

Water Supplies Department New Works Branch Consultants Management Division 6/F Sha Tin Government Offices 1 Sheung Wo Che Road Sha Tin New Territories

Attention: Mr W K Lau

Your reference:

Our reference: HKWSD202/50/107501

Date: 18 August 2021

BY EMAIL & POST

(email: simon_wk_lau@wsd.gov.hk)

Dear Sirs

Agreement No. CE 5/2019 (EP) Independent Environmental Checker for First Stage of Tseung Kwan O Desalination Plant – Investigation Verification of Monthly EM&A Report No.17 (July 2021)

We refer to emails of 11 and 17 August 2021 attaching Monthly EM&A Report No.17 (July 2021) for the captioned project prepared by the ET.

We have no further comments and hereby verify the captioned report in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/A and Further Environmental Permit no. FEP-01/503/2015/A.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned on 2618 2831.

Yours faithfully
ANEWR CONSULTING LIMITED

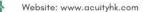
Louis Kwan

Independent Environmental Checker

KSYL/lsmt













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Contract No. 13/WSD/17

Design, Build and Operate First Stage of Tseung Kwan O **Desalination Plant**

Monthly EM&A Report No.17 (Period from 1 July to 31 July 2021)

Document No.

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Position	Member	Member	Leader
Signature			
Date:	14/08/2021	14/08/2021	14/08/2021

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REVISION HISTORY

Rev.	DESCRIPTION OF MODIFICATION	DATE
A	First Issue for Comments	14 August 2021

Contract No. 13/WSD/17

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EXECUTIVE SUMMARY

INTRODUCTION

- A1. The Project, Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant (TKODP), is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is currently governed by a Further Environmental Permit (EP No. FEP 01/503/2015/A) for the construction and operation of the Project.
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works for marine water quality, noise, waste management and ecology should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. This is the 17th Monthly EM&A Report, prepared by ASCL, for the Project summarizing the monitoring results and audit findings of the EM&A programme at and around Tseung Kwan O Area 137 (TKO 137) during the reporting period from 1 July 2021 to 31 July 2021.
- A4. The EM&A programme for this contract has covered environmental monitoring on construction noise level at selected NSRs and Contractor's environmental performance auditing in the aspects of construction dust, construction noise, water quality, waste management, Landscape and Visual and Ecology.

SUMMARY OF MAIN WORKS UNDERTAKEN & KEY MITIGATION MEASURES IMPLEMENTED

A5. Key activities carried out in this reporting period for the Project included the followings:

- Land Survey;
- Construction of ActiDAFF perimeter wall and water tank;
- Construction of Reverse Osmosis (RO) Building column and wall from Basement to Roof, beams and slabs for Roof Floor / Electrical Building 1st and 2nd floor slab, columns and wall;
- Construction of Product Water Storage Tank (PWST) perimeter wall and Electrical Building's 1/F slab;
- Construction of manhole no. 10 adjacent to PWST;
- Construction of Post Treatment Building footing;
- Construction of ground floor slab of Administration Building;
- Construction of reinforced concrete (R.C) footing of Inspection Corridor;
- Construction of Main Electrical and Central Chiller Plant Building (1/F to 2/F);
- Marine Dredging and 12m steel caisson erection at Outfall Shaft;
- Chiseling inside a steel casing at Outfall Shaft;
- Minimal grabbing of broken hard material for seabed levelling at Outfall Shaft;
- Removal of double silt curtains at Outfall Shaft;
- Divier checks on seabed level and placing of bagged concrete at Outfall Shaft;



- 610mm diameter socketed H-piles installation at Outfall Shaft;
- 610mm diameter driven piles and Excavation & Lateral Support (ELS) erection at Intake Shaft;
- Jet Grouting at Combined Shaft Area;
- Jacking pipe launching setup at Combined Shaft;
- Cable drawpit construction;
- Excavation and laying yard piping;
- Construction of base slab of Chemical Building;
- Wan Po Road Sewage Works Temporary Traffic Arrangement (TTA), excavation and laying High-Density Polyethylene (HDPE) pipe

A6. The major environmental impacts brought by the above construction works include:

- Construction dust and noise generation from marine construction works, excavation works, ELS installation works, breaking of concrete surface and construction works; pipe driving works
- Waste generation from the construction activities
- Impact on water quality from marine construction works and inland construction works
- A7. The key environmental mitigation measures implemented for the Project in this reporting period associated with the above construction works include:
 - Dust suppression by regular wetting and water spraying for construction works
 - Reduction of noise from equipment and machinery on-site and regular inspection to machinery and plants/vehicles on-site to ensure proper functioning
 - Sorting and storage of general refuse and construction waste
 - Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland areas before discharge

SUMMARY OF EXCEEDANCE & INVESTIGATION & FOLLOW-UP

- A8. No noise monitoring was conducted during the reporting period since there are no project-related construction activities undertaken within a radius of 300m from the monitoring locations. No project-related exceedance of the Action Level was recorded during the reporting period.
- A9. The EM&A works for water quality were conducted during the reporting period in accordance with the EM&A Manual.
- A10. Forty-one (41) of the general water quality monitoring results of suspended solids (SS) obtained had exceeded the Action Level. Thirty-two (32) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.



A11. Details of the exceedance are presented in **Appendix 0**.

- A12.Investigation on the reason of exceedance has been carried out, where the exceedance of SS on 01/07, 03/07, 06/07, 10/07, 15/07, 17/07, 22/07, 27/07, 29/07 and 31/07 was concluded to be unrelated to the project as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix 0**.
- A13. Joint site inspections of the construction work by ET and IEC were carried out on 6, 13, 20 and 30 July 2021 to audit the mitigation measures implementation status. Observations were recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

COMPLAINT HANDLING AND PROSECUTION

A14. No project-related environmental complaint was received during the reporting period.

A15. Neither notifications of summons nor prosecution was received for the Project.

REPORTING CHANGE

A16. There was no change to be reported that may affect the on-going EM&A programme.

SUMMARY OF UPCOMING KEY ISSUES AND KEY MITIGATION MEASURES

A17.Key activities anticipated in the next reporting period for the Project will include the followings:

- Land Survey;
- Construction of ActiDAFF perimeter wall and water tank;
- Construction of Reverse Osmosis (RO) Building column and wall from Basement to Roof;
 beams and slabs for Roof Floor; water tank; Electrical building 2nd floor slab, columns and wall;
- Construction of Product Water Storage Tank (PWST) perimeter wall and Electrical Building's 1/F slab:
- Construction of manhole no. 10 adjacent to PWST:
- Construction of Post Treatment Building footing;
- Construction of ground floor slab of Administration Building;
- Construction of reinforced concrete (RC) footing of Inspection Corridor.;
- Construction of Main Electrical and Central Chiller Plant Building (1/F to 2/F);
- 610mm diameter socketed H-piles installation at Outfall Shaft;
- 610mm diameter driven piles and Excavation & Lateral Support (ELS) erection at Intake Shaft;
- Marine dredging at Intake Shaft;
- Jacking pipe launching setup at Combined Shaft and commencement of pipe jacking works;
- Cable drawpit construction;

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- Excavation and laying yard piping;
- Construction of base slab of Chemical Building;
- Wan Po Road Sewage Works Temporary Traffic Arrangement (TTA), excavation and laying High-Density Polyethylene (HDPE pipe);
- Construction of On-Site Chlorine Generation (OSCG) Building footing

A18. The major environmental impacts brought by the above construction works will include:

- Construction dust and noise generation from breaking of concrete surface, excavation and construction works, ELS works, pipe driven works and marine construction works
- Waste generation from construction activities
- Impact on water quality from marine construction works and inland construction works

A19. The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:

- Dust suppression by regular wetting and water spraying for construction works
- Reduction of noise from equipment and machinery on-site
- Sorting and storage of general refuse and construction waste
- Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland areas before discharge



1. BASIC PROJECT INFORMATION

1.1. BACKGROUND

The Acciona Agua, S.A. Trading, Jardine Engineering Corporation, Limited and China State Construction Engineering (Hong Kong) Limited As AJC Joint Venture (AJCJV) is contracted to carry out the Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant (DPTKO) under Contract No. 13/WSD/17 (the Project).

Acuity Sustainability Consulting Limited (ASCL) is commissioned by AJCJV to undertake the Environmental Team (ET) services as required and/or implied, both explicitly and implicitly, in the Environmental Permit (EP), Environmental Impact Assessment Report (EIA Report) (Register No. AEIAR-192/2015) and Environmental Monitoring and Audit Manual (EM&A Manual) for the Project; and to carry out the Environmental Monitoring and Audit (EM&A) programme in fulfillment of the EIA Report's EM&A requirements and Contract No. 13/WSD/17 Specification requirements.

Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Environmental Permit (No. EP-01/503/2015) and Variation of Environmental Permit (No. EP-01/503/2015/A) to Water Supplies Department (WSD); and granted the Further Environmental Permit (No. FEP-01/503/2015/A) to AJCJV for the Project.

1.2. THE REPORTING SCOPE

This is the 17th Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 July to 31 July 2021.

1.3. PROJECT ORGANIZATION

The Project Organization structure for Construction Phase is presented in **Figure 1.1**.

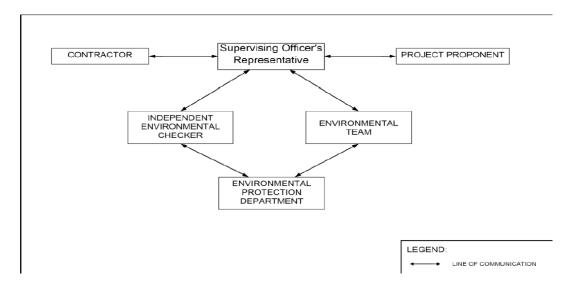


Figure 1.1 Project Organization Chart



Contact details of the key personnel are presented in Table 1.1 below:

Table 1.1 Contact Details of Key Personnel

Party	Position	Name	Telephone no.
Project Proponent	SE/CM2	Benny Lam	2634-3573
Supervising Officer	Project Manager	Christina Ko	2608-7302
(Binnies Hong Kong Limited)	Chief Resident Engineer	Roger Wu	6343-1002
The Jardine Engineering Corporation,	Project Manager	Stephen Yeung	2807-4665
Limited, China State Construction Engineering (Hong Kong) Limited and Acciona Agua, S.A. Trading	Environmental Monitoring Manager	Brian Kam	9456-9541
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698-6833
ANewR Consulting Limited	Independent Environmental Checker (IEC)	Louis Kwan	2618-2831

1.4. SUMMARY OF CONSTRUCTION WORKS

Details of the major construction activities undertaken in this reporting period are shown as below. The construction programme is presented in **Appendix A**.



Key activities carried out in this reporting period for the Project included the followings:

- Land Survey;
- Construction of ActiDAFF perimeter wall and water tank;
- Construction of Reverse Osmosis (RO) Building column and wall from Basement to Roof, beams and slabs for Roof Floor / Electrical Building 1st and 2nd floor slab, columns and wall;
- Construction of Product Water Storage Tank (PWST) perimeter wall and Electrical Building's 1/F slab;
- Construction of manhole no. 10 adjacent to PWST;
- Construction of Post Treatment Building footing;
- Construction of ground floor slab of Administration Building;
- Construction of reinforced concrete (R.C) footing of Inspection Corridor;
- Construction of Main Electrical and Central Chiller Plant Building (1/F to 2/F);
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- 610mm diameter driven piles and Excavation & Lateral Support (ELS) erection at Intake Shaft;
- Jet Grouting at Combined Shaft Area;
- Jacking pipe launching setup at Combined Shaft;
- Cable drawpit construction;
- Excavation and laying yard piping;
- Construction of base slab of Chemical Building;
- Wan Po Road Sewage Works Temporary Traffic Arrangement (TTA), excavation and laying High-Density Polyethylene (HDPE) pipe

1.5. SUMMARY OF ENVIRONMENTAL STATUS

A summary of the valid permits, licences, and/or notifications on environmental protection for this Project is presented in **Table 1.2**.



Table 1.2 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	FEP - 01/503/2015/A	Throughout the Contract	
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	Ref. No.: 451539	-	
Wastewater Discharge Licence (land-based)	WT00035775-2020	24/07/2020 - 31/07/2025	
Chemical Waste Producer Registration	5213-839-A2987-01	Throughout the Contract	
Construction Noise Permit (24 hrs) – CNP for general works, TBM at Combined Shaft and marine works	GW-RE0419-21	01/05/2021 - 30/10/2021	
Billing Account for Disposal of Construction Waste	7036276	Throughout the Contract	
Vessel CHITs for fill disposal	7039300	19/04/2021 – 20/07/2021	

The status for all environmental aspects is presented in **Table 1.3**.

Table 1.3 Summary of Status for Key Environmental Aspects under the EM&A Manual

Parameters	Status
Water Quality	
Baseline Monitoring under EM&A	The baseline water quality monitoring was conducted
Manual	between 12 May 2020 to 6 Jun 2020
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in
	Baseline Monitoring Report and submitted to EPD under
	EP Condition 3.4
Impact Monitoring	On-going
Waste Management	
Mitigation Measures in Waste	On-going
Monitoring Plan	
Environmental Audit	

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Parameters	Status
Site Inspection covering Measures of Air	On-going
Quality, Noise Impact, Water Quality,	
Waste, Ecological Quality, Fisheries,	
Landscape and Visual	

Other than the EM&A work by ET, environmental briefings, trainings and regular environmental management meetings were conducted, in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.



2. Noise

2.1. MONITORING REQUIREMENTS

To ensure no adverse noise impact, noise monitoring is recommended to be carried out within 300m radius from the nearby noise sensitive receivers (NSRs), during construction phase. The NSRs selected as monitoring station are (i) NSR4 – Creative Secondary School, (ii) NSR24 – PLK Laws Foundation College, and (iii) NSR31 – School of Continuing and Professional Studies – CUHK respectively.

In accordance with the EM&A Manual, baseline noise level at the noise monitoring stations were established as presented in the Baseline Monitoring Report. Impact noise monitoring will be conducted once per week in the form of 30-minutes measurements Leq, L10 and L90 levels recorded at each monitoring station between 0700 and 1900 on normal weekdays.

Referring to EM&A manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

No impact monitoring for noise impact was conducted in the reporting month due to the overly distant monitoring station from the works location, where they were farther than 1 km from the closet monitoring station NSR4 to the works location.

Impact noise monitoring will be conducted weekly in the reporting period between 0700-1900 on normal weekdays. Construction works would follow stipulations of the valid Construction Noise Permits if works had to be conducted during restricted hours or public holidays.

Construction noise level were measured in terms of the A-weighted equivalent continuous sound pressure level (LAeq). Leq $_{30 min}$ was used as the monitoring parameter for the time period between 0700 and 1900 on normal weekdays. **Table 2.1** summarizes the monitoring parameters, frequency and duration of the impact noise monitoring.

Table 2.1 Noise Monitoring Parameters, Time, Frequency and Duration

Time	Duration	Interval	Parameters
Daytime: 0700-1900	Day time: 0700-1900 (during normal weekdays)	$\begin{array}{c} \text{Continuously in} \\ L_{\text{eq 5min}}/L_{\text{eq 30min}} \left(\text{average} \right. \\ \text{of 6 consecutive } L_{\text{eq 5min}} \right) \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

2.2. MONITORING LOCATIONS

The monitoring locations should normally be made at a point 1m from the exterior of the NSRs building façade and be at a position 1.2m above the ground. A correction of +3dB(A) should be made to the free-field measurements.

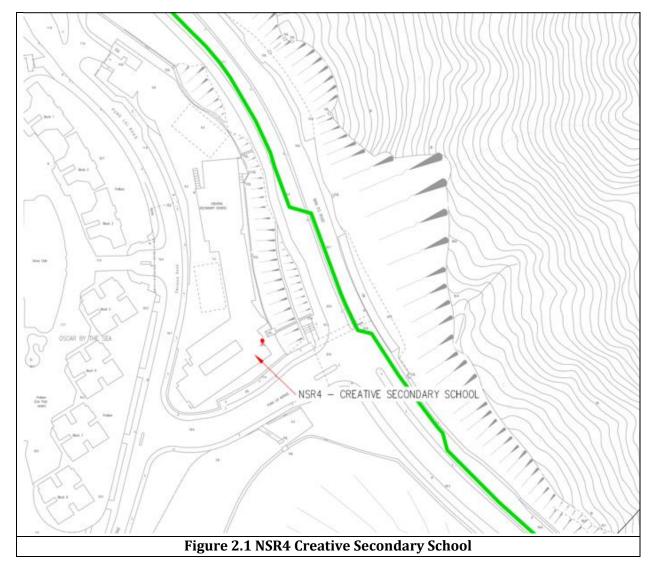


According to the environmental findings detailed in the EIA report and Baseline Monitoring Report, the designated locations for the construction noise monitoring are listed in **Table 2.2** below.

Table 2.2 Noise Sensitive Receivers

NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade

Three noise monitoring locations for impact monitoring at the nearby sensitive receivers are shown in **Figure 2.1-2.3**.





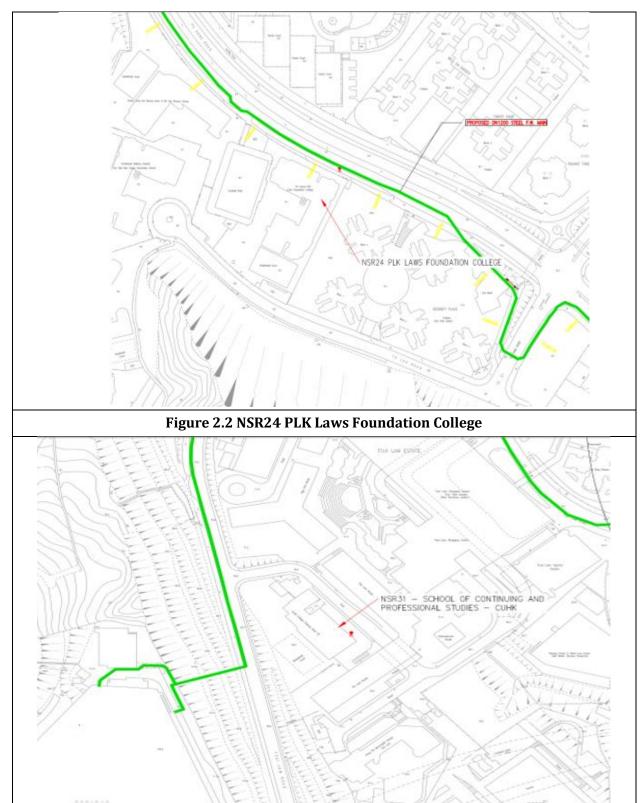


Figure 2.3 NSR31 School of Continuing and Professional Studies - CUHK



2.3. IMPACT MONITORING METHODOLOGY

Integrated sound level meter shall be used for the noise monitoring. The meter shall be in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels before and after the noise measurements agree to within 1.0 dB(A). Calibration certificates of the instruments used to be shown at **Appendix F** are intentionally left blank since no impact monitoring equipment was used in the reporting month.

Noise measurements shall not be made in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Table 2.3 Impact Noise Monitoring Equipment

Equipment	Brand and Model	Detection Limit
Sound Level Meter	Nti XL2	30-130 dB(A)
Sound Level Meter Calibrator	Rion NC-74	Nil
Pocket Wind Meter Anemometer	Kestrel 1000 Wind Meter	Nil

2.4. ACTION AND LIMIT LEVELS

The Action/Limit Levels are in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 are presented in **Table 2.4**.

Table 2.4 Action and Limit Levels for Noise per EM&A Manual

Time Period		Action	Limit (dB(A))
0700-1900 on not weekdays	mal	When one documented complaint is received from any one of the noise sensitive receivers	• 65 dB(A) during

Notes: Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.

If exceedances were found during noise monitoring, the actions in accordance with the Event and Action Plan shall be carried out according to **Appendix E**.



2.5. MONITORING RESULTS AND OBSERVATIONS

Referring to EM&A manual Section 4.1.2, the impact noise monitoring should be carried out when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations. No monitoring station was located within a radius of 300m of the Project site as shown in **Figure 2.4**, no impact monitoring for noise impact was conducted in the reporting period.

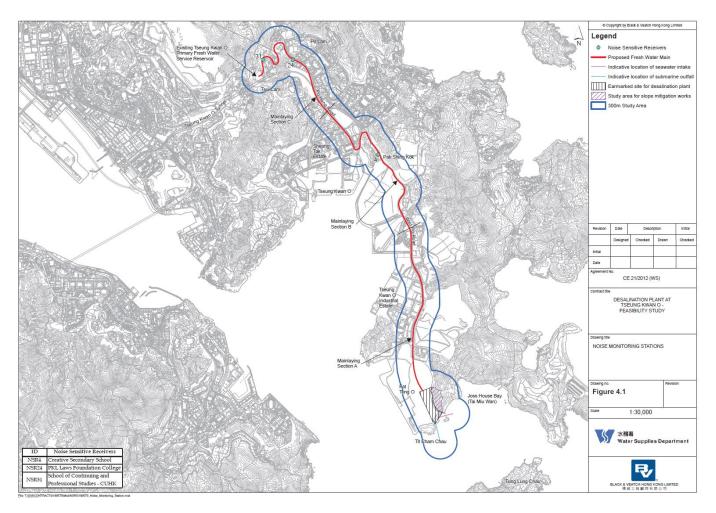


Figure 2.4 Site Layout Plan with Noise Sensitive Receivers and Desalination Plant

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3. WATER QUALITY

In accordance with the recommendations of the EIA, water quality EM&A is required during dredging for the submarine pipelines and, during operation phase. In addition, baseline water quality monitoring will be required prior to the commencement of marine construction activities. The following Section provides details of the water quality monitoring to be undertaken by the Environmental Team (ET) to verify the distance of sediment and brine plume dispersion and to identify whether the potential exists for any indirect impacts to occur to ecological sensitive receivers. The water quality monitoring programme will be carried out to allow any deteriorating water quality to be readily detected and timely action taken to rectify the situation. The status and locations of water quality sensitive receivers and the marine works location may change after issuing this Document. If required, the ET in consultation with IEC will propose updated monitoring locations and seek approval from EPD.

Water quality monitoring for the Project can be divided into the following stages:

- · Dredging activities during construction phase;
- · Discharge of effluent from main disinfection during construction phase;
- · Operation phase first year upon commissioning; and,
- · Continuous monitoring of effluent quality.

In addition, the marine works contractor is required to complete a silt curtain efficiency test for the combined use of floating silt curtain type and cage type silt curtain for dredging at seawater intake to confirm the silt curtain reduction efficiency assumptions of the assessment. The details of testing plan together with the silt curtain deployment plan shall be submitted by the ET to seek approval from the IEC and EPD.

With the onset of marine dredging activities in late April at Outfall Shaft Area, a silt curtain efficiency test has been conducted at the Outfall Shaft Area on 16th April 2021 at 6 monitoring intervals (08:00, 10:00, 12:00, 14:00, 16:00, 18:00). The baseline monitoring event has been conducted on 10th April 2021 at 5 monitoring locations. Testing protocols and methodologies had followed the guidelines as presented in the EM&A Manual *Annex C*. Detailed analysis of in-situ and laboratory data was presented in a separate report which has been submitted to EPD after approval by IEC on 31 May 2021. The overall Silt Removal Effectiveness at Outfall Shaft Area for the combined used of cage and floating type silt curtains was 95.28%.

3.1.1. WATER QUALITY PARAMETERS

The parameters that have been selected for measurement in situ and in the laboratory are those that were either determined in the EIA to be those with the most potential to be affected by the construction works or are a standard check on water quality conditions. Parameters to be measured in the baseline monitoring are listed in **Table 3.1**.



Table 3.1 Parameters measured in the baseline marine water quality monitoring

Parameters	Unit	Abbreviation						
In-situ measurements	In-situ measurements							
Dissolved oxygen	mg/L	DO						
Temperature	οС	-						
рН	-	-						
Turbidity	NTU	-						
Salinity	0/00	-						
Total Residual Chlorine NOTE1	mg/L	TRC						
Laboratory measurements								
Suspended Solids	mg/L	SS						
Iron-Soluble NOTE2	mg/L	Fe						
Anti-scalant as Reactive Phosphorus NOTE2	mg/L	PO ₄ as P-						

NOTE 1: Monitoring of TRC will be conducted when cleaning and sterilization of the new freshwater main is carried out.

NOTE 2: The testing methods shall be submitted to EPD for approval prior to the commencement of monitoring programme

In addition to the water quality parameters, other relevant data will also be measured and recorded in Water Quality Monitoring Logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal stage, current direction and velocity, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

3.1.2. MONITORING EQUIPMENT

For water quality monitoring, the following equipment will be used:

Dissolved Oxygen and Temperature Measuring Equipment - The instrument will be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and will be operable from a DC power source. It will be capable of measuring: dissolved oxygen levels in the range of 0 - 20 mg/L and 0 - 200% saturation; and a temperature of 0 - 45 degrees Celsius. It shall have a membrane electrode with automatic temperature compensation complete with a cable of not less than 35 m in length. Sufficient stocks of spare electrodes and cables

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shall be available for replacement where necessary (e.g. YSI model 59 DO meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

Turbidity Measurement Equipment - The instrument will be a portable, weatherproof turbidity-measuring unit complete with cable, sensor and comprehensive operation manuals. The equipment will be operated from a DC power source, it will have a photoelectric sensor capable of measuring turbidity between 0 - 1000 NTU and will be complete with a cable with at least 35 m in length (for example Hach 2100P or an approved similar instrument).

Salinity Measurement Instrument - A portable salinometer capable of measuring salinity in the range of 0 - 40 ppt will be provided for measuring salinity of the water at each monitoring location.

Water Depth Gauge – A portable, battery-operated echo sounder (for example Seafarer 700 or a similar approved instrument) will be used for the determination of water depth at each designated monitoring station. This unit will preferably be affixed to the bottom of the work boat if the same vessel is to be used throughout the monitoring programme. The echo sounder should be suitably calibrated. The ET shall seek approval for their proposed equipment with the client prior to deployment.

Current Velocity and Direction – No specific equipment is recommended for measuring the current velocity and direction. The environmental contractor shall seek approval of their proposed equipment with the client prior to deployment.

Positioning Device – A Global Positioning System (GPS) shall be used during monitoring to allow accurate recording of the position of the monitoring vessel before taking measurements. The Differential GPS, or equivalent instrument, should be suitably calibrated at appropriate checkpoint (e.g. Quarry Bay Survey Nail) to verify that the monitoring station is at the correct position before the water quality monitoring commence.

Water Sampling Equipment - A water sampler, consisting of a PVC or glass cylinder of not less than two litres, which can be effectively sealed with cups at both ends, will be used (e.g. Kahlsico Water Sampler 13SWB203 or an approved similar instrument). The water sampler will have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth.

Total Residual Chlorine for Discharge of Sterilization Water - Total residual chlorine (TRC) shall be measured in-situ using a handheld colorimeter with its testing toolkits.

3.1.3. SAMPLING / TESTING PROTOCOLS

All in situ monitoring instruments will be checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently recalibrated at monthly intervals throughout the stages of the water quality monitoring. Responses of sensors and electrodes will be checked with certified standard solutions before each use.



On-site calibration of field equipment shall follow the "Guide to On-Site Test Methods for the Analysis of Waters", BS 1427: 2009. Sufficient stocks of spare parts shall be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when equipment is under maintenance, calibration etc.

3.1.4. LABORATORY MEASUREMENT AND ANALYSIS

All laboratory work shall be carried out in a HOKLAS accredited laboratory. Sufficient volume of each water sample shall be collected at the monitoring stations for carrying out the laboratory analyses. Using chain of custody forms, collected water samples will be transferred to an HOKLAS accredited laboratory for immediate processing. The determination work shall start within the next working day after collection of the water samples. The laboratory measurements shall be provided to the client within 5 working days of the sampling event. Analytical methodology and sample preservation of other parameters will be based on the latest edition of Standard Methods for the Examination of Waste and Wastewater published by APHA, AWWA and WPCF and methods by USEPA, or suitable method in accordance with requirements of HOKLAS or another internationally accredited scheme. The submitted information should include pre-treatment procedures, instrument use, Quality Assurance/Quality Control (QA/QC) details (such as blank, spike recovery, number of duplicate samples per-batch etc), detection limits and accuracy. The QA/QC details shall be in accordance with requirements of HOKLAS or another internationally accredited scheme.

Parameters for laboratory measurements, their standard methods and their detection limits are presented in **Table 3.2**.

Table 3.2 Laboratory measurements, standard methods and corresponding detection limits of marine water quality monitoring

Parameters	Standard Methods	Detection Limit	Reporting Limit	Precision
Dissolved oxygen (mg/L)	Instrumental, CTD	0.1	-	±25%
Temperature (°C)	Instrumental, CTD	0.1	-	±25%
рН	Instrumental, CTD	0.1	-	±25%
Turbidity (NTU)	Instrumental, CTD	0.1	-	±25%
Salinity (0/00)	Instrumental, CTD	0.1	-	±25%
Suspended Solids (mg/L)	APHA 17 th Ed 2540D	1.0	2.0	±17%
Total Residual Chlorine (mg/L)	APHA 21st Ed 4500 - Cl G NOTE1	0.1 ^{NOTE1}	0.2 ^{NOTE1}	±10% NOTE1



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Parameters	Standard Methods	Detection Limit	Reporting Limit	Precision
Iron-soluble	USEPA 6010C NOTE 1	0.2 ^{NOTE1}	0.2 ^{NOTE1}	±25%NOTE1
Anti-scalant as Reactive phosphorus	APHA 4500P: B&F NOTE1	0.01 ^{NOTE1}	0.01 ^{NOTE1}	±25% ^{NOTE1}

NOTE1: The testing methods, Quality Assurance/Quality Control (QA/QC) details, detection limits and accuracy shall be submitted to EPD for approval prior to the commencement of monitoring programme.

If exceedances were found during water monitoring, the actions in accordance with the Event and Action Plan shall be carried out according to **Appendix G**.

3.1.5. MONITORING LOCATION

The water quality monitoring locations for baseline are in accordance to the EM&A Manual and detailed in **Table 3.3** below. A schedule for water quality monitoring shall be prepared by the ET and approved by IEC and EPD prior to the commencement of the monitoring.

Table 3.3 Location of Baseline Water Quality Monitoring Station

Station	Easting	Northing	Description
CE	843550	815243	Upstream control station at ebb tide
CF	846843	810193	Upstream control station at flood tide
WSR1	846864	812014	Ecological sensitive receiver at Tung Lung Chau
WSR2	847645	812993	Fisheries sensitive receiver at Tung Lung Chau
WSR3	848023	813262	Ecological sensitive receiver at Tung Lung Chau
WSR4	847886	814154	Ecological sensitive receiver at Tai Miu Wan
WSR16	845039	815287	Ecological sensitive receiver at Fat Tong Chau
WSR33	847159	814488	Ecological sensitive receiver at Tai Miu Wan
WSR36	846878	814081	Ecological sensitive receiver at Kwun Tsai
WSR37	846655	813810	Ecological sensitive receiver at Tit Cham Chau
NF1	846542	813614	Edge of mixing zone, ~ 200m west of outfall diffuser
NF2	846942	813614	Edge of mixing zone, ~ 200m east of outfall diffuser

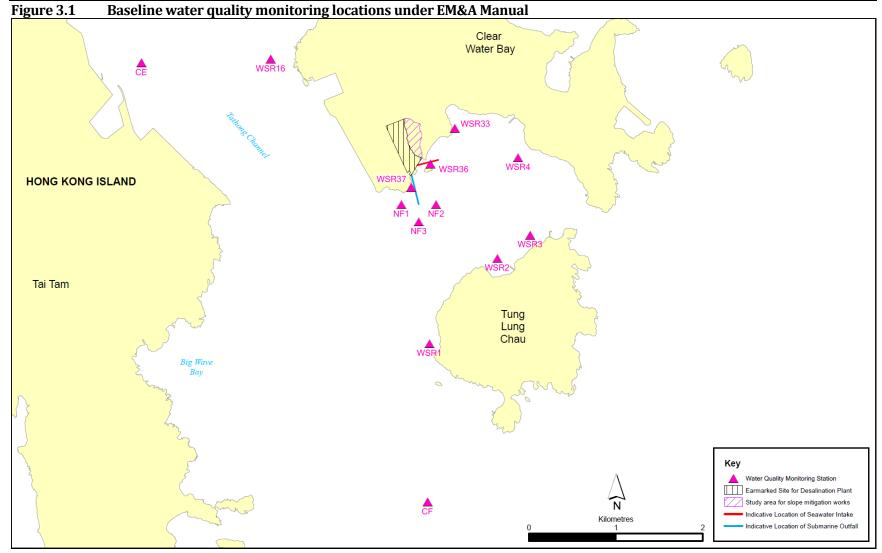
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F3 846742 813414	Edge of mixing zone, \sim 200m south of outfall diffuser
------------------	--

WSR1 to WSR37 were identified in accordance with Annex 14 of the EIAO-TM as well as Clause 3.4.4.2 of the Environmental Impact Assessment Study Brief for Desalination Plant at Tseung Kwan O (No. ESB-266/2013). WSR1 to WSR3 are sited near the Tung Lung Chau Fish Culture Zone; WSR16 and WSR36 are sited near the coral assemblages along the coastlines of Fat Tong Chau and Kwun Tsai respectively; WSR 4 and WSR33 are sited near the Coastal Protection Area and coral assemblages in waters of Tai Miu Wan; WSR37 is sited near the fisheries resource including spawning and nursery grounds at the coastal water of Tit Cham Chau.





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3.1.6. SAMPLING FREQUENCY

During periods when there are dredging works, impact monitoring should be undertaken at the monitoring stations as shown in **Figure 3.1** and **Table 3.3** three days per week during the construction phase after the commencement of marine construction works and dredging activities. Monitoring at each station would be undertaken at both mid-ebb and mid-flood tides on the same day. The tidal range selected for the baseline monitoring will be at least 0.5 m for both flood and ebb tides as far as practicable. The interval between two sets of monitoring would not be less than 36 hours. The monitoring frequency would be increased in the case of exceedances of Action/Limit Levels if considered necessary by ET. Monitoring frequency would be maintained as far as practicable.

The monitoring location/position, time, water depth, water temperature, salinity, weather conditions, sea conditions, tidal stage, special phenomena and work underway at the marine works site will be recorded.

3.1.7. SAMPLING DEPTHS & REPLICATION

For baseline monitoring, each station will be sampled and measurements/ water samples will be taken at three depths, 1 m below the sea surface, mid-depth and 1 m above the seabed. For stations that are less than 3 m in depth, only the mid depth sample shall be taken. For stations that are less than 6 m in depth, only the surface and seabed sample shall be taken. For in situ measurements, duplicate readings shall be made at each water depth at each station. Duplicate water samples shall be collected at each water depth at each station. All observations and results were recorded in the data record sheets in **Appendix L**.

3.1.8. ACTION AND LIMIT LEVELS

The Action and Limit Levels have been set based on the derivation criteria specified in the EM&A Manual, as shown in **Table 3.4** below. Based on the baseline water quality monitoring data and the derivation criteria specified in **Table 3.4**, the Action/Limit Levels have been derived and are presented in **Table 3.5**.

3.2. Monitoring Programme

The ET of the Project had conducted the baseline water monitoring between 12 May 2020 to 6 Jun 2020 at the thirteen designated monitoring stations and the six designated monitoring at waters near TKO in accordance with the EM&A Manual and Contract Specification respectively. The monitoring results was presented in Baseline Water Quality Monitoring Report separately.

The commencement of marine construction and dredging activities for the Project have been conducted in March and April 2021 respectively.



Table 3.4 Criteria of Action and Limit Levels for Water Quality

Parameters	Action	Limit
Construction Phase	 e Impact Monitoring	
DO in mg/L	Surface and Middle	Surface and Middle
	5%-ile of baseline data for surface	4 mg L-1
	and middle layer	
	<u>Bottom</u>	Bottom
	5%-ile of baseline data for bottom	2 mg L-1
	layers	
	Tung Lung Chau Fish Culture Zone	Tung Lung Chau Fish Culture Zone
	5.1 mgL ⁻¹ or level at control station	5.0 mgL-1 or level at control station
	(whichever the lower)	(whichever the lower)
SS in mg/L (Depth-	≥ 95 %-ile of baseline data or 20%	≥ 99 %-ile of baseline data or 30%
averaged)	exceedance of value at any impact	exceedance of value at any impact
	station compared with	station compared with
	corresponding data from control	corresponding data from control
	station	station
Turbidity in NTU	≥ 95 %-ile of baseline data or 20%	≥ 99 %-ile of baseline data or 30%
(Depth-averaged)	exceedance of value at any impact	exceedance of value at any impact
	station compared with	station compared with
	corresponding data from control	corresponding data from control
	station	station
First-year Operation	n Phase Monitoring	
DO in mg/L	Surface and Middle	Surface and Middle
DO III IIIg/ L	5%-ile of baseline data for surface	4 mg L-1
	and middle layer	Ting L
	Bottom	<u>Bottom</u>
	5%-ile of baseline data for bottom	2 mg L-1
		2 mg n -
	layers Tung Lung Chau Fish Culture Zone	Tung Lung Chau Fish Culture Zone
	Tung bung chau Pish Culture Zone	Tung bung chau Fish Culture Zolle

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	5.1 mgL ⁻¹ or level at control station	5.0 mgL ⁻¹ or level at control station				
	(whichever the lower)	(whichever the lower)				
SS in mg/L (Depth-	≥ 95 %-ile of baseline data or 20%	≥ 99 %-ile of baseline data or 30%				
averaged)	exceedance of value at any impact	exceedance of value at any impact				
	station compared with	station compared with				
	corresponding data from control	corresponding data from control				
	station	station				
Turbidity in NTU	≥ 95 %-ile of baseline data or 20%	≥ 99 %-ile of baseline data or 30%				
(Depth-averaged)	exceedance of value at any impact	exceedance of value at any impact				
	station compared with	station compared with				
	corresponding data from control	corresponding data from control				
	station	station				
Salinity in PSU	109% of baseline level or 9%	110% of baseline level or 10%				
(Depth-averaged)	exceedance of value at any impact	exceedance of value at any impact				
	station compared with	station compared with				
	corresponding data from control	corresponding data from control				
	station	station				
Iron in mg/L	0.3 mgL ⁻¹	0.3 mgL ⁻¹				
(Depth-averaged)						



Table 3.5 Derived Action and Limit Levels for Water Quality

Parameters	Action	Limit
Construction Phas	e Impact Monitoring	
DO in mg/L	Surface and Middle	Surface and Middle
	$7.30~mg~L^{-1}$	4 mg L ⁻¹
	<u>Bottom</u>	<u>Bottom</u>
	$7.31~mg~L^{-1}$	2 mg L ⁻¹
	Tung Lung Chau Fish Culture Zone	Tung Lung Chau Fish Culture Zone
	5.1 mgL ⁻¹ or level at control station	5.0 mgL ⁻¹ or level at control station
	(whichever the lower)	(whichever the lower)
SS in mg/L	5.00 mg L ⁻¹ or 20% exceedance of	6.00 mg L ⁻¹ or 30% exceedance of
(Depth-averaged)	value at any impact station	value at any impact station
	compared with corresponding data	compared with corresponding data
	from control station	from control station
Turbidity in NTU	2.41 NTU or 20% exceedance of	2.84 NTU or 30% exceedance of
(Depth-averaged)	value at any impact station	value at any impact station
	compared with corresponding data	compared with corresponding data
	from control station	from control station
First-year Operation	on Phase Monitoring ^{iv}	
70		
DO in mg/L	Surface and Middle	Surface and Middle
	7.30 mg L ⁻¹	4 mg L ⁻¹
	<u>Bottom</u>	<u>Bottom</u>
	7.31 mg L ⁻¹	2 mg L ⁻¹
	Tung Lung Chau Fish Culture Zone	Tung Lung Chau Fish Culture Zone
	5.1 mgL ⁻¹ or level at control station	5.0 mgL ⁻¹ or level at control station
	(whichever the lower)	(whichever the lower)
SS in mg/L	5.00 mg L ⁻¹ or 20% exceedance of	6.00 mg L-1 or 30% exceedance of
(Depth-averaged)	valueat any impact station	value at any impact station
	compared with corresponding data	compared with corresponding data
	from control station	from control station

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Turbidity in NTU	2.41 NTU or 20% exceedance of	2.84 NTU or 30% exceedance of
(Depth-averaged)	value at any impact station	value at any impact station
	compared with corresponding data	compared with corresponding data
	from control station	from control station
Salinity in PSU	34.28 PSU or 9% exceedance of	34.60 PSU or 10% exceedance of
(Depth-averaged)	value at any impact station	value at any impact station
	compared with corresponding data	compared with corresponding data
	from control station	from control station
Iron in mg/L	0.3 mgL ⁻¹	0.3 mgL ⁻¹
(Depth-averaged)		

Notes:

- i. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.
- ii. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- iii. For Turbidity, SS, iron and Salinity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
- iv. For the Action and Limit Levels adopted during First-year Operation Phase Monitoring, further review would be made according to the EM&A Manual during Operation Phase.

3.3. MONITORING RESULTS AND OBSERVATIONS

General water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) were conducted on 1, 3, 6, 8, 10, 13, 15, 17, 20*, 22, 24, 27, 29 and 31 July 2021.

During the impact monitoring period for July 2021, forty-one (41) of the general water quality monitoring results of suspended solids (SS) obtained had exceeded the Action Level. Thirty-two (32) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.

Details of the exceedance are presented in **Appendix 0**.

Investigation on the reason of exceedance has been carried out, where the exceedance of SS on 01/07, 03/07, 06/07, 10/07, 15/07, 17/07, 22/07, 27/07, 29/07 and 31/07 was concluded to be unrelated to the project as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix 0**.

* General water quality monitoring on 20 July 2021 was cancelled at both the mid-flood and mid-ebb tides due to the issuance of the No. 3 Tropical Cyclone Warning Signal. Further supporting documents were attached in **Appendix 0**.



Monitoring results of 6 key parameters: Salinity, DO, turbidity, SS, pH and temperature in this reporting, are summarized in **Table 3.6** and **Table 3.7**, and detailed results are presented in **Appendix L**.

Table 3.6 Summary of Impact Water Quality Monitoring Results (Mid-Flood)

		Parameters									
Locations		Salinity	Dissolved Ox	xygen (mg/L)	pН	Turbidity	Suspended	Temp.(°C)			
		(ppt)	Surface & Middle	Bottom	pII	(NTU)	Solids (mg/L)	remp.(c)			
	Avg.	30.75	8.82	8.63	8.21	3.7	3.67	29.4			
CE	Min.	29.32	7.32	7.46	7.91	2.7	2.50	27.5			
	Max.	31.99	9.94	9.81	8.48 5.1 12.10		30.5				
	Avg.	30.68	8.50	8.52	8.23	3.6	4.38	29.3			
WSR1	Min.	29.61	7.49	7.43	7.90	2.6	2.30	27.2			
	Max.	31.92	9.73	9.68	8.50	5.2	12.00	30.3			
	Avg.	30.68	8.73	8.63	8.25	2.4	3.74	29.3			
WSR1	Min.	29.23	7.35	7.34	7.91	1.7	2.10	27.2			
	Max.	31.92	10.13	10.15	8.51	3.5	8.90	30.3			
WSR2	Avg.	30.71	8.69	8.74	8.23	2.4	3.99	29.3			
	Min.	29.12	7.46	7.70	7.88	1.7	2.50	27.2			
	Max.	31.91	10.05	10.02	8.50	3.2	9.00	30.3			
	Avg.	30.74	8.53	8.45	8.22	2.4	4.77	29.3			
WSR3	Min.	29.27	7.46	7.39	7.92	1.5	2.50	27.2			
	Max.	31.99	9.77	9.61	8.49	3.5	24.10	30.3			
	Avg.	30.70	8.67	8.52	8.22	2.5	3.43	29.4			
WSR4	Min.	29.30	7.54	7.28	7.89	1.7	2.50	27.4			
	Max.	32.04	9.80	9.94	8.51	3.3	7.50	30.4			
	Avg.	30.62	8.49	8.67	8.23	2.7	4.14	29.4			
WSR16	Min.	29.10	7.30	7.86	7.93	1.8	2.50	27.5			
	Max.	31.93	9.76	9.56	8.51	4.5	14.50	30.4			
	Avg.	30.73	8.64	8.67	8.24	2.4	4.07	29.4			
WSR33	Min.	29.09	7.50	7.36	7.90	1.5	2.50	27.4			
	Max.	31.87	9.56	9.99	8.50	3.2	9.50	30.3			
<u></u>	Avg.	30.71	8.73	8.68	8.25	2.5	4.14	29.4			
WSR36	Min.	29.24	7.63	7.30	7.91	1.6	2.50	27.5			
	Max.	31.94	9.98	10.13	8.51	3.4	12.60	30.4			
<u></u>	Avg.	30.71	8.66	8.74	8.22	2.5	4.73	29.4			
WSR37	Min.	29.33	7.52	7.29	7.90	1.7	2.50	27.4			
	Max.	31.88	9.81	9.95	8.49	3.3	15.80	30.4			

Notes:

i. "Avg", "Min" and "Max" is the average, minimum and maximum respectively of the data from measurements conducted under mid-flood and mid-ebb tides at three water depths, except that of DO where the data for "Surface & Middle" and "Bottom" are calculated separately.

ii. Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing.



Table 3.7 Summary of Impact Water Quality Monitoring Results (Mid-Ebb)

		Parameters									
Locations		Salinity	Dissolved Ox	kygen (mg/L)	рН	Turbidity	Suspended	Temp.(°C)			
		(ppt)	Surface & Middle	Bottom	PII	(NTU)	Solids (mg/L)	remp.(c)			
	Avg.	30.59	8.76	8.49	8.22	3.8	4.71	29.6			
CE	Min.	29.57	7.12	7.22	7.94	2.6	2.50	28.6			
	Max.	31.88	10.26	9.68	8.49 5.4 12.80 30.7	30.7					
	Avg.	30.58	8.55	8.58	8.23	3.7	4.39	29.6			
CF	Min.	29.58	7.21	7.30	7.87	2.8	2.50	27.8			
	Max.	31.83	10.13	10.10	8.51	5.2	9.70	30.6			
	Avg.	30.59	8.59	8.51	8.21	2.6	5.38	29.6			
WSR1	Min.	29.46	7.38	7.29	7.88	1.3	2.30	27.9			
	Max.	31.74	9.94	10.03	8.51	5.5	14.50	30.6			
WSR2	Avg.	30.55	8.49	8.49	8.22	2.4	5.35	29.6			
	Min.	29.36	7.33	7.31	7.78	0.8	2.50	27.9			
	Max.	31.98	9.59	10.14	8.47	3.3	21.20	30.6			
	Avg.	30.63	8.61	8.58	8.24	2.5	6.08	29.6			
WSR3	Min.	29.54	7.28	7.34	7.85	1.3	2.50	28.1			
	Max.	31.92	9.82	9.79	8.50	3.8	23.30	30.6			
	Avg.	30.61	8.63	8.63	8.23	2.5	6.39	29.6			
WSR4	Min.	29.39	7.25	7.36	7.88	1.2	2.50	28.1			
	Max.	31.82	10.24	10.27	8.49	3.4	24.40	30.7			
	Avg.	30.63	8.60	8.60	8.24	2.6	5.88	29.6			
WSR16	Min.	29.51	7.12	7.34	7.94	1.6	2.50	28.4			
	Max.	31.97	10.11	10.24	8.49	3.7	22.00	30.7			
	Avg.	30.58	8.63	8.57	8.24	2.4	6.42	29.6			
WSR33	Min.	29.40	7.34	7.59	7.89	1.3	2.50	28.2			
	Max.	31.88	10.19	10.00	8.50	3.3	25.60	30.6			
	Avg.	30.55	8.57	8.57	8.26	2.4	6.02	29.6			
WSR36	Min.	29.44	7.40	7.40	7.92	1.3	2.50	28.3			
WSKSO	Max.	31.87	10.11	10.25	8.48	3.5	24.00	30.6			
	Avg.	30.62	8.57	8.60	8.24	2.4	6.44	29.6			
WSR2 WSR3 WSR4 WSR16 WSR33	Min.	29.54	7.45	7.28	7.98	0.9	2.50	28.5			
	Max.	31.88	10.15	10.01	8.46	3.7	28.30	30.6			

Notes:

i. "Avg", "Min" and "Max" is the average, minimum and maximum respectively of the data from measurements conducted under mid-flood and mid-ebb tides at three water depths, except that of DO where the data for "Surface & Middle" and "Bottom" are calculated separately.

ii. Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing.



4. WASTE

The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix H**.

Table 4.1 Quantities of Waste Generated from the Project during July 2021

	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
Reporting Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (see Note)	Chemical Waste	Others, e.g. general refuse
	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)
July 2021*	365.150	0.000	0.000	0.000	365.150	0.000	0.003	0.120	0.005	0.000	65.770

Notes:

⁽¹⁾ Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material

^{*} The data may be updated in the next reporting month after final confirmation by the end of the month.



5. Landfill Gas Monitoring

5.1. MONITORING REQUIREMENT

In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones.

5.2. MONITORING LOCATION

Monitoring of oxygen, methane, carbon dioxide and barometric pressure would be performed for excavations at 1m depth or more within the consultation Zone.

During construction of works within the consultation zones, excavations of 1m depth or more was monitored:

- At the ground surface before excavation commences;
- Immediately before any worker enters the excavation;
- At the beginning of each working day for the entire period the excavation remains open; and
- Periodically through the working day whilst workers are in the excavation.

For excavations between 300mm and 1m deep, measurements should be carried out:

- Directly after the excavation has been completed; and
- Periodically whilst the excavation remains open.

5.3. MONITORING PROGRAMME

For the part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone in this contract, since the SENT Landfill Extension is still under construction, the Landfill gas monitoring shall be conducted after the commencement of operation of the SENT Landfill Extension which will be 2021 Quarter 3 according to the latest construction programme shown in the monthly EM&A Report of SENT Landfill Extension. The Contractor's safety officer shall keep review the necessity of landfill gas monitoring during the construction stage. No landfill gas monitoring was conducted in the reporting period.



6. SUMMARY OF MONITORING EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

The Environmental Complaint Handling Procedure is shown in below **Figure 6.1**:

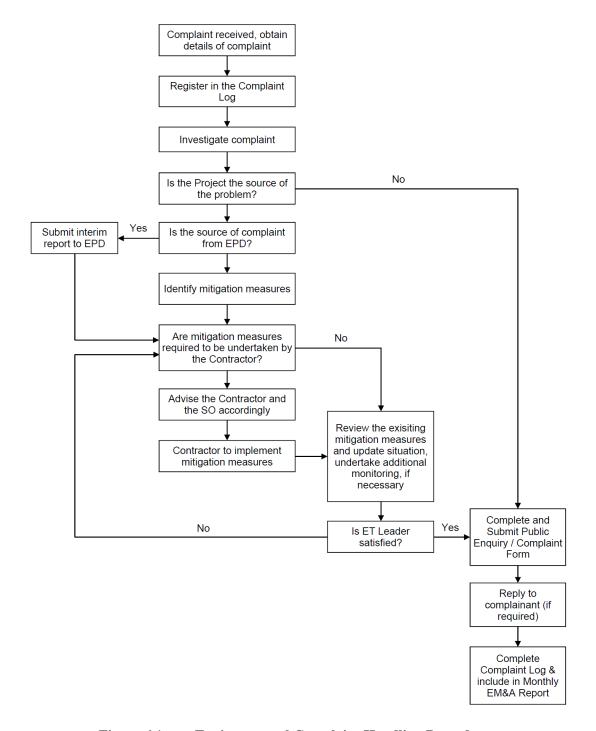


Figure 6.1 Environmental Complaint Handling Procedures

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No noise monitoring was conducted during the reporting period since there are no project-related construction activities undertaken within a radius of 300m from the monitoring locations.

General water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) were conducted on 1, 3, 6, 8, 10, 13, 15, 17, 20*, 22, 24, 27, 29 and 31 July 2021.

Forty-one (41) of the general water quality monitoring results of suspended solids (SS) obtained had exceeded the Action Level. Thirty-two (32) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level. Further information can be found in **Appendix 0**.

Details of the exceedance are presented in **Appendix 0**.

Investigation on the reason of exceedance has been carried out, where the exceedance of SS on 01/07, 03/07, 06/07, 10/07, 15/07, 17/07, 22/07, 27/07, 29/07 and 31/07 was concluded to be unrelated to the project as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix 0**.

No notification of summons and prosecution was received in the reporting period.

Statistics on complaints and regulatory compliance are summarized in **Appendix J.**

* General water quality monitoring on 20 July 2021 was cancelled at both the mid-flood and mid-ebb tides due to the issuance of the No. 3 Tropical Cyclone Warning Signal. Further supporting documents were attached in **Appendix 0**



7. EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 6, 13, 20 and 30 July 2021 at the site portions list in **Table 7.1** below.

Table 7.1 Summaries of Site Inspection Record

Date	Inspected Site Portion	Time
06 July 2021	TKO 137	14:30-17:00
13 July 2021	TKO 137	14:35-17:00
20 July 2021	TKO 137	14:30 – 17:00
30 July 2021	TKO 137	09:00-12:30

Joint site inspection with IEC were carried out on 6, 13, 20 and 30 July 2021.

Environmental deficiencies were observed during weekly site inspection. Key observations during the site inspections and during the reporting period are summarized in **Table 7.2**.

Table 7.2 Site Observations

Date	Environmental Observations	Follow-up Status
06 July 2021	 Observation(s) and Recommendation(s) No major observations were reported on the respective day. The Main Contractor was reminded to consider machinery storage in the site area (near to Administrative Building) (reminder). The Main Contractor was reminded to remove trapped general wastes in the gully to allow efficient drainage at Product Water Storage Area and ActiDAFF Area (reminder). The Main Contractor was reminded to consider chemical storage in the site area (General) (reminder). 	Nil.
13 July 2021	Observation(s) and Recommendation(s)	Nil.

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Date	Environmental Observations	Follow-up Status
Date	 No major observations were reported on the respective day. Trapped general waste materials should be cleaned from the gully to allow efficient drainage (General) (reminder). More stringent barriers should be implemented to prevent untreated 	Follow-up Status
	 wastewater overflowing from the construction site (near to 1st sedimentation tank) (reminder). 4. Regular drainage of trapped wastewater to sedimentation tank for treatment should be conducted at Reverse Osmosis Building (reminder). 	
20 July 2021	 Observation(s) and Recommendation(s) No major observations were reported on the respective day. Close monitoring to sea conditions (water quality) around the area of Joss House Bay and WSR33 where landslide was observed previously should be conducted. The Main Contractor was reminded to implement further mitigation measures (e.g. adding layers of silt curtains if necessary (General) (reminder). 	Nil.
30 July 2021	Observation(s) and Recommendation(s) 1. Oil stain/spillage was observed on multiple areas of sea surface around Intake Shaft Area. The Main Contractor was reminded to take remediate actions immediately (observation) 2. The Main Contractor was reminded to implement mosquitoes control measures to prevent hygiene and safety concerns at 富雄 barge (reminder). 3. Housekeeping was reminded at pilling area at the temporary platform at Intake Shaft Area (reminder).	Oil stains cleaned up with absorbent.

According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents should be implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix C**.

Site inspection proforma of the reporting period is provided in **Appendix I.**



8. FUTURE KEY ISSUES

Works to be undertaken in the next reporting month are:

- Land Survey;
- Construction of ActiDAFF perimeter wall and water tank;
- Construction of Reverse Osmosis (RO) Building column and wall from Basement to Roof; beams and slabs for Roof Floor; water tank; Electrical building 2nd floor slab, columns and wall;
- Construction of Product Water Storage Tank (PWST) perimeter wall and Electrical Building's 1/F slab:
- Construction of manhole no. 10 adjacent to PWST;
- Construction of Post Treatment Building footing;
- Construction of ground floor slab of Administration Building;
- Construction of reinforced concrete (RC) footing of Inspection Corridor.;
- Construction of Main Electrical and Central Chiller Plant Building (1/F to 2/F);
- 610mm diameter socketed H-piles installation at Outfall Shaft;
- 610mm diameter driven piles and Excavation & Lateral Support (ELS) erection at Intake Shaft;
- Marine dredging at Intake Shaft;
- Jacking pipe launching setup at Combined Shaft and commencement of pipe jacking works;
- Cable drawpit construction;
- Excavation and laying yard piping;
- Construction of base slab of Chemical Building;
- Wan Po Road Sewage Works Temporary Traffic Arrangement (TTA), excavation and laying High-Density Polyethylene (HDPE pipe);
- Construction of On-Site Chlorine Generation (OSCG) Building footing

The major environmental impacts brought by the above construction works will include:

- Construction dust and noise generation from breaking of concrete surface, excavation, ELS installation and construction works, pipe driving and marine construction works
- Waste generation from construction activities
- Impact on water quality from marine construction works and inland construction works

The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:

- Dust suppression by regular wetting and water spraying for construction works
- Reduction of noise from equipment and machinery on-site by regular checking of on-site plant/vehicle to ensure proper functioning
- Sorting and storage of general refuse and construction waste
- Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland areas before discharge

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Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

The impact noise monitoring schedule for the next reporting month to be shown at **Appendix K** is not included since no impact noise monitoring will be conducted in the next reporting month.

9. CONCLUSIONS AND RECOMMENDATIONS

This is the 17th Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 July to 31 July 2021, in accordance with the EM&A Manual and the requirement under FEP-01/503/2015/A.

No noise monitoring was conducted in the reporting period due to the over distant monitoring station from the works location, in which construction activities were not undertaken within a radius of 300m from the monitoring locations.

The EM&A works for water quality were conducted during the reporting period in accordance with the EM&A Manual.

Forty-one (41) of the general water quality monitoring results of suspended solids (SS) obtained had exceeded the Action Level. Thirty-two (32) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.

Details of the exceedance are presented in **Appendix 0**.

Investigation on the reason of exceedance has been carried out, where the exceedance of SS on 01/07, 03/07, 06/07, 10/07, 15/07, 17/07, 22/07, 27/07, 29/07 and 31/07 was concluded to be unrelated to the project as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix 0**.

Weekly environmental site inspection was conducted during the reporting period. No major deficiency was observed during site inspection. The environmental performance of the project was therefore considered satisfactory.

According to the environmental site inspections performed in the reporting month, the Contractor is reminded to pay attention on maintaining proper materials storage, site hygiene and temporary wastewater storage capacity.

No environmental complaint was received in the reporting period.

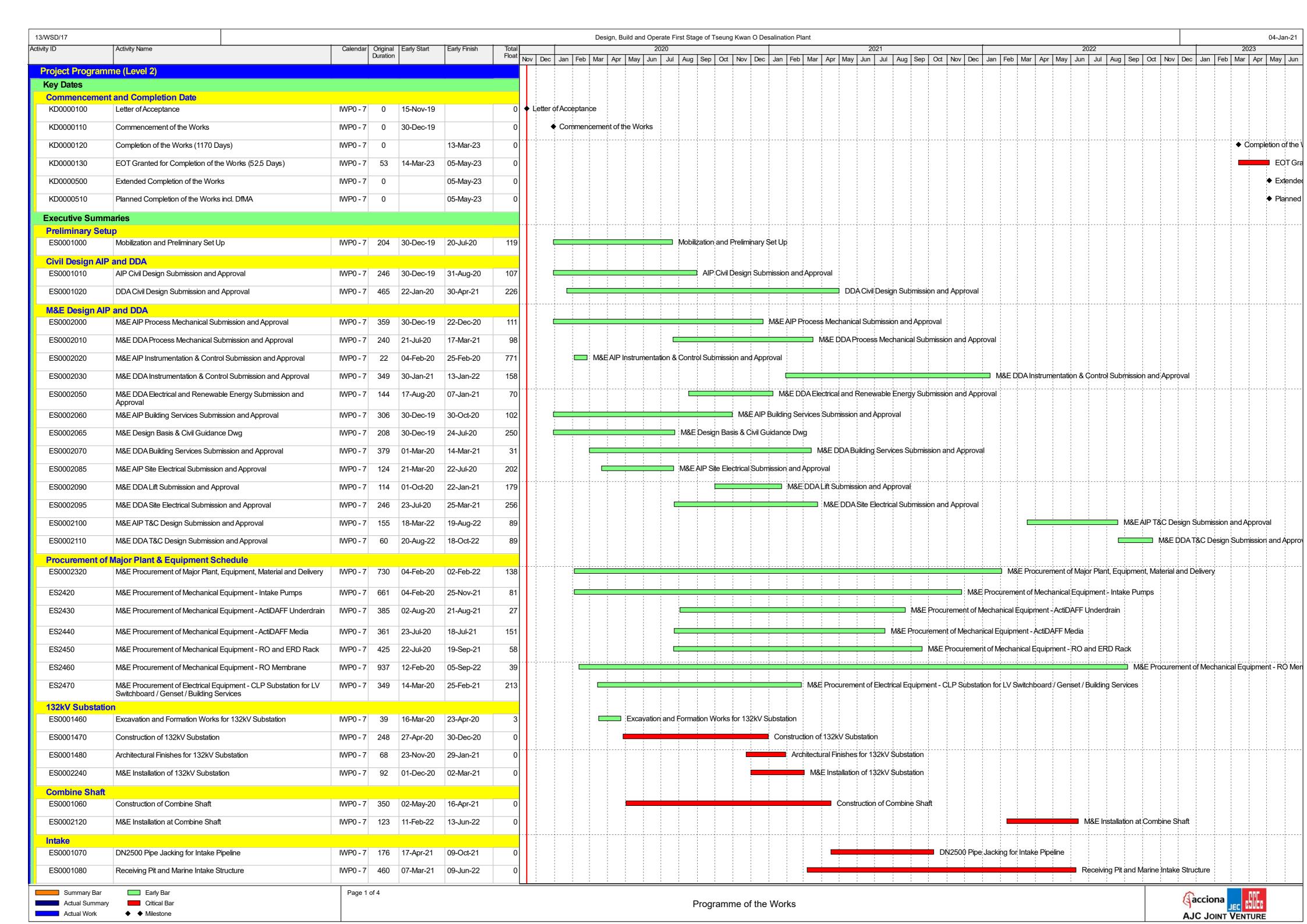
No notification of summons or prosecution was received since commencement of the Contract.

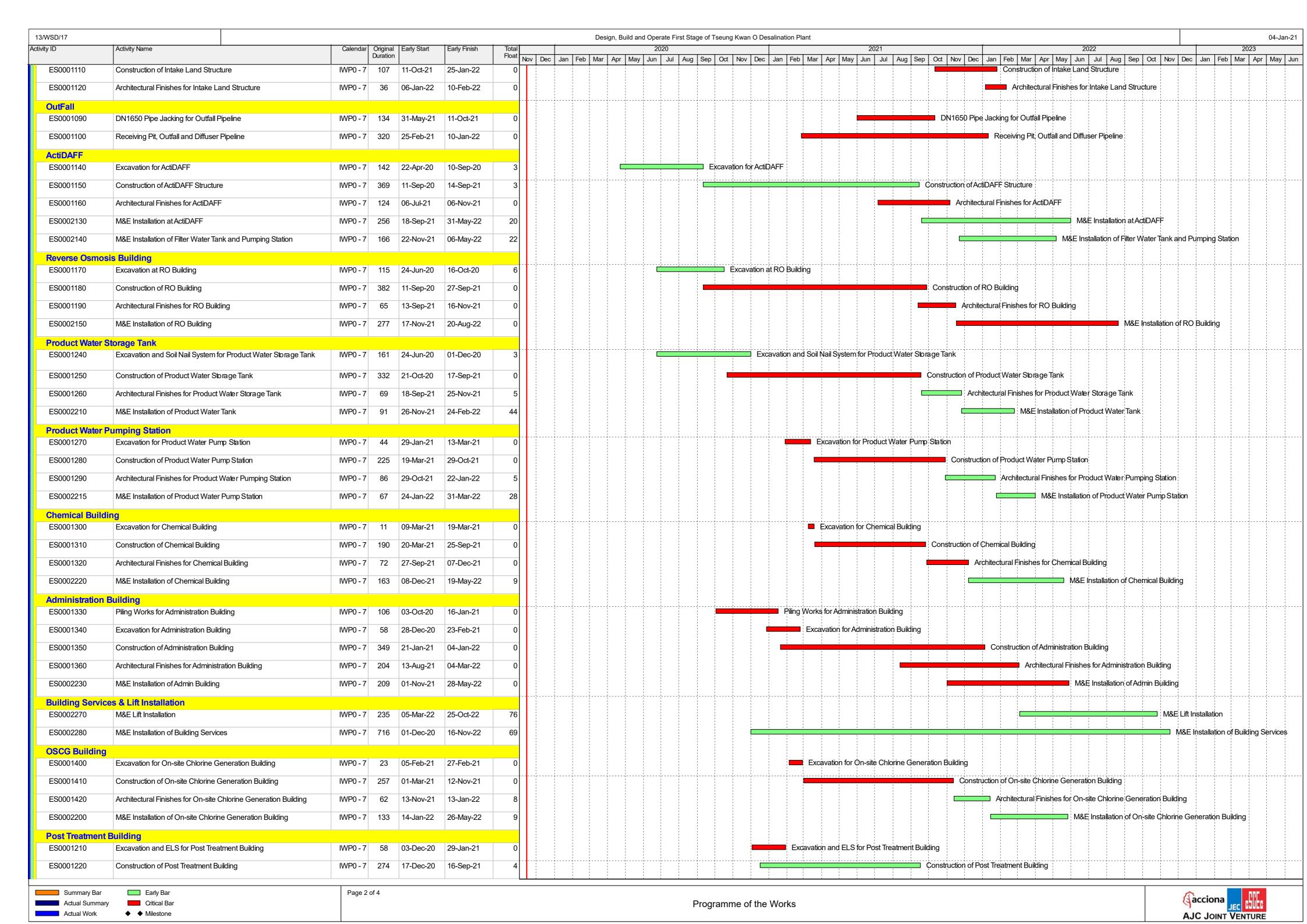
The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

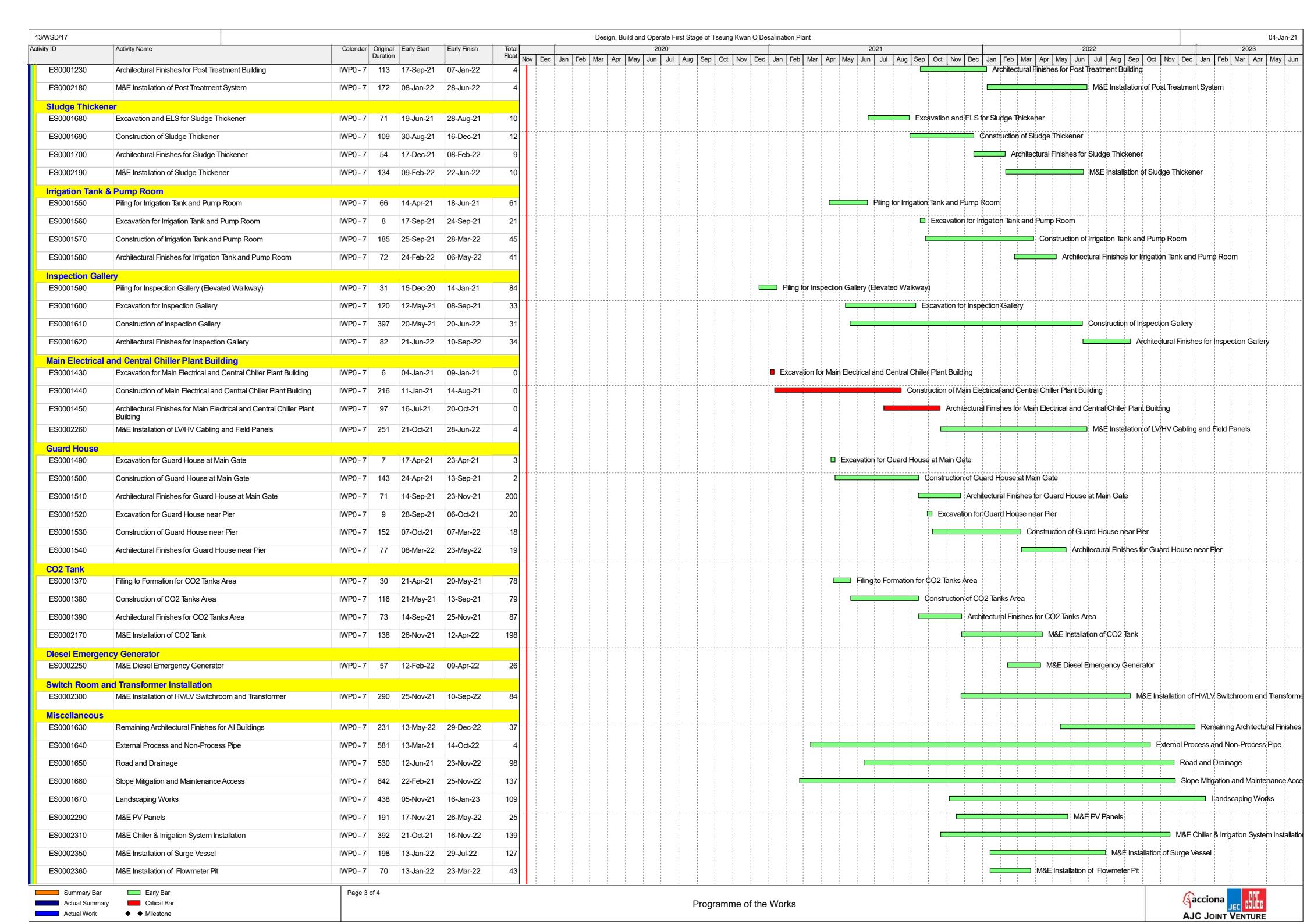


Appendix A

Master Programme







13/WSD/17									Desig	ın, Build a	and Oper	rate First S	Stage of T	Гseung K	(wan O	Desalina	tion Plant																04-Jan-21
tivity ID	Activity Name	Calendar	Original	Early Start	Early Finish	Total					20	020								2021								2022					2023
			Duration			Float	Nov D	ec Jan F	eb Mar	Apr Ma	ay Jun	Jul Au	ıg Sep	Oct N	Nov D	ec Jan	Feb Ma	ar Apr	May Ju	ın Jul	Aug S	ep Oct	Nov E	Dec Jan	n Feb I	Mar Apr	May Jur	n Jul /	Aug Sep	Oct Nov	/ Dec	Jan Feb	Mar Apr May Jui
ES0002370	M&E Installation of Static Mixer Pit	IWP0 - 7	41	28-Mar-22	07-May-22	0	T																				■ M&E li	nstallation	of Static	Mixer Pit		1 1	
ES0002380	M&E Installation of Drainage Pit	IWP0 - 7	30	25-Feb-22	26-Mar-22	40																				M&E	Installatio	on of Drain	nage Pit				
ES0002390	M&E Installation of Thickened Sludge Holding Tank	IWP0 - 7	45	08-Jan-22	21-Feb-22	73																		_	<u> </u>	1&E Install	ation of TI	hickened	Sludge H	lolding Tank	ĸ		
Statutory Sub	mission & Inspection	<u> </u>																															
ES0002330	Statutory Submission & Inspection	IWP0 - 7	1187	30-Dec-19	30-Mar-23	36																										1 1	Statutory Sub
Testing and C	commissioning	, , , , , , , , , , , , , , , , , , ,								1																1 1	1		!			1 1 1 1 1 1	
ES0002400	M&E Precomissioning	IWP0 - 7	253	20-Apr-22	28-Dec-22	0							1 1																			M&E Prec	omissioning
ES0002410	M&E Commissioning	IWP0 - 7	236	13-May-22	03-Jan-23	0																										M&E Cor	nmissioning
ES0002420	M&E Performance Test	IWP0 - 7	122	04-Jan-23	05-May-23	0																										; ;	M&EP

Early Bar

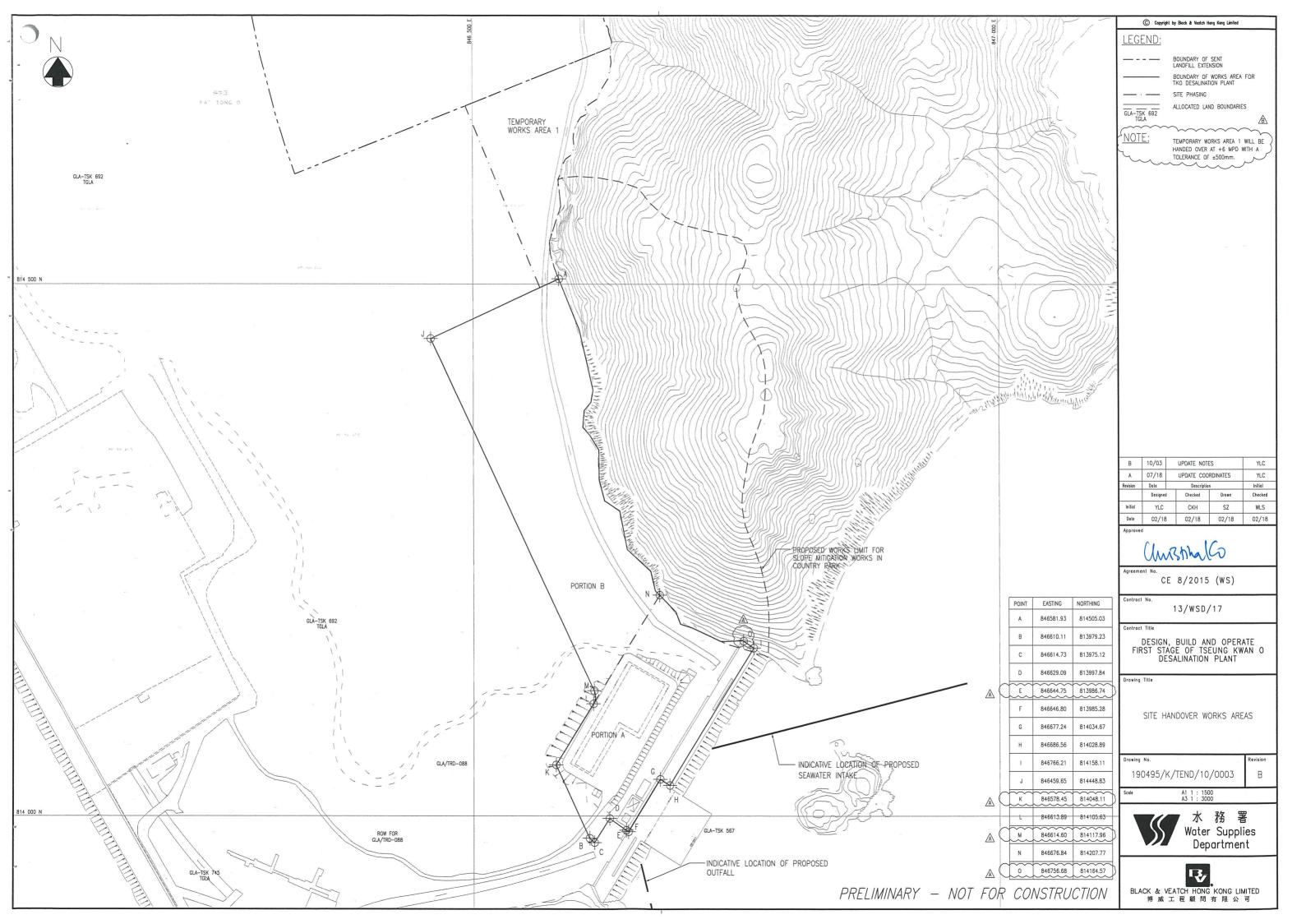
Critical Bar

◆ Milestone



Appendix B

Overview of Desalination Plant in Tseung Kwan O



BUILDINGS IN FIRST STAGE

DOILDI	1100 III TINOT OTNOL		
CODE	NAME OF BUILDING	TOTAL G.F.A. (m²)	SITE COVERAGE (m²)
В	COMBINE SHAFT	759.876	759,876
С	ACTIDAFF	10027,547	5455_346
G	REVERSE OSMOSĮS BUĮLDĮNG AND ELECTRĮCAL BUILDING	4511 <u>.</u> 455	5367,935
н	CO2 TANKS AREA	-	-
J	PRODUCT WATER STORAGE TANK, PUMP STATION AND ELECTRICAL BUILDING	1974.610	2933,980
к	SLUDGE TREATMENT BUILDING, TANK AND PUMP ROOM	2531,044	1228.361
М	ADMINISTRATION BUILDING & ELECTRICAL BUILDING C	2459,713	1114,062
N	MAIN ELECTRICAL AND CENTRAL CHILLER PLANT BUILDING	-	459,893
R1	ELECTROCHLORINATION BUILDING & ELECTRICAL BUILDING A	657.992	825.776
S	132 kV SUBSTATION	-	943.560
Т	IRRIGATION WATER TANK AND PUMP ROOM	-	156.148
R2	CHEMICAL BUILDING	813.056	813,056
٧	VISITOR GALLERY	1330.410	1330.410
X1	GUARD HOUSE AND FS CONTROL ROOM	39.585	39.585
X2	GUARD HOUSE	22.035	22.035
Υ	R+D OUTDOOR	-	-
Z	WASTE WATER TREATMENT PLANT	48.000	48,000
	TOTAL =	25175.323	21498.023

LEGEND / ABBREVIATION

H/L WINDOW HIGH LEVEL WINDOW METAL LOUVRES CAT LADDER

C.L. ACCESSIBLE UNISEX TOILET

PROPOSED FINISH FLOOR LEVEL IN METER ABOVE P.D. STRUCTURAL FLOOR LEVEL IN METER ABOVE P.D. MECHANNICAL VENTILATION & ARTIFICIAL LIGHTING

4.5kg CO² FIRE EXTINGUISHER

HOSE REEL

FIREMAN'S LIFT LIFT FOR THE BARRIER FREE ACCESS

PIPE DUCT

PLOT RATIO & SITE COVERAGE CALCULATION:

TOTAL G.F.A. TOTAL SITE COVERAGE

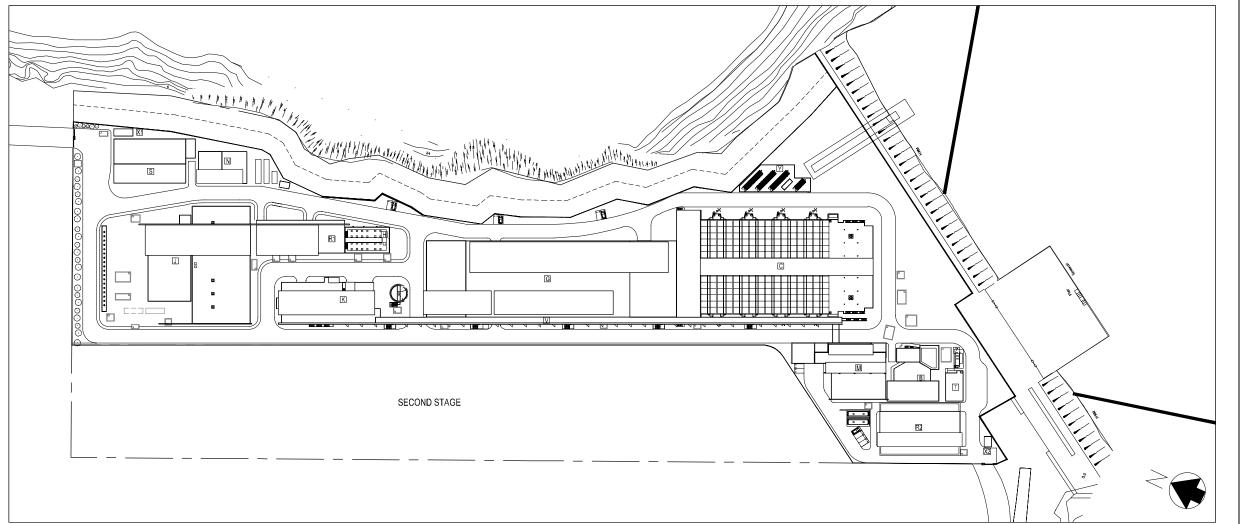
SITE COVERAGE

FIRST STAGE-INDICATIVE LOCATION OF PROPOSED SEAWATER INTAKE 大廟灣 JOSS HOUSE BAY (TAI MIU WAN)

1 : 5000

SITE LOCATION PLAN

FIRST STAGE OF TSEUNG KWAN O DESALINATION PLANT





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Appendix C

Summary of Implementation Status of Environmental Mitigation



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Imple Stage		ation	Implementation	Relevant Legislation & Guidelines	
Reference	Mitigation Measures	main concerns to address	implementation Agent	D	С	0	status		
Air Quality	7								
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		✓		Implemented	Air Pollution Control (Construction Dust)	
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		✓		NA		
S4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		✓		Implemented		
S4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		✓		Implemented		
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimize the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		✓		Implemented		
S4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		✓		Implemented		
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		✓		Implemented		
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		√		Implemented		



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Imple Stage		ation	Implementation	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address	Implementation Agent	D	С	0	status	
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	√	√		N/A	
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		✓		Implemented	
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site / During construction	Contractor(s)		✓		Implemented	
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site / During construction	Contractor(s)		✓		N/A	
S4.8.1	All exposed areas will be kept wet always to minimise dust emission.	Land site/ During construction	Contractor(s)		✓		Implemented	
S4.8.1	Ultra-low-sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		✓	✓	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWE TC(W)) No 19/2005 on Environmental Management on Construction Sites
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		✓		Implemented	



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Imple Stage		ation	Implementation	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address	implementation Agent	D	С	0	status	
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.	Land site/ During construction	Contractor(s)		✓		N/A	
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		√		Implemented	
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		√		Implemented	

Note: D – Design stage C – Construction O – Operation



EIA Referen	Recommended Environmental Protection ace Measures / Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Implen Stage			Implementation status	Relevant Legislation & Guidelines
	ice measures/ mugation measures	main concerns to address	Agent	D	С	0		& duidennes
Noise							T	T
S5.7	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/ During construction	Contractor(s)		√		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/ During construction	Contractor(s)		√		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		√		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m ⁻² and have	Noise control/ During construction	Contractor(s)		√		N/A	A Practical Guide for the Reduction of Noise from Construction Works,



EIA Poforonco	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Imple: Stage	menta	tion	Implementation status	Relevant Legislation & Guidelines
Keierence	Measures/ Midgadon Measures	main concerns to address	Agent	D	С	0		& Guidennes
	no openings or gaps.							
S5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	Noise control/ During construction	Contractor(s)	✓	✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	PMEs will not be used at the works areas near educational institutions with residual impact (ie the "influence area" within a radius of 40m) during school hours in order to reduce impact to the educational institutions.	Noise control / During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators. Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m ⁻² may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre- construction/ During construction	Contractor(s)	V	✓		N/A	
S5.9	Sawcutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre- construction/ During construction	Contractor(s)	√	•		N/A	



EIA	Recommended Environmental Protection	Objectives of the recommended measures &	Implementation	Imple Stage	menta	tion	status	Relevant Legislation & Guidelines
Keleren	ce Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		& Guidennes
S5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (eg summer holiday, Easter holiday or Christmas holiday, etc) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	•		N/A	
S5.10	A noise monitoring programme shall be implemented for the construction phase.	Designated monitoring stations as defined in EM&A Manual/During construction phase	Environmental Team (ET)		✓		N/A	
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommende measures & main concerns to	d Implementation Agent	Implei Stage	nentati	on	Implementation status	Relevant Legislation & Guidelines	
	Measures/ Mitigation Measures	address	ngent	D	С	0		duidelines	
Water Quality									
S6.9	Dredged marine sediment will be disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO).	Marine Dredging/ During construction	Contractor(s)		•		N/A	Dumping at Sea Ordinance (DASO)	
S6.9	Disposal vessels will be fitted with tight bottom seals in order to prevent leakage of material during transport.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-	
S6.9	Barges will be filled to a level, which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.	Marine Dredging/ During construction	Contractor(s)		√		Implemented	-	
S6.9	After dredging, any excess materials will be cleaned from decks and exposed fittings before the vessel is moved from the dredging area.	Marine Dredging/ During construction	Contractor(s)		*		Implemented	-	
S6.9	All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-	
S6.9	All vessels must have a clean ballast system.	Marine Dredging/ During construction	Contractor(s)		√		Implemented	-	
S6.9	No discharge of sewage/grey wastewater should be allowed. Waste water from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system.	Marine Dredging/ During construction	Contractor(s)		•		Implemented	-	
S6.9	No soil waste is allowed to be disposed overboard.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-	



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to	Implementation Agent	Stage	_		Implementation status	Relevant Legislation & Guidelines
S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	address Land site & drainage/ During construction	Contractor(s)	D	C	0	Implemented, observation and reminder issued.	ProPECC PN 1/94 TM Standard under the WPCO
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	-
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		1		Implemented	-
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)	✓	✓		Implemented, reminder issued.	ProPECC PN 1/94
S6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		~		N/A	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommender measures & main concerns to	Implementation Agent	Impler Stage	nentati	ion	Implementation status	Relevant Legislation & Guidelines
	Measures/ Midgadon Measures	address	Agent	D	С	0		Guidelines
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows. Land site & drainage/ During construction	Land site & drainage/ During construction	Contractor(s)		*		Implemented	-
S6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		1		Implemented	-
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		√	✓	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		✓	*	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to	Implementation Agent	Implen Stage	nentati	ion	Implementation status	Relevant Legislation & Guidelines
	Measures/ Mitigation Measures	address	Agent	D	С	0		Guidennes
S6.9	Site drainage should be well maintained and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		✓	✓	Implemented, reminder and observation issued. Rectified after observation.	-
S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Implen Stage	nentat	ion	Implementation Status	Relevant Legislation &
	Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
Waste Manage								
S8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Training of site personnel in proper waste management and chemical handling procedures. Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		√	√	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		√		Implemented, reminder issued.	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		•		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		√		Implemented	Chapters 2 & 3 Code of Practice on the Packaging, Labelling & Storage of Chemical Wastes published under the Waste Disposal Ordinance (Cap 354), Section 35
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		✓		Implemented, Reminder Issued,	Waste Disposal Ordinance (Cap 354)



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Implen Stage	nentati	on	Implementation Status	Relevant Legislation & Guidelines DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials WBTC 32/92, The Use of Tropical Hard Wood on Construction Site ETWB TCW No. 33/2002, Management of Construction and Demolition Material
	Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
S8.5	A recording system for the amount of wastes generated/recycled and disposal sites. The tripticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		√		Implemented	Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction, During operation	Contractor(s)		✓		Implemented	Tropical Hard Wood on
S8.5	Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		✓		Implemented	Management of Construction and
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		✓		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		✓		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		✓		Implemented Reminder issued.	-
S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		√		Implemented	-
S8.5	A Sediment Quality Report (SQR) for sampling and chemical testing of the sediment will be prepared and submitted to the EPD for approval. The approved detailed sampling and chemical testing will be carried out prior to the commencement of the dredging activities to confirm the sediment disposal method.	Marine works/ During construction	Contractor(s)		√		N/A	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The management of dredged/excavated sediment management requirement from ETWB TC(W) No.	Marine works/ During construction	WSD/ Contractor(s)		√		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Impler Stage	nentati	on	Implementation Status	Relevant Legislation & Guidelines
		main concerns to address	Agent	D	С	0		
	34/2002 will be incorporated in the Specification of the Contract Documents.							Ordinance (DASO)
S8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/landfills, and to control fly-tipping.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		√		Implemented	ETWB TC(W) No. 19/2005 Environmental Management on Construction Sites
\$8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		✓		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005
S8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		√		Implemented	-
S8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		√		Implemented	-
S8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)
S8.5	Open stockpiles of excavated/ fill materials or	Land site/ During	Contractor(s)		✓		Implemented	Air Pollution Control



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Implei Stage	Implementation Stage		Implementation Status	Relevant Legislation &
	Mitigation Measures	main concerns to address	Agent	D	С	0	1	Guidelines
	construction wastes on-site should be covered with tarpaulin or similar fabric.	Construction, particularly dry season						(Construction Dust) Regulation (Cap 311R)
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	√	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Chemical waste container shall have a capacity of less than 450 L unless the specifications have been approved by the EPD.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	1	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	√	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation		Implementation Stage		Implementation Status	Relevant Legislation &
	Mitigation Measures	main concerns to address	Agent	D	С	0	1	Guidelines
S8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	1	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	1	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/ WSD		*	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	✓	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	✓	Implemented	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminium can, waste paper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		√	1	Implemented	-
S8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		√		Implemented	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		√		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be	All facilities/ During construction	ET/IEC		1		Implemented	-



FIA Reterence	Recommended Environmental Protection Measures/ Mitigation Measures	recommended measures X	Implementation	Implen Stage	nentatio		Implementation Status	Relevant Legislation & Guidelines
	Mugation Measures	main concerns to address	Agent	D	C	0		duidennes
	implemented throughout the construction phase.							

Note: D – Design stage C – Construction O – Operation



	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impler Stage	nentati	ion	Implementation Status	Relevant Legislation &
	Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
	Ecology							
S9.7	For slope mitigation works within the Clear Water Bay Country Park, to avoid tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels can be adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical. A detailed specification describing the exact locations of the flexible barrier foundation plates, soil nails and rock dowels will be prepared to illustrate how the setback distance from existing trees would be implemented for tree avoidance.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	•	•		Implemented	-
S9.7	Pruning of tree canopies along the alignment of the flexible barriers shall be limited to a minimum.	Slope mitigation works area/ During construction	Contractor(s)		✓		Implemented	
S9.7	The alignment of flexible barriers shall be optimized to preserve all species of conservation interest and minimize the impact to the existing vegetation as far as practicable. All individuals of <i>Marsdenia lachnostoma</i> within the slope mitigation areas shall be retained <i>insitu</i> , by positioning the alignment of flexible barrier at a minimum 1.5m in a radius away from these individuals.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	•	•		N/A	-
S9.7 and 9.10	At the detailed design stage prior to the commencement of the slope mitigation works, a vegetation survey shall be carried out at the slope mitigation areas within the Clear Water Bay Country Park to assess the condition and identify the location of each individual of <i>Marsdenia lachnostoma</i> and other flora species of conservation interest that may be directly affected by the construction works.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	√	✓		Implemented	-
S9.7	Temporary fencing will be installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction. A sign identifying the site shall be attached to the fence and flagging tape shall be attached to the individuals to visualize their locations.	Slope mitigation works area/ During construction	Contractor(s)		✓		N/A	-



	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impler Stage	nentati	on		Relevant Legislation & Guidelines
	Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
S9.7 and S9.10	A specification for fencing and demarcating individuals of <i>Marsdenai lachnostoma</i> (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers will be prepared to protect the species.	Slope mitigation works area/ During construction	Contractor(s)		✓		N/A	-
S9.7	Induction training shall also be provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance.	Slope mitigation works area/ During construction	Contractor(s)		✓		N/A	-
S9.7	The resident site supervisory staff will closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity.	Slope mitigation works area/ During construction	Contractor(s)		√		N/A	-
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ Environmental Team (ET)		✓		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		✓		N/A	-
S9.7	Affected habitats within the Clear Water Bay Country Bay shall be reinstated by hydro-seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works.	All area/ During construction	Contractor(s)		✓		N/A	-

Note: D – Design stage C – Construction O – Operation



EIA	Recommended Environmental Protection Measures/ Mitigation	Objectives of the recommended	Implementation			ation	Implementation Status	Relevant
Reference	Measures	measures & main concerns to address	Agent	D	С	0		Legislation & Guidelines
	Landscape & Visual							
S11.10 & 11.11	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	√	Implemented	-
S11.10 & 11.11	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	√	Implemented	-
S11.10 & 11.11	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to: - green roofs where practical (ie without equipment on the roof); - roadside planting; - aesthetic treatment of all structures; - vertical greening; screen planting along application site; and - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible, - to reduce their visual impact and blend them into the surrounding landscape. (MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	•	•	Implemented	-
S11.10 & 11.11	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No. 10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	√	√	Implemented	ETWB TCW No. 3/2006 - Tree Preservation.
S11.10 & 11.11	No tree within the Country Park will be felled. Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments. A compensatory tree planting proposal including locations of tree compensation will be submitted to seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013. (MM5)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	•	✓	Implemented	DEVB TC(W) No. 10/2013
S11.10 &	Any slope mitigation works necessary to address natural terrain	All area/ Detailed	WSD/	✓	✓	✓	N/A	



EIA	Recommended Environmental Protection Measures/ Mitigation	Objectives of the recommended	Implementation	Implementation Stage				
Reference	Measures	measures & main concerns to address	Agent	D	С	0		Legislation & Guidelines
11.11	hazards, will be minimized to minimize any potential environmental impact to the Country Park e.g. soil nailing and rock stabilization will aim to avoid existing trees e.g. should any restoration of vegetation be necessary, the best planting matrix with native species will be established, with the aim of resembling the existing vegetation. (MM6)	design/ During construction/ During operation	Contractor(s)					
S11.10 & 11.11	Dredging works for the installation of intake structures and outfall diffusers should be minimized to avoid or reduce any potential environmental impacts to as low as reasonably practicable (ALARP). The intake and outfall structures (e.g. intake openings and diffuser heads) will be prefabricated and transferred to site for installation. (MM7)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	>	>	Implemented	
S11.10 & 11.11	All night-time lighting will be reduced to a practical minimum both in terms of number of level and will be hooded and directional. (MM8) units and lux level and will be hooded and directional. (MM8)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	√	Implemented	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage				Relevant Legislation &
				D	С	0		Guidelines
	Landfill Gas Hazard							
S12.7	During all works, safety procedures should be implemented to minimise the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	√	✓	✓	Implemented	-
S12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 metre.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	*	•	•	N/A	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance. Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	V	√	✓	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	√	√	√	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	√	Implemented	



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	recommended measures &	Implementation	Stage				Relevant Legislation &
			Agent	D	С	0		Guidelines
	physical contact with it.							
S12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable instrument, appropriately calibrated and capable of measuring the concentrations of methane. carbon dioxide and oxygen.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	√	*	N/A	
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	*	√	√	N/A	
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	√	✓	√	Implemented	
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of- working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, supervisors responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site supervisor and all operatives must be familiar with this statement.	All area/ During construction/ During operation	Contractor(s)	√	V	✓	Implemented	



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation	Implementation Stage			Implementation Status	Relevant Legislation &
			Agent	D	С	0		Guidelines
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	✓	✓	N/A	
S12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	*	•	✓	N/A	
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	√	V	✓	N/A	
S12.7	All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these hazards are	All area/ Detailed design/ During construction/ During operation	Contractor(s)			✓	Implemented	

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant



EIA Reference	Recommended Environmental Protection Measures / Mitigation Measures	recommended measures &	Implementation	Imple Stage D	 	Relevant Legislation & Guidelines
	being minimized on-site.					

Note: D – Design stage C – Construction O – Operation



Appendix D

Impact Monitoring Schedule of the Reporting Month

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant EM&A Water Quality Monitoring Schedule

		Jul-21	1-
Mon	Tue Wed	Thu Fri	Sat
		1 2	3
		Impact	Impact
		Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3,	Water Quality monitoring for CE, CF, WSR1, WSR
		WSR4, WSR16, WSR33, WSR36, WSR37	WSR3, WSR4, WSR16, WSR33, WSR36, WSR37
		Tidal Period:	Tidal Period:
			and the control of th
		Ebb Tide: 13:50 - 21:00	Ebb Tide: 05:20 - 10:15
		Flood Tide: 07:00 - 13:50	Flood Tide: 10:15 - 16:02
		Monitoring Time:	Monitoring Time:
		Mid-ebb: 15:30 - 19:00&	Mid-ebb: 08:00 - 10:00*\$#
		Mid-flood: 08:40 - 12:10	Mid-flood: 11:23 - 14:53
5	6 7	8 9	10
	Impact	Impact	Impact
	Water Quality monitoring for CE, CF, WSR1, WSR2,	Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3,	Water Quality monitoring for CE, CF, WSR1, WSR
	WSR3, WSR4, WSR16, WSR33, WSR36, WSR37	WSR4, WSR16, WSR33, WSR36, WSR37	WSR3, WSR4, WSR16, WSR33, WSR36, WSR37
	<u>Tidal Period:</u>	<u>Tidal Period:</u>	<u>Tidal Period:</u>
	Ebb Tide: 07:00 - 13:51	Ebb Tide: 08:50 -16:00	Ebb Tide: 08:37 - 16:24
	Flood Tide: 13:51 - 20:23	Flood Tide: 16:00 - 22:36	Flood Tide: 16:24 - 23:00
	Monitoring Time:	Monitoring Time:	Monitoring Time:
	Mid-ebb: 08:40 - 12:10	Mid-ebb: 09:40 - 13:10	Mid-ebb: 10:45 - 14:15
	Mid-flood: 15:22 - 18:52	Mid-flood: 15:30 - 19:00&	Mid-flood: 16:43 -19:00\$&#</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>12</td><td>13 14</td><td>15 16</td><td>17</td></tr><tr><td></td><td>Impact</td><td>Impact</td><td>Impact</td></tr><tr><td></td><td>Water Quality monitoring for CE, CF, WSR1, WSR2,</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3,</td><td>Water Quality monitoring for CE, CF, WSR1, WSF</td></tr><tr><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td><td>WSR4, WSR16, WSR33, WSR37</td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td><u>Tidal Period:</u></td><td>Tidal Period:</td><td><u>Tidal Period:</u></td></tr><tr><td></td><td>Ebb Tide: 10:51 - 18:00</td><td>Ebb Tide: 12:00 - 19:24</td><td>Ebb Tide: 16:18 - 22:31</td></tr><tr><td></td><td>Flood Tide: 04:00 - 10:51</td><td>Flood Tide: 05:29 - 12:00</td><td>Flood Tide: 09:28 - 16:18</td></tr><tr><td></td><td>Monitoring Time:</td><td>Monitoring Time:</td><td>Monitoring Time:</td></tr><tr><td></td><td>Mid-ebb: 12:40 - 16:10</td><td>Mid-ebb: 13:57 - 17:27</td><td>Mid-ebb:15:30 - 19:00&</td></tr><tr><td></td><td>Mid-flood: 08:00 - 10:30*\$#</td><td>Mid-flood: 08:00 - 11:30*</td><td>Mid-flood: 09:33 - 13:03</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>19</td><td>20 21</td><td>22 23</td><td>24</td></tr><tr><td></td><td></td><td>Impact</td><td>Impact</td></tr><tr><td></td><td>* Cancelled Due to Adverse Weather*</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3,</td><td>Water Quality monitoring for CE, CF, WSR1, WSR</td></tr><tr><td></td><td>(No. 1 & No.3 Tropical Cyclone Warning Signal, Amber</td><td>WSR4, WSR16, WSR33, WSR36, WSR37</td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td>Rainstorm Signal and Thunderstorm Signal)</td><td>Tidal Period:</td><td>Tidal Period:</td></tr><tr><td></td><td>Mainstorm Signal and Munderstorm Signal)</td><td>Ebb Tide:07:00 - 14:29</td><td>Ebb Tide: 08:42 - 16:06</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Flood Tide: 14:29 - 22:00</td><td>Flood Tide: 16:06 - 23:16</td></tr><tr><td></td><td></td><td>Monitoring Time:</td><td>Monitoring Time:</td></tr><tr><td></td><td></td><td>Mid-ebb: 08:59 - 12:29</td><td>Mid-ebb: 10:39 - 14:09</td></tr><tr><td></td><td></td><td>Mid-flood: 15:30 - 19:00&</td><td>Mid-flood: 16:27 - 19:00\$&#</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>26</td><td>27 28</td><td>29 30</td><td>31</td></tr><tr><td></td><td>Impact</td><td>Impact</td><td>Impact</td></tr><tr><td></td><td>Water Quality monitoring for CE, CF, WSR1, WSR2,</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3,</td><td>Water Quality monitoring for CE, CF, WSR1, WSR</td></tr><tr><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td><td>WSR4, WSR16, WSR36, WSR37</td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td><u>Tidal Period:</u></td><td>Tidal Period:</td><td><u>Tidal Period:</u></td></tr><tr><td></td><td>Ebb Tide: 12:16 - 19:24</td><td>Ebb Tide: 13:00 - 19:00</td><td>Ebb Tide: 15:00 - 20:00</td></tr><tr><td></td><td>Flood Tide: 05:00 - 12:16</td><td>Flood Tide: 06:00 - 13:00</td><td>Flood Tide: 08:00 - 15:00</td></tr><tr><td></td><td></td><td></td><td>Monitoring Time:</td></tr><tr><td></td><td>Monitoring Time:</td><td></td><td></td></tr><tr><td></td><td>Monitoring Time:</td><td>Monitoring Time:</td><td></td></tr><tr><td></td><td>Monitoring lime: Mid-ebb: 12:52 - 16:22 Mid-flood: 08:00 - 10:53*\$#</td><td>Mid-ebb: 14:15 - 17:45 Mid-flood: 08:00 - 11:30*</td><td>Mid-ebb: 15:30 - 19:00& Mid-flood: 09:45 - 13:15</td></tr></tbody></table>

Remarks: Monitoring Parameters: Dissolved oxygen, Temperature, pH, Turbidity, Salinity, Suspended Solids

- Note:

 * Due to safety concern of vessel transportation earlier than 0700, Water Quality Monitoring would start at 0800.

 \$ Since predicted tide is shorter than 3.5 hours, method of 90% tidal period as monitoring time is adopted.

 & Due to safety concern for sampling event in night-time, method of 90% tidal period as monitoring time is approached and end at 1900.

 # Prioritized routing: Mid-Elbb: CE→WSR16→WSR37→WSR36→WSR33→Remaining stations and Mid-Flood: CF→WSR1→WSR2→WSR3→WSR4→Remaining stations



Appendix E

Event/Action Plan for Noise Exceedance



Event and Action Plan for Construction Noise Monitoring

Event	Action										
	ET	IEC	ER	Contractor							
Action Level	 Carry out investigation to identify the source and cause of the complaint/ exceedance(s) Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC Discuss with the Contractor and IEC for remedial measures require If the complaint is related to the Project, conduct additional monitoring for checking mitigation effectiveness and report the findings and results to the IEC, ER and the Contractor 	advise the ER accordingly 3. Supervise the implementation of remedial measures d	 Confirm receipt of Notification of Exceedance in writing Require Contractor to propose remedial measures for the analyse noise problem Ensure remedial measures are properly implemented 	 Submit noise mitigation proposals, if required, to the IEC and ER Implement noise mitigation proposals. 							
mit Level	1. Notify IEC, ER, EPD and Contracto 2. Identify the source(s) of impact by reviewing all the relevant monitoring data and the corresponding construction activities. Exceedance should also be confirmed by immediate verification in the field far as practical. 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implement inform IEC, ER and EPD the cause actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EP, ER informed of the results 8. If exceedance stops, cease additional monitoring.	Contractor on the potential remedial actions 2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly 3. Supervise the implementation of the remedial measures ted. &	exceedance in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analyzed noise problem 4. Ensure remedial measures are properly implemented 5. If exceedance continuous, consider what portion of the work is	1. Take immediate action to avoid further exceedance 2. Identify practicable measures to minimize the noise impact. Submit proposals for remedial actions to ER within three working days of notification 3. Implement the agreed proposals 4. Resubmit proposal if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated							



Appendix F

Noise Monitoring Equipment Calibration Certificate (BLANK)



(BLANK)



Appendix G

Event/Action Plan for Water Quality Exceedance



Event	Action									
	ET	IEC	SO	Contractor						
Action level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Repeat measurement on next day of exceedance. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)						
Action level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; Repeat measurement on next working day of exceedance. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)						



Event		Act	tion	
	ET	IEC	SO	Contractor
Limit level being exceeded by one sampling day	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with Contractor, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)



Event		Act	tion	
	ET	IEC	SO	Contractor
Limit level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC, Contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods. Discuss mitigation measures with IEC, SO and Contractor. Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented measures. 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. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures; As directed by the SOR, to slow down or to stop all or part of the marine work or construction activities. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)



Appendix H

Waste Flow Table

Contract No. 13/WSD/17

Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

BEAM Plus Monthly Report

Appendix H - MA11 Construction Waste Reduction

Monthly Summary Waste Flow Table

		Tatal Occupies	Actual Quantities of Inert C&D Materials Generated Monthly											
	Total Quantity Generated	Total Quantity Generated	Excavated Material	Non-excavated Material				Actual Quantities of C&D Wastes Generated Monthly						
Month	610	(Excluded Excavated Material)	Excavated Material)	Total Quantity Generated	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed in sorting facility	Broken Concrete of construction waste collected by	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(al)	(a2)	(b)	(c)	(d)	(e)	(f)	recycling company (g)	(h)	(1)	(i)	(k)	(1)	
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	
Jan-2020	-	-	-	-	-	-	-	-	-	-	-	-	-	
Feb-2020	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mar-2020	0.420	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.420	
Apr-2020	2.400	2.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.400	
May-2020	18.470	18.470	0.000	0.000	0.000	0.000	0.000	0.000	5.900	0.000	0.000	0.000	12.570	
Jun-2020	1116.110	1116.110	0.000	0.000	0.000	0.000	1081.950	0.000	0.000	0.000	0.000	0.000	34.160	
Jul-2020	758.120	758.120	0.000	0.000	0.000	0.000	724.360	0.000	0.000	0.000	0.000	0.000	33.760	
Aug-2020	203.150	203.150	0.000	0.000	0.000	0.000	161.080	0.000	0.000	0.000	0.000	0.000	42.070	
Sep-2020	105.926	105.926	0.000	0.000	0.000	0.000	0.000	0.000	22.766	0.000	0.010	0.000	83.150	
Oct-2020	46.320	46.320	0.000	0.000	0.000	0.000	0.000	0.000	7.050	0.040	0.020	0.000	39.210	
Nov-2020	71.815	71.815	0.000	0.000	0.000	0.000	0.000	0.000	5.351	0.030	0.014	0.000	66.420	
Dec-2020	12934.194	12934.194	0.000	0.000	12860.314	0.000	0.000	0.000	9.912	0.030	0.018	0.000	63.920	
Total	15256.925	15256.925	0.000	0.000	12860.314	0.000	1967.390	0.000	50.979	0.100	0.062	0.000	378.080	

 Total C&D waste generated
 15256.925 Tomes
 (ie: al = b+c+d+e+f+g+h+i+j+k+l)

 Total C&D waste generated (excluded excavated materials)
 15256.925 Tome
 (ie: a2 = c+d+e+f+g+h+i+j+k+l)

 Total Recycled C&D Waste
 12911.455 Tome
 (ie: a3 = c+d+g+h+i+j)

 % of recycled C&D Waste for BEAM Plus MA 11
 84.63% (ie: a3/a2 x 100%)

Notes:

- (1) metal, paper & plastic were collected by recycler
- (2) The performance target of waste recycling are specified in the Contract.
- (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
- (5) Broken concrete for recycling into aggregates
- (6) Excavated materials/waste will NOT be considered as part of construction waste. It should be excluded in the calculation
- (7) Disposal of inert waste to public fill or sorting facilities will NOT be considered as recycled waste.



Contract No. 13/WSD/17
Environmental Management Plan for Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Appendix H – MA11 Construction Waste Reduction

Name of Department: WSD Contract No.: 13/WSD/17

Monthly Summary Waste Flow Table for 2021 (year)

		Actual Quan	tities of Inert C&	D Materials Genera	ated Monthly			Actual Quantities	of C&D Wastes (Generated Monthly	,
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan	11823.060	0.000	0.000	11816.130	6.930	0.000	0.000	0.000	0.000	0.000	73.960
Feb	434.090	0.000	0.000	434.090	0.000	0.000	14.767	0.123	0.008	0.000	45.080
Mar	91.710	0.000	0.000	0.000	91.710	0.000	0.002	0.155	0.010	0.000	122.940
Apr	0.000	0.000	0.000	0.000	0.000	0.000	28.931	0.057	0.002	0.000	89.450
May	1557.500	0.000	0.000	0.000	1557.500	0.000	0.005	0.108	0.009	0.000	70.750
Jun	4104.330**	0.000	0.000	0.000	4104.330**	0.000	0.001	0.088	0.005	0.000	91.540
Sub-total	18010.690	0.000	0.000	12250.220	5760.470	0.000	43.706	0.530	0.034	0.000	493.720
Jul*	365.150	0.000	0.000	0.000	365.150	0.000	0.003	0.120	0.005	0.000	65.770
Aug											
Sep											
Oct											
Nov											
Dec											
Total	18375.840	0.000	0.000	12250.220	6125.620	0.000	43.709	0.650	0.039	0.000	559.490

Notes:

- (1) The performance targets are given in Section 1.69 of Specification B
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging material
- * The data will be reviewed in next month.
- ** The data has been updated in this month.



Appendix I

Site Inspection Proforma



Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date:	Inspected by: ET: Charlene (an	so: Ray	monol 1	WSI SI	D:
Inspection Time:	14:30-17:00 Contractor: Brigh Kam	IEC:	ais kno	IVA	•
Weather		1			
Condition	Sunny Fine Overcast Drizzle Rain	Storm	На	zy	
Temperature	30 C Humidity High Moderate	Low			*
Wind	Calm Light Breeze Strong				
			1	2	9
Item EIA ref.		N/A	Yes	No	Photo/Remarks
No.		4			
0.00	General				
0.01	ls the current Environmental Permit displayed conspicuously at all vehicle site		\checkmark		
	entrances/exits for public's information at any time?				
0.02	ls ET Leader's log-book kept readily available for inspections?				
		L			2 7
1.00	Construction Dust				y water spraying
1.01 S4.8.1	Are dusty materials, such as excavated materials, building debris and construction		V		Vocapaction.
	materials, and exposed earth surface properly covered to prevent dust emission?	<u></u>			
1.02 S4.8.1	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to				1 moter sprangly
	dusty construction works for dust suppression?				. 08
1.03 S4.8.1	Are fumes or smoke emitting plants or construction activities shielded by a screen?	1	***************************************		no fu me/smoke
					emitty plant/
					Construction
1.04 S4.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	 			outivity.
			V		
1.05 S4.8.1	Is wheel-washing provided to all vehicles leaving the site?				5
			9		
1.06 S4.8.1	Are road section near the site exit free from dusty material?				
1.07 S4.8.1			<u> </u>		
34.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?		V		pared + sprayed
1.08 S4.8.1	Are water spraying provided immediately prior to any loading or transfer of dusty				with water?
1.00 54.6.1	materials?	54	/		
1.09 S4.8.1	Are covers provided to all dump trucks carrying dusty materials when entering and				Ala Almana
1.03 54.6.1	leaving the site?	V			No dump fruk. Was elserged
1.10 S4.8.1	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of				
54.6.1	boulders, poles, pillars sprayed with water to maintain the entire surface wet?	V			
1.11 S4.8.1	Is exposed earth properly treated within six months after the last construction activity				
51.0.1	on site?		V		
1.12 S4.8.1	Does the operation of plants on site free form dark smoke emission?				
	op-lane of plants of the root form dark official chinosion.		\checkmark		VNRMM laber



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
1.13	S4.8.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?		V		
1.14	S4.8.1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?				1
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	V	50		
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?		V		· ·
1.17	S4.8.1	Is open burning prohibited?				
2.00		Construction Noise (Airborne)		-		
	S5.7	Are quiet plants adopted on site?		O		Vnoise (ale)
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive niose?				Viguiar importion
2.03	S5.7	Are plants throttled down or turned off when not in use?		1		
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?	Ø			4 noetry to
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?) WEK.
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?				
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		V		
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?	0		11	
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				1
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				n 2 2 2 1
2.11	S5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	S5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13	S5.7	Are construction noise permit(s) applied for general construction works during restricted hours?	5			
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
3.00		Water Quality				
3.01		Is effluent discharge license obtained for wastewater discharge from site?		V		
3.02	S6.9	ls effluent discharged according to the effluent discharge license?		1		
3.03	S6.9	Is wastewater discharge from site properly treated prior to discharge?				<u></u>



No.		
3.04 S6.9 Are perimeter channels provided to intercept storm runoff from outside the site?		
3.05 S6.9 Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to		1
remove sand/silt particles from runoff?	<u> </u>	
3.06 S6.9 Is surface runoff diverted to sedimentation facilities?		
3.07 S6.9 Is the drainage system properly maintained?		Cerrinder (LD)
3.08 S6.9 Are construction works carefully programmed to minimize soil excavation works		
during rainy seasons?	Ш	
3.09 S6.9 Are exposed soil surface protected by paving as soon as possible to reduce the		
potential of soil erosion?	Ш	
3.10 S6.9 Are temporary access roads protected by crushed gravel?		
3.11 S6.9 Are exposed slope surface properly protected?		Vhydrosecolid
3.12 S6.9 Is trench excavation avoided in the wet season as far as practicable, or if necessary,		
backfilled in short sections after excavation?		
3.13 S6.9 Are open stockpiles of construction materials on site covered by tarpaulin or similar		
fabric during construction?	L_	
3.14 S6.9 Is runoff from wheel-washing facilities avoided?		
3.15 S6.9 Is oil leakage or spillage prevented?		1 drietray
3.16 S6.9 Are there any measures to prevent the release of oil and grease into the storm		V dity from.
drainage system?		V pleif 1100.
3.17 S6.9 Are the oil interceptors/ grease traps properly maintained?		
3.18 S6.9 Are debris and rubbish generated on site collected, handled and disposed of properly		
to avoid them entering the streams?		reminder (2)
3.19 S6.9 Are all fuel tanks and storage areas provided with locks and be sited on sealed areas,		-
within bunds of capacity equal to 110% of the storage capacity of the largest tank?	L	
3.20 S6.9 Are tanks, containers, storage area bunded and the locations locked as far as possible		d .
from the sensitive watercourse and stormwater drains?	L	
3.21 S6.9 Are sufficient chemical toilets provided on site to handle sewage from construction work force?		5
3.22 S6.9 Are sewage disposal and toilet maintenance of the portable chemical toilets provided		<u> </u>
by the licensed contractors?		
3.23 S6.9 Is concrete washing water properly collected and treated prior to discharge?		Į
3.24 S6.9 Is suitable type of silt curtains deployed during dredging to reduce the elevation of		(m) malrine
suspended solids to nearby sensitive receivers?		dreding was
3.25 S6.9 Is closed grab dredger used to reduce the potential leakage of sediments?		reporting day (No.



the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab? 3.29 S6.9 Is the maximum allowed dredging rate at the seawater intake limited to 750 m³/day while the maximum allowed dredging rate at the submarine outfall is 3,500 m³/day?	Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
drodged per hour? Is number of cycle limited to 20-21 grab per hour for 3m² closed grab, 10-11 grab per hour for m² closed grab? 3.28 8.6.9 is the grab operated in slow and controlled manner such that the impact to seabed by the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab? 3.29 8.6.9 is the maximum allowed dredging rate at the seawater intake limited to 750 m²/day? while the maximum allowed dredging rate at the submarine outfall is 3,500 m²/day? 3.30 8.6.9 is dredged marine sediment disposed of in a gazetted marine disposal area in secondance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)? 3.31 8.6.9 Are dagoseal vessels fitted with tight bottom seals in order to prevent leakage of material during transport? 3.32 8.6.9 Are barges filled to a level which ensures that material close not spill over during transport to the disposal site and that adequate feeboard is maintained to ensure that the decks are not washed by wave action? 3.33 8.6.9 Are excess materials cleaned from decks and exposed fittings before the vessel is moved from the dredging area after dredging? 3.34 8.6.9 Are the contractor(s) confirmed that the works cause no visible foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the dredging site? 3.35 8.6.9 When the dredged material has been unloaded at the disposal areas, is any material secumbated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper? 3.36 8.9.9 Is dredger maintained adequate elearnnee between vessels and the seabed at all states of the tide and reduce operations speed to ensure that excessive turbidity is not generated by turbulence from vessel movement or propeller wash? 3.37 8.6.9 Is the contractor shall regularly inspect the silt curtains and check that they are moored and marked to avoid danger to marine terific? Is regular inspection on the integrity of the silt curtain ca							(/
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3.41 S6.9 Is any soil waste disposed overboard?	3.40	S6.9					
	3.41	S6.9	ls any soil waste disposed overboard?				c/



Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
4.00		Waste Management		-		
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
		public filling facilities and landfills?				
4.02	00.5					
4.02	58.5	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?				
4.03	S8 5	IS the Contractor registered as a chemical waste producer?				
1.00	00.5	to the confluctor registered as a chemical waste producer.		V		
4.04	S8.5	Are chemical waste separated from other waste and collected by a licensed chemical waste				
		collector?	¥		Ш	-
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	S8.5	ls chemical waste reused and recycled on site as far as practicable?				_
4.07	S8.5	Are all containers for chemical waste properly labelled?				
8						
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and properly			П	
		labelled?		9		
4.09	S8.5	Are incompatible chemical wastes stored in different areas?		П	П	
			V			
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of			П	
		the largest container or of 20% by volume of the chemical waste stored in that area,		J		
4.12	CO 5	whichever is the greatest, provide?				
4.12	58.5	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		V		rominderer)
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				
				A		
4.14	S8.5	Is general refuse disposed of properly and regularly?		V		reminderco
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during				Anna' I an
		transportation of waste?		V		reminder (1)
4.16		Are individual collectors for aluminum cans, plastic bottles and packaging material and				
		office paper provided to encourage waste segregation?				
4.17	S8.5	Are C&D wastes sorted on site?	-			1
4.18	S8.5	Are C&D waste disposed of properly?			П	ı
		* * * * * * * * * * * * * * * * * * * *		V		
4.19	S8.5	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
		waste?		Ш	Ш	
4.20	S8.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
	i	and the second s				
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or				3
		contamination?				reminderin
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?				ranimari (s)
					1	
5.00		Landscape and Visual				
5.01		Are Is site hoarding provided?				
	& 11.11					
5.02	S11.10 &	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
	11.11		Ш		ш	
5.03	S11.10 &	Is construction light oriented away from the sensitive receivers?				
	11.11				Ш	:
5.04	S11.10	Is grass hydroseeding provided to slopes as soon as the completion of works?			ГП	
	& 11.11					
5.05	S11.10 &	Are damages to trees outside site boundary due construction works avoided?				
	11.11	7.				1
5.06	S11.10 &	Is excavation works carried out manually instead of machinery operation within 2.5m				
	11.11	vicinity of any preserved trees?				
5.07	S11 10 &	Are the retained and transplanted tree(s) properly protected and in good conditions?				
0.07	11.11	The the foliation and transplanted troots, properly protected and in good conditions.	/			
5.08		Are surgery works carried out for damaged trees?				
3.00	11.11	Are surgery works carried out for damaged nees:				
0.00	1	D. I.	<u> </u>	. 		
6.00	00.7	Ecology				
6.01	\$9.7	Is site runoff properly treated to prevent any silly runoff?				
						· ·
6.02	S9.7	Are silt trap installed and well-maintained?			П	1
		* · · · · · · · · · · · · · · · · · · ·				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?				Compaction And will add
			Ш	V		Indisedio
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				(NOV Paye
				1	Ш	- "
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and				
		damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and				
		rock dowels adjusted during detailed design, and a setback distance from existing trees is				
		recommended to be maintained as far as practical?				
6.06	S9.7	Are pruning of tree canopies along the alignment of the flexible barriers limited to a		П		
		minimum?	./			
6.07	S9.7	Are the alignment of flexible barriers optimized to preserve all species of conservation				
		interest and minimize the impact to the existing vegetation as far as practicable? Are the	/			
		alignment of flexible barriers positioned at mininmum 1.5 m in a radius away from these				
		individuals?				
6.08	S9.7	At the detailed design stage prior to the commencement of the slope mitigation works, is		-/ 1		
		vegetation survey carried out at the slope mitigation areas within the Clear Water Bay		8		
	L					



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.	_		-			
		Country Park to assess the condition and identify the location of each individual of				
		Marsdenia lachnostoma and other flora species of conservation interest that may be directly				
		affected by the construction works?				
6.09	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of				
		individually within the works area and in the close proximity to prevent from being				
		damaged and disturbed during construction? Is a sign identifying the site attached to the				
	75	fence and flagging tape shall be attached to the individuals to visualize their locations?				
6.10	S9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or				
		other flora species of conservation interest, if found) adjacent to the proposed alignment of		Ш		-
		the flexible barriers prepared to protect the species?				
6.11	S9.7	ls any induction training provided to all site personnel in order to brief them on this flora of				
		conservation interest including the locations and their importance?				
6.12	S9.7	Is the resident site supervisory staff closely monitor the conditions of concerned				
		individuals during construction of flexible barriers in the close proximity?	ر ا	Ш	Ш	
6.13	S9.7	Are fences erected along the boundary of the works area before the commencement of				
		works to prevent vehicle movements and encroachment of personnel onto adjacent areas?		1		
6.14	S9.7	ls regular check of the work site boundaries performed to ensure that they are not breached				
		and that damage does not occur to surrounding areas?		V		
6.15	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal				
		dumping, to the surrounding habitats through proper management of waste disposal?		1		
6.16	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and				
		shrubland-grassland immediately after completion of construction works, through on-site	V			
		tree/shrub planting?				
6.15	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro-seeding				
		and planting of climbers and native shrub seedlings where practical upon completion of the	V			
		slope mitigation works?				
7.00		Landfill Gas Hazard				2
7.01	S12.7	Are the safety procedures implemented to minimise the risks of fires and explosions,				
		asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and				
	1	excavation as well as creation of confined spaces?				
	n.	•	/			
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in				
		confined spaces provided from the Contractor to the workers?				
		sommed spaces provided from the contractor to the workers:				
7.04	S12.7	Ava the cofety officers twin I will be a 14-11-15"		swa s		
7.04		Are the safety officers trained with regard to landfill gas and leachate related hazards				
		and presented on the site throughout the works undertaken below grade?				
7.05	i i	Are the all personnel working on site and all visitor made aware of the possibility of	No. Line Specialized			
	1	gnition of gas, the possible presence of contaminated water and the need to avoid				
	ļ	physical contact?				



Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?	Ż			
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?	Z			,
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				9
8.00		Overall				
8.01		Is the EM&A properly implemented in general?				

0(107



Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection:
observation (1)
NIA
Reminder
(1) The Main Contractor was reminded to consider machinery storage in the
City area (near to administration building)
(3) The Main contractor was reminded to remove trapped general crashes in the guly for allow efficient trainage, at product when storye the Area &
Actionfic Area.
(3) otherwitats were not plan. The main contractor was remneld to consider chemical Storage
in site area (General)
Signatures:
ET Contractor's Supervising Officer's IEC's WSD's Representative Representative Representative Representative
A A A A A A A A A A A A A A A A A A A
(Name: charlene) (Name: Brian Kain) (Name: Rosana) (Name: louis) (Name: NA.)
1) Kulan

06/07



Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspect	ion Date: _	13/07/2071. 14:35-17:00	Inspected by:	ET:	havlene Lou' rran kam	so: Den	ek lan-	WSI	o: NIA ·
Inspect	ion Time:_	14-35-17-00		Contractor:	rian kum	IEC: LOW	us kwa	h	
Weath	ier	1							
Condi	tion	Sunny	Overcast	Drizzle	Rain	Storm	Ha	ızy	
Temp	erature	33 C	Humidity	High	Moderate	Low			
Wind	angangston bassagat (captumin	Calm Light	Breeze	Strong					
	Tarr		ancore a Madaros de Combanas d						
ltem	EIA ref.					N/A	Yes	No	Photo/Remarks
No.		General							
0.00		Is the current Environmental Permit	dienlayed cone	nicuously at all	vahiola cita		/		
0.01		entrances/exits for public's informa			venicle site				
0.02		Is ET Leader's log-book kept readil	y available for i	inspections?					
1.00		Construction Dust							pointer welter
1.01	S4.8.1	Are dusty materials, such as excava	ted materials, b	uilding debris a	nd construction				Rejular willer Spronjing. Comportion
		materials, and exposed earth surface	e properly cover	ed to prevent d	ust emission?				trydo seesing
1.02	S4.8.1	Are screenings, enclosures, water sp	oraying or vacu	um cleaning dev	rices provided to				sprayer with teme
		dusty construction works for dust su	appression?						
						L			
1.03	S4.8.1	Are fumes or smoke emitting plants	or construction	activities shield	ded by a screen?				no fumer.
						V			no fumer smoke construction
									anning Costs
1.04	S4.8.1	Are wheel-washing facilities with h	igh-pressure wa	ter jets provide	d at all site exits?				
1.05	S4.8.1	Is wheel-washing provided to all ve	hicles leaving the	ne site?					
		55 S							
1.06	S4.8.1	Are road section near the site exit fi	ee from dusty n	naterial?					
1.07	S4.8.1	Are all main haul roads inside the s		ayed with water	to minimize dust	1			pained & sprayed.
1.00	C4 0 1	emission during vehicle movement	-	1 15 4					· · · · · · · · · · · · · · · · · · ·
1.00	S4.8.1	Are water spraying provided immed materials?	nately prior to a	iny loading of tr	ansier of dusty				
1.09	S4.8.1	Are covers provided to all dump tru	cks carrying du	sty materials wl	nen entering and	+=			en distro tracks
		leaving the site?	ens carrying aa	ory materials wi	ion oncornig and				are dump timeles observed.
1.10	S4.8.1	Are the working areas for uprooting	g of trees, shrubs	s, or vegetation	or the removal of			П	
		boulders, poles, pillars sprayed with	water to maint	ain the entire su	rface wet?				
1,11	S4.8.1	Is exposed earth properly treated wi	thin six months	after the last co	nstruction activity			$\overline{\Box}$	
		on site?					V		
1.12	S4.8.1	Does the operation of plants on site	free form dark	smoke emission	?				VNRMM (abel
									711-111-101
		L							



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
1.13		Are vehicles travelling at speed not exceeding 15km/hr within the site?				
	S4.8.1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?				
	\$4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?				
		Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17	S4.8.1	ls open burning prohibited?				
2.00		Construction Noise (Airborne)				
		Are quiet plants adopted on site?				V woise 10121
2.02		Are the PMEs operating on site well-maintained to minimize the generation of excessive niose?				Vientor
2.03	S5.7	Are plants throttled down or turned off when not in use?		V		
		Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				4 no nearby
2.05		Are moveable barriers provided to screen NSRs from plant or noisy operations?) NSR
		Are silencers, mufflers and enclosures provided to plants?				
		Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		V		
	1 1	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	1 1	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
		Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				
2.11		Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12		Are all construction noise permit(s) applied for percussive piling work?		ik V		
2.13		Are construction noise permit(s) applied for general construction works during restricted hours?				
		Are valid construction noise permit(s) displayed at all vehicular exits?				
3.00	N	Nater Quality				
		s effluent discharge license obtained for wastewater discharge from site?				
3.02		s effluent discharged according to the effluent discharge license?				& feminder (2)
3.03	S6.9 I	s wastewater discharge from site properly treated prior to discharge?				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.	06.0					
3.04	86.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to			П	
		remove sand/silt particles from runoff?		<u> </u>		
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				reminder(3)
3.07	S6.9	Is the drainage system properly maintained?		7		reminder(3)
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works			Г	
		during rainy seasons?		\checkmark		
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the			$\overline{\Gamma}$	
		potential of soil erosion?		V		
3.10	S6.9	Are temporary access roads protected by crushed gravel?		V		
3.11	S6.9	Are exposed slope surface properly protected?			П	15 100 111
				V		I hydroked by
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?				
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar				
3.13	30.9	fabric during construction?				
3.14	26.0	Is runoff from wheel-washing facilities avoided?				
3.14	50.9	is runoff from wheel-washing facilities avoided?				
3.15	S6.9	Is oil leakage or spillage prevented?				I drip tray
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm				
		drainage system?			Ш	
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?	.V			
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of properly			П	
		to avoid them entering the streams?		1		
3.19	S6.9	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as possible				
		from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction			П	
		work force?				
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets provided	Г			
		by the licensed contractors?				
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?				
3.24	S6.9	Is suitable type of silt curtains deployed during dredging to reduce the elevation of				
		suspended solids to nearby sensitive receivers?			Ш	
3.25	S6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.				······································	**************************************	
3.26	S6.9	Is closed grab dredger of 3 to 6 m ³ used for dredging at seawater intake?				
	S6.9	Is specific work staff assigned the responsibility for monitoring the number of grab dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m³ closed grab, 10-11 grab per hour for 6m³ closed grab?				
3.28		Is the grab operated in slow and controlled manner such that the impact to seabed by the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab?				
3.29	S6.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m^3 /day while the maximum allowed dredging rate at the submarine outfall is $3,500 \text{ m}^3$ /day?				
3.30		Is dredged marine sediment disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)?				no marke diaping of period manye
3.31		Are disposal vessels fitted with tight bottom seals in order to prevent leakage of material during transport?				ovarved.
3.32	S6.9	Are barges filled to a level which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action?				<i></i>
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is moved from the dredging area after dredging?				٠
3.34		Are the contractor(s) confirmed that the works cause no visible foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the dredging site?				
3.35		When the dredged material has been unloaded at the disposal areas, is any material accumulated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper?				·/
3.36		Is dredger maintained adequate clearance between vessels and the seabed at all states of the tide and reduce operations speed to ensure that excessive turbidity is not generated by turbulence from vessel movement or propeller wash?		V		
		Is the contractor shall regularly inspect the silt curtains and check that they are moored and marked to avoid danger to marine traffic? Is regular inspection on the integrity of the silt curtain carried out by the contractor and any damage to the silt curtain shall be repaired by the contractor promptly?	,			
3.38		Are all vessels have a clean ballast system?				
3.39		Are all vessels well maintained and inspected before use to limit any potential discharges to the marine environment?				
3.40		Is any discharge of sewage/grey wastewater? Is wastewater from potentially contaminated area on working vessels should be minimized and collected?				
3.41	S6.9	Is any soil waste disposed overboard?				Ч



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
4.00		Waste Management				TO THE STATE OF TH
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at	Г			
		public filling facilities and landfills?		1		
4.02	00.5	To a magazidina quatam implemental ta manad the manad the control of the control				
4.02	36.3	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		/		
4.00	00.5					
4.03	S8.5	IS the Contractor registered as a chemical waste producer?				
4.04	005	Ava chamical wasts consented from other wasts and all set all				
4.04	30.3	Are chemical waste separated from other waste and collected by a licensed chemical waste collector?				
4 OF	C0 5					
4.05	36.3	Are trip tickets for chemical waste disposal available for inspection?				
4.06	CO 5					
4.06	58.5	Is chemical waste reused and recycled on site as far as practicable?	-			
4.07	00.5					
4.07	58.5	Are all containers for chemical waste properly labelled?				
100	00.5					
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and properly				
		labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
			L			
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?			П	
				رسا	Ш	
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				
		the largest container or of 20% by volume of the chemical waste stored in that area,				
		whichever is the greatest, provide?				
4.12	88.5	Are a routine cleaning and maintenance programme implemented for drainage systems,				reminder (1)
1.10	G0.5	sump pits, and oil interceptors?		بنا		1 Offinance of
4.13	88.5	Are sufficient general refuse disposal/collection points provided on site?				
						2000
4.14	S8.5	Is general refuse disposed of properly and regularly?				8
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during				
		transportation of waste?				
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
		office paper provided to encourage waste segregation?				
4.17	S8.5	Are C&D wastes sorted on site?				
			L			
4.18	S8.5	Are C&D waste disposed of properly?				
				V		-
4.19		Are unused C&D materials or chemicals recycled or reused to reduce the quantity of	7			
		waste?	V	Щ	L	
4.20	S8.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
				V		



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
				,		
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or				
		contamination?		A		
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?		T		
					Ш	EMARKE SAME SAME SAME SAME SAME SAME SAME SAM
5.00		Landscape and Visual				
5.01	S11.10	Are Is site hoarding provided?	/			
	& 11.11	a a				
5.02	S11.10 &	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
	11.11			V		
5.03	S11.10 &	Is construction light oriented away from the sensitive receivers?				
	11.11		/			PATENTIAL PROPERTY AND ADMINISTRATION OF THE PATENTY AND ADMINIST
5.04	S11.10	Is grass hydroseeding provided to slopes as soon as the completion of works?			T	
	& 11.11			V		
5.05	S11.10 &	Are damages to trees outside site boundary due construction works avoided?				
	11.11					
5.06	S11.10 &	ls excavation works carried out manually instead of machinery operation within 2.5m			\Box	
	11.11	vicinity of any preserved trees?				
5.07	S11.10 &	Are the retained and transplanted tree(s) properly protected and in good conditions?				
	11.11		-			
5.08	S11.10 &	Are surgery works carried out for damaged trees?				
	11.11					
6.00		Ecology		**************************************		
6.01	S9.7	Is site runoff properly treated to prevent any silly runoff?				
						Communication (2)(3)
6.02	S9.7	Are silt trap installed and well-maintained?				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?				
				1		
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
				9		
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and				
s		damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and		9		
		rock dowels adjusted during detailed design, and a setback distance from existing trees is				
	2	recommended to be maintained as far as practical?				
6.06		Are pruning of tree canopies along the alignment of the flexible barriers limited to a				
		minimum?				
6.07		Are the alignment of flexible barriers optimized to preserve all species of conservation				
		interest and minimize the impact to the existing vegetation as far as practicable? Are the				
		alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these				
6.08		individuals?				
0.00		At the detailed design stage prior to the commencement of the slope mitigation works, is				
-		vegetation survey carried out at the slope mitigation areas within the Clear Water Bay		LV		



Item No.	EIA ref.	ract no. 13/WSD/17 Design, Build and Operate First Stage of Ts	N/A	Yes	No	Photo/Remarks
		Country Park to assess the condition and identify the location of each individual of Marsdenia lachnostoma and other flora species of conservation interest that may be directly affected by the construction works?				
6.09	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction? Is a sign identifying the site attached to the fence and flagging tape shall be attached to the individuals to visualize their locations?				
6.10	S9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers prepared to protect the species?				
6.11	S9.7	Is any induction training provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance?				
6.12	S9.7	is the resident site supervisory staff closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity?		1		
6.13	S9.7	Are fences erected along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas?		1		
6.14	S9.7	Is regular check of the work site boundaries performed to ensure that they are not breached and that damage does not occur to surrounding areas?				METTO POTAL SERVICE SERVICE AND A SERVICE SERV
6.15	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal dumping to the surrounding habitats through proper management of waste disposal?				
6.16	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?				
6.15	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro-seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?	1			
7 .00 7.01	S12.7	Landfill Gas Hazard Are the safety procedures implemented to minimise the risks of fires and explosions, asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?	V			
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined spaces provided from the Contractor to the workers?				
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of ignition of gas, the possible presence of contaminated water and the need to avoid physical contact?	V			



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Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?	V			1
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
8.00		Overall		/		
8.01		Is the EM&A properly implemented in general?				

13/07

Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

D. 1/5 401
Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection:
Observation (S)
(1) No major obscirutions were reported an the respective day.
Reminder(s)
(1) Trapped general waste materials should be cleaned from the gully
to allow efficient drainage (General).
CN & More stringent barriers hard be implemented to prevent untreated. Wendenaver overflowing from the Construction site. (near to 1st sedimentation
famile)
Di Lington to sedimentation to sedimentations
famile) (3) Rejular dearinge of trapped walternature to sedimentation table for treatment should be concluded, out Revenue Demosis Parilling
Signatures:
ET Contractor's Supervising Officer's IEC's WSD's Representative Representative Representative
My Min
(Name: Lhorline) (Name: Ray (Name: Water) (Name: Lows) (Name: With)
Ceri (Man)

13/67



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Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date:	20/07/2021	Inspected by: ET: Charles Lan Contractor: Sylan kam		so: Ra	SD: MA		
Inspection Time:	14:30-17:00			IEC:	oms kna		
Weather		A					
Condition	Sunny	Overcast Dr	izzle Rain	Storm	На	zy	
Temperature	27 C	Humidity Hi	gh Moderate	Low			
Wind	Calm Light	Breeze Str	ong Amber sig	inel, tyrh	1. CAROLL	. the	indersom sympl
					2		
Item EIA ref.				N/A	Yes	No	Photo/Remarks
No.							
0.00	General				/		
0.01	Is the current Environmental Permit of	lisplayed conspicuously	at all vehicle site				
	entrances/exits for public's information	on at any time?					
0.02	Is ET Leader's log-book kept readily	available for inspection	s?				
1.00	Construction Dust	The state of the s					0 15 00.0011
1.01 S4.8.1	Are dusty materials, such as excavate	d materials, building de	bris and construction			ГП	pusty materials were best wet to
Constant	materials, and exposed earth surface p	175					
1.02 S4.8.1	Are screenings, enclosures, water spra	aving or vacuum cleaning	ng devices provided to				
	dusty construction works for dust sup				T.		no duty constructi
	,	•			果		works observed.
1.03 S4.8.1	Are fumes or smoke emitting plants of	r construction activities	shielded by a screen?	-			0
	The fames of smoke circuity plants of	r construction activities	sinciaca by a screen.				is functionally plants
							emitting plant
1.04 S4.8.1	Ara whool washing facilities with his	h	avided at all aits avise0.				construction activities
	Are wheel-washing facilities with hig	n-pressure water jets pr	ovided at all site exits?		1		
1.05 S4.8.1	Is wheel-washing provided to all vehi	cles leaving the site?					
100 0101		0 1					
1.06 S4.8.1	Are road section near the site exit free	from dusty material?			1		
1.07 S4.8.1	Are all main haul roads inside the site	naved or sprayed with	water to minimize dust				
01.0.1	emission during vehicle movement?	parea or oprayed war	vace to minimize dust		V		yaved.
1.08 S4.8.1	Are water spraying provided immedia	itely prior to any loading	or transfer of dusty				he loading (
	materials?	Party Party Statement	,				transfer of austr
1.09 S4.8.1	Are covers provided to all dump truck	s carrying dusty materia	als when entering and				per dump the us
	leaving the site?			V			diserved.
1.10 S4.8.1	Are the working areas for uprooting of	f trees, shrubs, or vegets	ation or the removal of				
	boulders, poles, pillars sprayed with v	vater to maintain the ent	ire surface wet?	V			
1.11 S4.8.1	Is exposed earth properly treated with	in six months after the l	ast construction activity				
	on site?				V		
1.12 S4.8.1	Does the operation of plants on site fr	ee form dark smoke em	ission?				Charles I.
					V		v mm laby



		det 110: 13/1100/17 Design, Dania and Operation	N/A	Yes	No	Photo/Remarks	i.
ltem No.	EIA ref.		19/74	103	140	THOSE REMAINS	
1.13	S4.8.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?					
1.14	S4.8.1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	/				
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?					
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?					
1.17	S4.8.1	Is open burning prohibited?					
2.00		Construction Noise (Airborne)					
2.01	S5.7	Are quiet plants adopted on site?		V		V noix laber	
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive niose?		V		Sugaler	
2.03	S5.7	Are plants throttled down or turned off when not in use?				- Insperson	
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?	V			4 Moneary	
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?) WSR.	
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?					
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				No geranon	ve al
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?					
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?					0
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?					
2.11	S5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?					
2.12	\$5.7	Are all construction noise permit(s) applied for percussive piling work?					
2.13	S5.7	Are construction noise permit(s) applied for general construction works during restricted hours?					
2.14	\$5.7	Are valid construction noise permit(s) displayed at all vehicular exits?		V			
3.00		Water Quality					
3.01	\$6.9	Is effluent discharge license obtained for wastewater discharge from site?		-			
3.02	S6.9	Is effluent discharged according to the effluent discharge license?					
3.03	S6.9	Is wastewater discharge from site properly treated prior to discharge?		V			



ltem	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				white a control of a strate as
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
		remove sand/silt particles from runoff?		L		
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				
3.07	S6.9	Is the drainage system properly maintained?		/		
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works				
		during rainy seasons?				
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the				
		potential of soil erosion?			Ш	
3.10	S6.9	Are temporary access roads protected by crushed gravel?				
3.11	S6.9	Are exposed slope surface properly protected?		/		
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
		backfilled in short sections after excavation?		V		
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar				
		fabric during construction?		·/		
3.14	S6.9	Is runoff from wheel-washing facilities avoided?				
3.15	S6.9	ls oil leakage or spillage prevented?				√ driptray
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm				
		drainage system?				
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?				
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?				
3.19		Are all fuel tanks and storage areas provided with locks and be sited on sealed areas,				
		within bunds of capacity equal to 110% of the storage capacity of the largest tank?		V		
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction		Th.		
		work force?		1		
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets provided			$\overline{\Box}$	
		by the licensed contractors?		1		
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?	1	V		
3.24		Is suitable type of silt curtains deployed during dredging to reduce the elevation of suspended solids to nearby sensitive receivers?				prodreding duty adverse
3.25	S6.9	ls closed grab dredger used to reduce the potential leakage of sediments?	V			respective day



Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
3.26	S6.9	Is closed grab dredger of 3 to 6 m ³ used for dredging at seawater intake?	V			y
3.27	S6.9	Is specific work staff assigned the responsibility for monitoring the number of grab dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m ³ closed grab, 10-11 grab per hour for 6m ³ closed grab?				4
3.28	S6.9	Is the grab operated in slow and controlled manner such that the impact to seabed by the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab?				ч
3.29	S6.9	Is the maximum allowed dredging rate at the seawater intake limited to $750 \text{ m}^3\text{/day}$ while the maximum allowed dredging rate at the submarine outfall is $3,500 \text{ m}^3\text{/day}$?				1/
3.30	S6.9	Is dredged marine sediment disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)?				or marine
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of material during transport?	V			1/
3.32	\$6.9	Are barges filled to a level which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action?				V
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is moved from the dredging area after dredging?				4
3.34	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the dredging site?				no dready of on respective day dut to diverse
3.35	S6.9	When the dredged material has been unloaded at the disposal areas, is any material accumulated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper?				Weather ownpry obsorbed on reported
3.36	S6.9	Is dredger maintained adequate clearance between vessels and the seabed at all states of the tide and reduce operations speed to ensure that excessive turbidity is not generated by turbulence from vessel movement or propeller wash?				No manne diedjer boats observed and
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are moored and marked to avoid danger to marine traffic? Is regular inspection on the integrity of the silt curtain carried out by the contractor and any damage to the silt curtain shall be repaired by the contractor promptly?	,			odverse weather.
3.38	S6.9	Are all vessels have a clean ballast system?				1/
3.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential discharges to the marine environment?	V			V
	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially contaminated area on working vessels should be minimized and collected?	V			No mame disensed dux to allow were
3.41	S6.9	Is any soil waste disposed overboard?				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
4.00		Waste Management				
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
		public filling facilities and landfills?				
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated, recycled and				
		disposed of?		V		
4.03	S8.5	IS the Contractor registered as a chemical waste producer?	- DAT			
			5 00	U		
4.04	S8.5	Are chemical waste separated from other waste and collected by a licensed chemical waste				
		collector?		[V]		
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
			8			
4.06	S8.5	Is chemical waste reused and recycled on site as far as practicable?				
4.07	S8.5	Are all containers for chemical waste properly labelled?				
	~ =					
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
1.10	00.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.10	S8.5	is the chemical waste storage area enclosed on at least 5 sides and adequately ventuated:		1		
4.11	C 9 5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of				
4.11	36,3	the largest container or of 20% by volume of the chemical waste stored in that area,				
		whichever is the greatest, provide?				10 to 2 May 11 (MARANA)
4.12	S8.5	Are a routine cleaning and maintenance programme implemented for drainage systems,				
		sump pits, and oil interceptors?				
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				
				(**)		
4.14	S8.5	Is general refuse disposed of properly and regularly?				
	ń					
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during				
		transportation of waste?		<u></u>		
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
		office paper provided to encourage waste segregation?				
4.17	S8.5	Are C&D wastes sorted on site?				
A 40	00.5	New C&D upote disposed of properties				
4.18	58.5	Are C&D waste disposed of properly?		1		
1.10	C 0 E	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
4.19	38.3	Are unused C&D materials of chemicals recycled of feused to feduce the quantity of waste?				
4.20	58.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?			_	
4.20	20,2	and paone fill and every waste reast on site as far as practicable to avoid disposal off-site:				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or				
		contamination?		0		
4.22	\$8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
7.22	50.5	as a damping receive seasons		2		
5.00		Landscape and Visual				
5.01		Are Is site hoarding provided?				
	& 11.11					
5.02		Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
	11,11					
5.03		Is construction light oriented away from the sensitive receivers?				
	11.11					
5.04		Is grass hydroseeding provided to slopes as soon as the completion of works?				
	& 11.11					
5.05	S11.10 &	Are damages to trees outside site boundary due construction works avoided?				
	11.11					And the second second
5.06	S11.10 &	Is excavation works carried out manually instead of machinery operation within 2.5m				
	750000555	vicinity of any preserved trees?				
5.07	S11.10 &	Are the retained and transplanted tree(s) properly protected and in good conditions?				
	11.11					MACHINE WAY
5.08	S11.10 &	Are surgery works carried out for damaged trees?				
	11.11		L			
6.00		Ecology				
6.01	S9.7	Is site runoff properly treated to prevent any silly runoff?		-		
1						
6.02	S9.7	Are silt trap installed and well-maintained?		7		
				V		
6.03	\$9.7	Are stockpiles properly covered to avoid generating silty runoff?				
				**		
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
				Y		
6.05	\$9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and				
0.00	2	damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and		V		
		rock dowels adjusted during detailed design, and a setback distance from existing trees is	l .			
		recommended to be maintained as far as practical?				
6.06	S9.7	Are pruning of tree canopies along the alignment of the flexible barriers limited to a		1		
		minimum?	1			
6.07	\$9.7	Are the alignment of flexible barriers optimized to preserve all species of conservation	1			
		interest and minimize the impact to the existing vegetation as far as practicable? Are the				
		alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these				
		individuals?		/		
6.08	S9.7	At the detailed design stage prior to the commencement of the slope mitigation works, is				
		vegetation survey carried out at the slope mitigation areas within the Clear Water Bay		"		



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
	1	Country Park to assess the condition and identify the location of each individual of				
		Marsdenia lachnostoma and other flora species of conservation interest that may be directly				
		affected by the construction works?				
6.09	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of				
		individually within the works area and in the close proximity to prevent from being				
		damaged and disturbed during construction? Is a sign identifying the site attached to the				
		fence and flagging tape shall be attached to the individuals to visualize their locations?				
6.10	\$9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or	T/1			
		other flora species of conservation interest, if found) adjacent to the proposed alignment of	0			
		the flexible barriers prepared to protect the species?				
6.11	S9.7	Is any induction training provided to all site personnel in order to brief them on this flora of	T-/-			
		conservation interest including the locations and their importance?	V			S-100
6.12	S9.7	Is the resident site supervisory staff closely monitor the conditions of concerned				
		individuals during construction of flexible barriers in the close proximity?				
6.13	\$9.7	Are fences erected along the boundary of the works area before the commencement of				
		works to prevent vehicle movements and encroachment of personnel onto adjacent areas?				1
6.14	S9 7	Is regular check of the work site boundaries performed to ensure that they are not breached				
	07.7	and that damage does not occur to surrounding areas?		10,		
6.15	\$9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal		/		
0.13	37.7	dumping, to the surrounding habitats through proper management of waste disposal?		7		
0.40	CO 7					
6.16	59.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and				
		shrubland-grassland immediately after completion of construction works, through on-site				
6.15	00.7	tree/shrub planting?				
0.15	39.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro-seeding				
		and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?				
7.00		Landfill Gas Hazard	***			
	0127					
7.01	S12.7	Are the safety procedures implemented to minimise the risks of fires and explosions,				
		asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and	_/			
		excavation as well as creation of confined spaces?				
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in	/			
		confined spaces provided from the Contractor to the workers?				
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards			-	
		and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of				
		ignition of gas, the possible presence of contaminated water and the need to avoid				
		physical contact?	/			



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
8.00 8.01		Overall Is the EM&A properly implemented in general?				





Remark / Follow up of Obser	vation(s) and Non-compliar	nce(s) of Last Weekly Site I	nspection:					
Observation (5) No major observe	ations Weve reported	on the respective	day.					
Reminaler:								
close monitoring to sea conditions (water quality) around the area of Jose House Boy and wsk 33 where landstide was observed previously should be conducted. The Main Contractor was recommended to implement further mitigation measures (e.g. adding layers of silt ourtain) if necessary. (General)								
Signatures:								
ET Representative	Contractor's Representative	Supervising Officer's Representative	IEC's Representative	WSD's Representative				
(Name: Charlene)	(Name: Bran Kan	(Name: Ranning)	(Name: Lows)	(Name: MK)			
7		Vou	Kwan					



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Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

		30/07/2021	Inspected by:	ET:	harlene Car Sman kann	so Ray	movel	kok wsi	w.K.lay	
Inspecti	ion Time:_	09-00-12-30		Contractor:	man kam	IEC: Lo	MS KW	MVI.		
Weath				<u></u>						
Condit	ion	Sunny Fine	Overcast	Drizzle	Rain	Storm	H	azy		
Tempe	rature	2k C	Humidity	High	Moderate	Low				
Wind		CalmLight	Breeze	Strong						
Item	EIA ref.					N/A	Yes	No	Photo/Remarks	
No.										
0.00		General					,			
0.01		Is the current Environmental Permit	displayed cons	spicuously at all	vehicle site					
		entrances/exits for public's informat					6.00000000			
0.02		Is ET Leader's log-book kept readily	y available for	inspections?						
1.00		Construction Dust							pusty materials	
1.01	S4.8.1	Are dusty materials, such as excavat	ted materials, b	uilding debris a	nd construction				were bupt to	
		materials, and exposed earth surface	properly cove	red to prevent d	ust emission?				emission.	
1.02	S4.8.1	Are screenings, enclosures, water sp		um cleaning dev	vices provided to				Regular water	
		dusty construction works for dust su	appression?						was conducted.	N.
									perferent to limit e	MISS
1.03	S4.8.1	Are fumes or smoke emitting plants	or construction	nactivities shiel	ded by a screen?				notume/smobe emitting planty	
									Canthanolian UCIA	n41
1.04	S4.8.1	Are wheel-washing facilities with hi	igh pressure w	ater jete provide	d at all site evits?				were o breved	
1.04	54.0.1	Are wheel-washing facilities with in	ign-pressure wa	ater jets provide	d at all site exits:				-	
1.05	S4.8.1	Is wheel-washing provided to all vel	hicles leaving t	he site?	30. 300					
1.06	S4.8.1	Are road section near the site exit fro	ee from dusty r	material?						
1.07	S4.8.1	Are all main haul roads inside the si	te paved or spr	aved with water	to minimize dust					
,		emission during vehicle movement?							payld +	in 1
1.08	S4.8.1	Are water spraying provided immed	iately prior to a	any loading or to	ansfer of dusty			П	bowler shaning	4
		materials?							mater was cons	wd
1.09	S4.8.1	Are covers provided to all dump true	cks carrying du	sty materials w	nen entering and				Wetto linitarismo	7.
		leaving the site?								
1.10	S4.8.1	Are the working areas for uprooting								
4 4 4	C1 0 1	boulders, poles, pillars sprayed with								
1,17	S4.8.1	Is exposed earth properly treated wit on site?								
1.12	S4.8.1	Does the operation of plants on site	free form dark	smoke emission	?				VNR Min laber	
									- The state of the	
		<u> </u>								



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1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site? 1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides? 1.15 S4.8.1 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas? 1.16 S4.8.1 Are horarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public? 2.00 Construction Noise (Airborne) 2.01 S5.7 Are the PfMEs operating on site well-minitained to minimize the generation of excessive niose? 2.03 S5.7 Are plants throttled down or turned off when not in use? 2.04 S5.7 Are the plants known to emit noise strongly in one direction oriented to face away from NSRs? 2.05 S5.7 Are would be barriers provided to screen NSRs from plant or noisy operations? 2.06 S5.7 Are silencers, mufflers and enclosures provided to plants? 2.07 S5.7 Are the hoods, cover panels and inspection hatches of PfMEs closed during operation? 2.08 S5.7 Are involvable barriers provided to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.09 S5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.09 S5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.09 S5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.09 S5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.09 S5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.08 S5.7 Are real construction noise permit(s) applied for general construction works during exercise flours? 2.10 S5.7 Are valid noise emission label(s) affixed to all air compressors operating on site? 2.11 S5.7 Are valid construction noise permit(s) applied for general construction works during exercis	Item	EIA ref.		N/A	Yes	No	Photo/Remarks
1.14 \$4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sades? 1.15 \$4.8.1 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas? 1.16 \$4.8.1 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas? 1.17 \$4.8.1 So open burning prohibited? 2.00 Construction Noise (Airborne) 2.01 \$5.7 Are quiet plants adopted on site? 2.02 \$5.7 Are plants throttled down or turned off when not in use? 2.03 \$5.7 Are plants throttled down or turned off when not in use? 2.04 \$5.7 Are plants throttled down or turned off when not in use? 2.05 \$5.7 Are the plants known to emit noise strongly in one direction oriented to face away from NSRs? 2.05 \$5.7 Are moveable barriers provided to screen NSRs from plant or noisy operations? 2.06 \$5.7 Are moveable barriers provided to screen NSRs from plant or noisy operations? 2.07 \$5.7 Are the hoods, cover panels and inspection harches of PMEs closed during operation? 2.08 \$5.7 Are purposely-boilt site hoarding construction with appropriate materials provided along the site boundary? 2.09 \$5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts loangthy entire receivers? 2.10 \$5.7 Are valid noise emission label(s) affixed to all hand-held breakers operating on site? 2.11 \$5.7 Are valid noise emission label(s) affixed to all hand-held breakers operating on site? 2.12 \$5.7 Are all construction noise permit(s) applied for general construction works during restricted hours? 2.14 \$5.7 Are valid noise emission label(s) applied for general construction works during restricted hours? 2.15 \$6.9 Is effluent discharged according to the effluent discharge ficense?	No.						
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3.02 S6.9 Is effluent discharged according to the effluent discharge license?	3.00		Water Quality				
	3.01						
3.03 S6.9 Is wastewater discharge from site properly treated prior to discharge?	3.02	S6.9	Is effluent discharged according to the effluent discharge license?		7		
	3.03	S6.9	Is wastewater discharge from site properly treated prior to discharge?				



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
		remove sand/silt particles from runoff?				
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				
3.07	S6.9	Is the drainage system properly maintained?				
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?				
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the				
		potential of soil erosion?			Ш	
3.10	S6.9	Are temporary access roads protected by crushed gravel?				
3.11	S6.9	Are exposed slope surface properly protected?				1 compartion
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?				
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar				
		fabric during construction?				
3.14	S6.9	Is runoff from wheel-washing facilities avoided?		7		
3.15	S6.9	Is oil leakage or spillage prevented?				o bsu)
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm drainage system?		7		Soriptray
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?	7			
3.18		Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?				
3.19	19000000	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20		Are tanks, containers, storage area bunded and the locations locked as far as possible				
0.20		from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction work force?				
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets provided				
		by the licensed contractors?			Ш	
3.23	S6.9	ls concrete washing water properly collected and treated prior to discharge?				4
3.24		Is suitable type of silt curtains deployed during dredging to reduce the elevation of suspended solids to nearby sensitive receivers?				{ my dredy my
3.25	\$6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				



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Item No.	EIA ref.	20, 1102, 21 200.g.n, 20110 0110 2p	N/A	Yes	No	Photo/Remarks
	0.50					
3.26	S6.9	Is closed grab dredger of 3 to 6 m ³ used for dredging at seawater intake?				47
3.27	S6.9	Is specific work staff assigned the responsibility for monitoring the number of grab				
		dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m³ closed				7
	2	grab, 10-11 grab per hour for 6m ³ closed grab?				
3.28	\$6.9	Is the grab operated in slow and controlled manner such that the impact to seabed by				
		the grab when being lowered could be minimized? Is the operator ensured the grab be				4
3.29	07.0	properly closed before lifting the grab?				
3.29	30.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m ³ /day while the maximum allowed dredging rate at the submarine outfall is 3,500 m ³ /day?				4
3.30	S6.9	Is dredged marine sediment disposed of in a gazetted marine disposal area in				
		accordance with marine dumping permit conditions of the Dumping at Sea Ordinance				Noobserved
		(DASO)?				disposal activity
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?		Ш	Ш	V
3.32	S6.9	Are barges filled to a level which ensures that material does not spill over during				
		transport to the disposal site and that adequate freeboard is maintained to ensure that				1/
		the decks are not washed by wave action?				
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is				9
		moved from the dredging area after dredging?				
3.34	\$6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,				wo divelging
		litter or other objectionable matter to be present in the water within and adjacent to the dredging site?				was observed.
3.35	86.0	When the dredged material has been unloaded at the disposal areas, is any material				
0.00	30.7	accumulated on the deck or other exposed parts of the vessel removed and placed in				No chserveel
		the hold or a hopper?				disposar of name waster andle
3.36	S6.9	ls dredger maintained adequate clearance between vessels and the seabed at all states			W	Narm Works Condin
		of the tide and reduce operations speed to ensure that excessive turbidity is not		WAY!		No druguy
		generated by turbulence from vessel movement or propeller wash?	_	N	_	observed.
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are				
		moored and marked to avoid danger to marine traffic? Is regular inspection on the				
		integrity of the silt curtain carried out by the contractor and any damage to the silt				
		curtain shall be repaired by the contractor promptly?				
3.38	S6.9	Are all vessels have a clean ballast system?				
				4		
3.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential				
		discharges to the marine environment?				
3.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				wateroter
2.44	06.0	contaminated area on working vessels should be minimized and collected?				temporarily stocker
3.41	50.9	Is any soil waste disposed overboard?				
						12



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
4.00	-00000000000000000000000000000000000000	Waste Management				
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at				
		public filling facilities and landfills?				
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated, recycled and				
		disposed of?				
4.03	S8.5	IS the Contractor registered as a chemical waste producer?		7		
					Ш	-
4.04	S8.5	Are chemical waste separated from other waste and collected by a licensed chemical waste				
		collector?				
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	00 5	Is chemical waste reused and recycled on site as far as practicable?				
4.00	30.3	is chemical waste reused and recycled on site as fair as practicable?				
4.07	S8.5	Are all containers for chemical waste properly labelled?				
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and properly				
		labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of			\Box	
		the largest container or of 20% by volume of the chemical waste stored in that area,				
4.12	005	whichever is the greatest, provide? Are a routine cleaning and maintenance programme implemented for drainage systems,				
4.12	30.5	sump pits, and oil interceptors?				
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				
4.14	S8.5	Is general refuse disposed of properly and regularly?				
						reminder (7)
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during				
		transportation of waste?			Ш	
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and				
		office paper provided to encourage waste segregation?				
4.17	S8.5	Are C&D wastes sorted on site?				
4.40	C 0 . F	A - C&D				
4.18	58.5	Are C&D waste disposed of properly?				
4.19	585	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of				
4.19	00.3	waste?				
4.20	S8.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
		, and an				



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ltem	EIA ref.	20, 200, 200, 200, 200, 200, 200, 200,	N/A	Yes	No	Photo/Remarks
No.						
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or contamination?				
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
5.00		Landscape and Visual				
5.01	S11.10	Are Is site hoarding provided?				
	& 11.11					
5.02	S11.10 &	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03	S11.10 &	Is construction light oriented away from the sensitive receivers?				
	11.11			in The State of th		
5.04	S11.10	Is grass hydroseeding provided to slopes as soon as the completion of works?				
	& 11.11					
5.05	S11.10 &	Are damages to trees outside site boundary due construction works avoided?				
	11.11					
5.06	S11.10 &	Is excavation works carried out manually instead of machinery operation within 2.5m				
	11.11	vicinity of any preserved trees?				
5.07	S11.10 &	Are the retained and transplanted tree(s) properly protected and in good conditions?				
	11.11					
5.08	S11.10 &	Are surgery works carried out for damaged trees?				
	11.11					
6.00		Ecology				
6.01	S9.7	Is site runoff properly treated to prevent any silly runoff?				
6.02	S9.7	Are silt trap installed and well-maintained?				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and		7		
		damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and				
		rock dowels adjusted during detailed design, and a setback distance from existing trees is				
		recommended to be maintained as far as practical?				
6.06	S9.7	Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum?				
6.07	S9.7	Are the alignment of flexible barriers optimized to preserve all species of conservation				
		interest and minimize the impact to the existing vegetation as far as practicable? Are the				
		alignment of flexible barriers positioned at mininmum 1.5 m in a radius away from these				
		individuals?	W			
6.08	S9.7	At the detailed design stage prior to the commencement of the slope mitigation works, is				
		vegetation survey carried out at the slope mitigation areas within the Clear Water Bay				



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Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
	1	Country Park to assess the condition and identify the location of each individual of				
		Marsdenia lachnostoma and other flora species of conservation interest that may be directly				
		affected by the construction works?				
6.09	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of				
		individually within the works area and in the close proximity to prevent from being				
		damaged and disturbed during construction? Is a sign identifying the site attached to the				
		fence and flagging tape shall be attached to the individuals to visualize their locations?				
6.10	S9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or				
		other flora species of conservation interest, if found) adjacent to the proposed alignment of				
		the flexible barriers prepared to protect the species?				
6.11	S9.7	Is any induction training provided to all site personnel in order to brief them on this flora of				
		conservation interest including the locations and their importance?				
6.12	S9.7	Is the resident site supervisory staff closely monitor the conditions of concerned				
		individuals during construction of flexible barriers in the close proximity?				
6.13	S9.7	Are fences erected along the boundary of the works area before the commencement of				
		works to prevent vehicle movements and encroachment of personnel onto adjacent areas?				
6.14	S9.7	Is regular check of the work site boundaries performed to ensure that they are not breached				
		and that damage does not occur to surrounding areas?				<u> </u>
6.15	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal				
		dumping, to the surrounding habitats through proper management of waste disposal?				
6.16	\$9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and				
		shrubland-grassland immediately after completion of construction works, through on-site				
		tree/shrub planting?				9
6.15	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro-seeding				
		and planting of climbers and native shrub seedlings where practical upon completion of the				
		slope mitigation works?				
7.00		Landfill Gas Hazard				
7.01	S12.7	Are the safety procedures implemented to minimise the risks of fires and explosions,				
		asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and				
,.02		excavation as well as creation of confined spaces?				
			2			
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in				
7.03	312.7	600 100 100 100 100 100 100 100 100 100				
		confined spaces provided from the Contractor to the workers?				
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards				
		and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of	/			
		ignition of gas, the possible presence of contaminated water and the need to avoid				
		physical contact?				



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Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

ltem	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
8.00 8.01		Overall Is the EM&A properly implemented in general?				

30/7

Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection:
ci) Distain/spillege was observed on multiple areas of see surface around
Intake Shaff Area. The Man Contractor was reminded to take
actions immediately
Reminder(5)
Their Contractor was remined to impenent wasquited
measures to rever byggen a solity state of
(3) House keeping was reminded at pilling area, at the temperary platform at Intaka Shaff Area.
platter at Intake Short Med.
Signatures:
ET Contractor's Supervising Officer's IEC's WSD's Representative Representative Representative Representative
M M
(Name: charlene) (Name: Remond (Name: Bran Law (Name: Louis) (Name: WKLAU)
301)
30/7/14

3017



Appendix J

Complaint Log



Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics								
	Frequency	Cumulative	Complaint Nature						
01 Jul 2021 -									
31 Jul 2021	0	0	N/A						

Statistical Summary of Environmental Summons

Reporting Period	Environmenta	Environmental Summons Statistics							
	Frequency	Cumulative	Details						
01 Jul 2021 -									
31 Jul 2021	0	0	N/A						

Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics								
	Frequency	Cumulative	Details						
01 Jul 2021 -									
31 Jul 2021	0	0	N/A						



Appendix K

Impact Monitoring Schedule of Next Reporting Month

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant EM&A Water Quality Monitoring Schedule

			Aug-			
1	Mon	Tue	Wed	Thu	Fri	Sat
	2	3	4	5	6	7
		Impact		Impact		Impact
		Water Quality monitoring for CE, CF, W	/SR1, WSR2,	Water Quality monitoring for CE, CF, WSR1, WSR2, WSR	3,	Water Quality monitoring for CE, CF, WSR1, WSR
		WSR3, WSR4, WSR16, WSR33, WSR3		WSR4, WSR16, WSR33, WSR36, WSR37		WSR3, WSR4, WSR16, WSR33, WSR36, WSR37
		Tidal Period:	(3) 1131(3)	Tidal Period:		Tidal Period:
		Ebb Tide: 05:26 - 13:00		Ebb Tide: 06:16 - 14:26		Ebb Tide: 07:31 - 15:31
		Flood Tide: 13:00 - 19:00		Flood Tide: 14:26 - 21:00		Flood Tide: 15:31 - 22:00
		Monitoring Time:		Monitoring Time:		Monitoring Time:
		Mid-ebb: 08:00 - 10:58*		Mid-ebb: 08:36 - 12:06		Mid-ebb: 09:46 - 13:16
		Mid-flood: 14:15 - 17:45		Mid-flood: 15:58 - 19:00&		Mid-flood: 17:00 - 19:00&#</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr><tr><td></td><td></td><td>Impact</td><td></td><td>Impact</td><td></td><td>Impact</td></tr><tr><td></td><td></td><td>Water Quality monitoring for CE, CF, W</td><td>VSR1_WSR2</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR</td><td>3</td><td>Water Quality monitoring for CE, CF, WSR1, WSR</td></tr><tr><td></td><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR3</td><td></td><td>WSR4, WSR16, WSR33, WSR36, WSR37</td><td>3,</td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td></td><td></td><td>10, W3K37</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td></tr><tr><td></td><td></td><td>Ebb Tide: 10:05 - 17:03</td><td></td><td>Ebb Tide: 11:00 - 18:05</td><td></td><td>Ebb Tide:14:00 - 19:10</td></tr><tr><td></td><td></td><td>Flood Tide: 17:03 - 23:43</td><td></td><td>Flood Tide: 05:00 - 11:00</td><td></td><td>Flood Tide: 07:00 - 14:00</td></tr><tr><td></td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td></tr><tr><td></td><td></td><td>Mid-ebb: 11:49 - 15:19</td><td></td><td>Mid-ebb: 12:47 - 16:17</td><td></td><td>Mid-ebb: 14:50 - 18:20</td></tr><tr><td></td><td></td><td>Mid-flood: 17:23 - 19:00 \$&</td><td>#</td><td>Mid-flood: 08:00 - 10:42*\$#</td><td></td><td>Mid-flood: 08:45 - 12:15</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td></tr><tr><td></td><td></td><td>Impact</td><td></td><td>Impact</td><td></td><td>Impact</td></tr><tr><td></td><td></td><td>Water Quality monitoring for CE, CF, W</td><td>/SR1 W/SR2</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3</td><td>2</td><td>Water Quality monitoring for CE, CF, WSR1, WSR</td></tr><tr><td></td><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR3</td><td></td><td>WSR4, WSR16, WSR33, WSR36, WSR37</td><td>²,</td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td></td><td></td><td>6, WSR37</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td></tr><tr><td></td><td></td><td>Ebb Tide: 04:00 - 11:01</td><td></td><td>Ebb Tide: 05:53 - 14:00</td><td></td><td>Ebb Tide: 07:44 - 15:00</td></tr><tr><td></td><td></td><td>Flood Tide: 11:01 - 18:37</td><td></td><td>Flood Tide: 14:00 - 21:06</td><td></td><td>Flood Tide: 15:00 - 22:16</td></tr><tr><td></td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td></tr><tr><td></td><td></td><td>Mid-ebb: 08:00 - 10:39 *\$#</td><td></td><td>Mid-ebb: 08:11 - 11:41</td><td></td><td>Mid-ebb: 09:37 - 13:07</td></tr><tr><td></td><td></td><td>Mid-flood: 13:04 - 16:34</td><td></td><td>Mid-flood: 15:48 - 19:00&</td><td></td><td>Mid-flood: 16:53 - 19:00&</td></tr><tr><td></td><td></td><td>11.10 1.00d. 20.0 1 20.0 1</td><td></td><td>1311 13341 23113 231304</td><td></td><td>1110 115501 15155</td></tr><tr><td></td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td></tr><tr><td></td><td></td><td>Impact</td><td></td><td>Impact</td><td></td><td>Impact</td></tr><tr><td></td><td></td><td>Water Quality monitoring for CE, CF, W</td><td>/SR1 W/SR2</td><td>Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3</td><td>2</td><td>Water Quality monitoring for CE, CF, WSR1, WSF</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>3'</td><td></td></tr><tr><td></td><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR3</td><td>6, WSR37</td><td>WSR4, WSR16, WSR33, WSR36, WSR37</td><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR36, WSR37</td></tr><tr><td></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td><td></td><td><u>Tidal Period:</u></td></tr><tr><td></td><td></td><td>Ebb Tide: 10:16 - 17:00</td><td></td><td>Ebb Tide: 11:38 - 17:41</td><td></td><td>Ebb Tide: 13:00 - 18:25</td></tr><tr><td></td><td></td><td>Flood Tide: 17:00 - 23:59</td><td></td><td>Flood Tide: 05:00 - 11:38</td><td></td><td>Flood Tide: 06:27 - 13:00</td></tr><tr><td></td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td><td></td><td>Monitoring Time:</td></tr><tr><td></td><td></td><td>Mid-ebb: 11:53 - 15:23</td><td></td><td>Mid-ebb: 12:54 - 16:24</td><td></td><td>Mid-ebb: 13:57 - 17:27</td></tr><tr><td></td><td></td><td>Mid-flood: 17:20 - 19:00\$&#</td><td>#</td><td>Mid-flood: 08:00 - 11:18 *\$#</td><td></td><td>Mid-flood: 08:00 - 11:28 *</td></tr><tr><td></td><td></td><td>1711d 1100d. 17.20 13.003d.</td><td>"</td><td>1411d 1100d: 00:00 11:10 \$11</td><td></td><td>Wild 1100d. 00.00 111.20</td></tr><tr><td></td><td>30</td><td>31</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Impact</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Water Quality monitoring for CE, CF, W</td><td>VSR1_WSR2</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>WSR3, WSR4, WSR16, WSR33, WSR3</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td>io, vv3ii37</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Tidal Period:</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Ebb Tide: 03:00 - 11:28</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Flood Tide: 11:28 - 23:59</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Monitoring Time:</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Mid-ebb: 08:00 - 11:02*\$#</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>Mid-flood:15:58 - 19:00&</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>17.10 1000.13.30 13.000</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>

Remarks: Monitoring Parameters: Dissolved oxygen, Temperature, pH, Turbidity, Salinity, Suspended Solids

- Note:

 * Due to safety concern of vessel transportation earlier than 0700, Water Quality Monitoring would start at 0800.

 \$ Since predicted tide is shorter than 3.5 hours, method of 90% tidal period as monitoring time is adopted.

 & Due to safety concern for sampling event in night-time, method of 90% tidal period as monitoring time is approached and end at 1900.

 # Prioritized routing: Mid-Elbb: CE→WSR16→WSR37→WSR36→WSR33→Remaining stations and Mid-Flood: CF→WSR1→WSR2→WSR3→WSR4→Remaining stations



Appendix L

Water Quality Monitoring Data

Supporting Documents for Cancellation of General Water Quality Monitoring on 20 July 2021

Reply Reply All AForward clai@acuityhk.com 'BV-Toby Ng<SRE.Civil>'; 'BV-Raymond Ho<RE.Geo.Marine>'; 'BV-Nickola Fung<ARE.Geo.>'; + 24 -20/7/2 RE: 13/WSD/17 - Ad-hoc arrangement for scheduled monitoring event due to adverse weather 1 Follow up. Start by Tuesday, 20 July 2021. Due by Tuesday, 20 July 2021. This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message. <<u>srel@bv13wsd1/.com.hk</u>>; 'James Choi' <<u>jpschoi@anewr.com</u>>; 'Jacky C H Leung' <<u>jleung@acuityhk.com</u>>; 'Binnies-Roger Wu<CKE>' <cre@bv13wsd17.com.hk>; 'Binnies-POON Ying-kok<RE.Safety/Env.>' <re2@bv13wsd17.com.hk>; 'Binnies-Image Yeung<ARE.Safety>' $'longhimchan@epd.gov.hk' < \underline{longhimchan@epd.gov.hk} >; 'wclyn@epd.gov.hk' < \underline{wclyn@epd.gov.hk} >; 'wclyn@e$ Subject: 13/WSD/17 - Ad-hoc arrangement for scheduled monitoring event due to adverse weather

Dear All,

Due to the adverse weather (No. 3 Tropical Cyclone Warning Signal), ad-hoc arrangements have been made on the following scheduled monitoring

Regular Water Quality Monitoring:

The monitoring event for mid-ebb period (0800-11:30, 20/07/2021) has been cancelled, the monitoring event for mid-Flood period will be conducted as scheduled based on weather conditions. This ad-hoc arrangement has been agreed by IEC and informed to Main Contractor.

The updated monitoring schedule will be provided shortly for your reference. Thank you for your attention.

Best regards,

Charlene Lai

Acuity Sustainability Consulting Limited O: 2698-6833 F: 2698-9383

Reply Reply All Forward

clai@acuityhk.com 'BV-Toby Ng<SRE.Civil>'; 'BV-Raymond Ho<RE.Geo.Marine>'; 'BV-Nickola Fung<ARE.Geo.>'; + 24 -

20/7/2021

RE: 13/WSD/17 - Ad-hoc arrangement for scheduled monitoring event due to adverse weather

1 Follow up. Start by Tuesday, 20 July 2021. Due by Tuesday, 20 July 2021.

This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message.

Dear All.

Due to the adverse weather (No. 1 Tropical Cyclone Warning Signal, amber rainstorm signal and thunderstorm signal), ad-hoc arrangements have been made on the following scheduled monitoring event:

Regular Water Quality Monitoring:

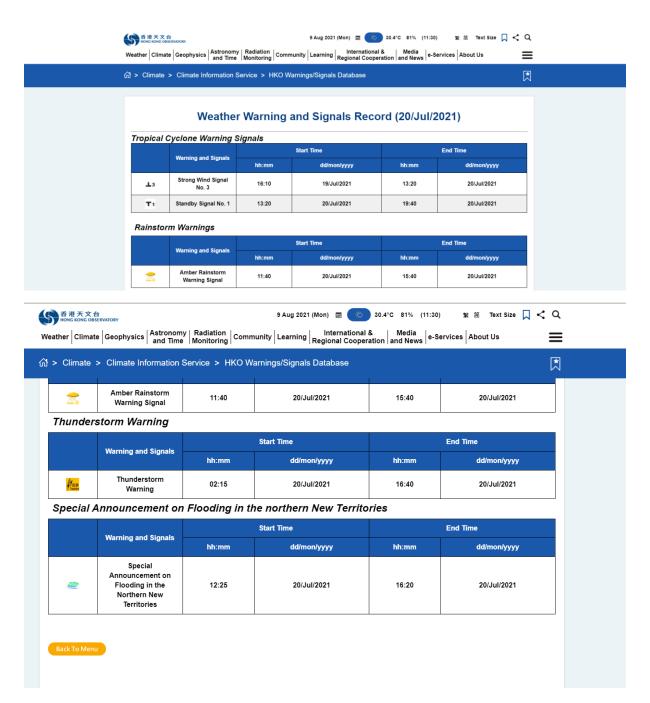
The monitoring event for mid-flood period (13:59 - 17:29, 20/07/2021) will be cancelled due to safety concerns. This ad-hoc arrangement has been agreed by IEC and informed to Main Contractor.

The updated monitoring schedule will be provided shortly for your reference. Thank you for your attention.

Best regards,

Charlene Lai

Acuity Sustainability Consulting Limited O: 2698-6833 F: 2698-9383



Sourced from:

https://www.hko.gov.hk/en/wxinfo/climat/warndb/warndba.shtml?start_ym=20210720

Location	Date (YYYYMMDD) Weat	ner Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210701 Cloud	<i>M</i> oderate	Mid-Ebb	Surface	1.00	3:32:00 PM	9.59	8.36	31.39	30.43	3.20	5.20
CE	20210701 Cloud	<i>y</i> Moderate	Mid-Ebb	Surface	1.00	3:32:00 PM	9.86	8.26	31.06	30.55	2.96	4.80
CE	20210701 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	10.15	3:31:00 PM	9.66	8.27	31.88	30.58	3.26	2.50
CE	20210701 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	10.15	3:31:00 PM	9.87	8.32	30.95	30.52	3.01	4.70
CE	20210701 Cloud	<i>y</i> Moderate	Mid-Ebb	Bottom	19.30	3:30:00 PM	9.42	8.32	31.43	30.43	3.41	3.30
CE	20210701 Cloud	<i>y</i> Moderate	Mid-Ebb	Bottom	19.30	3:30:00 PM	9.68	8.30	31.20	30.53	3.33	5.50
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Surface	1.00	8:02:00 AM	10.12	8.39	30.29	29.37	3.02	2.90
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Surface	1.00	8:02:00 AM	10.00	8.48	30.96	29.19	3.35	2.60
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	11.95	8:01:00 AM	9.90	8.26	31.27	29.34	3.41	3.80
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	11.95	8:01:00 AM	9.78	8.28	30.56	29.24	3.47	2.90
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Bottom	22.90	8:00:00 AM	9.19	8.49	31.68	29.41	2.56	3.00
CE	20210703 Cloud	<i>y</i> Moderate	Mid-Ebb	Bottom	22.90	8:00:00 AM	9.68	8.21	31.63	29.27	2.64	3.50
CE	20210706 Cloud	<i>y</i> Moderate	Mid-Ebb	Surface	1.00	8:42:00 AM	10.26	8.31	30.88	29.13	3.84	8.00
CE	20210706 Cloud	<i>y</i> Moderate	Mid-Ebb	Surface	1.00	8:42:00 AM	9.65	8.32	30.88	29.14	3.40	7.60
CE	20210706 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	10.35	8:41:00 AM	10.06	8.40	30.90	29.27	3.19	7.20
CE	20210706 Cloud	<i>y</i> Moderate	Mid-Ebb	Middle	10.35	8:41:00 AM	9.91	8.43	30.56	29.20	3.49	6.80
CE	20210706 Cloud	<i>y</i> Moderate	Mid-Ebb	Bottom	19.70	8:40:00 AM	9.43	8.49	30.88	29.15	3.19	7.70
CE	20210706 Cloud	<i>M</i> oderate	Mid-Ebb	Bottom	19.70	8:40:00 AM	9.47	8.36	31.10	29.27	2.93	8.20
CE	20210708 Sunny	Moderate	Mid-Ebb	Surface	1.00	9:42:00 AM	9.00	8.29	31.33	30.11	4.01	2.70
CE	20210708 Sunny	Moderate	Mid-Ebb	Surface	1.00	9:42:00 AM	9.25	8.30	30.78	30.10	3.46	2.90
CE	20210708 Sunny	Moderate	Mid-Ebb	Middle	10.15	9:41:00 AM	8.10	8.29	30.76	30.20	3.46	5.80
CE	20210708 Sunny	Moderate	Mid-Ebb	Middle	10.15	9:41:00 AM	9.16	8.22	30.73	30.13	3.59	5.80
CE	20210708 Sunny	Moderate	Mid-Ebb	Bottom	19.30	9:40:00 AM	8.93	8.17	31.13	30.09	2.85	5.40
CE	20210708 Sunny	Moderate	Mid-Ebb	Bottom	19.30	9:40:00 AM	8.52	8.34	31.41	30.16	3.12	5.40
CE	20210710 Sunny	Moderate	Mid-Ebb	Surface	1.00	10:47:00 AM	8.15	8.22	29.64	30.18	3.50	2.50
CE	20210710 Sunny	Moderate	Mid-Ebb	Surface	1.00	10:47:00 AM	7.98	8.26	29.91	30.22	3.49	2.50
CE	20210710 Sunny	Moderate	Mid-Ebb	Middle	11.65	10:46:00 AM	7.83	8.33	30.20	30.22	3.34	9.00

Location	Date (YYYYMMDD) Weathe	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210710 Sunny	Moderate	Mid-Ebb	Middle	11.65	10:46:00 AM	7.63	8.33	30.12	30.06	3.71	9.00
CE	20210710 Sunny	Moderate	Mid-Ebb	Bottom	22.30	10:45:00 AM	7.95	8.30	30.19	30.11	3.41	6.70
CE	20210710 Sunny	Moderate	Mid-Ebb	Bottom	22.30	10:45:00 AM	7.65	8.21	29.58	30.16	3.06	6.70
CE	20210713 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:42:00 PM	8.49	8.12	30.69	30.44	3.54	7.30
CE	20210713 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:42:00 PM	8.09	8.15	31.18	30.51	3.22	7.30
CE	20210713 Sunny	Moderate	Mid-Ebb	Middle	12.05	12:41:00 PM	8.08	8.28	31.24	30.28	2.83	12.80
CE	20210713 Sunny	Moderate	Mid-Ebb	Middle	12.05	12:41:00 PM	7.78	8.13	30.69	30.27	2.91	12.10
CE	20210713 Sunny	Moderate	Mid-Ebb	Bottom	23.10	12:40:00 PM	8.64	8.17	30.94	30.34	3.19	6.40
CE	20210713 Sunny	Moderate	Mid-Ebb	Bottom	23.10	12:40:00 PM	8.28	8.19	31.25	30.36	2.95	6.40
CE	20210715 Sunny	Moderate	Mid-Ebb	Surface	1.00	1:59:00 PM	9.12	8.25	30.48	30.58	3.88	3.30
CE	20210715 Sunny	Moderate	Mid-Ebb	Surface	1.00	1:59:00 PM	9.10	8.36	30.61	30.69	4.64	4.70
CE	20210715 Sunny	Moderate	Mid-Ebb	Middle	11.80	1:58:00 PM	8.16	8.41	31.02	30.60	4.35	9.00
CE	20210715 Sunny	Moderate	Mid-Ebb	Middle	11.80	1:58:00 PM	8.62	8.24	30.74	30.58	3.71	9.00
CE	20210715 Sunny	Moderate	Mid-Ebb	Bottom	22.60	1:57:00 PM	7.83	8.27	30.72	30.55	3.70	6.00
CE	20210715 Sunny	Moderate	Mid-Ebb	Bottom	22.60	1:57:00 PM	8.29	8.41	30.96	30.57	3.67	4.90
CE	20210717 Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:32:00 PM	9.45	8.21	30.93	28.65	3.74	2.50
CE	20210717 Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:32:00 PM	8.71	8.19	31.24	28.62	3.36	2.50
CE	20210717 Cloudy	Moderate	Mid-Ebb	Middle	11.90	3:31:00 PM	9.58	8.22	30.75	28.58	3.08	2.50
CE	20210717 Cloudy	Moderate	Mid-Ebb	Middle	11.90	3:31:00 PM	9.00	8.30	30.63	28.71	3.12	2.50
CE	20210717 Cloudy	Moderate	Mid-Ebb	Bottom	22.80	3:30:00 PM	9.31	8.27	30.66	28.58	3.39	2.50
CE	20210717 Cloudy	Moderate	Mid-Ebb	Bottom	22.80	3:30:00 PM	9.36	8.37	30.91	28.63	3.35	2.60
CE	20210722 Sunny	Moderate	Mid-Ebb	Surface	1.00	9:01:00 AM	7.59	8.17	30.73	28.88	4.55	2.50
CE	20210722 Sunny	Moderate	Mid-Ebb	Surface	1.00	9:01:00 AM	7.12	7.96	30.32	28.86	3.82	2.50
CE	20210722 Sunny	Moderate	Mid-Ebb	Middle	11.95	9:00:00 AM	7.09	8.14	30.23	28.94	4.24	2.50
CE	20210722 Sunny	Moderate	Mid-Ebb	Middle	11.95	9:00:00 AM	7.74	8.04	29.73	28.86	4.09	2.50
CE	20210722 Sunny	Moderate	Mid-Ebb	Bottom	22.90	8:59:00 AM	7.22	8.21	30.52	28.97	4.15	2.50
CE	20210722 Sunny	Moderate	Mid-Ebb	Bottom	22.90	8:59:00 AM	7.28	8.19	29.61	28.96	3.80	2.50

Location	Date Weath	er Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210724 Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:41:00 AM	8.06	8.16	29.67	28.90	4.56	2.50
CE	20210724 Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:41:00 AM	7.67	8.19	29.57	28.91	4.61	2.50
CE	20210724 Cloudy	Moderate	Mid-Ebb	Middle	10.45	10:40:00 AM	7.85	8.31	29.69	28.95	4.82	2.50
CE	20210724 Cloudy	Moderate	Mid-Ebb	Middle	10.45	10:40:00 AM	7.85	8.15	29.73	28.95	4.50	3.50
CE	20210724 Cloudy	Moderate	Mid-Ebb	Bottom	19.90	10:39:00 AM	7.56	8.25	29.58	28.93	4.28	3.30
CE	20210724 Cloudy	Moderate	Mid-Ebb	Bottom	19.90	10:39:00 AM	7.35	7.99	29.59	28.95	4.50	2.50
CE	20210727 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:54:00 PM	8.24	8.18	30.58	29.93	4.83	7.20
CE	20210727 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:54:00 PM	7.90	8.12	30.90	29.87	4.66	7.50
CE	20210727 Sunny	Moderate	Mid-Ebb	Middle	10.45	12:53:00 PM	8.14	7.94	30.94	29.72	4.60	5.60
CE	20210727 Sunny	Moderate	Mid-Ebb	Middle	10.45	12:53:00 PM	8.14	8.13	30.63	29.75	4.58	4.90
CE	20210727 Sunny	Moderate	Mid-Ebb	Bottom	19.90	12:52:00 PM	8.42	7.94	30.77	29.95	3.70	7.10
CE	20210727 Sunny	Moderate	Mid-Ebb	Bottom	19.90	12:52:00 PM	8.25	8.10	30.81	29.79	4.17	5.20
CE	20210729 Cloudy	Moderate	Mid-Ebb	Surface	1.00	2:17:00 PM	8.52	7.98	29.88	28.88	5.44	3.30
CE	20210729 Cloudy	Moderate	Mid-Ebb	Surface	1.00	2:17:00 PM	8.59	8.11	29.93	28.83	5.36	2.50
CE	20210729 Cloudy	Moderate	Mid-Ebb	Middle	11.10	2:16:00 PM	8.21	8.19	29.90	28.98	4.78	5.90
CE	20210729 Cloudy	Moderate	Mid-Ebb	Middle	11.10	2:16:00 PM	8.68	8.15	29.81	28.91	4.69	5.70
CE	20210729 Cloudy	Moderate	Mid-Ebb	Bottom	21.20	2:15:00 PM	8.47	8.03	29.66	29.02	5.12	2.50
CE	20210729 Cloudy	Moderate	Mid-Ebb	Bottom	21.20	2:15:00 PM	8.40	8.25	29.66	29.01	4.87	3.70
CE	20210731 Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:32:00 PM	8.62	8.06	30.30	29.15	3.66	3.20
CE	20210731 Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:32:00 PM	8.58	8.07	30.31	29.16	4.16	2.50
CE	20210731 Cloudy	Moderate	Mid-Ebb	Middle	10.90	3:31:00 PM	8.49	8.06	30.48	29.15	3.84	2.50
CE	20210731 Cloudy	Moderate	Mid-Ebb	Middle	10.90	3:31:00 PM	8.40	7.94	30.45	29.09	4.11	2.50
CE	20210731 Cloudy	Moderate	Mid-Ebb	Bottom	20.80	3:30:00 PM	8.02	7.94	30.48	29.03	3.94	2.50
CE	20210731 Cloudy	Moderate	Mid-Ebb	Bottom	20.80	3:30:00 PM	8.08	8.13	30.50	29.12	3.29	2.50
CF	20210701 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:21:00 PM	10.13	8.45	31.42	30.28	3.71	3.90
CF	20210701 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:21:00 PM	9.93	8.31	31.60	30.23	3.67	2.50
CF	20210701 Cloudy	Moderate	Mid-Ebb	Middle	10.25	6:20:00 PM	10.03	8.41	31.63	30.22	3.41	3.10

Location	Date Weathe	r Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CF	20210701 Cloudy	Moderate	Mid-Ebb	Middle	10.25	6:20:00 PM	9.72	8.31	31.36	30.15	3.26	2.50
CF	20210701 Cloudy	Moderate	Mid-Ebb	Bottom	19.50	6:19:00 PM	9.65	8.41	31.64	30.24	3.15	2.50
CF	20210701 Cloudy	Moderate	Mid-Ebb	Bottom	19.50	6:19:00 PM	10.10	8.36	31.83	30.25	2.99	2.50
CF	20210703 Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:58:00 AM	9.89	8.35	30.72	29.84	3.24	3.00
CF	20210703 Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:58:00 AM	9.90	8.22	31.33	29.97	3.59	2.50
CF	20210703 Cloudy	Moderate	Mid-Ebb	Middle	10.05	9:57:00 AM	9.24	8.51	31.06	29.77	3.02	2.50
CF	20210703 Cloudy	Moderate	Mid-Ebb	Middle	10.05	9:57:00 AM	8.68	8.36	30.50	29.78	3.50	2.50
CF	20210703 Cloudy	Moderate	Mid-Ebb	Bottom	19.10	9:56:00 AM	9.27	8.50	30.54	29.96	3.16	2.50
CF	20210703 Cloudy	Moderate	Mid-Ebb	Bottom	19.10	9:56:00 AM	8.88	8.32	30.30	29.71	3.27	2.50
CF	20210706 Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:24:00 AM	9.26	8.39	30.91	29.99	3.11	6.80
CF	20210706 Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:24:00 AM	9.53	8.41	30.93	29.95	3.65	7.30
CF	20210706 Cloudy	Moderate	Mid-Ebb	Middle	9.80	11:23:00 AM	9.04	8.39	31.23	29.82	3.65	8.50
CF	20210706 Cloudy	Moderate	Mid-Ebb	Middle	9.80	11:23:00 AM	9.27	8.45	31.27	29.82	3.17	7.50
CF	20210706 Cloudy	Moderate	Mid-Ebb	Bottom	18.60	11:22:00 AM	9.08	8.36	31.27	29.93	3.39	7.10
CF	20210706 Cloudy	Moderate	Mid-Ebb	Bottom	18.60	11:22:00 AM	9.66	8.35	30.80	29.92	3.40	6.80
CF	20210708 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:14:00 PM	7.93	8.19	31.19	30.60	3.89	5.30
CF	20210708 Sunny	Moderate	Mid-Ebb	Surface	1.00	12:14:00 PM	9.27	8.35	30.90	30.51	3.55	5.30
CF	20210708 Sunny	Moderate	Mid-Ebb	Middle	9.75	12:13:00 PM	8.64	8.21	31.48	30.44	3.58	5.10
CF	20210708 Sunny	Moderate	Mid-Ebb	Middle	9.75	12:13:00 PM	8.74	8.26	30.80	30.53	3.62	5.10
CF	20210708 Sunny	Moderate	Mid-Ebb	Bottom	18.50	12:12:00 PM	8.53	8.35	31.29	30.56	3.18	2.50
CF	20210708 Sunny	Moderate	Mid-Ebb	Bottom	18.50	12:12:00 PM	9.31	8.21	31.48	30.53	2.77	2.50
CF	20210710 Sunny	Moderate	Mid-Ebb	Surface	1.00	1:10:00 PM	8.25	8.22	30.16	30.58	3.74	2.50
CF	20210710 Sunny	Moderate	Mid-Ebb	Surface	1.00	1:10:00 PM	8.53	8.38	30.01	30.51	3.95	2.50
CF	20210710 Sunny	Moderate	Mid-Ebb	Middle	10.80	1:09:00 PM	7.69	8.33	30.16	30.51	3.68	3.20
CF	20210710 Sunny	Moderate	Mid-Ebb	Middle	10.80	1:09:00 PM	8.60	8.25	29.93	30.53	3.35	2.50
CF	20210710 Sunny	Moderate	Mid-Ebb	Bottom	20.60	1:08:00 PM	8.26	8.27	29.77	30.57	2.86	3.00
CF	20210710 Sunny	Moderate	Mid-Ebb	Bottom	20.60	1:08:00 PM	8.10	8.41	30.14	30.62	3.23	2.50

Location	Date (YYYYMMDD) Weathe	r Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CF	20210713 Sunny	Moderate	Mid-Ebb	Surface	1.00	3:08:00 PM	7.86	8.14	30.96	30.19	3.50	2.50
CF	20210713 Sunny	Moderate	Mid-Ebb	Surface	1.00	3:08:00 PM	8.01	8.26	31.00	30.15	3.51	2.50
CF	20210713 Sunny	Moderate	Mid-Ebb	Middle	10.55	3:07:00 PM	8.20	8.29	31.28	30.22	3.25	2.50
CF	20210713 Sunny	Moderate	Mid-Ebb	Middle	10.55	3:07:00 PM	7.79	8.11	31.14	30.32	3.58	2.50
CF	20210713 Sunny	Moderate	Mid-Ebb	Bottom	20.10	3:06:00 PM	8.45	8.23	31.18	30.41	3.04	6.20
CF	20210713 Sunny	Moderate	Mid-Ebb	Bottom	20.10	3:06:00 PM	7.99	8.23	31.06	30.26	3.31	6.20
CF	20210715 Sunny	Moderate	Mid-Ebb	Surface	1.00	4:43:00 PM	7.73	8.18	30.40	30.09	4.63	9.00
CF	20210715 Sunny	Moderate	Mid-Ebb	Surface	1.00	4:43:00 PM	8.48	8.33	30.47	30.10	4.18	9.00
CF	20210715 Sunny	Moderate	Mid-Ebb	Middle	10.20	4:42:00 PM	9.09	8.26	30.34	30.02	4.22	8.10
CF	20210715 Sunny	Moderate	Mid-Ebb	Middle	10.20	4:42:00 PM	7.90	8.27	30.94	30.15	4.25	8.10
CF	20210715 Sunny	Moderate	Mid-Ebb	Bottom	19.40	4:41:00 PM	8.13	8.36	30.25	30.15	3.77	6.30
CF	20210715 Sunny	Moderate	Mid-Ebb	Bottom	19.40	4:41:00 PM	8.83	8.26	30.35	30.15	3.81	4.70
CF	20210717 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:14:00 PM	8.63	8.36	30.66	27.77	3.81	2.50
CF	20210717 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:14:00 PM	8.98	8.27	30.94	27.77	3.87	2.50
CF	20210717 Cloudy	Moderate	Mid-Ebb	Middle	10.10	6:13:00 PM	8.25	8.18	30.60	27.81	2.85	2.50
CF	20210717 Cloudy	Moderate	Mid-Ebb	Middle	10.10	6:13:00 PM	8.76	8.32	31.00	27.88	3.30	2.50
CF	20210717 Cloudy	Moderate	Mid-Ebb	Bottom	19.20	6:12:00 PM	9.17	8.20	30.58	27.82	2.99	2.50
CF	20210717 Cloudy	Moderate	Mid-Ebb	Bottom	19.20	6:12:00 PM	8.82	8.32	30.57	27.86	3.16	3.10
CF	20210722 Sunny	Moderate	Mid-Ebb	Surface	1.00	11:48:00 AM	7.43	8.16	30.42	29.59	4.24	2.50
CF	20210722 Sunny	Moderate	Mid-Ebb	Surface	1.00	11:48:00 AM	7.21	7.94	29.77	29.44	4.41	2.50
CF	20210722 Sunny	Moderate	Mid-Ebb	Middle	10.65	11:47:00 AM	8.17	7.97	30.33	29.56	3.80	9.30
CF	20210722 Sunny	Moderate	Mid-Ebb	Middle	10.65	11:47:00 AM	7.52	8.05	30.51	29.41	3.86	7.30
CF	20210722 Sunny	Moderate	Mid-Ebb	Bottom	20.30	11:46:00 AM	7.92	8.09	29.74	29.39	3.54	2.50
CF	20210722 Sunny	Moderate	Mid-Ebb	Bottom	20.30	11:46:00 AM	7.30	8.12	29.86	29.37	4.22	2.50
CF	20210724 Cloudy	Moderate	Mid-Ebb	Surface	1.00	1:14:00 PM	7.97	8.02	29.59	29.75	4.78	2.50
CF	20210724 Cloudy	Moderate	Mid-Ebb	Surface	1.00	1:14:00 PM	7.40	8.29	29.58	29.73	5.23	3.70
CF	20210724 Cloudy	Moderate	Mid-Ebb	Middle	10.10	1:13:00 PM	8.08	8.03	29.70	29.67	4.24	5.90

Location	Date Weath (YYYYMMDD)	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CF	20210724 Cloudy	Moderate	Mid-Ebb	Middle	10.10	1:13:00 PM	8.30	8.25	29.73	29.67	4.34	5.90
CF	20210724 Cloudy	Moderate	Mid-Ebb	Bottom	19.20	1:12:00 PM	7.34	8.18	29.65	29.64	4.48	3.50
CF	20210724 Cloudy	Moderate	Mid-Ebb	Bottom	19.20	1:12:00 PM	8.01	8.03	29.62	29.70	4.37	2.50
CF	20210727 Sunny	Moderate	Mid-Ebb	Surface	1.00	3:24:00 PM	7.58	8.23	29.98	29.67	4.20	8.70
CF	20210727 Sunny	Moderate	Mid-Ebb	Surface	1.00	3:24:00 PM	7.67	8.41	30.54	29.75	4.55	9.70
CF	20210727 Sunny	Moderate	Mid-Ebb	Middle	10.65	3:23:00 PM	8.07	8.23	30.52	29.67	4.47	9.50
CF	20210727 Sunny	Moderate	Mid-Ebb	Middle	10.65	3:23:00 PM	7.46	8.12	30.17	29.72	3.93	9.70
CF	20210727 Sunny	Moderate	Mid-Ebb	Bottom	20.30	3:22:00 PM	7.51	8.41	30.36	29.44	3.81	3.30
CF	20210727 Sunny	Moderate	Mid-Ebb	Bottom	20.30	3:22:00 PM	7.85	8.17	30.43	29.44	3.83	3.60
CF	20210729 Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:54:00 PM	8.59	7.94	29.61	28.23	4.30	2.50
CF	20210729 Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:54:00 PM	8.47	8.08	29.70	28.24	4.43	2.50
CF	20210729 Cloudy	Moderate	Mid-Ebb	Middle	9.80	4:53:00 PM	8.67	8.23	29.60	28.36	3.96	2.50
CF	20210729 Cloudy	Moderate	Mid-Ebb	Middle	9.80	4:53:00 PM	8.65	8.16	29.63	28.38	4.73	2.70
CF	20210729 Cloudy	Moderate	Mid-Ebb	Bottom	18.60	4:52:00 PM	8.75	8.26	29.77	28.25	3.72	2.50
CF	20210729 Cloudy	Moderate	Mid-Ebb	Bottom	18.60	4:52:00 PM	8.24	8.18	29.72	28.41	3.65	2.50
CF	20210731 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:01:00 PM	8.89	8.05	30.47	28.71	3.81	5.10
CF	20210731 Cloudy	Moderate	Mid-Ebb	Surface	1.00	6:01:00 PM	8.79	7.96	30.70	28.75	3.65	4.90
CF	20210731 Cloudy	Moderate	Mid-Ebb	Middle	9.65	6:00:00 PM	8.83	7.87	31.05	28.78	3.84	2.60
CF	20210731 Cloudy	Moderate	Mid-Ebb	Middle	9.65	6:00:00 PM	8.67	7.88	31.11	28.80	3.67	2.50
CF	20210731 Cloudy	Moderate	Mid-Ebb	Bottom	18.30	5:59:00 PM	8.94	7.99	31.03	28.74	3.74	7.90
CF	20210731 Cloudy	Moderate	Mid-Ebb	Bottom	18.30	5:59:00 PM	8.94	8.12	30.78	28.83	4.02	7.50
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:55:00 PM	9.90	8.38	31.36	30.25	2.88	2.50
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:55:00 PM	9.94	8.35	31.18	30.31	2.84	3.30
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Middle	4.50	5:54:00 PM	9.69	8.30	31.74	30.37	2.49	3.90
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Middle	4.50	5:54:00 PM	10.09	8.24	31.50	30.40	2.94	2.80
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Bottom	8.00	5:53:00 PM	9.33	8.27	31.68	30.32	2.43	2.50
WSR01	20210701 Cloudy	Moderate	Mid-Ebb	Bottom	8.00	5:53:00 PM	10.03	8.24	31.08	30.27	2.30	3.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:39:00 AM	8.71	8.31	30.77	29.78	2.62	3.10
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:39:00 AM	9.82	8.28	30.49	29.75	3.01	3.20
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Middle	4.40	9:38:00 AM	8.69	8.25	30.41	29.70	2.40	3.40
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Middle	4.40	9:38:00 AM	10.03	8.23	30.55	29.66	2.77	4.10
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	7.80	9:37:00 AM	9.37	8.23	31.16	29.65	2.01	3.00
WSR01	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	7.80	9:37:00 AM	8.83	8.51	30.48	29.56	2.35	2.50
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:00:00 AM	8.79	8.31	31.13	29.97	2.96	7.60
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:00:00 AM	9.10	8.32	30.98	29.83	2.65	6.90
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.20	10:59:00 AM	9.20	8.32	30.80	29.87	2.69	7.50
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.20	10:59:00 AM	9.48	8.40	30.55	29.81	2.61	8.80
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	7.40	10:58:00 AM	9.18	8.37	30.81	29.99	2.62	8.30
WSR01	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	7.40	10:58:00 AM	9.18	8.38	31.00	29.83	2.32	8.50
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:50:00 AM	8.38	8.16	30.93	30.54	2.61	5.90
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:50:00 AM	9.15	8.28	31.08	30.50	2.53	5.90
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.15	11:49:00 AM	8.36	8.27	31.46	30.45	2.02	5.00
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.15	11:49:00 AM	7.96	8.34	31.32	30.44	2.26	5.00
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Bottom	7.30	11:48:00 AM	8.06	8.17	31.09	30.44	2.20	5.60
WSR01	20210708	Sunny	Moderate	Mid-Ebb	Bottom	7.30	11:48:00 AM	9.09	8.18	31.51	30.47	1.94	5.60
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:49:00 PM	8.95	8.37	29.70	30.59	2.41	3.70
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:49:00 PM	8.22	8.36	29.96	30.62	2.84	2.90
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Middle	4.35	12:48:00 PM	7.99	8.21	30.05	30.56	2.31	3.00
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Middle	4.35	12:48:00 PM	8.34	8.37	29.86	30.46	2.04	2.80
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Bottom	7.70	12:47:00 PM	8.24	8.24	29.65	30.56	2.17	2.90
WSR01	20210710	Sunny	Moderate	Mid-Ebb	Bottom	7.70	12:47:00 PM	8.56	8.33	29.73	30.50	2.39	3.40
WSR01	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:46:00 PM	8.61	8.11	30.90	30.35	2.27	2.50
WSR01	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:46:00 PM	8.65	8.26	31.12	30.54	2.03	2.50
WSR01	20210713	Sunny	Moderate	Mid-Ebb	Middle	4.45	2:45:00 PM	7.88	8.15	31.20	30.25	2.37	2.30

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210713 Su	unny	Moderate	Mid-Ebb	Middle	4.45	2:45:00 PM	8.00	8.26	31.09	30.34	2.00	2.30
WSR01	20210713 Su	unny	Moderate	Mid-Ebb	Bottom	7.90	2:44:00 PM	8.29	8.15	31.26	30.28	1.85	9.40
WSR01	20210713 St	unny	Moderate	Mid-Ebb	Bottom	7.90	2:44:00 PM	7.96	8.33	31.21	30.27	1.75	10.20
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Surface	1.00	4:20:00 PM	8.27	8.18	30.23	30.21	2.57	4.70
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Surface	1.00	4:20:00 PM	7.83	8.29	31.11	30.08	2.18	5.30
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Middle	4.55	4:19:00 PM	8.05	8.38	30.91	30.16	2.71	6.40
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Middle	4.55	4:19:00 PM	8.60	8.35	30.59	30.08	2.56	7.40
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Bottom	8.10	4:18:00 PM	8.65	8.29	30.74	30.14	2.28	10.40
WSR01	20210715 St	unny	Moderate	Mid-Ebb	Bottom	8.10	4:18:00 PM	8.55	8.22	30.83	30.15	1.97	10.40
WSR01	20210717 CI	loudy	Moderate	Mid-Ebb	Surface	1.00	5:51:00 PM	8.29	8.16	30.63	28.06	3.05	2.50
WSR01	20210717 CI	loudy	Moderate	Mid-Ebb	Surface	1.00	5:51:00 PM	9.48	8.32	30.75	27.88	3.07	2.60
WSR01	20210717 Cl	loudy	Moderate	Mid-Ebb	Middle	4.20	5:50:00 PM	8.79	8.20	31.21	28.06	2.29	3.30
WSR01	20210717 Cl	loudy	Moderate	Mid-Ebb	Middle	4.20	5:50:00 PM	9.13	8.18	31.25	27.89	2.12	2.50
WSR01	20210717 Cl	loudy	Moderate	Mid-Ebb	Bottom	7.40	5:49:00 PM	9.44	8.33	31.20	27.94	1.92	2.50
WSR01	20210717 CI	loudy	Moderate	Mid-Ebb	Bottom	7.40	5:49:00 PM	8.68	8.20	31.23	27.94	2.10	2.50
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Surface	1.00	11:23:00 AM	7.69	7.99	29.68	29.53	1.56	2.50
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Surface	1.00	11:23:00 AM	8.23	8.12	29.81	29.56	1.31	2.50
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Middle	4.75	11:22:00 AM	7.59	8.16	29.77	29.44	1.57	6.00
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Middle	4.75	11:22:00 AM	7.46	8.09	30.75	29.43	1.33	6.00
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Bottom	8.50	11:21:00 AM	8.00	8.08	30.13	29.54	1.51	2.50
WSR01	20210722 St	unny	Moderate	Mid-Ebb	Bottom	8.50	11:21:00 AM	7.44	8.21	29.66	29.40	1.61	2.50
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Surface	1.00	12:50:00 PM	7.38	8.25	29.69	29.57	3.27	6.60
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Surface	1.00	12:50:00 PM	7.77	8.29	29.57	29.72	2.89	6.60
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Middle	4.50	12:49:00 PM	7.50	8.18	29.76	29.48	2.70	2.50
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Middle	4.50	12:49:00 PM	7.97	8.22	29.74	29.68	2.68	2.50
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Bottom	8.00	12:48:00 PM	7.83	8.31	29.69	29.64	2.44	6.00
WSR01	20210724 CI	loudy	Moderate	Mid-Ebb	Bottom	8.00	12:48:00 PM	7.29	8.24	29.56	29.68	2.75	6.00

Location	Date (YYYYMMDD) W	Veather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Surface	1.00	3:02:00 PM	8.41	8.06	30.48	29.47	2.41	8.30
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Surface	1.00	3:02:00 PM	8.17	8.15	30.34	29.66	2.21	8.50
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Middle	4.70	3:01:00 PM	8.25	8.22	30.29	29.61	2.03	8.80
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Middle	4.70	3:01:00 PM	8.35	8.00	30.30	29.51	2.15	8.60
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Bottom	8.40	3:00:00 PM	7.57	8.25	30.54	29.53	1.83	6.90
WSR01	20210727 Sui	nny	Moderate	Mid-Ebb	Bottom	8.40	3:00:00 PM	7.33	8.18	30.54	29.62	2.18	7.90
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	4:31:00 PM	8.31	8.00	29.75	28.25	5.35	11.00
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	4:31:00 PM	8.28	8.00	29.65	28.36	5.52	9.90
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	4.50	4:30:00 PM	8.71	8.22	29.55	28.25	5.07	11.00
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	4.50	4:30:00 PM	8.79	8.05	29.46	28.29	5.14	14.50
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	8.00	4:29:00 PM	8.21	8.08	29.66	28.29	4.62	7.30
WSR01	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	8.00	4:29:00 PM	8.72	8.09	29.59	28.38	4.77	6.70
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:37:00 PM	8.73	8.04	30.95	28.79	2.60	4.10
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:37:00 PM	8.39	8.06	31.31	28.83	2.83	4.00
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Middle	4.25	5:36:00 PM	8.97	7.88	31.00	28.85	2.32	9.50
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Middle	4.25	5:36:00 PM	8.55	8.01	31.28	28.79	2.70	9.30
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Bottom	7.50	5:35:00 PM	8.62	7.93	31.17	28.76	2.39	2.50
WSR01	20210731 Clo	oudy	Moderate	Mid-Ebb	Bottom	7.50	5:35:00 PM	8.90	8.00	30.81	28.88	2.77	2.50
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:36:00 PM	9.59	8.31	31.02	30.19	2.70	5.30
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:36:00 PM	9.46	8.39	31.09	30.30	2.86	3.10
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Middle	4.85	5:35:00 PM	9.97	8.43	30.96	30.37	2.42	4.50
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Middle	4.85	5:35:00 PM	9.23	8.24	31.98	30.31	2.53	5.90
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Bottom	8.70	5:34:00 PM	9.98	8.47	31.44	30.29	2.46	3.60
WSR02	20210701 Clo	oudy	Moderate	Mid-Ebb	Bottom	8.70	5:34:00 PM	9.35	8.45	31.03	30.34	2.39	2.50
WSR02	20210703 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	9:24:00 AM	8.84	8.38	30.81	29.46	2.27	3.60
WSR02	20210703 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	9:24:00 AM	8.64	8.29	30.64	29.60	2.53	3.60
WSR02	20210703 Clo	oudy	Moderate	Mid-Ebb	Middle	4.75	9:23:00 AM	9.45	8.29	30.91	29.63	2.19	3.90

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR02	20210703	Cloudy	Moderate	Mid-Ebb	Middle	4.75	9:23:00 AM	8.97	8.36	30.87	29.67	1.95	4.10
WSR02	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	8.50	9:22:00 AM	10.14	8.44	30.63	29.73	2.23	2.90
WSR02	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	8.50	9:22:00 AM	8.74	8.37	31.12	29.65	2.48	4.40
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:41:00 AM	9.44	8.33	30.61	29.73	2.99	8.60
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:41:00 AM	8.99	8.42	30.82	29.64	2.69	8.40
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.65	10:40:00 AM	9.36	8.44	31.13	29.70	2.69	21.20
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.65	10:40:00 AM	10.02	8.39	30.89	29.67	2.90	21.20
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	8.30	10:39:00 AM	9.26	8.44	31.10	29.69	2.53	17.90
WSR02	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	8.30	10:39:00 AM	9.97	8.37	30.99	29.67	2.49	18.30
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:32:00 AM	9.01	8.28	31.29	30.44	2.54	5.90
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:32:00 AM	9.45	8.26	31.60	30.50	2.18	5.90
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.75	11:31:00 AM	8.58	8.35	30.91	30.51	1.89	2.50
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.75	11:31:00 AM	8.24	8.34	31.41	30.51	1.94	2.50
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Bottom	8.50	11:30:00 AM	9.43	8.17	30.85	30.48	1.85	2.50
WSR02	20210708	Sunny	Moderate	Mid-Ebb	Bottom	8.50	11:30:00 AM	8.57	8.22	30.88	30.37	2.01	2.50
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:32:00 PM	8.26	8.33	29.36	30.62	2.51	8.90
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:32:00 PM	8.56	8.27	29.84	30.49	2.67	8.90
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Middle	4.60	12:31:00 PM	8.90	8.35	29.49	30.55	2.77	3.80
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Middle	4.60	12:31:00 PM	8.31	8.38	29.83	30.52	2.43	2.50
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Bottom	8.20	12:30:00 PM	8.16	8.29	29.52	30.60	2.39	3.40
WSR02	20210710	Sunny	Moderate	Mid-Ebb	Bottom	8.20	12:30:00 PM	8.22	8.30	29.96	30.56	2.49	2.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:29:00 PM	7.93	8.20	30.92	30.35	2.43	3.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:29:00 PM	8.05	8.14	31.19	30.56	2.06	3.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Middle	4.60	2:28:00 PM	8.27	8.18	31.26	30.52	2.23	2.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Middle	4.60	2:28:00 PM	7.70	8.28	30.95	30.48	2.61	2.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Bottom	8.20	2:27:00 PM	7.63	8.24	30.69	30.56	1.84	2.50
WSR02	20210713	Sunny	Moderate	Mid-Ebb	Bottom	8.20	2:27:00 PM	7.96	8.24	30.92	30.34	1.86	2.50

Location	Date (YYYYMMDD)	athar	ea . lition		ater evel	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	4:01:00 PM	8.24	8.40	30.82	30.24	2.69	10.90
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	4:01:00 PM	7.86	8.41	30.34	30.18	2.62	10.90
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Mi	ddle	4.80	4:00:00 PM	8.76	8.24	30.96	30.23	2.92	10.70
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Mic	ddle	4.80	4:00:00 PM	8.11	8.25	30.33	30.37	2.69	10.70
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Bot	ttom	8.60	3:59:00 PM	7.79	8.34	30.94	30.35	2.47	8.60
WSR02	20210715 Sun	ny Mode	rate Mid	-Ebb Bot	ttom	8.60	3:59:00 PM	7.91	8.43	30.27	30.22	2.50	8.60
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Sur	face	1.00	5:33:00 PM	8.22	8.30	30.93	28.15	2.49	2.50
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Sur	face	1.00	5:33:00 PM	9.43	8.17	31.26	27.93	2.55	3.20
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Mi	ddle	4.60	5:32:00 PM	8.47	8.29	30.86	28.09	2.14	7.00
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Mi	ddle	4.60	5:32:00 PM	8.65	8.32	30.88	28.14	2.45	7.00
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Bot	ttom	8.20	5:31:00 PM	8.96	8.33	30.90	27.99	2.62	3.70
WSR02	20210717 Clou	udy Mode	rate Mid	-Ebb Bot	ttom	8.20	5:31:00 PM	8.22	8.33	30.89	28.06	2.49	2.90
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	11:04:00 AM	8.01	8.09	30.13	29.24	1.75	5.20
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	11:04:00 AM	7.70	8.13	29.87	29.21	1.73	5.20
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Mi	ddle	4.55	11:03:00 AM	7.85	8.09	30.08	29.36	1.41	2.50
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Mi	ddle	4.55	11:03:00 AM	7.58	8.07	30.57	29.35	1.36	2.50
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Bot	ttom	8.10	11:02:00 AM	7.81	8.05	30.55	29.33	0.84	2.50
WSR02	20210722 Sun	ny Mode	rate Mid	-Ebb Bot	ttom	8.10	11:02:00 AM	7.51	7.88	30.20	29.43	0.94	2.60
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Sur	face	1.00	12:31:00 PM	7.33	7.95	29.61	29.44	2.85	2.50
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Sur	face	1.00	12:31:00 PM	7.89	8.25	29.64	29.44	3.26	2.50
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Mi	ddle	4.90	12:30:00 PM	8.28	8.13	29.55	29.50	2.98	2.50
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Mi	ddle	4.90	12:30:00 PM	8.20	8.19	29.58	29.64	2.86	2.50
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Bot	ttom	8.80	12:29:00 PM	7.31	8.30	29.66	29.45	2.52	2.50
WSR02	20210724 Clou	udy Mode	rate Mid	-Ebb Bot	ttom	8.80	12:29:00 PM	7.68	8.14	29.76	29.62	2.86	2.50
WSR02	20210727 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	2:44:00 PM	7.73	8.09	30.09	29.44	2.42	3.70
WSR02	20210727 Sun	ny Mode	rate Mid	-Ebb Sur	face	1.00	2:44:00 PM	7.90	8.00	30.50	29.50	2.63	3.00
WSR02	20210727 Sun	ny Mode	rate Mid	-Ebb Mi	ddle	4.55	2:43:00 PM	7.39	8.11	30.15	29.73	2.22	4.70

Location	Date Weat	her Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR02	20210727 Sunny	Moderate	Mid-Ebb	Middle	4.55	2:43:00 PM	7.87	8.22	30.12	29.44	2.26	2.50
WSR02	20210727 Sunny	Moderate	Mid-Ebb	Bottom	8.10	2:42:00 PM	7.61	8.01	30.11	29.60	2.30	2.70
WSR02	20210727 Sunny	Moderate	Mid-Ebb	Bottom	8.10	2:42:00 PM	7.57	8.23	30.32	29.74	2.27	3.80
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Surface	1.00	4:12:00 PM	8.59	8.01	29.64	28.33	2.73	6.20
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Surface	1.00	4:12:00 PM	8.27	8.05	29.43	28.22	2.87	6.40
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Middle	4.70	4:11:00 PM	9.18	8.05	29.55	28.43	2.46	3.90
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Middle	4.70	4:11:00 PM	8.94	8.27	29.67	28.23	2.94	4.50
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Bottom	8.40	4:10:00 PM	8.91	8.15	29.86	28.30	2.02	6.00
WSR02	20210729 Cloud	y Moderate	Mid-Ebb	Bottom	8.40	4:10:00 PM	9.06	7.96	29.54	28.39	2.06	5.80
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Surface	1.00	5:19:00 PM	8.65	7.99	30.91	28.89	3.02	2.80
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Surface	1.00	5:19:00 PM	8.73	7.92	30.86	28.75	2.73	2.50
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Middle	4.70	5:18:00 PM	9.01	8.03	31.14	28.75	2.68	2.50
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Middle	4.70	5:18:00 PM	8.94	7.84	31.15	28.79	2.33	3.80
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Bottom	8.40	5:17:00 PM	8.57	7.78	31.34	28.76	2.07	9.10
WSR02	20210731 Cloud	y Moderate	Mid-Ebb	Bottom	8.40	5:17:00 PM	8.34	7.85	31.35	28.90	2.39	9.70
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Surface	1.00	5:20:00 PM	9.30	8.41	31.12	30.34	2.87	2.50
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Surface	1.00	5:20:00 PM	9.27	8.43	31.41	30.32	2.86	2.50
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Middle	4.25	5:19:00 PM	9.95	8.31	31.86	30.35	2.97	2.50
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Middle	4.25	5:19:00 PM	9.19	8.32	31.54	30.32	2.68	2.50
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Bottom	7.50	5:18:00 PM	9.79	8.24	31.01	30.38	1.97	2.50
WSR03	20210701 Cloud	y Moderate	Mid-Ebb	Bottom	7.50	5:18:00 PM	9.22	8.43	31.92	30.27	2.15	2.50
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Surface	1.00	9:15:00 AM	8.72	8.37	31.14	29.67	2.43	2.90
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Surface	1.00	9:15:00 AM	9.82	8.49	31.24	29.68	2.27	3.70
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Middle	4.05	9:14:00 AM	8.86	8.44	31.26	29.52	2.56	8.80
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Middle	4.05	9:14:00 AM	9.22	8.50	31.15	29.44	2.19	7.00
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Bottom	7.10	9:13:00 AM	9.58	8.44	30.83	29.45	2.20	8.80
WSR03	20210703 Cloud	y Moderate	Mid-Ebb	Bottom	7.10	9:13:00 AM	9.42	8.46	31.38	29.51	2.17	8.50

Location	Date (YYYYMMDD)	Veather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Surface	1.00	10:26:00 AM	9.73	8.40	31.16	29.62	2.33	22.10
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Surface	1.00	10:26:00 AM	9.04	8.38	30.85	29.57	2.48	22.10
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Middle	3.70	10:25:00 AM	10.27	8.33	30.76	29.58	2.32	23.30
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Middle	3.70	10:25:00 AM	9.90	8.40	31.07	29.62	2.24	23.30
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Bottom	6.40	10:24:00 AM	9.01	8.42	30.79	29.62	2.27	22.70
WSR03	20210706 Cld	oudy	Moderate	Mid-Ebb	Bottom	6.40	10:24:00 AM	8.79	8.32	30.85	29.73	2.10	22.70
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Surface	1.00	11:17:00 AM	9.47	8.33	31.60	30.47	2.06	2.60
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Surface	1.00	11:17:00 AM	9.25	8.35	30.76	30.39	2.36	3.50
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Middle	3.85	11:16:00 AM	9.19	8.27	31.27	30.43	1.93	5.00
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Middle	3.85	11:16:00 AM	8.09	8.30	31.59	30.38	2.26	5.00
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Bottom	6.70	11:15:00 AM	8.79	8.25	31.23	30.48	2.27	3.40
WSR03	20210708 Su	inny	Moderate	Mid-Ebb	Bottom	6.70	11:15:00 AM	8.38	8.28	31.07	30.42	2.11	2.50
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Surface	1.00	12:17:00 PM	8.44	8.27	29.76	30.46	2.61	2.50
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Surface	1.00	12:17:00 PM	8.93	8.35	30.14	30.47	2.51	2.50
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Middle	4.15	12:16:00 PM	9.01	8.34	30.18	30.40	2.30	6.90
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Middle	4.15	12:16:00 PM	8.52	8.41	29.67	30.53	1.99	6.90
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Bottom	7.30	12:15:00 PM	8.62	8.36	29.81	30.51	2.21	2.50
WSR03	20210710 Su	inny	Moderate	Mid-Ebb	Bottom	7.30	12:15:00 PM	8.91	8.38	29.76	30.51	2.59	2.80
WSR03	20210713 Su	inny	Moderate	Mid-Ebb	Surface	1.00	2:15:00 PM	8.52	8.32	31.26	30.52	2.73	2.50
WSR03	20210713 Su	ınny	Moderate	Mid-Ebb	Surface	1.00	2:15:00 PM	7.77	8.32	30.97	30.54	2.34	2.50
WSR03	20210713 Su	ınny	Moderate	Mid-Ebb	Middle	3.70	2:14:00 PM	7.73	8.35	30.76	30.37	2.07	2.50
WSR03	20210713 Su	ınny	Moderate	Mid-Ebb	Middle	3.70	2:14:00 PM	8.43	8.22	30.79	30.37	2.34	2.50
WSR03	20210713 Su	inny	Moderate	Mid-Ebb	Bottom	6.40	2:13:00 PM	8.67	8.13	30.64	30.47	1.90	8.10
WSR03	20210713 Su	inny	Moderate	Mid-Ebb	Bottom	6.40	2:13:00 PM	8.36	8.28	30.79	30.59	2.15	9.10
WSR03	20210715 Su	inny	Moderate	Mid-Ebb	Surface	1.00	3:43:00 PM	7.77	8.32	31.05	30.27	2.64	5.90
WSR03	20210715 Su	inny	Moderate	Mid-Ebb	Surface	1.00	3:43:00 PM	8.06	8.35	30.38	30.34	2.84	8.00
WSR03	20210715 Su	inny	Moderate	Mid-Ebb	Middle	4.05	3:42:00 PM	8.92	8.41	30.44	30.38	2.57	10.70

Location	Date (YYYYMMDD) W	eather/	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210715 Sur	nny	Moderate	Mid-Ebb	Middle	4.05	3:42:00 PM	8.73	8.24	30.96	30.22	2.73	10.70
WSR03	20210715 Sur	nny	Moderate	Mid-Ebb	Bottom	7.10	3:41:00 PM	8.17	8.22	31.11	30.19	2.17	15.80
WSR03	20210715 Sur	nny	Moderate	Mid-Ebb	Bottom	7.10	3:41:00 PM	8.40	8.26	30.59	30.29	1.93	15.80
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:17:00 PM	8.86	8.20	30.64	28.10	3.09	9.20
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	5:17:00 PM	8.77	8.30	30.64	28.24	2.59	9.20
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Middle	3.70	5:16:00 PM	9.25	8.17	30.80	28.28	2.49	7.00
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Middle	3.70	5:16:00 PM	8.93	8.17	31.17	28.33	2.44	7.00
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.40	5:15:00 PM	8.80	8.36	31.17	28.12	2.48	7.90
WSR03	20210717 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.40	5:15:00 PM	8.84	8.29	30.86	28.34	2.40	5.90
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	10:48:00 AM	8.12	8.15	30.03	29.29	1.91	3.90
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	10:48:00 AM	8.16	7.93	30.71	29.20	2.00	3.90
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	3.90	10:47:00 AM	7.08	8.14	30.67	29.42	1.52	2.50
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	3.90	10:47:00 AM	7.97	8.13	30.15	29.36	1.38	2.50
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	6.80	10:46:00 AM	7.62	8.10	30.07	29.23	1.43	2.50
WSR03	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	6.80	10:46:00 AM	8.29	8.14	30.26	29.39	1.26	3.20
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	12:17:00 PM	7.28	8.09	29.57	29.36	3.21	2.50
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	12:17:00 PM	7.69	8.31	29.56	29.33	2.94	2.50
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	3.80	12:16:00 PM	8.16	8.24	29.65	29.52	2.98	2.50
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	3.80	12:16:00 PM	8.28	8.28	29.61	29.40	2.64	2.50
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.60	12:15:00 PM	7.34	8.15	29.68	29.48	3.00	2.50
WSR03	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.60	12:15:00 PM	7.50	8.10	29.72	29.44	2.66	2.50
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	2:30:00 PM	8.38	8.11	30.63	29.62	3.05	2.50
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	2:30:00 PM	7.58	8.06	30.28	29.59	2.87	2.50
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	3.70	2:29:00 PM	8.07	8.16	30.51	29.68	2.79	7.10
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	3.70	2:29:00 PM	8.46	7.94	30.07	29.60	2.36	8.90
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	6.40	2:28:00 PM	8.05	8.15	30.07	29.58	2.63	2.90
WSR03	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	6.40	2:28:00 PM	7.47	7.92	30.42	29.66	2.22	3.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:57:00 PM	8.51	7.95	29.72	28.50	3.43	2.90
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:57:00 PM	9.11	8.11	29.54	28.37	3.77	2.50
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Middle	3.70	3:56:00 PM	8.82	8.23	29.73	28.49	3.08	4.70
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Middle	3.70	3:56:00 PM	8.57	8.26	29.76	28.45	3.14	5.90
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Bottom	6.40	3:55:00 PM	9.19	8.29	29.87	28.48	2.61	3.10
WSR03	20210729	Cloudy	Moderate	Mid-Ebb	Bottom	6.40	3:55:00 PM	9.14	8.19	29.70	28.43	3.09	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:04:00 PM	8.62	7.87	31.20	28.90	2.68	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:04:00 PM	8.58	7.85	31.17	28.85	2.62	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Middle	3.75	5:03:00 PM	8.88	8.03	31.17	28.91	2.90	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Middle	3.75	5:03:00 PM	8.82	7.94	30.86	28.83	3.14	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	6.50	5:02:00 PM	8.28	7.89	30.68	28.89	2.66	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	6.50	5:02:00 PM	8.57	8.02	31.00	28.80	2.40	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:05:00 PM	10.24	8.45	31.29	30.41	3.19	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	5:05:00 PM	9.68	8.30	30.94	30.39	2.95	3.20
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.65	5:04:00 PM	9.69	8.25	31.82	30.28	2.45	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.65	5:04:00 PM	9.50	8.39	31.14	30.43	2.72	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.30	5:03:00 PM	9.97	8.25	31.73	30.34	2.47	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.30	5:03:00 PM	10.22	8.34	31.62	30.27	2.20	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:07:00 AM	9.19	8.47	30.93	29.36	2.82	4.40
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:07:00 AM	8.82	8.27	31.13	29.54	2.77	4.90
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.60	9:06:00 AM	9.14	8.45	30.68	29.43	2.76	7.80
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.60	9:06:00 AM	9.68	8.34	30.70	29.54	2.55	7.70
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.20	9:05:00 AM	9.92	8.48	30.93	29.45	2.11	9.20
WSR04	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.20	9:05:00 AM	9.89	8.31	30.37	29.62	2.19	9.50
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:14:00 AM	9.23	8.36	31.15	29.62	2.96	19.50
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	10:14:00 AM	9.90	8.44	31.03	29.51	3.03	20.10
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.90	10:13:00 AM	8.97	8.39	30.77	29.60	2.55	24.40

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.90	10:13:00 AM	9.97	8.32	30.97	29.53	2.64	24.40
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	6.80	10:12:00 AM	10.20	8.49	31.26	29.67	2.32	20.20
WSR04	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	6.80	10:12:00 AM	10.27	8.44	31.05	29.58	2.10	19.10
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:05:00 AM	9.23	8.27	31.41	30.17	2.52	2.90
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:05:00 AM	8.75	8.16	31.27	30.24	2.45	2.50
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Middle	3.50	11:04:00 AM	8.72	8.22	31.52	30.35	1.93	2.50
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Middle	3.50	11:04:00 AM	8.43	8.18	31.11	30.16	2.26	2.50
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Bottom	6.00	11:03:00 AM	8.09	8.17	30.78	30.32	2.02	5.40
WSR04	20210708	Sunny	Moderate	Mid-Ebb	Bottom	6.00	11:03:00 AM	8.98	8.29	30.97	30.24	1.76	5.40
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:04:00 PM	9.08	8.21	29.99	30.42	2.49	7.30
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	12:04:00 PM	8.21	8.36	29.90	30.44	2.55	7.30
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Middle	3.75	12:03:00 PM	8.28	8.24	29.88	30.37	2.37	2.50
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Middle	3.75	12:03:00 PM	9.00	8.21	29.39	30.47	2.61	2.60
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Bottom	6.50	12:02:00 PM	7.89	8.31	29.88	30.47	2.12	7.10
WSR04	20210710	Sunny	Moderate	Mid-Ebb	Bottom	6.50	12:02:00 PM	7.72	8.32	29.41	30.36	2.39	7.10
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:03:00 PM	8.45	8.27	31.25	30.63	2.48	8.30
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:03:00 PM	8.35	8.15	31.00	30.42	2.28	8.40
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Middle	3.90	2:02:00 PM	7.90	8.15	30.94	30.65	2.61	9.20
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Middle	3.90	2:02:00 PM	8.40	8.35	30.74	30.67	2.37	9.70
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Bottom	6.80	2:01:00 PM	8.24	8.29	31.15	30.65	1.84	8.90
WSR04	20210713	Sunny	Moderate	Mid-Ebb	Bottom	6.80	2:01:00 PM	8.58	8.24	30.77	30.41	1.62	9.90
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Surface	1.00	3:30:00 PM	8.61	8.26	30.72	30.38	2.93	11.20
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Surface	1.00	3:30:00 PM	9.16	8.40	31.03	30.42	2.88	11.20
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Middle	3.40	3:29:00 PM	9.17	8.26	31.00	30.47	2.41	9.90
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Middle	3.40	3:29:00 PM	8.50	8.24	30.24	30.49	2.79	9.90
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Bottom	5.80	3:28:00 PM	7.95	8.42	30.42	30.47	2.28	3.90
WSR04	20210715	Sunny	Moderate	Mid-Ebb	Bottom	5.80	3:28:00 PM	8.46	8.20	30.79	30.43	2.70	5.90

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	5:05:00 PM	9.25	8.29	31.11	28.13	2.54	7.40
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	5:05:00 PM	8.64	8.27	31.01	28.23	2.36	7.40
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Middle	3.75	5:04:00 PM	9.48	8.30	30.90	28.21	2.64	4.10
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Middle	3.75	5:04:00 PM	9.60	8.18	31.25	28.24	2.42	3.50
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Bottom	6.50	5:03:00 PM	8.67	8.30	31.17	28.19	2.21	2.50
WSR04	20210717 Cl	loudy	Moderate	Mid-Ebb	Bottom	6.50	5:03:00 PM	8.28	8.26	31.01	28.31	1.89	3.20
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Surface	1.00	10:33:00 AM	7.25	8.10	30.49	29.26	1.32	6.40
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Surface	1.00	10:33:00 AM	7.66	8.17	29.98	29.30	1.53	6.40
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Middle	3.45	10:32:00 AM	8.20	8.01	29.75	29.13	1.26	2.50
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Middle	3.45	10:32:00 AM	7.62	7.92	30.33	29.15	1.19	2.50
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Bottom	5.90	10:31:00 AM	7.36	7.95	30.75	29.21	1.65	2.50
WSR04	20210722 Su	unny	Moderate	Mid-Ebb	Bottom	5.90	10:31:00 AM	7.92	7.88	29.63	29.28	1.58	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	12:06:00 PM	7.54	8.25	29.66	29.38	2.68	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	12:06:00 PM	7.48	8.17	29.70	29.17	3.19	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Middle	3.35	12:05:00 PM	7.43	8.08	29.69	29.34	2.55	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Middle	3.35	12:05:00 PM	7.53	8.26	29.75	29.29	2.74	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Bottom	5.70	12:04:00 PM	7.66	7.96	29.55	29.36	3.07	2.50
WSR04	20210724 Cl	loudy	Moderate	Mid-Ebb	Bottom	5.70	12:04:00 PM	8.00	8.20	29.61	29.21	2.56	2.50
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Surface	1.00	2:19:00 PM	7.75	8.23	30.51	29.55	2.52	7.00
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Surface	1.00	2:19:00 PM	7.38	8.23	30.43	29.60	2.39	7.00
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Middle	3.50	2:18:00 PM	8.23	8.23	30.12	29.59	2.63	2.50
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Middle	3.50	2:18:00 PM	7.56	8.16	30.60	29.65	2.38	3.50
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Bottom	6.00	2:17:00 PM	7.89	8.20	30.55	29.58	2.14	7.60
WSR04	20210727 Su	unny	Moderate	Mid-Ebb	Bottom	6.00	2:17:00 PM	7.58	8.08	30.30	29.79	1.81	7.60
WSR04	20210729 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	3:45:00 PM	8.85	8.27	29.80	28.39	3.04	6.20
WSR04	20210729 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	3:45:00 PM	8.63	8.15	29.89	28.53	3.43	5.80
WSR04	20210729 Cl	loudy	Moderate	Mid-Ebb	Middle	3.35	3:44:00 PM	8.89	8.08	29.81	28.51	2.79	2.60

WSR04 20210729 Cloudy Moderate Mid-Ebb Middle 3.35 3:44:00 PM 8.63 8.11 29.87 28.40 3. WSR04 20210729 Cloudy Moderate Mid-Ebb Bottom 5.70 3:43:00 PM 8.69 8.13 29.68 28.51 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.41 8.36 29.81 28.56 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.70 7.91 31.03 28.99 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.70 7.91 30.97 28.85 3. WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.59 7.96 30.81 28.88 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00	9 3.10 4 2.50 8 7.30 2 6.90 7 2.50 9 2.80 3 4.20
WSR04 20210729 Cloudy Moderate Mid-Ebb Bottom 5.70 3:43:00 PM 8.41 8.36 29.81 28.56 2.8 WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.42 7.91 31.03 28.99 2.0 WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.70 7.91 30.97 28.85 3.3 WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.74 8.08 31.10 28.92 3.3 WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.59 7.96 30.81 28.88 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.82 8.08 31.02 28.84 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55	4 2.50 8 7.30 2 6.90 7 2.50 9 2.80 3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.42 7.91 31.03 28.99 2.0 WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.70 7.91 30.97 28.85 3. WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.74 8.08 31.10 28.92 3. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.59 7.96 30.81 28.88 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.69 7.98 30.92 28.95 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:	8 7.30 2 6.90 7 2.50 9 2.80 3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:51:00 PM 8.70 7.91 30.97 28.85 3. WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.74 8.08 31.10 28.92 3. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.59 7.96 30.81 28.88 2. WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.69 7.98 30.92 28.84 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 9.80 8.32 31.05 30.59 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:0	2 6.90 7 2.50 9 2.80 3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.74 8.08 31.10 28.92 3.35 WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.59 7.96 30.81 28.88 2.2 WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.82 8.08 31.02 28.84 2.2 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2.2 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 9.80 8.32 31.05 30.59 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.87 8.45 31.83 30.57 2. WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3	7 2.50 9 2.80 3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Middle 3.35 4:50:00 PM 8.59 7.96 30.81 28.88 2.0 WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.82 8.08 31.02 28.84 2.0 WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.69 7.98 30.92 28.95 2.0 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2.0 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.87 8.45 31.83 30.57 2.0 WSR16 20210701 Cloudy Moderate Mid-Ebb Midle 7.70 3:54:00 PM 10.16 8.40 31.91 30.55 2.0 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3	9 2.80 3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.82 8.08 31.02 28.84 2.02 WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.69 7.98 30.92 28.95 2.02 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2.02 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.80 8.32 31.05 30.59 2.02 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.87 8.45 31.83 30.57 2.02 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.40 31.91 30.62 2.02 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40	3 4.20
WSR04 20210731 Cloudy Moderate Mid-Ebb Bottom 5.70 4:49:00 PM 8.69 7.98 30.92 28.95 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 10.11 8.24 31.92 30.54 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.80 8.32 31.05 30.59 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.87 8.45 31.83 30.57 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.40 31.91 30.62 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.34 31.39 30.67 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00	
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WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 3:55:00 PM 9.80 8.32 31.05 30.59 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 9.87 8.45 31.83 30.57 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.40 31.91 30.55 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.34 31.39 30.67 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.52 8.22 31.67 29.37 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.00	
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WSR16 20210701 Cloudy Moderate Mid-Ebb Middle 7.70 3:54:00 PM 10.16 8.40 31.91 30.55 2.70 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.24 8.31 31.97 30.62 2.70 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.34 31.39 30.67 2.70 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.52 8.22 31.67 29.37 2.70 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.70	9 2.50
WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.24 8.31 31.97 30.62 2.00 WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.34 31.39 30.67 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.52 8.22 31.67 29.37 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.00	0 2.50
WSR16 20210701 Cloudy Moderate Mid-Ebb Bottom 14.40 3:53:00 PM 10.16 8.34 31.39 30.67 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.52 8.22 31.67 29.37 2.00 WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.00	7 2.50
WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.52 8.22 31.67 29.37 2. WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.	4 4.60
WSR16 20210703 Cloudy Moderate Mid-Ebb Surface 1.00 8:20:00 AM 9.98 8.24 30.94 29.25 2.	7 4.60
·	4 6.10
WSR16 20210703 Cloudy Moderate Mid-Ebb Middle 7.55 8:19:00 AM 8.73 8.49 30.81 29.38 2.	5 6.80
	9 5.10
WSR16 20210703 Cloudy Moderate Mid-Ebb Middle 7.55 8:19:00 AM 8.99 8.46 30.63 29.25 2.	6 7.60
WSR16 20210703 Cloudy Moderate Mid-Ebb Bottom 14.10 8:18:00 AM 8.92 8.46 31.16 29.39 2.	8 5.60
WSR16 20210703 Cloudy Moderate Mid-Ebb Bottom 14.10 8:18:00 AM 8.70 8.33 30.63 29.33 2.	5 8.00
WSR16 20210706 Cloudy Moderate Mid-Ebb Surface 1.00 9:05:00 AM 9.17 8.47 31.25 29.35 2.	9 22.00
WSR16 20210706 Cloudy Moderate Mid-Ebb Surface 1.00 9:05:00 AM 10.02 8.41 30.91 29.43 3.	4 22.00
WSR16 20210706 Cloudy Moderate Mid-Ebb Middle 7.95 9:04:00 AM 9.61 8.37 30.63 29.26 2.	8 21.60
WSR16 20210706 Cloudy Moderate Mid-Ebb Middle 7.95 9:04:00 AM 9.88 8.40 30.58 29.36 2.	5 21.60
WSR16 20210706 Cloudy Moderate Mid-Ebb Bottom 14.90 9:03:00 AM 9.19 8.33 31.02 29.39 2.	2 19.80
WSR16 20210706 Cloudy Moderate Mid-Ebb Bottom 14.90 9:03:00 AM 8.98 8.39 30.68 29.43 2.	5 18.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:04:00 AM	8.51	8.40	30.95	30.09	2.50	2.50
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:04:00 AM	9.00	8.16	30.78	30.15	2.24	2.50
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Middle	7.75	10:03:00 AM	8.17	8.24	30.93	30.10	2.14	2.50
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Middle	7.75	10:03:00 AM	9.14	8.23	31.21	30.13	2.49	3.90
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Bottom	14.50	10:02:00 AM	8.84	8.33	31.38	30.16	1.69	2.50
WSR16	20210708	Sunny	Moderate	Mid-Ebb	Bottom	14.50	10:02:00 AM	9.13	8.22	31.12	30.11	1.58	2.50
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:07:00 AM	9.02	8.25	30.11	30.15	2.33	2.50
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:07:00 AM	8.74	8.34	29.51	30.11	2.44	2.50
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Middle	8.35	11:06:00 AM	7.80	8.39	29.53	30.25	2.18	2.70
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Middle	8.35	11:06:00 AM	8.42	8.29	29.93	30.13	2.06	4.40
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Bottom	15.70	11:05:00 AM	8.75	8.30	29.90	30.15	2.11	3.90
WSR16	20210710	Sunny	Moderate	Mid-Ebb	Bottom	15.70	11:05:00 AM	7.96	8.30	29.67	30.12	2.19	2.50
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:04:00 PM	7.83	8.25	30.90	30.38	2.22	10.30
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:04:00 PM	8.23	8.15	30.83	30.41	2.60	10.00
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Middle	8.20	1:03:00 PM	7.90	8.22	31.15	30.54	2.34	8.40
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Middle	8.20	1:03:00 PM	8.07	8.23	30.94	30.39	2.04	12.70
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Bottom	15.40	1:02:00 PM	7.71	8.18	31.01	30.33	2.06	10.80
WSR16	20210713	Sunny	Moderate	Mid-Ebb	Bottom	15.40	1:02:00 PM	7.93	8.25	31.06	30.28	2.31	8.90
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:22:00 PM	7.73	8.20	30.91	30.58	3.05	3.70
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:22:00 PM	8.69	8.31	30.85	30.67	3.21	2.70
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Middle	8.15	2:21:00 PM	8.90	8.24	30.66	30.64	2.42	9.60
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Middle	8.15	2:21:00 PM	9.04	8.23	30.68	30.47	2.64	9.60
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Bottom	15.30	2:20:00 PM	8.90	8.27	30.92	30.58	2.68	7.40
WSR16	20210715	Sunny	Moderate	Mid-Ebb	Bottom	15.30	2:20:00 PM	8.66	8.30	30.49	30.67	2.61	8.40
WSR16	20210717	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:53:00 PM	9.00	8.22	30.84	28.60	2.47	3.50
WSR16	20210717	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:53:00 PM	8.27	8.35	30.97	28.62	2.42	2.50
WSR16	20210717	Cloudy	Moderate	Mid-Ebb	Middle	8.40	3:52:00 PM	8.59	8.27	31.18	28.47	2.45	2.50

Location	Date (YYYYMMDD) W	eather/	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR16	20210717 Clo	oudy	Moderate	Mid-Ebb	Middle	8.40	3:52:00 PM	8.44	8.32	30.58	28.52	2.84	2.50
WSR16	20210717 Clo	oudy	Moderate	Mid-Ebb	Bottom	15.80	3:51:00 PM	8.21	8.35	31.03	28.43	2.34	4.30
WSR16	20210717 Clo	oudy	Moderate	Mid-Ebb	Bottom	15.80	3:51:00 PM	9.36	8.28	30.81	28.46	2.49	2.90
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	9:24:00 AM	7.12	8.15	30.11	29.09	3.58	2.50
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	9:24:00 AM	7.17	7.99	29.96	29.02	3.32	2.50
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	7.80	9:23:00 AM	8.25	7.95	30.76	28.97	3.66	7.60
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	7.80	9:23:00 AM	7.48	8.08	29.81	29.01	3.51	7.60
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	14.60	9:22:00 AM	7.34	8.20	30.65	28.98	3.41	2.50
WSR16	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	14.60	9:22:00 AM	8.14	8.07	30.00	29.08	3.25	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	11:03:00 AM	8.26	8.01	29.74	29.02	3.13	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	11:03:00 AM	7.66	8.19	29.76	28.99	3.37	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	7.70	11:02:00 AM	8.20	8.17	29.61	28.97	2.30	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	7.70	11:02:00 AM	7.30	8.30	29.58	29.10	2.41	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	14.40	11:01:00 AM	8.03	8.21	29.56	28.99	2.42	2.50
WSR16	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	14.40	11:01:00 AM	8.33	8.03	29.57	28.98	2.14	2.50
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	1:17:00 PM	8.78	8.18	30.87	29.73	2.79	7.40
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	1:17:00 PM	8.70	8.23	30.53	29.79	2.65	7.40
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	7.55	1:16:00 PM	8.55	8.28	30.47	29.81	2.68	3.10
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	7.55	1:16:00 PM	8.19	8.08	30.87	29.85	2.34	4.80
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	14.10	1:15:00 PM	8.63	8.11	30.85	29.74	2.85	3.30
WSR16	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	14.10	1:15:00 PM	8.68	8.15	30.44	29.84	2.89	3.40
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	2:40:00 PM	8.18	8.05	30.18	28.79	3.64	8.00
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	2:40:00 PM	8.38	8.11	30.14	28.74	3.14	7.80
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	8.00	2:39:00 PM	7.93	8.06	29.81	28.78	3.53	2.50
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	8.00	2:39:00 PM	8.51	8.29	30.04	28.72	3.09	2.50
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	15.00	2:38:00 PM	8.49	7.94	29.79	28.84	2.76	2.50
WSR16	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	15.00	2:38:00 PM	8.57	8.11	29.92	28.90	3.11	4.10

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:52:00 PM	7.84	8.30	30.59	29.11	3.00	3.30
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:52:00 PM	8.00	8.12	30.91	29.22	3.28	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Middle	8.15	3:51:00 PM	8.40	8.20	30.38	29.15	3.15	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Middle	8.15	3:51:00 PM	8.35	8.13	30.75	29.12	3.21	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	15.30	3:50:00 PM	8.11	8.15	31.08	29.13	2.56	5.90
WSR16	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	15.30	3:50:00 PM	7.73	8.11	30.90	29.24	2.45	5.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:50:00 PM	9.82	8.49	31.36	30.31	2.45	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:50:00 PM	9.93	8.26	31.14	30.46	2.54	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.55	4:49:00 PM	9.90	8.49	31.49	30.42	2.42	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.55	4:49:00 PM	9.44	8.41	31.88	30.44	2.82	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.10	4:48:00 PM	10.00	8.37	31.85	30.39	2.61	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.10	4:48:00 PM	9.27	8.39	31.38	30.48	2.72	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:58:00 AM	8.80	8.23	30.76	29.48	2.86	8.30
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:58:00 AM	9.27	8.46	30.72	29.34	2.52	8.10
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.75	8:57:00 AM	8.82	8.30	30.93	29.58	2.26	9.10
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.75	8:57:00 AM	9.79	8.50	30.81	29.49	2.11	8.00
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.50	8:56:00 AM	8.61	8.34	31.18	29.49	2.16	9.10
WSR33	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.50	8:56:00 AM	9.03	8.25	31.06	29.38	2.06	9.90
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:57:00 AM	10.19	8.40	30.61	29.64	2.72	20.40
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:57:00 AM	10.08	8.31	30.77	29.65	2.83	21.10
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.80	9:56:00 AM	9.04	8.34	30.74	29.66	2.31	25.60
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.80	9:56:00 AM	9.00	8.34	30.99	29.53	2.45	25.60
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	6.60	9:55:00 AM	9.82	8.43	30.69	29.64	2.41	20.00
WSR33	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	6.60	9:55:00 AM	9.19	8.35	30.61	29.67	2.11	19.40
WSR33	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:51:00 AM	9.06	8.38	30.84	30.19	2.55	2.50
WSR33	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:51:00 AM	8.10	8.26	31.05	30.20	2.66	2.50
WSR33	20210708	Sunny	Moderate	Mid-Ebb	Middle	3.75	10:50:00 AM	8.33	8.17	30.84	30.34	2.10	2.50

Location	Date (YYYYMMDD)	ather Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33	20210708 Sunr	ny Moderate	Mid-Ebb	Middle	3.75	10:50:00 AM	8.58	8.32	31.38	30.26	2.00	2.50
WSR33	20210708 Sunr	ny Moderate	Mid-Ebb	Bottom	6.50	10:49:00 AM	8.92	8.16	30.77	30.25	2.22	2.50
WSR33	20210708 Sunr	ny Moderate	Mid-Ebb	Bottom	6.50	10:49:00 AM	9.36	8.22	31.55	30.20	2.37	2.50
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	11:51:00 AM	8.78	8.24	29.40	30.32	2.62	5.20
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	11:51:00 AM	8.87	8.31	29.74	30.29	3.09	3.30
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Middle	3.75	11:50:00 AM	9.07	8.39	30.00	30.30	2.43	2.50
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Middle	3.75	11:50:00 AM	7.86	8.21	29.88	30.46	2.19	2.50
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Bottom	6.50	11:49:00 AM	8.42	8.33	29.55	30.30	2.02	2.50
WSR33	20210710 Sunr	ny Moderate	Mid-Ebb	Bottom	6.50	11:49:00 AM	8.08	8.32	30.01	30.34	2.01	2.50
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	1:49:00 PM	8.28	8.18	30.78	30.44	2.83	2.50
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	1:49:00 PM	8.20	8.30	31.25	30.63	2.59	2.50
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Middle	3.80	1:48:00 PM	8.55	8.22	30.78	30.59	2.02	5.60
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Middle	3.80	1:48:00 PM	8.56	8.14	31.07	30.59	2.25	5.60
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Bottom	6.60	1:47:00 PM	7.95	8.21	31.22	30.50	1.69	4.10
WSR33	20210713 Sunr	ny Moderate	Mid-Ebb	Bottom	6.60	1:47:00 PM	8.28	8.36	30.74	30.51	1.58	4.80
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	3:13:00 PM	7.91	8.42	30.37	30.39	2.98	9.30
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Surface	1.00	3:13:00 PM	8.05	8.32	30.38	30.48	2.65	9.30
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Middle	3.80	3:12:00 PM	8.86	8.45	31.14	30.48	2.15	4.30
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Middle	3.80	3:12:00 PM	8.64	8.32	31.06	30.39	2.44	5.40
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Bottom	6.60	3:11:00 PM	8.51	8.37	30.62	30.34	2.21	12.00
WSR33	20210715 Sunr	ny Moderate	Mid-Ebb	Bottom	6.60	3:11:00 PM	7.89	8.32	31.12	30.48	2.53	12.00
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Surface	1.00	4:51:00 PM	8.63	8.23	31.01	28.46	2.92	2.50
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Surface	1.00	4:51:00 PM	8.85	8.23	30.94	28.28	2.92	3.40
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Middle	3.60	4:50:00 PM	8.76	8.31	30.80	28.53	2.65	3.80
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Middle	3.60	4:50:00 PM	8.89	8.30	30.91	28.32	2.39	3.80
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Bottom	6.20	4:49:00 PM	8.37	8.31	31.19	28.41	2.57	6.30
WSR33	20210717 Clou	dy Moderate	Mid-Ebb	Bottom	6.20	4:49:00 PM	9.43	8.33	31.17	28.24	2.54	6.30

WSR33 20210722 Sunny Moderate Mid-Ebb Surface 1.00 10:18:00 AM 8.21 7.98 29.92 29.15 1.36 6.50 WSR33 20210722 Sunny Moderate Mid-Ebb Surface 1.00 10:18:00 AM 8.09 8.03 29.82 29.29 1.51 6.50 WSR33 20210722 Sunny Moderate Mid-Ebb Middle 3.65 10:17:00 AM 7.46 7.91 30.46 29.25 1.65 2.60 WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.70 7.89 29.63 29.24 1.28 11.10 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.96 8.06 30.65 29.10 1.33 10:70 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.34 8.00 29.66 29.08 2.75 2.50 WSR33	Location	Date (YYYYMMDD) W	Veather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33 20210722 Sunny Moderate Mid-Ebb Middle Mid-Ebb 3.65 10:17:00 AM 8.18 8.16 29.70 29.24 1.72 2.50 WSR33 20210722 Sunny Moderate Mid-Ebb Middle Bottom 6.30 10:16:00 AM 7.46 7.91 30.46 29.25 1.65 2.60 WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.70 7.89 29.63 29.21 1.28 11.10 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 8.00 7.96 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.34 8.00 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb <td>WSR33</td> <td>20210722 Sur</td> <td>nny</td> <td>Moderate</td> <td>Mid-Ebb</td> <td>Surface</td> <td>1.00</td> <td>10:18:00 AM</td> <td>8.21</td> <td>7.98</td> <td>29.92</td> <td>29.15</td> <td>1.36</td> <td>6.50</td>	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	10:18:00 AM	8.21	7.98	29.92	29.15	1.36	6.50
WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:17:00 AM 7.46 7.91 30.46 29.25 1.65 2.60 WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.70 7.89 29.63 29.24 1.28 11.10 WSR33 20210722 Sunny Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.96 8.06 30.65 29.10 1.34 10.70 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.34 8.00 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.80 8.08 29.73 29.14 2.90 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.50 8.29 29.62 29.16 2.84 2.50 WSR33	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	10:18:00 AM	8.09	8.03	29.82	29.29	1.51	6.50
WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.70 7.89 29.63 29.24 1.28 11.10 WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.96 8.06 30.65 29.10 1.34 10.70 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 8.00 7.96 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.90 2.966 29.08 2.75 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Midelb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.18 29.65 2.91 2.46 2.50	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	3.65	10:17:00 AM	8.18	8.16	29.70	29.24	1.72	2.50
WSR33 20210722 Sunny Moderate Mid-Ebb Bottom 6.30 10:16:00 AM 7.96 8.06 30.65 29.10 1.34 10.70 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 8.00 7.96 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Mid-Ebb Middle 3.50 11:50:00 AM 8.01 8.27 29.64 29.22 2.52 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Midle 3.50 11:50:00 AM 8.01 8.27 29.64 29.22 2.52 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.61 2.91 2.84 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Middle	3.65	10:17:00 AM	7.46	7.91	30.46	29.25	1.65	2.60
WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 8.00 7.96 29.60 29.13 3.03 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.34 8.00 29.66 29.08 2.75 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.80 8.08 29.73 29.14 2.90 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.80 8.08 29.73 29.14 2.90 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.65 7.97 29.61 29.17 2.46 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	6.30	10:16:00 AM	7.70	7.89	29.63	29.24	1.28	11.10
WSR33 20210724 Cloudy Moderate Mid-Ebb Surface 1.00 11:51:00 AM 7.34 8.00 29.66 29.08 2.75 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 8.01 8.27 29.64 29.22 2.52 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.65 7.97 29.61 29.17 2.46 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.18 29.65 2.93 9.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33	WSR33	20210722 Sur	nny	Moderate	Mid-Ebb	Bottom	6.30	10:16:00 AM	7.96	8.06	30.65	29.10	1.34	10.70
WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 8.01 8.27 29.64 29.22 2.52 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.80 8.08 29.73 29.14 2.90 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 8.37 8.19 30.18 29.65 2.39 9.50 WSR33 20210727 Sunny Moderate Mid-Ebb Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	11:51:00 AM	8.00	7.96	29.60	29.13	3.03	2.50
WSR33 20210724 Cloudy Moderate Mid-Ebb Middle 3.50 11:50:00 AM 7.80 8.08 29.73 29.14 2.90 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 8.37 8.19 30.18 29.65 2.39 9.50 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.36 8.21 30.55 29.63 1.93 3.30 WSR33	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	11:51:00 AM	7.34	8.00	29.66	29.08	2.75	2.50
WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.59 8.29 29.62 29.16 2.84 2.50 WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.65 7.97 29.61 29.17 2.46 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 8.16 8.21 30.55 29.63 1.93 3.30 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.37 8.09 30.27 29.73 1.99 8.60 WSR33 <	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	3.50	11:50:00 AM	8.01	8.27	29.64	29.22	2.52	2.50
WSR33 20210724 Cloudy Moderate Mid-Ebb Bottom 6.00 11:49:00 AM 7.65 7.97 29.61 29.17 2.46 2.50 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 8.37 8.19 30.18 29.65 2.39 9.50 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.16 8.21 30.55 29.63 1.93 3.30 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 <t< td=""><td>WSR33</td><td>20210724 Clo</td><td>oudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Middle</td><td>3.50</td><td>11:50:00 AM</td><td>7.80</td><td>8.08</td><td>29.73</td><td>29.14</td><td>2.90</td><td>2.50</td></t<>	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Middle	3.50	11:50:00 AM	7.80	8.08	29.73	29.14	2.90	2.50
WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 7.45 8.11 30.17 29.58 2.01 9.20 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.37 8.09 30.27 29.73 1.99 8.60 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 <td< td=""><td>WSR33</td><td>20210724 Clo</td><td>oudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Bottom</td><td>6.00</td><td>11:49:00 AM</td><td>7.59</td><td>8.29</td><td>29.62</td><td>29.16</td><td>2.84</td><td>2.50</td></td<>	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.00	11:49:00 AM	7.59	8.29	29.62	29.16	2.84	2.50
WSR33 20210727 Sunny Moderate Mid-Ebb Surface 1.00 2:06:00 PM 8.37 8.19 30.18 29.65 2.39 9.50 WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.16 8.21 30.55 29.63 1.93 3.30 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.37 8.09 30.27 29.73 1.99 8.60 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.32 8.12 29.76 28.65 3.17 2.50 WSR33 <td< td=""><td>WSR33</td><td>20210724 Clo</td><td>oudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Bottom</td><td>6.00</td><td>11:49:00 AM</td><td>7.65</td><td>7.97</td><td>29.61</td><td>29.17</td><td>2.46</td><td>2.50</td></td<>	WSR33	20210724 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.00	11:49:00 AM	7.65	7.97	29.61	29.17	2.46	2.50
WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 7.57 8.29 30.49 29.66 2.23 4.00 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.16 8.21 30.55 29.63 1.93 3.30 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.84 8.12 29.76 28.65 3.17 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Midle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 <t< td=""><td>WSR33</td><td>20210727 Sur</td><td>nny</td><td>Moderate</td><td>Mid-Ebb</td><td>Surface</td><td>1.00</td><td>2:06:00 PM</td><td>7.45</td><td>8.11</td><td>30.17</td><td>29.58</td><td>2.01</td><td>9.20</td></t<>	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	2:06:00 PM	7.45	8.11	30.17	29.58	2.01	9.20
WSR33 20210727 Sunny Moderate Mid-Ebb Middle 3.65 2:05:00 PM 8.16 8.21 30.55 29.63 1.93 3.30 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.37 8.09 30.27 29.73 1.99 8.60 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Surface	1.00	2:06:00 PM	8.37	8.19	30.18	29.65	2.39	9.50
WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.37 8.09 30.27 29.73 1.99 8.60 WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.98 7.99 29.72 28.49 3.05 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 <	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	3.65	2:05:00 PM	7.57	8.29	30.49	29.66	2.23	4.00
WSR33 20210727 Sunny Moderate Mid-Ebb Bottom 6.30 2:04:00 PM 8.56 8.22 30.56 29.64 1.76 7.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.98 7.99 29.72 28.49 3.05 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Middle	3.65	2:05:00 PM	8.16	8.21	30.55	29.63	1.93	3.30
WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.43 8.07 30.07 28.44 3.11 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.32 8.12 29.76 28.65 3.17 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	6.30	2:04:00 PM	8.37	8.09	30.27	29.73	1.99	8.60
WSR33 20210729 Cloudy Moderate Mid-Ebb Surface 1.00 3:30:00 PM 8.32 8.12 29.76 28.65 3.17 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210727 Sur	nny	Moderate	Mid-Ebb	Bottom	6.30	2:04:00 PM	8.56	8.22	30.56	29.64	1.76	7.60
WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.84 8.11 30.05 28.45 2.84 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.98 7.99 29.72 28.49 3.05 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	3:30:00 PM	8.43	8.07	30.07	28.44	3.11	2.50
WSR33 20210729 Cloudy Moderate Mid-Ebb Middle 3.80 3:29:00 PM 8.98 7.99 29.72 28.49 3.05 2.50 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	3:30:00 PM	8.32	8.12	29.76	28.65	3.17	2.50
WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 8.61 7.97 30.02 28.44 2.82 3.60 WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	3.80	3:29:00 PM	8.84	8.11	30.05	28.45	2.84	2.50
WSR33 20210729 Cloudy Moderate Mid-Ebb Bottom 6.60 3:28:00 PM 9.01 8.23 30.07 28.62 3.21 2.50 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Middle	3.80	3:29:00 PM	8.98	7.99	29.72	28.49	3.05	2.50
WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.56 8.25 30.57 28.99 3.07 9.20 WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.60	3:28:00 PM	8.61	7.97	30.02	28.44	2.82	3.60
WSR33 20210731 Cloudy Moderate Mid-Ebb Surface 1.00 4:38:00 PM 8.76 8.04 31.11 28.90 3.34 9.00	WSR33	20210729 Clo	oudy	Moderate	Mid-Ebb	Bottom	6.60	3:28:00 PM	9.01	8.23	30.07	28.62	3.21	2.50
·	WSR33	20210731 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	4:38:00 PM	8.56	8.25	30.57	28.99	3.07	9.20
WSR33 20210731 Cloudy Moderate Mid-Ebb Middle 3.85 4:37:00 PM 8.48 8.15 31.00 28.84 2.41 8.80	WSR33	20210731 Clo	oudy	Moderate	Mid-Ebb	Surface	1.00	4:38:00 PM	8.76	8.04	31.11	28.90	3.34	9.00
	WSR33	20210731 Clo	oudy	Moderate	Mid-Ebb	Middle	3.85	4:37:00 PM	8.48	8.15	31.00	28.84	2.41	8.80

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33	20210731	Cloudy	Moderate	Mid-Ebb	Middle	3.85	4:37:00 PM	8.17	8.12	30.79	28.92	2.59	6.70
WSR33	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:36:00 PM	8.14	8.18	30.52	28.99	2.33	8.60
WSR33	20210731	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:36:00 PM	8.14	8.15	30.67	28.98	2.31	8.70
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:33:00 PM	9.37	8.43	31.82	30.41	3.21	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:33:00 PM	9.54	8.28	31.87	30.33	3.25	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.55	4:33:00 PM	9.32	8.39	31.25	30.44	2.71	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.55	4:33:00 PM	9.34	8.27	31.56	30.50	2.72	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.10	4:32:00 PM	9.53	8.43	30.93	30.46	2.55	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.10	4:32:00 PM	10.25	8.26	31.34	30.49	2.48	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:48:00 AM	9.99	8.32	31.10	29.49	2.41	8.40
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:48:00 AM	9.50	8.48	30.43	29.38	2.42	7.40
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.50	8:48:00 AM	8.60	8.39	31.33	29.37	2.70	8.00
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.50	8:48:00 AM	10.16	8.36	31.68	29.40	2.57	7.50
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.00	8:47:00 AM	9.30	8.46	30.78	29.43	2.00	7.10
WSR36	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.00	8:47:00 AM	9.86	8.40	30.28	29.30	2.19	7.10
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:43:00 AM	9.93	8.40	30.67	29.50	2.81	24.00
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:43:00 AM	10.11	8.41	30.73	29.56	2.77	21.30
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.40	9:43:00 AM	9.28	8.38	31.08	29.46	2.27	19.70
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Middle	3.40	9:43:00 AM	9.98	8.36	30.94	29.47	2.30	19.10
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	5.80	9:42:00 AM	9.69	8.44	30.82	29.51	2.21	23.40
WSR36	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	5.80	9:42:00 AM	10.20	8.47	30.54	29.53	2.21	23.40
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:37:00 AM	8.14	8.38	30.87	30.18	2.46	5.40
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:37:00 AM	9.11	8.35	30.82	30.29	2.48	5.40
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Middle	3.65	10:37:00 AM	7.87	8.31	31.16	30.28	2.38	2.50
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Middle	3.65	10:37:00 AM	7.98	8.31	30.89	30.18	2.63	2.50
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Bottom	6.30	10:36:00 AM	8.07	8.21	30.99	30.16	2.22	2.50
WSR36	20210708	Sunny	Moderate	Mid-Ebb	Bottom	6.30	10:36:00 AM	8.48	8.25	31.35	30.33	2.33	4.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR36	20210710 Su	unny	Moderate	Mid-Ebb	Surface	1.00	11:38:00 AM	7.88	8.36	29.44	30.44	2.50	2.80
WSR36	20210710 Su	unny	Moderate	Mid-Ebb	Surface	1.00	11:38:00 AM	7.63	8.36	30.07	30.44	2.53	2.90
WSR36	20210710 Su	unny	Moderate	Mid-Ebb	Middle	3.35	11:38:00 AM	8.49	8.25	29.69	30.47	2.18	2.50
WSR36	20210710 Su	unny	Moderate	Mid-Ebb	Middle	3.35	11:38:00 AM	8.18	8.31	29.89	30.42	2.50	3.10
WSR36	20210710 St	unny	Moderate	Mid-Ebb	Bottom	5.70	11:37:00 AM	7.98	8.38	30.10	30.32	1.76	2.50
WSR36	20210710 St	unny	Moderate	Mid-Ebb	Bottom	5.70	11:37:00 AM	7.62	8.34	29.73	30.40	1.92	2.50
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Surface	1.00	1:36:00 PM	7.84	8.36	30.65	30.62	2.62	2.50
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Surface	1.00	1:36:00 PM	8.49	8.32	31.26	30.48	2.78	2.50
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Middle	3.70	1:36:00 PM	8.50	8.23	30.68	30.40	2.27	13.60
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Middle	3.70	1:36:00 PM	8.45	8.30	30.70	30.51	2.64	10.50
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Bottom	6.40	1:35:00 PM	7.63	8.12	31.25	30.40	1.55	2.50
WSR36	20210713 Su	unny	Moderate	Mid-Ebb	Bottom	6.40	1:35:00 PM	8.07	8.35	31.20	30.37	1.81	2.50
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Surface	1.00	2:58:00 PM	8.03	8.35	30.51	30.41	2.38	5.80
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Surface	1.00	2:58:00 PM	8.58	8.37	30.31	30.37	2.72	4.40
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Middle	3.15	2:58:00 PM	8.25	8.34	31.15	30.49	2.64	3.40
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Middle	3.15	2:58:00 PM	8.89	8.28	30.71	30.52	2.27	4.50
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Bottom	5.30	2:57:00 PM	9.02	8.38	30.79	30.42	2.06	10.40
WSR36	20210715 Su	unny	Moderate	Mid-Ebb	Bottom	5.30	2:57:00 PM	7.96	8.20	30.99	30.44	2.33	10.40
WSR36	20210717 Cl	loudy	Moderate	Mid-Ebb	Surface	1.00	4:34:00 PM	8.33	8.18	30.67	28.39	2.90	2.50
WSR36	20210717 CI	loudy	Moderate	Mid-Ebb	Surface	1.00	4:34:00 PM	9.24	8.29	30.71	28.37	2.97	3.60
WSR36	20210717 CI	loudy	Moderate	Mid-Ebb	Middle	3.60	4:34:00 PM	9.53	8.30	30.71	28.34	2.13	4.80
WSR36	20210717 CI	loudy	Moderate	Mid-Ebb	Middle	3.60	4:34:00 PM	9.36	8.32	30.84	28.49	2.50	4.80
WSR36	20210717 Cl	loudy	Moderate	Mid-Ebb	Bottom	6.20	4:33:00 PM	9.44	8.30	30.63	28.42	1.98	2.50
WSR36	20210717 Cl	loudy	Moderate	Mid-Ebb	Bottom	6.20	4:33:00 PM	8.78	8.25	30.85	28.36	2.04	2.50
WSR36	20210722 Su	unny	Moderate	Mid-Ebb	Surface	1.00	10:01:00 AM	7.40	7.92	29.84	29.01	1.63	5.70
WSR36	20210722 Su	unny	Moderate	Mid-Ebb	Surface	1.00	10:01:00 AM	7.52	8.08	30.22	29.09	1.81	5.70
WSR36	20210722 Su	unny	Moderate	Mid-Ebb	Middle	3.75	10:01:00 AM	8.01	8.05	30.27	29.18	1.31	4.30

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR36	20210722 S	Sunny	Moderate	Mid-Ebb	Middle	3.75	10:01:00 AM	7.73	8.02	29.97	29.09	1.33	3.80
WSR36	20210722 S	Sunny	Moderate	Mid-Ebb	Bottom	6.50	10:00:00 AM	7.40	8.04	29.70	29.22	1.35	3.20
WSR36	20210722 S	Sunny	Moderate	Mid-Ebb	Bottom	6.50	10:00:00 AM	8.02	7.95	29.75	29.05	1.31	3.20
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:36:00 AM	7.43	8.31	29.67	29.06	3.48	2.50
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:36:00 AM	7.48	8.23	29.76	29.14	2.91	2.50
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Middle	3.85	11:36:00 AM	7.82	8.29	29.60	29.06	2.57	2.50
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Middle	3.85	11:36:00 AM	7.69	8.22	29.68	29.20	2.29	2.50
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	11:35:00 AM	8.28	8.00	29.54	29.25	2.28	2.50
WSR36	20210724 C	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	11:35:00 AM	7.51	8.19	29.75	29.13	2.70	2.50
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:52:00 PM	8.36	8.07	30.07	29.76	2.20	8.70
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:52:00 PM	8.56	8.10	30.45	29.66	2.29	8.70
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Middle	3.30	1:52:00 PM	7.69	8.21	30.70	29.72	2.13	8.80
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Middle	3.30	1:52:00 PM	8.42	8.15	30.13	29.70	1.89	7.60
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Bottom	5.60	1:51:00 PM	8.44	8.06	30.34	29.69	1.59	8.40
WSR36	20210727 S	Sunny	Moderate	Mid-Ebb	Bottom	5.60	1:51:00 PM	7.62	8.26	30.24	29.77	1.88	7.40
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:16:00 PM	9.08	8.24	29.79	28.49	3.52	2.70
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:16:00 PM	8.47	8.17	29.90	28.47	3.38	2.50
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Middle	3.70	3:16:00 PM	8.95	8.15	29.72	28.49	3.23	2.50
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Middle	3.70	3:16:00 PM	8.29	8.24	29.87	28.61	3.25	2.50
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Bottom	6.40	3:15:00 PM	8.68	8.29	29.92	28.64	3.08	2.50
WSR36	20210729 C	Cloudy	Moderate	Mid-Ebb	Bottom	6.40	3:15:00 PM	8.19	7.99	29.81	28.68	2.94	3.60
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:25:00 PM	8.25	8.13	30.50	29.01	2.95	9.20
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:25:00 PM	8.58	8.01	31.20	28.96	3.30	9.60
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Middle	3.15	4:25:00 PM	8.17	8.17	31.11	29.04	2.42	2.50
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Middle	3.15	4:25:00 PM	8.32	8.15	30.81	29.06	2.76	2.50
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Bottom	5.30	4:24:00 PM	8.46	8.19	30.63	28.93	2.65	6.90
WSR36	20210731 C	Cloudy	Moderate	Mid-Ebb	Bottom	5.30	4:24:00 PM	8.42	8.20	31.16	28.93	2.58	8.30

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:19:00 PM	9.48	8.31	31.71	30.38	3.32	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:19:00 PM	10.00	8.33	31.71	30.41	2.96	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.85	4:18:00 PM	9.83	8.35	31.78	30.56	2.79	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Middle	3.85	4:18:00 PM	10.21	8.42	30.94	30.46	2.46	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:17:00 PM	9.85	8.25	31.88	30.51	2.71	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:17:00 PM	10.01	8.37	31.82	30.52	2.36	2.50
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:40:00 AM	9.19	8.33	30.64	29.29	2.34	5.20
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Surface	1.00	8:40:00 AM	8.78	8.33	30.93	29.26	2.26	4.70
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.80	8:39:00 AM	9.43	8.31	30.84	29.28	2.36	3.90
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Middle	3.80	8:39:00 AM	8.61	8.46	31.20	29.27	2.06	4.50
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.60	8:38:00 AM	9.75	8.22	30.85	29.31	2.54	5.60
WSR37	20210703	Cloudy	Moderate	Mid-Ebb	Bottom	6.60	8:38:00 AM	9.77	8.22	30.87	29.49	2.41	4.50
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:27:00 AM	10.15	8.46	31.04	29.46	3.12	28.30
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Surface	1.00	9:27:00 AM	10.13	8.46	30.86	29.48	3.21	28.30
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.35	9:26:00 AM	9.42	8.40	30.66	29.42	2.29	23.60
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Middle	4.35	9:26:00 AM	9.18	8.31	31.08	29.33	2.62	23.60
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	7.70	9:25:00 AM	9.64	8.34	30.70	29.41	2.36	20.30
WSR37	20210706	Cloudy	Moderate	Mid-Ebb	Bottom	7.70	9:25:00 AM	10.01	8.43	30.57	29.49	2.00	19.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:24:00 AM	8.36	8.27	31.43	30.20	2.46	2.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Surface	1.00	10:24:00 AM	8.59	8.15	30.86	30.29	2.55	2.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.15	10:23:00 AM	9.05	8.34	31.37	30.34	2.02	2.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Middle	4.15	10:23:00 AM	8.68	8.31	30.77	30.16	1.82	2.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Bottom	7.30	10:22:00 AM	8.49	8.16	31.54	30.31	2.28	2.50
WSR37	20210708	Sunny	Moderate	Mid-Ebb	Bottom	7.30	10:22:00 AM	8.87	8.15	30.79	30.24	2.03	2.50
WSR37	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:26:00 AM	8.31	8.38	29.66	30.29	2.86	2.50
WSR37	20210710	Sunny	Moderate	Mid-Ebb	Surface	1.00	11:26:00 AM	7.76	8.38	30.05	30.31	2.47	2.90
WSR37	20210710	Sunny	Moderate	Mid-Ebb	Middle	4.05	11:25:00 AM	8.85	8.34	30.05	30.26	2.39	6.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR37	20210710 S	Sunny	Moderate	Mid-Ebb	Middle	4.05	11:25:00 AM	8.87	8.23	30.00	30.36	2.03	6.20
WSR37	20210710 S	Sunny	Moderate	Mid-Ebb	Bottom	7.10	11:24:00 AM	7.76	8.40	30.09	30.36	2.45	11.00
WSR37	20210710 S	Sunny	Moderate	Mid-Ebb	Bottom	7.10	11:24:00 AM	8.12	8.29	29.68	30.27	2.16	12.00
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:24:00 PM	8.48	8.25	30.88	30.39	2.49	8.10
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:24:00 PM	7.94	8.21	30.64	30.39	2.77	8.10
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Middle	4.40	1:23:00 PM	8.47	8.15	30.95	30.38	2.12	5.80
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Middle	4.40	1:23:00 PM	8.61	8.17	30.95	30.45	2.35	5.80
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Bottom	7.80	1:22:00 PM	8.20	8.27	30.79	30.55	2.09	5.00
WSR37	20210713 S	Sunny	Moderate	Mid-Ebb	Bottom	7.80	1:22:00 PM	7.67	8.16	31.10	30.28	2.42	5.00
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:44:00 PM	8.17	8.27	30.29	30.56	3.04	11.10
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	2:44:00 PM	8.39	8.27	30.71	30.57	2.99	11.10
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Middle	3.95	2:43:00 PM	7.77	8.24	30.38	30.56	2.59	15.60
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Middle	3.95	2:43:00 PM	8.16	8.26	30.40	30.49	2.19	12.70
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Bottom	6.90	2:42:00 PM	9.10	8.28	31.08	30.46	2.25	4.00
WSR37	20210715 S	Sunny	Moderate	Mid-Ebb	Bottom	6.90	2:42:00 PM	7.97	8.23	30.90	30.61	2.05	2.80
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:18:00 PM	9.16	8.25	30.78	28.55	2.92	7.60
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:18:00 PM	8.65	8.35	31.12	28.57	2.66	7.60
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Middle	4.20	4:17:00 PM	8.84	8.20	30.63	28.59	2.40	2.70
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Middle	4.20	4:17:00 PM	8.79	8.22	30.99	28.46	2.82	2.60
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Bottom	7.40	4:16:00 PM	8.79	8.28	31.07	28.52	2.64	2.50
WSR37	20210717 (Cloudy	Moderate	Mid-Ebb	Bottom	7.40	4:16:00 PM	8.56	8.30	30.92	28.49	2.39	2.50
WSR37	20210722 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	9:46:00 AM	7.57	8.12	29.74	29.15	1.52	2.50
WSR37	20210722 S	Sunny	Moderate	Mid-Ebb	Surface	1.00	9:46:00 AM	7.45	7.99	30.73	29.17	1.77	2.50
WSR37	20210722 S	Sunny	Moderate	Mid-Ebb	Middle	4.15	9:45:00 AM	7.25	8.18	30.49	29.05	1.50	2.50
WSR37	20210722 S	Sunny	Moderate	Mid-Ebb	Middle	4.15	9:45:00 AM	7.48	7.99	29.83	29.00	1.28	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR37	20210722 5	Sunny	Moderate	Mid-Ebb	Bottom	7.30	9:44:00 AM	7.43	8.01	30.23	29.00	0.96	2.50
WSR37	20210722 5	Sunny	Moderate	Mid-Ebb	Bottom	7.30	9:44:00 AM	8.08	8.16	30.52	29.05	0.85	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:24:00 AM	7.79	8.30	29.56	29.08	3.05	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	11:24:00 AM	8.34	8.25	29.54	28.96	3.22	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Middle	4.35	11:23:00 AM	7.86	8.21	29.66	28.98	2.64	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Middle	4.35	11:23:00 AM	7.50	7.98	29.60	29.04	2.75	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Bottom	7.70	11:22:00 AM	7.90	8.12	29.73	29.00	2.50	2.50
WSR37	20210724 (Cloudy	Moderate	Mid-Ebb	Bottom	7.70	11:22:00 AM	7.28	7.99	29.65	29.09	2.80	2.50
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:39:00 PM	8.58	8.18	30.43	29.76	1.99	9.00
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Surface	1.00	1:39:00 PM	7.98	8.14	30.29	29.71	1.83	8.00
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Middle	4.15	1:38:00 PM	7.97	8.08	30.63	29.87	1.99	5.30
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Middle	4.15	1:38:00 PM	7.94	8.10	30.48	29.78	2.32	7.10
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Bottom	7.30	1:37:00 PM	8.76	8.12	30.50	29.75	1.92	8.00
WSR37	20210727 5	Sunny	Moderate	Mid-Ebb	Bottom	7.30	1:37:00 PM	8.28	8.17	30.78	29.70	1.67	7.70
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:02:00 PM	8.70	8.32	30.08	28.56	3.28	9.80
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	3:02:00 PM	8.46	8.33	30.02	28.64	3.69	9.40
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Middle	3.90	3:01:00 PM	8.95	8.03	30.34	28.71	2.93	5.30
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Middle	3.90	3:01:00 PM	8.38	8.35	30.33	28.70	3.34	4.80
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Bottom	6.80	3:00:00 PM	8.23	8.15	30.26	28.84	2.51	3.70
WSR37	20210729 (Cloudy	Moderate	Mid-Ebb	Bottom	6.80	3:00:00 PM	8.94	8.09	30.32	28.60	2.57	4.90
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:12:00 PM	8.28	8.10	30.48	29.10	2.82	3.10
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Surface	1.00	4:12:00 PM	8.02	8.19	30.56	28.96	2.56	2.50
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Middle	3.85	4:11:00 PM	7.98	8.34	30.56	29.07	2.40	3.10
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Middle	3.85	4:11:00 PM	7.85	8.23	31.03	29.06	2.58	2.50
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:10:00 PM	7.72	8.18	30.61	29.03	2.14	7.30
WSR37	20210731 (Cloudy	Moderate	Mid-Ebb	Bottom	6.70	4:10:00 PM	8.35	8.16	30.80	29.01	2.51	7.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
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Remark:

Note 1: Measurements of turbidity would be rounding to 0.1 NTU for proven accuracy as per the equipment specs during utilization of data.

Note 2: Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:33:00 AM	9.06	8.28	31.52	30.28	3.90	2.50
CE	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:33:00 AM	9.94	8.46	31.31	30.31	3.74	2.50
CE	20210701	Cloudy	Moderate	Mid-Flood	Middle	11.05	11:32:00 AM	9.75	8.30	31.77	30.27	3.44	4.40
CE	20210701	Cloudy	Moderate	Mid-Flood	Middle	11.05	11:32:00 AM	9.71	8.25	31.79	30.25	3.35	2.50
CE	20210701	Cloudy	Moderate	Mid-Flood	Bottom	21.10	11:31:00 AM	9.41	8.45	31.83	30.18	3.04	2.50
CE	20210701	Cloudy	Moderate	Mid-Flood	Bottom	21.10	11:31:00 AM	9.81	8.21	31.74	30.44	3.11	2.70
CE	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:48:00 PM	9.48	8.33	30.48	30.37	3.21	2.50
CE	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:48:00 PM	9.88	8.19	31.54	30.49	3.14	2.50
CE	20210703	Cloudy	Moderate	Mid-Flood	Middle	11.65	1:47:00 PM	9.92	8.48	31.78	30.48	3.62	2.50
CE	20210703	Cloudy	Moderate	Mid-Flood	Middle	11.65	1:47:00 PM	8.57	8.24	30.74	30.33	3.60	2.50
CE	20210703	Cloudy	Moderate	Mid-Flood	Bottom	22.30	1:46:00 PM	8.78	8.43	30.65	30.26	3.43	2.50
CE	20210703	Cloudy	Moderate	Mid-Flood	Bottom	22.30	1:46:00 PM	8.54	8.22	31.15	30.28	3.05	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:08:00 PM	9.29	8.43	30.55	29.47	3.37	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:08:00 PM	9.40	8.46	30.94	29.45	3.63	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Middle	11.95	6:07:00 PM	9.73	8.48	31.01	29.56	3.43	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Middle	11.95	6:07:00 PM	8.94	8.43	30.85	29.47	3.32	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Bottom	22.90	6:06:00 PM	9.57	8.30	30.99	29.60	3.36	2.50
CE	20210706	Cloudy	Moderate	Mid-Flood	Bottom	22.90	6:06:00 PM	9.57	8.36	31.13	29.48	3.04	2.50
CE	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	6:05:00 PM	9.07	8.18	31.15	29.70	3.71	2.50
CE	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	6:05:00 PM	9.27	8.13	30.76	29.60	3.21	2.50
CE	20210708	Sunny	Moderate	Mid-Flood	Middle	12.15	6:04:00 PM	8.13	8.22	30.73	29.61	3.47	3.40
CE	20210708	Sunny	Moderate	Mid-Flood	Middle	12.15	6:04:00 PM	8.80	8.20	31.22	29.66	3.04	3.30
CE	20210708	Sunny	Moderate	Mid-Flood	Bottom	23.30	6:03:00 PM	9.09	8.21	30.95	29.67	2.71	2.50
CE	20210708	Sunny	Moderate	Mid-Flood	Bottom	23.30	6:03:00 PM	8.90	8.13	31.22	29.62	2.76	2.50
CE	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:52:00 PM	8.53	8.40	29.78	29.83	3.57	3.50
CE	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:52:00 PM	8.86	8.24	29.32	29.76	4.06	3.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210710	Sunny	Moderate	Mid-Flood	Middle	10.10	6:51:00 PM	8.55	8.42	29.62	29.68	3.82	3.40
CE	20210710	Sunny	Moderate	Mid-Flood	Middle	10.10	6:51:00 PM	7.85	8.47	29.69	29.79	3.22	3.30
CE	20210710	Sunny	Moderate	Mid-Flood	Bottom	19.20	6:50:00 PM	8.83	8.37	29.63	29.61	3.52	2.70
CE	20210710	Sunny	Moderate	Mid-Flood	Bottom	19.20	6:50:00 PM	8.07	8.27	29.43	29.66	3.52	3.70
CE	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	10:25:00 AM	8.46	8.40	30.74	30.01	3.76	5.50
CE	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	10:25:00 AM	8.26	8.34	30.58	30.03	3.37	3.40
CE	20210713	Sunny	Moderate	Mid-Flood	Middle	12.30	10:24:00 AM	7.87	8.23	30.69	30.14	3.24	5.50
CE	20210713	Sunny	Moderate	Mid-Flood	Middle	12.30	10:24:00 AM	8.23	8.19	30.75	30.22	3.31	3.40
CE	20210713	Sunny	Moderate	Mid-Flood	Bottom	23.60	10:23:00 AM	7.61	8.22	30.85	30.17	2.83	5.80
CE	20210713	Sunny	Moderate	Mid-Flood	Bottom	23.60	10:23:00 AM	7.83	8.18	30.88	29.94	2.89	3.00
CE	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	10:45:00 AM	9.22	8.19	31.36	29.87	4.05	2.50
CE	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	10:45:00 AM	9.30	8.20	31.31	30.05	4.20	3.30
CE	20210715	Sunny	Moderate	Mid-Flood	Middle	10.80	10:44:00 AM	8.61	8.18	31.27	30.00	4.12	2.50
CE	20210715	Sunny	Moderate	Mid-Flood	Middle	10.80	10:44:00 AM	7.89	8.29	31.99	30.02	3.44	3.80
CE	20210715	Sunny	Moderate	Mid-Flood	Bottom	20.60	10:43:00 AM	8.33	8.22	31.70	30.04	3.59	3.00
CE	20210715	Sunny	Moderate	Mid-Flood	Bottom	20.60	10:43:00 AM	8.14	8.16	31.70	29.98	3.25	4.20
CE	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:10:00 PM	8.41	8.38	31.57	27.54	3.86	6.70
CE	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:10:00 PM	9.44	8.21	31.52	27.63	4.22	6.70
CE	20210717	Cloudy	Moderate	Mid-Flood	Middle	11.05	12:09:00 PM	8.48	8.41	31.84	27.65	3.26	12.10
CE	20210717	Cloudy	Moderate	Mid-Flood	Middle	11.05	12:09:00 PM	8.47	8.20	31.40	27.65	3.26	12.10
CE	20210717	Cloudy	Moderate	Mid-Flood	Bottom	21.10	12:08:00 PM	8.42	8.27	31.53	27.60	3.35	6.00
CE	20210717	Cloudy	Moderate	Mid-Flood	Bottom	21.10	12:08:00 PM	9.21	8.44	31.77	27.66	3.00	5.60
CE	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	6:21:00 PM	8.28	8.10	30.71	29.12	4.16	3.70
CE	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	6:21:00 PM	7.52	7.94	30.75	29.11	4.54	2.50
CE	20210722	Sunny	Moderate	Mid-Flood	Middle	11.85	6:20:00 PM	7.86	8.15	30.54	29.15	3.85	2.50
CE	20210722	Sunny	Moderate	Mid-Flood	Middle	11.85	6:20:00 PM	7.32	7.96	30.61	29.03	3.64	2.50
CE	20210722	Sunny	Moderate	Mid-Flood	Bottom	22.70	6:19:00 PM	7.46	8.06	30.69	29.08	4.06	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CE	20210722	Sunny	Moderate	Mid-Flood	Bottom	22.70	6:19:00 PM	8.20	8.10	30.78	29.02	3.80	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:46:00 PM	7.61	7.96	30.03	28.64	5.10	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:46:00 PM	8.62	7.98	30.15	28.69	4.82	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Middle	10.05	6:45:00 PM	8.51	8.20	30.35	28.67	4.97	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Middle	10.05	6:45:00 PM	8.17	8.16	29.97	28.74	4.89	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Bottom	19.10	6:44:00 PM	8.22	8.25	30.35	28.71	4.09	2.50
CE	20210724	Cloudy	Moderate	Mid-Flood	Bottom	19.10	6:44:00 PM	8.19	8.26	29.89	28.68	4.16	3.30
CE	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	10:30:00 AM	7.76	7.97	29.47	29.63	4.36	2.50
CE	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	10:30:00 AM	8.12	8.14	29.57	29.54	3.95	3.80
CE	20210727	Sunny	Moderate	Mid-Flood	Middle	10.30	10:29:00 AM	7.97	8.07	29.73	29.68	3.77	3.60
CE	20210727	Sunny	Moderate	Mid-Flood	Middle	10.30	10:29:00 AM	8.17	8.14	30.18	29.62	4.18	3.00
CE	20210727	Sunny	Moderate	Mid-Flood	Bottom	19.60	10:28:00 AM	8.24	7.96	29.53	29.52	3.76	3.80
CE	20210727	Sunny	Moderate	Mid-Flood	Bottom	19.60	10:28:00 AM	7.96	8.01	30.17	29.54	3.35	2.50
CE	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:39:00 AM	8.12	8.17	29.58	28.94	4.90	3.20
CE	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:39:00 AM	8.19	8.19	29.50	28.96	4.40	3.90
CE	20210729	Cloudy	Moderate	Mid-Flood	Middle	11.20	10:38:00 AM	8.20	7.97	29.71	28.91	4.28	5.80
CE	20210729	Cloudy	Moderate	Mid-Flood	Middle	11.20	10:38:00 AM	8.06	8.25	29.63	28.95	4.13	5.40
CE	20210729	Cloudy	Moderate	Mid-Flood	Bottom	21.40	10:37:00 AM	8.40	8.12	29.60	28.94	4.07	2.50
CE	20210729	Cloudy	Moderate	Mid-Flood	Bottom	21.40	10:37:00 AM	8.59	7.94	29.34	28.98	4.32	3.10
CE	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:24:00 PM	9.42	8.03	31.62	29.04	3.04	2.50
CE	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:24:00 PM	9.73	8.19	31.40	29.17	3.47	4.00
CE	20210731	Cloudy	Moderate	Mid-Flood	Middle	12.30	12:23:00 PM	9.61	8.13	31.71	29.06	3.45	7.30
CE	20210731	Cloudy	Moderate	Mid-Flood	Middle	12.30	12:23:00 PM	9.77	7.91	31.86	29.09	3.30	7.10
CE	20210731	Cloudy	Moderate	Mid-Flood	Bottom	23.60	12:22:00 PM	9.31	8.03	30.56	29.10	3.29	5.50
CE	20210731	Cloudy	Moderate	Mid-Flood	Bottom	23.60	12:22:00 PM	9.65	8.00	31.42	29.04	2.92	5.80
CF	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:42:00 AM	9.73	8.46	31.22	29.79	3.22	2.60
CF	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:42:00 AM	9.71	8.32	31.56	29.94	3.65	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CF	20210701	Cloudy	Moderate	Mid-Flood	Middle	10.80	8:41:00 AM	9.49	8.30	31.92	29.91	3.21	2.50
CF	20210701	Cloudy	Moderate	Mid-Flood	Middle	10.80	8:41:00 AM	9.14	8.40	31.51	29.92	3.34	2.50
CF	20210701	Cloudy	Moderate	Mid-Flood	Bottom	20.60	8:40:00 AM	9.40	8.45	31.25	29.84	3.18	4.20
CF	20210701	Cloudy	Moderate	Mid-Flood	Bottom	20.60	8:40:00 AM	9.33	8.38	31.31	29.88	3.32	4.20
CF	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:25:00 AM	9.63	8.27	31.10	30.27	3.18	2.50
CF	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:25:00 AM	9.10	8.33	30.84	30.11	3.62	2.50
CF	20210703	Cloudy	Moderate	Mid-Flood	Middle	10.40	11:24:00 AM	9.36	8.34	30.83	29.96	3.40	2.50
CF	20210703	Cloudy	Moderate	Mid-Flood	Middle	10.40	11:24:00 AM	9.80	8.41	31.63	30.22	3.26	2.50
CF	20210703	Cloudy	Moderate	Mid-Flood	Bottom	19.80	11:23:00 AM	9.38	8.42	31.24	30.19	3.18	2.50
CF	20210703	Cloudy	Moderate	Mid-Flood	Bottom	19.80	11:23:00 AM	9.68	8.44	31.52	30.26	3.25	2.50
CF	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	3:24:00 PM	9.00	8.44	30.98	29.87	3.78	3.70
CF	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	3:24:00 PM	8.95	8.50	30.54	30.09	3.25	2.50
CF	20210706	Cloudy	Moderate	Mid-Flood	Middle	9.65	3:23:00 PM	9.97	8.50	30.79	30.06	3.28	2.50
CF	20210706	Cloudy	Moderate	Mid-Flood	Middle	9.65	3:23:00 PM	9.19	8.28	30.49	29.96	2.98	3.10
CF	20210706	Cloudy	Moderate	Mid-Flood	Bottom	18.30	3:22:00 PM	9.59	8.48	31.17	29.90	2.74	2.30
CF	20210706	Cloudy	Moderate	Mid-Flood	Bottom	18.30	3:22:00 PM	9.34	8.33	30.77	29.86	3.13	2.30
CF	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	3:32:00 PM	8.14	8.16	31.11	30.05	3.23	3.30
CF	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	3:32:00 PM	9.18	8.27	31.34	29.83	3.10	2.50
CF	20210708	Sunny	Moderate	Mid-Flood	Middle	10.75	3:31:00 PM	8.37	8.25	31.18	29.98	3.03	2.50
CF	20210708	Sunny	Moderate	Mid-Flood	Middle	10.75	3:31:00 PM	8.94	8.17	31.31	29.94	3.45	2.50
CF	20210708	Sunny	Moderate	Mid-Flood	Bottom	20.50	3:30:00 PM	9.11	8.16	31.44	29.93	2.84	4.00
CF	20210708	Sunny	Moderate	Mid-Flood	Bottom	20.50	3:30:00 PM	8.66	8.15	31.29	29.92	3.05	4.00
CF	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	4:45:00 PM	8.75	8.48	29.65	30.18	3.89	4.30
CF	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	4:45:00 PM	8.94	8.37	29.90	30.05	3.49	2.90
CF	20210710	Sunny	Moderate	Mid-Flood	Middle	10.70	4:44:00 PM	8.10	8.29	29.61	30.27	3.20	3.40
CF	20210710	Sunny	Moderate	Mid-Flood	Middle	10.70	4:44:00 PM	7.56	8.45	29.86	30.25	3.34	2.70
CF	20210710	Sunny	Moderate	Mid-Flood	Bottom	20.40	4:43:00 PM	8.52	8.46	29.66	30.28	2.78	4.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
CF	20210710	Sunny	Moderate	Mid-Flood	Bottom	20.40	4:43:00 PM	7.48	8.45	29.85	30.06	3.19	3.40
CF	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	7.83	8.31	30.95	29.52	3.57	8.90
CF	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	7.61	8.40	30.53	29.40	3.92	8.90
CF	20210713	Sunny	Moderate	Mid-Flood	Middle	10.25	8:01:00 AM	7.54	8.23	30.77	29.64	3.73	6.40
CF	20210713	Sunny	Moderate	Mid-Flood	Middle	10.25	8:01:00 AM	8.29	8.39	30.87	29.41	3.30	3.60
CF	20210713	Sunny	Moderate	Mid-Flood	Bottom	19.50	8:00:00 AM	8.40	8.38	30.72	29.54	2.83	11.50
CF	20210713	Sunny	Moderate	Mid-Flood	Bottom	19.50	8:00:00 AM	7.69	8.32	30.53	29.52	3.25	11.50
CF	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	8.86	8.13	31.39	29.09	4.05	4.10
CF	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	8.69	8.28	31.39	28.94	4.12	3.10
CF	20210715	Sunny	Moderate	Mid-Flood	Middle	9.90	8:01:00 AM	8.51	8.14	31.82	29.05	3.49	12.00
CF	20210715	Sunny	Moderate	Mid-Flood	Middle	9.90	8:01:00 AM	8.75	8.35	31.59	28.93	3.38	10.50
CF	20210715	Sunny	Moderate	Mid-Flood	Bottom	18.80	8:00:00 AM	9.00	8.15	31.46	28.93	3.65	2.50
CF	20210715	Sunny	Moderate	Mid-Flood	Bottom	18.80	8:00:00 AM	8.78	8.16	31.83	28.95	3.19	2.50
CF	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:35:00 AM	8.44	8.41	31.78	27.25	4.31	3.30
CF	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:35:00 AM	9.35	8.26	31.83	27.24	4.02	2.50
CF	20210717	Cloudy	Moderate	Mid-Flood	Middle	9.80	9:34:00 AM	8.31	8.20	31.14	27.23	3.75	11.20
CF	20210717	Cloudy	Moderate	Mid-Flood	Middle	9.80	9:34:00 AM	8.31	8.34	31.29	27.28	3.62	11.20
CF	20210717	Cloudy	Moderate	Mid-Flood	Bottom	18.60	9:33:00 AM	9.13	8.37	31.62	27.17	3.57	2.50
CF	20210717	Cloudy	Moderate	Mid-Flood	Bottom	18.60	9:33:00 AM	9.51	8.34	31.82	27.24	3.24	3.20
CF	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	3:32:00 PM	7.56	7.99	30.00	29.26	3.81	2.50
CF	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	3:32:00 PM	7.49	7.99	29.80	29.28	3.42	2.50
CF	20210722	Sunny	Moderate	Mid-Flood	Middle	10.45	3:31:00 PM	7.75	8.02	29.80	29.35	3.88	2.50
CF	20210722	Sunny	Moderate	Mid-Flood	Middle	10.45	3:31:00 PM	7.75	7.90	30.78	29.34	4.09	2.50
CF	20210722	Sunny	Moderate	Mid-Flood	Bottom	19.90	3:30:00 PM	7.43	8.08	29.92	29.34	4.11	2.50
CF	20210722	Sunny	Moderate	Mid-Flood	Bottom	19.90	3:30:00 PM	8.01	7.99	30.36	29.17	4.07	3.20
CF	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:29:00 PM	7.50	7.94	30.05	29.21	4.58	2.50
CF	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:29:00 PM	7.89	8.06	29.83	29.24	5.22	3.60

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CF	20210724	Cloudy	Moderate	Mid-Flood	Middle	10.40	4:28:00 PM	8.31	8.21	30.25	29.14	4.98	2.50
CF	20210724	Cloudy	Moderate	Mid-Flood	Middle	10.40	4:28:00 PM	7.51	7.91	30.08	29.28	4.37	2.50
CF	20210724	Cloudy	Moderate	Mid-Flood	Bottom	19.80	4:27:00 PM	7.74	7.95	29.83	29.22	4.04	2.50
CF	20210724	Cloudy	Moderate	Mid-Flood	Bottom	19.80	4:27:00 PM	7.73	8.19	30.03	29.16	4.76	2.50
CF	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	7.73	8.02	29.89	28.98	4.14	3.10
CF	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	8.33	8.11	29.86	28.98	3.83	2.50
CF	20210727	Sunny	Moderate	Mid-Flood	Middle	9.55	8:01:00 AM	8.28	8.02	30.32	29.00	3.65	9.90
CF	20210727	Sunny	Moderate	Mid-Flood	Middle	9.55	8:01:00 AM	7.93	7.94	30.26	29.00	3.34	9.70
CF	20210727	Sunny	Moderate	Mid-Flood	Bottom	18.10	8:00:00 AM	8.04	8.05	29.85	29.01	3.81	6.80
CF	20210727	Sunny	Moderate	Mid-Flood	Bottom	18.10	8:00:00 AM	8.08	8.10	29.85	29.03	3.60	6.90
CF	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	8.13	8.23	29.78	28.36	4.70	7.40
CF	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:02:00 AM	8.23	8.23	29.90	28.35	4.71	7.20
CF	20210729	Cloudy	Moderate	Mid-Flood	Middle	10.50	8:01:00 AM	8.24	8.09	29.82	28.40	4.66	7.10
CF	20210729	Cloudy	Moderate	Mid-Flood	Middle	10.50	8:01:00 AM	7.65	7.98	29.84	28.39	4.24	6.70
CF	20210729	Cloudy	Moderate	Mid-Flood	Bottom	20.00	8:00:00 AM	7.73	8.23	29.97	28.39	3.92	2.50
CF	20210729	Cloudy	Moderate	Mid-Flood	Bottom	20.00	8:00:00 AM	7.77	8.22	30.10	28.37	4.24	2.50
CF	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:47:00 AM	8.28	8.05	30.30	28.69	3.84	7.00
CF	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:47:00 AM	8.04	8.03	30.25	28.76	3.43	7.20
CF	20210731	Cloudy	Moderate	Mid-Flood	Middle	10.20	9:46:00 AM	7.96	8.03	30.09	28.71	3.25	2.90
CF	20210731	Cloudy	Moderate	Mid-Flood	Middle	10.20	9:46:00 AM	8.21	8.13	30.53	28.76	3.65	3.00
CF	20210731	Cloudy	Moderate	Mid-Flood	Bottom	19.40	9:45:00 AM	7.94	8.15	31.20	28.79	3.05	4.40
CF	20210731	Cloudy	Moderate	Mid-Flood	Bottom	19.40	9:45:00 AM	8.01	7.95	30.13	28.79	2.58	3.60
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:06:00 AM	10.13	8.21	31.34	29.85	2.72	3.30
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:06:00 AM	9.99	8.39	31.89	29.87	2.64	4.00
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.30	9:05:00 AM	10.08	8.47	31.84	29.98	2.62	3.00
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.30	9:05:00 AM	9.49	8.42	31.27	29.92	2.36	5.10
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.60	9:04:00 AM	10.15	8.23	31.36	29.91	2.26	3.40

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.60	9:04:00 AM	9.59	8.36	31.21	29.95	2.35	3.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:47:00 AM	9.72	8.35	30.77	30.09	2.43	2.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:47:00 AM	9.88	8.18	30.60	30.26	2.86	2.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.70	11:46:00 AM	9.12	8.49	30.99	30.15	2.42	2.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.70	11:46:00 AM	9.16	8.31	30.76	30.12	2.45	2.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Bottom	8.40	11:45:00 AM	9.86	8.41	30.93	30.29	2.24	2.50
WSR01	20210703	Cloudy	Moderate	Mid-Flood	Bottom	8.40	11:45:00 AM	8.49	8.34	30.76	30.13	2.15	2.50
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	3:47:00 PM	9.93	8.46	30.93	29.95	3.21	2.10
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	3:47:00 PM	9.78	8.51	31.00	30.01	2.80	2.60
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Middle	4.25	3:46:00 PM	9.20	8.38	30.51	30.01	2.54	3.00
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Middle	4.25	3:46:00 PM	9.48	8.51	30.87	30.01	2.69	3.10
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Bottom	7.50	3:45:00 PM	9.47	8.49	31.09	29.75	2.13	2.70
WSR01	20210706	Cloudy	Moderate	Mid-Flood	Bottom	7.50	3:45:00 PM	9.59	8.46	30.85	29.81	2.40	3.40
WSR01	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	3:53:00 PM	8.16	8.12	31.30	29.87	2.65	2.50
WSR01	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	3:53:00 PM	8.52	8.12	31.43	29.95	2.41	2.50
WSR01	20210708	Sunny	Moderate	Mid-Flood	Middle	4.60	3:52:00 PM	8.73	8.18	31.11	30.09	2.48	4.60
WSR01	20210708	Sunny	Moderate	Mid-Flood	Middle	4.60	3:52:00 PM	8.40	8.30	31.11	29.88	2.22	4.60
WSR01	20210708	Sunny	Moderate	Mid-Flood	Bottom	8.20	3:51:00 PM	8.48	8.29	31.35	30.08	1.73	3.30
WSR01	20210708	Sunny	Moderate	Mid-Flood	Bottom	8.20	3:51:00 PM	8.73	8.37	31.09	30.02	1.96	2.50
WSR01	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:05:00 PM	8.43	8.45	29.23	30.05	2.27	3.90
WSR01	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:05:00 PM	8.98	8.42	29.45	29.91	2.49	3.90
WSR01	20210710	Sunny	Moderate	Mid-Flood	Middle	4.35	5:04:00 PM	7.81	8.38	29.46	30.08	2.44	3.30
WSR01	20210710	Sunny	Moderate	Mid-Flood	Middle	4.35	5:04:00 PM	7.81	8.33	29.50	30.13	2.12	3.90
WSR01	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.70	5:03:00 PM	8.48	8.26	29.90	29.99	1.81	8.10
WSR01	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.70	5:03:00 PM	8.53	8.33	29.39	29.98	1.84	8.10
WSR01	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:23:00 AM	8.35	8.19	30.66	29.61	2.72	4.00
WSR01	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:23:00 AM	8.16	8.23	30.71	29.50	2.35	4.10

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210713	Sunny	Moderate	Mid-Flood	Middle	4.60	8:22:00 AM	8.18	8.33	30.70	29.46	1.86	6.80
WSR01	20210713	Sunny	Moderate	Mid-Flood	Middle	4.60	8:22:00 AM	8.24	8.27	30.41	29.62	2.09	6.80
WSR01	20210713	Sunny	Moderate	Mid-Flood	Bottom	8.20	8:21:00 AM	8.32	8.36	30.73	29.59	1.86	3.40
WSR01	20210713	Sunny	Moderate	Mid-Flood	Bottom	8.20	8:21:00 AM	8.01	8.40	30.51	29.68	2.22	3.30
WSR01	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:26:00 AM	9.37	8.28	31.47	29.08	2.68	2.50
WSR01	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:26:00 AM	8.66	8.20	31.62	29.15	2.52	3.80
WSR01	20210715	Sunny	Moderate	Mid-Flood	Middle	4.70	8:25:00 AM	7.95	8.14	31.82	29.11	2.59	3.20
WSR01	20210715	Sunny	Moderate	Mid-Flood	Middle	4.70	8:25:00 AM	8.92	8.34	31.91	29.12	2.94	2.50
WSR01	20210715	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:24:00 AM	7.61	8.36	31.85	29.15	2.91	2.80
WSR01	20210715	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:24:00 AM	8.47	8.27	31.63	29.06	2.55	2.60
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:58:00 AM	8.78	8.46	31.92	27.31	2.57	4.20
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:58:00 AM	8.61	8.38	31.36	27.26	2.44	4.00
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.55	9:57:00 AM	9.32	8.46	31.67	27.23	2.42	3.60
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.55	9:57:00 AM	9.41	8.43	31.89	27.36	2.39	5.30
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Bottom	8.10	9:56:00 AM	9.19	8.35	31.15	27.34	2.58	3.10
WSR01	20210717	Cloudy	Moderate	Mid-Flood	Bottom	8.10	9:56:00 AM	8.93	8.41	31.67	27.26	2.92	3.30
WSR01	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	3:57:00 PM	7.35	8.08	30.82	29.38	1.91	3.60
WSR01	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	3:57:00 PM	8.04	7.91	30.13	29.47	2.21	2.80
WSR01	20210722	Sunny	Moderate	Mid-Flood	Middle	4.30	3:56:00 PM	8.25	8.15	30.22	29.46	2.13	2.50
WSR01	20210722	Sunny	Moderate	Mid-Flood	Middle	4.30	3:56:00 PM	7.31	7.99	29.87	29.29	2.14	2.50
WSR01	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.60	3:55:00 PM	8.01	7.97	30.54	29.56	1.70	2.50
WSR01	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.60	3:55:00 PM	7.34	7.94	30.08	29.46	2.03	3.60
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:49:00 PM	7.57	7.99	30.21	29.16	2.77	2.50
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:49:00 PM	8.26	8.03	29.83	29.05	2.34	2.50
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.55	4:48:00 PM	8.32	8.02	29.83	29.07	2.63	2.50
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.55	4:48:00 PM	8.13	8.05	29.96	29.02	2.20	2.80
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Bottom	8.10	4:47:00 PM	8.35	8.06	30.00	29.13	2.26	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR01	20210724	Cloudy	Moderate	Mid-Flood	Bottom	8.10	4:47:00 PM	8.60	8.05	30.12	29.14	2.41	2.50
WSR01	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:24:00 AM	7.74	7.98	29.80	29.07	3.01	2.90
WSR01	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:24:00 AM	7.97	8.04	30.07	29.04	2.54	3.80
WSR01	20210727	Sunny	Moderate	Mid-Flood	Middle	4.70	8:23:00 AM	7.82	8.11	30.38	29.16	2.05	4.10
WSR01	20210727	Sunny	Moderate	Mid-Flood	Middle	4.70	8:23:00 AM	8.25	7.93	29.77	29.22	2.43	3.60
WSR01	20210727	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:22:00 AM	8.21	7.92	29.69	29.11	2.30	8.50
WSR01	20210727	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:22:00 AM	7.63	8.21	30.11	29.08	2.16	8.90
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:26:00 AM	8.04	8.25	30.02	28.58	3.45	2.80
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:26:00 AM	8.62	8.32	30.07	28.58	2.93	2.60
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Middle	4.30	8:25:00 AM	8.51	8.50	29.88	28.50	2.49	2.50
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Middle	4.30	8:25:00 AM	7.92	8.29	29.78	28.46	2.46	3.40
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Bottom	7.60	8:24:00 AM	7.92	8.41	30.15	28.50	2.79	5.10
WSR01	20210729	Cloudy	Moderate	Mid-Flood	Bottom	7.60	8:24:00 AM	8.48	8.22	30.12	28.44	2.52	4.90
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:10:00 AM	8.88	7.92	30.58	28.85	2.43	6.20
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:10:00 AM	9.13	8.12	30.76	28.84	2.38	6.50
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.70	10:09:00 AM	9.10	8.11	31.13	28.75	2.17	6.40
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.70	10:09:00 AM	8.94	8.10	30.74	28.90	2.57	6.70
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Bottom	8.40	10:08:00 AM	8.92	8.01	30.82	28.77	2.11	2.70
WSR01	20210731	Cloudy	Moderate	Mid-Flood	Bottom	8.40	10:08:00 AM	8.89	8.18	30.85	28.91	1.82	2.50
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:27:00 AM	10.05	8.26	31.48	30.14	2.62	2.50
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:27:00 AM	9.66	8.31	31.83	29.98	2.93	2.50
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.50	9:26:00 AM	10.01	8.45	31.44	30.05	2.19	2.50
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.50	9:26:00 AM	9.56	8.31	31.68	30.14	2.62	3.20
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Bottom	8.00	9:25:00 AM	9.88	8.39	31.81	30.10	2.32	2.60
WSR02	20210701	Cloudy	Moderate	Mid-Flood	Bottom	8.00	9:25:00 AM	10.02	8.41	31.16	30.04	2.34	2.50
WSR02	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:03:00 PM	9.24	8.26	31.11	30.08	2.79	2.50
WSR02	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:03:00 PM	9.81	8.31	30.85	30.01	2.58	2.50

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WSR02	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.65	12:02:00 PM	9.11	8.42	30.55	30.27	2.59	2.50
WSR02	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.65	12:02:00 PM	8.49	8.50	30.55	30.17	2.65	2.50
WSR02	20210703	Cloudy	Moderate	Mid-Flood	Bottom	8.30	12:01:00 PM	9.08	8.18	31.72	30.05	2.21	2.50
WSR02	20210703	Cloudy	Moderate	Mid-Flood	Bottom	8.30	12:01:00 PM	9.37	8.48	31.11	30.04	2.53	2.50
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:08:00 PM	9.07	8.43	30.94	29.89	3.20	5.70
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:08:00 PM	9.91	8.28	31.12	29.73	2.76	5.70
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Middle	4.70	4:07:00 PM	9.75	8.28	30.60	29.69	2.89	4.30
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Middle	4.70	4:07:00 PM	9.26	8.37	31.11	29.83	2.85	3.60
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Bottom	8.40	4:06:00 PM	9.42	8.42	30.87	29.69	2.62	4.70
WSR02	20210706	Cloudy	Moderate	Mid-Flood	Bottom	8.40	4:06:00 PM	9.92	8.40	30.92	29.75	2.38	4.30
WSR02	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:10:00 PM	8.14	8.32	31.36	30.00	2.38	4.70
WSR02	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:10:00 PM	8.65	8.33	30.76	29.96	2.84	4.70
WSR02	20210708	Sunny	Moderate	Mid-Flood	Middle	4.95	4:09:00 PM	9.04	8.19	31.04	30.01	1.86	2.50
WSR02	20210708	Sunny	Moderate	Mid-Flood	Middle	4.95	4:09:00 PM	8.54	8.18	30.78	29.95	1.97	2.50
WSR02	20210708	Sunny	Moderate	Mid-Flood	Bottom	8.90	4:08:00 PM	8.80	8.32	30.81	30.03	1.67	3.90
WSR02	20210708	Sunny	Moderate	Mid-Flood	Bottom	8.90	4:08:00 PM	8.08	8.18	30.74	29.91	1.89	3.90
WSR02	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:20:00 PM	9.02	8.26	29.59	30.16	2.42	9.00
WSR02	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:20:00 PM	8.07	8.44	29.59	30.06	2.52	9.00
WSR02	20210710	Sunny	Moderate	Mid-Flood	Middle	4.60	5:19:00 PM	8.26	8.40	29.12	30.01	2.37	2.60
WSR02	20210710	Sunny	Moderate	Mid-Flood	Middle	4.60	5:19:00 PM	7.57	8.28	29.57	29.99	2.70	4.00
WSR02	20210710	Sunny	Moderate	Mid-Flood	Bottom	8.20	5:18:00 PM	8.28	8.30	29.62	29.91	1.79	4.00
WSR02	20210710	Sunny	Moderate	Mid-Flood	Bottom	8.20	5:18:00 PM	8.94	8.27	29.39	30.14	2.02	3.80
WSR02	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:39:00 AM	8.23	8.33	30.89	29.56	2.27	7.80
WSR02	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:39:00 AM	8.19	8.23	30.92	29.58	2.18	7.80
WSR02	20210713	Sunny	Moderate	Mid-Flood	Middle	4.70	8:38:00 AM	7.94	8.21	30.96	29.64	2.30	2.50
WSR02	20210713	Sunny	Moderate	Mid-Flood	Middle	4.70	8:38:00 AM	8.24	8.25	30.75	29.63	2.28	3.50
WSR02	20210713	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:37:00 AM	8.21	8.27	30.47	29.76	1.99	3.10

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WSR02	20210713	Sunny	Moderate	Mid-Flood	Bottom	8.40	8:37:00 AM	8.38	8.16	30.39	29.51	2.14	2.90
WSR02	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:45:00 AM	8.60	8.34	31.56	29.08	2.65	3.60
WSR02	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:45:00 AM	8.44	8.18	31.57	29.14	2.75	3.30
WSR02	20210715	Sunny	Moderate	Mid-Flood	Middle	4.60	8:44:00 AM	8.54	8.33	31.82	29.18	2.63	3.20
WSR02	20210715	Sunny	Moderate	Mid-Flood	Middle	4.60	8:44:00 AM	9.39	8.21	31.67	29.25	3.10	3.00
WSR02	20210715	Sunny	Moderate	Mid-Flood	Bottom	8.20	8:43:00 AM	8.87	8.26	31.25	29.05	2.58	2.70
WSR02	20210715	Sunny	Moderate	Mid-Flood	Bottom	8.20	8:43:00 AM	8.06	8.19	31.59	29.24	2.20	3.30
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:17:00 AM	8.33	8.30	31.25	27.44	2.97	2.70
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:17:00 AM	8.80	8.42	31.68	27.29	2.67	4.10
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.80	10:16:00 AM	9.19	8.34	31.79	27.41	2.30	3.10
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.80	10:16:00 AM	9.34	8.27	31.91	27.23	2.58	4.90
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Bottom	8.60	10:15:00 AM	8.29	8.25	31.52	27.27	2.18	6.30
WSR02	20210717	Cloudy	Moderate	Mid-Flood	Bottom	8.60	10:15:00 AM	9.24	8.31	31.15	27.42	2.10	7.50
WSR02	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:16:00 PM	7.72	7.92	30.56	29.14	2.27	2.50
WSR02	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:16:00 PM	7.46	7.89	29.92	29.30	2.62	3.90
WSR02	20210722	Sunny	Moderate	Mid-Flood	Middle	4.80	4:15:00 PM	7.60	8.10	29.87	29.31	2.35	2.50
WSR02	20210722	Sunny	Moderate	Mid-Flood	Middle	4.80	4:15:00 PM	7.73	8.07	30.08	29.16	2.17	2.50
WSR02	20210722	Sunny	Moderate	Mid-Flood	Bottom	8.60	4:14:00 PM	7.77	8.15	30.59	29.34	2.05	2.50
WSR02	20210722	Sunny	Moderate	Mid-Flood	Bottom	8.60	4:14:00 PM	8.23	8.04	30.10	29.13	1.71	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	8.53	7.96	30.33	28.99	2.70	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	8.43	8.12	30.21	28.93	2.88	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.70	5:02:00 PM	7.99	8.05	30.28	28.94	3.01	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.70	5:02:00 PM	8.55	8.24	30.27	28.96	2.66	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Bottom	8.40	5:01:00 PM	7.88	8.16	30.14	28.96	2.30	2.50
WSR02	20210724	Cloudy	Moderate	Mid-Flood	Bottom	8.40	5:01:00 PM	8.56	7.99	30.27	29.04	2.30	2.50
WSR02	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:42:00 AM	7.96	7.90	29.86	29.24	2.48	8.40
WSR02	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:42:00 AM	7.57	8.10	29.42	29.14	2.74	8.30

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR02	20210727	Sunny	Moderate	Mid-Flood	Middle	4.80	8:41:00 AM	7.91	8.14	30.37	29.12	2.23	8.90
WSR02	20210727	Sunny	Moderate	Mid-Flood	Middle	4.80	8:41:00 AM	7.83	8.19	29.74	29.10	2.27	8.50
WSR02	20210727	Sunny	Moderate	Mid-Flood	Bottom	8.60	8:40:00 AM	8.09	8.04	29.80	29.20	1.88	5.70
WSR02	20210727	Sunny	Moderate	Mid-Flood	Bottom	8.60	8:40:00 AM	7.70	7.88	30.33	29.24	1.72	5.40
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:45:00 AM	8.50	8.40	29.65	28.65	2.74	7.50
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:45:00 AM	8.88	8.25	29.71	28.67	3.14	7.10
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Middle	4.75	8:44:00 AM	8.64	8.14	29.73	28.62	2.51	2.50
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Middle	4.75	8:44:00 AM	8.46	8.42	30.01	28.60	2.58	2.50
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Bottom	8.50	8:43:00 AM	8.84	8.35	29.73	28.64	2.76	2.90
WSR02	20210729	Cloudy	Moderate	Mid-Flood	Bottom	8.50	8:43:00 AM	8.54	8.24	29.55	28.68	2.32	3.90
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:28:00 AM	9.31	8.08	31.23	28.96	3.03	3.90
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:28:00 AM	9.36	8.05	31.52	29.02	2.68	4.10
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.65	10:27:00 AM	8.94	7.97	31.27	28.99	2.01	4.00
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.65	10:27:00 AM	9.24	7.98	30.97	28.89	2.41	2.50
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Bottom	8.30	10:26:00 AM	9.37	8.07	31.51	29.05	2.48	2.50
WSR02	20210731	Cloudy	Moderate	Mid-Flood	Bottom	8.30	10:26:00 AM	9.37	8.13	31.66	28.97	2.15	2.50
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:41:00 AM	9.48	8.41	31.69	30.07	2.59	2.50
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:41:00 AM	9.77	8.44	31.77	30.06	2.52	2.50
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.15	9:40:00 AM	9.88	8.22	31.39	30.15	2.56	2.50
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.15	9:40:00 AM	9.93	8.26	31.86	30.06	2.65	2.50
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.30	9:39:00 AM	9.42	8.29	31.28	30.12	2.21	6.00
WSR03	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.30	9:39:00 AM	9.60	8.46	31.88	30.15	2.08	6.00
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:14:00 PM	9.14	8.25	31.00	30.18	2.47	2.50
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:14:00 PM	9.13	8.47	31.21	30.20	2.92	2.50
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.90	12:13:00 PM	8.85	8.48	31.86	30.31	2.07	2.50
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.90	12:13:00 PM	9.46	8.26	30.74	30.06	2.45	2.50
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.80	12:12:00 PM	9.40	8.49	31.33	30.16	2.44	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.80	12:12:00 PM	9.05	8.49	30.71	30.34	2.28	2.50
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:21:00 PM	9.69	8.39	30.71	29.67	2.50	4.80
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:21:00 PM	9.11	8.32	30.98	29.64	2.47	13.10
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.95	4:20:00 PM	9.91	8.28	30.86	29.73	2.55	8.10
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.95	4:20:00 PM	9.70	8.48	31.03	29.85	2.17	7.90
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.90	4:19:00 PM	9.04	8.30	30.81	29.67	2.04	6.30
WSR03	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.90	4:19:00 PM	9.61	8.47	30.61	29.81	1.89	4.70
WSR03	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:22:00 PM	8.70	8.14	31.15	29.87	2.35	2.50
WSR03	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:22:00 PM	7.99	8.14	30.97	30.00	2.64	2.50
WSR03	20210708	Sunny	Moderate	Mid-Flood	Middle	3.95	4:21:00 PM	9.14	8.28	30.84	29.84	2.48	2.50
WSR03	20210708	Sunny	Moderate	Mid-Flood	Middle	3.95	4:21:00 PM	8.45	8.24	31.21	29.98	2.12	2.50
WSR03	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.90	4:20:00 PM	8.41	8.22	31.42	29.93	1.79	2.50
WSR03	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.90	4:20:00 PM	9.14	8.17	31.38	29.86	1.94	2.50
WSR03	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:26:00 PM	7.96	8.47	29.54	30.07	2.53	3.80
WSR03	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:26:00 PM	8.20	8.30	29.67	29.98	2.14	4.30
WSR03	20210710	Sunny	Moderate	Mid-Flood	Middle	4.00	5:25:00 PM	8.65	8.30	29.36	30.08	1.91	3.60
WSR03	20210710	Sunny	Moderate	Mid-Flood	Middle	4.00	5:25:00 PM	7.82	8.30	29.46	30.04	2.16	4.90
WSR03	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.00	5:24:00 PM	8.77	8.37	29.27	29.89	1.99	3.80
WSR03	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.00	5:24:00 PM	7.60	8.29	29.39	29.87	2.33	2.50
WSR03	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:49:00 AM	7.65	8.23	30.41	29.59	2.52	2.50
WSR03	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:49:00 AM	8.09	8.21	30.77	29.67	2.23	3.30
WSR03	20210713	Sunny	Moderate	Mid-Flood	Middle	4.15	8:48:00 AM	7.92	8.24	30.62	29.57	2.27	2.50
WSR03	20210713	Sunny	Moderate	Mid-Flood	Middle	4.15	8:48:00 AM	7.99	8.28	30.52	29.51	2.06	2.50
WSR03	20210713	Sunny	Moderate	Mid-Flood	Bottom	7.30	8:47:00 AM	7.51	8.16	30.58	29.65	2.16	7.10
WSR03	20210713	Sunny	Moderate	Mid-Flood	Bottom	7.30	8:47:00 AM	7.48	8.27	30.72	29.65	2.15	7.10
WSR03	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	9.20	8.39	31.25	29.17	2.74	3.00
WSR03	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	9.03	8.31	31.60	29.28	2.65	2.60

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210715	Sunny	Moderate	Mid-Flood	Middle	3.85	8:58:00 AM	7.94	8.22	31.90	29.20	2.94	8.10
WSR03	20210715	Sunny	Moderate	Mid-Flood	Middle	3.85	8:58:00 AM	9.45	8.22	31.87	29.21	2.66	8.10
WSR03	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.70	8:57:00 AM	8.55	8.33	31.70	29.17	2.91	3.50
WSR03	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.70	8:57:00 AM	8.41	8.24	31.78	29.19	2.52	3.80
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:31:00 AM	8.94	8.35	31.30	27.22	2.79	11.00
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:31:00 AM	8.33	8.20	31.45	27.37	2.55	11.00
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.95	10:30:00 AM	9.02	8.32	31.16	27.23	2.31	24.10
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.95	10:30:00 AM	9.22	8.25	31.27	27.24	2.58	24.10
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.90	10:29:00 AM	8.41	8.20	31.57	27.28	2.52	7.90
WSR03	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.90	10:29:00 AM	8.93	8.29	31.25	27.36	2.50	7.90
WSR03	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:32:00 PM	8.19	8.08	29.96	29.12	2.01	2.50
WSR03	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:32:00 PM	7.46	8.04	30.30	29.32	2.17	2.50
WSR03	20210722	Sunny	Moderate	Mid-Flood	Middle	4.20	4:31:00 PM	7.81	7.99	30.47	29.33	1.99	2.50
WSR03	20210722	Sunny	Moderate	Mid-Flood	Middle	4.20	4:31:00 PM	7.67	8.03	30.62	29.25	1.71	2.50
WSR03	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.40	4:30:00 PM	7.48	8.16	29.94	29.26	1.80	2.50
WSR03	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.40	4:30:00 PM	7.78	7.97	30.43	29.26	1.53	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:15:00 PM	7.62	7.92	30.03	29.08	3.15	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:15:00 PM	7.82	8.00	30.02	28.92	3.47	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.85	5:14:00 PM	7.76	7.96	29.89	28.95	2.91	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.85	5:14:00 PM	7.91	8.12	30.23	29.05	2.54	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.70	5:13:00 PM	7.39	8.10	30.35	28.96	2.61	2.50
WSR03	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.70	5:13:00 PM	7.65	8.09	30.38	28.94	3.03	2.50
WSR03	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:53:00 AM	7.76	8.12	29.71	29.16	2.99	3.50
WSR03	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	8:53:00 AM	7.53	8.00	29.87	29.51	3.14	2.70
WSR03	20210727	Sunny	Moderate	Mid-Flood	Middle	4.15	8:52:00 AM	7.70	7.96	29.99	29.23	2.55	9.20
WSR03	20210727	Sunny	Moderate	Mid-Flood	Middle	4.15	8:52:00 AM	7.78	7.94	29.69	29.22	2.16	9.80
WSR03	20210727	Sunny	Moderate	Mid-Flood	Bottom	7.30	8:51:00 AM	7.66	8.14	30.01	29.22	2.19	3.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR03	20210727	Sunny	Moderate	Mid-Flood	Bottom	7.30	8:51:00 AM	7.57	8.11	29.89	29.27	1.86	2.50
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	8.84	8.21	29.63	28.71	2.72	7.40
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	8.40	8.19	29.92	28.70	2.87	7.20
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.75	8:58:00 AM	8.73	8.26	29.78	28.76	2.77	2.70
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.75	8:58:00 AM	8.85	8.27	29.92	28.70	3.02	2.90
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.50	8:57:00 AM	8.38	8.28	29.59	28.57	2.34	2.50
WSR03	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.50	8:57:00 AM	8.46	8.24	29.80	28.59	2.41	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:41:00 AM	8.87	8.17	31.68	29.06	2.56	3.00
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:41:00 AM	8.87	8.07	31.87	29.05	2.94	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.25	10:40:00 AM	9.25	7.93	31.99	28.87	2.22	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Middle	4.25	10:40:00 AM	9.43	8.05	31.22	28.92	2.28	2.50
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Bottom	7.50	10:39:00 AM	9.13	8.14	31.58	28.91	2.20	7.80
WSR03	20210731	Cloudy	Moderate	Mid-Flood	Bottom	7.50	10:39:00 AM	8.93	8.10	31.92	28.92	2.48	7.60
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:57:00 AM	9.21	8.26	31.82	30.08	2.74	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:57:00 AM	9.80	8.41	31.09	30.20	2.64	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.90	9:56:00 AM	9.85	8.26	31.66	30.15	2.19	2.70
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.90	9:56:00 AM	9.89	8.25	31.41	30.18	2.18	4.10
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.80	9:55:00 AM	9.94	8.33	31.17	30.06	2.21	2.50
WSR04	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.80	9:55:00 AM	9.23	8.21	31.79	30.25	2.18	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:26:00 PM	9.02	8.29	30.83	30.26	2.80	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:26:00 PM	8.62	8.43	30.69	30.28	3.15	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.55	12:25:00 PM	8.81	8.18	30.63	30.27	2.10	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.55	12:25:00 PM	9.29	8.40	31.00	30.35	2.07	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.10	12:24:00 PM	9.73	8.24	30.74	30.06	2.37	2.50
WSR04	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.10	12:24:00 PM	8.92	8.30	31.20	30.27	2.03	2.50
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:37:00 PM	9.76	8.33	30.92	29.76	2.69	5.60
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:37:00 PM	9.69	8.44	30.95	29.69	3.10	7.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.70	4:36:00 PM	9.20	8.51	31.10	29.79	2.47	6.00
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.70	4:36:00 PM	9.59	8.48	30.89	29.80	2.61	4.20
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.40	4:35:00 PM	9.06	8.51	30.80	29.89	2.17	5.00
WSR04	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.40	4:35:00 PM	9.37	8.30	30.77	29.68	2.34	6.40
WSR04	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:34:00 PM	9.24	8.12	31.42	29.87	2.70	2.50
WSR04	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:34:00 PM	8.45	8.32	30.92	29.84	2.72	2.50
WSR04	20210708	Sunny	Moderate	Mid-Flood	Middle	3.75	4:33:00 PM	8.96	8.12	31.34	29.89	2.36	2.50
WSR04	20210708	Sunny	Moderate	Mid-Flood	Middle	3.75	4:33:00 PM	8.17	8.27	30.84	30.01	1.99	2.50
WSR04	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.50	4:32:00 PM	7.95	8.33	31.49	29.90	1.69	2.50
WSR04	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.50	4:32:00 PM	8.81	8.19	31.36	29.85	1.73	2.50
WSR04	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:37:00 PM	7.87	8.46	29.44	29.90	2.59	4.40
WSR04	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:37:00 PM	8.40	8.44	29.30	30.01	2.41	3.90
WSR04	20210710	Sunny	Moderate	Mid-Flood	Middle	3.55	5:36:00 PM	8.99	8.30	29.42	30.06	2.26	4.40
WSR04	20210710	Sunny	Moderate	Mid-Flood	Middle	3.55	5:36:00 PM	7.84	8.46	29.32	30.04	2.29	4.40
WSR04	20210710	Sunny	Moderate	Mid-Flood	Bottom	6.10	5:35:00 PM	7.69	8.39	29.40	29.97	2.31	3.10
WSR04	20210710	Sunny	Moderate	Mid-Flood	Bottom	6.10	5:35:00 PM	7.76	8.36	29.78	29.85	2.11	3.30
WSR04	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	7.65	8.27	30.88	29.78	2.53	7.50
WSR04	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	8:59:00 AM	7.57	8.30	30.55	29.92	2.27	7.50
WSR04	20210713	Sunny	Moderate	Mid-Flood	Middle	3.85	8:58:00 AM	8.25	8.34	30.46	29.81	1.81	2.60
WSR04	20210713	Sunny	Moderate	Mid-Flood	Middle	3.85	8:58:00 AM	8.04	8.27	30.81	29.71	1.84	3.70
WSR04	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.70	8:57:00 AM	7.62	8.17	30.82	29.67	2.08	4.40
WSR04	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.70	8:57:00 AM	7.71	8.25	30.47	29.76	2.13	2.50
WSR04	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:12:00 AM	8.59	8.17	31.30	29.32	2.80	3.30
WSR04	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:12:00 AM	8.32	8.27	31.39	29.42	2.70	2.80
WSR04	20210715	Sunny	Moderate	Mid-Flood	Middle	3.35	9:11:00 AM	9.76	8.34	31.59	29.42	2.62	2.80
WSR04	20210715	Sunny	Moderate	Mid-Flood	Middle	3.35	9:11:00 AM	9.40	8.23	32.04	29.36	2.64	3.70
WSR04	20210715	Sunny	Moderate	Mid-Flood	Bottom	5.70	9:10:00 AM	9.14	8.34	31.39	29.33	2.24	3.30

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR04	20210715	Sunny	Moderate	Mid-Flood	Bottom	5.70	9:10:00 AM	7.71	8.38	31.54	29.28	2.46	2.90
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:44:00 AM	9.49	8.38	31.88	27.58	2.86	3.40
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:44:00 AM	8.61	8.39	31.15	27.36	2.99	4.70
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.45	10:43:00 AM	8.51	8.20	31.64	27.50	2.38	5.20
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.45	10:43:00 AM	9.32	8.24	31.71	27.50	2.78	3.10
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Bottom	5.90	10:42:00 AM	9.12	8.21	31.78	27.46	1.88	3.20
WSR04	20210717	Cloudy	Moderate	Mid-Flood	Bottom	5.90	10:42:00 AM	8.69	8.36	31.26	27.35	1.96	5.10
WSR04	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:46:00 PM	8.24	7.96	30.83	29.19	2.19	2.50
WSR04	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	4:46:00 PM	8.25	8.09	30.10	29.22	2.55	2.50
WSR04	20210722	Sunny	Moderate	Mid-Flood	Middle	3.45	4:45:00 PM	7.59	7.98	29.91	29.19	1.87	2.50
WSR04	20210722	Sunny	Moderate	Mid-Flood	Middle	3.45	4:45:00 PM	7.69	7.95	30.64	29.24	2.21	2.50
WSR04	20210722	Sunny	Moderate	Mid-Flood	Bottom	5.90	4:44:00 PM	7.90	8.04	30.54	29.17	1.89	2.50
WSR04	20210722	Sunny	Moderate	Mid-Flood	Bottom	5.90	4:44:00 PM	7.28	7.89	30.21	29.14	2.09	2.50
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:26:00 PM	7.90	8.12	29.88	28.99	3.00	2.50
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:26:00 PM	8.57	8.07	30.03	28.90	2.70	3.30
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.90	5:25:00 PM	8.23	8.09	30.18	28.82	3.25	2.50
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.90	5:25:00 PM	8.15	7.99	30.13	29.00	3.08	2.50
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.80	5:24:00 PM	8.20	8.14	30.10	28.82	2.44	2.50
WSR04	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.80	5:24:00 PM	8.02	7.91	30.37	28.88	2.78	2.50
WSR04	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:04:00 AM	7.54	7.95	30.48	29.30	3.17	4.10
WSR04	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:04:00 AM	8.05	8.08	30.36	29.35	3.24	3.60
WSR04	20210727	Sunny	Moderate	Mid-Flood	Middle	3.50	9:03:00 AM	7.93	7.94	30.64	29.49	2.42	3.10
WSR04	20210727	Sunny	Moderate	Mid-Flood	Middle	3.50	9:03:00 AM	7.43	8.27	30.68	29.33	2.66	2.80
WSR04	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.00	9:02:00 AM	7.83	8.21	29.62	29.35	2.17	3.30
WSR04	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.00	9:02:00 AM	7.87	7.98	30.03	29.36	2.05	3.90
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:12:00 AM	8.87	8.24	30.14	28.79	2.81	2.50
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:12:00 AM	9.05	8.13	29.80	28.73	3.00	3.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.85	9:11:00 AM	8.85	8.26	29.80	28.79	3.16	3.00
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.85	9:11:00 AM	8.34	8.28	29.71	28.77	3.02	2.50
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.70	9:10:00 AM	8.53	8.00	29.97	28.70	2.54	6.70
WSR04	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.70	9:10:00 AM	8.99	8.24	29.92	28.74	2.18	6.90
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:53:00 AM	9.39	8.04	30.65	29.11	2.49	2.50
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:53:00 AM	9.20	8.08	31.11	29.17	2.78	2.50
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.45	10:52:00 AM	8.96	8.02	30.60	29.10	2.68	2.50
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.45	10:52:00 AM	9.14	8.09	31.01	29.02	2.80	2.50
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Bottom	5.90	10:51:00 AM	9.40	8.12	30.55	29.04	2.59	2.50
WSR04	20210731	Cloudy	Moderate	Mid-Flood	Bottom	5.90	10:51:00 AM	8.99	7.96	30.41	29.15	2.61	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:09:00 AM	9.66	8.41	31.45	30.28	2.33	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:09:00 AM	9.17	8.47	31.44	30.20	2.48	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Middle	8.60	11:08:00 AM	10.03	8.23	31.77	30.18	2.28	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Middle	8.60	11:08:00 AM	9.15	8.47	31.48	30.22	2.38	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Bottom	16.20	11:07:00 AM	9.56	8.41	31.39	30.25	2.60	2.50
WSR16	20210701	Cloudy	Moderate	Mid-Flood	Bottom	16.20	11:07:00 AM	9.37	8.41	31.10	30.44	2.53	4.70
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:25:00 PM	9.76	8.26	31.19	30.39	2.76	2.50
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:25:00 PM	9.61	8.38	30.70	30.27	3.07	2.50
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Middle	8.60	1:24:00 PM	8.42	8.24	30.83	30.30	2.36	2.50
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Middle	8.60	1:24:00 PM	9.60	8.28	31.22	30.36	2.18	2.50
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Bottom	16.20	1:23:00 PM	9.41	8.30	31.54	30.28	2.07	2.50
WSR16	20210703	Cloudy	Moderate	Mid-Flood	Bottom	16.20	1:23:00 PM	8.47	8.31	30.89	30.41	2.48	2.50
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:45:00 PM	9.73	8.34	30.94	29.47	2.54	9.70
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:45:00 PM	9.36	8.35	30.82	29.67	3.04	9.70
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Middle	8.45	5:44:00 PM	9.63	8.40	30.52	29.64	2.72	6.20
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Middle	8.45	5:44:00 PM	9.66	8.39	30.68	29.70	2.41	5.10
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Bottom	15.90	5:43:00 PM	9.26	8.32	30.50	29.81	2.61	7.00

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR16	20210706	Cloudy	Moderate	Mid-Flood	Bottom	15.90	5:43:00 PM	9.41	8.51	30.86	29.66	2.35	7.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:43:00 PM	8.83	8.37	30.83	29.76	2.18	2.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:43:00 PM	8.86	8.27	31.40	29.85	2.34	2.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Middle	8.15	5:42:00 PM	9.34	8.36	30.96	29.74	2.15	2.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Middle	8.15	5:42:00 PM	9.22	8.12	30.97	29.79	2.56	2.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Bottom	15.30	5:41:00 PM	8.57	8.12	31.44	29.88	1.97	2.50
WSR16	20210708	Sunny	Moderate	Mid-Flood	Bottom	15.30	5:41:00 PM	9.20	8.34	31.49	29.74	2.22	2.60
WSR16	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:31:00 PM	7.50	8.32	29.66	29.69	2.69	3.40
WSR16	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:31:00 PM	7.62	8.27	29.59	29.83	2.31	2.50
WSR16	20210710	Sunny	Moderate	Mid-Flood	Middle	7.90	6:30:00 PM	8.52	8.31	29.68	29.71	2.68	2.60
WSR16	20210710	Sunny	Moderate	Mid-Flood	Middle	7.90	6:30:00 PM	8.86	8.33	29.21	29.82	2.62	3.70
WSR16	20210710	Sunny	Moderate	Mid-Flood	Bottom	14.80	6:29:00 PM	8.52	8.28	29.92	29.76	2.05	4.50
WSR16	20210710	Sunny	Moderate	Mid-Flood	Bottom	14.80	6:29:00 PM	7.86	8.36	29.10	29.61	2.41	2.50
WSR16	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	10:05:00 AM	8.38	8.29	30.80	29.86	2.34	7.40
WSR16	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	10:05:00 AM	7.63	8.32	30.44	29.84	2.50	7.40
WSR16	20210713	Sunny	Moderate	Mid-Flood	Middle	8.15	10:04:00 AM	7.58	8.27	30.42	29.91	2.14	8.30
WSR16	20210713	Sunny	Moderate	Mid-Flood	Middle	8.15	10:04:00 AM	8.06	8.20	30.44	30.03	2.12	8.30
WSR16	20210713	Sunny	Moderate	Mid-Flood	Bottom	15.30	10:03:00 AM	8.06	8.21	30.64	30.05	1.82	2.50
WSR16	20210713	Sunny	Moderate	Mid-Flood	Bottom	15.30	10:03:00 AM	7.99	8.36	30.93	29.83	1.88	2.60
WSR16	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	10:21:00 AM	7.89	8.08	31.70	29.92	2.57	14.50
WSR16	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	10:21:00 AM	7.70	8.22	31.32	29.80	2.81	11.80
WSR16	20210715	Sunny	Moderate	Mid-Flood	Middle	8.10	10:20:00 AM	8.43	8.23	31.93	29.77	2.39	6.80
WSR16	20210715	Sunny	Moderate	Mid-Flood	Middle	8.10	10:20:00 AM	7.55	8.06	31.32	29.78	2.84	4.80
WSR16	20210715	Sunny	Moderate	Mid-Flood	Bottom	15.20	10:19:00 AM	8.28	8.12	31.92	29.94	2.45	2.50
WSR16	20210715	Sunny	Moderate	Mid-Flood	Bottom	15.20	10:19:00 AM	8.49	8.18	31.82	29.83	2.67	3.40
WSR16	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:48:00 AM	9.07	8.32	31.31	27.48	2.66	2.50
WSR16	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:48:00 AM	8.84	8.34	31.28	27.60	2.33	3.50

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WSR16	20210717	Cloudy	Moderate	Mid-Flood	Middle	8.20	11:47:00 AM	8.98	8.38	31.63	27.63	2.16	8.30
WSR16	20210717	Cloudy	Moderate	Mid-Flood	Middle	8.20	11:47:00 AM	8.79	8.45	31.28	27.49	2.42	8.30
WSR16	20210717	Cloudy	Moderate	Mid-Flood	Bottom	15.40	11:46:00 AM	8.97	8.20	31.44	27.73	2.49	6.30
WSR16	20210717	Cloudy	Moderate	Mid-Flood	Bottom	15.40	11:46:00 AM	9.19	8.38	31.90	27.53	2.58	6.30
WSR16	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:58:00 PM	7.67	8.18	30.84	29.01	3.12	2.50
WSR16	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:58:00 PM	8.30	8.10	29.94	29.02	2.90	2.50
WSR16	20210722	Sunny	Moderate	Mid-Flood	Middle	8.15	5:57:00 PM	7.36	8.02	29.89	29.02	2.94	2.50
WSR16	20210722	Sunny	Moderate	Mid-Flood	Middle	8.15	5:57:00 PM	7.95	7.97	30.58	29.05	3.14	2.50
WSR16	20210722	Sunny	Moderate	Mid-Flood	Bottom	15.30	5:56:00 PM	8.31	8.03	30.50	29.10	3.00	2.50
WSR16	20210722	Sunny	Moderate	Mid-Flood	Bottom	15.30	5:56:00 PM	7.96	8.14	29.93	29.09	3.15	2.50
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:24:00 PM	7.30	8.14	30.11	28.65	3.12	2.50
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:24:00 PM	7.95	8.01	29.87	28.73	3.08	2.50
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Middle	8.20	6:23:00 PM	7.87	8.24	30.18	28.78	2.75	2.50
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Middle	8.20	6:23:00 PM	8.11	8.16	30.04	28.62	2.71	2.50
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Bottom	15.40	6:22:00 PM	8.07	8.08	29.99	28.74	2.95	4.10
WSR16	20210724	Cloudy	Moderate	Mid-Flood	Bottom	15.40	6:22:00 PM	8.17	8.17	29.88	28.69	2.81	4.10
WSR16	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	10:07:00 AM	7.39	8.23	30.08	29.62	3.22	4.10
WSR16	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	10:07:00 AM	7.54	8.00	29.78	29.72	2.81	3.10
WSR16	20210727	Sunny	Moderate	Mid-Flood	Middle	8.00	10:06:00 AM	8.18	8.12	29.56	29.59	3.29	3.80
WSR16	20210727	Sunny	Moderate	Mid-Flood	Middle	8.00	10:06:00 AM	7.40	7.99	30.19	29.48	3.14	4.20
WSR16	20210727	Sunny	Moderate	Mid-Flood	Bottom	15.00	10:05:00 AM	8.45	7.98	30.24	29.48	2.88	3.30
WSR16	20210727	Sunny	Moderate	Mid-Flood	Bottom	15.00	10:05:00 AM	8.43	7.97	30.09	29.60	2.45	3.40
WSR16	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:16:00 AM	8.69	8.34	29.69	28.98	4.13	2.50
WSR16	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:16:00 AM	7.98	8.19	29.65	28.98	4.51	2.50
WSR16	20210729	Cloudy	Moderate	Mid-Flood	Middle	7.90	10:15:00 AM	8.25	8.16	29.40	29.02	4.26	2.50
WSR16	20210729	Cloudy	Moderate	Mid-Flood	Middle	7.90	10:15:00 AM	8.46	8.36	29.46	28.93	4.02	3.90
WSR16	20210729	Cloudy	Moderate	Mid-Flood	Bottom	14.80	10:14:00 AM	8.65	8.22	29.44	29.02	3.73	2.50

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WSR16	20210729	Cloudy	Moderate	Mid-Flood	Bottom	14.80	10:14:00 AM	8.22	8.30	29.42	29.06	3.90	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:00:00 PM	9.16	7.93	31.03	29.01	2.49	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:00:00 PM	9.20	8.10	30.46	29.01	2.31	2.70
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Middle	8.00	11:59:00 AM	9.33	8.11	30.47	29.13	2.70	7.10
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Middle	8.00	11:59:00 AM	9.15	7.95	30.61	29.09	2.60	6.90
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Bottom	15.00	11:58:00 AM	9.49	8.10	30.65	29.22	2.48	2.50
WSR16	20210731	Cloudy	Moderate	Mid-Flood	Bottom	15.00	11:58:00 AM	9.11	7.99	30.68	29.17	2.16	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:12:00 AM	9.11	8.23	31.29	30.15	2.47	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:12:00 AM	9.55	8.22	31.55	30.25	2.49	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.70	10:11:00 AM	9.54	8.28	31.11	30.12	2.80	2.50
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.70	10:11:00 AM	9.15	8.39	31.81	30.06	2.65	2.70
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.40	10:10:00 AM	9.41	8.41	31.23	30.11	2.47	6.70
WSR33	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.40	10:10:00 AM	9.99	8.44	31.81	30.08	2.49	4.20
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:39:00 PM	8.92	8.43	31.61	30.11	2.64	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:39:00 PM	8.56	8.20	31.53	30.14	3.06	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.80	12:38:00 PM	8.56	8.40	31.56	30.10	2.33	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.80	12:38:00 PM	9.59	8.20	30.95	30.22	2.25	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.60	12:37:00 PM	9.55	8.20	30.82	30.22	2.06	2.50
WSR33	20210703	Cloudy	Moderate	Mid-Flood	Bottom	6.60	12:37:00 PM	9.74	8.48	31.57	30.20	2.41	2.50
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:51:00 PM	9.54	8.29	30.74	29.63	2.86	6.80
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	4:51:00 PM	8.98	8.41	30.87	29.81	2.40	6.40
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.65	4:50:00 PM	9.80	8.50	30.84	29.88	2.42	7.60
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.65	4:50:00 PM	9.68	8.50	30.66	29.84	2.62	7.40
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.30	4:49:00 PM	9.30	8.38	30.79	29.70	2.46	7.20
WSR33	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.30	4:49:00 PM	9.51	8.41	30.78	29.76	2.27	7.60
WSR33	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:51:00 PM	8.60	8.31	30.97	29.88	2.12	4.30
WSR33	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	4:51:00 PM	9.36	8.28	31.46	29.82	1.83	2.90

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33	20210708	Sunny	Moderate	Mid-Flood	Middle	3.75	4:50:00 PM	9.25	8.21	31.20	29.88	1.89	2.50
WSR33	20210708	Sunny	Moderate	Mid-Flood	Middle	3.75	4:50:00 PM	8.71	8.23	30.70	29.85	2.07	2.50
WSR33	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.50	4:49:00 PM	8.00	8.31	30.72	29.80	2.25	2.50
WSR33	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.50	4:49:00 PM	8.03	8.19	30.74	29.93	2.46	2.50
WSR33	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:50:00 PM	8.69	8.32	29.33	29.81	2.77	2.50
WSR33	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	5:50:00 PM	8.70	8.47	29.09	29.99	2.36	2.50
WSR33	20210710	Sunny	Moderate	Mid-Flood	Middle	3.50	5:49:00 PM	8.68	8.43	29.60	29.81	2.34	2.50
WSR33	20210710	Sunny	Moderate	Mid-Flood	Middle	3.50	5:49:00 PM	8.18	8.26	29.68	29.96	2.59	3.80
WSR33	20210710	Sunny	Moderate	Mid-Flood	Bottom	6.00	5:48:00 PM	8.75	8.36	29.09	29.98	1.85	3.00
WSR33	20210710	Sunny	Moderate	Mid-Flood	Bottom	6.00	5:48:00 PM	7.71	8.45	29.45	29.97	2.04	4.00
WSR33	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:52:00 AM	8.01	8.26	30.67	30.02	2.61	3.70
WSR33	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:52:00 AM	7.83	8.37	31.02	29.75	2.40	2.50
WSR33	20210713	Sunny	Moderate	Mid-Flood	Middle	3.80	9:51:00 AM	8.06	8.28	30.77	30.01	2.21	2.80
WSR33	20210713	Sunny	Moderate	Mid-Flood	Middle	3.80	9:51:00 AM	7.52	8.36	30.42	29.77	1.97	5.00
WSR33	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.60	9:50:00 AM	8.39	8.20	31.00	29.71	2.08	8.20
WSR33	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.60	9:50:00 AM	8.08	8.25	30.49	29.89	1.96	8.20
WSR33	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:27:00 AM	8.79	8.16	31.20	29.46	3.05	3.40
WSR33	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:27:00 AM	8.05	8.20	31.87	29.37	3.04	3.40
WSR33	20210715	Sunny	Moderate	Mid-Flood	Middle	3.75	9:26:00 AM	7.67	8.18	31.31	29.57	2.72	4.00
WSR33	20210715	Sunny	Moderate	Mid-Flood	Middle	3.75	9:26:00 AM	9.47	8.20	31.72	29.58	2.98	3.10
WSR33	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.50	9:25:00 AM	8.80	8.36	31.34	29.45	2.19	9.30
WSR33	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.50	9:25:00 AM	9.58	8.34	31.39	29.47	2.56	9.30
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:59:00 AM	8.60	8.25	31.68	27.36	2.37	3.50
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:59:00 AM	8.75	8.32	31.64	27.50	2.61	3.50
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.55	10:58:00 AM	8.38	8.21	31.63	27.35	2.71	3.70
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.55	10:58:00 AM	8.51	8.26	31.21	27.44	2.47	4.50
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.10	10:57:00 AM	9.38	8.44	31.11	27.44	2.16	7.40

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.10	10:57:00 AM	8.77	8.46	31.15	27.39	2.59	7.40
WSR33	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	7.93	7.91	30.64	29.05	2.26	2.50
WSR33	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	7.50	7.99	30.85	29.13	2.71	2.50
WSR33	20210722	Sunny	Moderate	Mid-Flood	Middle	3.65	5:02:00 PM	8.04	8.14	30.42	29.20	2.19	2.50
WSR33	20210722	Sunny	Moderate	Mid-Flood	Middle	3.65	5:02:00 PM	7.56	7.96	30.35	29.12	1.87	3.70
WSR33	20210722	Sunny	Moderate	Mid-Flood	Bottom	6.30	5:01:00 PM	7.63	7.98	30.25	29.15	1.70	2.50
WSR33	20210722	Sunny	Moderate	Mid-Flood	Bottom	6.30	5:01:00 PM	7.36	7.90	30.40	29.18	1.46	2.50
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:38:00 PM	8.49	8.11	29.99	28.83	3.11	2.60
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:38:00 PM	8.25	7.99	30.41	28.90	3.17	2.50
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.80	5:37:00 PM	7.72	8.23	30.30	28.97	2.48	2.50
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.80	5:37:00 PM	8.41	8.03	30.20	28.86	2.75	2.50
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.60	5:36:00 PM	7.97	8.24	30.21	28.83	2.40	3.40
WSR33	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.60	5:36:00 PM	7.44	8.03	29.82	28.86	2.02	2.50
WSR33	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:19:00 AM	8.34	8.24	31.06	29.37	2.91	3.10
WSR33	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:19:00 AM	7.77	8.19	30.11	29.32	2.59	4.70
WSR33	20210727	Sunny	Moderate	Mid-Flood	Middle	3.70	9:18:00 AM	8.36	8.23	30.95	29.41	2.35	3.30
WSR33	20210727	Sunny	Moderate	Mid-Flood	Middle	3.70	9:18:00 AM	8.26	8.41	30.52	29.31	2.03	3.30
WSR33	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.40	9:17:00 AM	7.82	8.26	30.69	29.46	2.12	9.50
WSR33	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.40	9:17:00 AM	7.60	8.24	30.72	29.42	2.15	9.10
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:26:00 AM	8.24	8.14	29.95	28.75	3.17	5.20
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:26:00 AM	9.28	8.05	29.85	28.81	2.68	5.40
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.60	9:25:00 AM	8.53	8.19	30.05	28.74	2.79	2.50
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.60	9:25:00 AM	9.04	8.12	29.87	28.85	2.73	2.50
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.20	9:24:00 AM	8.57	8.03	30.01	28.87	2.65	2.50
WSR33	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.20	9:24:00 AM	8.47	8.28	30.04	28.79	2.74	3.10
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:06:00 AM	9.56	8.00	30.79	29.05	3.11	5.80
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:06:00 AM	9.36	8.00	30.66	29.08	2.70	5.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.60	11:05:00 AM	9.29	8.14	30.35	29.14	2.19	2.50
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.60	11:05:00 AM	9.35	7.94	30.67	29.06	2.50	2.50
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Bottom	6.20	11:04:00 AM	9.79	8.08	31.12	29.04	2.37	3.50
WSR33	20210731	Cloudy	Moderate	Mid-Flood	Bottom	6.20	11:04:00 AM	9.67	8.04	30.61	29.03	2.20	4.10
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:28:00 AM	9.22	8.44	31.13	30.32	2.77	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:28:00 AM	9.31	8.44	31.38	30.27	2.42	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.55	10:28:00 AM	9.29	8.41	31.57	30.19	2.33	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Middle	3.55	10:28:00 AM	9.69	8.46	31.19	30.20	2.54	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.10	10:27:00 AM	10.13	8.27	31.88	30.25	1.98	2.50
WSR36	20210701	Cloudy	Moderate	Mid-Flood	Bottom	6.10	10:27:00 AM	9.67	8.38	31.75	30.35	2.15	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:51:00 PM	9.42	8.47	31.50	30.23	2.85	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	12:51:00 PM	8.57	8.22	31.81	30.12	2.51	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.45	12:51:00 PM	8.43	8.31	31.57	30.31	2.29	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Middle	3.45	12:51:00 PM	9.43	8.24	31.39	30.36	2.65	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Bottom	5.90	12:50:00 PM	8.74	8.38	30.63	30.31	2.36	2.50
WSR36	20210703	Cloudy	Moderate	Mid-Flood	Bottom	5.90	12:50:00 PM	9.15	8.21	31.04	30.24	2.58	2.50
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:07:00 PM	9.98	8.35	30.49	29.78	2.85	6.90
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:07:00 PM	9.88	8.50	30.51	29.77	2.39	5.60
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.25	5:07:00 PM	8.94	8.50	31.13	29.82	2.42	6.80
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.25	5:07:00 PM	9.59	8.40	30.65	29.66	2.14	6.70
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Bottom	5.50	5:06:00 PM	9.59	8.51	30.54	29.60	2.18	7.70
WSR36	20210706	Cloudy	Moderate	Mid-Flood	Bottom	5.50	5:06:00 PM	9.19	8.51	30.86	29.62	2.31	7.50
WSR36	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	8.23	8.26	30.97	29.81	2.78	3.40
WSR36	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:03:00 PM	9.05	8.37	30.84	29.93	2.83	2.50
WSR36	20210708	Sunny	Moderate	Mid-Flood	Middle	3.40	5:03:00 PM	8.49	8.21	31.00	29.80	2.08	3.30
WSR36	20210708	Sunny	Moderate	Mid-Flood	Middle	3.40	5:03:00 PM	9.05	8.30	30.69	29.86	2.28	2.50
WSR36	20210708	Sunny	Moderate	Mid-Flood	Bottom	5.80	5:02:00 PM	9.00	8.24	31.16	29.85	2.11	4.20

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR36	20210708	Sunny	Moderate	Mid-Flood	Bottom	5.80	5:02:00 PM	8.27	8.34	30.71	29.89	2.20	4.20
WSR36	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:01:00 PM	7.83	8.30	29.84	29.85	2.36	2.50
WSR36	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:01:00 PM	8.79	8.47	29.51	29.76	2.81	2.50
WSR36	20210710	Sunny	Moderate	Mid-Flood	Middle	3.45	6:01:00 PM	8.77	8.46	29.24	29.84	2.27	3.20
WSR36	20210710	Sunny	Moderate	Mid-Flood	Middle	3.45	6:01:00 PM	8.14	8.34	29.60	29.74	2.68	2.70
WSR36	20210710	Sunny	Moderate	Mid-Flood	Bottom	5.90	6:00:00 PM	7.59	8.47	29.74	29.71	1.76	4.40
WSR36	20210710	Sunny	Moderate	Mid-Flood	Bottom	5.90	6:00:00 PM	8.56	8.37	29.92	29.72	1.90	4.40
WSR36	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:42:00 AM	7.69	8.19	30.97	29.80	2.23	12.60
WSR36	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:42:00 AM	8.39	8.24	30.62	29.78	2.25	12.60
WSR36	20210713	Sunny	Moderate	Mid-Flood	Middle	3.55	9:42:00 AM	8.45	8.34	30.76	29.93	2.47	4.00
WSR36	20210713	Sunny	Moderate	Mid-Flood	Middle	3.55	9:42:00 AM	7.80	8.35	30.80	29.81	2.30	3.00
WSR36	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.10	9:41:00 AM	8.01	8.37	30.97	29.97	2.03	3.60
WSR36	20210713	Sunny	Moderate	Mid-Flood	Bottom	6.10	9:41:00 AM	8.20	8.22	30.95	29.75	2.35	3.00
WSR36	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:40:00 AM	9.52	8.11	31.61	29.58	3.32	2.70
WSR36	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:40:00 AM	7.92	8.13	31.82	29.71	3.15	3.50
WSR36	20210715	Sunny	Moderate	Mid-Flood	Middle	3.60	9:40:00 AM	8.51	8.10	31.64	29.54	2.60	7.50
WSR36	20210715	Sunny	Moderate	Mid-Flood	Middle	3.60	9:40:00 AM	8.34	8.19	31.63	29.64	2.67	8.90
WSR36	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.20	9:39:00 AM	8.06	8.13	31.94	29.54	2.42	6.40
WSR36	20210715	Sunny	Moderate	Mid-Flood	Bottom	6.20	9:39:00 AM	9.61	8.18	31.52	29.72	2.79	3.60
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:12:00 AM	9.18	8.20	31.30	27.55	2.90	2.50
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:12:00 AM	8.72	8.41	31.38	27.46	3.09	2.80
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.85	11:12:00 AM	8.37	8.37	31.21	27.64	2.30	2.60
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Middle	3.85	11:12:00 AM	8.83	8.43	31.64	27.62	2.19	3.10
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.70	11:11:00 AM	8.86	8.32	31.61	27.46	2.65	2.50
WSR36	20210717	Cloudy	Moderate	Mid-Flood	Bottom	6.70	11:11:00 AM	9.34	8.32	31.16	27.50	2.22	2.50
WSR36	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:17:00 PM	7.63	8.00	30.11	29.01	1.92	2.50
WSR36	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:17:00 PM	8.14	8.07	30.67	29.15	2.14	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR36	20210722	Sunny	Moderate	Mid-Flood	Middle	3.50	5:17:00 PM	8.03	8.00	30.24	29.13	1.76	2.50
WSR36	20210722	Sunny	Moderate	Mid-Flood	Middle	3.50	5:17:00 PM	8.23	7.98	29.85	29.10	2.08	2.50
WSR36	20210722	Sunny	Moderate	Mid-Flood	Bottom	6.00	5:16:00 PM	7.92	8.14	29.79	29.10	1.72	2.50
WSR36	20210722	Sunny	Moderate	Mid-Flood	Bottom	6.00	5:16:00 PM	7.30	7.91	30.66	29.16	1.64	2.50
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:49:00 PM	7.74	8.06	30.40	28.96	3.05	2.50
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:49:00 PM	8.66	7.99	29.88	28.95	3.35	2.50
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.80	5:49:00 PM	7.40	8.25	30.33	28.96	2.49	3.80
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Middle	3.80	5:49:00 PM	8.40	8.08	30.36	28.98	2.75	2.50
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.60	5:48:00 PM	7.71	8.01	29.82	28.99	2.30	4.20
WSR36	20210724	Cloudy	Moderate	Mid-Flood	Bottom	6.60	5:48:00 PM	7.71	8.26	29.84	28.81	2.24	5.30
WSR36	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:32:00 AM	8.05	8.13	30.19	29.46	2.34	9.30
WSR36	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:32:00 AM	8.28	7.99	30.23	29.48	2.51	9.20
WSR36	20210727	Sunny	Moderate	Mid-Flood	Middle	3.75	9:32:00 AM	8.26	8.30	30.34	29.33	2.15	9.40
WSR36	20210727	Sunny	Moderate	Mid-Flood	Middle	3.75	9:32:00 AM	7.99	8.38	29.84	29.40	1.87	9.40
WSR36	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.50	9:31:00 AM	8.21	8.30	29.94	29.41	2.32	9.70
WSR36	20210727	Sunny	Moderate	Mid-Flood	Bottom	6.50	9:31:00 AM	8.42	8.24	30.28	29.44	2.05	9.60
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:39:00 AM	8.80	8.23	29.99	28.91	3.24	2.50
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:39:00 AM	8.95	8.19	30.22	28.90	3.14	3.10
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.85	9:39:00 AM	8.81	8.32	30.28	28.87	2.84	2.50
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.85	9:39:00 AM	8.78	8.37	30.25	28.94	3.03	2.70
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.70	9:38:00 AM	8.54	8.24	30.16	28.87	2.28	2.50
WSR36	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.70	9:38:00 AM	8.61	8.07	30.32	28.94	2.73	3.60
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:20:00 AM	9.72	7.96	30.46	29.02	2.89	2.50
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:20:00 AM	9.36	8.18	30.80	29.04	2.96	2.50
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.25	11:20:00 AM	9.43	7.99	31.11	29.10	2.61	2.50
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.25	11:20:00 AM	9.58	8.17	30.45	29.02	2.73	2.50
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Bottom	5.50	11:19:00 AM	9.51	7.92	30.78	29.09	2.45	2.50

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR36	20210731	Cloudy	Moderate	Mid-Flood	Bottom	5.50	11:19:00 AM	9.67	8.16	30.36	29.15	2.16	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:44:00 AM	9.22	8.24	31.42	30.32	2.84	9.50
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Surface	1.00	10:44:00 AM	9.81	8.24	31.34	30.21	2.71	9.50
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.05	10:43:00 AM	9.14	8.35	31.41	30.42	2.32	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Middle	4.05	10:43:00 AM	9.71	8.39	31.50	30.26	2.68	2.50
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.10	10:42:00 AM	9.47	8.25	31.88	30.28	2.54	5.70
WSR37	20210701	Cloudy	Moderate	Mid-Flood	Bottom	7.10	10:42:00 AM	9.73	8.38	31.75	30.41	2.40	5.70
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:04:00 PM	9.49	8.35	31.20	30.34	2.41	2.50
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Surface	1.00	1:04:00 PM	9.21	8.22	31.20	30.19	2.73	2.50
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.15	1:03:00 PM	9.21	8.25	31.41	30.26	2.43	8.90
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Middle	4.15	1:03:00 PM	9.09	8.27	31.27	30.12	2.70	8.90
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Bottom	7.30	1:02:00 PM	9.65	8.39	30.87	30.28	2.67	3.60
WSR37	20210703	Cloudy	Moderate	Mid-Flood	Bottom	7.30	1:02:00 PM	9.47	8.40	30.57	30.29	2.35	5.00
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:23:00 PM	9.19	8.33	30.65	29.69	2.79	7.90
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Surface	1.00	5:23:00 PM	9.15	8.35	30.65	29.78	3.04	7.30
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.95	5:22:00 PM	9.62	8.29	30.66	29.81	2.23	7.30
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Middle	3.95	5:22:00 PM	9.76	8.31	30.88	29.75	2.53	7.00
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.90	5:21:00 PM	9.78	8.40	30.66	29.64	2.58	6.40
WSR37	20210706	Cloudy	Moderate	Mid-Flood	Bottom	6.90	5:21:00 PM	9.95	8.49	30.66	29.72	2.66	6.50
WSR37	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:21:00 PM	8.72	8.16	31.07	29.74	2.57	2.50
WSR37	20210708	Sunny	Moderate	Mid-Flood	Surface	1.00	5:21:00 PM	8.55	8.35	31.21	29.88	2.21	2.50
WSR37	20210708	Sunny	Moderate	Mid-Flood	Middle	3.90	5:20:00 PM	9.05	8.23	30.77	29.77	2.33	4.50
WSR37	20210708	Sunny	Moderate	Mid-Flood	Middle	3.90	5:20:00 PM	8.19	8.20	31.18	29.93	2.62	4.50
WSR37	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.80	5:19:00 PM	8.83	8.15	30.82	29.92	2.02	4.80
WSR37	20210708	Sunny	Moderate	Mid-Flood	Bottom	6.80	5:19:00 PM	8.91	8.19	30.89	29.90	2.31	4.80
WSR37	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:13:00 PM	8.62	8.48	29.79	29.79	2.95	2.50
WSR37	20210710	Sunny	Moderate	Mid-Flood	Surface	1.00	6:13:00 PM	7.66	8.36	29.85	29.88	2.90	3.80

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR37	20210710	Sunny	Moderate	Mid-Flood	Middle	4.00	6:12:00 PM	7.74	8.34	29.53	29.74	2.33	3.90
WSR37	20210710	Sunny	Moderate	Mid-Flood	Middle	4.00	6:12:00 PM	8.04	8.38	29.54	29.74	2.67	4.50
WSR37	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.00	6:11:00 PM	7.82	8.34	29.51	29.75	2.34	2.70
WSR37	20210710	Sunny	Moderate	Mid-Flood	Bottom	7.00	6:11:00 PM	8.67	8.38	29.33	29.88	2.04	3.30
WSR37	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:34:00 AM	8.09	8.28	30.68	29.66	2.24	7.80
WSR37	20210713	Sunny	Moderate	Mid-Flood	Surface	1.00	9:34:00 AM	7.64	8.31	30.57	29.70	2.31	7.80
WSR37	20210713	Sunny	Moderate	Mid-Flood	Middle	4.10	9:33:00 AM	7.97	8.27	30.55	29.77	2.00	15.80
WSR37	20210713	Sunny	Moderate	Mid-Flood	Middle	4.10	9:33:00 AM	7.82	8.37	30.84	29.93	2.08	11.70
WSR37	20210713	Sunny	Moderate	Mid-Flood	Bottom	7.20	9:32:00 AM	8.18	8.16	30.80	29.83	1.84	2.50
WSR37	20210713	Sunny	Moderate	Mid-Flood	Bottom	7.20	9:32:00 AM	7.72	8.23	31.02	29.89	2.04	3.60
WSR37	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:58:00 AM	8.43	8.17	31.30	29.69	3.33	3.30
WSR37	20210715	Sunny	Moderate	Mid-Flood	Surface	1.00	9:58:00 AM	9.06	8.16	31.15	29.69	3.13	3.70
WSR37	20210715	Sunny	Moderate	Mid-Flood	Middle	4.10	9:57:00 AM	7.93	8.25	31.73	29.81	2.31	4.50
WSR37	20210715	Sunny	Moderate	Mid-Flood	Middle	4.10	9:57:00 AM	9.25	8.27	31.85	29.69	2.60	4.40
WSR37	20210715	Sunny	Moderate	Mid-Flood	Bottom	7.20	9:56:00 AM	8.86	8.14	31.77	29.75	2.62	8.10
WSR37	20210715	Sunny	Moderate	Mid-Flood	Bottom	7.20	9:56:00 AM	8.49	8.24	31.28	29.80	2.35	8.10
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:27:00 AM	8.67	8.38	31.80	27.64	2.82	3.60
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:27:00 AM	9.32	8.33	31.49	27.59	2.44	2.50
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.20	11:26:00 AM	8.70	8.31	31.86	27.41	2.45	2.50
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Middle	4.20	11:26:00 AM	9.15	8.20	31.85	27.37	2.09	3.00
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Bottom	7.40	11:25:00 AM	8.54	8.20	31.11	27.44	2.70	3.00
WSR37	20210717	Cloudy	Moderate	Mid-Flood	Bottom	7.40	11:25:00 AM	9.10	8.44	31.11	27.45	2.56	4.90
WSR37	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:35:00 PM	8.08	8.06	30.77	29.01	1.97	2.50
WSR37	20210722	Sunny	Moderate	Mid-Flood	Surface	1.00	5:35:00 PM	7.68	8.18	29.79	29.06	1.89	2.50
WSR37	20210722	Sunny	Moderate	Mid-Flood	Middle	4.35	5:34:00 PM	8.20	7.95	30.84	29.06	2.39	3.00
WSR37	20210722	Sunny	Moderate	Mid-Flood	Middle	4.35	5:34:00 PM	7.54	7.90	30.28	29.12	2.02	3.00
WSR37	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.70	5:33:00 PM	7.29	8.16	30.46	29.11	2.14	7.90

Location	Date (YYYYMMDD)	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU) note 1	SS (mg/L) (Note 2)
WSR37	20210722	Sunny	Moderate	Mid-Flood	Bottom	7.70	5:33:00 PM	7.90	8.06	29.90	29.02	1.85	8.10
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:02:00 PM	7.73	8.26	29.91	28.80	2.98	2.80
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Surface	1.00	6:02:00 PM	7.52	7.99	30.22	28.82	3.34	2.50
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.40	6:01:00 PM	7.50	8.02	30.25	28.82	2.83	3.70
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Middle	4.40	6:01:00 PM	7.52	7.97	30.31	28.70	2.45	2.50
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Bottom	7.80	6:00:00 PM	7.93	8.03	30.18	28.82	2.98	3.50
WSR37	20210724	Cloudy	Moderate	Mid-Flood	Bottom	7.80	6:00:00 PM	8.29	7.92	29.94	28.85	2.96	3.50
WSR37	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:46:00 AM	8.46	8.26	30.20	29.45	2.35	7.90
WSR37	20210727	Sunny	Moderate	Mid-Flood	Surface	1.00	9:46:00 AM	8.58	8.02	29.88	29.44	2.65	8.90
WSR37	20210727	Sunny	Moderate	Mid-Flood	Middle	4.20	9:45:00 AM	8.44	8.14	30.17	29.59	2.14	3.70
WSR37	20210727	Sunny	Moderate	Mid-Flood	Middle	4.20	9:45:00 AM	8.75	8.12	30.44	29.51	1.83	3.60
WSR37	20210727	Sunny	Moderate	Mid-Flood	Bottom	7.40	9:44:00 AM	7.80	8.19	30.50	29.47	2.04	3.40
WSR37	20210727	Sunny	Moderate	Mid-Flood	Bottom	7.40	9:44:00 AM	8.10	8.07	29.98	29.41	1.73	4.00
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:54:00 AM	8.78	8.12	30.23	28.94	2.89	2.70
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Surface	1.00	9:54:00 AM	8.95	8.14	30.06	28.94	3.28	3.40
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.80	9:53:00 AM	9.13	8.13	29.88	28.91	2.91	4.40
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Middle	3.80	9:53:00 AM	8.99	8.34	29.90	28.88	2.45	2.50
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.60	9:52:00 AM	9.20	8.26	30.00	28.81	2.87	2.70
WSR37	20210729	Cloudy	Moderate	Mid-Flood	Bottom	6.60	9:52:00 AM	9.16	8.11	30.34	28.94	3.02	2.50
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:37:00 AM	9.50	7.91	30.55	29.19	2.13	2.50
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Surface	1.00	11:37:00 AM	8.97	8.02	30.76	29.12	2.31	2.50
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.85	11:36:00 AM	9.04	8.11	31.13	29.15	2.87	4.70
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Middle	3.85	11:36:00 AM	9.01	8.11	30.52	29.14	2.48	4.90
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Bottom	6.70	11:35:00 AM	9.02	7.97	30.48	29.13	2.53	2.50
WSR37	20210731	Cloudy	Moderate	Mid-Flood	Bottom	6.70	11:35:00 AM	9.45	8.17	31.10	29.22	2.23	2.50

Note 1: Measurements of turbidity would be rounding to 0.1 NTU for proven accuracy as per the equipment specs during utilization of data.

I Location I Weather I I II I I Level I Denth I II I I I I I I I I I I I I I I I I	Location		Weather		Tidal	l	Depth (m)	Time (hh:mm)	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	(NTU)	SS (mg/L) (Note 2)
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Note 2: Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing



Appendix M

HOKLAS Laboratory Certificate





Hong Kong Accreditation Service 香港認可處

Certificate of Accreditation

認可證書

This is to certify that 特此證明

ACUMEN LABORATORY AND TESTING LIMITED

浩科檢測中心有限公司

Lot 12, Tam Kon Shan Road, North Tsing Yi, New Territories, Hong Kong

香港新界青衣北担杆山路12路段

has been accepted by the HKAS Executive, on the recommendation of the Accreditation Advisory Board, as a 在認可諮詢委員會的建議下櫃香港認可處執行機關接受為

HOKLAS Accredited Laboratory 「香港實驗所認可計劃」認可實驗所

This laboratory meets the requirements of ISO/IEC 17025:2005 and it has been accredited for performing specific tests or calibrations as listed in the scope of accreditation within the test category of

Environmental Testing

此實驗所符合ISO/IEC 17025:2005所訂的要求 並獲認可進行載於認可範圍內下透測試類別中的指定測試或校正工作

環境測試

This accreditation to ISO/IEC 17025:2005 demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (see joint IAF-IAC-ISO Communique). 此樣 ISO/IEC 17025:2005 的簡可資格證明此實驗所證明表實驗所證明表例的技能能力益 實稿一套實驗所質重修理體系(是國際認可論確。國際實驗所證明表作相關及國際經歷化相關的關係公廳)。

The common seal of the Hong Kong Accreditation Service is affixed hereto by the authority of the HKAS Executive 現經香港認可處執行機關授權在此蓋上香港認可處的印意

WONG Wang-wan, Executive Administrator 執行幹事 黃宏華 Issue Date: 16 July 2014

簽發日期:二零一四年七月十六日

Registration Number: HOKLAS 241 註冊號碼:

Date of First Registration: 16 July 2014 首次註冊日期: 二零一四年七月十六日

L 001195

This certificate is issued subject to the terms and conditions laid down by HKAS 本證書般報告複談可盡訂立的模點及提升超出



Appendix N

Water Quality Equipment Calibration Certificate

Equipment	Model	Serial Number	Calibration Date	Calibration Expiry Date*
Multi-Functional Meter	Horiba U-53	UHB5F2BB	16/06/2021	16/07/2021
Multi-Functional Meter	Horiba U-53	S2A98W8H	14/07/2021	14/08/2021

Remarks*: All *in situ* monitoring instruments will be checked, calibrated and certified by laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at monthly intervals throughout the stages of water quality monitoring, as per requirements in the EM&A Manual Clause 5.1.3.



Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

BA060061

Date of Issue

17 June 2021

Page No.

1 of 2

PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited Unit C, 11/F, Ford Glory Plaza 37-39 Wing Hong Street

Cheung Sha Wan, Kowloon, Hong Kong

Attn: Mr. Nelson TSUI

PART B - DESCRIPTION

Name of Equipment

Multi Water Quality Checker U-53

Manufacturer

Horiba

Serial Number

UHB5F2BB

Date of Received

Jun 11, 2021

Date of Calibration

Jun 16, 2021

Date of Next Calibration(a)

Sep 15, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter

Reference Method

pH at 25°C

APHA 21e 4500-H⁺ B APHA 21e 4500-O G

Dissolved Oxygen

APHA 21e 2520 B

Salinity Turbidity

APHA 21e 2130 B

Temperature

Section 6 of international Accreditation New Zealand Technical

Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D - CALIBRATION RESULTS(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading(d) (pH Unit)	Tolerance(e)(pH Unit)	Results
4.00	4.09	0.09	Satisfactory
7.42	7.34	-0.08	Satisfactory
10.01	9.89	-0.12	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
18.0	18.2	0.2	Satisfactory
28.0	29.3	1.3	Satisfactory
37	38.0	1.0	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

The results relate only to the calibrated equipment as received

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

> LEE Chun-ning, Desmond Senior Chemist



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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BA060061

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17 June 2021

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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
2.00	1.75	-0.25	Satisfactory
4.77	4.31	-0.46	Satisfactory
6.43	6.22	-0.21	Satisfactory
7.71	7.47	-0.24	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.50 (mg/L)

(4) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.03	0.30	Satisfactory
20	21.38	6.90	Satisfactory
30	32.49	8.30	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

(5) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.41		Satisfactory
10	10.00	0.0	Satisfactory
20	20.20	1.0	Satisfactory
100	100.80	0.8	Satisfactory
800	828.00	3.5	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

Remark(s):
Operation of the Company of The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form



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PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited Unit C, 11/F, Ford Glory Plaza 37-39 Wing Hong Street Cheung Sha Wan, Kowloon, Hong Kong

Attn: Mr. Nelson TSUI

PART B - DESCRIPTION

Name of Equipment

Multi Water Quality Checker U-53

Manufacturer Serial Number Horiba S2A98W8H

Date of Received Date of Calibration Jul 12, 2021 Jul 14, 2021

Date of Next Calibration^(a)

Oct 13, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter

Reference Method

pH at 25°C Dissolved Oxygen APHA 21e 4500-H⁺ B APHA 21e 4500-O G

Salinity

APHA 21e 2520 B

Turbidity Temperature APHA 21e 2130 B Section 6 of international Accreditation New Zealand Technical

Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D - CALIBRATION RESULTS(b,c)

(1) pH at 25°C

Target (pH unit)	Target (pH unit) Displayed Reading ^(d) (pH Unit) Tolerance ^(e) (pH Unit)		Results
4.00	4.12	0.12	Satisfactory
7.42	7.47	0.05	Satisfactory
10.01	10.07	0.06	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
17	18.70	1.70	Satisfactory
30	30.84	0.84	Satisfactory
35	35.91	0.91	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

(a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

b) The results relate only to the calibrated equipment as received

(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

"Displayed Reading" denotes the figure shown on item under calibration/checking regardless of equipment precision or significant figures.

The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

LEE Chun-ning, Desmond Senior Chemist



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.80	2.27	0.47	Satisfactory
3.86	3.63	-0.23	Satisfactory
6.07	6.56	0.49	Satisfactory
7.81	8.20	0.39	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.50 (mg/L)

(4) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.85	-1.50	Satisfactory
20	20.37	1.85	Satisfactory
30	30.67	2.23	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

(5) Turbidity

Expected Rea (NTU)	ding Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.00		Satisfactory
10	9.17	-8.3	Satisfactory
20	19.90	-0.5	Satisfactory
100	101.00	1.0	Satisfactory
800	879.00	9.9	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

Remark(s): -

⁽Displayed Reading) presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

⁽B) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

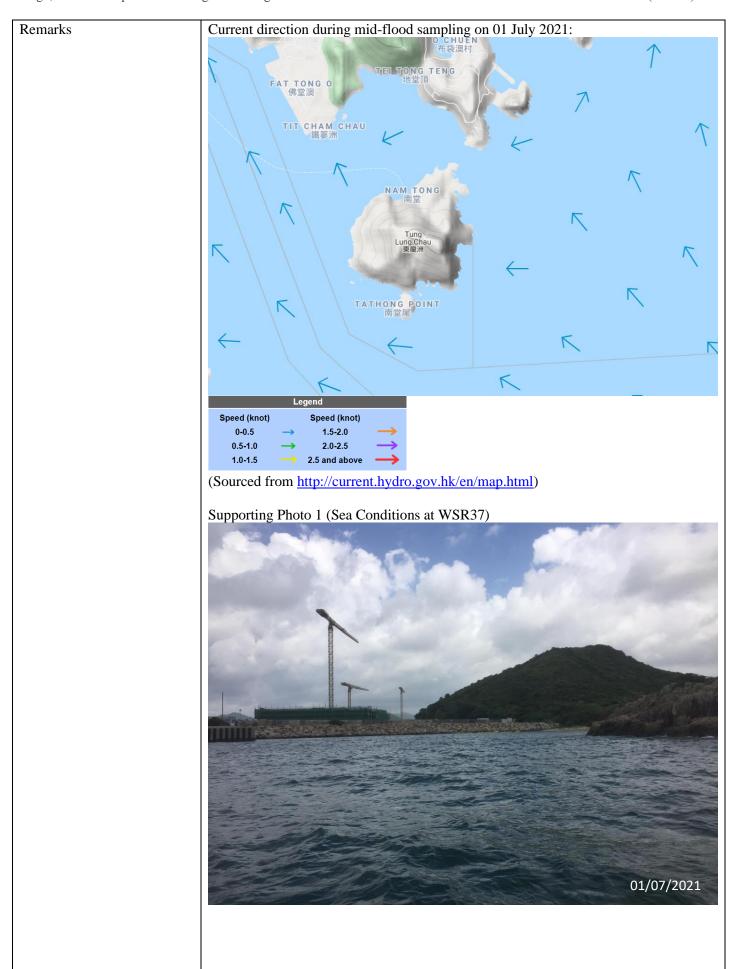


Appendix O

Exceedance Report(s)

Incident Report on Action Level or Limit Level Non-Compliance

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	01 July 2021 (Lab result received on 08 July 2021)			
Time	08:40-12:10 (Mid-Flood) and 15:30-19:00 (Mid-Ebb)			
	Mid-Flood			
Monitoring Location	HONG KONG ISLAND Tai Tam	WSR37 NF3 WSR	Clear Water Bay WSR33 WSR36 WSR36 Tung Lung Chau	Key Water Quality Monitoring Station Will Elemented Sills for Disabilistion Pilent
D		Ĉ.F	0	N Study area for slope miligation works Killometres 1 2 Indicative Location of Several relate Indicative Location of Several relate
Parameter	Suspended Solid (SS)		T ::4 T1	
Action & Limit Levels	Action Level		Limit Level	
Measurement Level	> 5.0 mg/L Impact Station(s) of Exceedance 5.9 mg/L (WSR37)	Control Station 2.9 mg/L (CF	E)	Impact Station(s) without Exceedance 3.7 mg/L (WSR1)
		3.1 mg/L (CF	·)	2.6 mg/L (WSR2) 3.7 mg/L (WSR3) 2.8 mg/L (WSR4) 2.9 mg/L (WSR16) 3.5 mg/L (WSR33) 2.5 mg/L (WSR36)
Possible reason for Action or Limit Level Non-compliance	01 July 2021 was a public he construction works were construction	•	•	e Main Contractor, no marine
	Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the east side of Tit Cham Chau.			
	According to the field observation by sampling team during sampling event, no plume was observed in the Project site.			
	Conditions of the protective 01 July 2021.	silt curtain at t	he inland water	r outfall was satisfactory on



Page 2 of 4





	Supporting Photo 4 (Declaration Email)
	Reply All 今 Forward Fri 16/7/2021 11:33 am 甘忠校 < chunghau_kam@cohl.com> RE: [TKODP] Contract No. 13/WSD/17 Notification of Water Quality Monitoring Data Exceedance (01.07.2021) To clai@acuityhk.com
Prepared by	Charlene Lai
Date	19 July 2021

Incident Report on Action Level or Limit Level Non-Compliance

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	03 July 2021 (Lab result received on 09 July 2021)			
Time	11:23-14:53 (Mid-Flood) and 08:00-10:00 (Mid-Ebb)			
	Mid-Flood			
Monitoring Location	Mid-Fl WSR37 HONG KONG ISLAND Rig Wave Ray		Clear Vater Bay	
Doromotor	Sugnanded Solid (SS)	Ğ F	N Kilometres	Wester Quality Monitoring Station
Parameter	Suspended Solid (SS)		' ', T 1	
Action & Limit Levels	Action Level		imit Level	
Measurement Level	> 5.0 mg/L Impact Station(s) of Exceedance 5.2 mg/L (WSR 37)	Control Stations 2.5 mg/L (CF) 2.5 mg/L (CE)	Ex 2.5 2.5 2.5 2.5 2.5 2.5 2.5	pact Station(s) without ceedance 5 mg/L (WSR 1) 5 mg/L (WSR 2) 5 mg/L (WSR 3) 5 mg/L (WSR 4) 5 mg/L (WSR 16) 5 mg/L (WSR33) 5 mg/L (WSR36)
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: Marine construction activities, namely 1) grab dredging of non-marine sediment; 2) chiselling inside a steel casing (alternately 0800-2000 hrs) Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1800 hrs) Marine construction activities with contact with water: 1) grab dredging of non-marine sediment; 2) 610mm Ø pipe piling on temporary working platform Marine vessels on 03 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 2 (Outfall Shaft) Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the east side of Tit Cham Chau.			

SS level for the station downstream to the marine construction works (WSR16, 2.5 mg/L) was as low as other upstream monitoring stations. No SS exceedance was observed at WSR36 (2.5 mg/L), where marine construction activities were conducted. Although the dredging rate on 03 July 2021 (99 m³) was higher than the two closest monitoring dates, namely 01 July 2021 (0 m³) and 06 July 2021 (0 m³), the SS level at WSR37 (5.2 mg/L), where dredging works were conducted, was lower than that of 01 July 2021 and 06 July 2021 (5.9 mg/L and 7.1 mg/L respectively) for the same station during the same tidal stage (mid-flood). The high SS value at WSR37 from recent monitoring events infers that factors other than dredging operation may have caused the elevated SS value. According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 03 July 2021. Conditions of the protective silt curtain at the inland water outfall and Outfall Shaft Area was satisfactory on 03 July 2021. Mid-Ebb WSR3, WSR4, WSR16, WSR33, WSR36 **Monitoring Location** HONG KONG ISLAND Parameter Suspended Solid (SS) Action & Limit Levels Action Level Limit Level > 5.0 mg/L> 6.0 mg/LMeasurement Level Impact Station(s) of Control Stations Impact Station(s) without Exceedance Exceedance 6.6 mg/L (WSR3) 3.1 mg/L (CE) 3.2 mg/L (WSR1) 7.3 mg/L (WSR4) 2.6 mg/L (CF) 3.8 mg/L (WSR2) 6.5 mg/L (WSR16) 4.7 mg/L (WSR37) 8.8 mg/L (WSR33) 7.6 mg/L (WSR36) Possible reason for Action or Outfall Shaft Area: Marine construction activities, namely 1) grab dredging of non-Limit Level Non-compliance marine sediment; 2) chiselling inside a steel casing (alternately 0800-2000 hrs)

Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling on

temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1800 hrs

Marine construction activities with contact with water: 1) grab dredging of non-marine sediment; 2) 610mm Ø pipe piling on temporary working platform

Marine vessels on 03 July 2021:

- Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft)
- Derrick barge x 2 (Outfall Shaft)

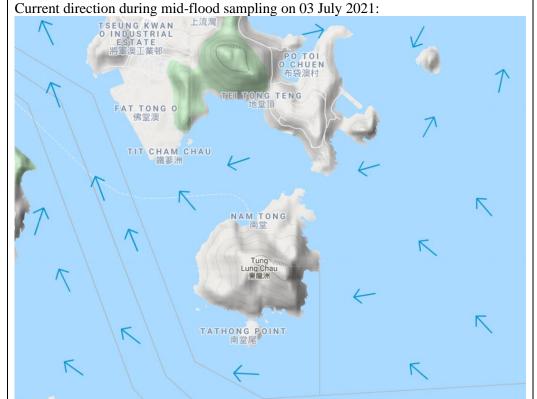
Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

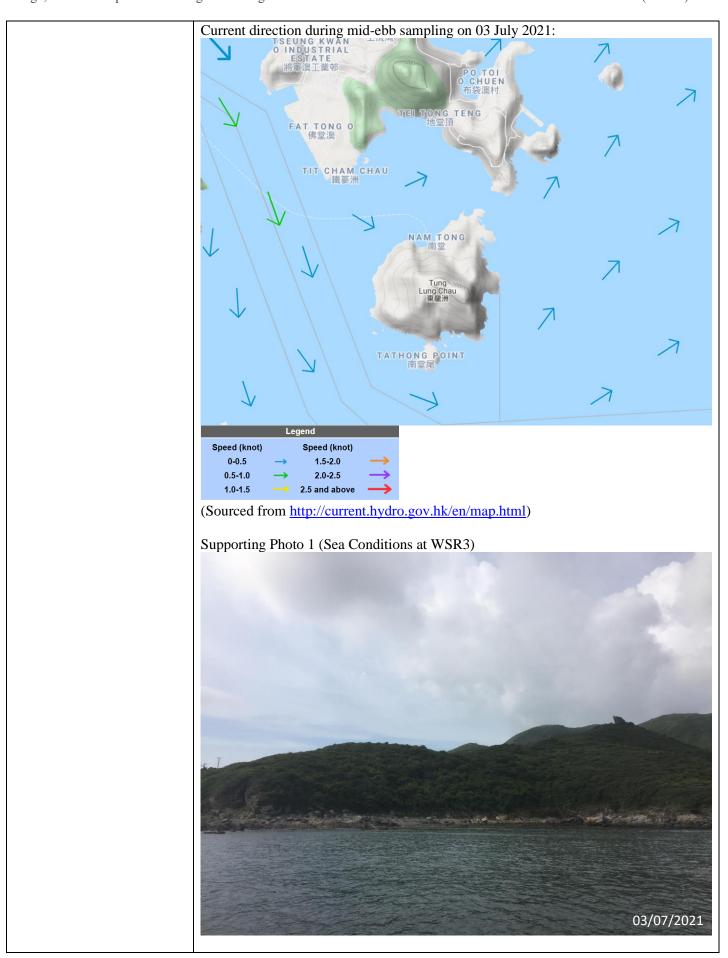
Monitoring station that was closest to marine construction activities (WSR36, 7.6 mg/L) was lower than WSR33 (8.8 mg/L), which was further away from the construction site. WSR4 (7.3 mg/L) was situated at a further location but with SS level observed comparable to monitoring stations near to marine construction activities (WSR36, WSR33). This may infer that other natural factors may have led to the SS exceedance at WSR4. No SS exceedance was observed at WSR37 (4.7 mg/L), where dredging works were conducted. Two other monitoring stations noted with SS exceedance, namely WSR3 and WSR16, were distant to the station with marine construction activities. However, the SS level of WSR16 was higher than the Limit Level (6.0 mg/L), implying that SS had resulted from other source(s). In view of the inverse relation between distance to marine works and SS level, the SS exceedance was concluded not project relevant.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 03 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 03 July 2021.





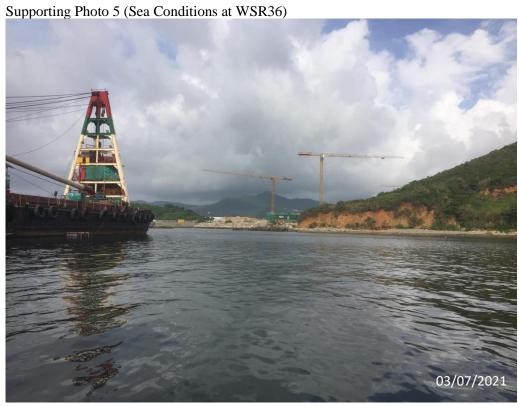


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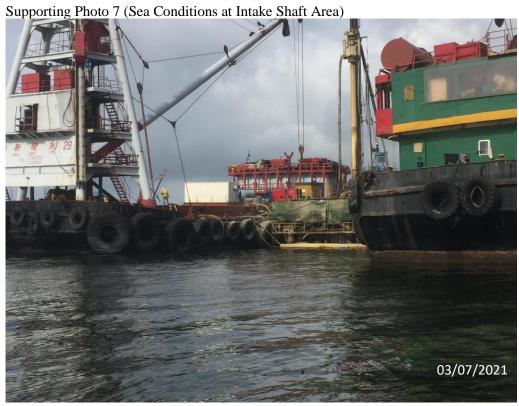














Supporting Photo 9 (Daily Dredging Rate up to 14 July 2021)

Outfall	<u>m3</u>	<u>m3 (cum)</u>
1/7/2021	0	2504
2/7/2021	0	2504
3/7/2021	99	2603
4/7/2021	0	2603
5/7/2021	28.3	2631.3
6/7/2021	0	2631.3
7/7/2021	0	2631.3
8/7/2021	0	2631.3
9/7/2021	0	2631.3
10/7/2021	0	2631.3
11/7/2021	80.7	2712
12/7/2021	0	2712
13/7/2021	0	2712
14/7/2021	0	2712

Locations St (flood secrege) St (ebb average) St (bb dexceed) St (bb oxeroged) St (bb oxeroged)		Supporting Ph	oto 10 (SS lev	el on 01 July 2	2021)		
WS82			Locations	SS (flood average)	SS (ebb average)	SS (flood exceed)	SS (ebb exceed)
WSR3 3.7 2.5 No No No			WSR1	3.7	3.0	No	No
WSR4							
(ebb control)							No
			WSR4	2.8	2.6	No	No
WSR16 2.9 3.3 No		(ebb control)	CE	2.9	4.3		
WSR33 3.5 2.5 No		(flood control)	CF	3.1	2.8		
WSR36 2.5 2.5 No			WSR16	2.9	3.3	No	No
NSR37 S.9 2.5 Yes No			WSR33	3.5	2.5	No	No
Action level Limit level							
CE (ebb) 5.2 6.0 6.0			WSR37	5.9	2.5	Yes	No
Supporting Photo 11 (SS level on 06 July 2021)				Action level	Limit level		
Supporting Photo 11 (SS level on 06 July 2021)			CE (ebb)				
Locations SS (flood average) SS (flood exceed) SS (ebb exceed)			CF (flood)	5.0	6.0		
WSR1 2.8 7.9 No No No WSR2 4.7 15.9 No Yes Yes WSR3 7.5 22.7 Yes Yes Yes WSR4 5.7 21.3 Yes Y					SS (ebb exceed)		
WSR2 4.7 15.9 No Yes WSR3 7.5 22.7 Yes Yes Yes WSR4 5.7 21.3 Yes						· · · · · · · · · · · · · · · · · · ·	
WSR4 5.7 21.3 Yes Yes							
(ebb control) CE 2.5 7.6 (flood control) CF 2.7 7.3 WSR16 7.5 20.8 Yes WSR33 7.2 22.0 Yes WSR36 6.9 21.8 Yes WSR37 7.1 23.9 Yes WSR37 7.1 23.9 Yes CE (ebb) 9.1 9.9 CF (flood) 5.0 6.0			WSR3	7.5	22.7	Yes	Yes
(flood control) CF 2.7 7.3			WSR4	5.7	21.3	Yes	Yes
WSR16 7.5 20.8 Yes Yes WSR33 7.2 22.0 Yes Yes Yes WSR36 6.9 21.8 Yes Yes Yes WSR37 7.1 23.9 Yes Yes		(ebb control)	CE	2.5	7.6		
WSR33 7.2 22.0 Yes Yes		(flood control)	CF	2.7	7.3		
WSR36 6.9 21.8 Yes Yes WSR37 7.1 23.9 Yes Yes			WSR16	7.5	20.8	Yes	Yes
WSR37 7.1 23.9 Yes Y			WSR33	7.2	22.0	Yes	Yes
Action level Limit level			WSR36			Yes	Yes
CE (ebb) 9.1 9.9 CF (flood) 5.0 6.0 Prepared by Charlene Lai			WSR37	7.1	23.9	Yes	Yes
CE (ebb) 9.1 9.9 CF (flood) 5.0 6.0 Prepared by Charlene Lai						1	
Prepared by Charlene Lai			/ / / /				
Prepared by Charlene Lai							
			CF (flood)	5.0	6.0		
	Prepared by	Charlene Lai	:	:			

Incident Report on Action Level or Limit Level Non-Compliance

Date 106 July 2021 (Lab result received on 13 July 2021) Time 15:22-18:52 (Mid-Flood) and 08:40-12:10 (Mid-Ebb)	Project	Design, Build and Operate Fi	irst Stage of Tseung	Kwan O Desalination Plant
Monitoring Location WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Parameter Suspended Solid (SS) Action & Limit Levels Action Level Limit Level > 5.0 mg/L > 6.0 mg/L Measurement Level Impact Station(s) without Exceedance 7.5 mg/L (WSR 3) 2.7 mg/L (CF) 2.8 mg/L (WSR 1) 5.7 mg/L (WSR 4) 7.5 mg/L (WSR 4) 7.5 mg/L (WSR 3) 2.5 mg/L (CF) 4.7 mg/L (WSR 2) Possible reason for Action or Limit Level Non-compliance Possible reason for Action or Outfall Shaft Area: No marine activities till 1700 hrs. 1 derrick barge returned from typhoon shelter and moored in position (1700-1900 hrs). Intake Shaft Area: marine construction activities with contact with water: 1) 610mm Ø pipe piling of temporary working platform Marine vessels on 06 July 2021: • Derrick barge x 2: pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 2: pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 2: pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1 (Outfall Shaft) Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters	·	•		
Monitoring Location WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Parameter Suspended Solid (SS) Action & Limit Levels Action Level Limit Level > 5.0 mg/L > 6.0 mg/L Measurement Level Impact Station(s) without Exceedance 7.5 mg/L (WSR 3) 2.7 mg/L (CF) 2.8 mg/L (WSR 1) 7.5 mg/L (WSR 4) 2.5 mg/L (CF) 4.7 mg/L (WSR 2) 7.5 mg/L (WSR 33) 6.9 mg/L (WSR 33) 6.9 mg/L (WSR 37) 2.5 mg/L (CF) 4.7 mg/L (WSR 2) Possible reason for Action or Limit Level Non-compliance Intake Shaft Area: No marine activities till 1700 hrs. 1 derrick barge returned from typhoon shelter and moored in position (1700-1900 hrs). Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling o temporary working platform: 2) lifting of 610mm Ø pipe piles Marine construction activities with contact with water: 1) 610mm Ø pipe piling o temporary working platform Marine vessels on 06 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft)	Time			
Parameter Suspended Solid (SS) Action & Limit Levels Action & Limit Levels Action Level Impact Station(s) of Exceedance 7.5 mg/L (WSR 3) 5.7 mg/L (WSR 4) 7.5 mg/L (WSR 4) 7.5 mg/L (WSR 4) 7.5 mg/L (WSR 3) 5.7 mg/L (WSR 3) 5.7 mg/L (WSR 3) 5.7 mg/L (WSR 3) 6.9 mg/L 1.5 mg/L (WSR 3) 7.5 mg/L (WSR 3) 1.5 mg/L (WSR 2) 1.5 mg/L (WSR 3) 1.				
Parameter Action & Limit Levels So mg/L Measurement Level Impact Station(s) of Exceedance 7.5 mg/L (WSR 3) 5.7 mg/L (WSR 3) 5.7 mg/L (WSR 4) 7.5 mg/L (WSR 16) 7.2 mg/L (WSR 36) 7.1 mg/L (WSR 37) 1.1 mg/L (WSR 37) 1.2 mg/L (WSR 37) 1.3 mg/L (WSR 16) 7.2 mg/L (WSR 37) 1.4 mg/L (WSR 2) Possible reason for Action or Limit Level Non-compliance Possible reason for Action or Uphpoon shelter and moored in position (1700-1900 hrs). Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling of temporary working platform; 2) lifting of 610mm Ø pipe piles Marine construction activities with contact with water: 1) 610mm Ø pipe piling of temporary working platform Marine vessels on 06 July 2021: • Derrick barge x 1; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1 (Outfall Shaft) Dominating sea current direction was found to be from Southeast to Northwest at water to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the search and the sum of the	Monitoring Location			
Parameter Action & Limit Levels Action Level Some continued to the water and moored in position (1700-1900 hrs).		HONG KONG ISLAND	WSR33 WSR37 WSR37 NF1 NF2 NF3	Wished Wished Wished Wished Wished Wished Wished Clustery Monitoring Station
Action & Limit Levels Action Level	Parameter	Suspended Solid (SS)	c F	N Study area for alope mitigation works
Solution			Limit	t I evel
Impact Station(s) of Exceedance	retion & Emili Develo			
typhoon shelter and moored in position (1700- 1900 hrs). Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling of temporary working platform; 2) lifting of 610mm Ø pipe piles Marine construction activities with contact with water: 1) 610mm Ø pipe piling of temporary working platform Marine vessels on 06 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1(Outfall Shaft) Dominating sea current direction was found to be from Southeast to Northwest at water to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the	Measurement Level	Exceedance 7.5 mg/L (WSR 3) 5.7 mg/L (WSR 4) 7.5 mg/L (WSR 16) 7.2 mg/L (WSR33) 6.9 mg/L (WSR36)	2.7 mg/L (CF)	2.8 mg/L (WSR 1)
		typhoon shelter and moored in position (1700- 1900 hrs). Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling on temporary working platform; 2) lifting of 610mm Ø pipe piles Marine construction activities with contact with water: 1) 610mm Ø pipe piling on temporary working platform Marine vessels on 06 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1(Outfall Shaft) Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the		

As been advised by the Main Contractor, no dredging activities was conducted at WSR37 on 06 July 2021. Since it is expected that dredging activities will generate high SS, the SS value at WSR37 infers other factors may have caused the elevated SS value. The SS level at WSR37 (7.1 mg/L) was also higher than WSR36 (6.9 mg/L), where no dredging activities was conducted at WSR37. The SS level of an upstream location, WSR3 (7.5 mg/L), was higher than WSR36, where marine construction works were observed. In view of the inverse relation between sea current direction and SS level, the SS exceedance is concluded not project relevant. The SS levels of upstream locations, i.e. WSR3 (7.5 mg/L), WSR4 (5.7 mg/L) and WSR33 (7.2 mg/L), have all exceeded the Action Level (5.0 mg/L), implying that SS had resulted from other source(s).

Tropical cyclone warning signal no.1 was issued on 06 July 2021 with accumulative rainfall reaching 30mm over Joss-House Bay (Tai Miu Wan). The rainfall may lead to release of SS content from the soil of the nearby lands (e.g. country park, fill bank). The SS data during mid-flood tide suggested unstable weather conditions may be the dominating factor of elevated SS value of which all monitoring stations in the Joss House Bay have reached 20-24 mg/L on 06 July 2021.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 06 July 2021.

Conditions of the protective silt curtain at the inland water outfall and Outfall Shaft Area was satisfactory on 06 July 2021.

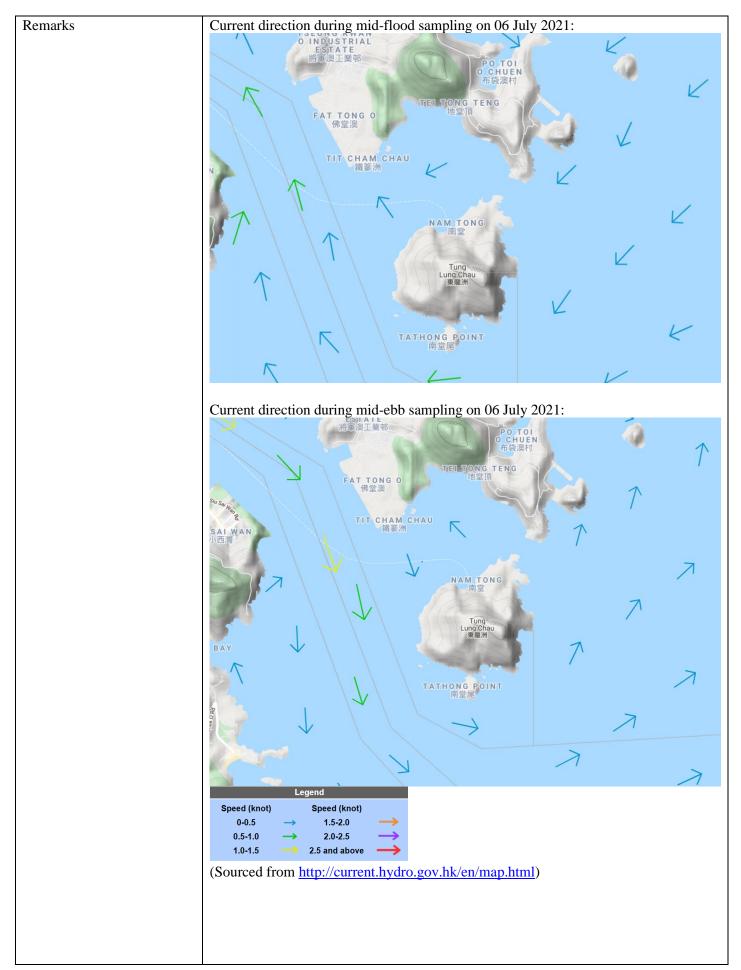
WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Monitoring Location HONG KONG ISLAND Suspended Solid (SS) Parameter Action & Limit Levels Action Level Limit Level > 9.1 mg/L> 9.9 mg/LMeasurement Level Impact Station(s) of **Control Stations** Impact Station(s) without Exceedance Exceedance 7.6 mg/L (CE) 7.9 mg/L (WSR1) 15.9 mg/L (WSR2) 22.7 mg/L (WSR3) 7.3 mg/L (CF) 21.3 mg/L (WSR4) 20.8 mg/L (WSR16) 22.0 mg/L (WSR33)

Mid-Ebb

21.8 mg/L (WSR36)

	23.9 mg/L (WSR37)			
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: No marine activities till 1700 hrs. 1 derrick barge returned from typhoon shelter and moored in position (1700- 1900 hrs).			
	Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling o temporary working platform; 2) lifting of 610mm Ø pipe piles Marine construction activities with contact with water: 1) 610mm Ø pipe piling o temporary working platform			
	 Marine vessels on 06 July 2021: Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) Derrick barge x 1(Outfall Shaft) 			
	Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.			
	As been advised by the Main Contractor, no dredging activities was conducted at WSR37 on 06 July 2021. The SS level at WSR37 was nonetheless the highest comparing with other monitoring stations. Since it is expected that dredging activities will generate high SS, the SS value at WSR37 infers other factors may have caused the elevated SS value. The SS level of a distant location, WSR3 (22.7 mg/L), was higher than WSR36 (21.8 mg/L), where marine construction works were conducted. The SS level of a distant location, WSR16 (20.8 mg/L) upstream, clearly showed that such high SS had resulted from other source(s).			
	Tropical cyclone warning signal no.1 was issued on 06 July 2021 with accumulative rainfall reaching 30mm over Joss-House Bay (Tai Miu Wan). The rainfall may lead to release of SS content from the soil of the nearby lands (e.g. country park, fill bank). The SS data during mid-ebb tide suggested unstable weather conditions may be the dominating factor of elevated SS value of which all monitoring stations in the Joss House Bay have reached 20-24 mg/L on 06 July 2021.			
	According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 06 July 2021.			
	Conditions of the protective	silt curtain at the inland water	outfall was satisfactory on	

06 July 2021.







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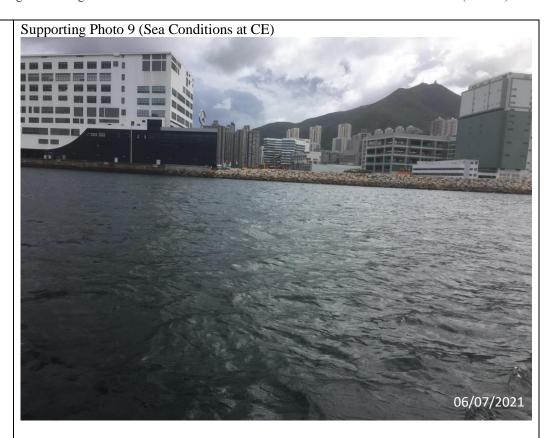




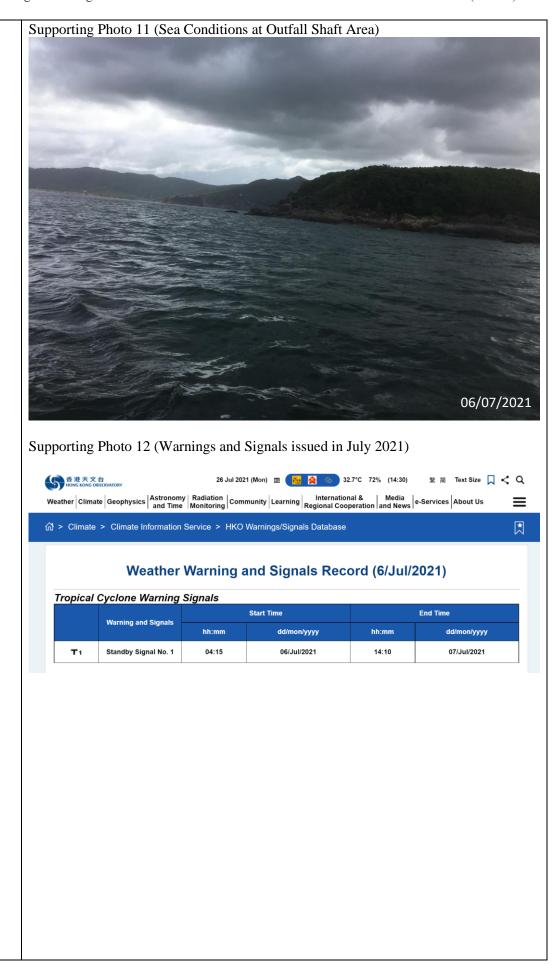


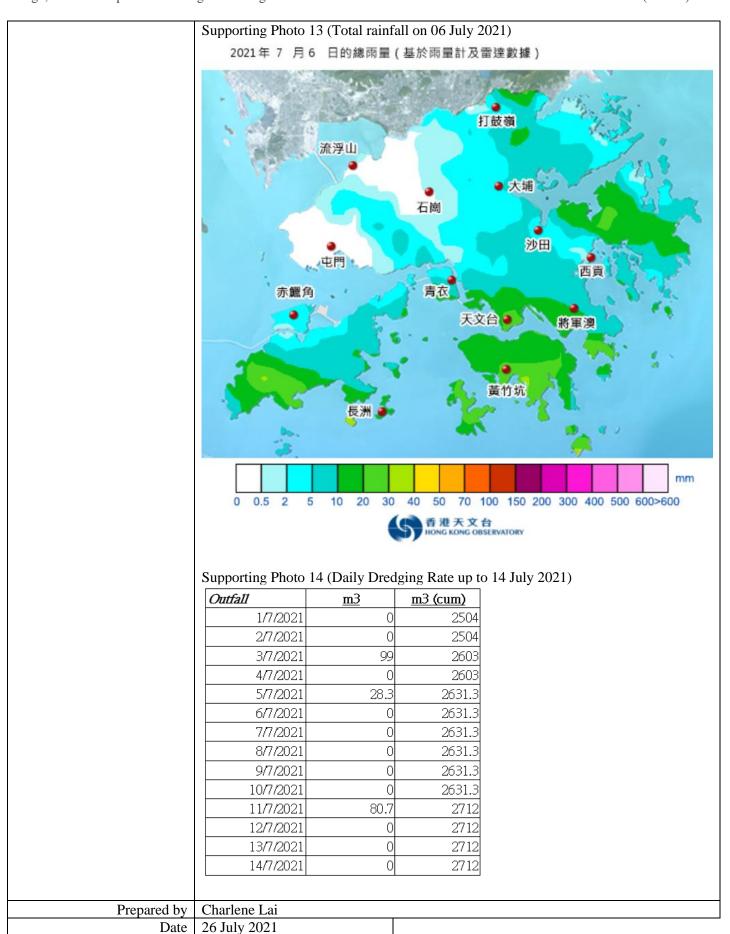










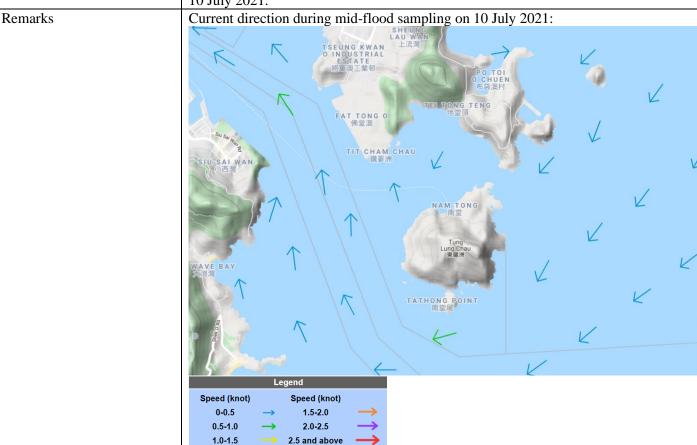


Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	10 July 2021 (Lab result received on 16 July 2021)			
Time	16:43 – 19:00 (Mid-Flood) and 10:45 – 14:15 (Mid-Ebb)			
	Mid-F	Flood		
Monitoring Location	HONG KONG ISLAND Big Wires Birgy	Clear Water Bay WSR33 WSR36 WSR4 WSR36 WSR4 WSR3 Tung Lung Chau CF	Key Weer Quality Monitoring Station Elementarion Ellies for Disabilisation Plant Station regions of State of Station of Stati	
		0	Nacortectes 1 2 Indicative Location of Submarine Outfal	
Parameter	Suspended Solid (SS)			
Action & Limit Levels	Action Level	Limit Level		
	> 5.0 mg/L	> 6.0 mg/L		
Measurement Level	Impact Station(s) of	Control Stations	Impact Station(s) without	
	Exceedance		Exceedance	
	5.2 mg/L (WSR1)	3.5 mg/L (CF)	3.8 mg/L (WSR3)	
	5.4 mg/L (WSR2)	3.3 mg/L (CE)	3.9 mg/L (WSR4)	
			3.2 mg/L (WSR16)	
			3.1 mg/L (WSR33)	
			3.3 mg/L (WSR36)	
Descitte was a few Astions and	Ontell Charles American		3.5 mg/L (WSR37)	
Possible reason for Action or Limit Level Non-compliance		construction activities, name 0 hrs & 1500 – 2100 hrs); 2) cl 00 hrs)		
	Intake Shaft Area: marine construction activities, namely 1) pipe piling works of 610mm Ø on temporary working platform, 2) lifting of 610mm Ø pipe piles			
	Marine construction activities with contact with water: 1) grab dredging of non-marine sediment; 2) pipe piling works of 610mm Ø on temporary working platform			
	 Marine vessels on 10 June 2021: Derrick barge x 2, pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) Derrick barge x 2 (Outfall Shaft) 			
	Dominating sea current direction was found to be from Southeast to Northwe to the west side of Tit Cham Chau; and from Northeast to Southwest at was east side of Tit Cham Chau.			

SS levels for the stations closest to the marine construction works (WSR37, 3.5 mg/L; WSR36, 3.3 mg/L) were comparable to other monitoring stations without SS exceedance. As been advised by the Main Contractor, the dredging rate at WSR37 was minimal on 10 July 2021. WSR1 and WSR2 were located distant to the construction site and the possibility of being affected by marine construction activities was relatively low. With prediction that marine construction activities should result in high SS level, the observed SS level at WSR36 and WSR37 infers that SS exceedances at WSR1 and WSR2 were not project-related.

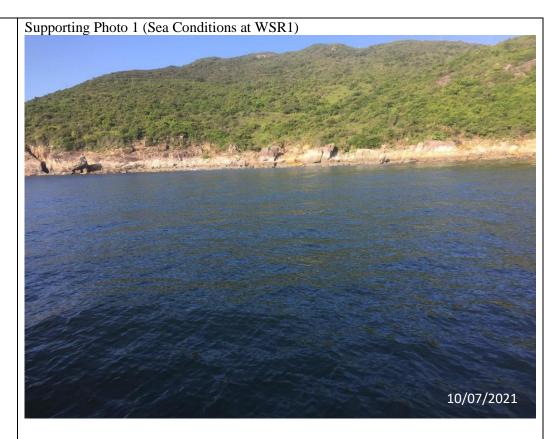
According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 10 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 10 July 2021.



(Sourced from http://current.hydro.gov.hk/en/map.html)

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	Supporting Photo 5 (Daily Dredging Rate up to 14 Jul			
	Outfall	<u>m3</u>	<u>m3 (cum)</u>	
	1/7/2021	0	2504	
	2/7/2021	0	2504	
	3/7/2021	99	2603	
	4/7/2021	0	2603	
	5/7/2021	28.3	2631.3	
	6/7/2021	0	2631.3	
	7/7/2021	0	2631.3	
	8/7/2021	0	2631.3	
	9/7/2021	0	2631.3	
	10/7/2021	0	2631.3	
	11/7/2021	80.7	2712	
	12/7/2021	0	2712	
	13/7/2021	0	2712	
	14/7/2021	0	2712	
Prepared by	Charlene Lai			
Date	26 July 2021			

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant		
Date	15 July 2021 (Lab result received on 20 July 2021)		
Time	08:00-11:30 (Mid-Flood) and 13:57-17:27 (Mid-Ebb)		
	Mid-Fl	lood	
Monitoring Location	HONG KONG ISLAND Tai Tam	Clear Water Bay WSR33 WSR35 WSR3 Tung Lung Chau CF	Key Weser Quality Monitoring Station Examples of the contiguous modes Kildmorrors 2
Donomoton	Cupandad Colid (CC)		
Parameter Action & Limit Levels	Suspended Solid (SS) Action Level	Limit Level	
Action & Limit Levels	> 6.9 mg/L	> 7.5 mg/L	
Measurement Level	Impact Station(s) of Exceedance 7.3 mg/L (WSR 16)	Control Stations 5.8 mg/L (CF) 3.2 mg/L (CE)	Impact Station(s) without Exceedance 2.9 mg/L (WSR 1) 3.2 mg/L (WSR 2) 4.9 mg/L (WSR 3) 3.1 mg/L (WSR 4) 5.4 mg/L (WSR33) 5.4 mg/L (WSR36) 5.4 mg/L (WSR37)
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) minimal grabbing of broken hard material for seabed levelling (0800-2000 hrs); 2) chiselling hard material (0800-1900 hrs) Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs) Marine construction activities with contact with water: 1) minimal grabbing of broken hard material for seabed levelling (0800-2000 hrs); 2) 610mm Ø pipe piling on temporary working platform Marine vessels on 15 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 2 (Outfall Shaft)		

Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the east side of Tit Cham Chau. SS level for the station closest to the marine construction works (WSR37, 5.4 mg/L) was relatively lower than the station with SS exceedance. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant. According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 15 July 2021. Conditions of the protective silt curtain at the inland water outfall and Outfall Shaft Area was satisfactory on 15 July 2021. Mid-Ebb Monitoring Location WSR2, WSR3, WSR4, WSR33, WSR37 HONG KONG ISLAND Parameter Suspended Solid (SS) Action & Limit Levels Action Level Limit Level > 7.4 mg/L> 8.0 mg/LImpact Station(s) of Measurement Level **Control Stations** Impact Station(s) without Exceedance Exceedance 10.1 mg/L (WSR2) 6.2 mg/L (CE) 7.4 mg/L (WSR1) 11.2 mg/L (WSR3) 7.5 mg/L (CF) 6.9 mg/L (WSR16) 8.7 mg/L (WSR4) 6.5 mg/L (WSR36) 8.7 mg/L (WSR33) 9.6 mg/L (WSR37) Possible reason for Action or Outfall Shaft Area: marine construction activities, namely 1) minimal grabbing of broken hard material for seabed levelling (0800-2000 hrs); 2) chiselling hard material Limit Level Non-compliance (0800-1900 hrs) Intake Shaft Area: marine construction activities, namely 1) 610mm Ø pipe piling on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs) Marine construction activities with contact with water: 1) minimal grabbing of broken hard material for seabed levelling (0800-2000 hrs); 2) 610mm Ø pipe piling on temporary working platform

Marine vessels on 15 July 2021:

- Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft)
- Derrick barge x 2 (Outfall Shaft)

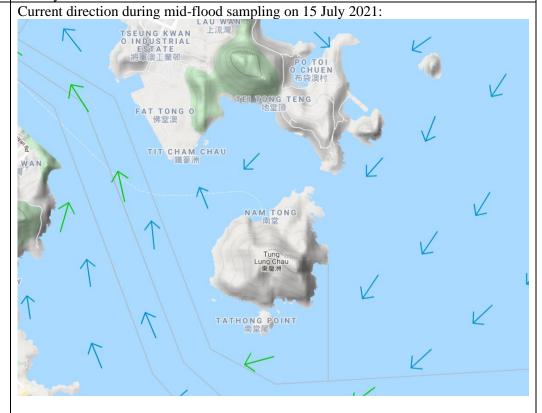
Dominating sea current direction was found to be from Northwest to Southeast a.5waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

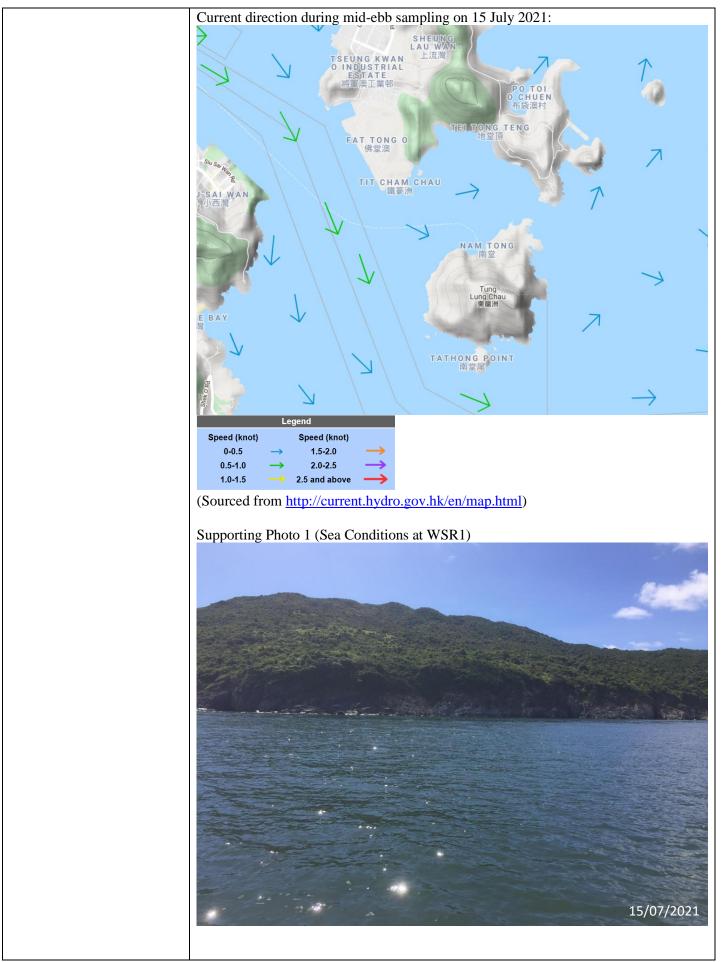
SS levels for the monitoring stations further away from the construction site (WSR2, 10.1 mg/L; WSR3, 11.2 mg/L) were observed higher than that with marine construction activities, namely WSR36 (6.5 mg/L) and WSR37 (9.6 mg/L). Relatively high SS background was noted at the control stations (CE, 6.2 mg/L; CF, 7.5 mg/L). No SS exceedance was observed at WSR36, where marine construction activities were conducted. In view of the inverse relation between distance to marine works and SS level, the SS exceedances is concluded not project relevant.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 15 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 15 July 2021.

Remarks





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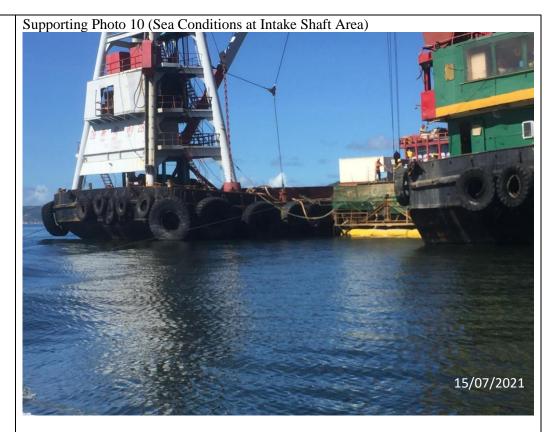














28 July 2021

Prepared by

Date

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	17 July 2021 (Lab result received on 21 July 2021)			
Time	09:33-13:03 (Mid-Flood) and 15:30-19:00 (Mid-Ebb)			
	Mid-Flood			
Monitoring Location	HONG KONG ISLAND Tai Tam Big Wice Bay	Clear Water Bay WSR33 WSR36 WSR36 WSR36 WSR36 WSR4 Tung Chau Chau	Key Wester Quality Monitoring Station Water Quality Monitoring Station Water Quality Monitoring Station Station and Station Plant Station and Station of Station	
Parameter	Suspended Solid (SS)			
Action & Limit Levels	Action Level	Limit Level		
Action & Limit Levels	> 6.8 mg/L	> 7.3 mg/L		
Measurement Level	Impact Station(s) of Exceedance 14.3 mg/L (WSR 3)	Control Stations 5.7 mg/L (CF) 8.2 mg/L (CE)	Impact Station(s) without Exceedance 3.9 mg/L (WSR 1) 4.8 mg/L (WSR 2) 4.1 mg/L (WSR 4) 5.9 mg/L (WSR 16) 5.0 mg/L (WSR33) 2.7 mg/L (WSR36) 3.3 mg/L (WSR 37)	
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) minimal grabbing of broken hard material for seabed levelling (am); 2) removal of double silt curtains; 3) diver checks on seabed level and placing of bagged concrete (pm) Intake Shaft Area: marine construction activities, namely 1) Modification of working platform and associated lifting works (0800-1900 hrs) Marine construction activities with contact with water: 1) minimal grabbing of broken hard material for seabed levelling (am); 2) removal of double silt curtains; 3) diver checks on seabed level and placing of bagged concrete (pm) Marine vessels on 17 July 2021: • Derrick barge x 2; pipe piling rig x 1 (idling); 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 2 (Outfall Shaft)			

Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the east side of Tit Cham Chau. SS level for the station closest to the marine construction works (WSR37, 3.3 mg/L) was relatively lower than the station with SS exceedance. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant. According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 17 July 2021. Conditions of the protective silt curtain at the inland water outfall and Outfall Shaft Area was satisfactory on 17 July 2021. Mid-Ebb Monitoring Location WSR3 HONG KONG ISLAND Suspended Solid (SS) Parameter Action & Limit Levels Action Level Limit Level > 5.0 mg/L> 6.0 mg/LMeasurement Level Impact Station(s) of Impact Station(s) without **Control Stations** Exceedance Exceedance 7.7 mg/L (WSR3) 2.5 mg/L (CE) 2.7 mg/L (WSR1) 2.6 mg/L (CF) 4.4 mg/L (WSR2) 4.7 mg/L (WSR4) 3.0 mg/L (WSR16) 4.4 mg/L (WSR33) 3.5 mg/L (WSR36) 4.3 mg/L (WSR37) Possible reason for Action or Outfall Shaft Area: marine construction activities, namely 1) minimal grabbing of broken hard material for seabed levelling (am); 2) removal of double silt curtains; 3) Limit Level Non-compliance diver checks on seabed level and placing of bagged concrete (pm) Intake Shaft Area: marine construction activities, namely 1) Modification of working platform and associated lifting works (0800-1900 hrs)

Marine construction activities with contact with water: 1) minimal grabbing of broken hard material for seabed levelling (am); 2) removal of double silt curtains; 3) diver checks on seabed level and placing of bagged concrete (pm)

Marine vessels on 17 July 2021:

- Derrick barge x 2; pipe piling rig x 1 (idling); 5.5T crane lift x 1 (Intake Shaft)
- Derrick barge x 2 (Outfall Shaft)

Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

SS level for the station closest to the marine construction works (WSR37, 4.3 mg/L) and immediately downstream to the marine construction works (WSR36, 3.5 mg/L) were relatively lower than the station with SS exceedance. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant..

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 17 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 17 July 2021.

Remarks

Current direction during mid-flood sampling on 17 July 2021:

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FAT TONG O

佛堂澳

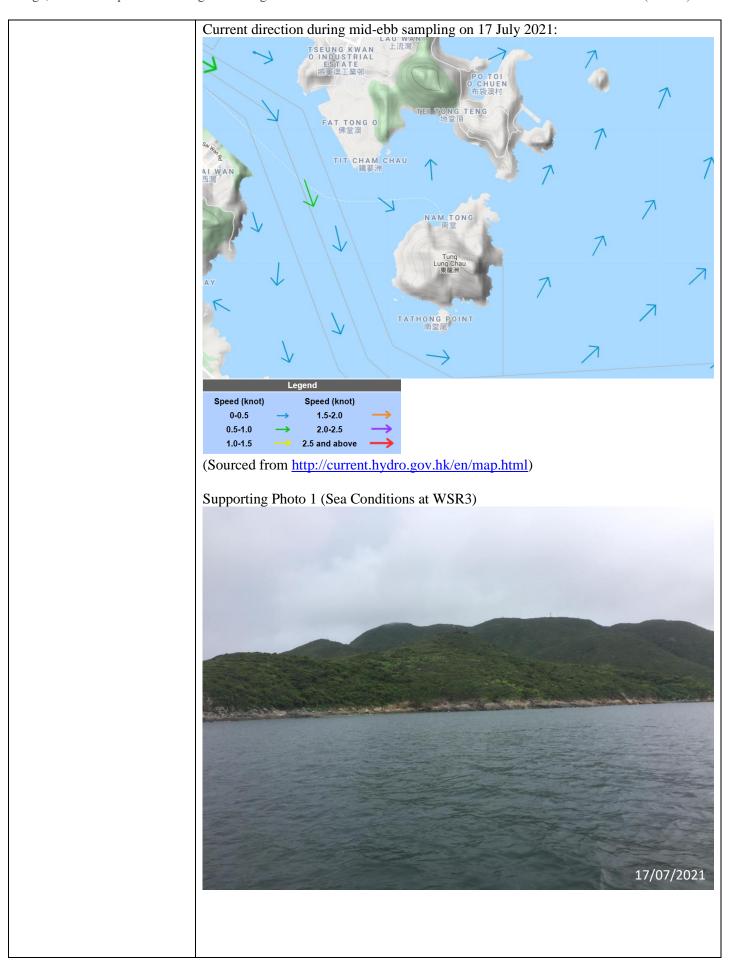
TIT CHAM CHAU

國家洲

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TATHONG POINT



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Supporting Photo 5 (Sea Conditions at Outfall Shaft Area)



Prepared by Charlene Lai

Date 28 July 2021

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	22 July 2021 (Lab result received on 26 July 2021)			
Time	15:30-19:00 (Mid-Flood) and 08:59-12:29 (Mid-Ebb)			
	Mid-Ebb			
Monitoring Location	WSR33 HONG KONG ISLAND WSR35			
	Big Wire Bay	WSIP	Tung Lung Chau	Key Wester Quality Monitoring Station N N Kidensethes 1 2 Indicative Location of Seawarder Inside Indicative Location of Seawarder Inside Indicative Location of Seawarder Inside
Parameter	Suspended Solid (SS)	<u> </u>		
Action & Limit Levels	Action Level		Limit Level	
Measurement Level	> 5.0 mg/L Impact Station(s) of Exceedance 6.7 mg/L (WSR 33)	Control Station 4.4 mg/L (CF 2.5 mg/L (CF	- 7)	Impact Station(s) without Exceedance 3.7 mg/L (WSR 1) 3.4 mg/L (WSR 2) 3.1 mg/L (WSR 3) 3.8 mg/L (WSR 4) 4.2 mg/L (WSR16) 4.3 mg/L (WSR36) 2.5 mg/L (WSR 37)
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) Checks on seabed after typhoon; 2) placement of bagged concrete base by divers (0800-2100 hrs). Intake Shaft Area: marine construction activities, namely 1) pipe piling of 610mm Ø on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs) Marine construction activities with contact with water Checks on seabed after typhoon; 2) placement of bagged concrete base by divers (0800-2100 hrs); 3) pipe piling of 610mm Ø on temporary working platform Marine vessels on 22 July 2021: • Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) • Derrick barge x 1 (Outfall Shaft) Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.			

SS level for the stations closest to the marine construction works (WSR37, 2.5 mg/L; WSR36, 4.3 mg/L) were relatively lower than the station with SS exceedance. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant.

According to the field observation by sampling team during sampling event, silt plume near to the coastline of Clear Water Bay Country Park was observed in the Project site on 22 July 2021. The observed silt plume was possibly resulted from the adjacent landslide events triggered by the heavy rainfall on 20 July 2021.

was satisfactory on 22 July 2021.

Conditions of the protective silt curtain at the inland water outfall and Outfall Shaft Area Current direction during mid-ebb sampling on 22 July 2021: Remarks

NAM TONG

Speed (knot) Speed (knot) 0-0.5 1.5-2.0 0.5-1.0 2.0-2.5 2.5 and above

(Sourced from http://current.hydro.gov.hk/en/map.html)



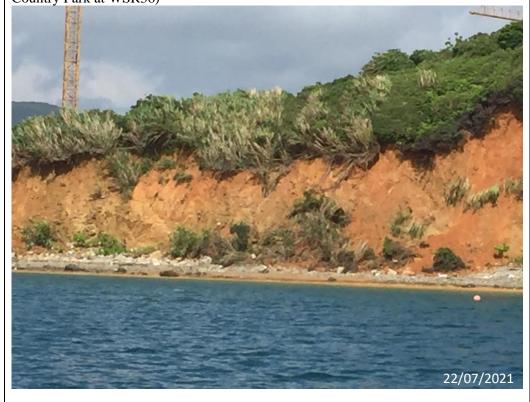


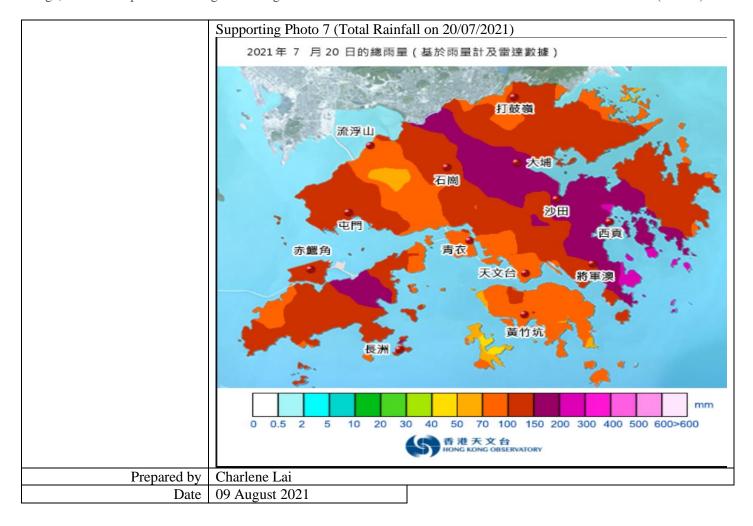






Supporting Photo 6 (Silt Plume and Landslide near to Coastline of Clear Water Bay Country Park at WSR36)





Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	27 July 2021 (Lab result received on 30 July 2021)			
Time	08:00-10:53 (Mid-Flood) and 12:52-16:22 (Mid-Ebb)			
	Mid-Fl	ood		
Monitoring Location	WSR36			
	HONG KONG ISLAND Tai Tam	WSR3 WSR3 WSR3 CF	Clear Water Bay WSR33 Tung Lung Chau	Key Water Gually Monitoring Station Elementaries State for Desaltymation Pilet Staty are for State miligation works Includive Location of Statement Paties Includive Location of Statement Paties Includive Location of Statement Cuttle
Parameter	Suspended Solid (SS)			
Action & Limit Levels	Action Level	Ţ	Limit Level	
Action & Limit Levels				
Measurement Level	> 7.8 mg/L Impact Station(s) of Exceedance	Control Station	> 8.4 mg/L	Impact Station(s) without Exceedance
	9.4 mg/L (WSR 36)	6.5 mg/L (CF) 3.2 mg/L (CE)		5.3 mg/L (WSR 1) 7.5 mg/L (WSR 2) 5.1 mg/L (WSR 3) 3.5 mg/L (WSR 4) 3.7 mg/L (WSR16) 5.5 mg/L (WSR33) 5.3 mg/L (WSR 37)
Possible reason for Action or Limit Level Non-compliance	, , , ,			
				1

Dominating sea current direction was found to be from Southeast to Northwest at waters to the west side of Tit Cham Chau; and from Northeast to Southwest at waters to the east side of Tit Cham Chau.

No SS exceedance was observed at WSR37 (5.3 mg/L), which locates immediately downstream to WSR36. As been advised by the Main Contractor, the bagged concrete base was in solid form of which concrete mix had set with limited SS that would be generated during the manual placement for seabed levelling. The SS level of WSR36 (9.4 mg/L) was relatively similar to WSR2 (7.5 mg/L), where WSR2 located further away from the construction site, suggesting other natural factors may be possible reason for the SS exceedance at WSR36. Light rainfall was noted on 27 July 2021, with 5-10mm recorded by Hong Kong Observatory.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 27 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 27 July 2021.

Mid-Ebb				
Monitoring Location	WSR1, WSR36			
	HONG KONG ISLAND Tai Tam Big Wave Beg	Clear Water Bay WSR3 WSR3 WSR3 Tung Lung Chau	Key West Quality Mentioning Station Examerized title for the baselination Pierl Study area for slope miligation works. Includer's Location of Students Destallation Pierl Study area for slope miligation works. Includer's Location of Students Destallation Following Location of Students Destallation And Control of Students Destallation Note that the students of Students Destallation Pierl Students Destallation P	
Parameter	Suspended Solid (SS)			
Action & Limit Levels	Action Level	Limit Level		
retion & Limit Levels	> 7.5 mg/L	> 8.1 mg/L		
Measurement Level	Impact Station(s) of Exceedance	Control Stations	Impact Station(s) without Exceedance	
	8.2 mg/L (WSR1) 8.3 mg/L (WSR36)	6.3 mg/L (CE) 7.4 mg/L (CF)	3.4 mg/L (WSR2) 4.5 mg/L (WSR3) 5.9 mg/L (WSR4) 4.9 mg/L (WSR16) 7.0 mg/L (WSR33) 7.5 mg/L (WSR37)	
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) Manual placement of bagged concrete base by divers for seabed levelling (0800-2300 hrs) Intake Shaft Area: marine construction activities, namely 1) pipe piling of 610mm Ø on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs)			

Mid Ebb

Marine construction activities with contact with water: 1) Manual placement of bagged concrete base by divers for seabed levelling (0800-2300 hrs); 2) pipe piling of 610mm Ø on temporary working platform

Marine vessels on 27 July 2021:

Derrick barge x 2; pipe piling rig x 1, 5.5T crane lift x 1 (Intake Shaft)
 Derrick barge x 2 (Outfall Shaft) – one of the derrick barges holding the steel caisson moored off to Intake Shaft to stand by whole day

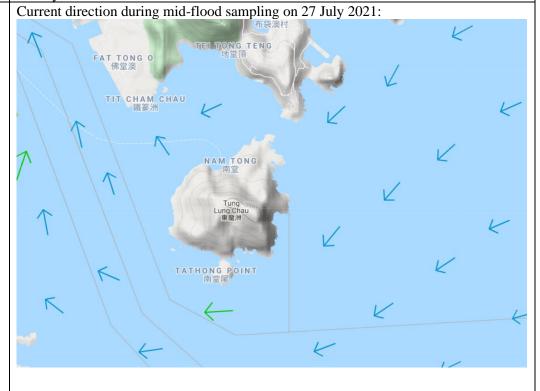
Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

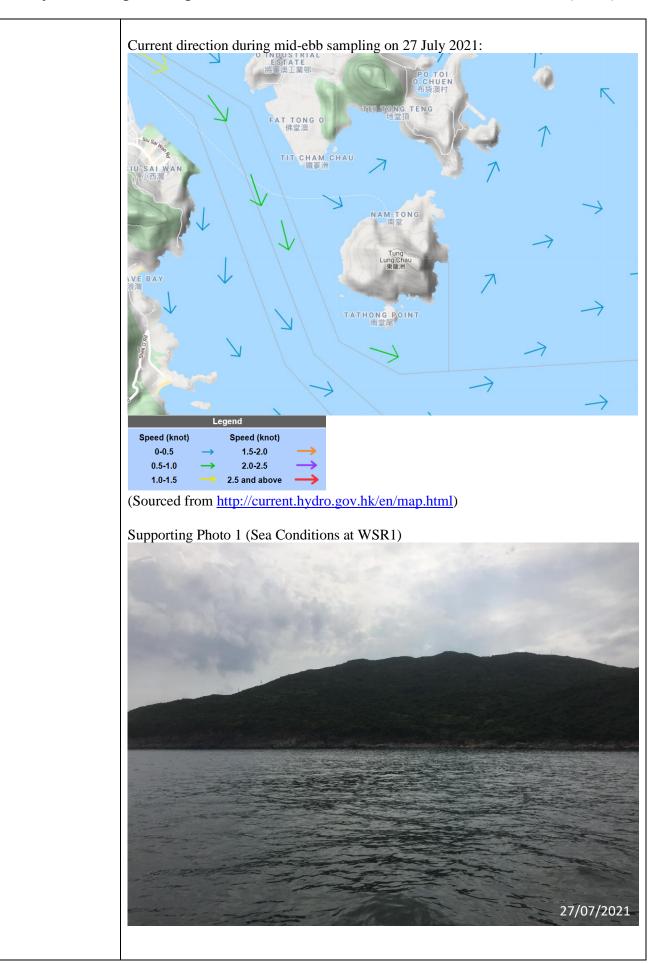
SS level for the station immediately downstream (WSR33, 7.0 mg/L) was relatively lower than station with marine construction works (WSR36, 8.3 mg/L). SS level of a distant location (WSR1, 8.2 mg/L) was comparable to stations with marine construction activities. As been advised by the Main Contractor, the bagged concrete base was in solid form of which concrete mix had set with limited SS that would be generated during the manual placement for seabed levelling. The SS background levels at the control stations (CF, 7.4 mg/L; CE, 6.3 mg/L) and upstream station (WSR37 (7.5 mg/L), were generally high, suggesting other natural factors may be possible reasons for the SS exceedance. Light rainfall was noted on 27 July 2021, with 5-10mm recorded by Hong Kong Observatory.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 27 July 2021.

Conditions of the protective silt curtain at the inland water outfall was satisfactory on 27 July 2021.

Remarks





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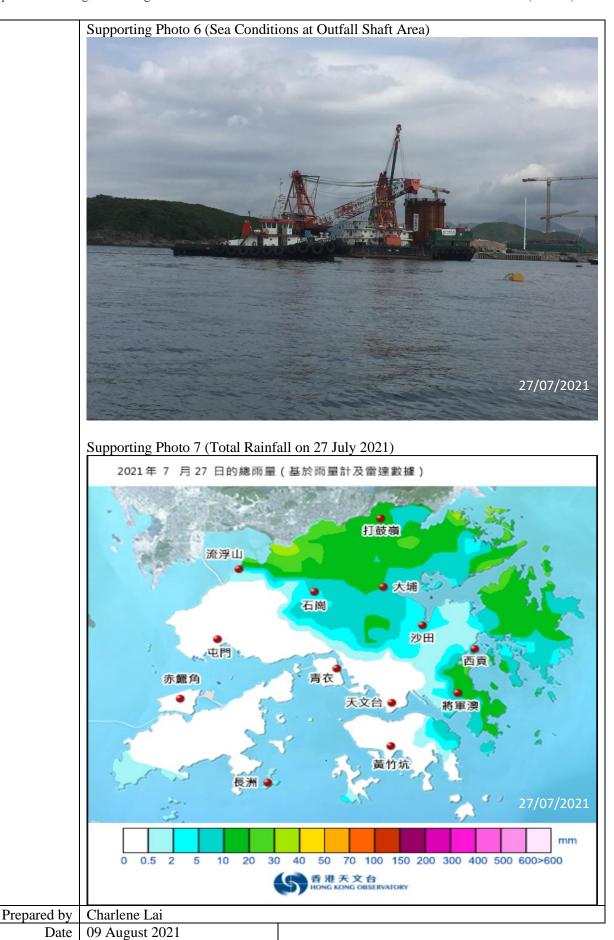












Incident Report on Action Level or Limit Level Non-Compliance

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	29 July 2021 (Lab result received on 04 August 2021)			
Time	08:00-11:30 (Mid-Flood) and 14:15-17:45 (Mid-Ebb)			
Mid-Ebb				
Monitoring Location	HONG KONG ISLAND Tai Tam	Clear Water Bay WSR33 WSR35 WSR36 WSR4 WSR3 WSR3 WSR3 Tung Lung Chau CF	Key Water Quality Moritoring Station Water Quality Moritoring Station Water Quality Moritoring Station Plant Water Quality Moritoring Station Plant Water Quality Moritoring Station Water Quality Moritoring St	
D	0 11011100	0	Kilometres Indicative Location of Seawater Intake Indicative Location of Submarine Outfel	
Parameter	Suspended Solid (SS)	l r · · · · r · · ·		
Action & Limit Levels	Action Level	Limit Level > 6.0 mg/L		
Measurement Level	> 5.0 mg/L Impact Station(s) of Exceedance 10.1 mg/L (WSR 1) 5.5 mg/L (WSR 2) 6.3 mg/L (WSR 37)	Control Stations 2.5 mg/L (CF) 3.9 mg/L (CE)	Impact Station(s) without Exceedance 3.6 mg/L (WSR 3) 3.8 mg/L (WSR 4) 4.6 mg/L (WSR16) 2.7 mg/L (WSR 33) 2.7 mg/L (WSR36)	
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) 0800 - 1300 hrs - Rigging of the caisson on board the derrick barge; 2) 0800 - 2200 hrs - Positioning of the crane barge which lifted up the caisson from derrick barge; 3) 1300 - 1400 hrs - Derrick barge towed out from outfall area; 4) Caisson sank in position at the outfall shaft at approximate 16:30; 5) 1630 - 1800 hrs - Diver's checking on base condition of the caisson after sitting on seabed Intake Shaft Area: marine construction activities, namely 1) pipe piling of 610mm Ø on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs) Marine construction activities with contact with water: 1) caisson sank in position at the outfall shaft at approximate 16:30; 2) 1630 - 1800 hrs - Diver's checking on base condition of the caisson after sitting on seabed; 3) pipe piling of 610mm Ø on temporary working platform			
	Marine vessels on 29 July 20 • Derrick barge x 2; pipe p	Marine vessels on 29 July 2021: Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft)		

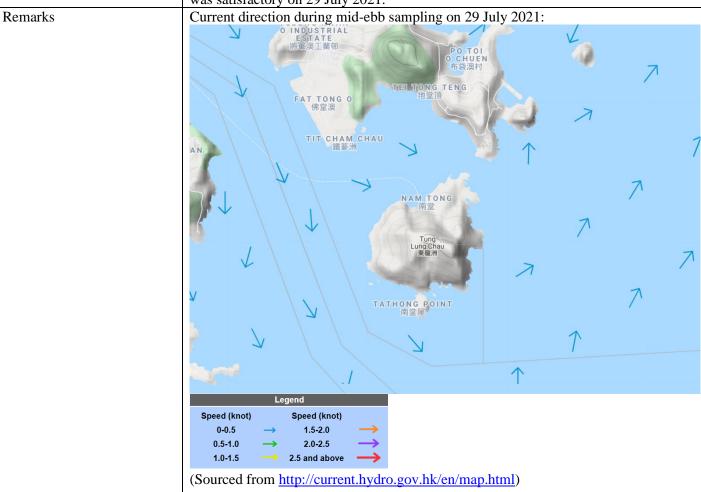
• Derrick barge x 2 (one of the derrick barges moored out of Outfall area standing by whole day), crane barge x 1, tug boat x 1, anchor boat x 1

Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

The timeframe of general water sampling during mid-ebb tide on 29 July 2021 was between 14:15-17:45. As advised by the Water Sampling Team, the water sampling time at WSR1, WSR2 and WSR37 was 16:29-16:31, 16:10-16:12 and 15:00-15:02 respectively. According to the work activities schedule provided by the Main Contractor, no marine work-related activities that will generate SS were conducted at the Outfall Shaft Area (WSR37) during water sampling. However, SS level at WSR37 (6.3 mg/L) was higher than stations which located further away from the construction site (WSR2, 5.5 mg/L). WSR1 and WSR2 were located distant from the construction site and the possibility of being affected by marine construction activities were considered limited. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant and may be resulted from other natural factors.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 29 July 2021.

Conditions of the protective silt curtain at the inland water outfall and Intake Shaft Area was satisfactory on 29 July 2021.





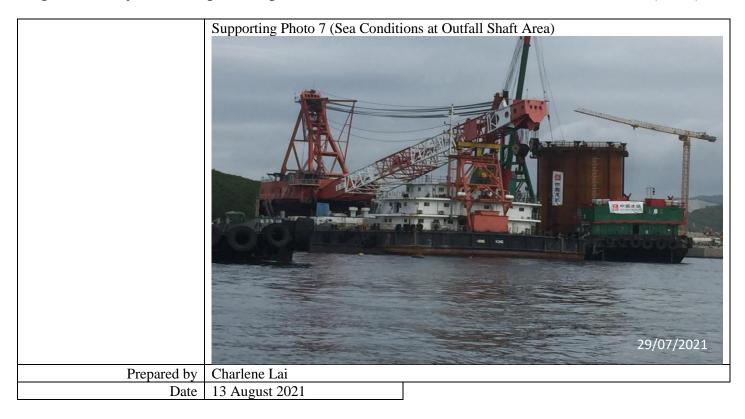












Incident Report on Action Level or Limit Level Non-Compliance

Project	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant			
Date	31 July 2021 (Lab result received on 04 August 2021)			
Time	09:45-13:15 (Mid-Flood) and 15:30-19:00 (Mid-Ebb)			
Mid-Ebb				
Monitoring Location	WSR1, WSR2, WSR33, WSR36			
	HONG KONG ISLAND Tai Tam Big Wine Bigg	Clear Water Bay WSR33 WSR33 WSR34 NF1 NF2 NF3 WSR36 Tung Lung Chau Chau	Key West Quality Montoring Station Remarked State for Dissalvation Pipet Station van the disposition van the footbase of the control of State of	
Parameter	Suspended Solid (SS)			
Action & Limit Levels	Action Level	Limit Level		
Action & Limit Levels	> 5.0 mg/L	> 6.0 mg/L		
Measurement Level	Impact Station(s) of Exceedance 5.3 mg/L (WSR 1) 5.1 mg/L (WSR 2) 8.5 mg/L (WSR 33) 6.5 mg/L (WSR36)	Control Stations 5.1 mg/L (CF) 2.6 mg/L (CE)	Impact Station(s) without Exceedance 2.5 mg/L (WSR 3) 4.4 mg/L (WSR 4) 3.7 mg/L (WSR16) 4.3 mg/L (WSR 37)	
Possible reason for Action or Limit Level Non-compliance	Outfall Shaft Area: marine construction activities, namely 1) 0800 – 1800 hrs – Welding to stabilize the caisson (after retrieval from seabed) on board the derrick barge; 2) 0800 – 1100 hrs – Crane barge unmoored; 3) 1100 – 1700 hrs – Crane barge towed off-site, to Hei Ling Chau Typhoon Shelter; 4) 1100 – 1200 hrs – Derrick barge towed back and re-positioned at outfall shaft to assist diver's work; 5) 1200 – 1530 hrs – Diver's checking on seabed conditions Intake Shaft Area: marine construction activities, namely 1) pipe piling of 610mm Ø on temporary working platform; 2) lifting of 610mm Ø pipe piles (0800-1900 hrs) Marine construction activities with contact with water: 1) 1200 – 1530 hrs – Diver's checking on seabed conditions; 2) pipe piling of 610mm Ø on temporary working platform			
	 Marine vessels on 31 July 2021: Derrick barge x 2; pipe piling rig x 1; 5.5T crane lift x 1 (Intake Shaft) Derrick barge x 2, crane barge x 1, tug boat x 2, anchor boat x 1 (Outfall Shaft) 			

Dominating sea current direction was found to be from Northwest to Southeast at waters to the west side of Tit Cham Chau; and from West to East at waters to the east side of Tit Cham Chau.

The SS level of the work station closest to the construction site (WSR36, 6.5 mg/L) was lower than station which located further from the construction site (WSR33, 8.5 mg/L). No SS exceedance was observed at WSR37 where marine activities were conducted during 1200-1530hrs. In view of the inverse relation between distance to marine works and SS level, the SS exceedance is concluded not project relevant and may be resulted from other natural factors. Heavy rainfall with accumulative 70-100mm was recorded in the Joss House Bay Area on 31 July 2021. The rainfall may lead to release of SS content from the soil of the nearby lands (e.g. country park, fill bank). The SS data during mid-ebb tide suggested unstable weather conditions may be the dominating factor of elevated SS value.

According to the field observation by sampling team during sampling event, no silt plume was observed in the Project site on 31 July 2021.

Conditions of the protective silt curtain at the inland water outfall and Intake Shaft Area was satisfactory on 31 July 2021.

Remarks

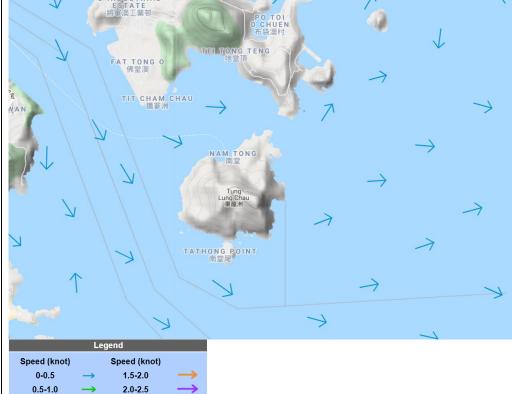
Current direction during mid-ebb sampling on 31 July 2021:

SHEUNG KWAN

O INDUSTRIAL
ESTATE

WO CHUEN
布袋澳村

TELL TONG TENG
地堂頂



(Sourced from http://current.hydro.gov.hk/en/map.html)

2.5 and above

















