96		4.0	1.2		5	4		<u>0.54</u>	0.37	<u>0.42</u>	<u>0.42</u>	
September	6.16	5.13		5.23	4.46		3.6	3.8		6	<u>10</u>		<u>0.53</u>	0.34	0.35	0.37	
October	7.71	NA		4.96	NA		2.0	NA		7	NA		<u>0.39</u>	NA	<u>0.42</u>	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

Action Level (AL) Exceedance - Text with Italic and Underline

Limit Level (LL) Exceedance - Text with Italic, Bold and Underline

Result of Analysis  
SR10 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)			TIN (mg/L) (In-situ)		TIN (mg/L) (Lab)		AL/LL
	Portion A	No Works	AL/ LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	Portion A	No Works	
Dry Season																	
November	6.90	NA	6.11/ 6.02	6.87	NA	6.11/ 6.04	1.3	NA	2.9/ 4.8	3	NA	9/ 18	0.16	NA	0.14	NA	0.22/ 0.29
December	7.10	7.34		7.04	7.27		1.1	0.7		3	4		0.14	0.19	0.13	0.19	
January	7.56	7.77		7.47	7.72		1.1	0.9		4	4		<u><b>0.30</b></u>	<u>0.23</u>	<u><b>0.32</b></u>	<u><b>0.30</b></u>	
February	8.17	NA		8.16	NA		1.7	NA		2	NA		<u>0.28</u>	NA	<u>0.28</u>	NA	
March	8.80	7.70		8.70	7.79		0.7	1.6		4	4		0.18	<u>0.24</u>	0.19	<u>0.24</u>	
Wet Season																	
April	7.62	7.98	5.00/ 5.00	7.62	7.98	4.41/ 4.25	1.8	0.3	4.0/ 8.7	3	4	9/ 18	0.30	0.26	0.30	0.27	0.37/ 0.49
May	6.59	6.57		6.59	6.57		1.9	1.1		4	4		0.31	0.34	0.31	0.37	
June	6.09	5.08		6.09	5.08		0.8	1.4		4	3		<u><b>0.53</b></u>	<u><b>0.62</b></u>	<u><b>0.53</b></u>	<u><b>0.64</b></u>	
July	5.19	5.98		5.19	5.98		0.7	1.4		4	4		<u><b>0.59</b></u>	0.37	<u><b>0.57</b></u>	0.37	
August	<u><b>3.39</b></u>	6.49		<u><b>3.39</b></u>	6.49		3.4	0.6		4	4		<u><b>0.87</b></u>	0.29	0.30	0.28	
September	<u><b>4.79</b></u>	6.18		4.79	6.18		3.2	2.2		4	6		<u><b>0.51</b></u>	0.28	0.30	0.30	
October	5.54	NA		5.54	NA		1.5	NA		4			0.29	NA	0.33	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

Action Level (AL) Exceedance - Text with Italic and Underline

**Limit Level (LL) Exceedance - Text with Italic, Bold and Underline**

Result of Analysis  
SR11 "Portion A Dredging" vs "No Work"

Month	DO (S&M) (mg/L)			DO (B) (mg/L)			Turbidity (NTU)			SS (mg/L)			TIN (mg/L) (In-situ)		TIN (mg/L) (Lab)		AL/LL
	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	AL/LL	Portion A	No Works	Portion A	No Works	
Dry Season																	
November	6.79	NA	6.11/ 6.02	6.72	NA	6.11/ 6.04	1.1	NA	2.9/ 4.8	3	NA	9/ 18	0.17	NA	0.14	NA	0.22/ 0.29
December	6.88	7.37		6.78	7.29		1.2	0.7		3	4		0.14	0.19	0.13	0.19	
January	7.48	7.83		7.45	7.77		0.8	0.9		4	4		<b><u>0.30</u></b>	<b><u>0.23</u></b>	<b><u>0.32</u></b>	<b><u>0.30</u></b>	
February	8.25	NA		8.24	NA		1.2	NA		3	NA		<b><u>0.28</u></b>	NA	<b><u>0.28</u></b>	NA	
March	8.91	8.09		8.75	8.03		0.7	1.6		3	4		0.18	<b><u>0.24</u></b>	0.19	<b><u>0.24</u></b>	
Wet Season																	
April	7.62	8.00	5.00/ 5.00	7.58	7.91	4.41/ 4.25	0.9	0.3	4.0/ 8.7	2	5	9/ 18	0.25	0.27	0.30	0.27	0.37/ 0.49
May	7.18	6.74		6.88	6.52		1.2	1.2		5	4		0.24	0.32	0.31	0.37	
June	6.34	7.14		5.87	5.89		0.6	1.4		4	4		<b><u>0.53</u></b>	<b><u>0.54</u></b>	<b><u>0.53</u></b>	<b><u>0.64</u></b>	
July	6.37	6.96		5.16	6.19		1.0	1.1		4	3		<b><u>0.55</u></b>	0.33	<b><u>0.57</u></b>	0.37	
August	<b><u>3.62</u></b>	6.49		<b><u>3.52</u></b>	6.32		1.8	0.6		3	3		<b><u>0.83</u></b>	0.28	0.30	0.28	
September	5.89	5.30		5.07	4.47		2.8	1.4		3	4		<b><u>0.43</u></b>	0.33	0.30	0.30	
October	8.99	NA		5.78	NA		1.4	NA		3	NA		0.27	NA	0.33	NA	

Remarks

Monthly mean is taken for monitoring data recorded during 2014 - 2016.

NA - Not Applicable as no monitoring data with such condition (i.e. No Works) in that month

*Action Level (AL) Exceedance - Text with Italic and Underline*

***Limit Level (LL) Exceedance - Text with Italic, Bold and Underline***

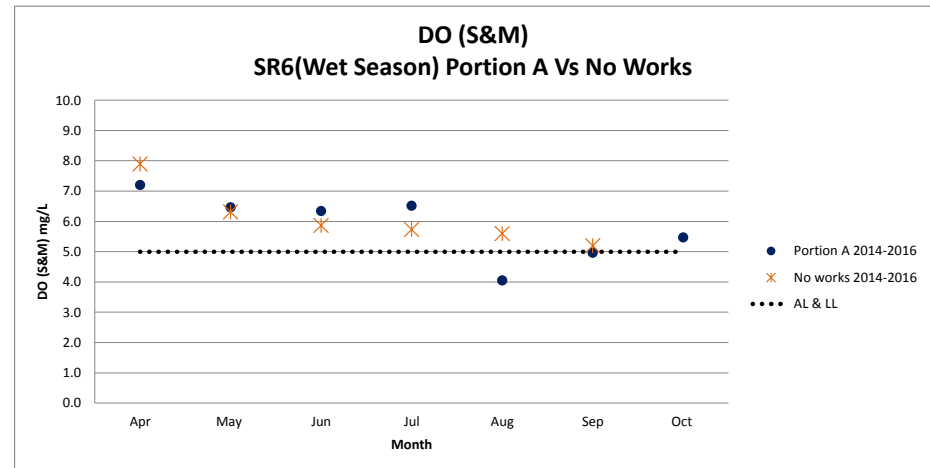
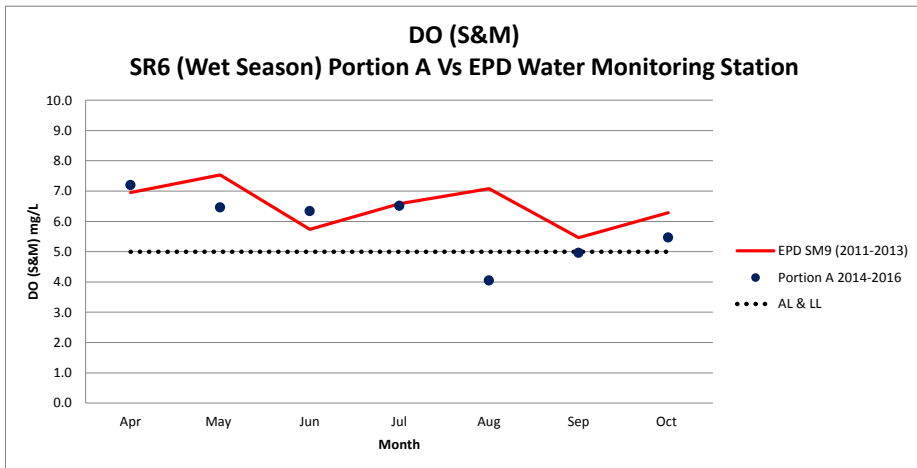
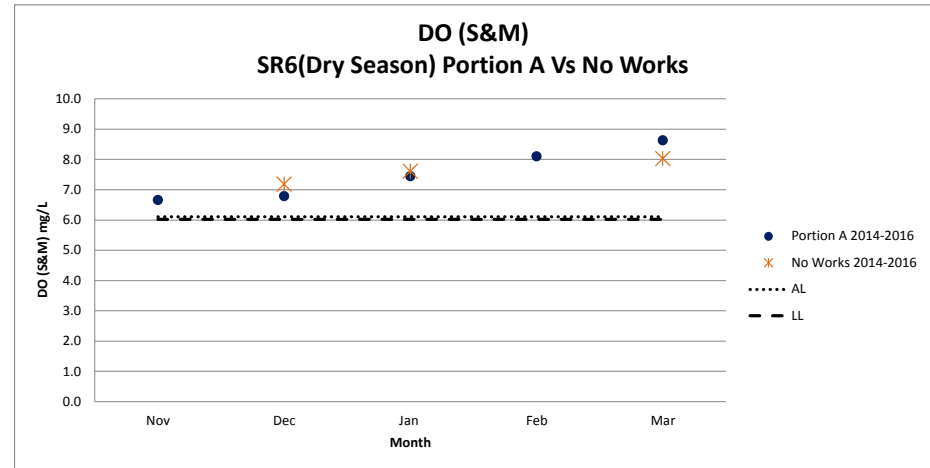
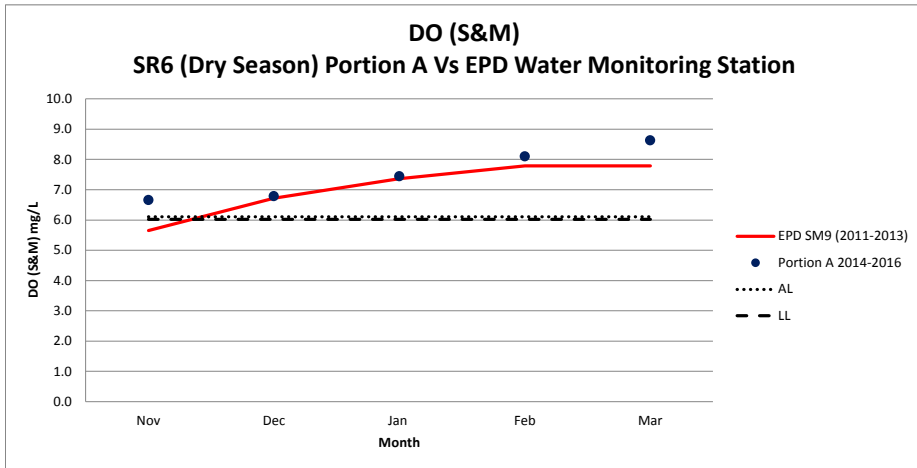
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Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

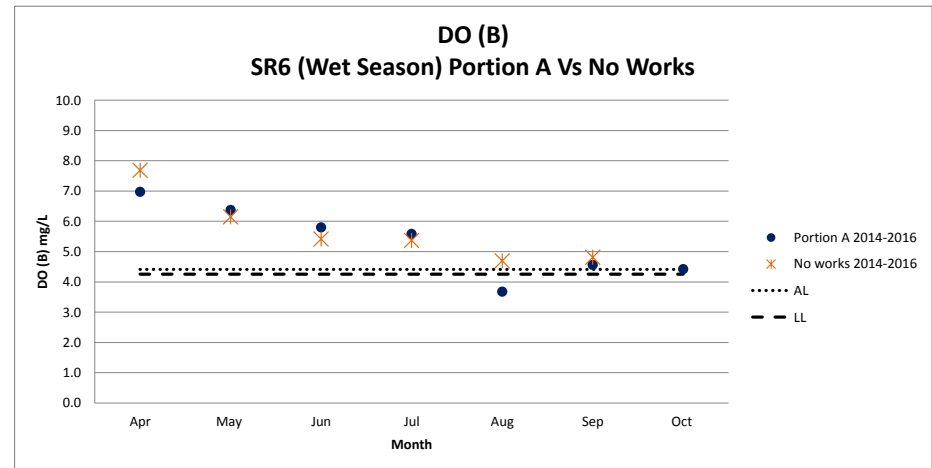
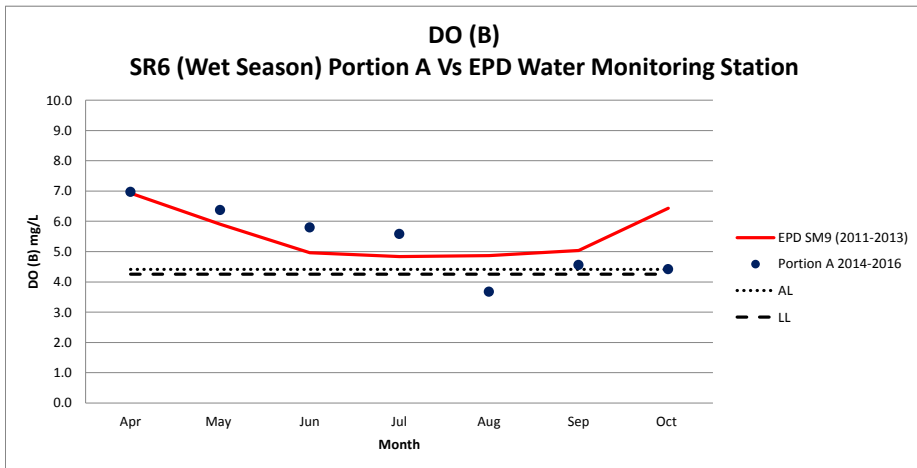
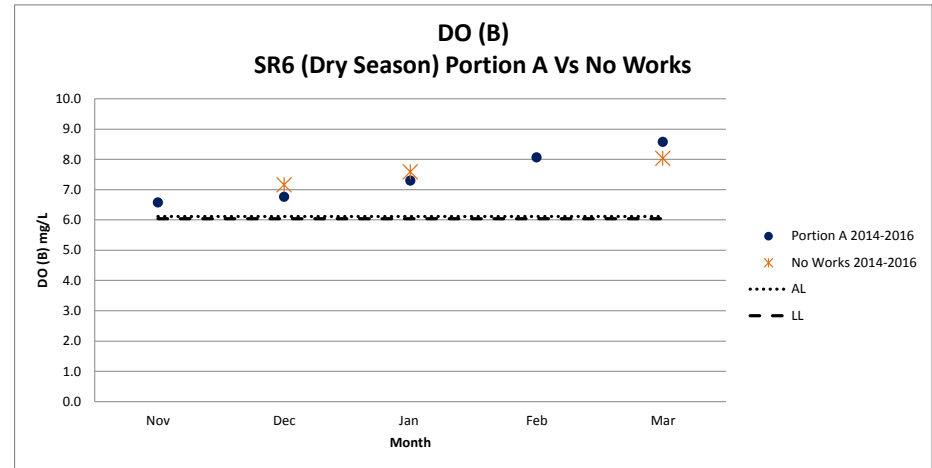
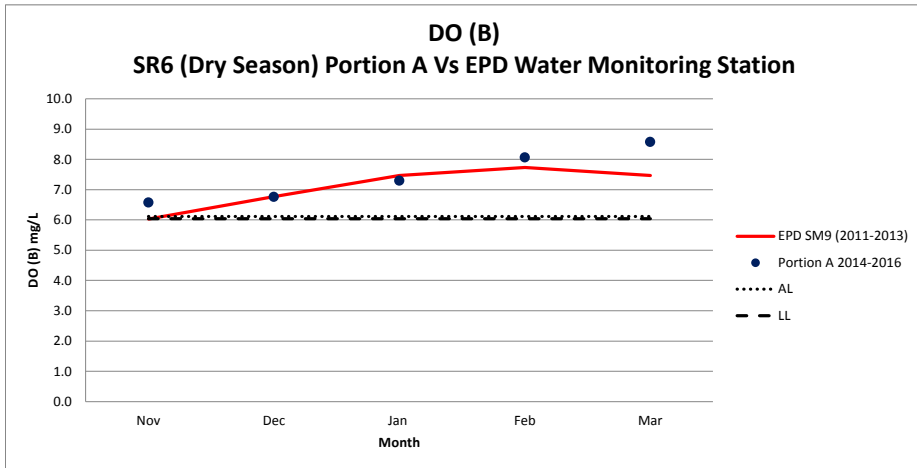
Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

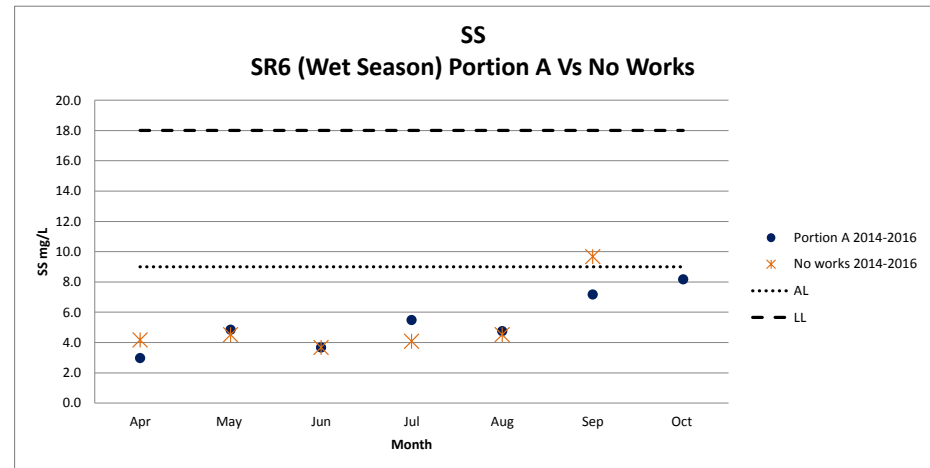
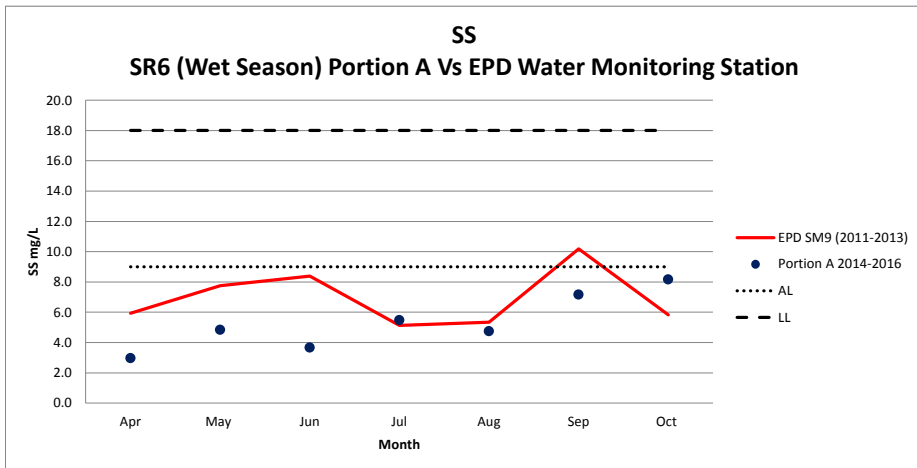
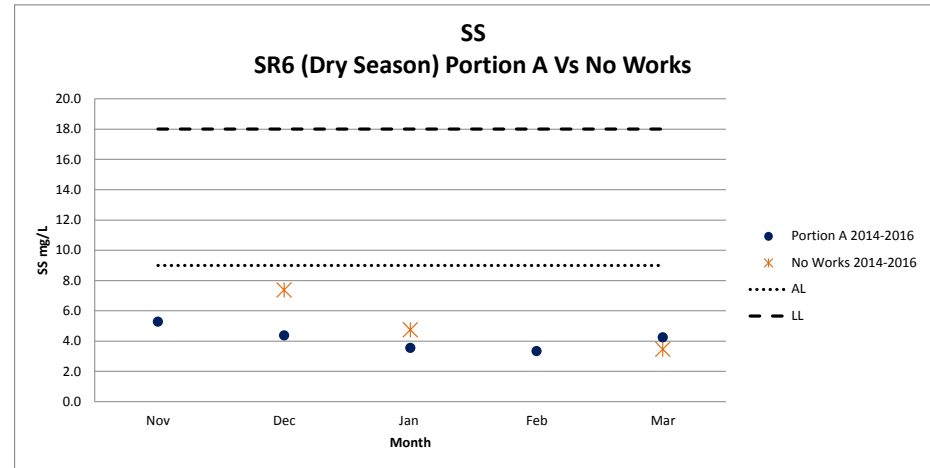
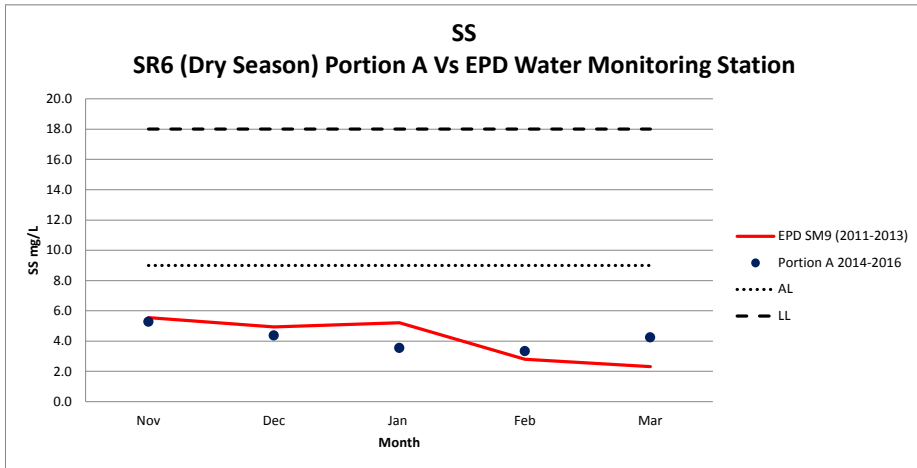
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

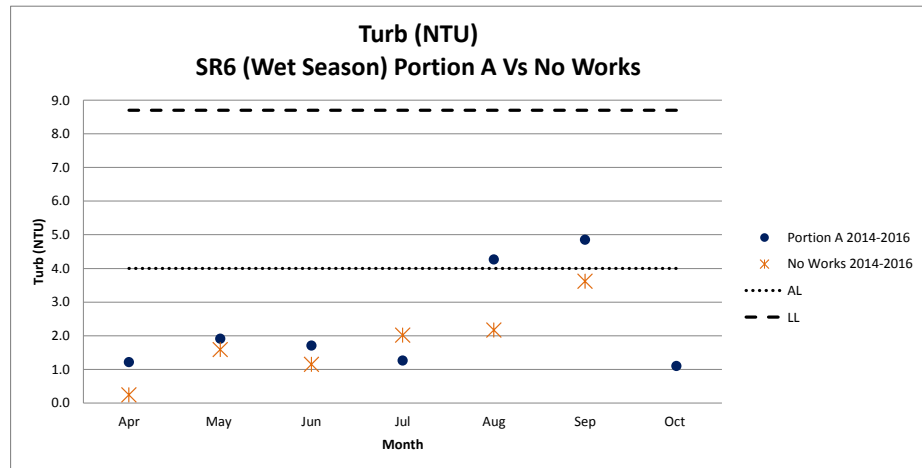
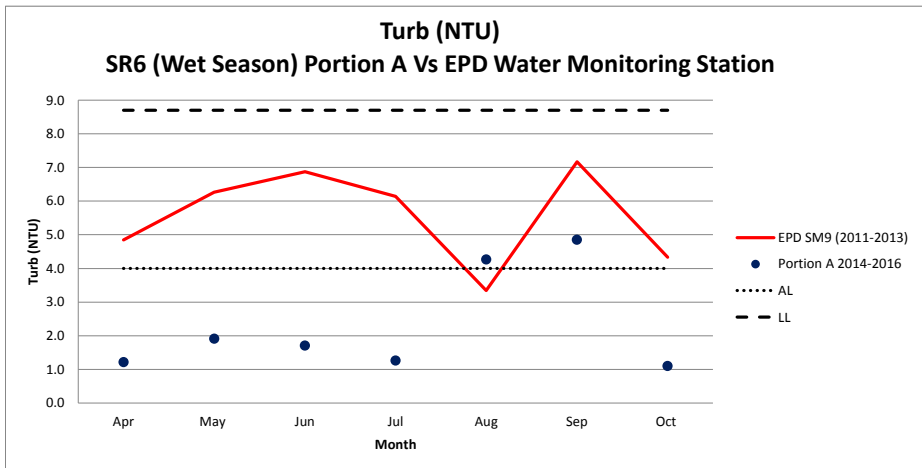
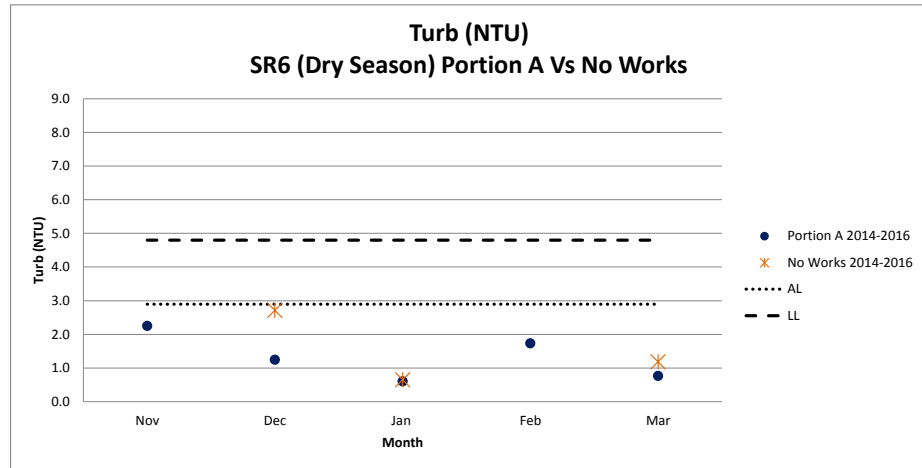
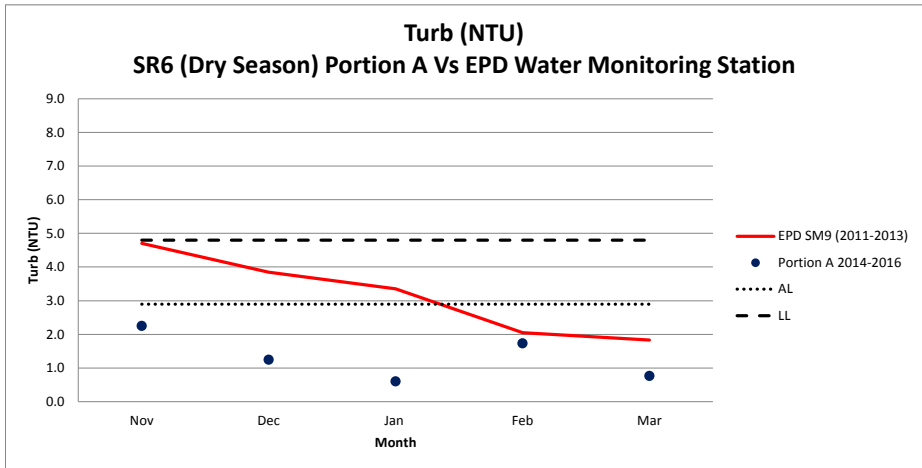
### SR6 – Graphical Results











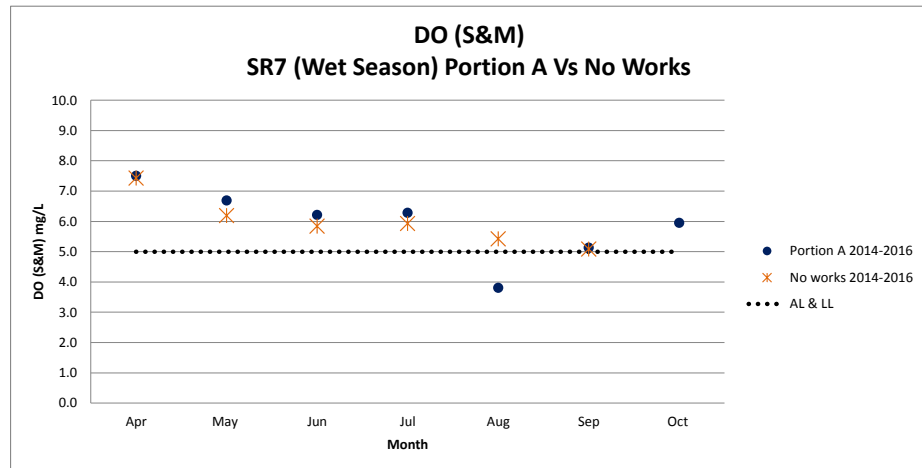
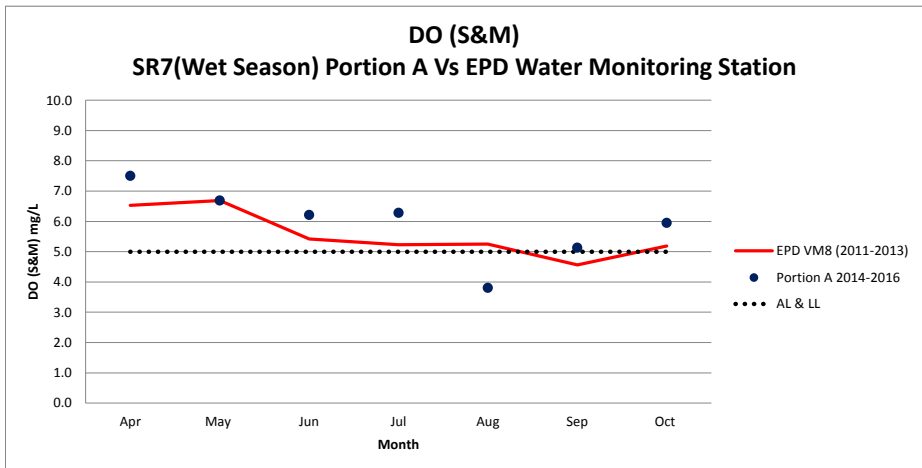
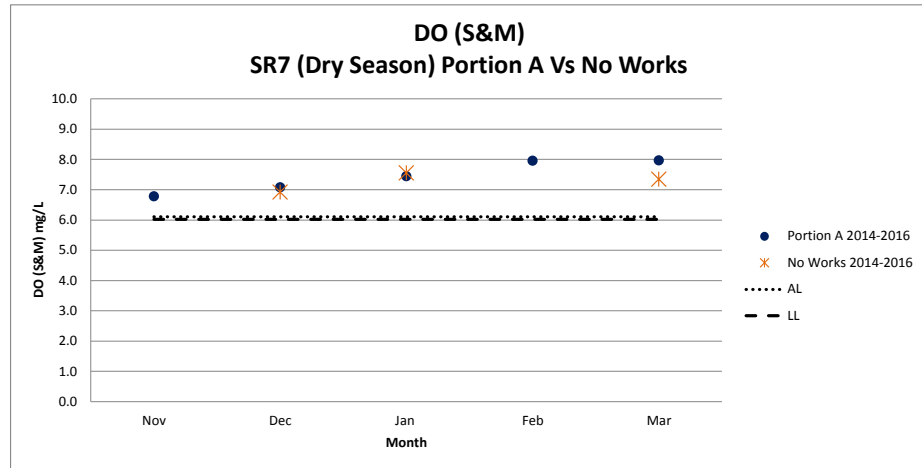
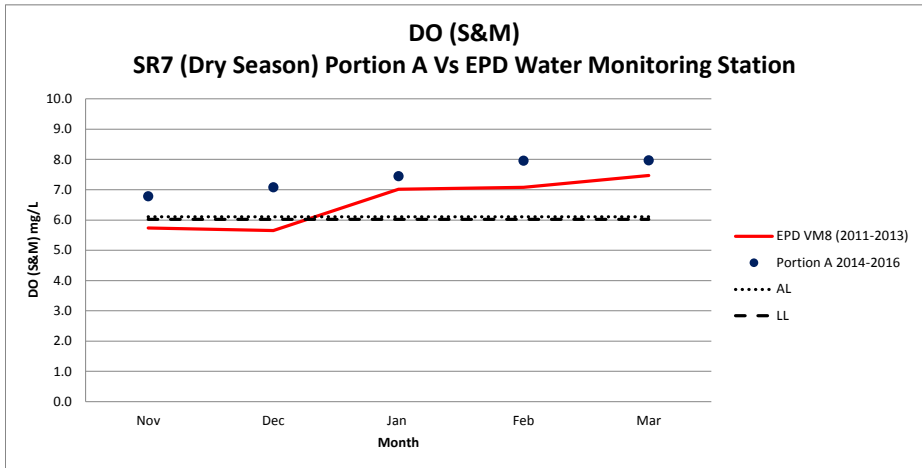
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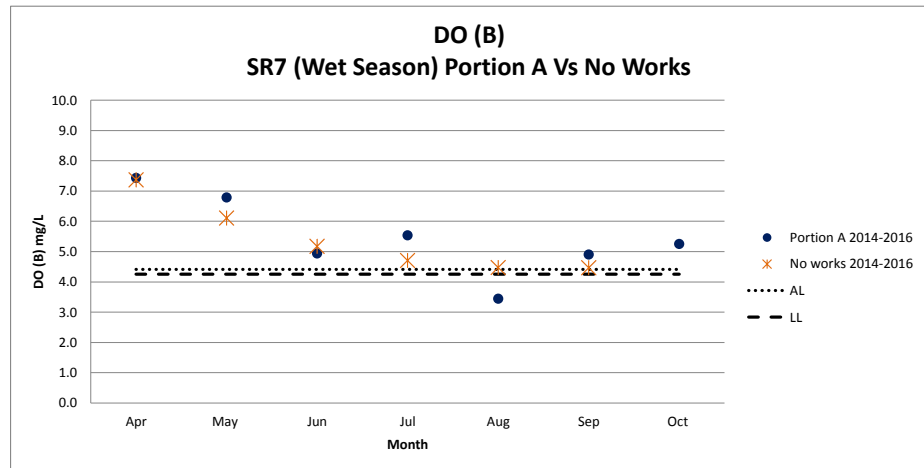
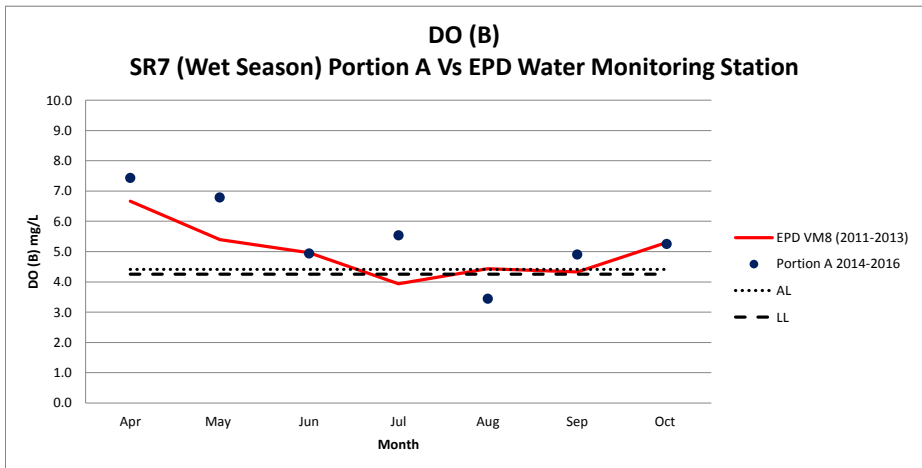
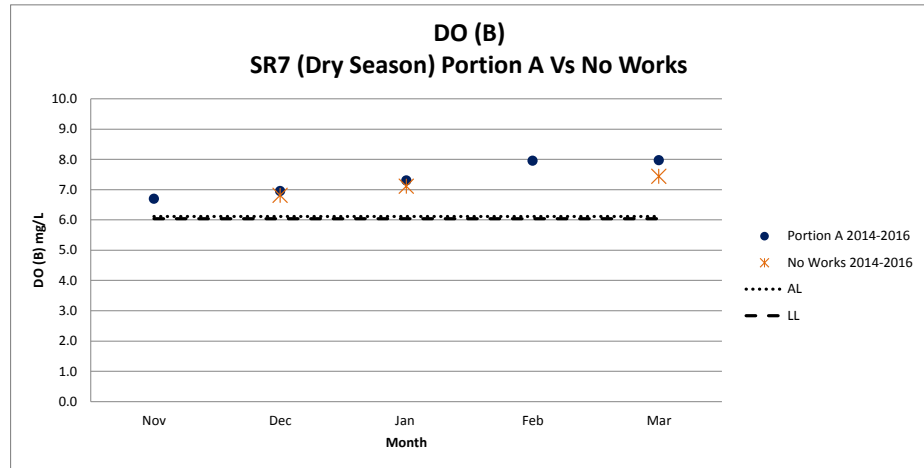
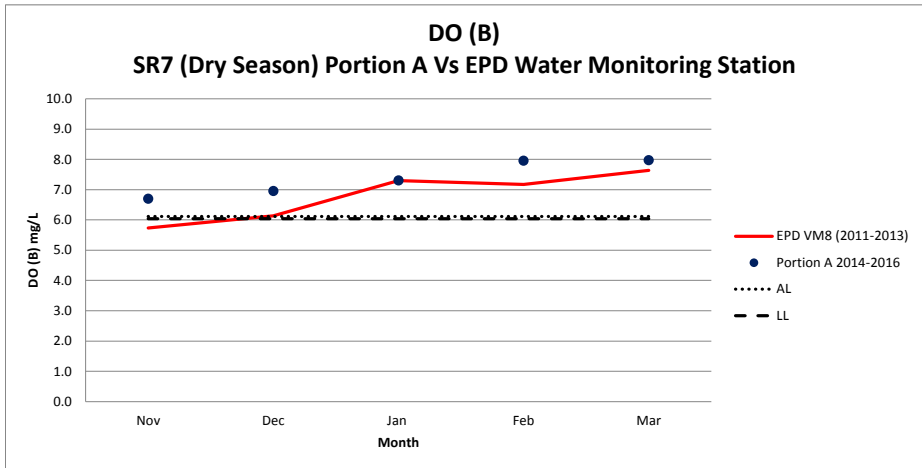
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Hong Kong.

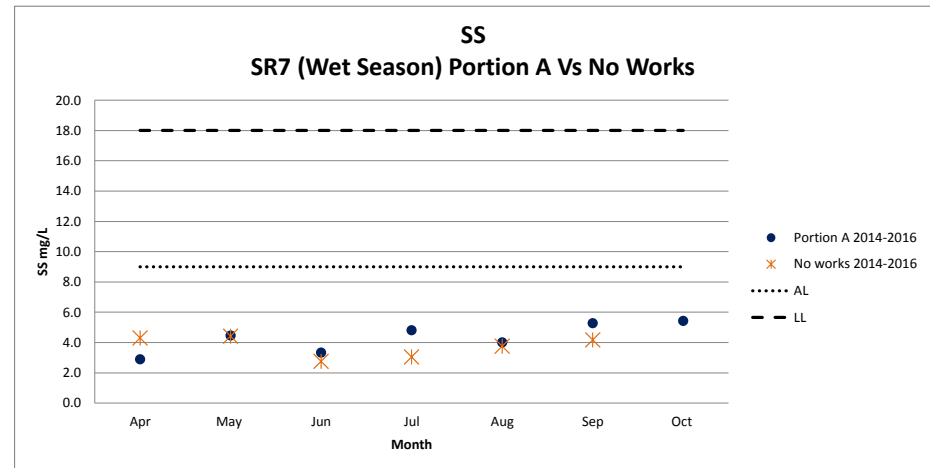
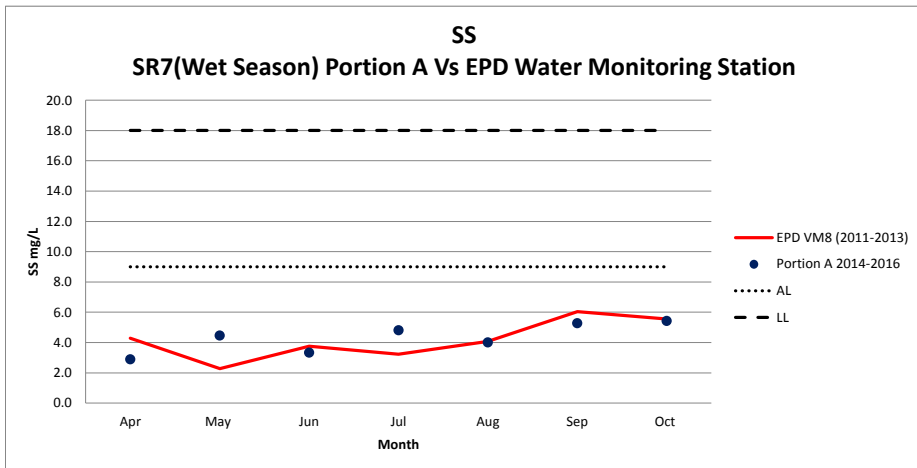
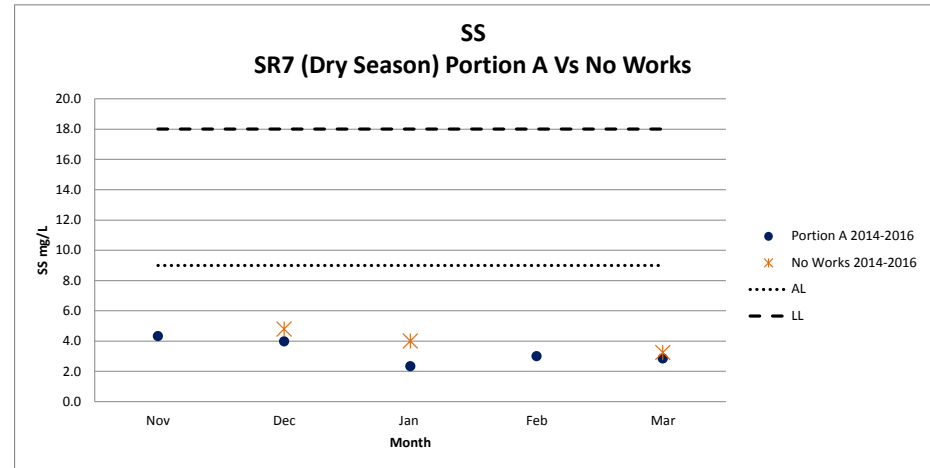
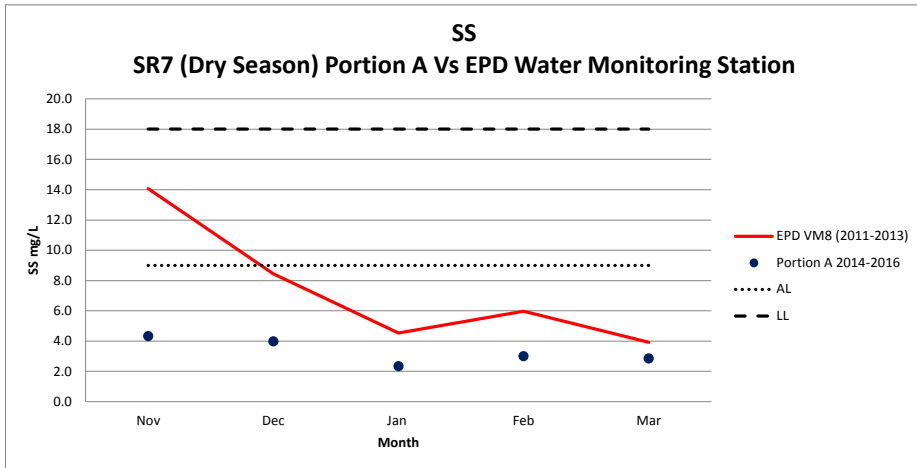
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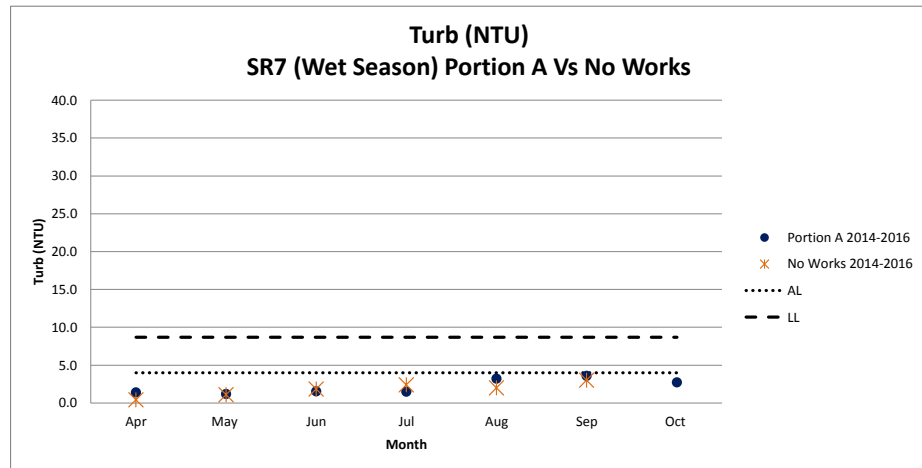
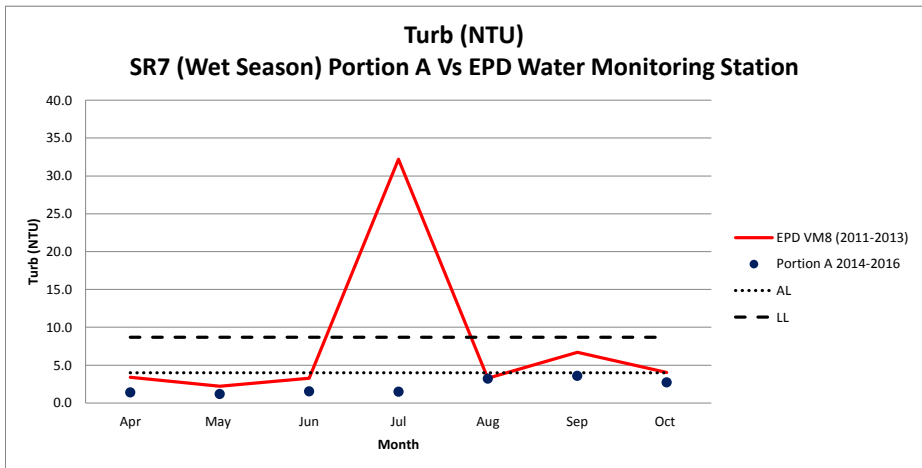
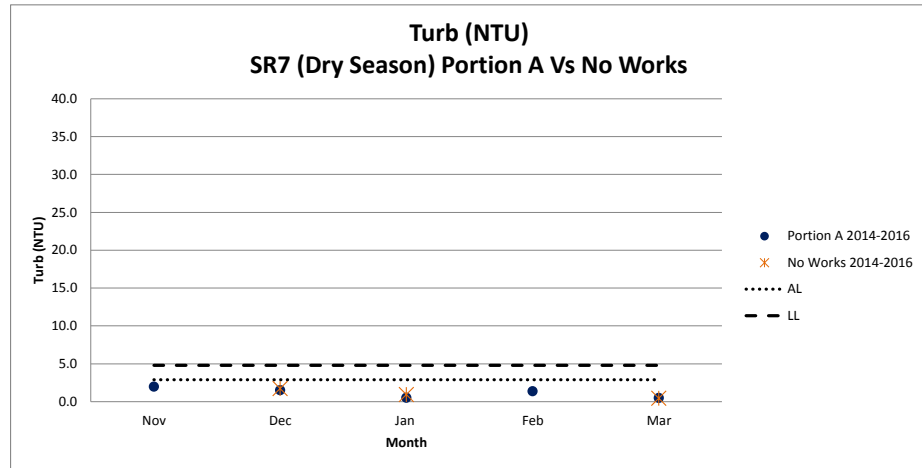
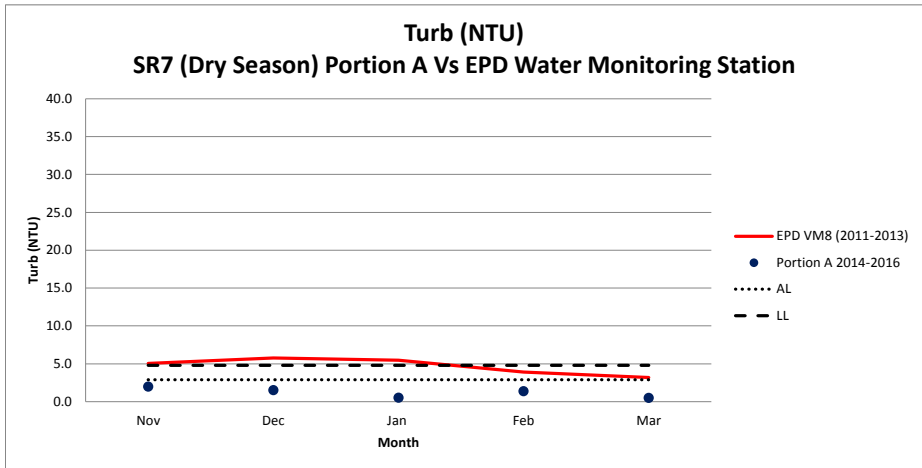
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

### SR7 – Graphical Results











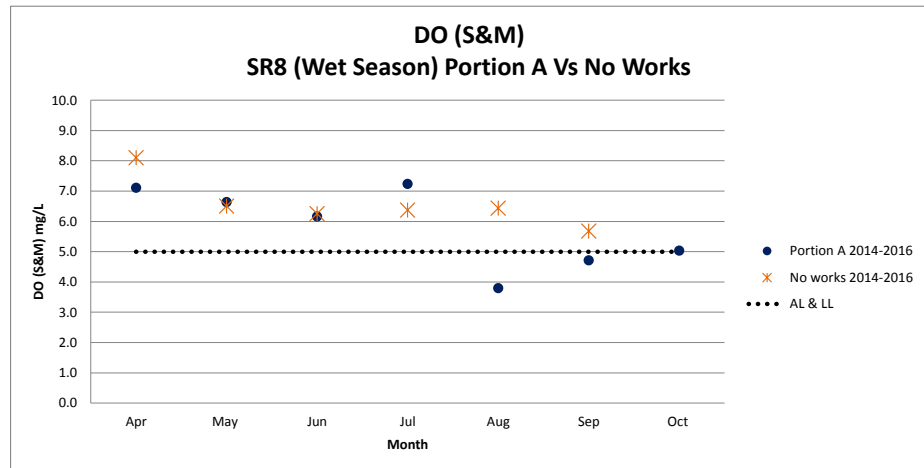
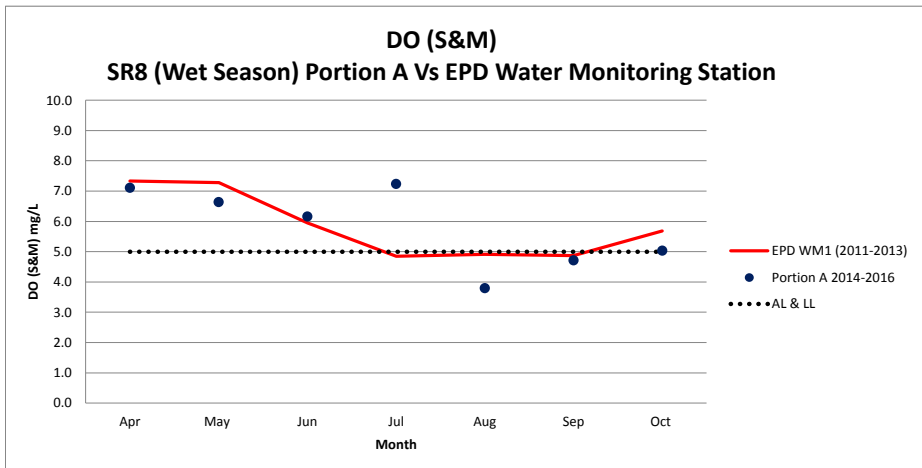
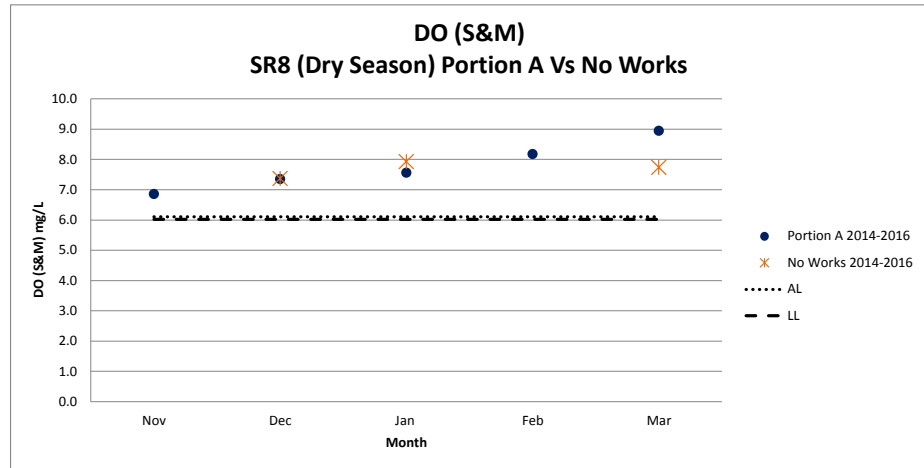
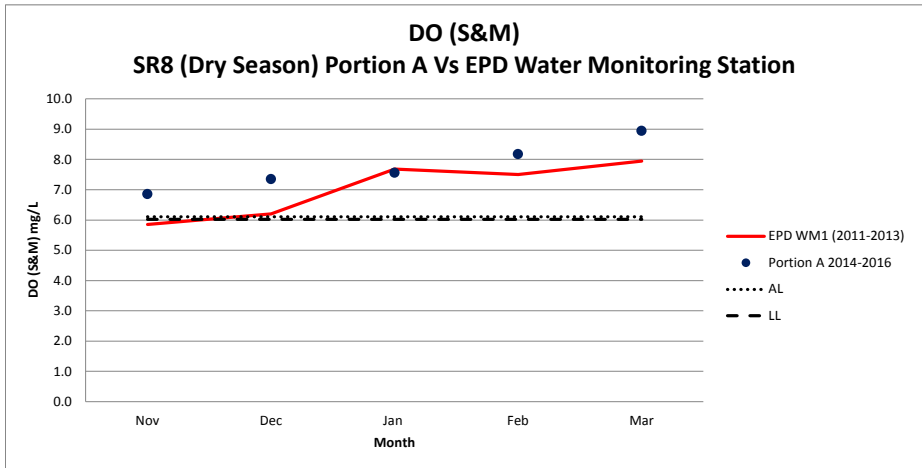
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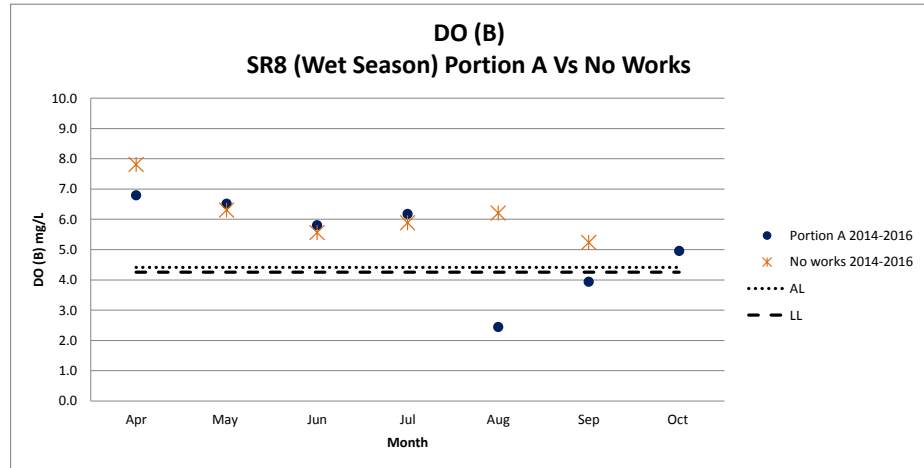
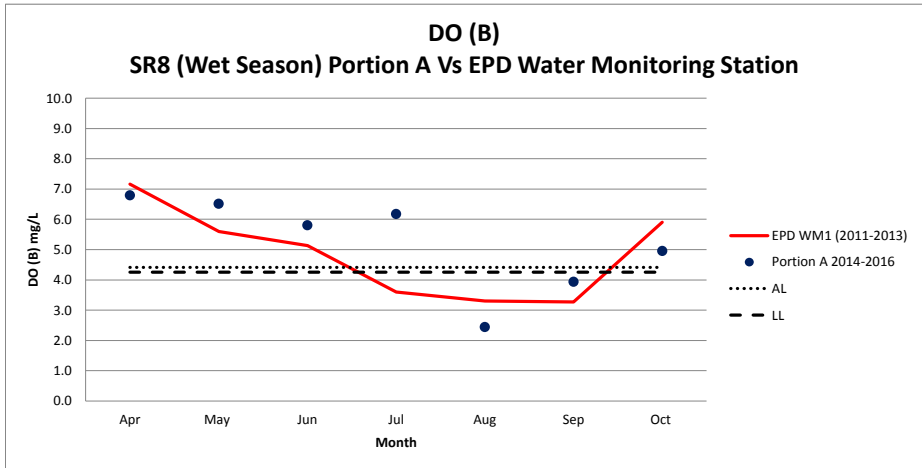
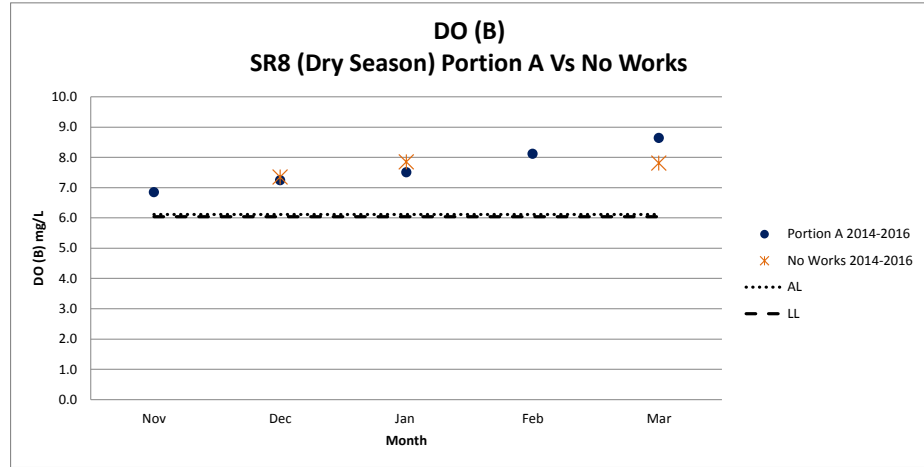
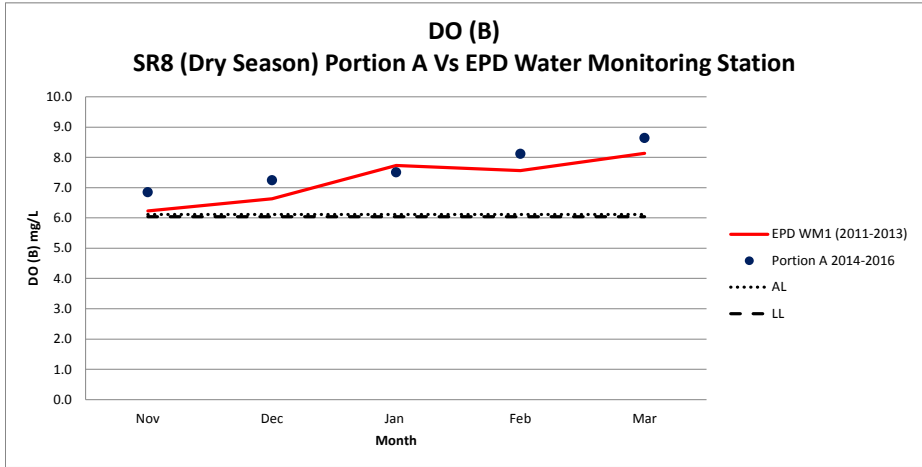
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Hong Kong.

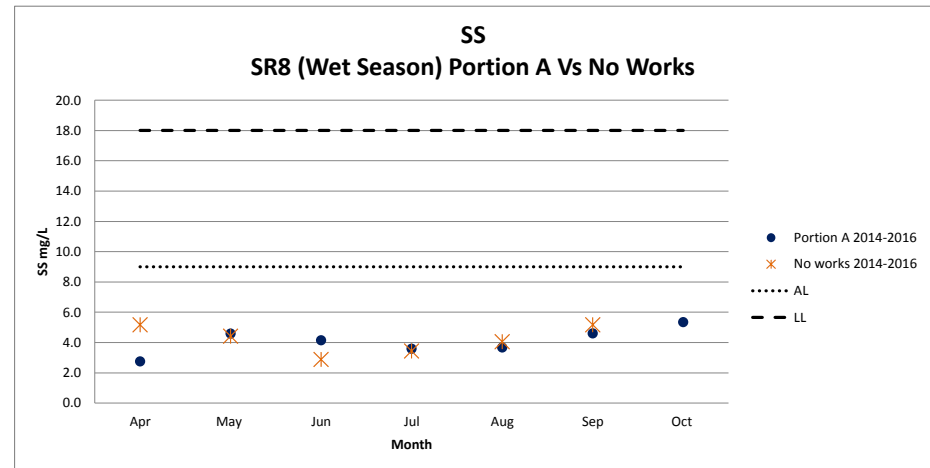
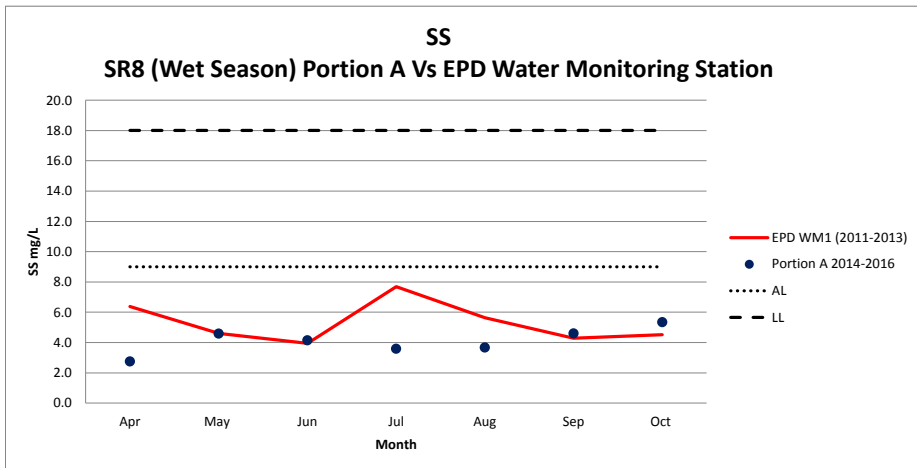
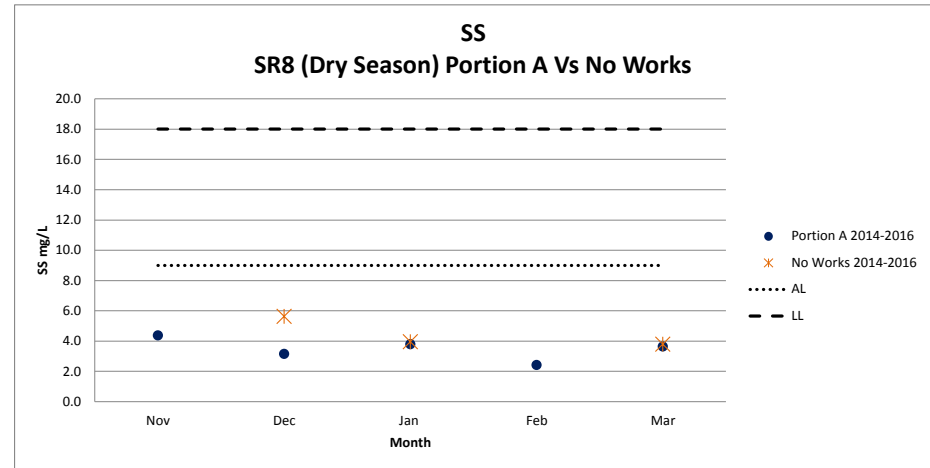
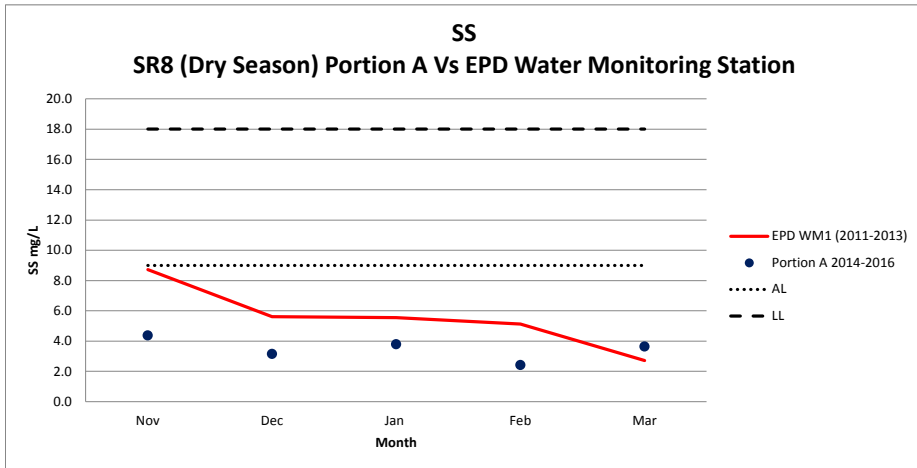
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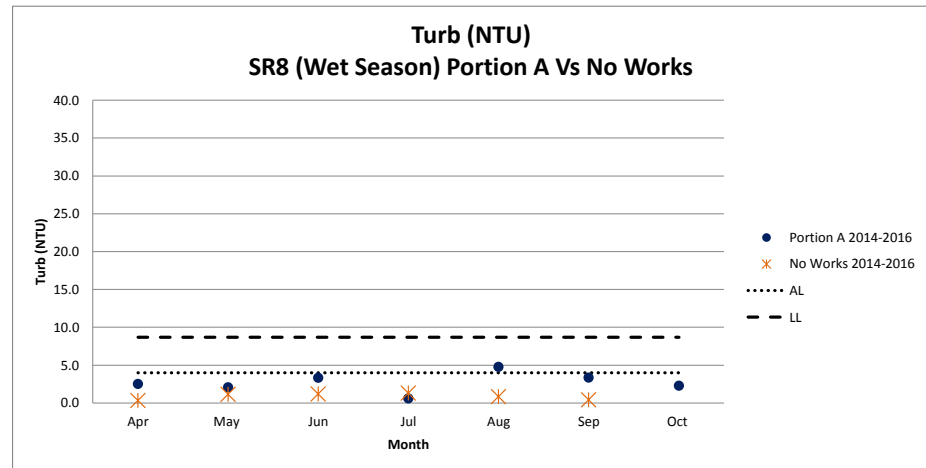
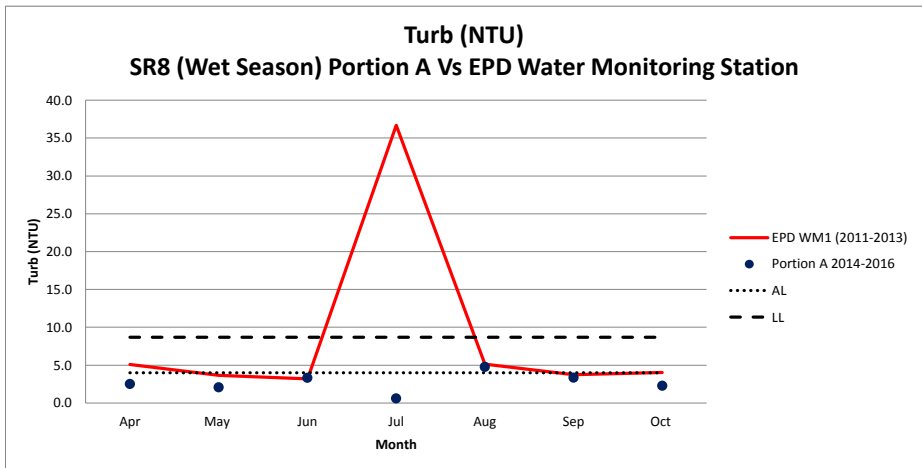
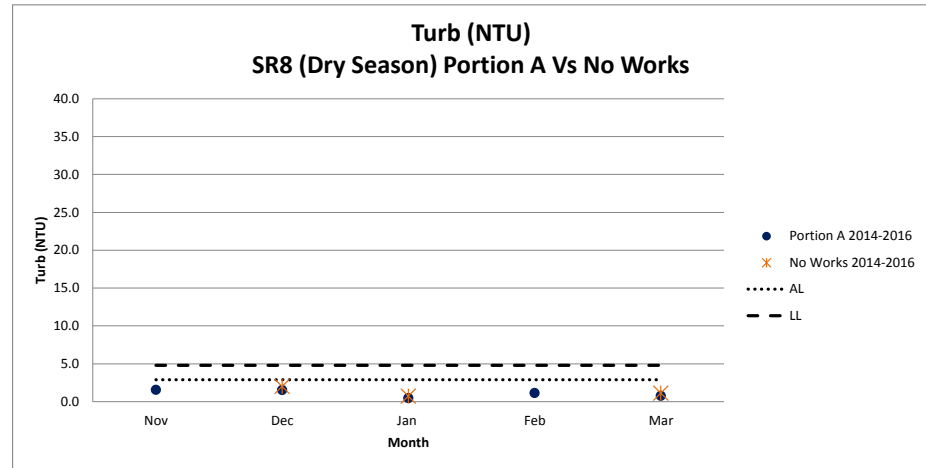
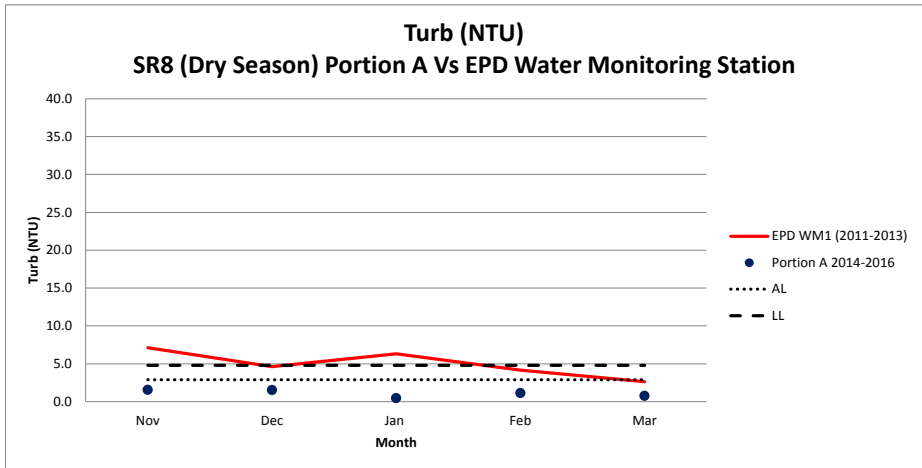
**MaterialLab**

### SR8 – Graphical Results









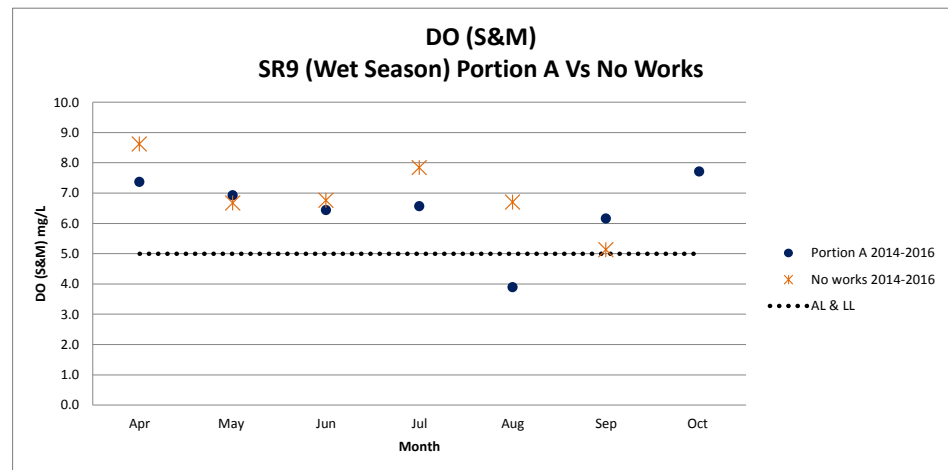
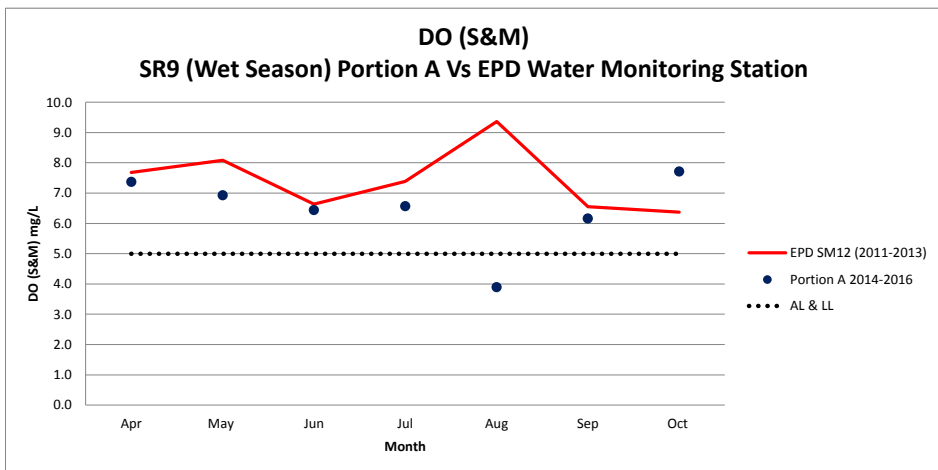
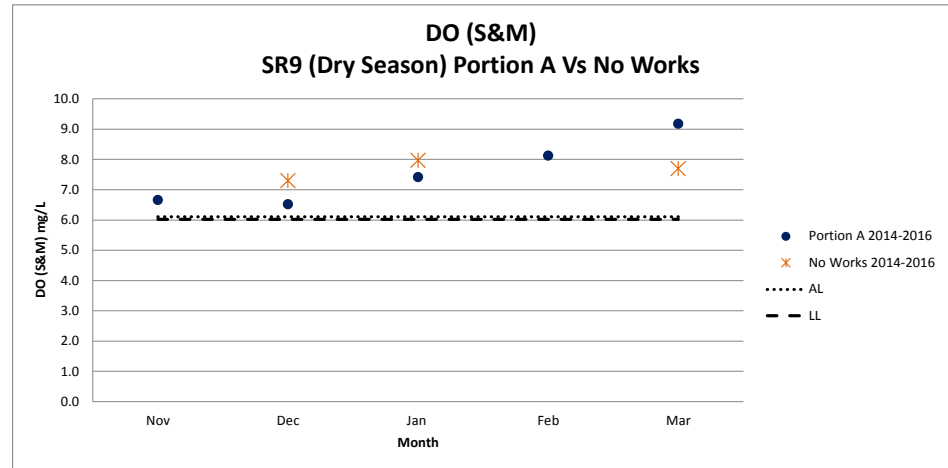
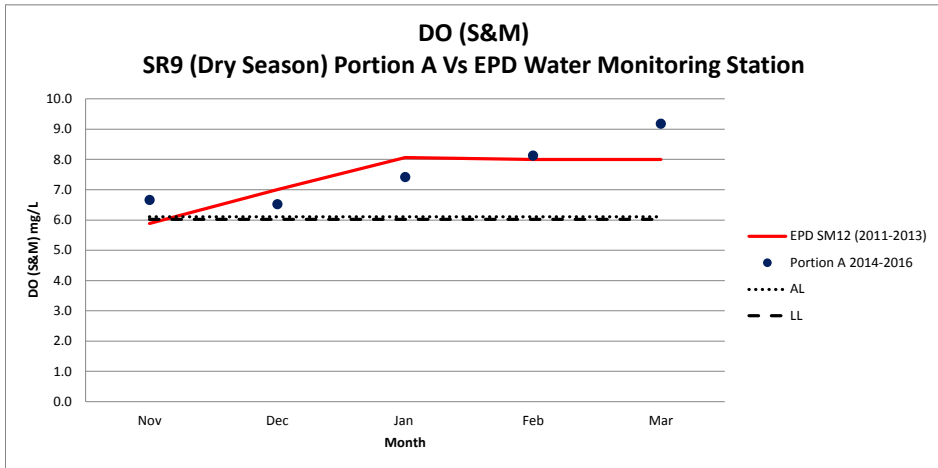
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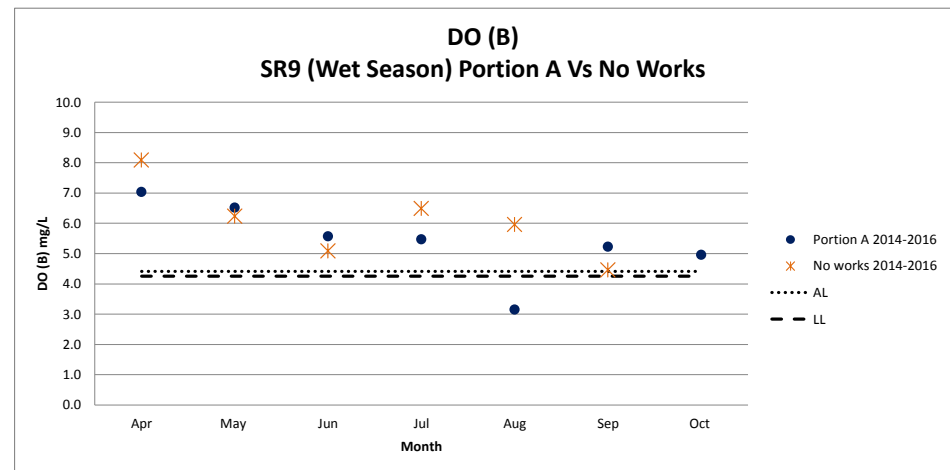
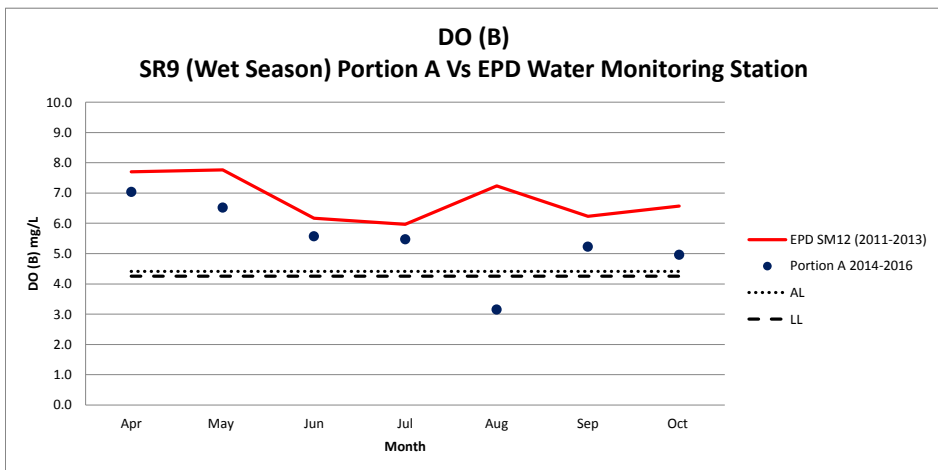
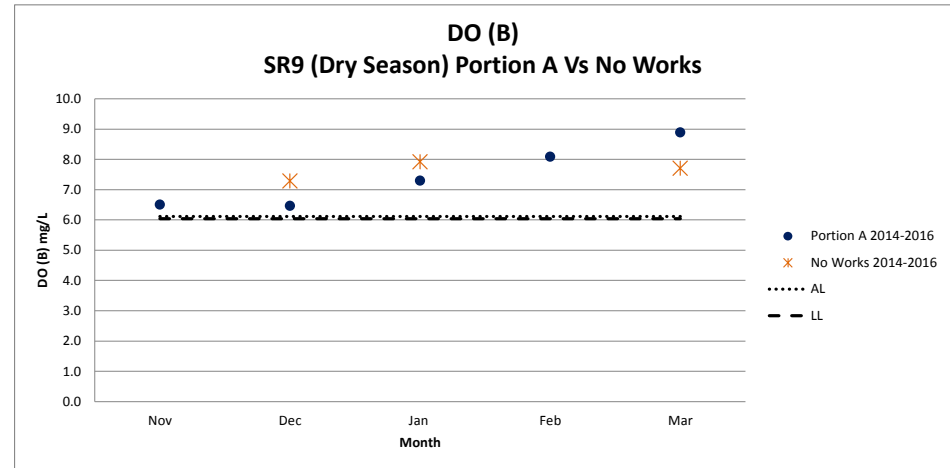
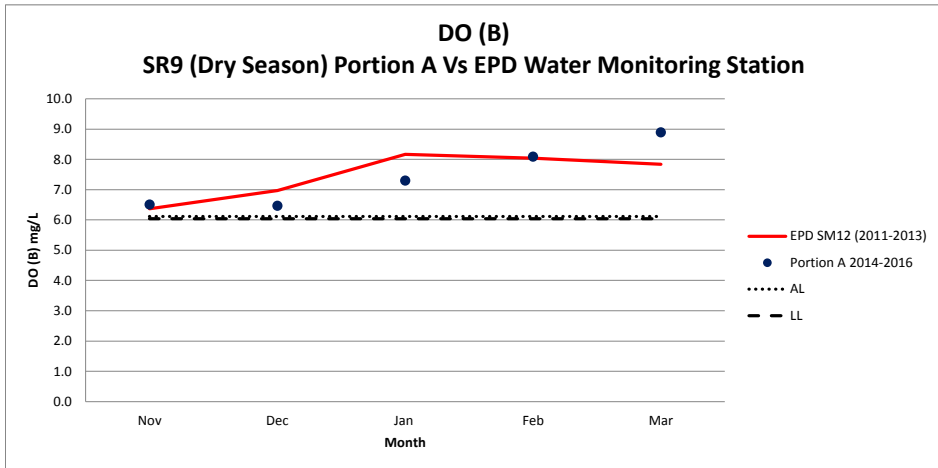
Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

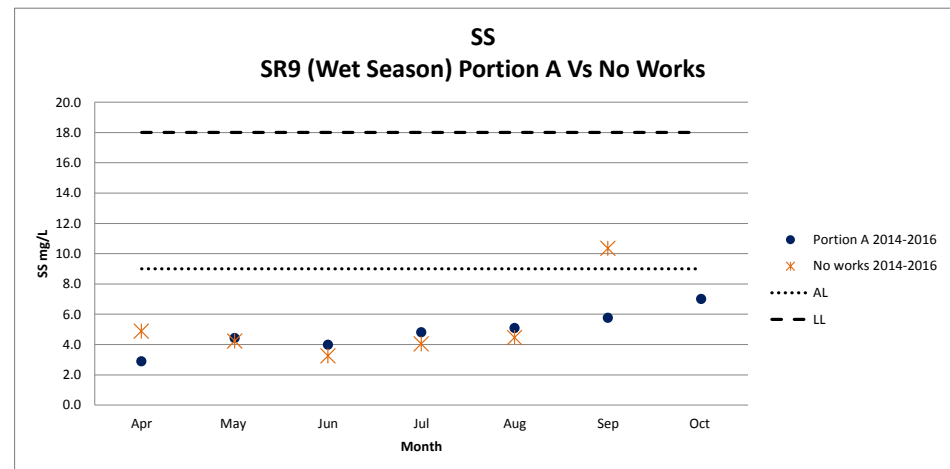
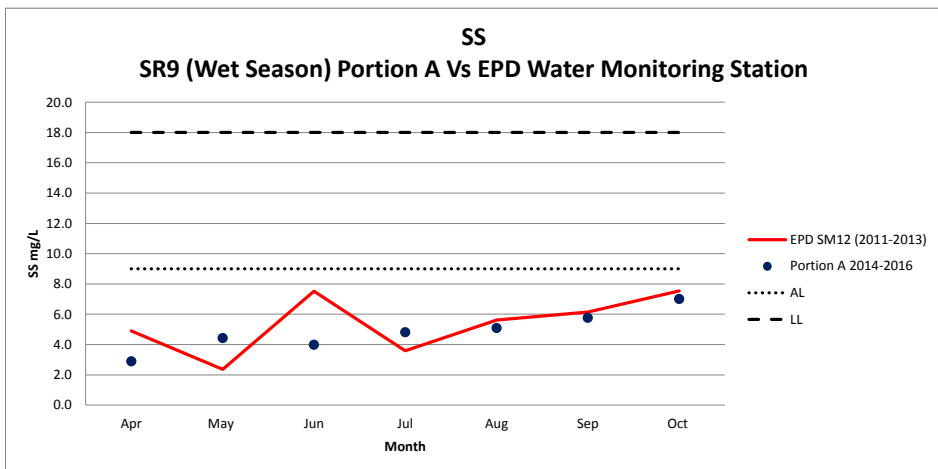
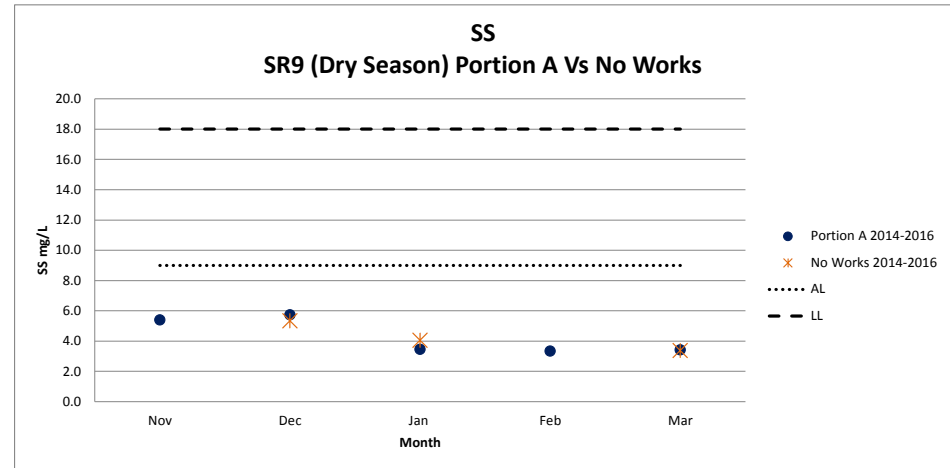
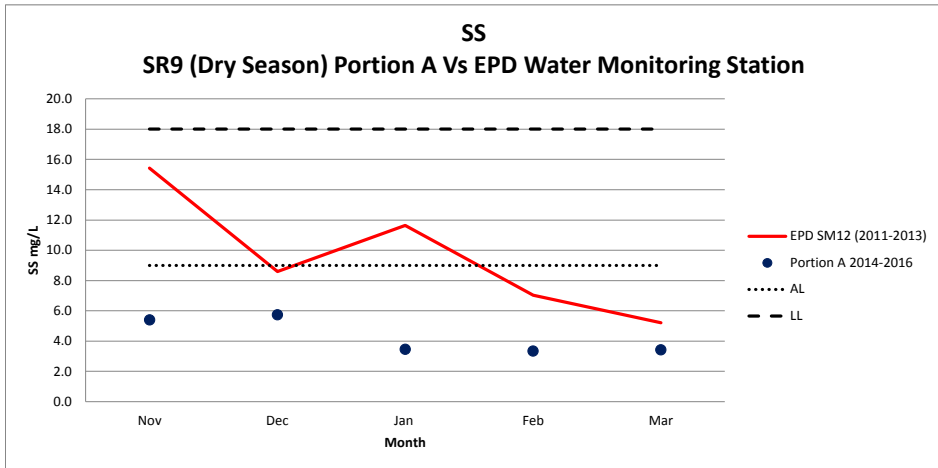
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

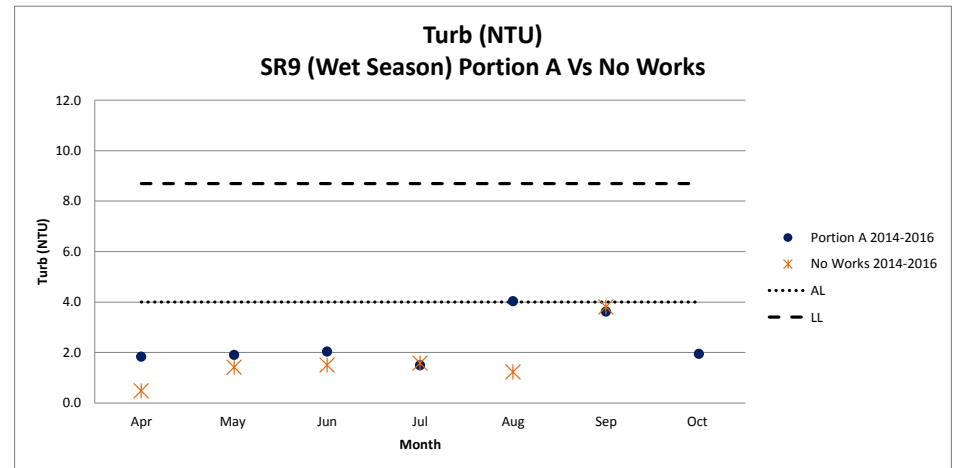
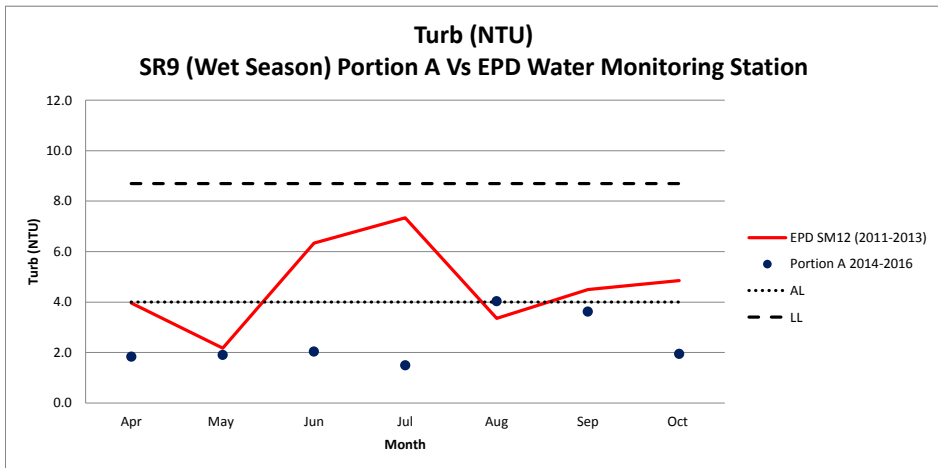
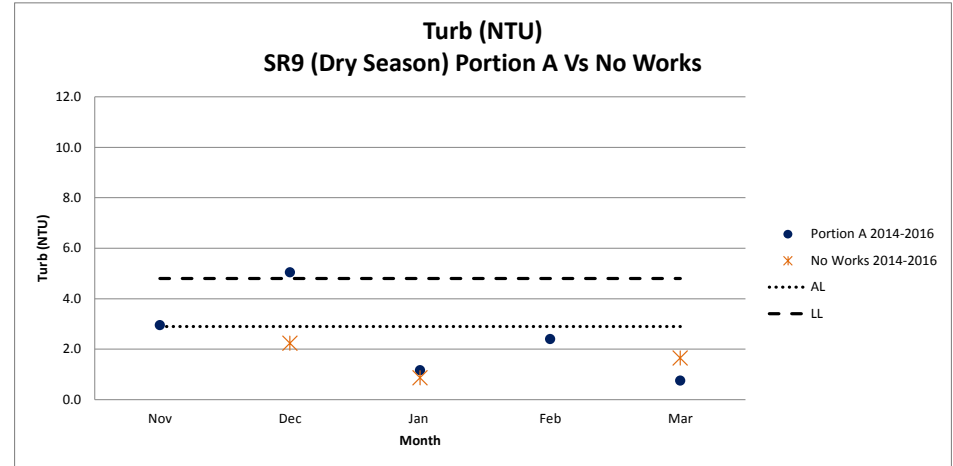
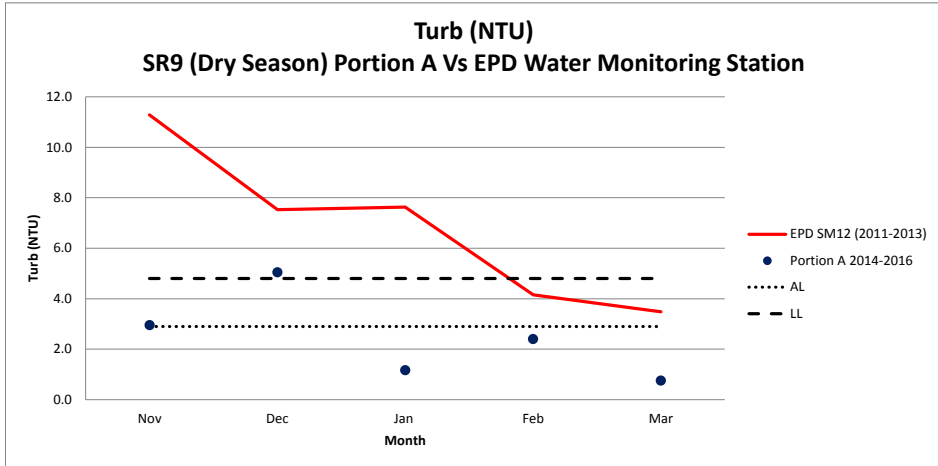
### SR9 – Graphical Results

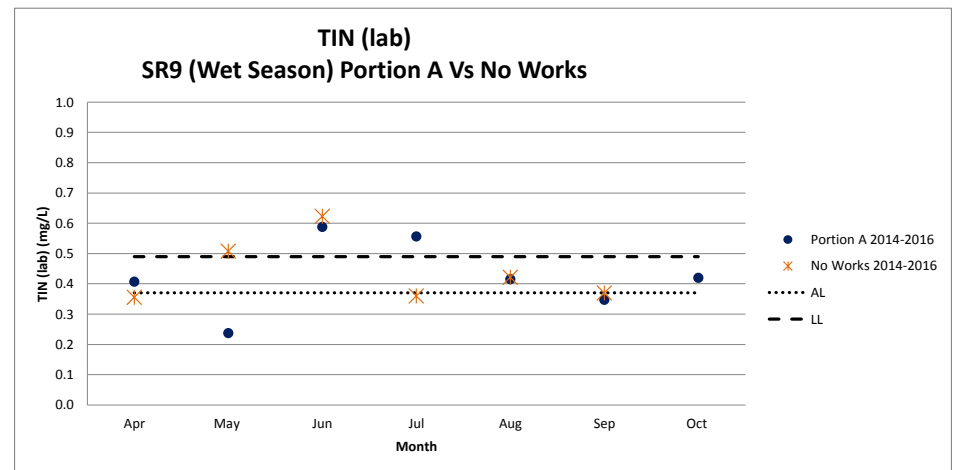
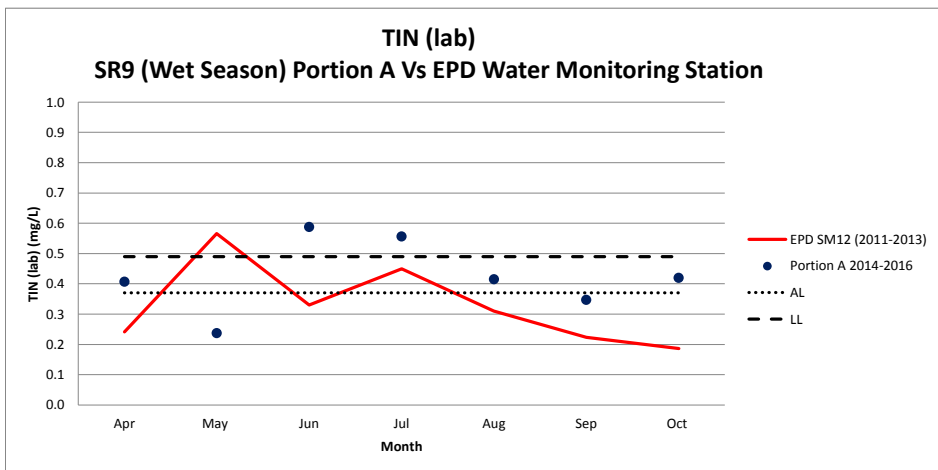
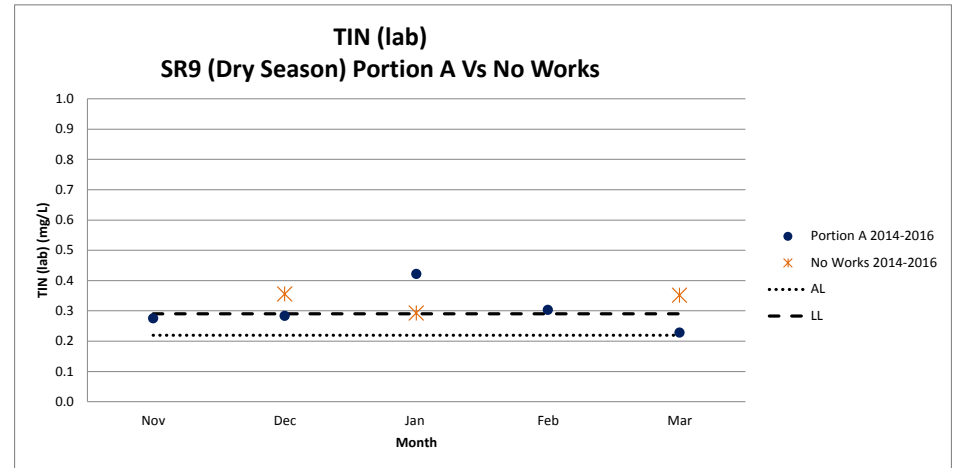
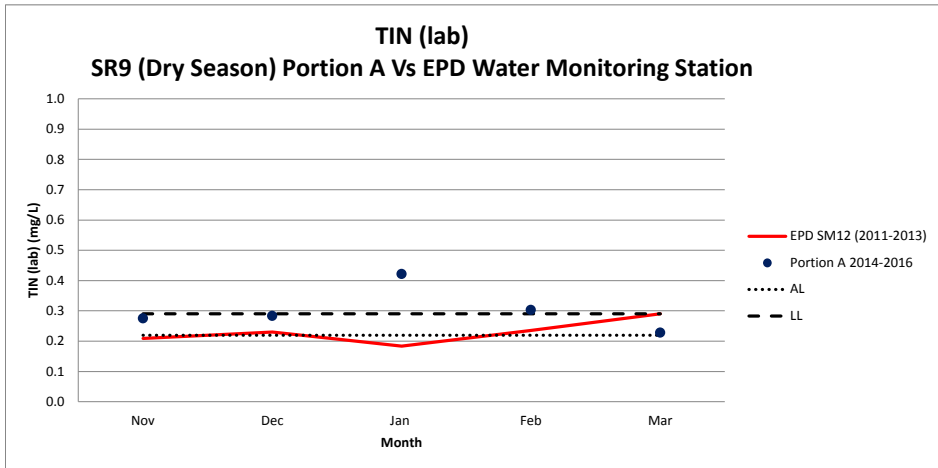


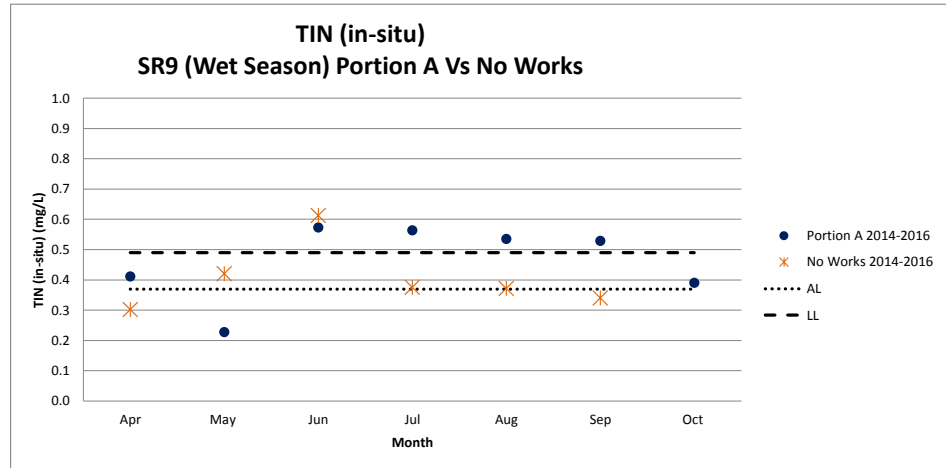
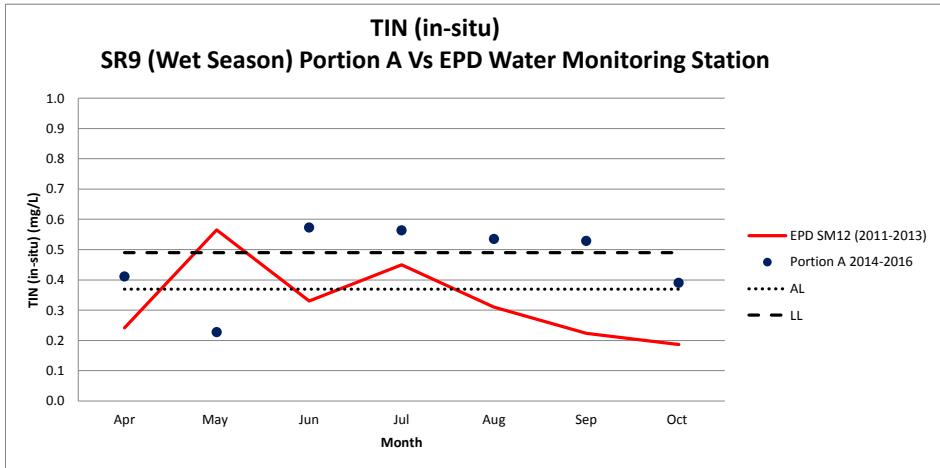
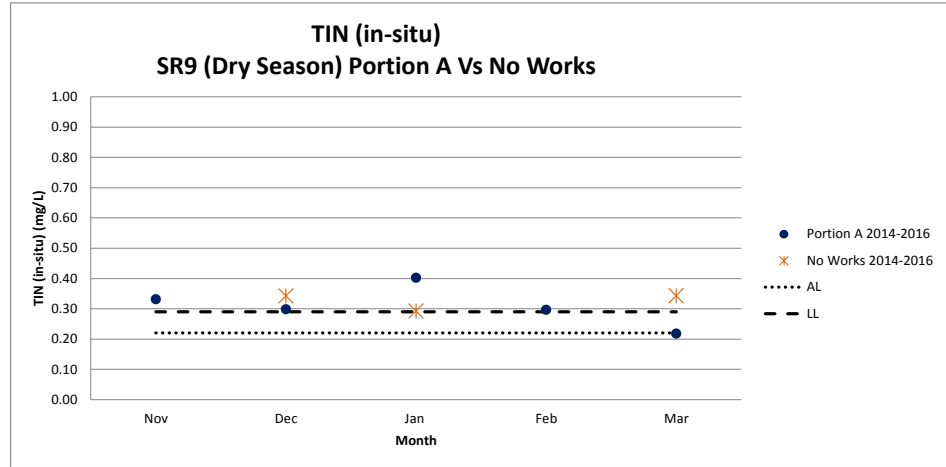
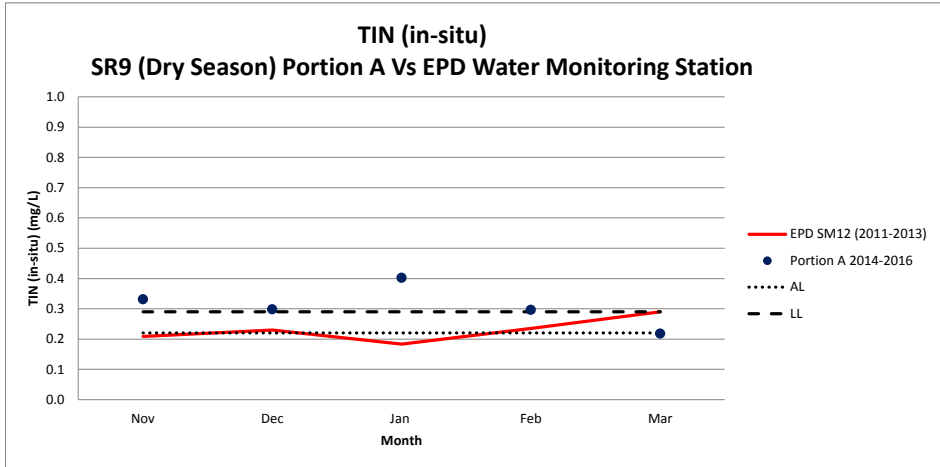












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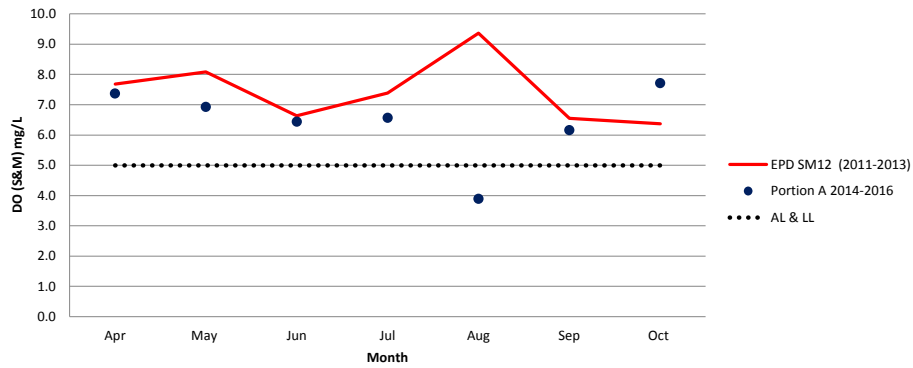
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1-15 Kwai Fung Crescent, Kwai Fong,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

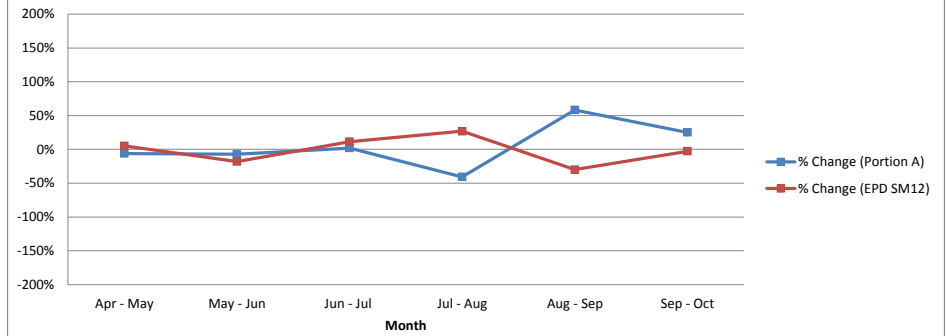
**MaterialLab**

SR9 – DO (S&M) and DO (B) Percentage Change in Wet Season

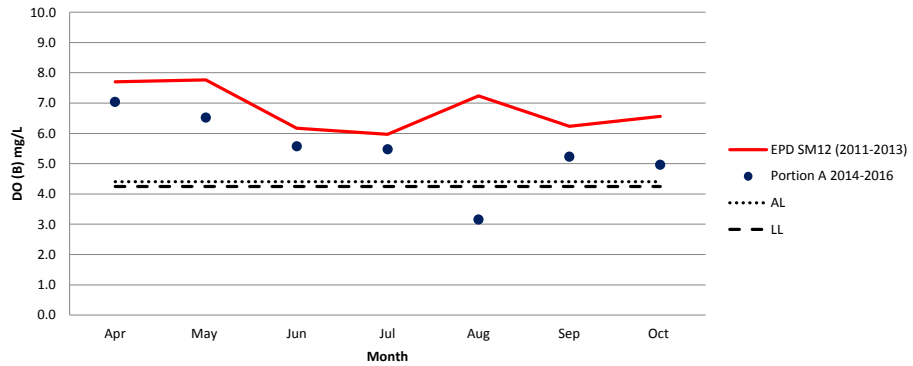
**DO (S&M) - SR9 (Wet Season)**  
**Portion A Vs EPD Water Monitoring Station**



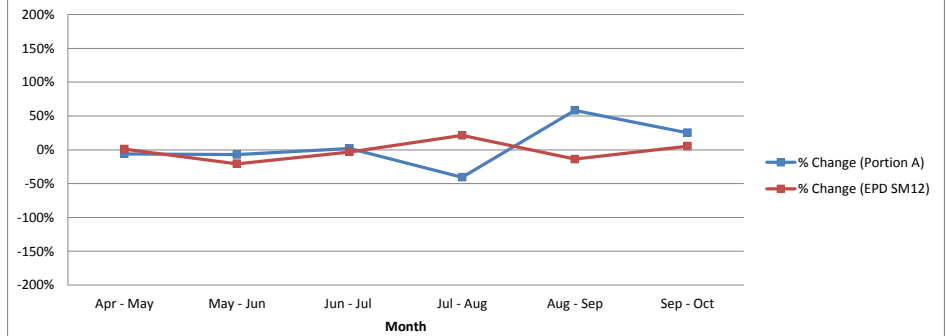
**DO (S&M) - SR9 (Wet Season)**  
**Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**



**DO (B) - SR9 (Wet Season)**  
**Portion A Vs EPD Water Monitoring Station**



**DO (B) - SR9 (Wet Season)**  
**Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**



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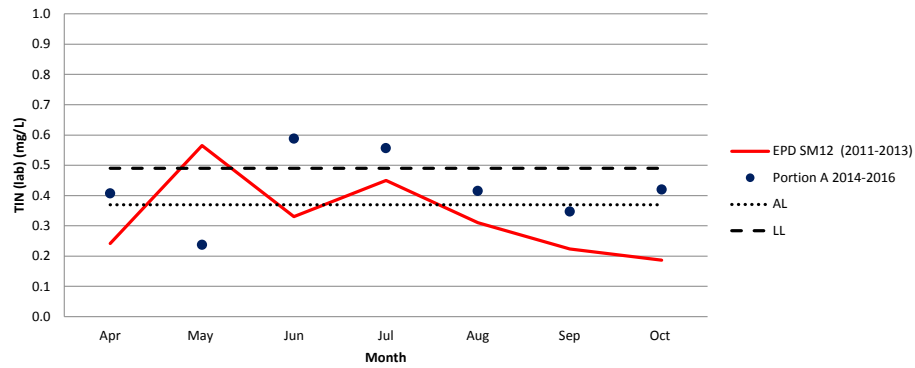
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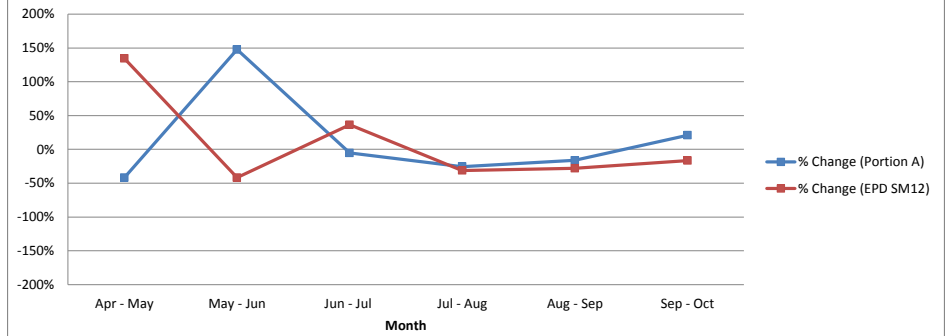
**MaterialLab**

### SR9 – TIN Percentage Change in Wet Season

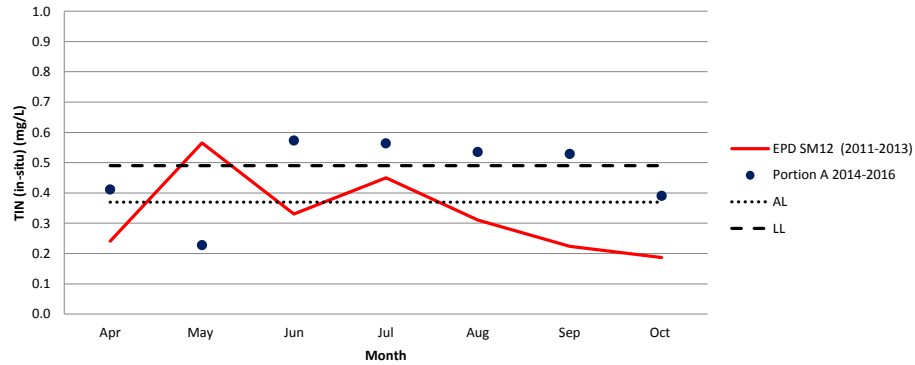
**TIN (lab) - SR9 (Wet Season)**  
**Portion A Vs EPD Water Monitoring Station**



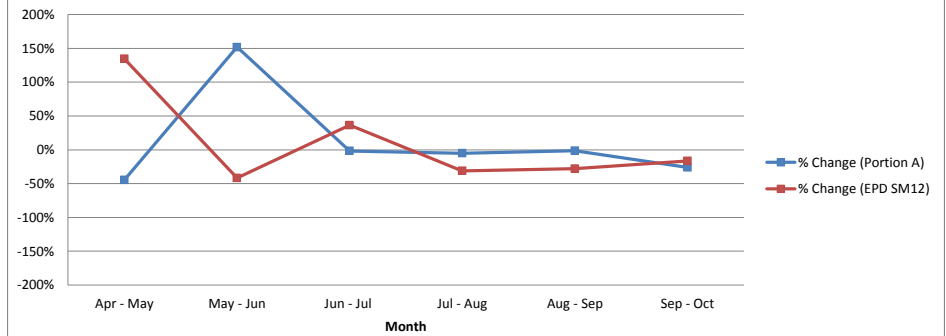
**TIN (lab) - SR9 (Wet Season)**  
**Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) - SR9 (Wet Season)**  
**Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) - SR9 (Wet Season)**  
**Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**





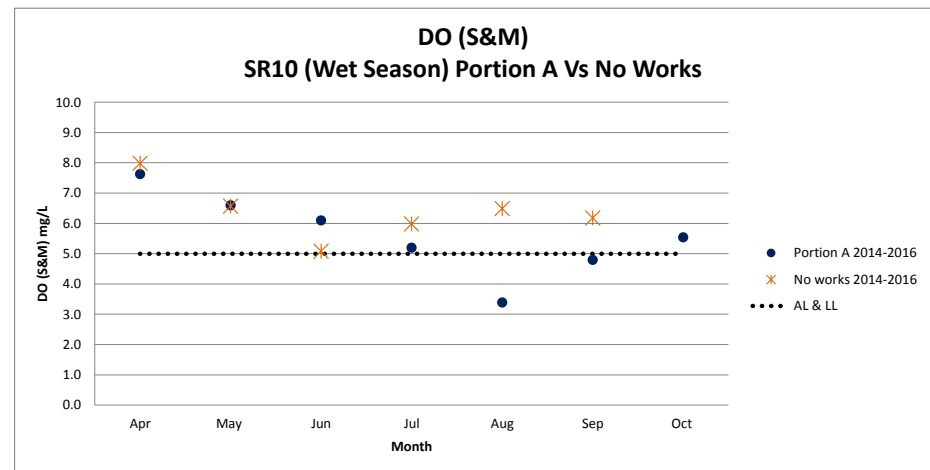
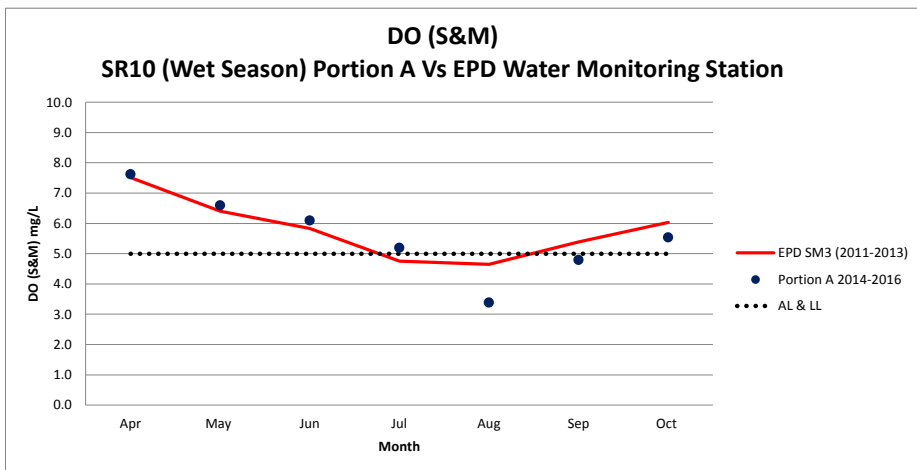
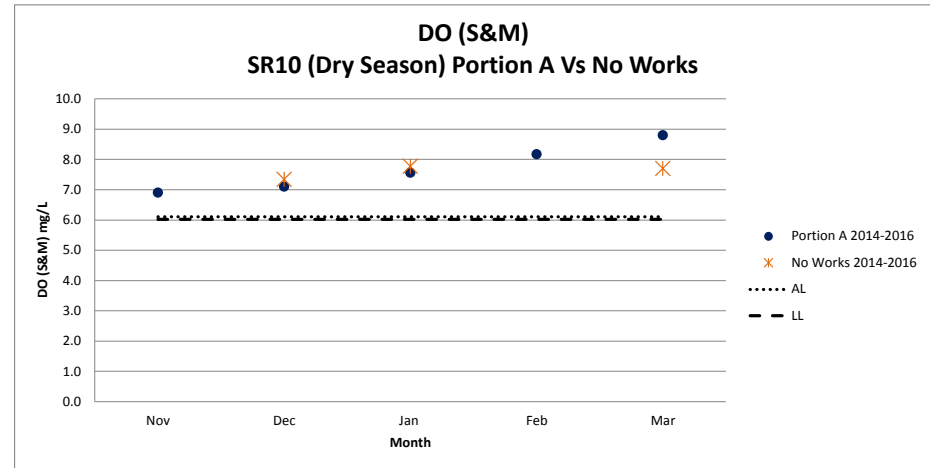
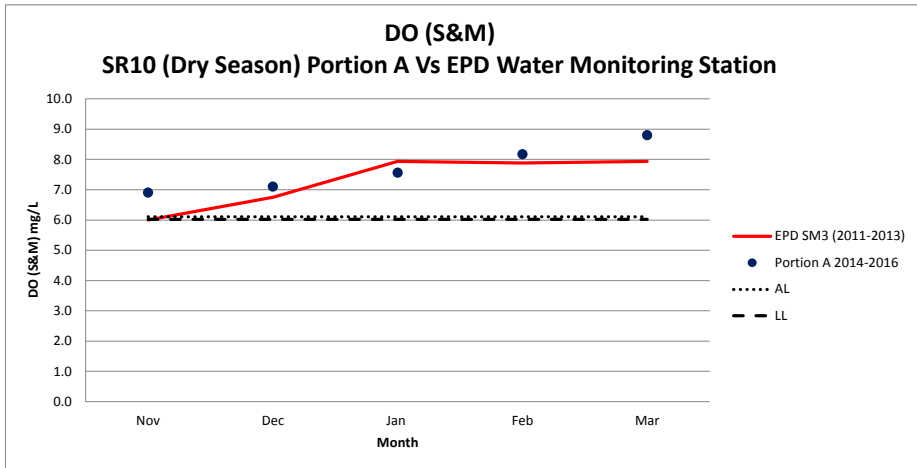
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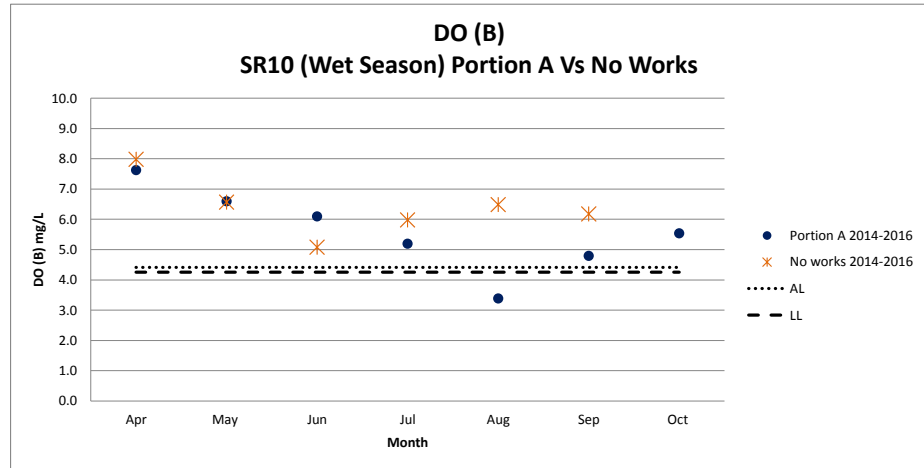
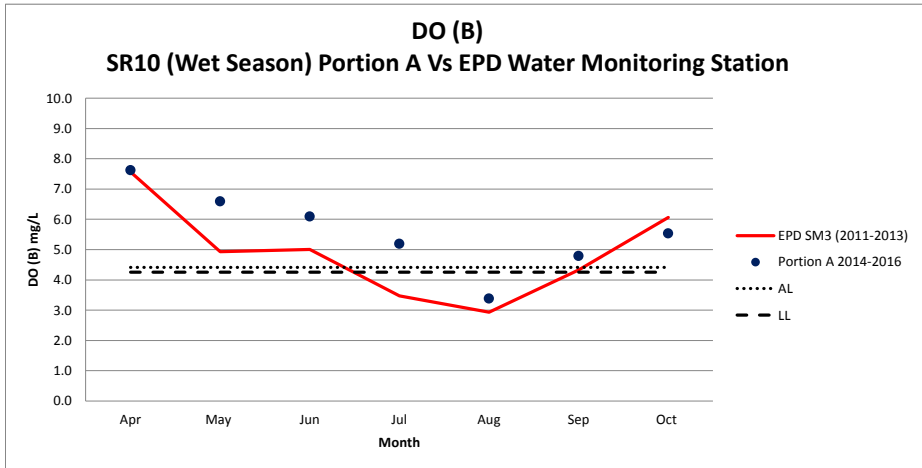
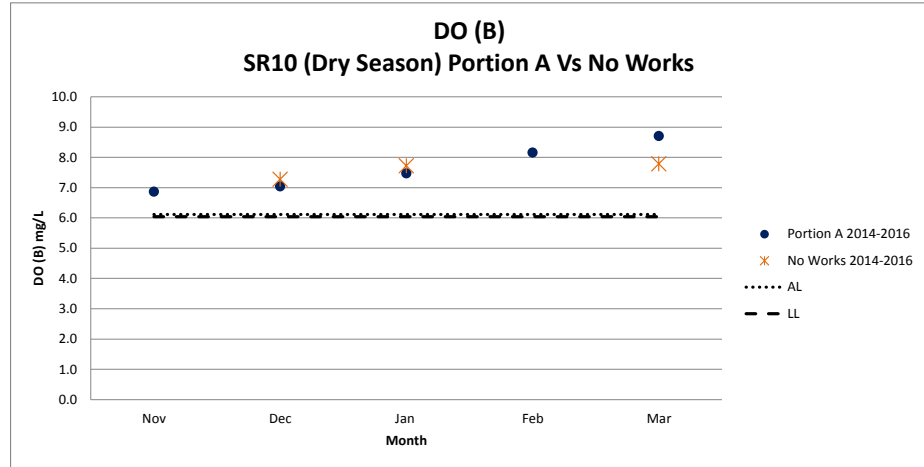
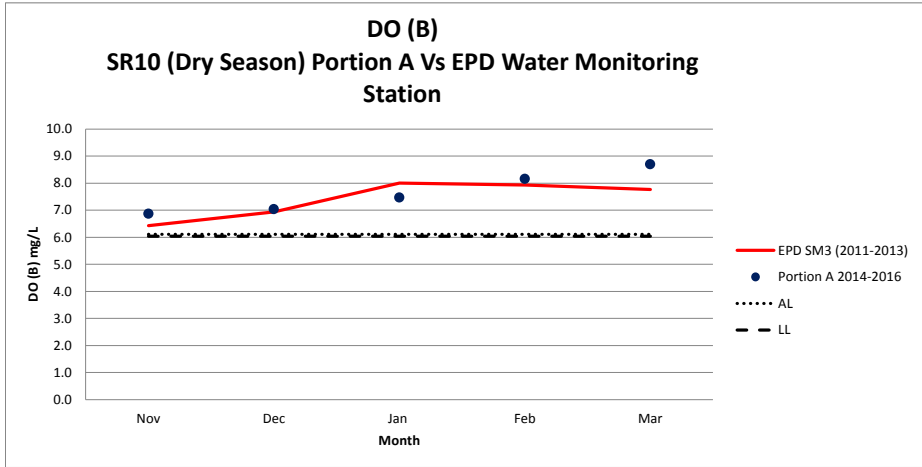
Room 723 & 725, 7/F, Block B,  
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Hong Kong.

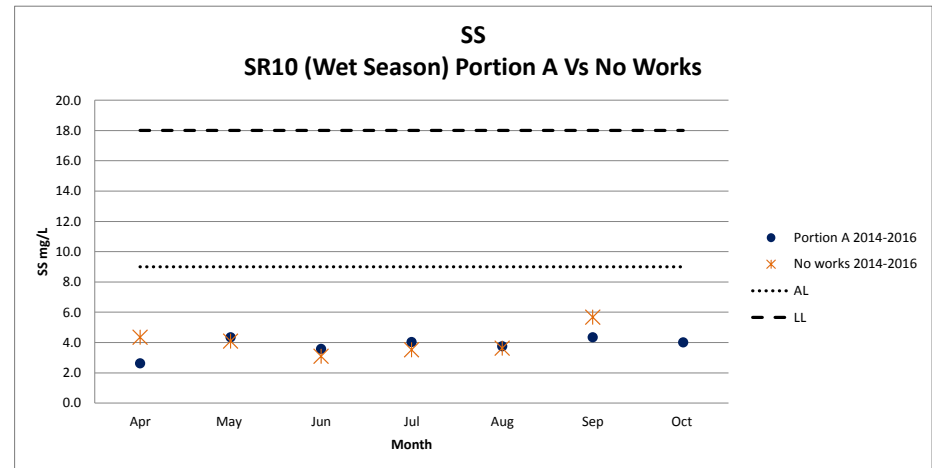
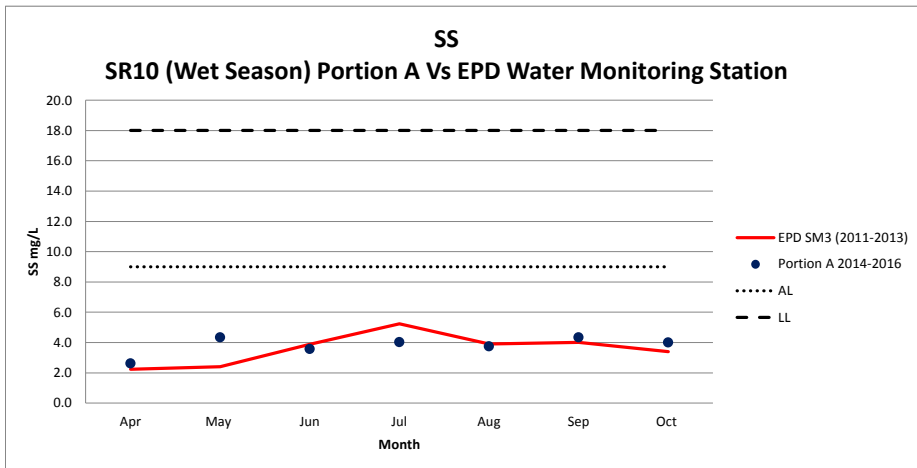
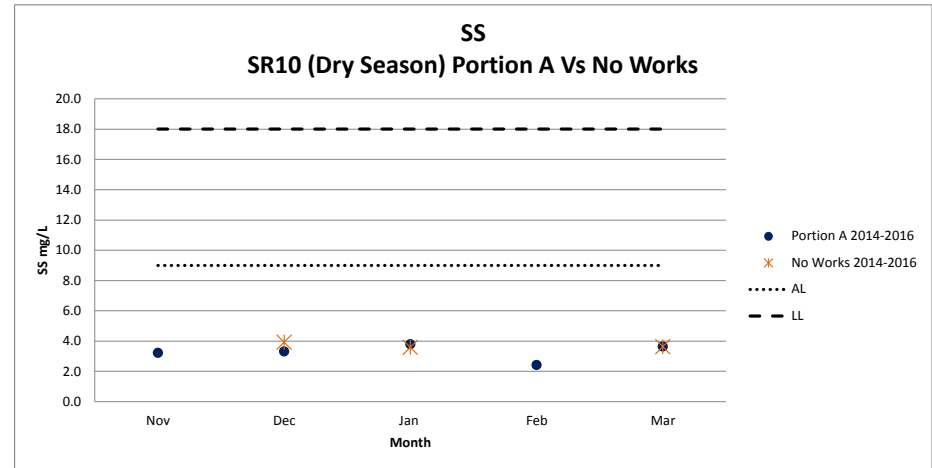
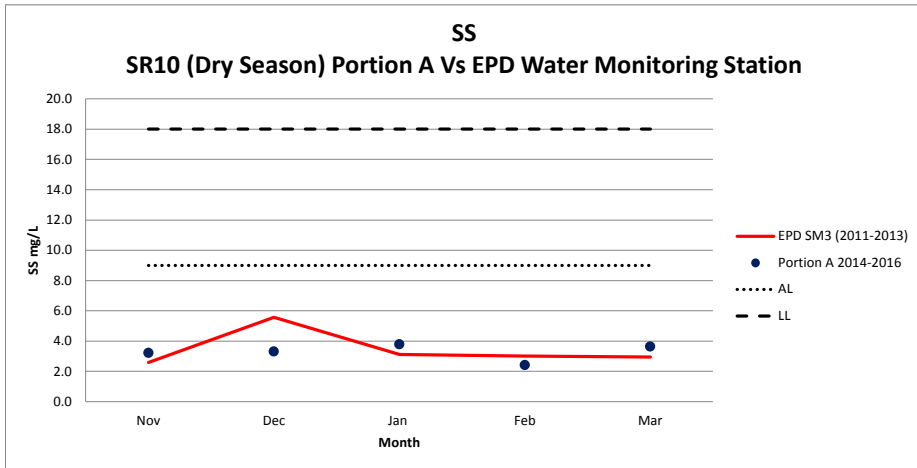
Tel : (852)-24508238  
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Email : mcl@fugro.com.hk

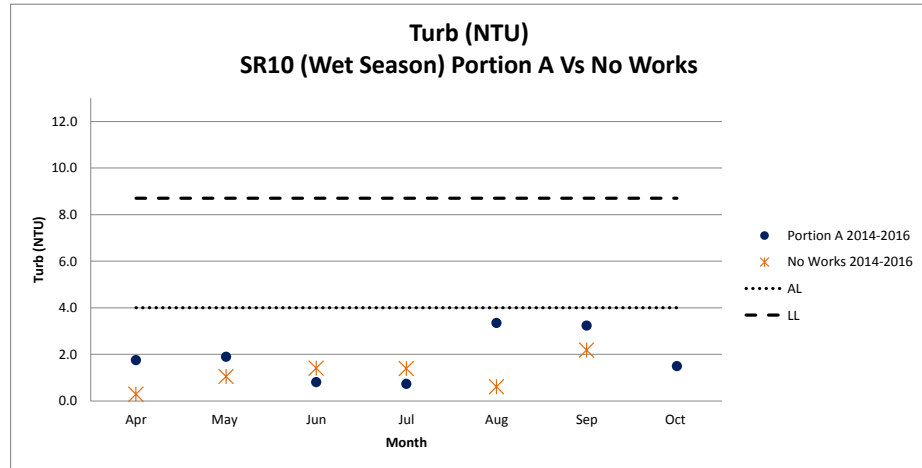
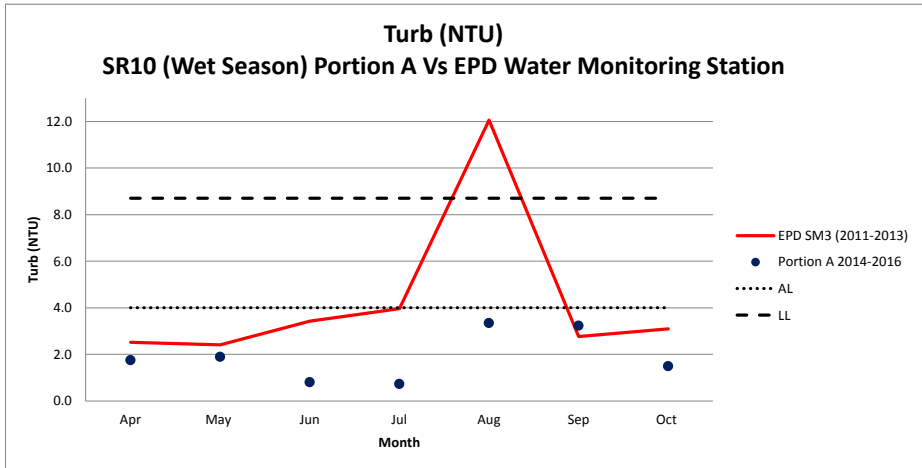
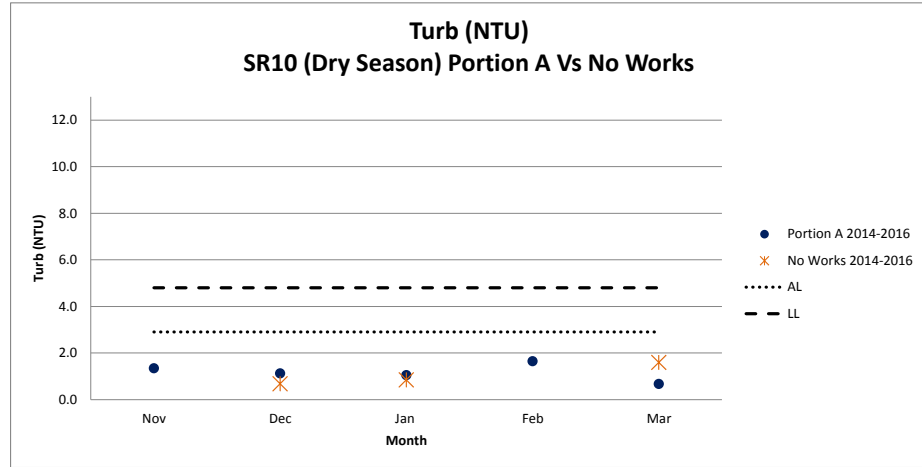
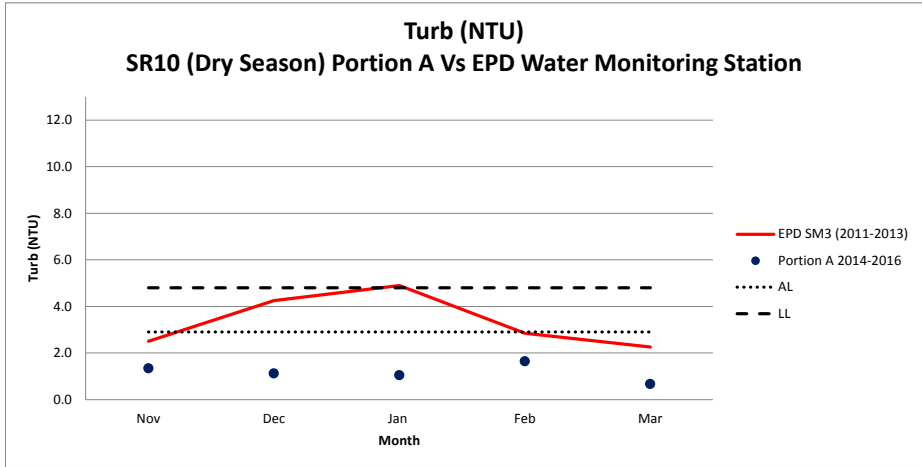
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

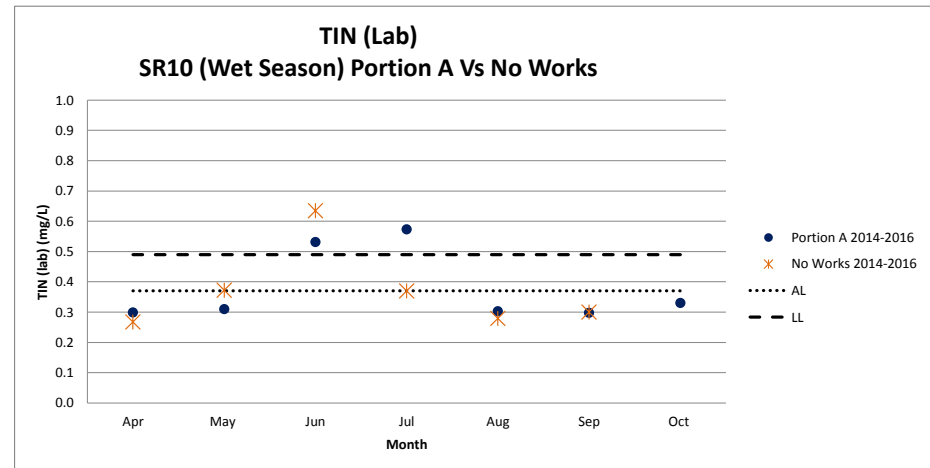
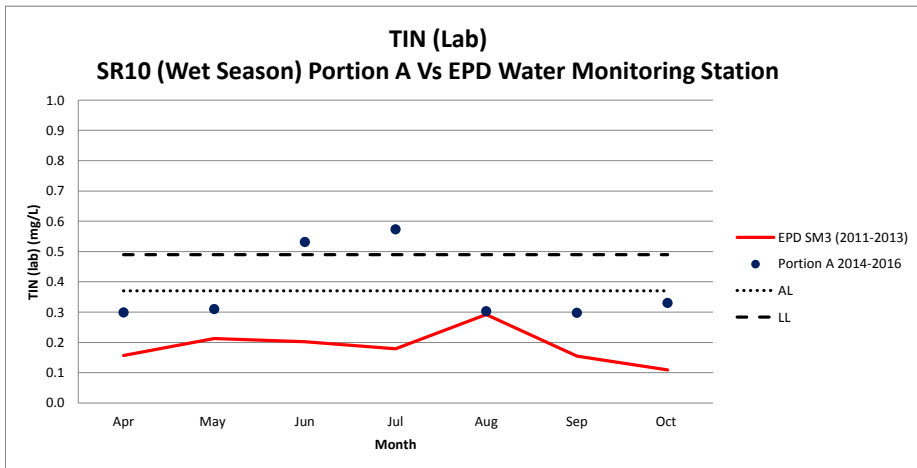
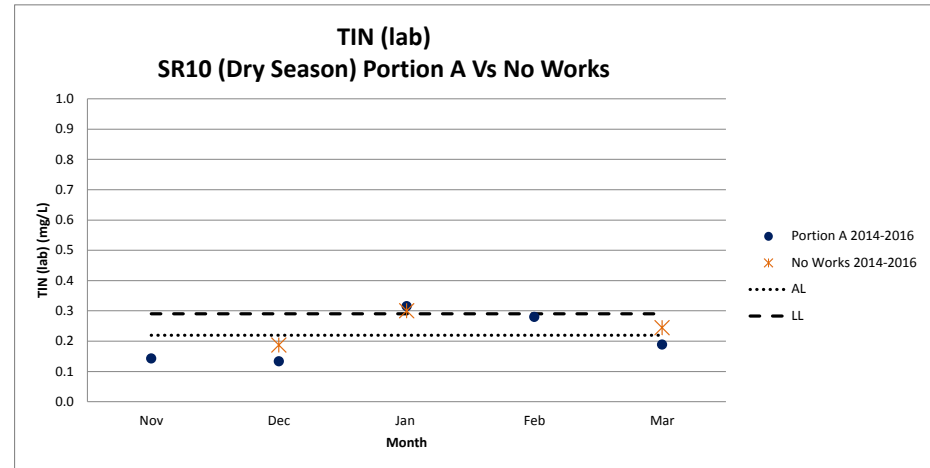
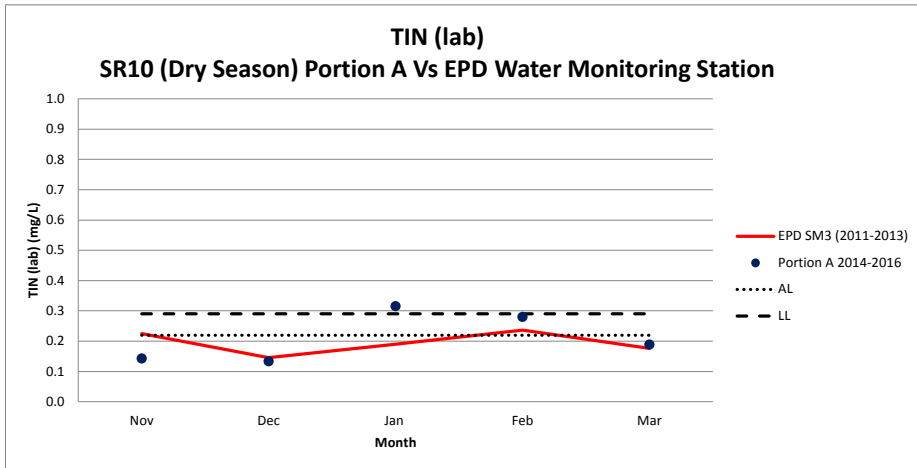
### SR10 – Graphical Results

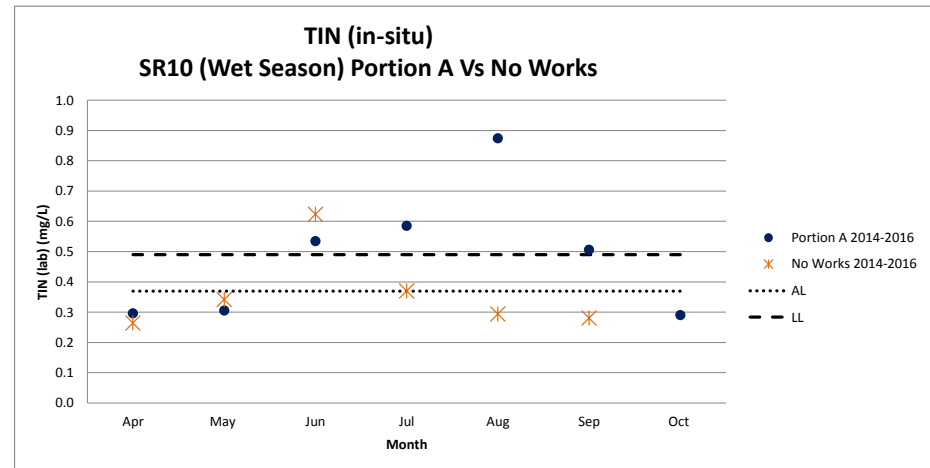
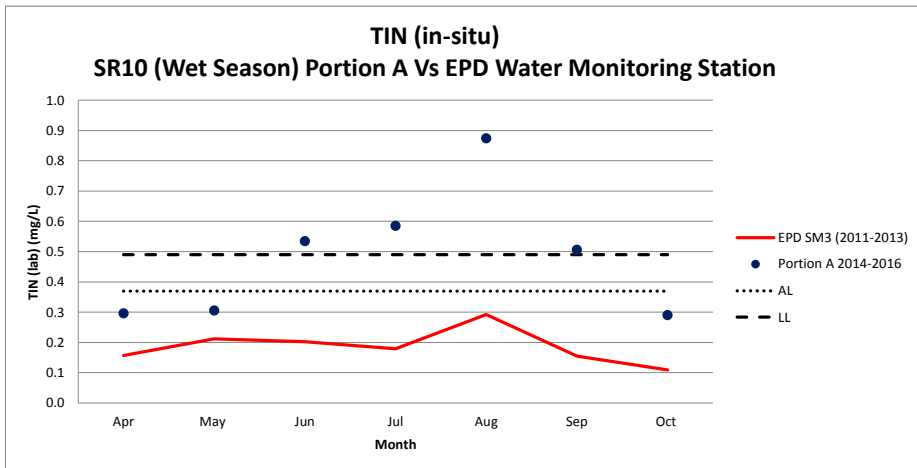
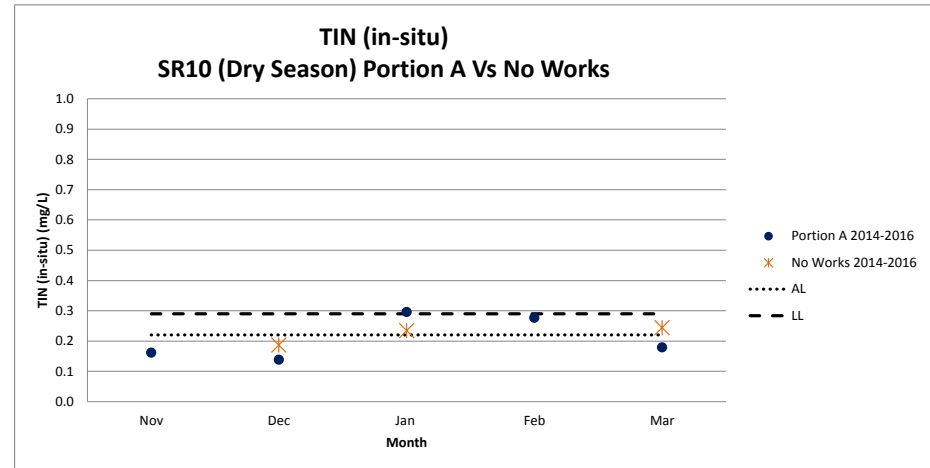
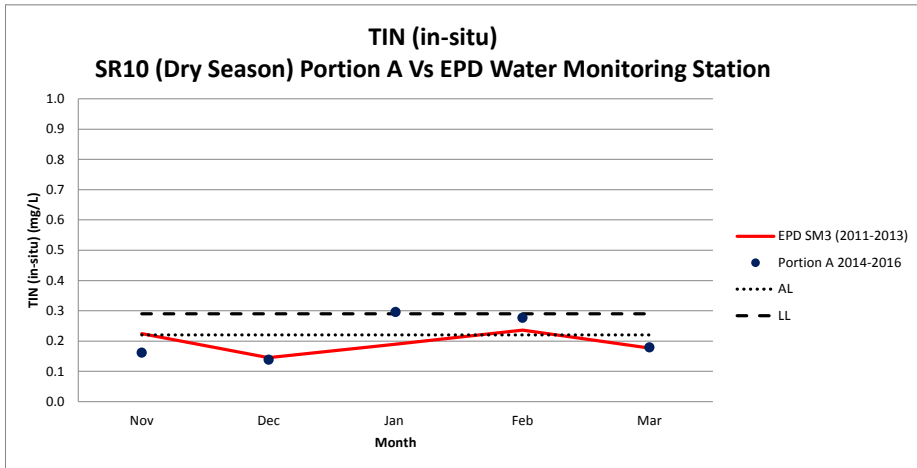












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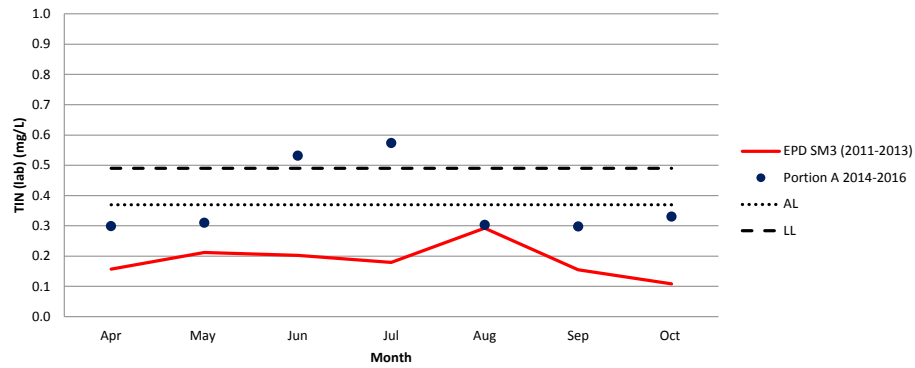
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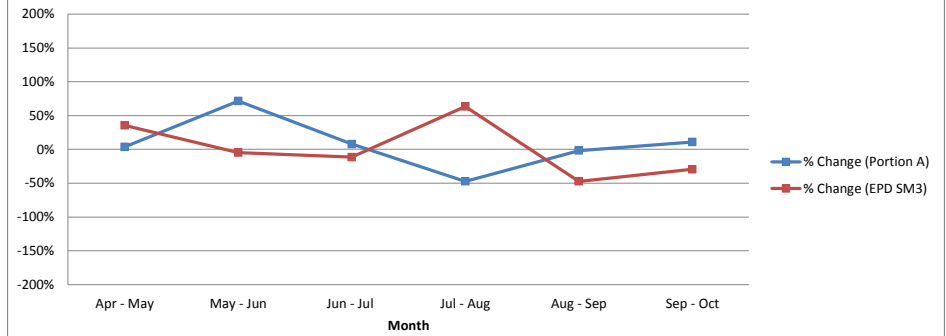
SR10 – TIN Percentage Change in Wet Season



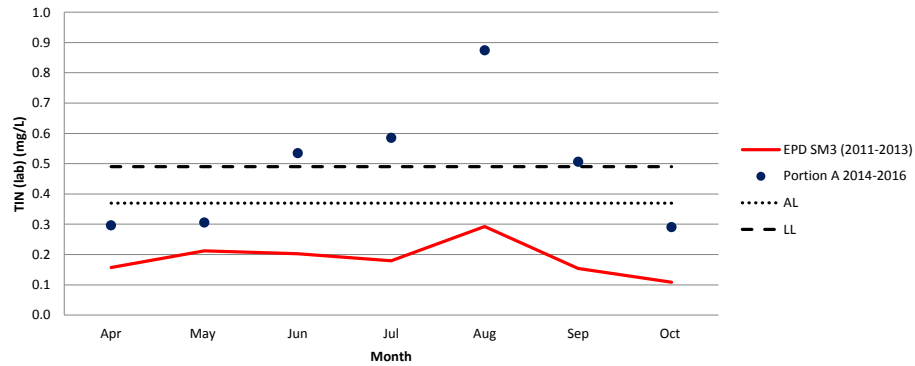
**TIN (lab) - SR10 (Wet Season)  
Portion A Vs EPD Water Monitoring Station**



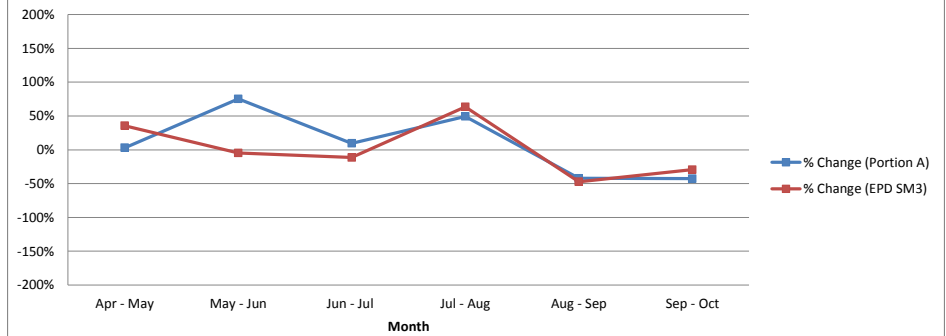
**TIN (lab) - SR10 (Wet Season)  
Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) - SR10 (Wet Season)  
Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) - SR10 (Wet Season)  
Monthly Percentage Change of Portion A Vs EPD Water Monitoring Station**



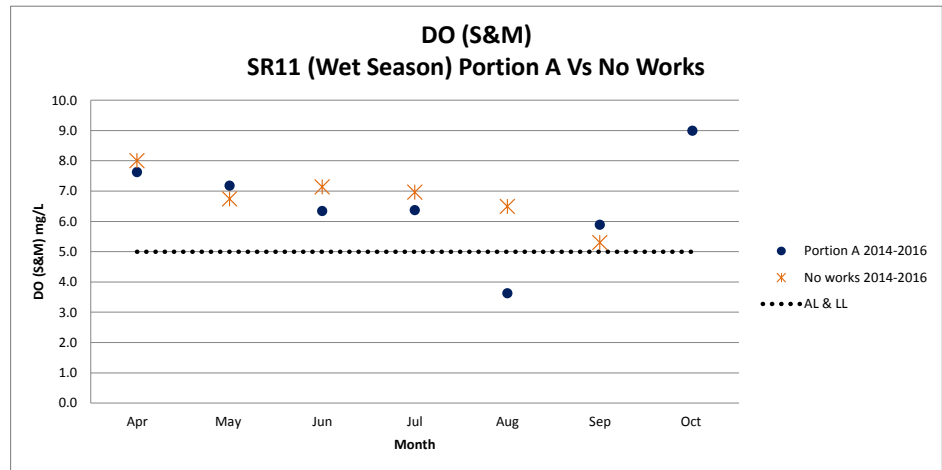
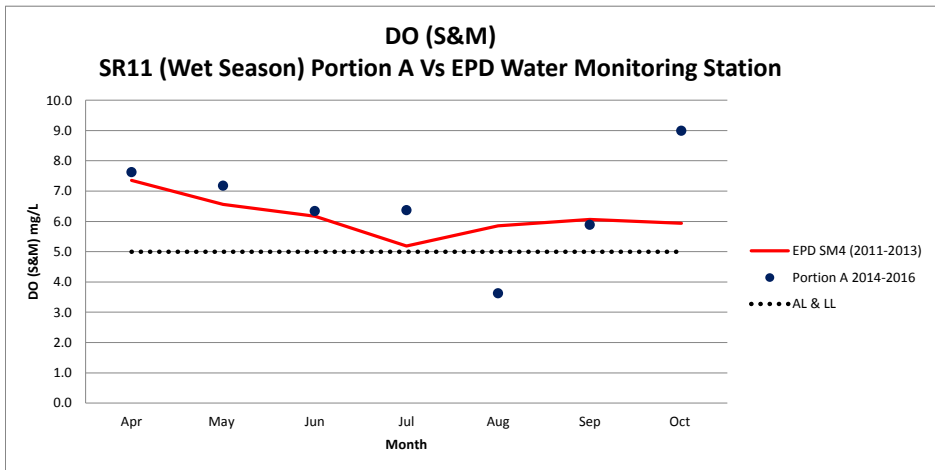
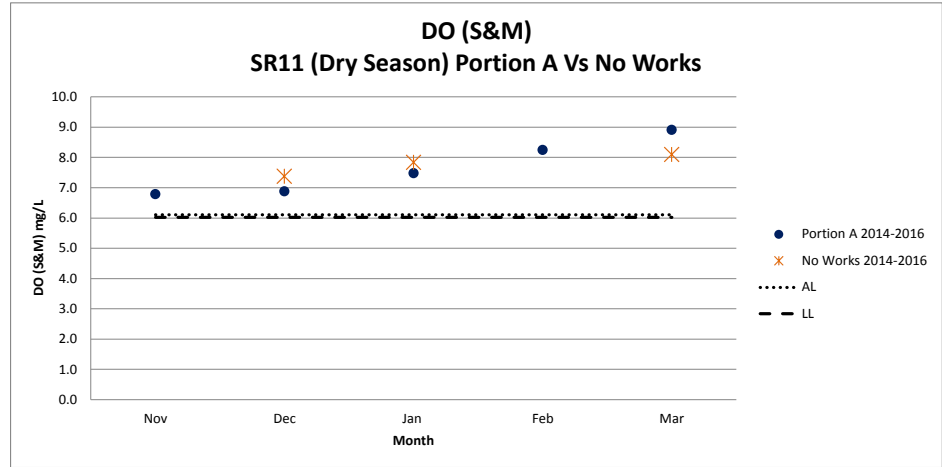
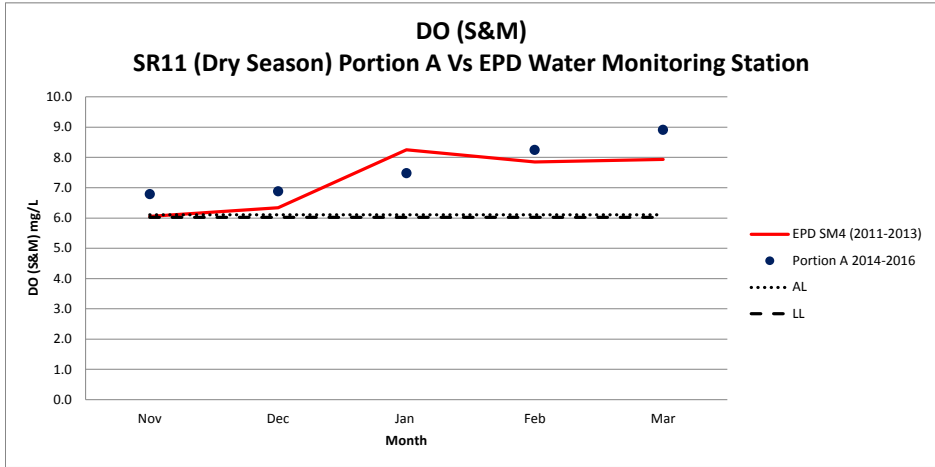
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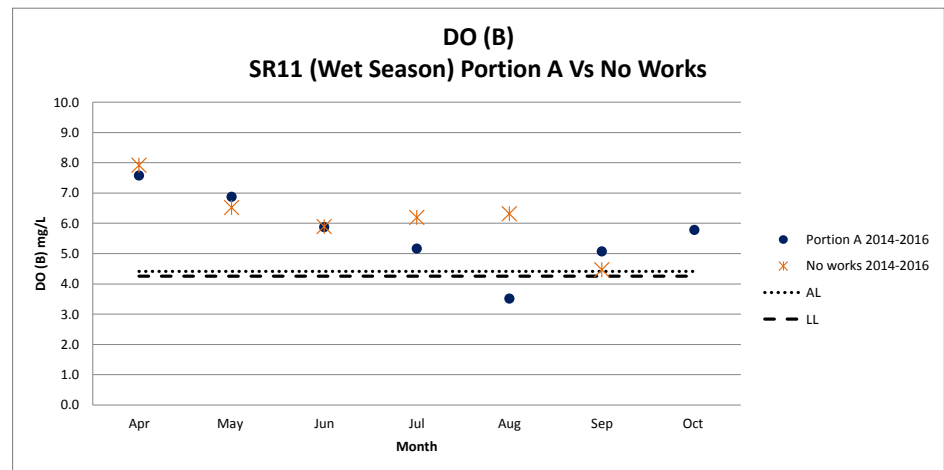
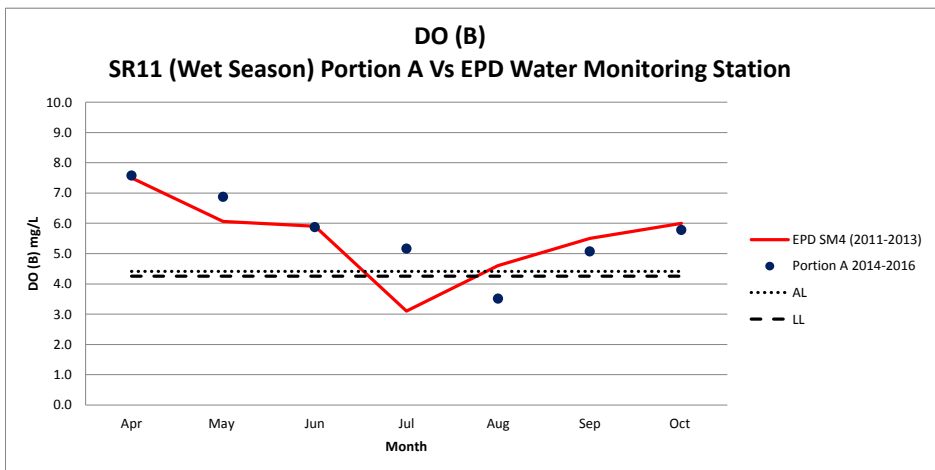
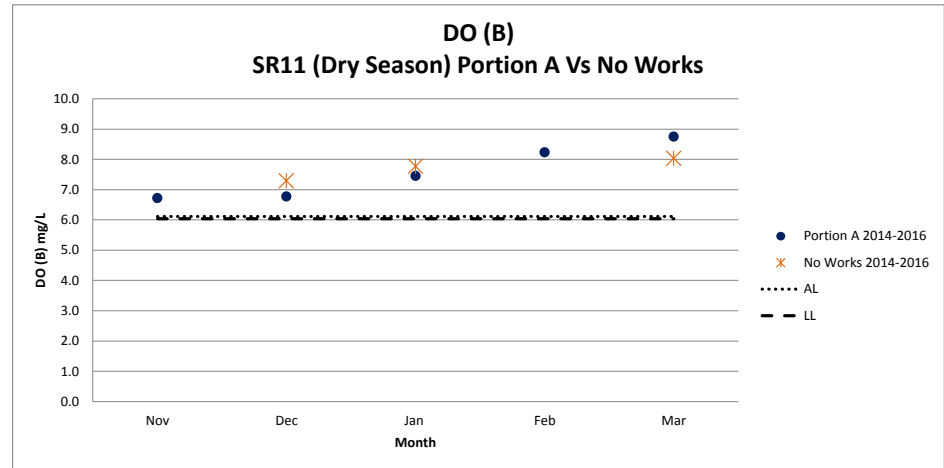
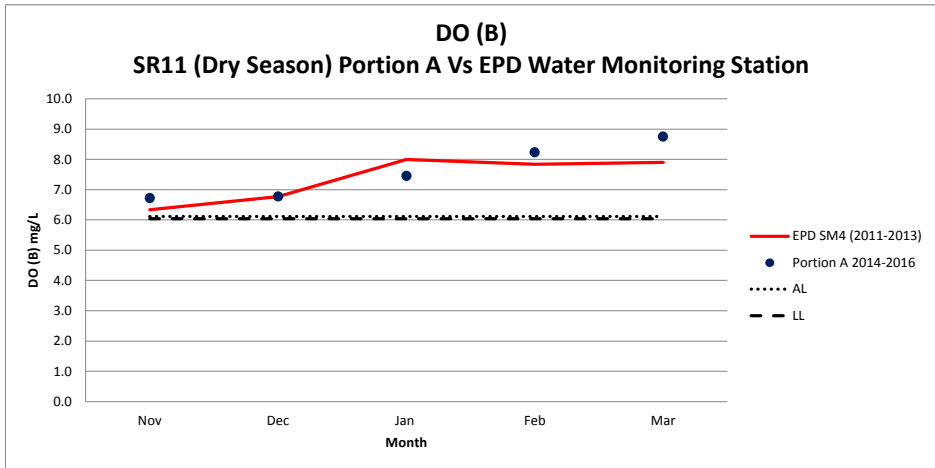
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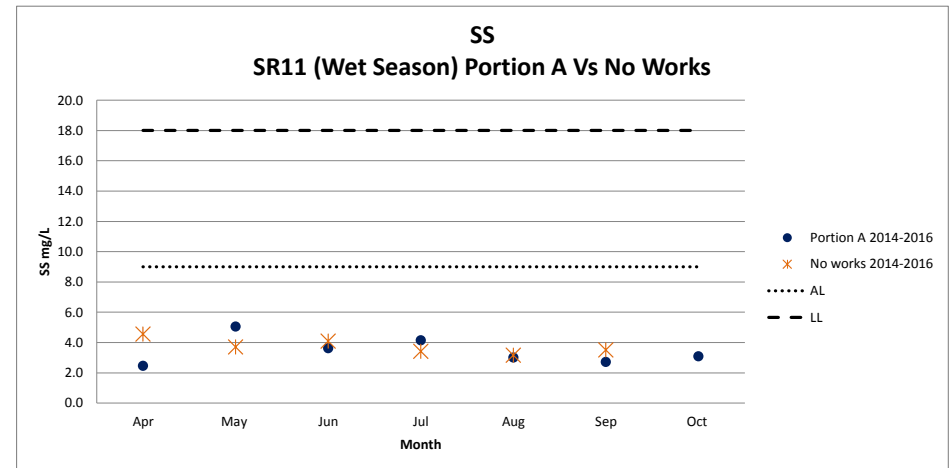
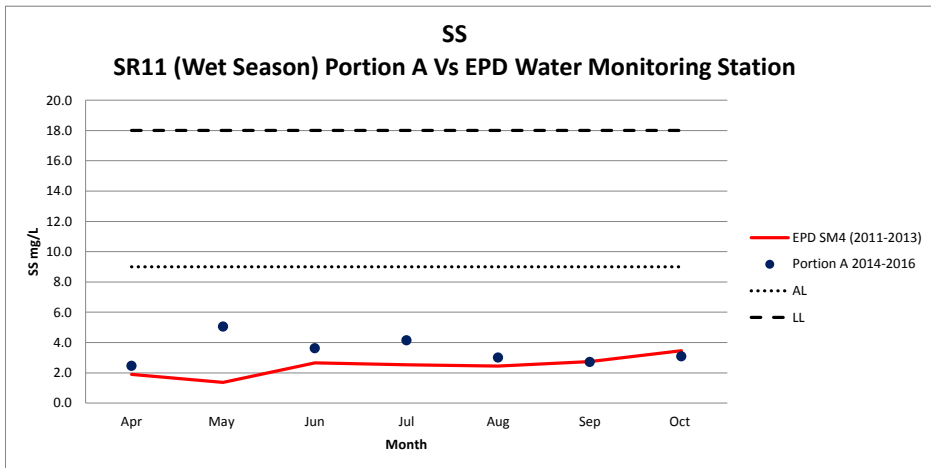
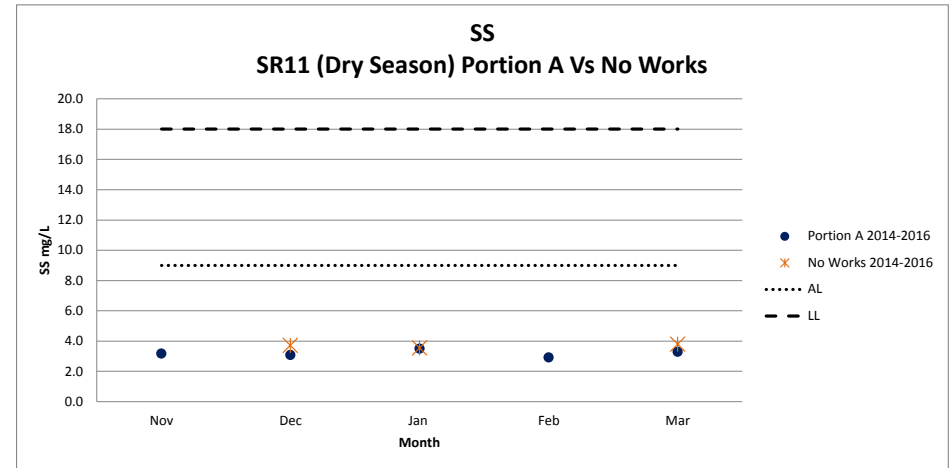
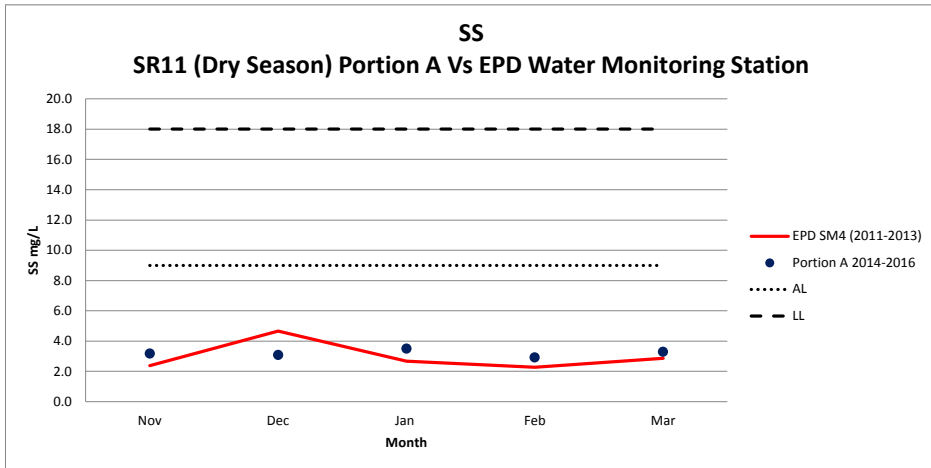
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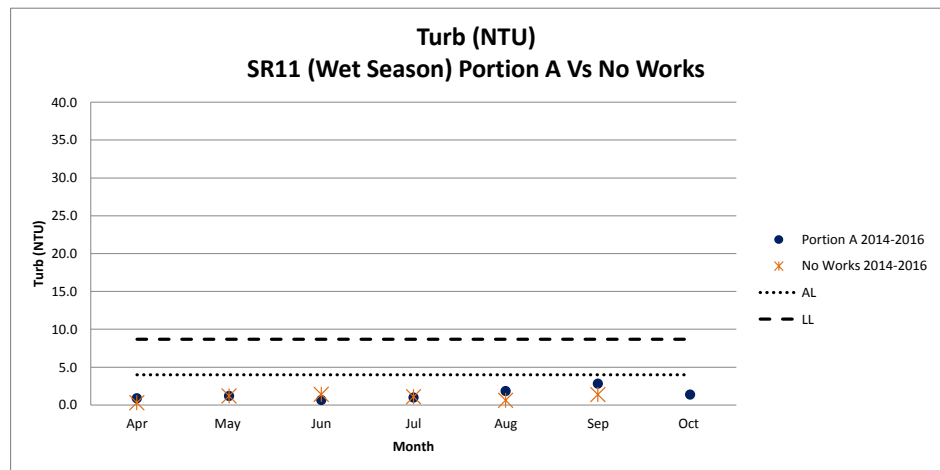
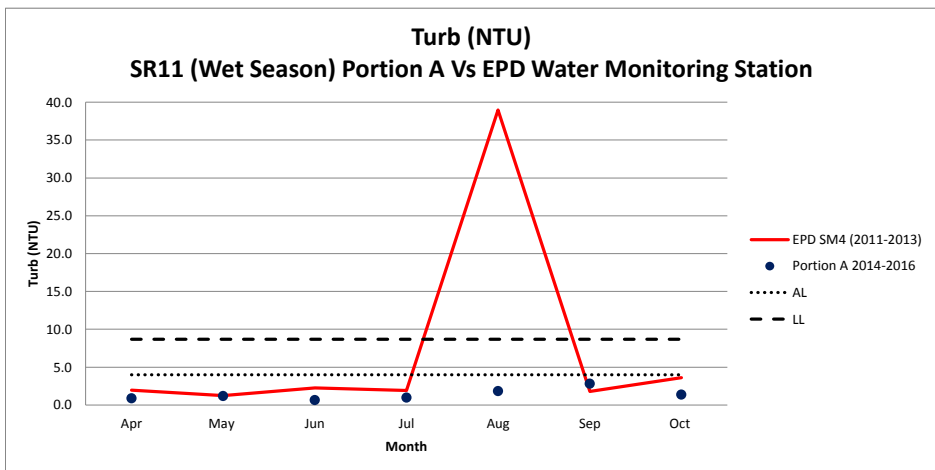
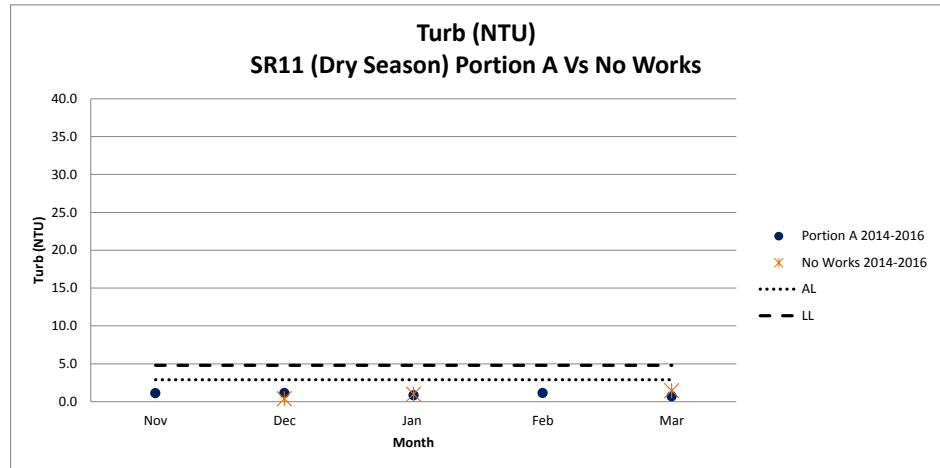
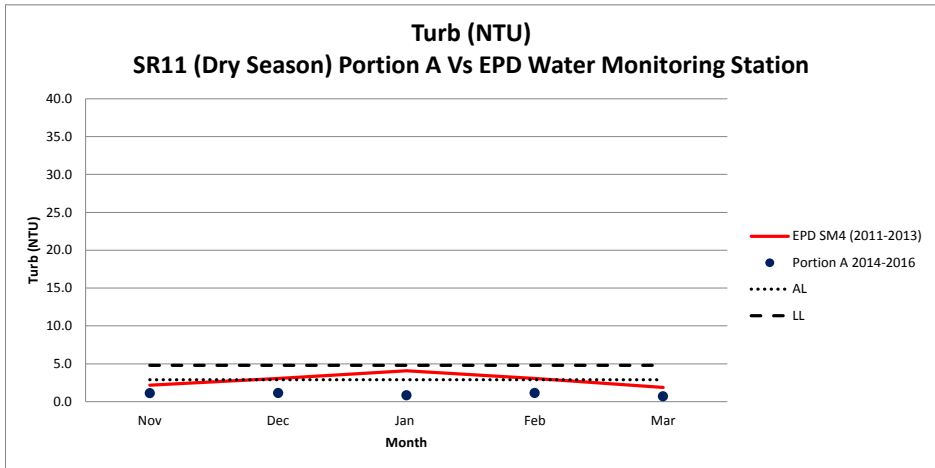
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

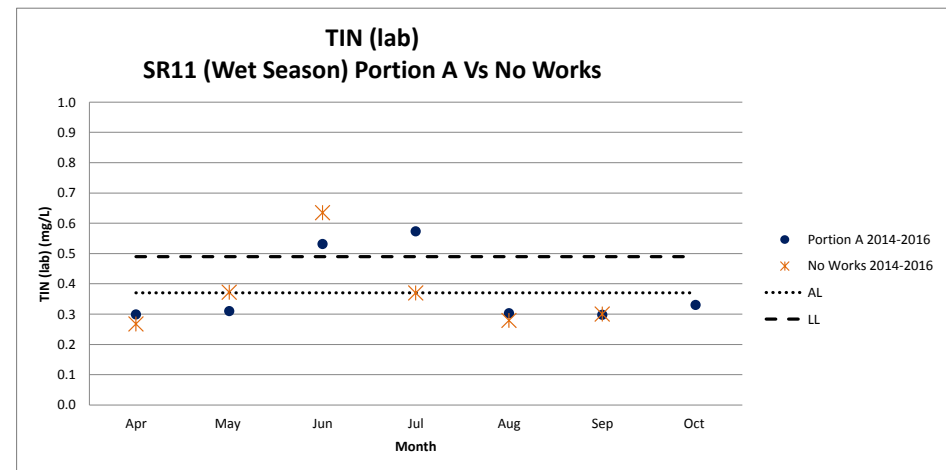
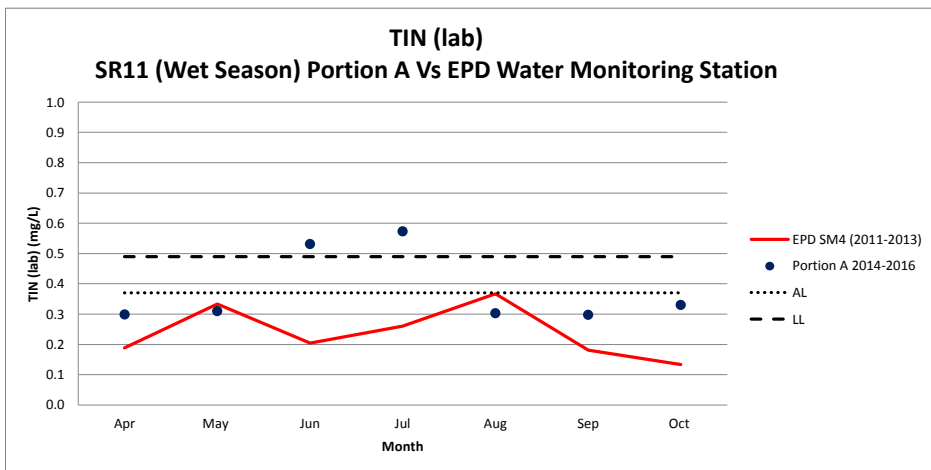
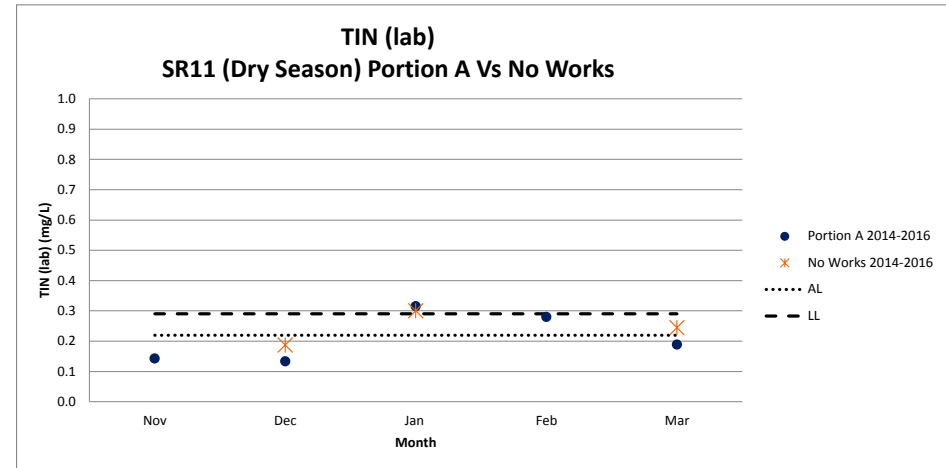
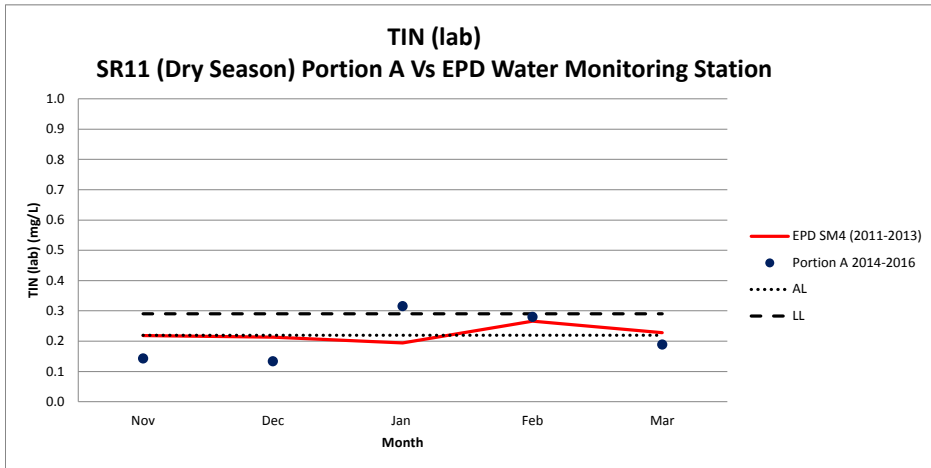
### SR11 – Graphical Results

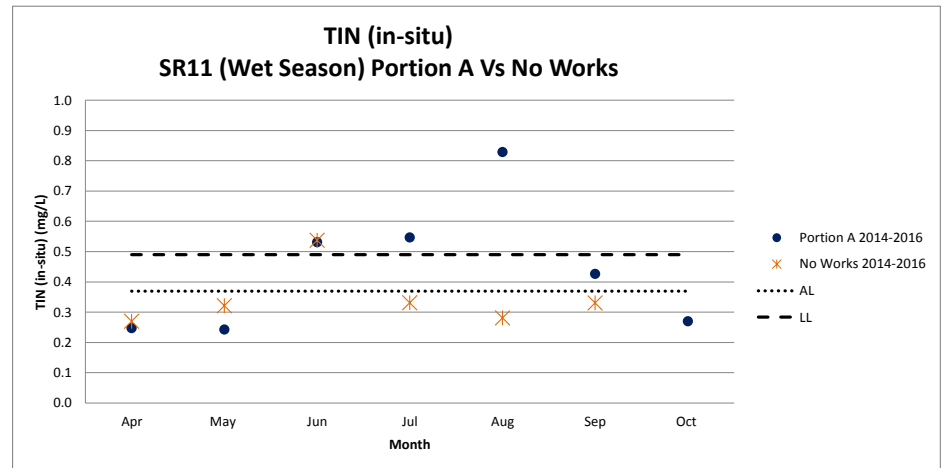
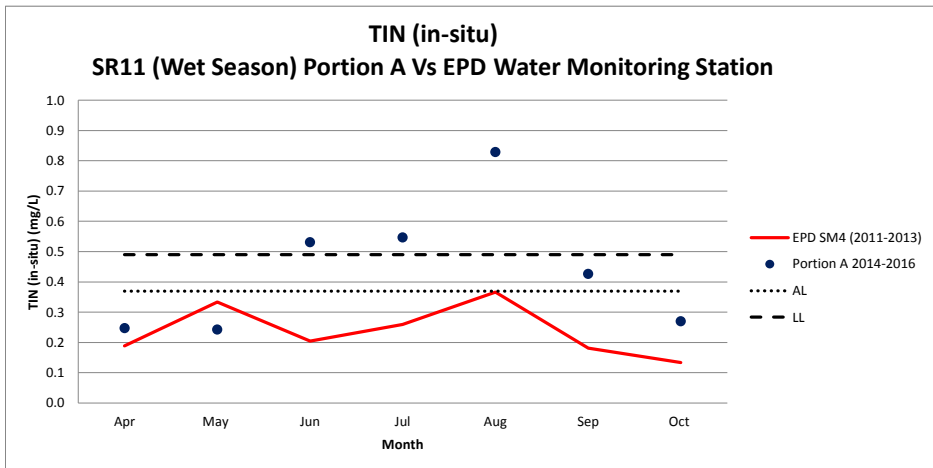
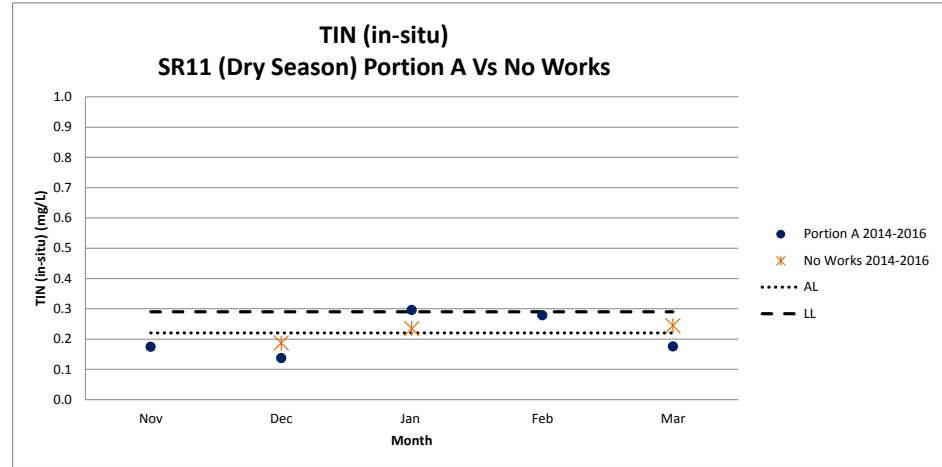
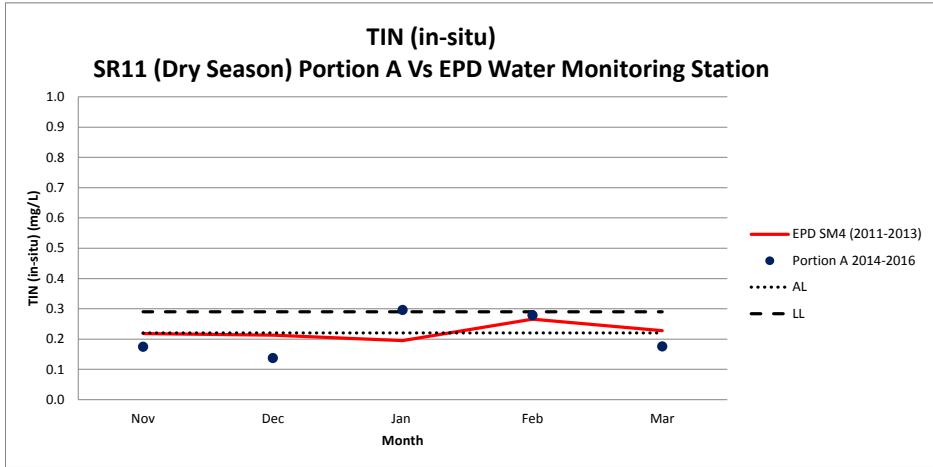














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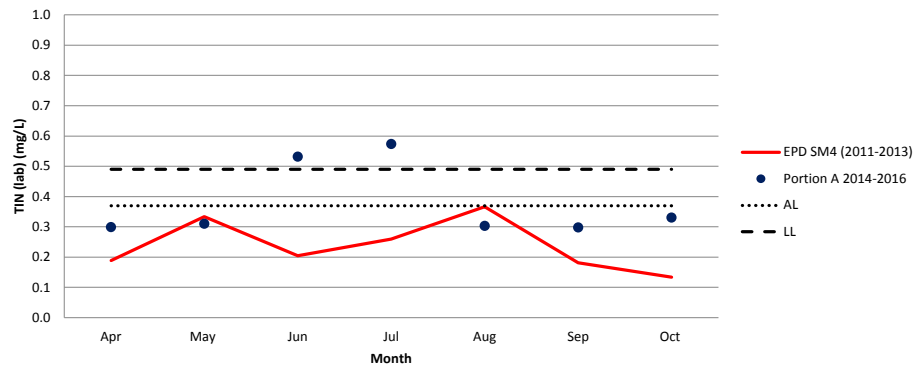
Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

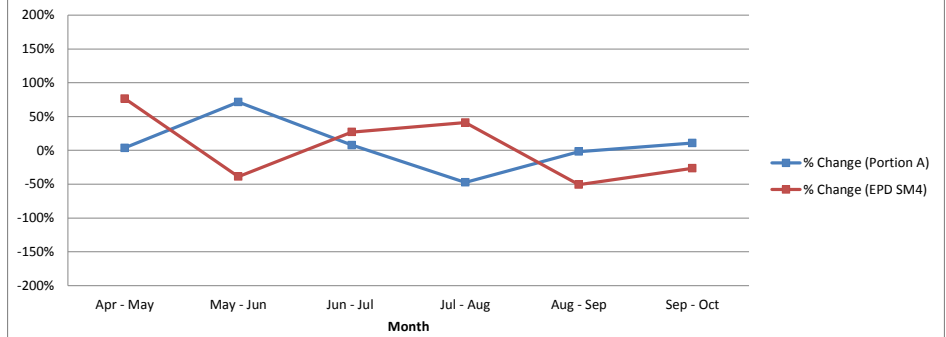
The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

SR11 – TIN Percentage Change in Wet Season

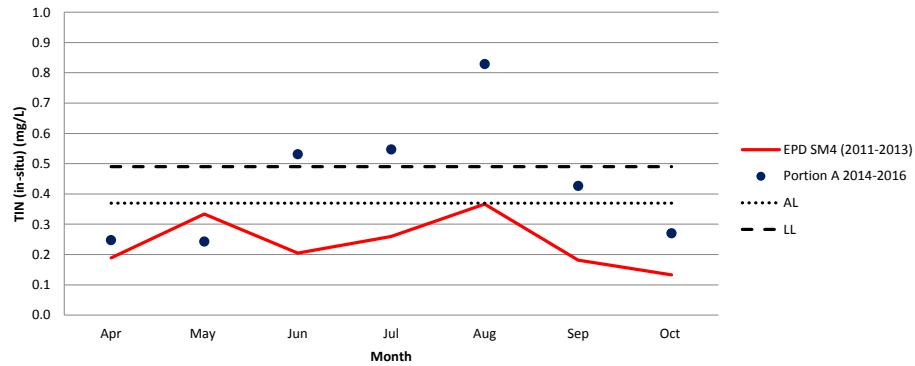
**TIN (lab) - SR11 (Wet Season)  
Portion A Vs EPD Water monitoring Station**



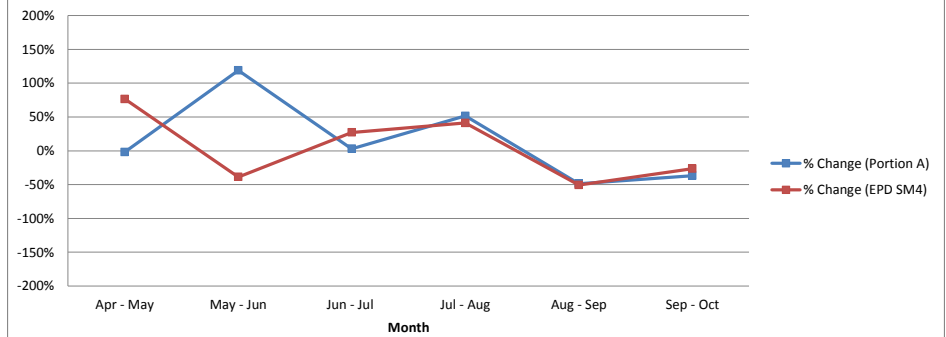
**TIN (lab) - SR11 (Wet Season)  
Monthly Percentage Change of Portion A Vs EPD Water monitoring Station**



**TIN (in-situ) - SR11 (Wet Season)  
Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) - SR11 (Wet Season)  
Monthly Percentage Change of Portion A Vs EPD Water monitoring Station**



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Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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### Appendix C

#### Relevant Notification of Exceedances

## MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
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Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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### Relevant Notification of Exceedances - SR6

**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR6a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	08:10 Mid-Flood , 15:20 Mid-Ebb
Monitoring Location:	SR6 – Kau Yi Chau, Corals
Parameter:	Dissolved Oxygen (S&M) and (B) and Turbidity
Action Level / Limit Level:	DO (S&M): 6.11/6.02 DO (B): 6.11/6.04 Turbidity: 2.9/4.8
Measured Level:	08:10 Mid-Flood: DO (S&M): 4.08 – LL Exceedance DO (B): 3.89 – LL Exceedance Turbidity: 4.3 – AL Exceedance 15:20 Mid-Ebb: DO (S&M): 4.01 – LL Exceedance DO (B): 3.46 – LL Exceedance Turbidity: 4.2 – AL Exceedance
Action taken / to be taken:	Monitoring equipment was checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level and the value of SR6, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions. <u>Turbidity</u> At Mid-Flood, Turbidity at C2 and C3 were 5.2 NTU and 4.7 NTU respectively which were higher than the Limit Level and Action Level of SR6 respectively while at Mid-Ebb; turbidity at C1 was 8.9 which were higher than the Limit Level and value of SR6 respectively, indicating the background turbidity was high at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.
Remarks:	Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&M): 4.08, DO (B): 3.87 and Turbidity: 4.2 and Mid-Ebb: DO (S&M): 3.99, DO (B): 3.45 and Turbidity: 4.3).

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m <sup>3</sup> /day.
--	---

Certified by: Colin Yung  
Designation: Environmental Team Leader  
Signature:

A handwritten signature in black ink, appearing to be the initials "CY" followed by a flourish.

Date: 15/08/2014

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Fax : (852)-24508032  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140911 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	11-9-2014				
Time: (hh:mm)	Mid-Flood: 07:34		Mid-Ebb: 14:00		
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L		Turbidity: 2.9/4.8 NTU; : / mg/L		
Measured Level of exceeded parameters (tick // fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): 4.31 AL / (C)	DO (B): 3.92 AL / (C)	DO (S&M): 4.08 AL / (C)	DO (B): 3.93 AL / (C)	
	Turbidity: 8.2 AL / (C)	: AL / LL	Turbidity: 7.9 AL / (C)	: AL / LL	
	: AL / LL	: AL / LL	: AL / LL	: AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	
		✓	✓	✓	
	Findings / Evidences				
	<input type="checkbox"/> Station at Upstream Location at ME				
	<input checked="" type="checkbox"/> Upstream Control Station (exceeded AL/LL)	MF: 4.23mg/L (C) ME: 3.78mg/L (C)	MF: 3.27mg/L (C) ME: 3.78mg/L (C)	MF: 8.4 NTU (C) ME: 10.6 NTU (C)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	
<input type="checkbox"/> No Dredging Works carried out.					
<input type="checkbox"/> Others					

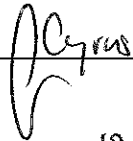
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17 M.S. Castle Peak Road,  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.						
	Mid-Flood:	DO (S&M):	<u>4.32</u>	DO (B):	<u>3.93</u>	Turbidity:	<u>8.1</u>
		:		:		:	
	Mid-Ebb:	DO (S&M):	<u>4.07</u>	DO (B):	<u>3.93</u>	Turbidity:	<u>7.8</u>
		:		:		:	
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>B</u> / / of the Project. According to Contractor, dredged rate was <u>400</u> / / m <sup>3</sup> /day at Portion / / respectively.					
	<input type="checkbox"/>						

Certified by:  697

Signature:

Date (dd/mm/yyyy): 19 / 09 / 2014



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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	30/09/2014				
Time: (hh:mm)	Mid-Flood: 9:40		Mid-Ebb: 17:50		
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L;	Turbidity: 2.9/4.8 NTU;			
	DO (B): 6.11/6.04 mg/L;				
	: / mg/L		: / mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): 5.05 AL (L)	DO (B): 4.83 AL (L)	DO (S&M): 5.29 AL / (L)	DO (B): 5.08 AL (L)	
	Turbidity: 6.3 AL (LL)	: AL / LL	Turbidity: 5.2 AL / (L)	: AL / LL	
	: AL / LL	: AL / LL	: AL / LL	: AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	
		✓	✓	✓	
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at ME				
	<input checked="" type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	
	<input type="checkbox"/> No Dredging Works carried out.				
<input type="checkbox"/> Others					

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood: DO (S&M):	<u>5.05</u>	DO (B): <u>4.83</u> Turbidity: <u>6.3</u>
	Mid-Ebb: DO (S&M):	<u>5.29</u>	DO (B): <u>5.08</u> Turbidity: <u>5.2</u>
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>A</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>  </u> / <u>  </u> respectively. (in-situ)	
	<input type="checkbox"/>	_____ _____ _____ _____	

Prepared by: [Signature]  
 Signature:  
 Date (dd/mm/yyyy): 09/10/2014

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
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Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151103 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	03/11/2015				
Time: (hh:mm)	Mid-Flood: 14:25	Mid-Ebb: 06:28			
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	Turbidity: 2.9 / 4.8 NTU			
	DO (B): 6.11 / 6.04 mg/L				
	TSS : 9 / 18 mg/L				mg/L
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:			
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	
	Turbidity: 3.4 AL / LL		Turbidity: 3.9 AL / LL		
	TSS : 11 AL / LL				
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at ME			✓	
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				
	<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream 3.7NTU (G5)	Upstream 8 mg/L (G5)
	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: 3.2NTU (G3)	Downstream: 5 mg/L (G3)	
<input type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:	3.4
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:	3.9
	<input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 2A2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A2) was 646m3/day.</u>				

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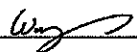
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 Fax : (852)-24508032  
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	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 26/11/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 26/11/2015

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151112 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	12/11/2015				
Time: (hh:mm)	Mid-Flood: 06:54	Mid-Ebb: 12:58			
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	Turbidity: 2.9 / 4.8 NTU			
	DO (B): 6.11 / 6.04 mg/L				
	TSS : 9 / 18 mg/L				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	
	Turbidity: 4.9 AL / LL		Turbidity: 3.2 AL / LL		
	TSS : 13 AL / LL		TSS : 12 AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at ME			✓	✓
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				
<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream 7.1NTU (G4)	Upstream 13mg/L (G4)	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: 3.9NTU (G2)	Downstream: 5mg/L (G2)	
<input type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.		✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood: DO (S&M): _____	DO (B): _____	Turbidity: 4.9		
	Mid-Ebb: DO (S&M): _____	DO (B): _____	Turbidity: 3.2		
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 3B) of the Project.</b>				
	<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 3B) was 1269m3/day.</b>				
	_____				
	_____				

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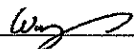
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 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 01/12/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 01/12/2015

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

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Fax : (852)-24508032  
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Relevant Notification of Exceedances - SR7

**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR7a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	07:50 Mid-Flood , 14:30 Mid-Ebb
Monitoring Location:	SR7 – Green Island, Corals
Parameter:	Dissolved Oxygen (S&M) & (B) and Turbidity
Action Level / Limit Level:	DO: (S&M) 6.11/6.02 DO: (B) 6.11/6.04 Turbidity: 2.9/4.8
Measured Level:	07:50 Mid-Flood: DO (S&M): 3.87 – LL Exceedance DO (B): 3.44 – LL Exceedance Turbidity: 3.2 – AL Exceedance 14:30 Mid-Ebb: DO (S&M): 3.74 – LL Exceedance DO (B): 3.46 – LL Exceedance Turbidity: 3.2 – AL Exceedance
Action taken / to be taken:	Monitoring equipment was checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, SR7 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level and the value of SR7, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions. <u>Turbidity</u> At Mid-Flood, SR7 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, Turbidity at C2 and C3 were 5.2 NTU and 4.7 NTU respectively which were higher than the Limit Level and Action Level of SR7 respectively while at Mid-Ebb; turbidity at C1 was 8.9 which were higher than the Limit Level and value of SR7 respectively, indicating the background turbidity was high at the monitoring period. At Mid-Ebb, Turbidity at G3 was 9.0 NTU while 3.0 NTU was recorded at G6; no increasing trend of turbidity was shown across the project. The exceedance was not considered due



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Fax : (852)-24508032  
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	to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.
Remarks:	Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&M): 3.86, DO (B): 3.44 and Turbidity: 3.2 and Mid-Ebb: DO (S&M): 3.75, DO (B):3.47 and Turbidity: 3.3). Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m <sup>3</sup> /day.

Certified by: Colin Yung  
Designation: Environmental Team Leader

Signature: 

Date: 15/08/2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140411 /IM/SR7					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11-9-2014					
Time: (hh:mm)	Mid-Flood:	07:15	Mid-Ebb:	14:50		
Monitoring Location:	SR7 – Green Island, Corals					
Action Level / Limit Level:	DO (S&M):	6.11/6.02 mg/L;	Turbidity:	2.9/4.8 NTU;		
	DO (B):	6.11/6.04 mg/L;				
		/ mg/L		/ mg/L		
Measured Level of exceeded parameters (tick // fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	4.04 AL / (L)	DO (B):	4.01 AL / (L)	DO (S&M):	4.06 AL / (L)
	Turbidity:	AL / LL	:	AL / LL	Turbidity:	AL / LL
	:	AL / LL	:	AL / LL	:	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity		
		✓	✓			
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓			
	<input checked="" type="checkbox"/> Upstream Control Station (exceeded AL/LL)	MF: 4.23 mg/L (B) ME: 3.88 mg/L (C)	MF: 3.27 mg/L (B) ME: 3.78 mg/L (C)			
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) NTU Downstream: ( ) NTU		
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood:	DO (S&M): <u>4.05</u>	DO (B): <u>4.00</u> Turbidity: _____
		:	:
	Mid-Ebb:	DO (S&M): <u>4.05</u>	DO (B): <u>4.00</u> Turbidity: _____
	:	:	
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>B</u> / / of the Project. According to Contractor, dredged rate was <u>1400</u> / / m <sup>3</sup> /day at Portion / / respectively.	
	<input type="checkbox"/>	_____	
		_____	
		_____	
		_____	

Certified by: Cyrus Lo

Signature:

Date (dd/mm/yyyy): 19 / 09 / 2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR7					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	30/09/2014					
Time: (hh:mm)	Mid-Flood: 9:45		Mid-Ebb: 17:36			
Monitoring Location:	SR7 – Green Island, Corals					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L		Turbidity: 2.9/4.8 NTU; : / mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): 5.04 AL / (LL)	DO (B): 5.03 AL (LL)	DO (S&M): 5.04 AL / (LL)	DO (B): 5.03 AL / (LL)		
	Turbidity: 6.9 AL / (LL)	: AL / LL	Turbidity: 7.0 AL / LL	: AL / LL		
	: AL / LL	Words: AL / LL	: AL / LL	: AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity		
		✓	✓	✓		
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓		
	<input checked="" type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)		
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU		
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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5 Lok Yi Street, Tel : (852)-24508238  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	<u>5.04</u>	DO (B):	<u>5.03</u>	Turbidity: <u>6.9</u>
		:		:		:
	Mid-Ebb:	DO (S&M):	<u>5.04</u>	DO (B):	<u>5.03</u>	Turbidity: <u>7.0</u>
	:		:		:	
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>A</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>  </u> / <u>  </u> respectively.				(in-situ)
	<input type="checkbox"/>	_____				
		_____				
		_____				
		_____				

Prepared by: Cyrus Lai

Signature:

Date (dd/mm/yyyy): 09 / 10 / 2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151103 /IM/SR7							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	03/11/2015							
Time: (hh:mm)	Mid-Flood: 14:09		Mid-Ebb: 06:03					
Monitoring Location:	SR7 – Green Island, Corals							
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L		Turbidity: 2.9 / 4.8 NTU					
	DO (B): 6.11 / 6.04 mg/L							
	TSS : 9 / 18 mg/L		: / mg/L					
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	4.4 AL / LL	:	AL / LL	Turbidity:	6.0 AL / LL	:	AL / LL
	TSS :	10 AL / LL	:	AL / LL	TSS :	11 AL / LL	:	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:							
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TSS			
	Findings / Evidences							
	<input checked="" type="checkbox"/> Station at Upstream Location at MF			✓	✓			
	<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL							
<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream:	( ) mg/L	Upstream:	( ) mg/L	Upstream	3.4NTU (G2)	Upstream	6 mg/L (G2)
	Downstream:	( ) mg/L	Downstream:	( ) mg/L	Downstream:	3.3NTU (G4)	Downstream:	5 mg/L (G4)
<input type="checkbox"/> No Dredging Works carried out.								
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓			
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.							
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:	4.4			
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:	6.0			
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion A (Zone 2A2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A2) was 646m3/day.						

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity		
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 26 / 11 / 2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 26 / 11 / 2015

- Notes:
- Abbreviation:
  - AL – Action Level
  - DO (B) – Dissolved Oxygen (Bottom)
  - DO (S&M) – Dissolved Oxygen (Surface & Middle)
  - LL – Limit Level
  - ME – Mid Ebb
  - MF – Mid Flood
  - NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
  - NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
  - TIN (In-situ) – Total inorganic Nitrogen (In-situ results)
  - TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
  - TSS – Total Suspended Solids
  - Wet Season: April to October; Dry Season: November to March

## MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

### Relevant Notification of Exceedances - SR8



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR8a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	10:35 Mid-Flood , 13:25 Mid-Ebb
Monitoring Location:	SR8 – Shek Kok Tsui, Corals
Parameter:	Dissolved Oxygen (S&M) & (B) and Turbidity
Action Level / Limit Level:	DO: (S&M) 6.11/6.02 DO: (B) 6.11/6.04 Turbidity: 2.9/4.8
Measured Level:	10:35 Mid-Flood: DO (S&M): 3.83 – LL Exceedance DO (B): 2.46 – LL Exceedance Turbidity: 4.7 – AL Exceedance 13:25 Mid-Ebb: DO (S&M): 3.76 – LL Exceedance DO (B): 2.42 – LL Exceedance Turbidity: 4.8 – AL Exceedance
Action taken / to be taken:	Monitoring equipment is checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, SR8 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level of SR8, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions <u>Turbidity</u> At Mid-Flood, SR8 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, Turbidity at C2 and C3 were 5.2 NTU and 4.7 NTU respectively which were higher than the Limit Level and Action Level of SR8 respectively while at Mid-Ebb; turbidity at C1 was 8.9 which were higher than the Limit Level and value of SR8 respectively, indicating the background turbidity was high at the monitoring period. At Mid-Ebb, Turbidity at G3 was 9.0 NTU while 3.0 NTU was recorded at G6; no increasing trend of turbidity was shown across the project. The exceedance was not considered due

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



	to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.
Remarks:	Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&M): 3.83, DO (B): 2.46 and Turbidity: 4.7 and Mid-Ebb: DO (S&M): 3.75, DO (B):2.42 and Turbidity: 4.7). Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m <sup>3</sup> /day.

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date: 15/08/2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140911 /IM/SR8					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11-9-2014					
Time: (hh:mm)	Mid-Flood:	09:26	Mid-Ebb:	12:00		
Monitoring Location:	SR8 – Shek Kok Tsui, Corals					
Action Level / Limit Level:	DO (S&M):	6.11/6.02 mg/L;	Turbidity:	2.9/4.8 NTU;		
	DO (B):	6.11/6.04 mg/L;				
Measured Level of exceeded parameters (tick // fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	4.11 AL / <input checked="" type="checkbox"/>	DO (B):	3.17 AL / <input checked="" type="checkbox"/>	DO (S&M):	2.73 AL / <input checked="" type="checkbox"/>
	Turbidity:	4.2 AL / <input checked="" type="checkbox"/>			Turbidity:	4.0 AL / <input checked="" type="checkbox"/>
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity		
		✓	✓	✓		
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓		
	<input checked="" type="checkbox"/> Upstream Control Station (exceeded AL/LL)	MF: 4.23 mg/L (C) ME: 3.78 mg/L (C)	MF: 3.27 mg/L (C) ME: 3.78 mg/L (C)	MF: 8.4 NTU (C) ME: 10.6 NTU (C)		
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ mg/L Downstream: _____ mg/L	Upstream: _____ mg/L Downstream: _____ mg/L	Upstream: _____ NTU Downstream: _____ NTU		
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Tel : (852)-24508238  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood:	DO (S&M): <u>4.10</u>	DO (B): <u>3.17</u> Turbidity: <u>4.2</u>
	Mid-Ebb:	DO (S&M): <u>3.73</u>	DO (B): <u>3.02</u> Turbidity: <u>4.0</u>
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>8</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1400</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>  </u> / <u>  </u> / <u>  </u> respectively.	
	<input type="checkbox"/>	_____ _____ _____ _____	

Certified by: Cyrus Lai  
 Signature: [Signature]  
 Date (dd/mm/yyyy): 19 / 09 / 2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20140930 /IM/SR6				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	30/09/2014				
Time: (hh:mm)	Mid-Flood: 9:40		Mid-Ebb: 17:50		
Monitoring Location:	SR6 – Kau Yi Chau, Corals				
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L		Turbidity: 2.9/4.8 NTU; : / mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): 5.05 AL (L)	DO (B): 4.83 AL (L)	DO (S&M): 5.29 AL / (L)	DO (B): 5.08 AL (L)	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	
		✓	✓	✓	
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at ME				
	<input checked="" type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at MF	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	
<input type="checkbox"/> No Dredging Works carried out.					
<input type="checkbox"/> Others					

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street, Tel : (852)-24508238  
 17 M.S. Castle Peak Road, Fax : (852)-24508032  
 Tai Lam, Tuen Mun, N.T., Hong Kong. Email : mcl@fugro.com.hk



Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood: DO (S&M): <u>5.05</u>	DO (B): <u>4.83</u>	Turbidity: <u>6.3</u>
	Mid-Ebb: DO (S&M): <u>5.29</u>	DO (B): <u>5.08</u>	Turbidity: <u>5.2</u>
	<input checked="" type="checkbox"/> Dredging works conducted at Portion <u>A</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>  </u> / <u>  </u> respectively. (in-situ)		
<input type="checkbox"/> _____ _____ _____ _____			

Prepared by: [Signature]  
 Signature:  
 Date (dd/mm/yyyy): 09/10/2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR8					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	30/09/2014					
Time: (hh:mm)	Mid-Flood: 11:26		Mid-Ebb: 16:20			
Monitoring Location:	SR8 – Shek Kok Tsui, Corals					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L;		Turbidity: 2.9/4.8 NTU;			
	DO (B): 6.11/6.04 mg/L;		_____ : _____ / _____ mg/L			
	_____ : _____ / _____ mg/L		_____ : _____ / _____ mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): 5.54 AL / (L)	DO (B): 5.55 AL / (L)	DO (S&M): 5.83 AL / (L)	DO (B): 5.57 AL / (L)		
	Turbidity: 5.9 AL / (L)	_____ : _____ AL / LL	Turbidity: 5.3 AL / (L)	_____ : _____ AL / LL		
	_____ : _____ AL / LL	Words : _____ AL / LL	_____ : _____ AL / LL	Words : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity		
		✓	✓	✓		
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)		
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU Downstream: _____ ( ) NTU		
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood: DO (S&M):	<u>5.54</u>	DO (B): <u>5.55</u> Turbidity: <u>5.9</u>
	Mid-Ebb: DO (S&M):	<u>5.83</u>	DO (B): <u>5.57</u> Turbidity: <u>5.3</u>
	<input checked="" type="checkbox"/> Dredging works conducted at Portion <u>A</u> / <u>   </u> / <u>   </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>   </u> / <u>   </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>   </u> / <u>   </u> respectively. (in-situ)		
<input type="checkbox"/> _____ _____ _____ _____			

Prepared by: Cyrene Lau  
 Signature: [Signature]  
 Date (dd/mm/yyyy): 09/10/2014



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Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

### Relevant Notification of Exceedances - SR9

**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR9a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	09:20 Mid-Flood , 14:35 Mid-Ebb
Monitoring Location:	SR9 – Cheung Sha Wan FCZ
Parameter:	Dissolved Oxygen (S&M) & (B) and Turbidity and Total Inorganic Nitrogen (In-situ) & (Lab)
Action Level / Limit Level:	DO (S&M): 6.11/6.02; DO (B): 6.11/6.04 Turbidity: 2.9/4.8 TIN (Wet Season): 0.37/0.49
Measured Level:	09:20 Mid-Flood: DO (S&M): 3.87 – LL Exceedance DO (B): 3.44 – LL Exceedance Turbidity: 4.4 – AL Exceedance TIN (In-situ): 0.54 – LL Exceedance TIN (Lab): 0.42 – AL Exceedance 14:35 Mid-Ebb: DO (S&M): 3.92 – LL Exceedance DO (B): 2.86 – LL Exceedance Turbidity: 3.7 – AL Exceedance TIN (In-situ): 0.53 – LL Exceedance TIN (Lab): 0.41 – AL Exceedance
Action taken / to be taken:	Monitoring equipment is checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, SR9 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level of SR9, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions <u>Turbidity</u> At Mid-Flood, SR9 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, Turbidity at C2 and C3 were 5.2 NTU and 4.7 NTU respectively which were higher than the Limit Level and Action

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 17 M.S. Castle Peak Road,  
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	<p>Level of SR9 respectively while at Mid-Ebb; turbidity at C1 was 8.9 which were higher than the Limit Level and value of SR9 respectively, indicating the background turbidity was high at the monitoring period. At Mid-Ebb, Turbidity at G3 was 9.0 NTU while 6.3 NTU was recorded at G5 (located between SR9 and the Project); no increasing trend of turbidity was shown across the project. The exceedance was not considered due to the project.</p> <p><u>Total Inorganic Nitrogen</u></p> <p>At Mid-Flood, SR9 was situated at upstream of the Project, the water quality would not be affected by the construction.</p> <p>At Mid-Flood TIN level at G6 was 0.95 while at Mid-Ebb TIN level at G1 was 1.00 mg/L which were higher than the Limit Level and the value of SR9 indicating the background TIN was high at the monitoring period. The exceedance was not considered due to the project.</p> <p>The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.</p>
<p>Remarks:</p>	<p>Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&amp;M): 3.87, DO (B): 3.44 and Turbidity: 4.3, TIN: 0.51 and Mid-Ebb: DO (S&amp;M): 3.93, DO (B): 2.88, Turbidity: 3.7 and TIN: 0.51).</p> <p>Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m<sup>3</sup>/day.</p>

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date: 14/08/2014

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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140911 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11-9-2014					
Time: (hh:mm)	Mid-Flood:	08:32	Mid-Ebb:	12:55		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11/6.02 mg/L;	TIN	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11/6.04 mg/L;	Turbidity:	2.9/4.8 NTU;		
		mg/L		mg/L		
Measured Level of exceeded parameters (tick // fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	4.9 AL / (L)	DO (B):	4.6 AL / (L)	DO (S&M):	4.6 AL / (L)
	Turbidity:	4.9 AL / LL	TIN(In-situ):	0.7 AL / (L)	Turbidity:	6.1 AL / (L)
	TIN(Lab):	AL / LL		TIN(Lab):	AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
	Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN
		✓	✓	✓	✓	
Findings / Evidences						
<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓	✓	✓	✓	
<input checked="" type="checkbox"/> Upstream Control Station (at station) exceeded AL/LL/TIN		MF: 4.2 mg/L (B) ME: 3.8 mg/L (C1)	MF: 3.2 mg/L (B) ME: 3.7 mg/L (C1)	MF: 8.4 NTU (B) ME: 10.6 NTU (C1)	ME: 0.7 mg/L (G1)	
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME		Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU Downstream: _____ ( ) NTU	Upstream: _____ ( ) mg/L Downstream: _____ ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.						
	Mid-Flood:	DO (S&M):	<u>4.80</u>	DO (B):	<u>4.63</u>	Turbidity:	<u>4.7</u>
		TIN:	<u>0.71</u>	:		:	
	Mid-Ebb:	DO (S&M):	<u>4.66</u>	DO (B):	<u>4.60</u>	Turbidity:	<u>5.9</u>
		TIN:	<u>0.66</u>	:		:	
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>B</u> / / of the Project. According to Contractor, dredged rate was <u>1400</u> / / m <sup>3</sup> /day at Portion / / respectively.					
	<input type="checkbox"/>	_____					
		_____					
		_____					
		_____					

Certified by: Cyrus Lau  
 Signature: \_\_\_\_\_  
 Date (dd/mm/yyyy): 19/09/2014

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	30/09/2014					
Time: (hh:mm)	Mid-Flood: 10:30		Mid-Ebb: 17:08			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 6.11/6.04 mg/L;	Turbidity:	2.9/4.8 NTU;			
	: / mg/L	:	/ mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: 4.5 (A) / LL	TIN(In-situ): 0.56 AL / (I)	Turbidity: 4.5 (A) / LL	TIN(In-situ): 0.56 AL / (I)		
	TIN(Lab): AL / LL	:	TIN(Lab): AL / LL	:		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN	
				✓	✓	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF			✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN exceeded AL/LL)			MF:6.8 NTU(C2) ME:4.0NTU(C1)	MF:0.85mg/L(G6) ME:1.20mg/L(G1)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: 7.9 (G6 )NTU Downstream: 6.6 (G1 )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.			
	Mid-Flood:	DO (S&M): _____ TIN: <u>0.56</u>	DO (B): _____ _____	Turbidity: <u>4.5</u> _____
	Mid-Ebb:	DO (S&M): _____ TIN: <u>0.56</u>	DO (B): _____ _____	Turbidity: <u>4.5</u> _____
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>A</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>  </u> / <u>  </u> respectively. (in-situ)		
	<input type="checkbox"/>	_____		

Prepared by: Cyrus Lau  
 Signature: \_\_\_\_\_  
 Date (dd/mm/yyyy): 09 / 10 / 2014

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20141104 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	04/11/2014					
Time: (hh:mm)	Mid-Flood: 15:40		Mid-Ebb: 09:30			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; TSS : 9 / 18 mg/L		TIN : 0.37/0.49(wet season) or 0.22/0.29(dry season)mg/L Turbidity: 2.9/4.8 NTU;			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): 6.05 AL / LL	DO (B): 5.75 AL / LL	DO (S&M): 6.05 AL / LL	DO (B): 5.86 AL / LL		
	Turbidity: 6.4 AL / LL	TIN(In-situ): 0.78 AL / LL	Turbidity: 5.7 AL / LL	TIN(In-situ): 0.77 AL / LL		
	TIN(Lab): 0.32 AL / LL		TIN(Lab): 0.31 AL / LL	TSS : 10 AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN / TIN (Lab)	TSS
	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	✓	✓	✓	✓	✓
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN or gradient station) exceeded AL/LL	MF:6.03mg/L(G5) ME:5.81mg/L(C1)	MF:5.99mg/L(G5) ME:5.72mg/L(C1)	MF:7.0NTU(G5) ME:3.6NTU(C1)	MF:0.85mg/L(G5) ME:1.10mg/L(G1)	(In-situ) (In-situ)
	<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: 5.93 ( G2 )mg/L Downstream: 6.81 ( G6 )mg/L	Upstream: 5.87 ( G2 )mg/L Downstream: 6.74 ( G6 )mg/L	Upstream: 4.3 ( G2 )NTU Downstream: 0.9 ( G6 )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: 5 (G2) mg/L Downstream: 4 (G6)mg/L
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others				TIN (Lab) : Upstream gradient stations exceeded AL/LL  Upstream: 0.42 (G1) mg/L  Downstream: 0.31 (G5)mg/L		



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 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

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 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.			
	Mid-Flood:	DO (S&M): <u>6.04</u>	DO (B): <u>5.75</u>	Turbidity: <u>6.5</u>
		TIN: <u>0.78</u>		
	Mid-Ebb:	DO (S&M): <u>6.05</u>	DO (B): <u>5.87</u>	Turbidity: <u>5.8</u>
	TIN: <u>0.77</u>			
	<input type="checkbox"/> Dredging works conducted at Portion ___/___/___ of the Project. According to Contractor, dredged rate was ___/___/___ m <sup>3</sup> /day at Portion ___/___/___ respectively. (in-situ)			
	<input checked="" type="checkbox"/> <u>Dredging works conducted at Zone 3A (Portion A) and Zone 4A (Portion A) of the Project. Dredged rate (in-situ) at Zone 3A (Portion A) and Zone 4A (Portion A) were 446 m<sup>3</sup>/day and 892 m<sup>3</sup>/day respectively.</u>			

Prepared by: Alvin Lai  
 Signature: \_\_\_\_\_  
 Date (dd/mm/yyyy): 01 / 12 / 2014

Certified by : Colin Yung  
 Designation : Environmental Team Leader  
 Signature : \_\_\_\_\_  
 Date(dd/mm/yy): 01/12/2014

## Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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17 M.S. Castle Peak Road,  
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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20141127 /IM/SR9						
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel						
Date:	27/11/2014						
Time: (hh:mm)	Mid-Flood: 10:57		Mid-Ebb: 17:18				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ						
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L;		TIN		0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B): 6.11/6.04 mg/L;		Turbidity:		2.9/4.8 NTU;		
	: / mg/L		: / mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	Turbidity:	AL / LL	
	TIN(Lab):	0.23 <u>AL</u> / LL	:	AL / LL	TIN(Lab):	AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:						
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____						
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN(Lab)		
	Findings / Evidences						
	<input checked="" type="checkbox"/> Station at Upstream Location at MF						
	<input type="checkbox"/> Upstream Control Station ( ) exceeded AL/LL						
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream:	( )mg/L	Upstream:	( )mg/L	Upstream:	( )NTU
		Downstream:	( )mg/L	Downstream:	( )mg/L	Downstream:	( )NTU
	<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others							

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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: _____	_____	_____		
	<input type="checkbox"/> Dredging works conducted at Portion ____/____/____ of the Project. According to Contractor, dredged rate was ____/____/____ m <sup>3</sup> /day at Portion ____/____/____ respectively.					
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Zone 1B (Portion A), Zone 3B (Portion A) of the Project. According to Contractor, dredged rate (in-situ) were 800 m<sup>3</sup>/day and 800 m<sup>3</sup>/day at Zone 1B (Portion A) and Zone 3B (Portion A) respectively.</b>					
	<u>No TIN exceedance was found in In-situ results. (mid-flood: 0.04 mg/L)</u>					

Prepared by: Cyrus Lau

Signature: \_\_\_\_\_

Date (dd/mm/yyyy): 05/21/2015

Certified by : Colin Yung

Designation : Environmental Team Leader

Signature : CYDate(dd/mm/yy): 05/21/2015**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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**Interim Notification of Environmental Quality Limits Exceedances  
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Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20141202 /IM/SR9a						
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel						
Date:	02/12/2014						
Time: (hh:mm)	Mid-Flood:	13 :58	Mid-Ebb:	07 :56			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ						
Action Level / Limit Level:	DO (S&M):	6.11/6.02 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B):	6.11/6.04 mg/L;	Turbidity:	2.9/4.8 NTU;			
	:	/	mg/L	:	/		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	5.90 AL / LL	DO (S&M):	6.07 AL / LL	
	Turbidity:	7.5 AL / LL	TIN(In-situ):	0.28 AL / LL	Turbidity:	8.1 AL / LL	
	TIN(Lab):	0.24 AL / LL	:	AL / LL	TIN(Lab):	0.24 AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:						
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____						
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)	
		✓	✓	✓	✓	✓	
	Findings / Evidences						
	<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓	✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station or gradient stations for TIN exceeded AL/LL				MF: 0.33mg/L (G5) ME: 0.28mg/L (G1)		
	<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: 6.59 (G1) mg/L	Upstream: 6.58 (G1) mg/L	Upstream: 1.0 (G2) NTU	Upstream: ( ) mg/L	Upstream: 0.16 (G2)mg/L	
	Downstream: 7.39 (G6) mg/L	Downstream: 7.36 (G6) mg/L	Downstream: 0.9 (G6) NTU	Downstream: ( ) mg/L	Downstream: 0.04 (G6)mg/L		
<input type="checkbox"/> No Dredging Works carried out.							
<input type="checkbox"/> Others							



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.  
Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20150602 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	02/06/2015					
Time: (hh:mm)	Mid-Flood:	17:18	Mid-Ebb:	11:33		
Monitoring Location:	SR9 -- Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
		mg/L		mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:				Mid-Ebb:	
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.57 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.61 AL / (L)		AL / LL	TIN(Lab):	0.63 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF:0.62mg/L (G4) ME:1.12mg/L (G2)	MF:0.64mg/L (G4) ME:1.00mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity:	_____	
		TIN: 0.57				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity:	_____	
	TIN: 0.62					
<input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 2C1 and Zone 3A) of the Project.</u>						
<u>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 3A) were 800m<sup>3</sup>/day and 400m<sup>3</sup>/day respectively.</u>						

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.69mg/L (C2)  ME: 1.09mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.63mg/L (C2)  ME: 1.10mg/L (C1)

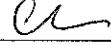
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 18/06/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 18/06/2015

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20150903 /IM/SR9																																													
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel																																													
Date:	03/09/2015																																													
Time: (hh:mm)	Mid-Flood:	09:25	Mid-Ebb:	15:10																																										
Monitoring Location:	SR9 – Cheung Sha Wan FCZ																																													
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L																																										
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;																																										
		mg/L		mg/L																																										
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:																																										
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL																																								
	Turbidity:	AL / LL	TIN(In-situ):	0.40 AL / LL	Turbidity:	AL / LL																																								
	TIN(Lab):	0.38 AL / LL		TIN(Lab):	0.38 AL / LL																																									
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____																																													
	<table border="1"> <thead> <tr> <th></th> <th>DO(S&amp;M)</th> <th>DO(B)</th> <th>Turbidity</th> <th>TIN (In-situ)</th> <th>TIN (Lab)</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)</td> <td align="center" colspan="5">Findings / Evidences</td> </tr> <tr> <td><input checked="" type="checkbox"/> Station at Upstream Location at MF</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL</td> <td></td> <td></td> <td></td> <td>MF:0.46mg/L (G4) ME:0.68mg/L (G2)</td> <td>MF:0.46mg/L (G4) ME:0.67mg/L (G2)</td> </tr> <tr> <td><input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )NTU Downstream: _____ ( )NTU</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td></td> </tr> <tr> <td><input type="checkbox"/> No Dredging Works carried out.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Conclusion</td> <td colspan="3"><input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.</td> <td></td> <td></td> </tr> </tbody> </table>							DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)	Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	Findings / Evidences					<input checked="" type="checkbox"/> Station at Upstream Location at MF					<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF:0.46mg/L (G4) ME:0.68mg/L (G2)	MF:0.46mg/L (G4) ME:0.67mg/L (G2)	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		<input type="checkbox"/> No Dredging Works carried out.						Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			
	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)																																									
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.																																													
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:																																										
		TIN: 0.40																																												
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:																																										
		TIN: 0.39																																												
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A, Zone 2B1 and Zone 2B2) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) was 400m <sup>3</sup> /day. Dredged rate (in-situ) at Portion A (Zone 2B1) and Portion A (Zone 2B2) were 400m <sup>3</sup> /day and 800m <sup>3</sup> /day respectively.																																													



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.53mg/L (C2)  ME: 0.56mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.52mg/L (C2)  ME: 0.58mg/L (C1)

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 25/09/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 25/09/2015

- Notes:
- Abbreviation:
  - AL – Action Level
  - DO (B) – Dissolved Oxygen (Bottom)
  - DO (S&M) – Dissolved Oxygen (Surface & Middle)
  - LL – Limit Level
  - ME – Mid Ebb
  - MF – Mid Flood
  - NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
  - NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
  - TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
  - TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
  - TSS – Total Suspended Solids
  - Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20150912 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/09/2015					
Time: (hh:mm)	Mid-Flood: 17:03	Mid-Ebb: 11:23				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; : / mg/L	TIN Turbidity: 4.0/8.7 NTU; : / mg/L	0.37/0.49 <sub>(wet season)</sub> Or 0.22/0.29 <sub>(dry season)</sub> mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: AL / LL	TIN(In-situ): 0.47 (A) / LL	Turbidity: AL / LL	TIN(In-situ): 0.43 (A) / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition					
	<input checked="" type="checkbox"/> Dredging rate within accepted rate					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem.					
	<input type="checkbox"/> Others: _____					
		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF:0.49mg/L (G5) ME:0.62mg/L (G2)	MF:0.49mg/L (G5) ME:0.66mg/L (G2)	
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: 0.47	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: 0.43	DO (B): _____	Turbidity: _____		
	<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 2B2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2B2) was 1200m <sup>3</sup> /day.					

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
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	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.46mg/L (C2)  ME: 0.83mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.46mg/L (C2)  ME: 0.83mg/L (C1)

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 06/10/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 06/10/2015

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20150926 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	26/09/2015					
Time: (hh:mm)	Mid-Flood: 16:21	Mid-Ebb: 10:17				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; : / mg/L	TIN Turbidity: 4.0/8.7 NTU; : / mg/L	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.48 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.49 (A) / LL : AL / LL	DO (S&M): AL / LL Turbidity: AL / LL TIN(Lab): 0.47 (A) / LL	DO (B): AL / LL TIN(In-situ): 0.48 (A) / LL : AL / LL		
	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Action taken / to be taken: (tick / fill in as appropriate)						
		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF <input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL <input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME <input type="checkbox"/> No Dredging Works carried out.					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)				MF:0.49mg/L (G4) ME:0.76mg/L (G2)	MF:0.48mg/L (G4) ME:0.76mg/L (G2)	
		Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.49 _____ : _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.48 _____ : _____ : _____	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2B2) of the Project According to Contractor, dredged rate (in-situ) at Portion A (Zone 2B2) was 1000m3/day.</b> _____ _____ _____				

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Fugro Development Centre,  
 5 Lok Yi Street, Tel : (852)-24508238  
 17 M.S. Castle Peak Road, Fax : (852)-24508032  
 Tai Lam, Tuen Mun, N.T., Hong Kong. Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.46mg/L (C2)  ME: 0.80mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.46mg/L (C2)  ME: 0.83mg/L (C1)

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 22/10/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 22/10/2015

- Notes:
- Abbreviation:
  - AL – Action Level
  - DO (B) – Dissolved Oxygen (Bottom)
  - DO (S&M) – Dissolved Oxygen (Surface & Middle)
  - LL – Limit Level
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  - NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
  - TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
  - TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
  - TSS – Total Suspended Solids
  - Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151006 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	06/10/2015					
Time: (hh:mm)	Mid-Flood:	13:21	Mid-Ebb:	07:52		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
		mg/L		mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.39 AL / LL	Turbidity:	AL / LL
	TIN(Lab):	0.42 AL / LL		TIN(Lab):	0.42 AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF:0.39mg/L (G4) ME:0.67mg/L (G2)	MF:0.42mg/L (G4) ME:0.66mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 2A1) and Portion A (Zone 2B2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1) and Portion A (Zone 2B2) were both 400m3/day.					

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.41mg/L (C2)  ME: 0.85mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.42mg/L (C2)  ME: 0.86mg/L (C1)

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 22/10/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 22/10/2015

- Notes:
- Abbreviation:
  - AL – Action Level
  - DO (B) – Dissolved Oxygen (Bottom)
  - DO (S&M) – Dissolved Oxygen (Surface & Middle)
  - LL – Limit Level
  - ME – Mid Ebb
  - MF – Mid Flood
  - NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
  - NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
  - TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
  - TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
  - TSS – Total Suspended Solids
  - Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151103 /IM/SR9				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	03/11/2015				
Time: (hh:mm)	Mid-Flood: 13:46		Mid-Ebb: 07:23		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ				
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU			
	TSS : 9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	
	Turbidity: 4.8 (A) / LL	TIN(In-situ): AL / LL	Turbidity: 5.3 AL / (L)	TIN(In-situ): AL / LL	
	TIN(Lab): AL / LL	:	AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
	Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity
Findings / Evidences					
<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	
<input type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL					
<input checked="" type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME		Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream 3.4NTU (G2)	Upstream: ( )mg/L
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: 3.3NTU (G4)	Downstream: ( )mg/L	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:	4.8
		TIN:	:	:	:
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:	5.3
		TIN:	:	:	:
<input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 2A2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A2) was 646m3/day.</u>					



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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN	
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 26 / 11 / 2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 26 / 11 / 2015

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151112 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/11/2015					
Time: (hh:mm)	Mid-Flood: 07:13	Mid-Ebb: 12:25				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU			
	TSS : 9 / 18 mg/L		: / mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: AL / LL	TIN(In-situ): 0.42 AL / LL	Turbidity: AL / LL	TIN(In-situ): 0.43 AL / LL		
	TIN(Lab): 0.44 AL / LL	TSS : 13 AL / LL	TIN(Lab): 0.42 AL / LL	TSS : 14 AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF			✓	✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				ME: 0.31mg/L (G2)	ME: 0.33mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN: 0.42	:	:		
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN: 0.43	:	:		
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 3B) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 3B) was <u>1269m3/day.</u> According to Contractor, dredging work was conducted at Portion B (02:45-05:00, Mid-Flood) and Portion A (13:00-14:55, 15:05-18:50 and 19:20-21:55) and no dredging works conducted at 12:25 on 12 November 2015.						

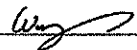
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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk


**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN	
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 01/12/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 01/12/2015**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong. Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151121 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	21/11/2015					
Time: (hh:mm)	Mid-Flood:	14:13	Mid-Ebb:	08:57		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.52 AL / (U)	Turbidity:	AL / LL
	TIN(Lab):	0.55 AL / (U)	TSS :	AL / LL	TIN(Lab):	0.55 AL / (U)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF: 0.41mg/L (G4) ME: 0.73mg/L (G2)	MF: 0.43mg/L (G4) ME: 0.74mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) mg/L	Upstream: _____ ( ) NTU	Upstream: _____ ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) mg/L	Downstream: _____ ( ) NTU	Downstream: _____ ( ) mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	0.52	DO (B):	Turbidity:	
	Mid-Ebb:	DO (S&M):	0.55	DO (B):	Turbidity:	
	<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 2B2 and Zone 4A) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2B2 and Zone 4A) were 423m <sup>3</sup> /day and 1200m <sup>3</sup> /day respectively.					

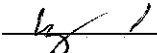
**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk


**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.47mg/L (C2)  ME: 0.88mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.47mg/L (C2)  ME: 0.86mg/L (C1)

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 03/12/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 03/12/2015**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151224 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	24/12/2015					
Time: (hh:mm)	Mid-Flood: 07:12		Mid-Ebb: 12:51			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L		TIN		0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	
	DO (B): 6.11 / 6.04 mg/L		Turbidity:		2.9 / 4.8 NTU	
	TSS : 9 / 18 mg/L		: / mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.29 (AL) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.29 (AL) / LL	TSS :	AL / LL	TIN(Lab):	0.29 (AL) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	TSS	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.35mg/L (G4) ME: 0.38mg/L (G2)	MF: 0.35mg/L (G4) ME: 0.39mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	Downstream: ( ) mg/L
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	TIN:	0.29	DO (B):	Turbidity:
	Mid-Ebb:	DO (S&M):	TIN:	0.29	DO (B):	Turbidity:
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2B2) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 2B2) was 946m <sup>3</sup> /day.					


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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk


**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 20/01/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 20/01/2016**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH<sub>3</sub>-N (In-situ) – Ammoniacal Nitrogen (In-situ results)NH<sub>3</sub>-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151231 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2015					
Time: (hh:mm)	Mid-Flood: 09:17		Mid-Ebb: 16:27			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU	TSS : 9 / 18 mg/L	
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	Mid-Ebb:	DO (S&M): _____ AL / LL	
		Turbidity: _____ AL / LL	TIN(In-situ): <u>0.36</u> AL / <u>(L)</u>		DO (B): _____ AL / LL	
		TIN(Lab): <u>0.37</u> AL / <u>(L)</u>	TSS : _____ AL / LL		TIN(In-situ): <u>0.32</u> AL / <u>(L)</u>	
					TSS : _____ AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.58mg/L (G4) ME: 0.40mg/L (G2)	MF: 0.60mg/L (G4) ME: 0.42mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	TIN: <u>0.36</u>	_____
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	TIN: <u>0.32</u>	_____
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A3) and Portion B of the Project.</b>					
	<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A3) and Portion B were 538m<sup>3</sup>/day and 1076m<sup>3</sup>/day respectively.</b>					



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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 20 / 01 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 20 / 01 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160107 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/01/2016					
Time: (hh:mm)	Mid-Flood: 14:12		Mid-Ebb: 09:44			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU				
	TSS : 9 / 18 mg/L					
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.40</u> AL / (L)	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.44</u> AL / (L)		
	TIN(Lab): <u>0.43</u> AL / (L)	TSS : _____ AL / LL	TIN(Lab): <u>0.44</u> AL / (L)	TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station <sup>or gradient station for TIN</sup> exceeded AL/LL				MF: 0.67mg/L (G4) ME: 0.49mg/L (G2)	MF: 0.78mg/L (G4) ME: 0.54mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.40</u>	_____	_____		
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	TIN: <u>0.44</u>	_____	_____			
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, Zone 2A3) of the Project.</b>					
	<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 1B) were both 423m3/day.</b>					

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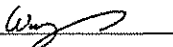
Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

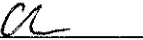
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 03 / 02 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 03 / 02 / 2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160109 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	09/01/2016					
Time: (hh:mm)	Mid-Flood:	07:33	Mid-Ebb:	12:34		
Monitoring Location:	SR9 -- Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49(wet season) or 0.22/0.29(dry season)mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.39 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.41 AL / (L)	TSS :	AL / LL	TIN(Lab):	0.40 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.47mg/L (G2)	MF: 0.64mg/L (G4) ME: 0.49mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2B2, Zone 3B) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1), Portion A (Zone 2B2) and Portion A (Zone 3B) were both 423m3/day.						

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Fugro Development Centre,  
 5 Lok Yi Street, Tel : (852)-24508238  
 17 M.S. Castle Peak Road, Fax : (852)-24508032  
 Tai Lam, Tuen Mun, N.T., Hong Kong. Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 04 / 02 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 04 / 02 / 2016

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160223 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	23/02/2016					
Time: (hh:mm)	Mid-Flood: 08:06		Mid-Ebb: 12:39			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L		TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		DO (B): 6.11 / 6.04 mg/L	
	TSS : 9 / 18 mg/L		Turbidity: 2.9 / 4.8 NTU			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.30 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.30 AL / (L)	TSS :	AL / LL	TIN(Lab):	0.31 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.46mg/L (G4) ME: 0.37mg/L (G2)	MF: 0.48mg/L (G4) ME: 0.37mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream:	( )mg/L	Upstream:	( )mg/L	Upstream:	( )mg/L
	Downstream:	( )mg/L	Downstream:	( )mg/L	Downstream:	( )mg/L
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN: 0.30				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN: 0.30					
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C2) of the Project.</b>					
	<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C2) was 1085m3/day.</b>					
	_____					
	_____					

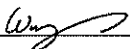
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 29/03/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 29/03/2016

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160310 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	10/03/2016					
Time: (hh:mm)	Mid-Flood:	07:35	Mid-Ebb:	12:18		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.27 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.28 (A) / LL	TSS :	AL / LL	TIN(Lab):	0.29 (A) / LL
	TSS :	AL / LL			TSS :	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.45mg/L (G4) ME: 0.42mg/L (G2)	MF: 0.40mg/L (G4) ME: 0.38mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:	0.27			
Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:			
	TIN:	0.29				
	<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 2C1, Zone 4A) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 4A) were both 423m <sup>3</sup> /day.					



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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 29/03/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 29/03/2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160322 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	22/03/2016					
Time: (hh:mm)	Mid-Flood:	16:29	Mid-Ebb:	10:11		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU			
	TSS : 9 / 18 mg/L		/ mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.33</u> AL / <u>LL</u>	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.28</u> AL / <u>LL</u>		
	TIN(Lab): <u>0.34</u> AL / <u>LL</u>	TSS : _____ AL / LL	TIN(Lab): <u>0.29</u> AL / LL	TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.28mg/L (G4) ME: 0.34mg/L (G2)	MF: 0.27mg/L (G4) ME: 0.31mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.33</u>				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	TIN: <u>0.28</u>					
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) was 423m<sup>3</sup>/day.</b>					


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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 07/04/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 07/04/2016

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160412 /IM/SR9							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	12/04/2016							
Time: (hh:mm)	Mid-Flood:	08:45	Mid-Ebb:	14:20				
Monitoring Location:	SR9 – Cheung Sha Wan FCZ							
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;				
	TSS :	9 / 18 mg/L		/ mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.44 <u>AL</u> / LL	Turbidity:	AL / LL	TIN(In-situ):	0.43 <u>AL</u> / LL
	TIN(Lab):	0.41 <u>AL</u> / LL	TSS :	AL / LL	TIN(Lab):	0.43 <u>AL</u> / LL	TSS :	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:							
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)		
	Findings / Evidences							
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓		
	<input checked="" type="checkbox"/> Upstream Control Station <sup>(or gradient station for TIN)</sup> exceeded AL/LL				MF: 0.55mg/L (G4) ME: 0.54mg/L (G2)	MF: 0.58mg/L (G4) ME: 0.54mg/L (G2)		
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L				
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.							
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.							
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:				
		TIN:	_____	_____				
		_____	_____	_____				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:				
		TIN:	_____	_____				
		_____	_____	_____				
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) was 892m3/day.</b>							

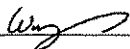
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Tel : (852)-24508238  
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Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 04/05/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 04/05/2016

## Notes:

- Abbreviation:

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DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

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TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160416 /IM/SR9																																								
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel																																								
Date:	16/04/2016																																								
Time: (hh:mm)	Mid-Flood: 12:40		Mid-Ebb: 08:22																																						
Monitoring Location:	SR9 – Cheung Sha Wan FCZ																																								
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L		TIN Turbidity: 4.0/8.7 NTU;		0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L																																				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:																																					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL																																			
Action taken / to be taken: (tick / fill in as appropriate)	Turbidity:	AL / LL	TIN(In-situ):	0.61 AL / (L)	Turbidity:	AL / LL																																			
	TIN(Lab):	0.59 AL / (L)	TSS :	AL / LL	TIN(Lab):	0.57 AL / (L)																																			
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Station at Upstream Location at MF <input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL <input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME <input type="checkbox"/> No Dredging Works carried out.																																								
	<table border="1"> <thead> <tr> <th></th> <th>DO(S&amp;M)</th> <th>DO(B)</th> <th>Turbidity</th> <th>TIN (In-situ)</th> <th>TIN (Lab)</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align: center;">Findings / Evidences</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> <td></td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> <td></td> <td>MF: 0.45mg/L (G4) ME: 0.60mg/L (G2)</td> <td>MF: 0.42mg/L (G4) ME: 0.56mg/L (G2)</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Upstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )NTU</td> <td>Upstream: _____ ( )mg/L</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Downstream: _____ ( )mg/L</td> <td>Downstream: _____ ( )mg/L</td> <td>Downstream: _____ ( )NTU</td> <td>Downstream: _____ ( )mg/L</td> <td></td> </tr> </tbody> </table>							DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)	Findings / Evidences						<input checked="" type="checkbox"/>				✓	✓	<input checked="" type="checkbox"/>				MF: 0.45mg/L (G4) ME: 0.60mg/L (G2)	MF: 0.42mg/L (G4) ME: 0.56mg/L (G2)	<input type="checkbox"/>	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		<input type="checkbox"/>	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L
	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)																																				
Findings / Evidences																																									
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<input type="checkbox"/>	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L																																					
<input type="checkbox"/>	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L																																					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.																																								
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.61 _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.56 _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2B1) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2B1) was 423m3/day.</b>																																								

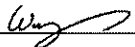
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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
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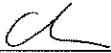
**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 04/05/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 04/05/2016

## Notes:

- Abbreviation:

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DO (B) – Dissolved Oxygen (Bottom)

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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160423 /IM/SR9				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	23/04/2016				
Time: (hh:mm)	Mid-Flood: 07:24		Mid-Ebb: 12:47		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ				
Action Level / Limit Level:	DO (S&M): 5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B): 4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS : 9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	
	Turbidity: AL / LL	TIN(In-situ): 0.38 (AL) / LL	Turbidity: AL / LL	TIN(In-situ): 0.39 (AL) / LL	
	TIN(Lab): 0.39 (AL) / LL	TSS : AL / LL	TIN(Lab): 0.40 (AL) / LL	TSS : AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:				
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)   TIN (Lab)
	Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.47mg/L (G4) ME: 0.67mg/L (G2)   MF: 0.49mg/L (G4) ME: 0.66mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.					
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.				
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
		TIN: 0.38	_____	_____	
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	
	TIN: 0.39	_____	_____		
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) was 446m <sup>3</sup> /day.				



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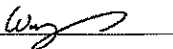
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**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 30/5/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 30/5/2016

**Notes:**

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160430 /IM/SR9																																								
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel																																								
Date:	30/04/2016																																								
Time: (hh:mm)	Mid-Flood: 10:22	Mid-Ebb: 15:40																																							
Monitoring Location:	SR9 – Cheung Sha Wan FCZ																																								
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN : 0.37/0.49 <sub>(wet season)</sub> Or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;																																							
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:																																							
	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.43 (A) / LL	DO (B): _____ AL / LL TIN(In-situ): 0.41 (A) / LL TSS : _____ AL / LL	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.45 (A) / LL	DO (B): _____ AL / LL TIN(In-situ): 0.46 (A) / LL TSS : _____ AL / LL																																					
	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____																																								
Action taken / to be taken: (tick / fill in as appropriate)	<table border="1"> <thead> <tr> <th></th> <th>DO(S&amp;M)</th> <th>DO(B)</th> <th>Turbidity</th> <th>TIN (In-situ)</th> <th>TIN (Lab)</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align:center">Findings / Evidences</td> </tr> <tr> <td><input checked="" type="checkbox"/> Station at Upstream Location at MF</td> <td></td> <td></td> <td></td> <td style="text-align:center">✓</td> <td style="text-align:center">✓</td> </tr> <tr> <td><input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL</td> <td></td> <td></td> <td></td> <td>MF: 0.47mg/L (G5) ME: 0.48mg/L (G2)</td> <td>MF: 0.46mg/L (G5) ME: 0.47mg/L (G2)</td> </tr> <tr> <td><input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td>Upstream: _____ ( )NTU Downstream: _____ ( )NTU</td> <td>Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L</td> <td></td> </tr> <tr> <td><input type="checkbox"/> No Dredging Works carried out.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)	Findings / Evidences						<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.47mg/L (G5) ME: 0.48mg/L (G2)	MF: 0.46mg/L (G5) ME: 0.47mg/L (G2)	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		<input type="checkbox"/> No Dredging Works carried out.					
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Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.																																								
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.41 _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.46 _____																																								
	<input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 1A, 1B and 3B) of the Project.</u> <u>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 1B) were 900m3/day and 538m3/day respectively.</u> <u>Dredged rate (in-situ) at Portion A (Zone 3B) was 538m3/day.</u>																																								

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 30/5/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 30/5/2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160604 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	04/06/2016					
Time: (hh:mm)	Mid-Flood: 16:40		Mid-Ebb: 11:14			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;			
	TSS : 9 / 18 mg/L		/ mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.66</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.65</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.67</u> AL / <u>(L)</u>	TSS : _____ AL / LL	TIN(Lab): <u>0.67</u> AL / <u>(L)</u>	TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	
		Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF: 0.49mg/L (G4) ME: 1.02mg/L (G2)	
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.66</u>				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
	TIN: <u>0.65</u>					
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, 2C1) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 2C1) were 538m<sup>3</sup>/day and 1077m<sup>3</sup>/day respectively.</b>					


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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28/06/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28/06/2016**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160607 /IM/SR9					
Project:	CVI/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/06/2016					
Time: (hh:mm)	Mid-Flood:	07:55	Mid-Ebb:	12:48		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS :	9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.48 (AL) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.44 (AL) / LL	TSS :	AL / LL	TIN(Lab):	0.48 (AL) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.53mg/L (G4) ME: 0.55mg/L (G2)	MF: 0.50mg/L (G4) ME: 0.57mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: 0.48	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: 0.49	DO (B): _____	Turbidity: _____		
	<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 1A, 3B) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 3B) were 446m <sup>3</sup> /day and 1077m <sup>3</sup> /day respectively.					

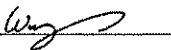
**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28 / 06 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28 / 06 / 2016

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160611 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11/06/2016					
Time: (hh:mm)	Mid-Flood:	10:03	Mid-Ebb:	15:42		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L			
	DO (B): 4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;			
	TSS : 9 / 18 mg/L		/ mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(in-situ): <u>0.57</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN(in-situ): <u>0.57</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.59</u> AL / <u>(L)</u>	TSS : _____ AL / LL	TIN(Lab): <u>0.58</u> AL / <u>(L)</u>	TSS : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF: 0.59mg/L (G4) ME: 0.68mg/L (G2)	MF: 0.57mg/L (G4) ME: 0.68mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.57</u>				
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.57</u>				
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) was 1615m <sup>3</sup> /day.					



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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 28 / 06 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 28 / 06 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160618 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	18/06/2016					
Time: (hh:mm)	Mid-Flood: 16:28		Mid-Ebb: 11:16			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L		TIN Turbidity: 4.0/8.7 NTU;		0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.78 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.80 AL / (L)	TSS :	AL / LL	TIN(Lab):	0.77 AL / (L)
	TSS :	AL / LL			TSS :	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.63mg/L (G4) ME: 1.16mg/L (G2)	MF: 0.59mg/L (G4) ME: 1.36mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L	Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:	0.78				
	TIN:	0.81				
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) were 538m <sup>3</sup> /day respectively.					

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
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**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

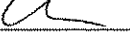
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 06/07/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 06/07/2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160625 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	25/06/2016					
Time: (hh:mm)	Mid-Flood:	08:40	Mid-Ebb:	13:46		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.41 AL / LL	Turbidity:	AL / LL
	TIN(Lab):	0.39 AL / LL	TSS :	AL / LL	TIN(Lab):	0.40 AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.52mg/L (G4) ME: 0.68mg/L (G2)	MF: 0.49mg/L (G4) ME: 0.62mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	0.41	DO (B):	_____	Turbidity: _____
		TIN:	_____	_____	_____	_____
	Mid-Ebb:	DO (S&M):	0.38	DO (B):	_____	Turbidity: _____
	TIN:	_____	_____	_____	_____	
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, 3B) of the Project</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1) and Portion A (Zone 3B) were both 538m3/day.</b>						

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 03 / 08 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 03 / 08 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160702 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	02/07/2016					
Time: (hh:mm)	Mid-Flood: 16:02		Mid-Ebb: 10:13			
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L;	DO (B): 4.41/4.25 mg/L;	TSS : 9 / 18 mg/L	TIN 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	Turbidity: 4.0/8.7 NTU;	
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.46</u> AL / LL
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.45</u> AL / LL	Turbidity: _____ AL / LL	TIN(In-situ): _____ AL / LL	TIN(Lab): <u>0.47</u> AL / LL	TSS : _____ AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.63mg/L (G4) ME: 0.94mg/L (G2)	MF: 0.63mg/L (G4) ME: 0.90mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____	TIN: <u>0.45</u>	
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____	TIN: <u>0.46</u>	
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C1) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) was 308m <sup>3</sup> /day.					

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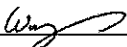
Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 03/08/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 03/08/2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160712 /IM/SR9					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/07/2016					
Time: (hh:mm)	Mid-Flood:	11:13	Mid-Ebb:	16:32		
Monitoring Location:	SR9 – Cheung Sha Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS	: 9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.97 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.95 AL / (L)	TSS :	AL / LL	TIN(Lab):	0.92 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	TSS	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.68mg/L (G4) ME: 0.65mg/L (G3)	MF: 0.62mg/L (G4) ME: 0.66mg/L (G3)
<input type="checkbox"/> No increasing trend towards the Project at ME:	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L		
	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C1, Zone 2B2) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 2B2) were both 538m3/day.</b>					



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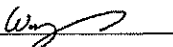
Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 04 / 08 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 04 / 08 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

## MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

Relevant Notification of Exceedances - SR10

**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR10a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	11:05 Mid-Flood , 12:55 Mid-Ebb
Monitoring Location:	SR10 – Lo Tik Wan FCZ
Parameter:	Dissolved Oxygen (S&M) & (B), Turbidity and Total Inorganic Nitrogen (In-situ)
Action Level / Limit Level:	DO (S&M): 6.11/6.02 DO (B): 6.11/6.04 Turbidity: 2.9/4.8 TIN (Wet Season): 0.37/0.49
Measured Level:	11:05 Mid-Flood: DO (S&M): 3.79 – LL Exceedance DO (B): 3.38 – LL Exceedance Turbidity: 3.0 – AL Exceedance TIN(In-situ): 0.92 – LL Exceedance 12:55 Mid-Ebb: DO (S&M): 3.80 – LL Exceedance DO (B): 3.39 – LL Exceedance Turbidity: 3.7 – AL Exceedance TIN(In-situ): 0.83 – LL Exceedance
Action taken / to be taken:	Monitoring equipment was checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, SR10 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level and the value of SR10, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions <u>Turbidity</u> At Mid-Flood, SR10 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, Turbidity at C2 and C3 were 5.2 NTU and 4.7 NTU respectively which were higher than the Limit Level and Action Level of SR10 respectively while at Mid-Ebb; turbidity at C1 was 8.9 which were higher than the Limit Level and value of SR10 respectively, indicating the

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.


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	<p>background turbidity was high at the monitoring period. At Mid-Ebb, Turbidity at G3 was 9.0 NTU while 3.0 NTU was recorded at G6 (located between SR10 and the Project); no increasing trend of turbidity was shown across the project. The exceedance was not considered due to the project.</p> <p><u>Total Inorganic Nitrogen</u></p> <p>At Mid-Flood, SR10 was situated at upstream of the Project, the water quality would not be affected by the construction.</p> <p>At Mid-Ebb TIN level at G1 was 1.00 mg/L which was higher than the Limit Level and the value of SR10 indicating the background TIN was high at the monitoring period. The exceedance was not considered due to the project.</p> <p>The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.</p>
<p>Remarks:</p>	<p>Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&amp;M): 3.79, DO (B): 3.38, Turbidity: 3.1, TIN: 0.89 and Mid-Ebb: DO (S&amp;M): 3.81 and DO (B): 3.39, Turbidity: 3.7 and TIN: 0.78). No TIN exceedance was found in laboratory result (Mid-Flood: 0.30 and Mid-Ebb: 0.31).</p> <p>Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m<sup>3</sup>/day.</p>

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date: 06/09/2014

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140911 /IM/SR10				
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel				
Date:	11-9-2014				
Time: (hh:mm)	Mid-Flood: 10:08		Mid-Ebb: 11:26		
Monitoring Location:	SR10 - Lo Tik Wan FCZ				
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L		TIN: 0.37/0.49 (wet season) or 0.22/0.29 (dry season) mg/L Turbidity: 2.9/4.8 NTU; : / mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:		
	DO (S&M): 4.39 AL / (D)	DO (B): 3.64 AL / (D)	DO (S&M): 4.14 AL / (D)	DO (B): 3.49 AL / (D)	
	Turbidity: 3.9 (D) / LL	TIN(In-situ): 0.17 AL / (D)	Turbidity: 3.7 (D) / LL	TIN(In-situ): 0.19 AL / (D)	
	TIN(Lab): AL / LL	: AL / LL	TIN(Lab): AL / LL	: AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____				
	Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity
		✓	✓	✓	✓
Findings / Evidences					
<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓	✓	✓	✓
<input checked="" type="checkbox"/> Upstream Control Station (or upstream station for exceeded AL/LL TIN)		MF: 4.23 mg/L (C3) ME: 3.98 mg/L (C1)	MF: 3.27 mg/L (C3) ME: 3.78 mg/L (C1)	MF: 8.4 NTU (C3) ME: 10.6 NTU (C1)	ME: 0.96 (G1)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME		Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) NTU Downstream: ( ) NTU	Upstream: ( ) mg/L Downstream: ( ) mg/L
<input type="checkbox"/> No Dredging Works carried out.					
<input type="checkbox"/> Others					

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Fugro Development Centre,  
 5 Lok Yi Street, Tel : (852)-24508238  
 17 M.S. Castle Peak Road, Fax : (852)-24508032  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.			
	Mid-Flood:	DO (S&M): <u>4.38</u>	DO (B): <u>3.63</u>	Turbidity: <u>3.9</u>
		TIN: <u>0.74</u>	:	:
	Mid-Ebb:	DO (S&M): <u>4.14</u>	DO (B): <u>2.48</u>	Turbidity: <u>3.1</u>
	TIN: <u>0.76</u>	:	:	
	<input checked="" type="checkbox"/> Dredging works conducted at Portion <u>B</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1400</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>  </u> / <u>  </u> / <u>  </u> respectively.			
	<input type="checkbox"/>			
	_____ _____ _____ _____			

Certified by: Ayres Lai  
 Signature: [Signature]  
 Date (dd/mm/yyyy): 19/09/2014

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	30/09/2014					
Time: (hh:mm)	Mid-Flood: 12:07		Mid-Ebb: 15:30			
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L	TIN: 0.37/0.49(wet season) or 0.22/0.29(dry season)mg/L Turbidity: 2.9/4.8 NTU; Words : / mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): 4.93 AL / (L)	DO (B): 4.51 AL (L)	DO (S&M): 5.59 AL (L)	DO (B): 4.96 AL / (L)		
	Turbidity: 5.6 AL (L)	TIN(In-situ): 0.67 AL / (L)	Turbidity: 3.9 (L) / LL	TIN(In-situ): 0.71 AL / (L)		
TIN(Lab): AL / LL	: AL / LL	TIN(Lab): AL / LL	: AL / LL			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN	
		✓	✓	✓	✓	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN exceeded AL/LL)	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)	MF:0.85mg/L(G6) ME:1.20mg/L(G1)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Fugro Development Centre,  
5 Lok Yi Street, Tel : (852)-24508238  
17 M.S. Castle Peak Road, Fax : (852)-24508032  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.						
	Mid-Flood:	DO (S&M):	<u>4.93</u>	DO (B):	<u>4.51</u>	Turbidity:	<u>5.6</u>
		TIN:	<u>0.67</u>				
	Mid-Ebb:	DO (S&M):	<u>5.59</u>	DO (B):	<u>4.96</u>	Turbidity:	<u>3.9</u>
		TIN:	<u>0.71</u>				
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>A</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1077</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>A</u> / <u>  </u> / <u>  </u> respectively. (in-situ)					
	<input type="checkbox"/>	_____					
		_____					
		_____					
		_____					

Prepared by: Agnes Lai

Signature:

Date (dd/mm/yyyy): 09/10/2014



**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20150602 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	02/06/2015					
Time: (hh:mm)	Mid-Flood: 16:13		Mid-Ebb: 12:53			
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; : / mg/L		TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU; : / mg/L			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: AL / LL	TIN(In-situ): 0.57 AL / (L)	Turbidity: AL / LL	TIN(In-situ): 0.50 AL / (L)		
TIN(Lab): 0.54 AL / (L)	: AL / LL	TIN(Lab): 0.53 AL / (L)	: AL / LL			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF:0.62mg/L (G4) ME:1.12mg/L (G2)	MF:0.64mg/L (G4) ME:1.00mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.57 _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.50 _____ : _____ <input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 2C1 and Zone 3A) of the Project.</u> <u>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 3A) were 800m<sup>3</sup>/day and 400m<sup>3</sup>/day respectively.</u>					

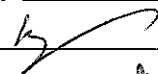
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.69mg/L (C2)  ME: 1.09mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.63mg/L (C2)  ME: 1.10mg/L (C1)

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 18/06/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 18/06/2015

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20151231 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	31/12/2015					
Time: (hh:mm)	Mid-Flood:	10:23	Mid-Ebb:	15:33		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M):		Mid-Ebb:		
		AL / LL	DO (B):	AL / LL	DO (B):	
	Turbidity:	AL / LL	TIN(In-situ):	AL / LL	TIN(In-situ):	
	TIN(Lab):	0.31 AL / LL		TIN(Lab):	0.27 AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.58mg/L (G4) ME: 0.40mg/L (G2)	MF: 0.60mg/L (G4) ME: 0.42mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	Downstream: ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A3) and Portion B of the Project.</b>						
<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A3) and Portion B were 538m3/day and 1076m3/day respectively.</b>						

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 20/01/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 20/01/2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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17 M.S. Castle Peak Road,  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160107 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/01/2016					
Time: (hh:mm)	Mid-Flood: 13:10	Mid-Ebb: 11:06				
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L DO (B): 6.11 / 6.04 mg/L TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 2.9 / 4.8 NTU				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.23</u> AL / LL	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.23</u> AL / LL		
	TIN(Lab): <u>0.24</u> AL / LL	_____ AL / LL	TIN(Lab): <u>0.25</u> AL / LL	_____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF: 0.67mg/L (G4) ME: 0.49mg/L (G2)	MF: 0.78mg/L (G4) ME: 0.54mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
Conclusion	<input type="checkbox"/> No Dredging Works carried out.					
	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.23</u> _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.23</u> _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, Zone 2A3) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 1B) were both 423m<sup>3</sup>/day.</b>					

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 03/02/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 03/02/2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
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17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160109 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	09/01/2016					
Time: (hh:mm)	Mid-Flood:	08:49	Mid-Ebb:	11:33		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.36 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.39 AL / (L)			TIN(Lab):	0.38 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.47mg/L (G2)	MF: 0.64mg/L (G4) ME: 0.49mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2B2, Zone 3B) of the Project.</b>						
<b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1), Portion A (Zone 2B2) and Portion A (Zone 3B) were both 423m3/day</b>						

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 04/02/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 04/02/2016

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160223 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	23/02/2016					
Time: (hh:mm)	Mid-Flood:	09:28	Mid-Ebb:	11:31		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU		
	TSS :	9 / 18 mg/L	:	/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.28 (A) / LL	Turbidity:	AL / LL
	TIN(Lab):	0.28 (A) / LL	:	AL / LL	TIN(Lab):	0.28 (A) / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.46mg/L (G4) ME: 0.37mg/L (G2)	MF: 0.48mg/L (G4) ME: 0.37mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
<input checked="" type="checkbox"/> Dredging works conducted at Portion A (Zone 2C2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C2) was 1085m <sup>3</sup> /day.						

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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
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	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 28 / 03 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 28 / 03 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
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Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160604 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	04/06/2016					
Time: (hh:mm)	Mid-Flood: 15:32		Mid-Ebb: 12:46			
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L		TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;			
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.68</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.60</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.69</u> AL / <u>(L)</u>		TIN(Lab): <u>0.60</u> AL / <u>(L)</u>			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.49mg/L (G4) ME: 1.02mg/L (G2)	MF: 0.49mg/L (G4) ME: 1.02mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: <u>0.68</u>	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: <u>0.60</u>	DO (B): _____	Turbidity: _____		
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, 2C1) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 2C1) were 538m<sup>3</sup>/day and 1077m<sup>3</sup>/day respectively.</b>					

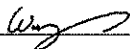
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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28/06/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28/06/2016**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

**MATERIALAB CONSULTANTS LIMITED**

Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160607 /IM/SR10							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	07/06/2016							
Time: (hh:mm)	Mid-Flood:	09:20	Mid-Ebb:	11:40				
Monitoring Location:	SR10 – Lo Tik Wan FCZ							
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;				
	TSS :	9 / 18 mg/L	:	/ mg/L				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.46 (A) / LL	Turbidity:	AL / LL	TIN(In-situ):	0.42 (A) / LL
	TIN(Lab):	0.43 (A) / LL	:	AL / LL	TIN(Lab):	0.46 (A) / LL	:	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)		
	Findings / Evidences							
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓		
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.53mg/L (G4) ME: 0.55mg/L (G2)	MF: 0.50mg/L (G4) ME: 0.57mg/L (G2)		
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	Downstream: ( ) mg/L			
<input type="checkbox"/> No Dredging Works carried out.								
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.							
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.46 _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.42 _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A, 3B) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 3B) were 446m<sup>3</sup>/day and 1077m<sup>3</sup>/day respectively.</b>							

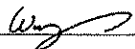
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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28/06/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28/06/2016

## Notes:

- Abbreviation:

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TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160611 /IM/SR10																																																																															
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel																																																																															
Date:	11/06/2016																																																																															
Time: (hh:mm)	Mid-Flood: 11:38		Mid-Ebb: 14:23																																																																													
Monitoring Location:	SR10 – Lo Tik Wan FCZ																																																																															
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L		TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU; : / mg/L																																																																													
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:																																																																												
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	Turbidity: AL / LL	TIN(In-situ): 0.64 AL / LL																																																																										
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____																																																																															
	<table border="1"> <thead> <tr> <th></th> <th>DO(S&amp;M)</th> <th>DO(B)</th> <th>Turbidity</th> <th>TIN (In-situ)</th> <th>TIN (Lab)</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align:center">Findings / Evidences</td> </tr> <tr> <td><input checked="" type="checkbox"/> Station at Upstream Location at MF</td> <td></td> <td></td> <td></td> <td style="text-align:center">✓</td> <td style="text-align:center">✓</td> </tr> <tr> <td><input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL</td> <td></td> <td></td> <td></td> <td>MF: 0.59mg/L (G4) ME: 0.68mg/L (G2)</td> <td>MF: 0.57mg/L (G4) ME: 0.68mg/L (G2)</td> </tr> <tr> <td rowspan="2"><input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME</td> <td>Upstream: ( )mg/L</td> <td>Upstream: ( )mg/L</td> <td>Upstream: ( )NTU</td> <td>Upstream: ( )mg/L</td> <td></td> </tr> <tr> <td>Downstream: ( )mg/L</td> <td>Downstream: ( )mg/L</td> <td>Downstream: ( )NTU</td> <td>Downstream: ( )mg/L</td> <td></td> </tr> <tr> <td><input type="checkbox"/> No Dredging Works carried out.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Conclusion</td> <td colspan="3"><input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.</td> <td style="text-align:center">✓</td> <td style="text-align:center">✓</td> </tr> <tr> <td rowspan="2">Remarks: (tick / fill in as appropriate)</td> <td colspan="6">Repeat In-situ measurement was done.</td> </tr> <tr> <td>Mid-Flood:</td> <td>DO (S&amp;M): TIN: 0.64</td> <td>DO (B):</td> <td>Turbidity:</td> <td colspan="2"></td> </tr> <tr> <td>Mid-Ebb:</td> <td>DO (S&amp;M): TIN: 0.64</td> <td>DO (B):</td> <td>Turbidity:</td> <td colspan="2"></td> </tr> <tr> <td colspan="7"> <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B) of the Project.</b>  <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) was 1615m3/day.</b> </td> </tr> </tbody> </table>								DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)	Findings / Evidences							<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.59mg/L (G4) ME: 0.68mg/L (G2)	MF: 0.57mg/L (G4) ME: 0.68mg/L (G2)	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L		Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		<input type="checkbox"/> No Dredging Works carried out.						Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.						Mid-Flood:	DO (S&M): TIN: 0.64	DO (B):	Turbidity:			Mid-Ebb:	DO (S&M): TIN: 0.64	DO (B):	Turbidity:			<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) was 1615m3/day.</b>					
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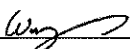
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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
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**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28/06/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28/06/2016**Notes:**

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DO (B) – Dissolved Oxygen (Bottom)

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- Wet Season: April to October; Dry Season: November to March



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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160614 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/06/2016					
Time: (hh:mm)	Mid-Flood:	12:45	Mid-Ebb:	09:40		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.71 AL / (L)	DO (B): _____ AL / LL TIN(In-situ): 0.73 AL / (L)	Mid-Ebb:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.73 AL / (L)	
				DO (B): _____ AL / LL TIN(In-situ): 0.80 AL / (L)		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.89mg/L (G4) ME: 1.18mg/L (G2)	MF: 0.87mg/L (G4) ME: 1.27mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.73 _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.80 _____ : _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A, 4A) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 4A) were 446m3/day and 538m3/day respectively.</b>					

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					


Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 06/07/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 06/07/2016

**Notes:**

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- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160618 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and Its Approach Channel					
Date:	18/06/2016					
Time: (hh:mm)	Mid-Flood:	15:28	Mid-Ebb:	12:44		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.85 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.83 AL / (L)		AL / LL	TIN(Lab):	0.74 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.63mg/L (G4) ME: 1.16mg/L (G2)	MF: 0.59mg/L (G4) ME: 1.36mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	0.85	DO (B):	_____	Turbidity: _____
		TIN:	_____	_____	_____	_____
	Mid-Ebb:	DO (S&M):	0.75	DO (B):	_____	Turbidity: _____
	TIN:	_____	_____	_____	_____	
<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) were 538m<sup>3</sup>/day respectively</b>						

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	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 06/07/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 06/07/2016

**Notes:**

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TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160702 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	02/07/2016					
Time: (hh:mm)	Mid-Flood:	14:44	Mid-Ebb:	12:00		
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M):	5/5 mg/L;	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L		
	DO (B):	4.41/4.25 mg/L;	Turbidity:	4.0/8.7 NTU;		
	TSS :	9 / 18 mg/L		/ mg/L		
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.58 AL / (L)	Turbidity:	AL / LL
	TIN(Lab):	0.55 AL / (L)		AL / LL	TIN(Lab):	0.56 AL / (L)
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.63mg/L (G4) ME: 0.94mg/L (G2)	MF: 0.63mg/L (G4) ME: 0.90mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L	Upstream: ( ) mg/L	Upstream: ( ) NTU	Upstream: ( ) mg/L	Upstream: ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( ) mg/L	Downstream: ( ) mg/L	Downstream: ( ) NTU	Downstream: ( ) mg/L	Downstream: ( ) mg/L	
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M):	DO (B):	Turbidity:		
		TIN:				
	Mid-Ebb:	DO (S&M):	DO (B):	Turbidity:		
	TIN:					
<input checked="" type="checkbox"/> <u>Dredging works conducted at Portion A (Zone 2C1) of the Project.</u> <u>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) was 308m3/day.</u>						


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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

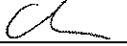
**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 03/08/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 03/08/2016

## Notes:

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160712 /IM/SR10					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/07/2016					
Time: (hh:mm)	Mid-Flood: 12:13	Mid-Ebb: 15:26				
Monitoring Location:	SR10 – Lo Tik Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;				
Measured Level of exceeded parameters: (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL	DO (B): <u>4.20</u> AL / <u>(L)</u>	Mid-Ebb:	DO (S&M): _____ AL / LL	
		Turbidity: _____ AL / LL	TIN(In-situ): <u>0.88</u> AL / <u>(L)</u>		DO (B): <u>4.18</u> AL / <u>(L)</u>	
		TIN(Lab): <u>0.83</u> AL / <u>(L)</u>	_____ : _____ AL / LL		TIN(In-situ): <u>0.83</u> AL / <u>(L)</u>	
	TIN(Lab): <u>0.80</u> AL / <u>(L)</u>	_____ : _____ AL / LL		TIN(Lab): <u>0.80</u> AL / <u>(L)</u>	_____ : _____ AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
		Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓		✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL		MF: 2.35mg/L (G4) ME: 4.00mg/L (G3)		MF: 0.68mg/L (G4) ME: 0.65mg/L (G3)	MF: 0.62mg/L (G4) ME: 0.66mg/L (G3)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.		✓		✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): <u>4.20</u> Turbidity: _____ TIN: <u>0.88</u> _____ : _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): <u>4.18</u> Turbidity: _____ TIN: <u>0.83</u> _____ : _____ : _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C1, Zone 2B2) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 2B2) were both 538m3/day.</b>					

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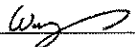
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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

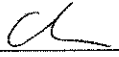
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 04 / 08 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 04 / 08 / 2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



## MATERIALAB CONSULTANTS LIMITED

Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The text is centered between two thick, horizontal black bars.

Relevant Notification of Exceedances - SR11

**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140814/IM/SR11a
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel
Date:	14/08/2014
Time:	11:40 Mid-Flood , 12:15 Mid-Ebb
Monitoring Location:	SR11 – Sok Kwu Wan FCZ
Parameter:	Dissolved Oxygen (S&M) & (B) and Total Inorganic Nitrogen (In-situ)
Action Level / Limit Level:	DO (S&M): 6.11/6.02 DO (B): 6.11/6.04 TIN (Wet Season): 0.37/0.49
Measured Level:	11:40 Mid-Flood: DO (S&M): 3.61 – LL Exceedance DO (B): 3.56 – LL Exceedance TIN(In-situ): 0.76 – LL Exceedance 12:15 Mid-Ebb: DO (S&M): 3.63 – LL Exceedance DO (B): 3.47 – LL Exceedance TIN(In-situ): 0.90 – LL Exceedance
Action taken / to be taken:	Monitoring equipment was checked and confirmed without problem. Silt curtain and dredging rate were inspected and confirmed in a proper condition during the period.
Possible reason for Action or Limit Level Non-compliance:	<u>Dissolved Oxygen</u> At Mid-Flood, SR11 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Flood, DO (S&M) and DO (B) at C3 were 3.72 mg/L and 3.16 mg/L respectively while at Mid-Ebb, DO (S&M) and DO (B) at C1 were 3.63 mg/L and 3.25 mg/L respectively which were lower than the Limit Level of SR11, indicating the background DO was low at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions <u>Total Inorganic Nitrogen</u> At Mid-Flood, SR11 was situated at upstream of the Project, the water quality would not be affected by the construction. At Mid-Ebb TIN level at G1 was 1.00 mg/L which was higher than the Limit Level and the value of SR11 indicating the background TIN was high at the monitoring period. The exceedance was not considered due to the project. The exceedance may be caused by influences in the vicinity of the station or changes in ambient conditions.
Remarks:	Repeat in-situ measurement was done to confirm the exceedances (Mid-Flood: DO (S&M): 3.62, DO (B): 3.56, TIN: 0.74 and Mid-Ebb: DO (S&M): 3.62 and DO (B): 3.47 and TIN: 0.88). No TIN exceedance was found in

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.


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	laboratory result (Mid-Flood: 0.29 and Mid-Flood: 0.30) Dredging works conducted at Portion A of the Project. According to Contractor, dredged rate on 14/8 was 700m <sup>3</sup> /day.
--	--

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date: 06/09/2014

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140911 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11-9-2014					
Time: (hh:mm)	Mid-Flood:	10:44		Mid-Ebb:	10:46	
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L	TIN: Turbidity:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L; 2.9/4.8 NTU; : / mg/L			
Measured Level of exceeded parameters (tick / / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): 4.33 AL / (D)	DO (B): 4.09 AL / (D)	DO (S&M): 4.19 AL / (D)	DO (B): 4.09 AL / (D)		
	Turbidity: 3.2 (A) / LL	TIN(In-situ): 0.56 AL / (D)	Turbidity: 3.1 (A) / LL	TIN(In-situ): 0.62 AL / (D)		
	TIN(Lab): AL / LL	: AL / LL	TIN(Lab): AL / LL	: AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN	
		✓	✓	✓	✓	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station (or gateway) exceeded AL/LL TIN	MF: 4.23 mg/L (C) ME: 3.98 mg/L (C)	MF: 3.27 mg/L (C) ME: 3.78 mg/L (C)	MF: 2.4 NTU (C) ME: 10.6 NTU (C)	ME: 2.96 (E)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) mg/L Downstream: ( ) mg/L	Upstream: ( ) NTU Downstream: ( ) NTU	Upstream: ( ) mg/L Downstream: ( ) mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
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Fax : (852)-24508032  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.		
	Mid-Flood:	DO (S&M): <u>4.31</u> TIN: <u>0.51</u>	DO (B): <u>4.08</u> Turbidity: <u>3.2</u>
	Mid-Ebb:	DO (S&M): <u>4.18</u> TIN: <u>0.59</u>	DO (B): <u>4.10</u> Turbidity: <u>3.2</u>
	<input checked="" type="checkbox"/> Dredging works conducted at Portion <u>B</u> / <u>  </u> / <u>  </u> of the Project. According to Contractor, dredged rate was <u>1400</u> / <u>  </u> / <u>  </u> m <sup>3</sup> /day at Portion <u>  </u> / <u>  </u> / <u>  </u> respectively. <input type="checkbox"/> _____ _____ _____ _____		

Certified by: Cyrus Lai  
 Signature: [Signature]  
 Date (dd/mm/yyyy): 19/07/2014

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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Fax : (852)-24508032  
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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20140930 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	30/09/2014					
Time: (hh:mm)	Mid-Flood: 13:02		Mid-Ebb: 14:40			
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11/6.02 mg/L; DO (B): 6.11/6.04 mg/L; : / mg/L		TIN: 0.37/0.49(wet season) or 0.22/0.29(dry season)mg/L Turbidity: 2.9/4.8 NTU; Words : / mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): 5.73 AL / (L)	DO (B): 4.12 AL / (L)	DO (S&M): 5.93 AL / (L)	DO (B): 5.35 AL / (L)		
	Turbidity: 6.4 AL (L)	TIN(In-situ): 0.65 AL / (L)	Turbidity: 4.6 AL / LL	TIN(In-situ): 0.64 AL / (L)		
	TIN(Lab): AL / LL		Words : AL / LL		TIN(Lab): AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)	<input checked="" type="checkbox"/> Change of ambient condition or influence in the vicinity, not Project related	DO(S&M)	DO(B)	Turbidity	TIN	
		✓	✓	✓	✓	
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF	✓	✓	✓	✓	
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN exceeded AL/LL)	MF:5.30mg/L(C2) ME:4.93mg/L(C1)	MF:5.10mg/L(C3) ME:4.78mg/L(C1)	MF:6.8 NTU(C2) ME:4.0NTU(C1)	MF:0.85mg/L(G6) ME:1.20mg/L(G1)	
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )mg/L Downstream: ( )mg/L	Upstream: ( )NTU Downstream: ( )NTU	Upstream: ( )mg/L Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
<input type="checkbox"/> Others						

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 5 Lok Yi Street, Tel : (852)-24508238  
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Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.						
	Mid-Flood:	DO (S&M):	<u>5.73</u>	DO (B):	<u>4.12</u>	Turbidity:	<u>6.4</u>
		TIN:	<u>0.65</u>	:		:	
	Mid-Ebb:	DO (S&M):	<u>5.93</u>	DO (B):	<u>5.35</u>	Turbidity:	<u>4.6</u>
		TIN:	<u>0.64</u>	:		:	
	<input checked="" type="checkbox"/>	Dredging works conducted at Portion <u>A</u> / / of the Project. According to Contractor, dredged rate was <u>1077</u> / / m <sup>3</sup> /day at Portion <u>A</u> / / respectively.					dredged rate (in-situ)
<input type="checkbox"/>	_____						
	_____						
	_____						
	_____						

Prepared by: [Signature]

Signature:

Date (dd/mm/yyyy): 09 / 10 / 2014

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

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**Interim Notification of Environmental Quality Limits Exceedances  
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Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20150602 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	02/06/2015					
Time: (hh:mm)	Mid-Flood: 15:40		Mid-Ebb: 13:20			
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; : / mg/L		TIN: Turbidity: 4.0/8.7 NTU; : / mg/L		0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL	TIN(In-situ): 0.54 AL (U)	TIN(In-situ): 0.53 AL (U)
	Turbidity: AL / LL	TIN(Lab): 0.53 AL (U)	Turbidity: AL / LL	TIN(Lab): 0.55 AL (U)		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF:0.62mg/L (G4) ME:1.12mg/L (G2)	MF:0.64mg/L (G4) ME:1.00mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: ( )mg/L	Upstream: ( )mg/L	Upstream: ( )NTU	Upstream: ( )mg/L	Downstream: ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: ( )mg/L	Downstream: ( )mg/L	Downstream: ( )NTU	Downstream: ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.54 _____ : _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.53 _____ : _____ : _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C1 and Zone 3A) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 3A) were 800m<sup>3</sup>/day and 400m<sup>3</sup>/day respectively.</b>					



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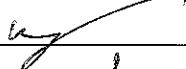
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Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others				Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.69mg/L (C2)  ME: 1.09mg/L (C1)	Additional TIN monitoring were conducted at C2 and C1:  Upstream exceeded AL/LL  MF: 0.63mg/L (C2)  ME: 1.10mg/L (C1)

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 18/06/2015

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 18/06/2015

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160107 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/01/2016					
Time: (hh:mm)	Mid-Flood: 12:40	Mid-Ebb: 11:45				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU				
	TSS : 9 / 18 mg/L					
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	Mid-Ebb:				
	DO (S&M): AL / LL	DO (B): AL / LL	DO (S&M): AL / LL	DO (B): AL / LL		
	Turbidity: AL / LL	TIN(In-situ): 0.24 (A) / LL	Turbidity: AL / LL	TIN(In-situ): 0.23 (A) / LL		
	TIN(Lab): 0.25 (A) / LL		TIN(Lab): 0.25 (A) / LL			
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:					
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.67mg/L (G4) ME: 0.49mg/L (G2)	MF: 0.78mg/L (G4) ME: 0.54mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: 0.24	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: 0.23	DO (B): _____	Turbidity: _____		
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, Zone 2A3) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 1B) were both 423m3/day.					

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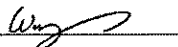
Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

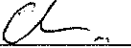
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 03/02/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 03/02/2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160109 /IM/SR11							
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel							
Date:	09/01/2016							
Time: (hh:mm)	Mid-Flood:	09:35	Mid-Ebb:	11:03				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ							
Action Level / Limit Level:	DO (S&M):	6.11 / 6.02 mg/L	TIN:	0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L				
	DO (B):	6.11 / 6.04 mg/L	Turbidity:	2.9 / 4.8 NTU				
	TSS :	9 / 18 mg/L	:	/ mg/L				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:					
	DO (S&M):	AL / LL	DO (B):	AL / LL	DO (S&M):	AL / LL	DO (B):	AL / LL
	Turbidity:	AL / LL	TIN(In-situ):	0.36 AL / (L)	Turbidity:	AL / LL	TIN(In-situ):	0.36 AL / (L)
	TIN(Lab):	0.39 AL / (L)	:	AL / LL	TIN(Lab):	0.38 AL / (L)	:	AL / LL
Action taken / to be taken: (tick / fill in as appropriate)	Inspection:							
	<input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____							
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)		
	Findings / Evidences							
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓		
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.62mg/L (G4) ME: 0.47mg/L (G2)	MF: 0.64mg/L (G4) ME: 0.49mg/L (G2)		
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.								
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓			
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.							
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity:	_____			
		TIN: 0.36	_____	_____	_____			
	Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity:	_____			
		TIN: 0.36	_____	_____	_____			
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2B2, Zone 3B) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1), Portion A (Zone 2B2) and Portion A (Zone 3B) were both 423m3/day.</b>							

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 04/02/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 04/02/2014

**Notes:**

- Abbreviation:

AL – Action Level

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DO (S&M) – Dissolved Oxygen (Surface & Middle)

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MF – Mid Flood

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NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160223 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	23/02/2016					
Time: (hh:mm)	Mid-Flood: 10:16		Mid-Ebb: 11:00			
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 6.11 / 6.02 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	DO (B): 6.11 / 6.04 mg/L	Turbidity: 2.9 / 4.8 NTU	TSS : 9 / 18 mg/L	
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): AL / LL	DO (B): AL / LL	Mid-Ebb:	DO (S&M): AL / LL	
	Turbidity: AL / LL	TIN(In-situ): 0.28 (A) / LL	Turbidity: AL / LL	TIN(In-situ): 0.27 (A) / LL	TIN(Lab): 0.28 (A) / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.46mg/L (G4) ME: 0.37mg/L (G2)	MF: 0.48mg/L (G4) ME: 0.37mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.28 _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.27 _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C2) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C2) was 1085m3/day.</b>					

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 29/03/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 29/03/2016

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160604 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	04/06/2016					
Time: (hh:mm)	Mid-Flood:	14:59	Mid-Ebb:	13:32		
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L;	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L	DO (B): 4.41/4.25 mg/L;	Turbidity: 4.0/8.7 NTU;		
	TSS : 9 / 18 mg/L			/ mg/L		
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.64</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.58</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.64</u> AL / <u>(L)</u>	_____ AL / LL	TIN(Lab): <u>0.57</u> AL / <u>(L)</u>	_____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.49mg/L (G4) ME: 1.02mg/L (G2)	MF: 0.49mg/L (G4) ME: 1.02mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.					
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____	DO (B): _____	Turbidity: _____		
		TIN: <u>0.64</u>	_____	_____		
Mid-Ebb:	DO (S&M): _____	DO (B): _____	Turbidity: _____			
	TIN: <u>0.58</u>	_____	_____			
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B, 2C1) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) and Portion A (Zone 2C1) were 538m3/day and 1077m3/day respectively.</b>					



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Fugro Development Centre,  
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 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 28 / 06 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 28 / 06 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

**Incident Report on Action Level or Limit Level Non-compliance**

Reference No.:	20160607 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	07/06/2016					
Time: (hh:mm)	Mid-Flood: 10:02	Mid-Ebb: 11:10				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9/18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): <u>0.43</u> AL / LL	DO (B): _____ AL / LL TIN(In-situ): <u>0.45</u> AL / LL _____ : _____ AL / LL	Mid-Ebb:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): <u>0.47</u> AL / LL	
		DO (B): _____ AL / LL TIN(In-situ): <u>0.41</u> AL / LL _____ : _____ AL / LL		DO (B): _____ AL / LL TIN(In-situ): _____ AL / LL _____ : _____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.53mg/L (G4) ME: 0.55mg/L (G2)	MF: 0.50mg/L (G4) ME: 0.57mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.45</u> _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.41</u> _____ : _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A, 3B) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 3B) were 446m3/day and 1077m3/day respectively.</b>					

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Fugro Development Centre,  
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Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 28 / 06 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 28 / 06 / 2016

Notes:

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160611 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	11/06/2016					
Time: (hh:mm)	Mid-Flood:	12:34	Mid-Ebb:	13:39		
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;	mg/L			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:		Mid-Ebb:			
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.69</u> AL / (L)	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.64</u> AL / (L)		
	TIN(Lab): <u>0.68</u> AL / (L)	_____ AL / LL	TIN(Lab): <u>0.67</u> AL / (L)	_____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL				MF: 0.59mg/L (G4) ME: 0.68mg/L (G2)	MF: 0.57mg/L (G4) ME: 0.68mg/L (G2)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.69</u> _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: <u>0.64</u> _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1B) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 1B) was 1615m<sup>3</sup>/day.</b>					

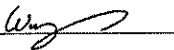
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 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk


**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo SoSignature: Date (dd/mm/yyyy): 28 / 06 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: Date (dd/mm/yy): 28 / 06 / 2016**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&amp;M) – Dissolved Oxygen (Surface &amp; Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160614 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	14/06/2016					
Time: (hh:mm)	Mid-Flood:	11:55	Mid-Ebb:	10:30		
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.72 AL / (L)	DO (B): _____ AL / LL TIN(In-situ): 0.77 AL / (L)	Mid-Ebb:	DO (S&M): _____ AL / LL Turbidity: _____ AL / LL TIN(Lab): 0.73 AL / (L)	
				DO (B): _____ AL / LL TIN(In-situ): 0.76 AL / (L)		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	
		Findings / Evidences				
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	
	<input checked="" type="checkbox"/> Upstream Control Station <sup>or gradient station for TIN</sup> exceeded AL/LL				MF: 0.89mg/L (G4) ME: 1.18mg/L (G2)	
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.			✓	✓	
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.77 _____ Mid-Ebb: DO (S&M): _____ DO (B): _____ Turbidity: _____ TIN: 0.76 _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 1A, 4A) of the Project. According to Contractor, dredged rate (in-situ) at Portion A (Zone 1A) and Portion A (Zone 4A) were 446m<sup>3</sup>/day and 538m<sup>3</sup>/day respectively.</b>					

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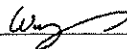
Fugro Development Centre,  
5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 06 / 07 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 06 / 07 / 2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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5 Lok Yi Street,  
17 M.S. Castle Peak Road,  
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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Email : mcl@fugro.com.hk



**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160618 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	18/06/2016					
Time: (hh:mm)	Mid-Flood: 14:55		Mid-Ebb: 13:29			
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L		TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;			
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:			Mid-Ebb:		
	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL	DO (S&M): _____ AL / LL	DO (B): _____ AL / LL		
	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.81</u> AL / <u>(L)</u>	Turbidity: _____ AL / LL	TIN(In-situ): <u>0.79</u> AL / <u>(L)</u>		
	TIN(Lab): <u>0.82</u> AL / <u>(L)</u>	_____ AL / LL	TIN(Lab): <u>0.73</u> AL / <u>(L)</u>	_____ AL / LL		
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	Findings / Evidences					
	<input checked="" type="checkbox"/> Station at Upstream Location at MF				✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (or gradient station for TIN) exceeded AL/LL				MF: 0.63mg/L (G4) ME: 1.16mg/L (G2)	MF: 0.59mg/L (G4) ME: 1.36mg/L (G2)
<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L	Upstream: _____ ( )mg/L	Upstream: _____ ( )NTU	Upstream: _____ ( )mg/L		
	Downstream: _____ ( )mg/L	Downstream: _____ ( )mg/L	Downstream: _____ ( )NTU	Downstream: _____ ( )mg/L		
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.				✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done.					
	Mid-Flood:	DO (S&M): _____ TIN: <u>0.81</u>	DO (B): _____	Turbidity: _____		
	Mid-Ebb:	DO (S&M): _____ TIN: <u>0.79</u>	DO (B): _____	Turbidity: _____		
	<input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) of the Project.</b> According to Contractor, dredged rate (in-situ) at Portion A (Zone 2A1, Zone 2A2, Zone 2B2) were 538m <sup>3</sup> /day respectively					



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Fugro Development Centre,  
 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
 Fax : (852)-24508032  
 Email : mcl@fugro.com.hk

**MaterialLab**

	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					


Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 06/07/2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 06/07/2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March



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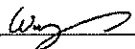
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 5 Lok Yi Street,  
 17 M.S. Castle Peak Road,  
 Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : (852)-24508238  
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	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

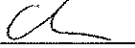
Prepared by: Wingo So

Signature: 

Date (dd/mm/yyyy): 03 / 08 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yy): 03 / 08 / 2016

**Notes:**

- Abbreviation:

AL – Action Level

DO (B) – Dissolved Oxygen (Bottom)

DO (S&M) – Dissolved Oxygen (Surface & Middle)

LL – Limit Level

ME – Mid Ebb

MF – Mid Flood

NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)

NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)

TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)

TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)

TSS – Total Suspended Solids

- Wet Season: April to October; Dry Season: November to March

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**Interim Notification of Environmental Quality Limits Exceedances  
Impact Water Quality Monitoring**

Incident Report on Action Level or Limit Level Non-compliance

Reference No.:	20160712 /IM/SR11					
Project:	CV/2013/04 - Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel					
Date:	12/07/2016					
Time: (hh:mm)	Mid-Flood: 12:52	Mid-Ebb: 14:55				
Monitoring Location:	SR11 – Sok Kwu Wan FCZ					
Action Level / Limit Level:	DO (S&M): 5/5 mg/L; DO (B): 4.41/4.25 mg/L; TSS : 9 / 18 mg/L	TIN: 0.37/0.49 <sub>(wet season)</sub> or 0.22/0.29 <sub>(dry season)</sub> mg/L Turbidity: 4.0/8.7 NTU;				
Measured Level of exceeded parameters (tick / fill in / circle as appropriate)	Mid-Flood:	DO (S&M): _____ AL / LL	DO (B): <u>4.22</u> AL / <u>(L)</u>	Mid-Ebb:	DO (S&M): _____ AL / LL	
		Turbidity: _____ AL / LL	TIN(In-situ): <u>0.82</u> AL / <u>(L)</u>		DO (B): <u>4.20</u> AL / <u>(L)</u>	
		TIN(Lab): <u>0.83</u> AL / <u>(L)</u>	_____ AL / LL		TIN(In-situ): <u>0.85</u> AL / <u>(L)</u>	
	TIN(Lab): _____ AL / LL	_____ AL / LL		TIN(Lab): <u>0.81</u> AL / <u>(L)</u>	_____ AL / LL	
Action taken / to be taken: (tick / fill in as appropriate)	Inspection: <input checked="" type="checkbox"/> Silt curtain in proper condition <input checked="" type="checkbox"/> Dredging rate within accepted rate <input checked="" type="checkbox"/> Monitoring equipment is checked and confirmed without problem. <input type="checkbox"/> Others: _____					
Possible reason for Action or Limit Level Non-compliance: (tick / fill in as appropriate)		DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
	<input checked="" type="checkbox"/> Station at Upstream Location at MF		✓		✓	✓
	<input checked="" type="checkbox"/> Upstream Control Station (station for TIN) exceeded AL/LL		MF: 2.35mg/L (G4) ME: 4.00mg/L (G3)		MF: 0.68mg/L (G4) ME: 0.65mg/L (G3)	MF: 0.62mg/L (G4) ME: 0.66mg/L (G3)
	<input type="checkbox"/> No increasing / decreasing (for DO) trend across the Project at ME	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	Upstream: _____ ( )NTU Downstream: _____ ( )NTU	Upstream: _____ ( )mg/L Downstream: _____ ( )mg/L	
<input type="checkbox"/> No Dredging Works carried out.						
Conclusion	<input checked="" type="checkbox"/> Due to change or/and influence of ambient condition in the vicinity, i.e. not Project related.		✓		✓	✓
Remarks: (tick / fill in as appropriate)	Repeat In-situ measurement was done. Mid-Flood: DO (S&M): _____ DO (B): <u>4.22</u> Turbidity: _____ TIN: <u>0.82</u> _____ : _____ : _____ Mid-Ebb: DO (S&M): _____ DO (B): <u>4.20</u> Turbidity: _____ TIN: <u>0.85</u> _____ : _____ : _____ <input checked="" type="checkbox"/> <b>Dredging works conducted at Portion A (Zone 2C1, Zone 2B2) of the Project.</b> <b>According to Contractor, dredged rate (in-situ) at Portion A (Zone 2C1) and Portion A (Zone 2B2) were both 538m3/day.</b>					

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 Email : mcl@fugro.com.hk



	DO(S&M)	DO(B)	Turbidity	TIN (In-situ)	TIN (Lab)
Others					

Prepared by: Wingo So

Signature:

Date (dd/mm/yyyy): 04 / 08 / 2016

Certified by: Colin Yung

Designation: Environmental Team Leader

Signature:

Date (dd/mm/yy): 04 / 08 / 2016

**Notes:**

- Abbreviation:
- AL – Action Level
- DO (B) – Dissolved Oxygen (Bottom)
- DO (S&M) – Dissolved Oxygen (Surface & Middle)
- LL – Limit Level
- ME – Mid Ebb
- MF – Mid Flood
- NH3-N (In-situ) – Ammoniacal Nitrogen (In-situ results)
- NH3-N (Lab) – Ammoniacal Nitrogen (Laboratory results)
- TIN (In-situ) – Total Inorganic Nitrogen (In-situ results)
- TIN (Lab) – Total Inorganic Nitrogen (Laboratory results)
- TSS – Total Suspended Solids
- Wet Season: April to October; Dry Season: November to March

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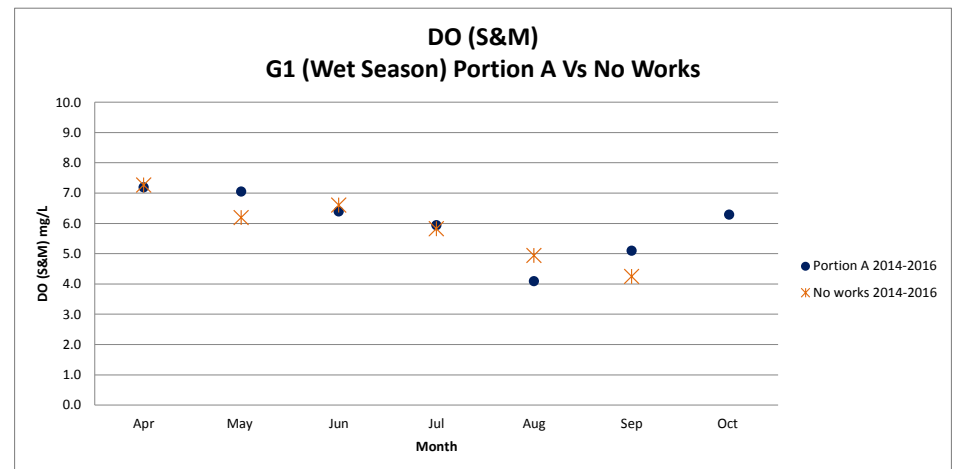
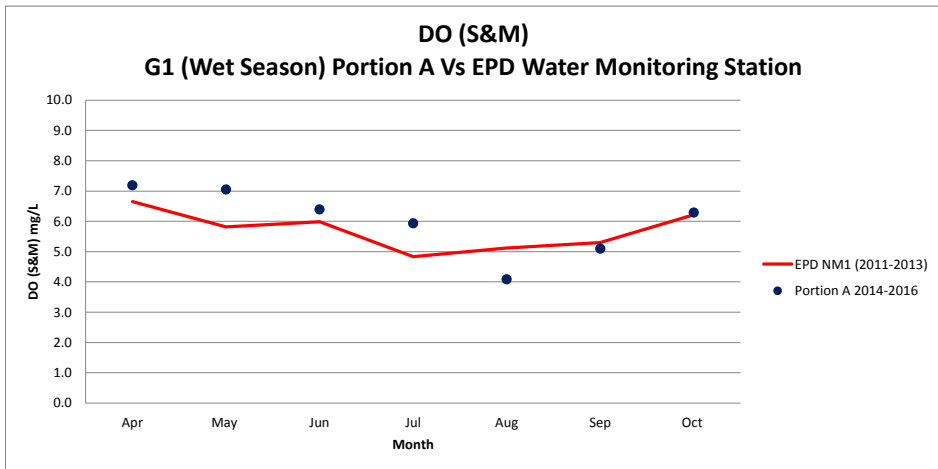
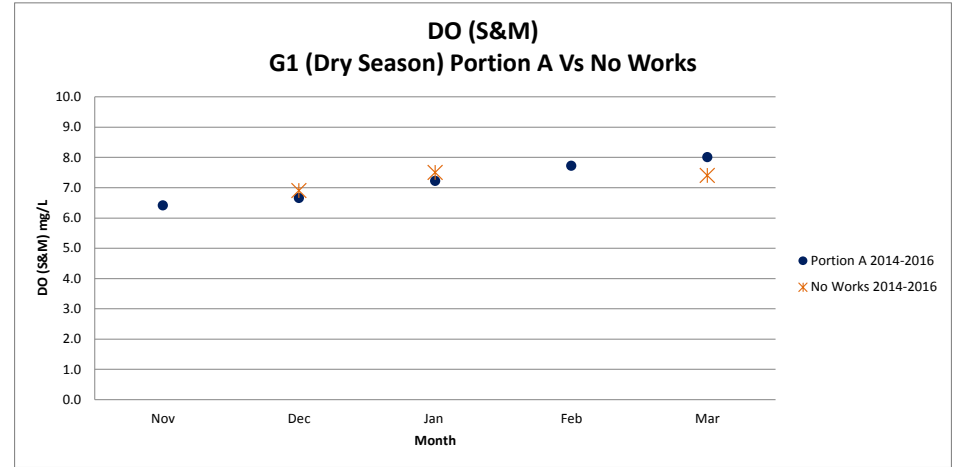
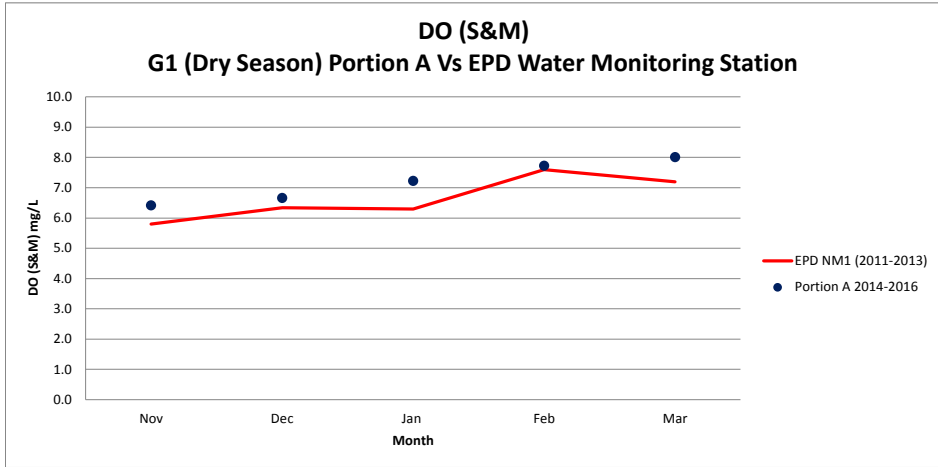
Room 723 & 725, 7/F, Block B,  
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Hong Kong.

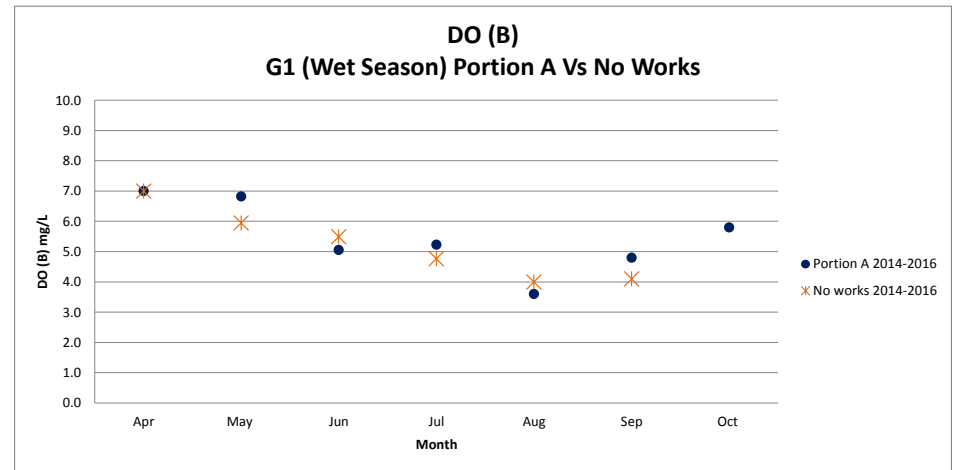
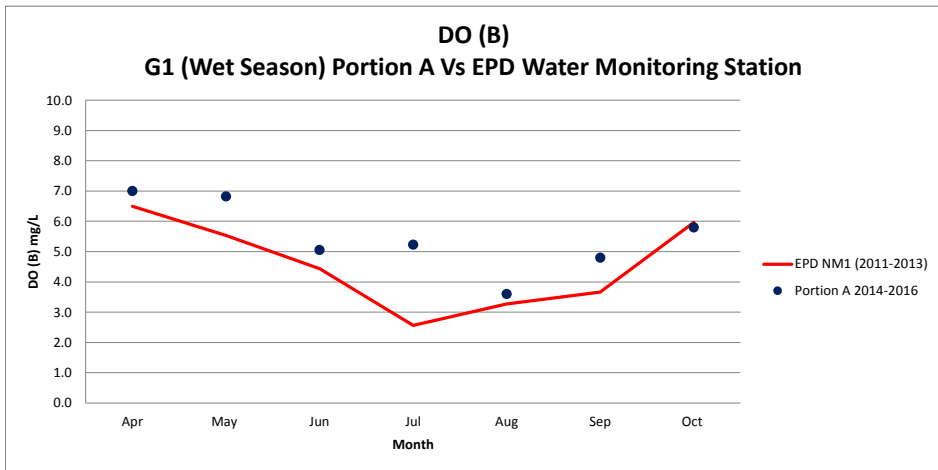
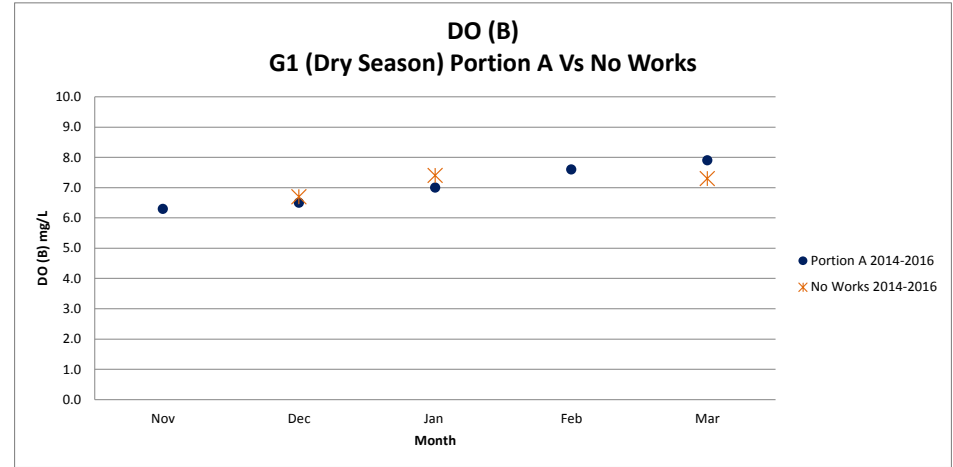
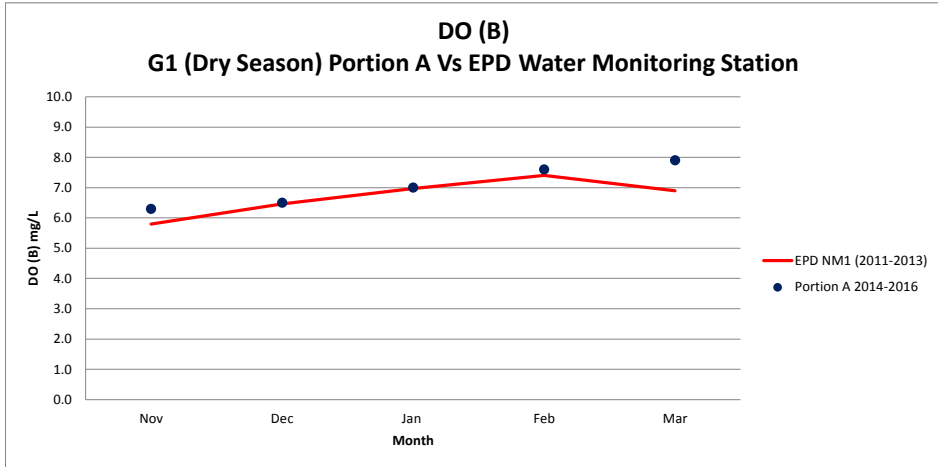
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**MaterialLab**

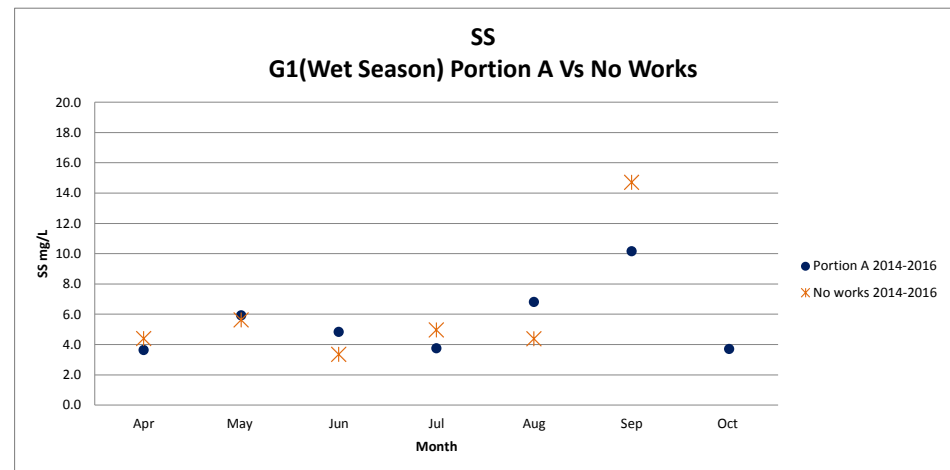
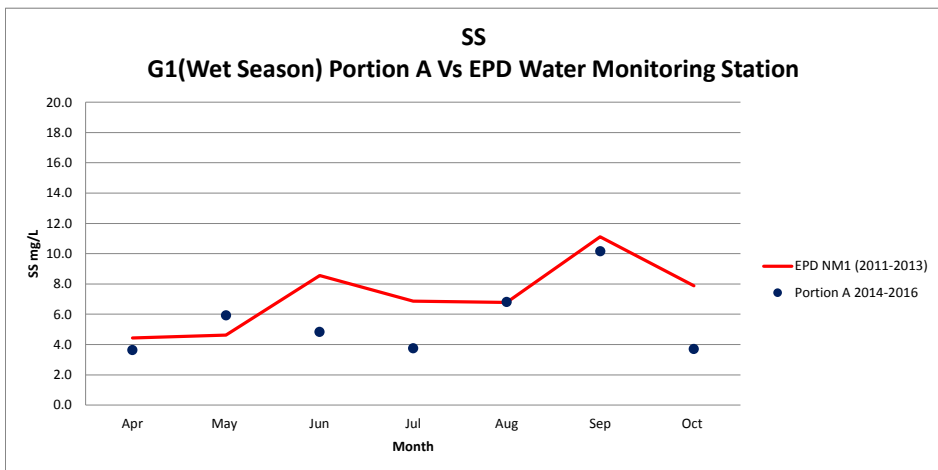
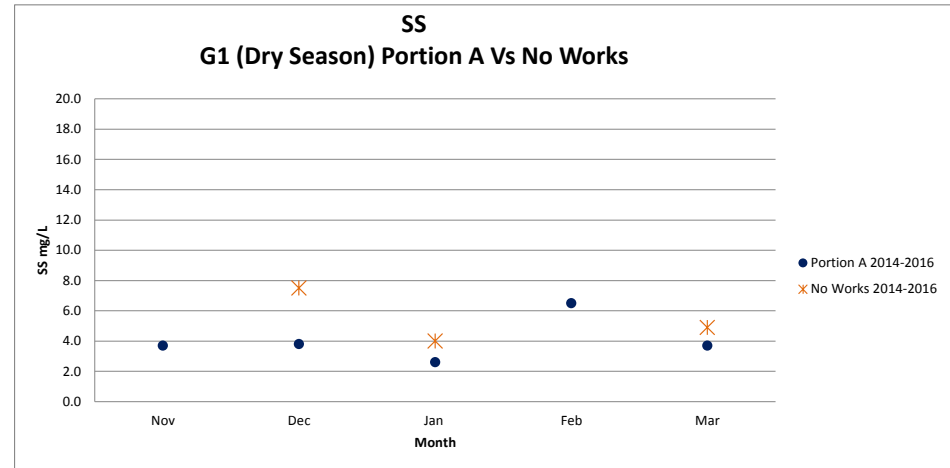
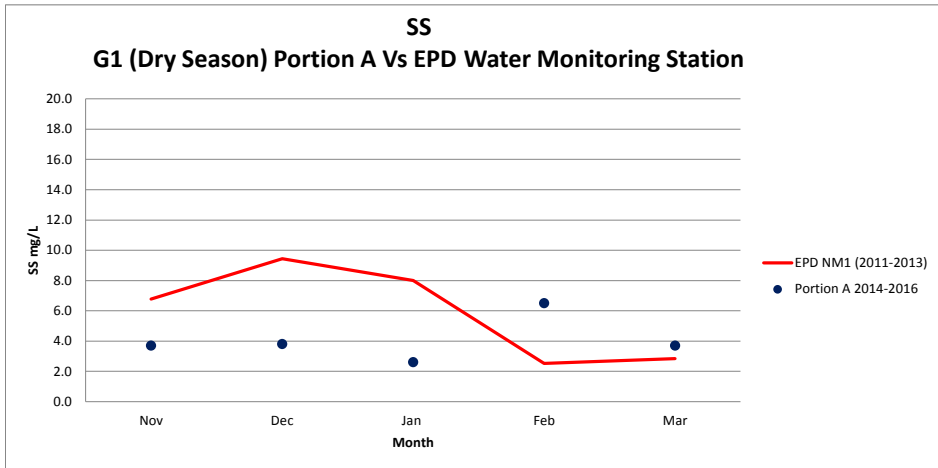
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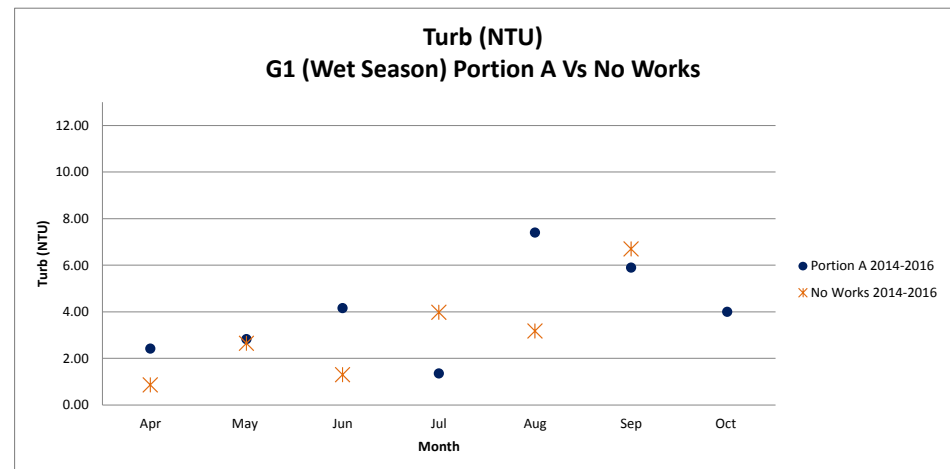
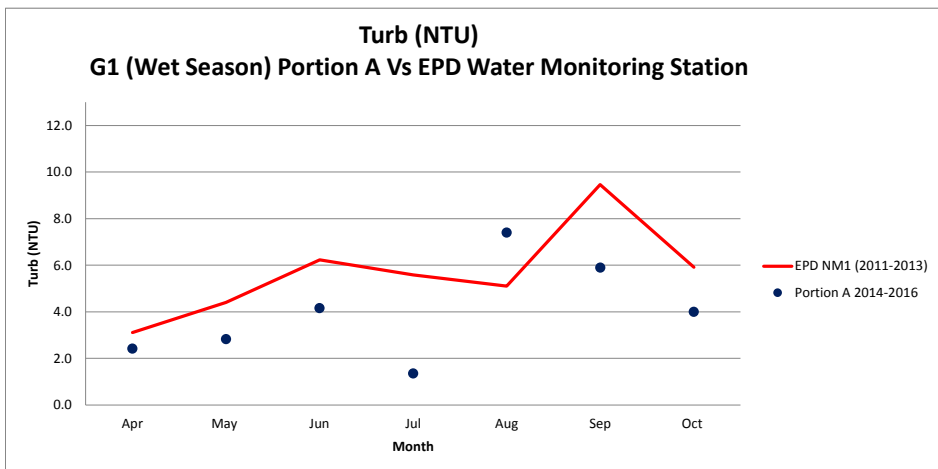
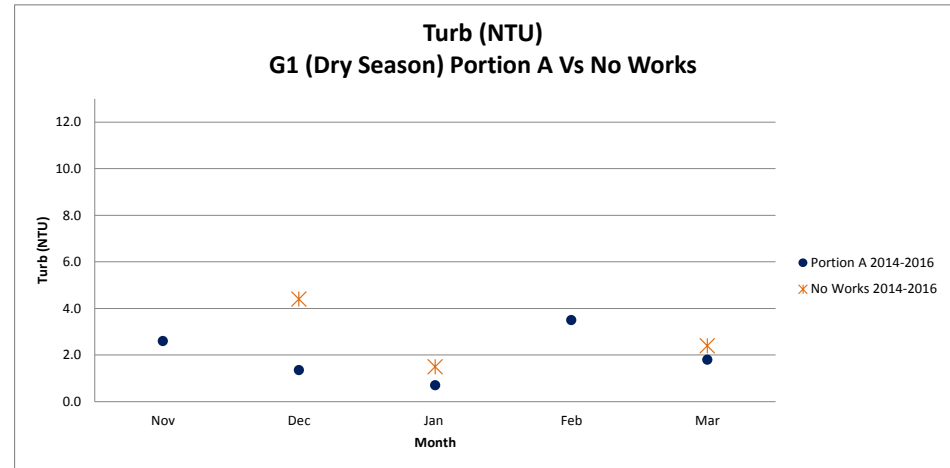
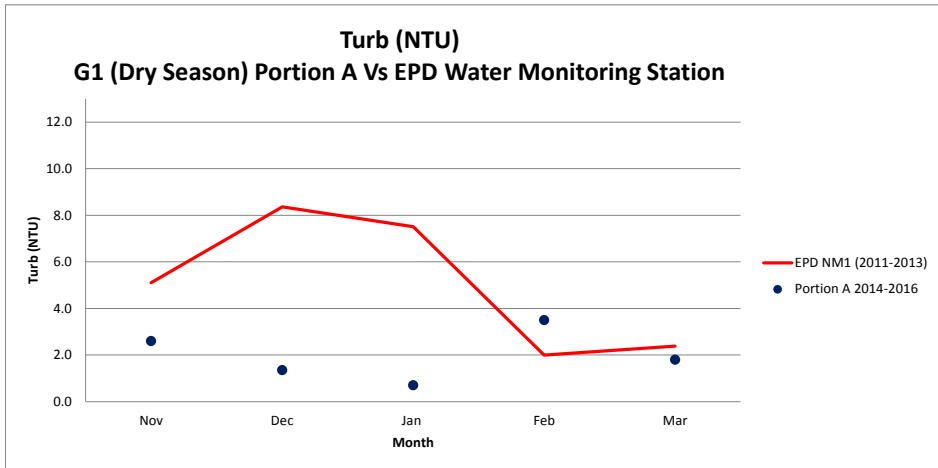
#### Graphical Presentation of Analytical Results of G1 and G4

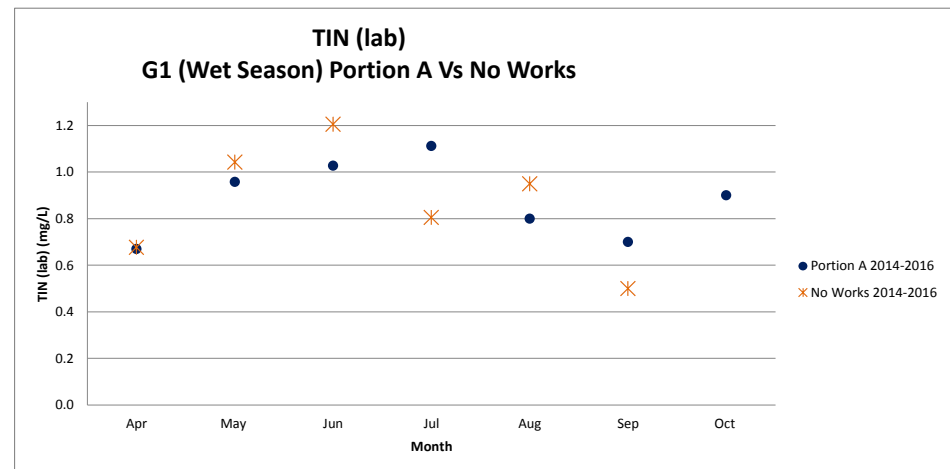
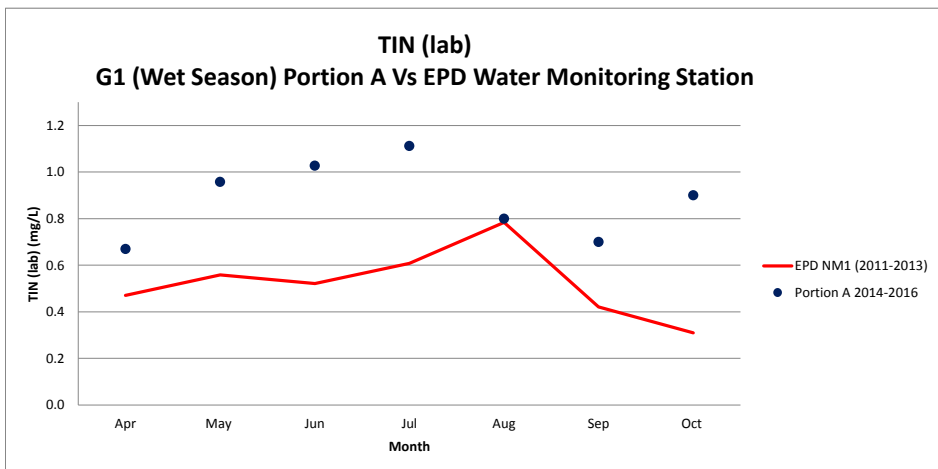
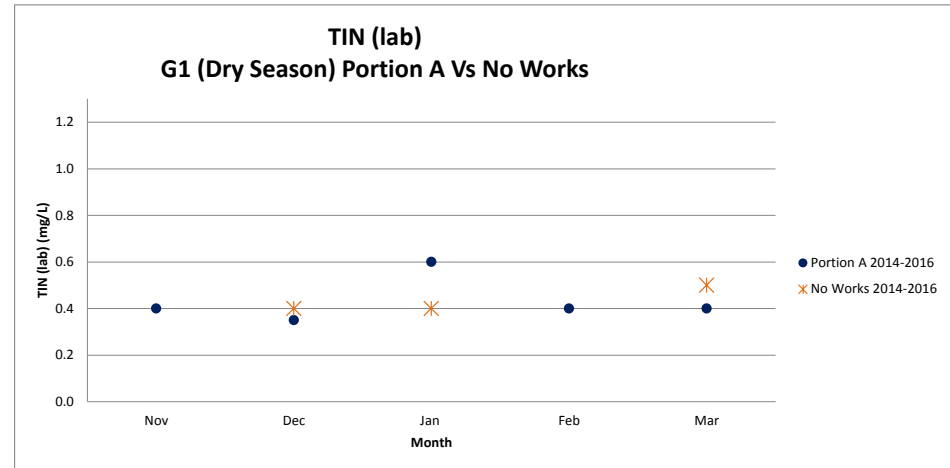
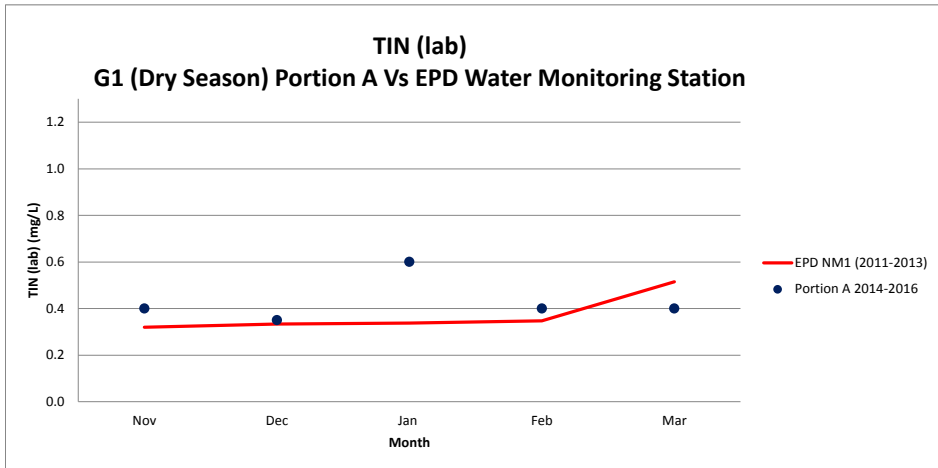


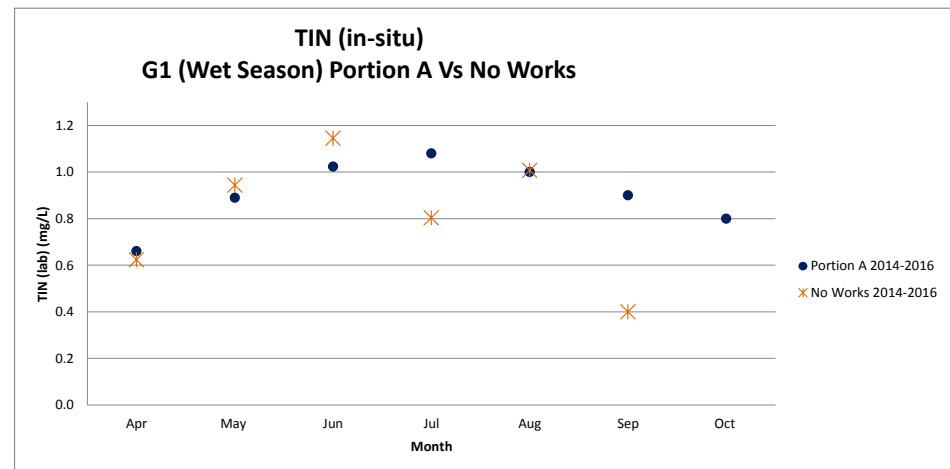
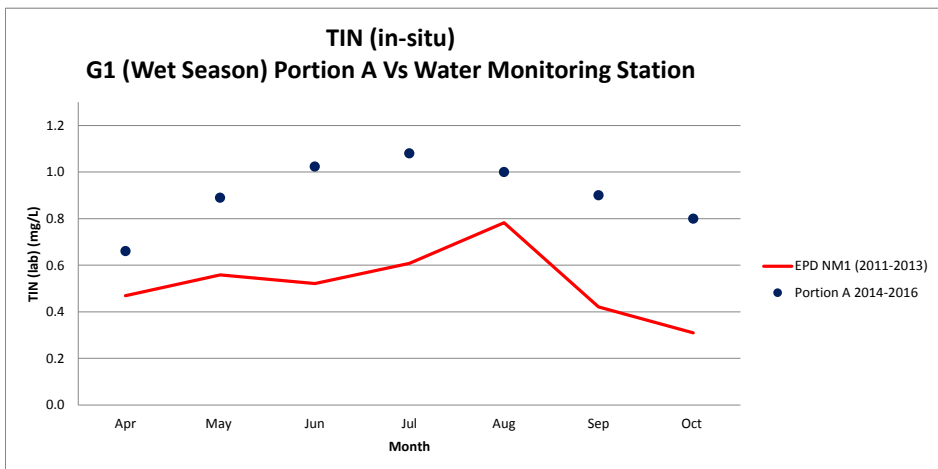
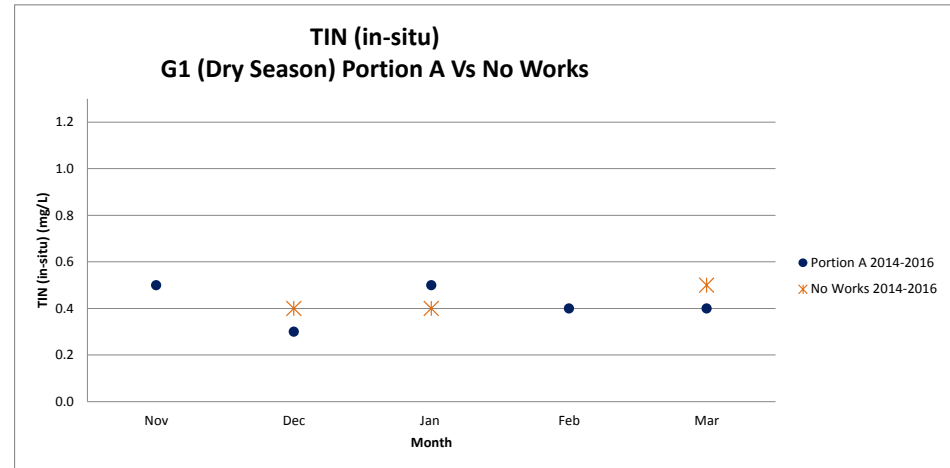
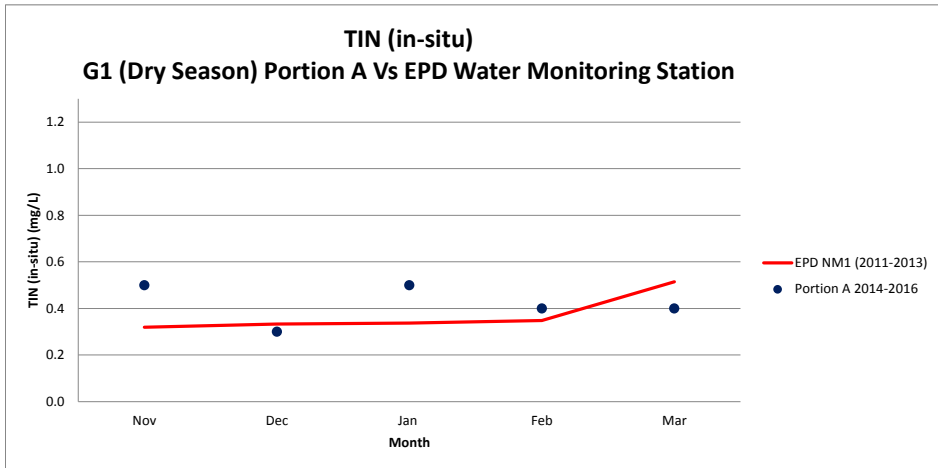


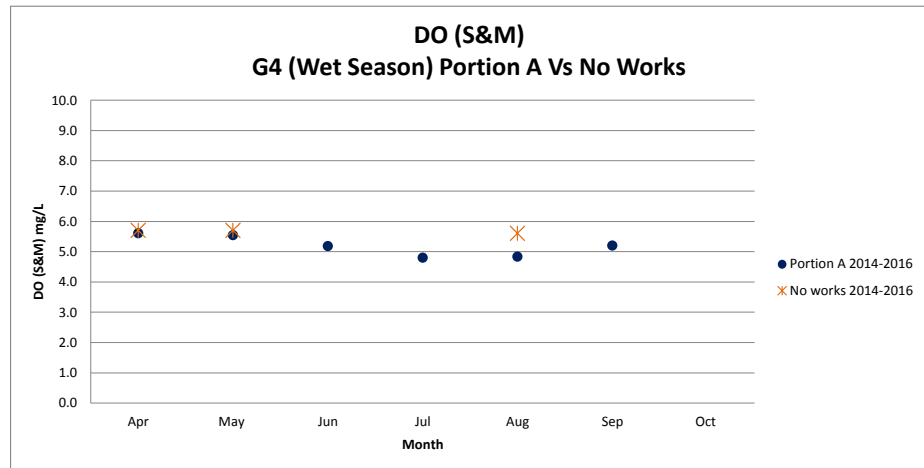
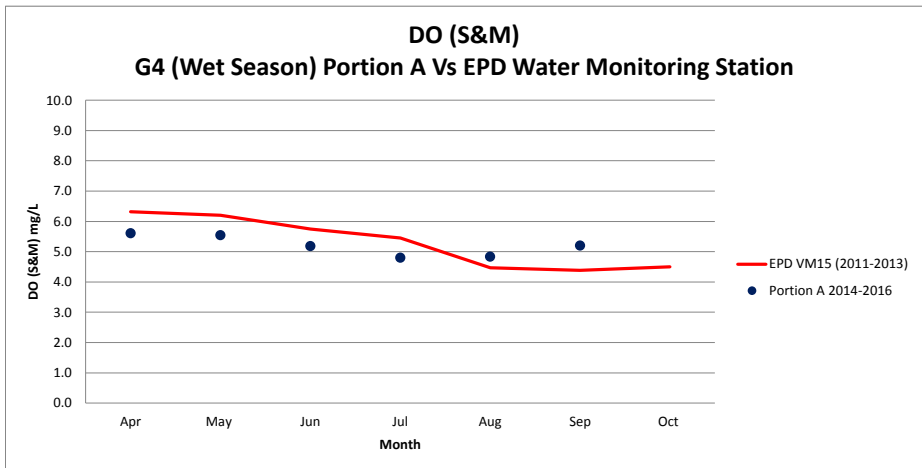
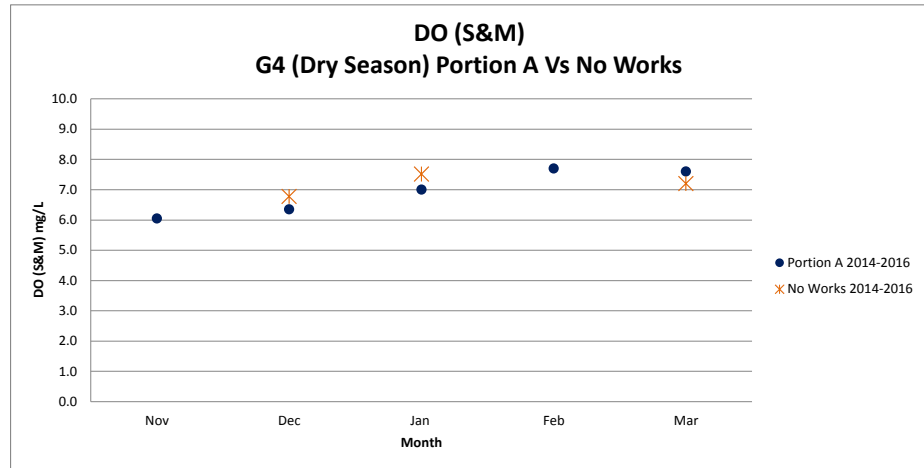
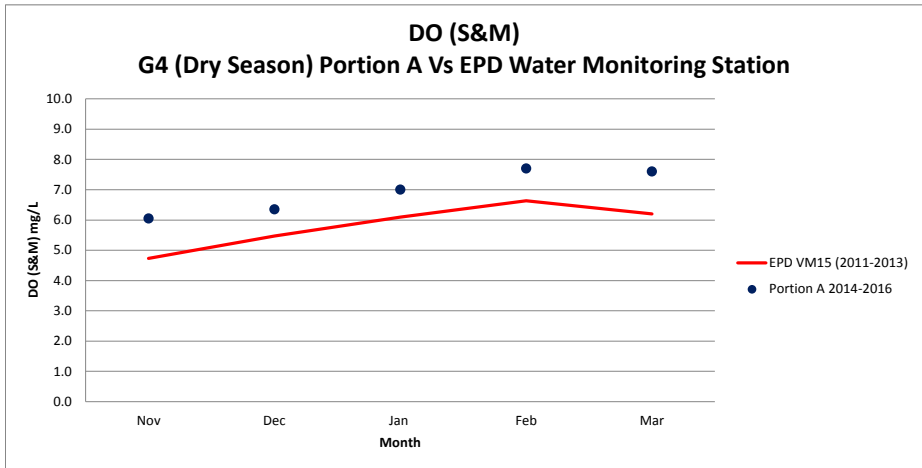


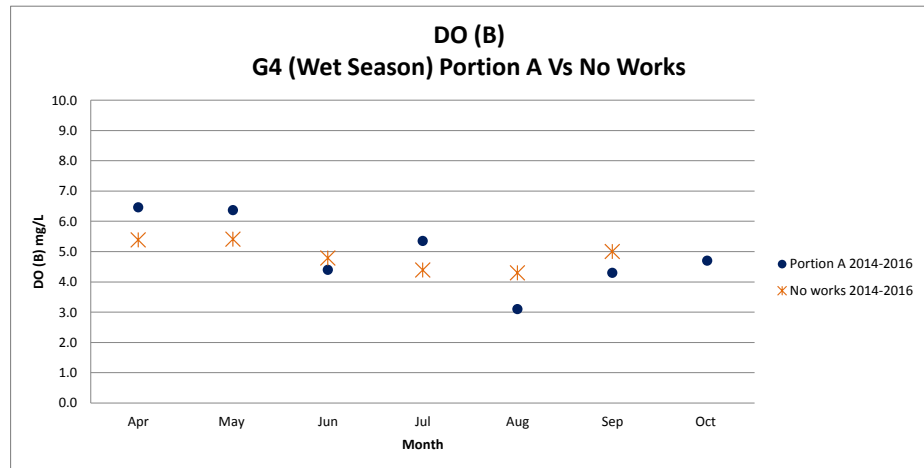
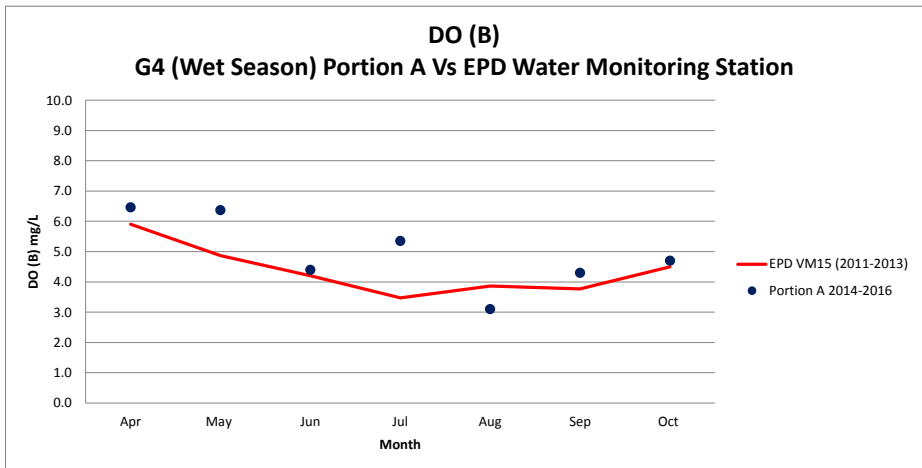
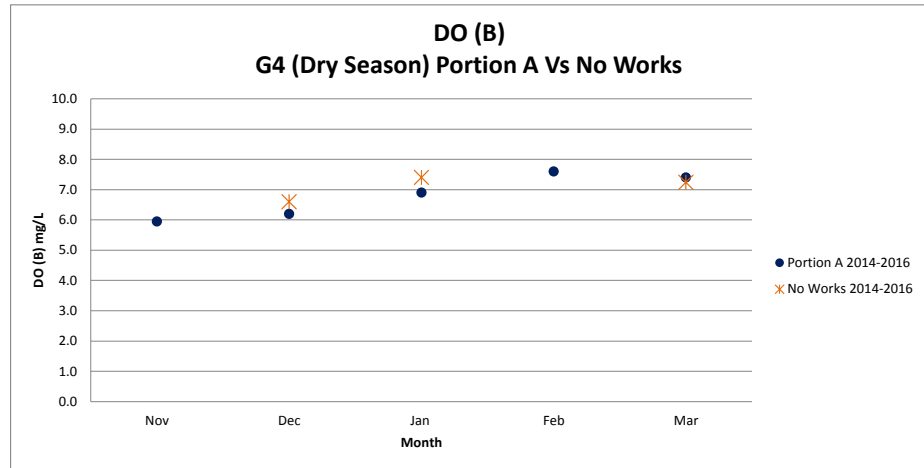
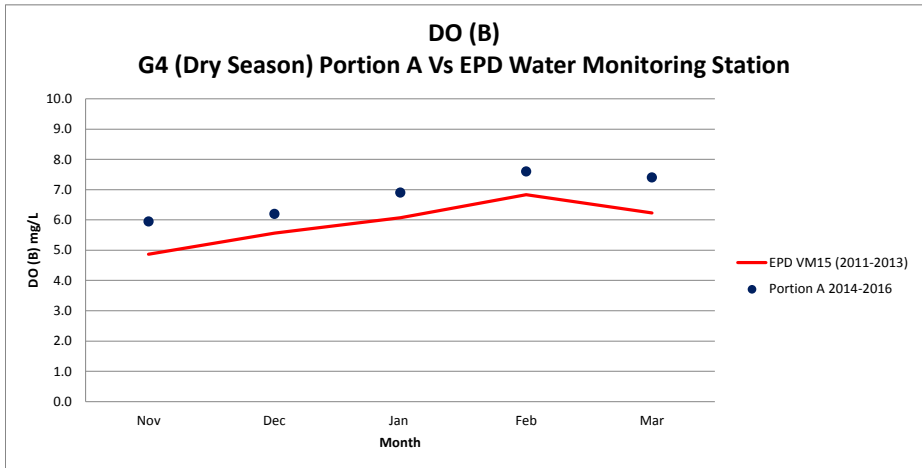


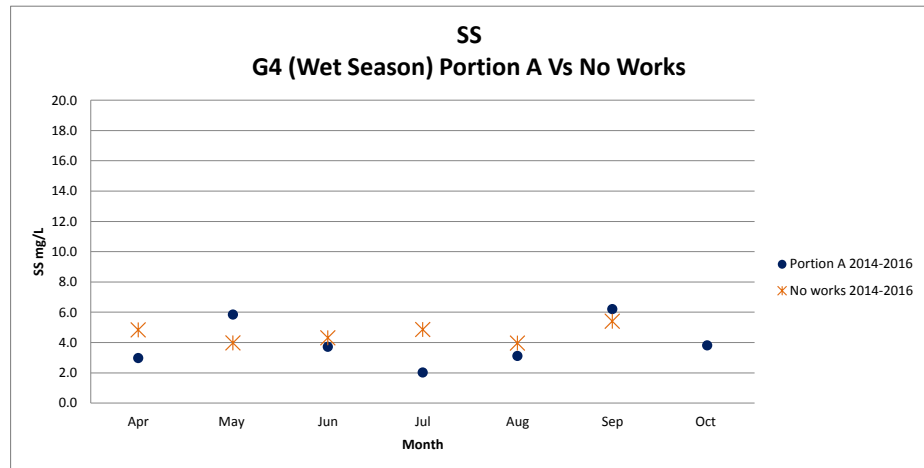
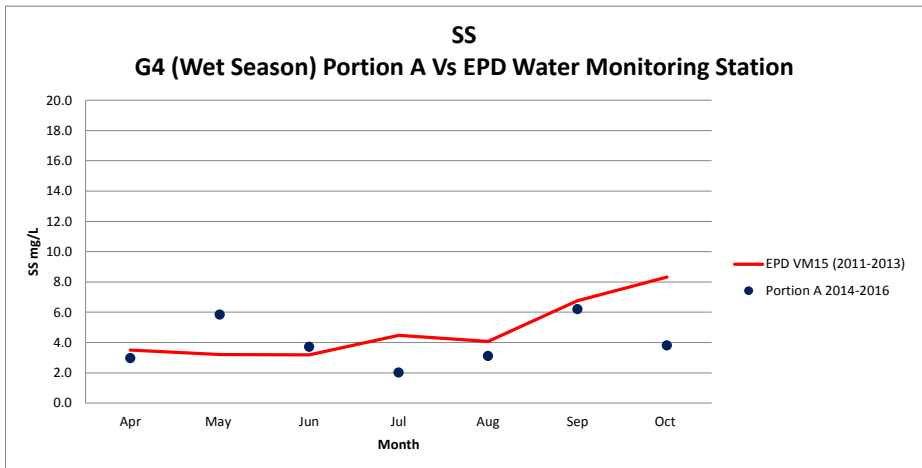
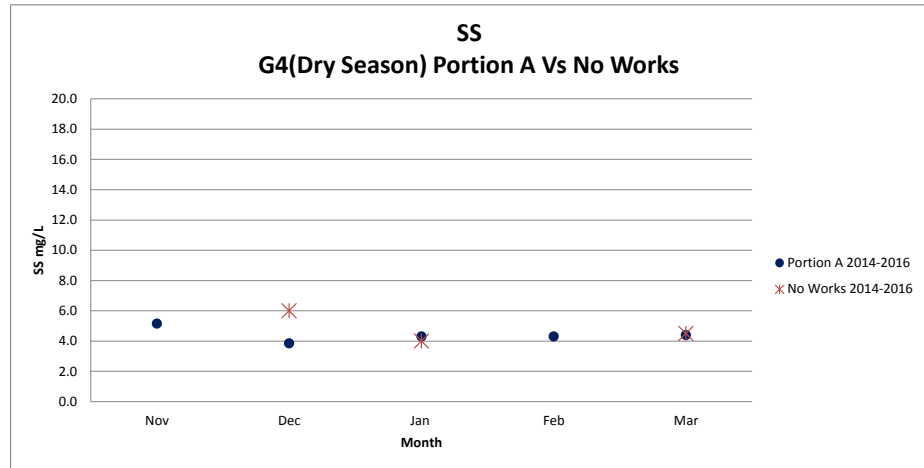
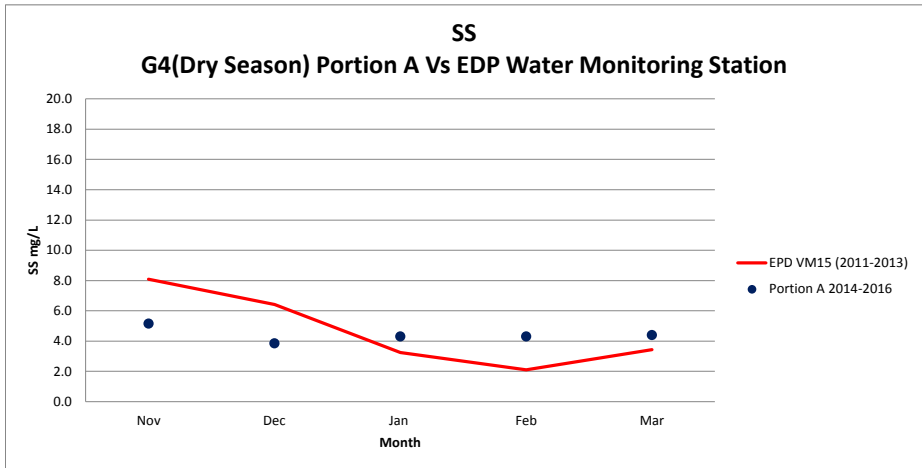


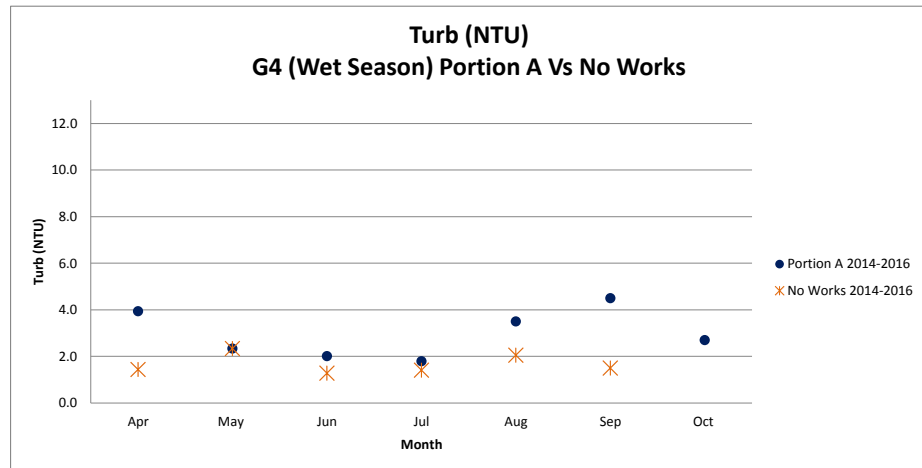
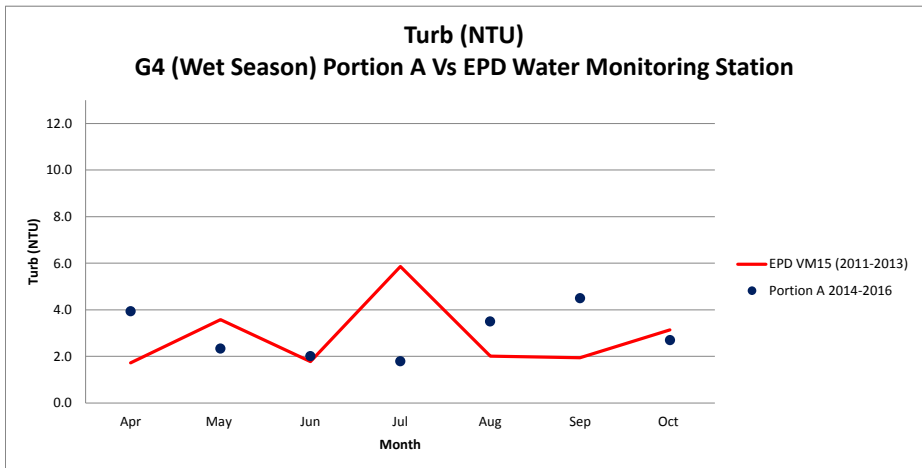
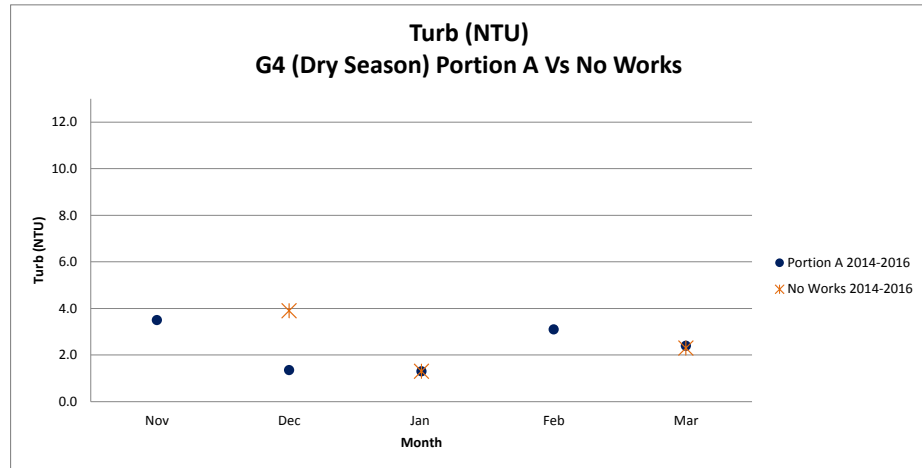
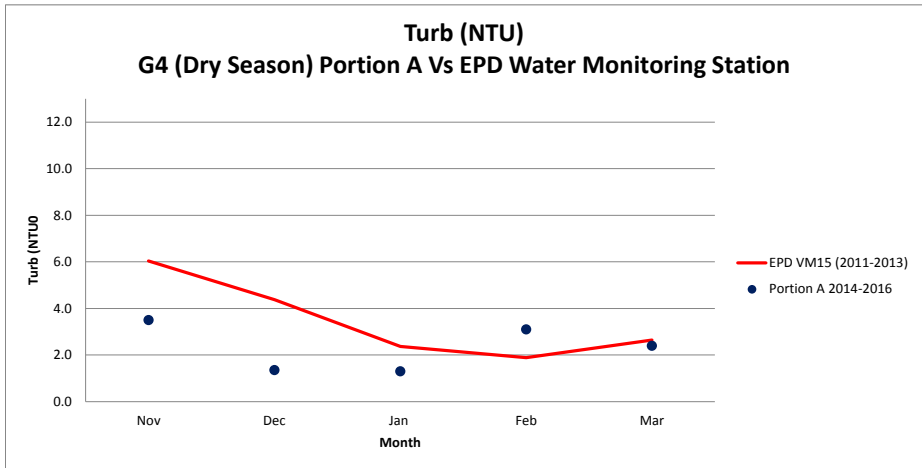




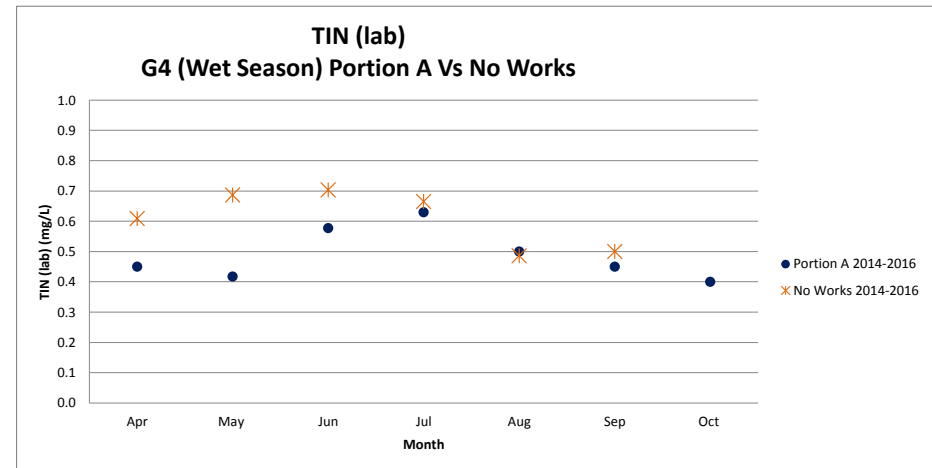
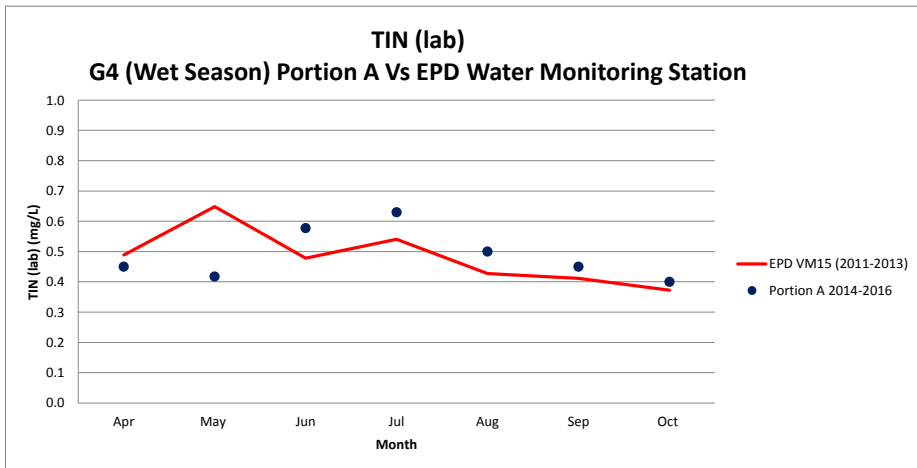
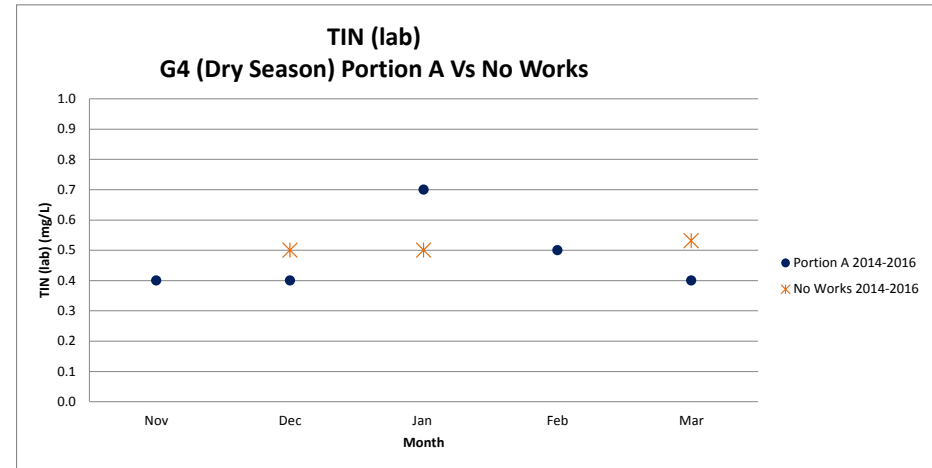
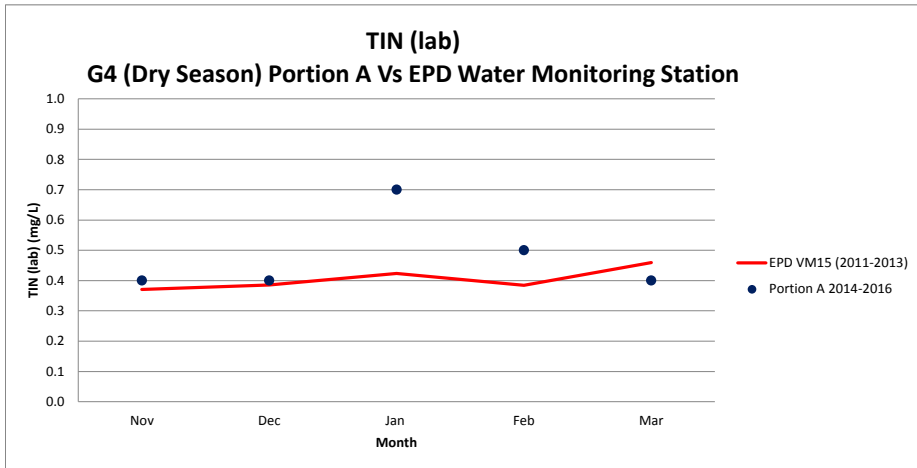


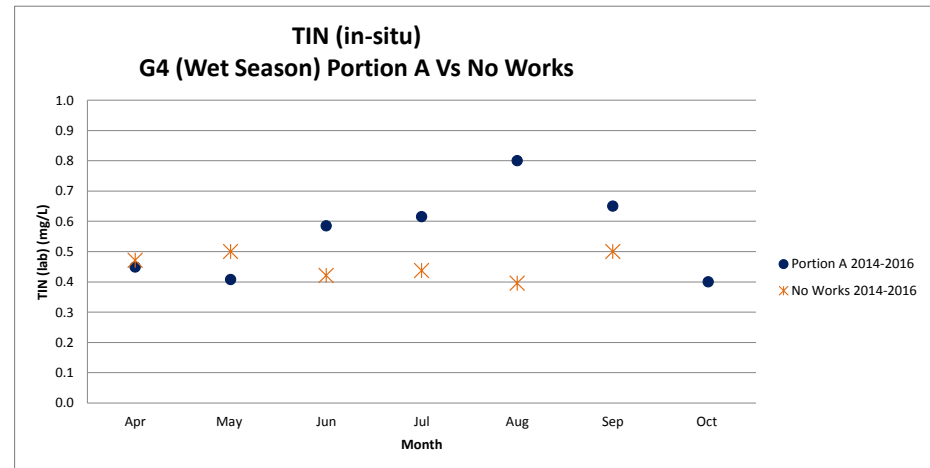
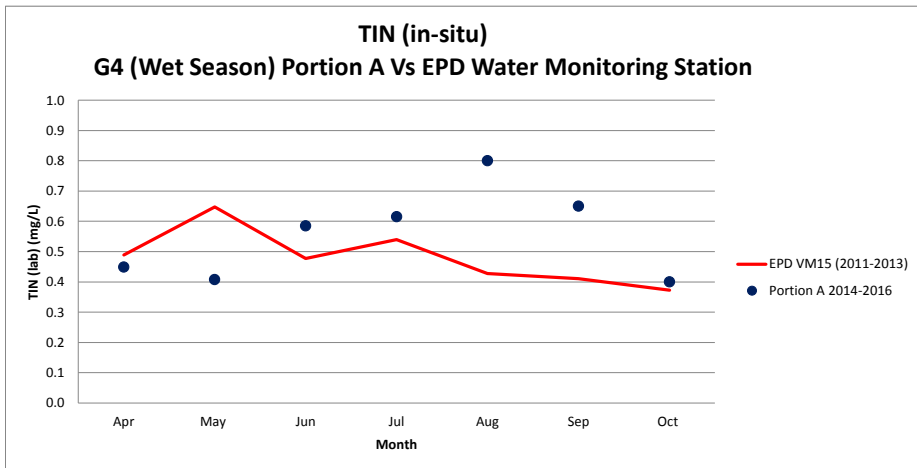
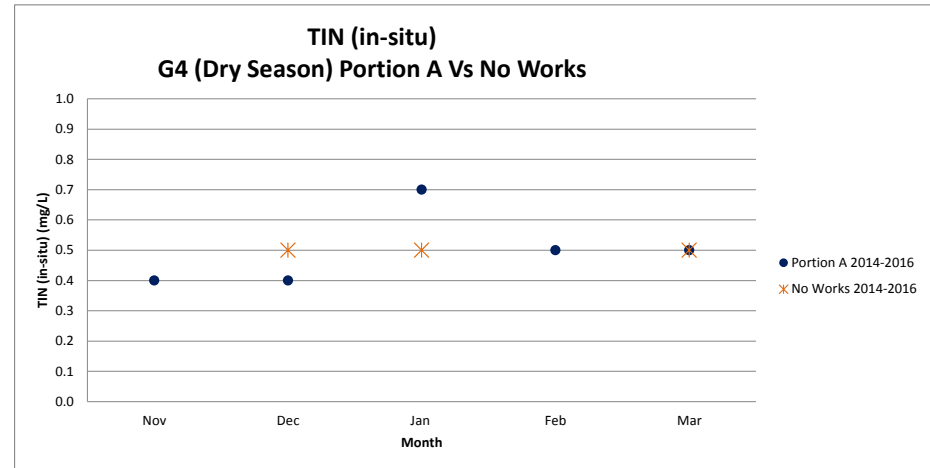
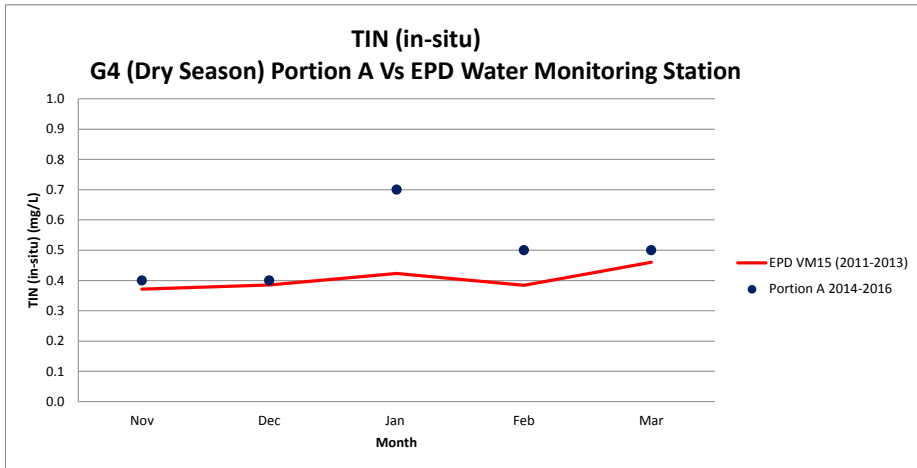












## MATERIALAB CONSULTANTS LIMITED

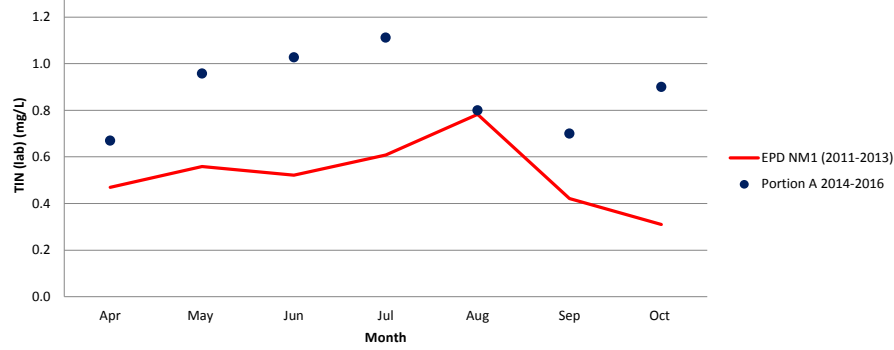
Room 723 & 725, 7/F, Block B,  
Profit Industrial Building,  
1-15 Kwai Fung Crescent, Kwai Fong,  
Hong Kong.

Tel : (852)-24508238  
Fax : (852)-24508032  
Email : mcl@fugro.com.hk

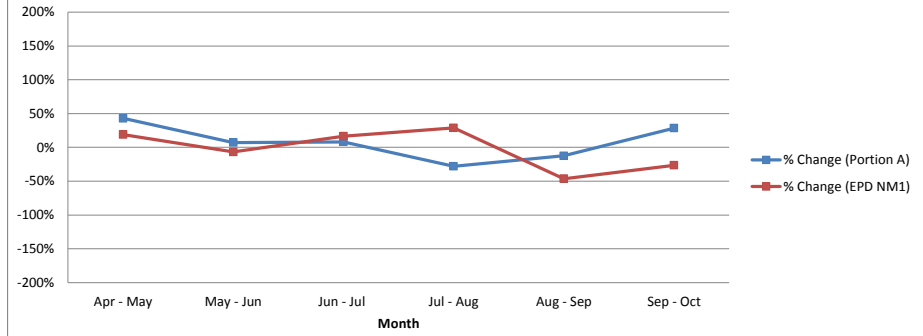
**MaterialLab**

G1 – TIN Percentage Change in Wet Season

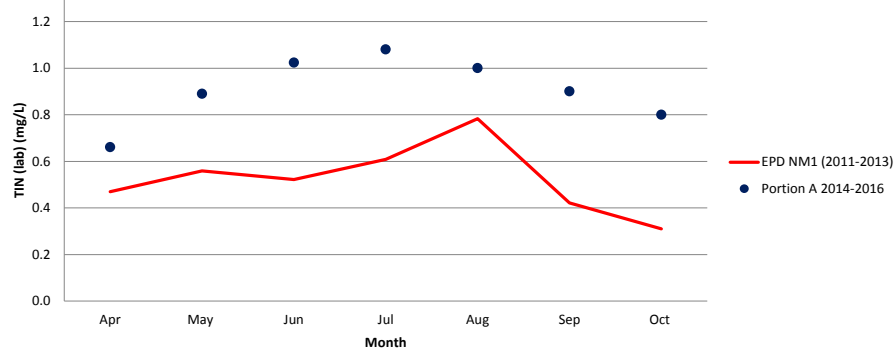
**TIN (lab) - G1 (Wet Season)  
Portion A Vs EPD Water Monitoring Station**



**TIN (lab) - G1 (Wet Season)  
Monthly Percentage Change of Portion A Vs EPD Water  
Monitoring Station**



**TIN (in-situ) - G1 (Wet Season)  
Portion A Vs EPD Water Monitoring Station**



**TIN (in-situ) -G1 (Wet Season)  
Monthly Percentage Change of Portion A vs EPD Water  
Monitoring Station**

