



**South East Asia – Japan 2 Cable  
System - Hong Kong Segment  
(SJC2-HK) - Chung Hom Kok**

**Monthly EM&A Report  
For April 2021**

[05/2021]

	Name	Signature
Prepared & Checked:	Alex Chan	
Reviewed & Certified:	Lemon Lam	

Version:	Rev. 0	Date: 14 May 2021
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Our Ref: 7076596/L27426/AB/TSC/JC/lc

14 May 2021

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**By Email Only**  
(david.lim@opticmarine.com)

Attention: Mr. David LIM

Dear Sir

**South East Asia – Japan 2 Cable System – Hong Kong Segment (SJC2-HK) – Chung Hom Kok  
Verification of Monthly EM&A Report for April 2021**

Reference is made to the *Monthly EM&A Report for April 2021 (Rev. 0)* dated 14 May 2021, submitted by the Environmental Team via e-mail on 14 May 2021.

We hereby verify the said Monthly EM&A Report has complied with the requirement as set out under Condition 3.3 of the Environmental Permit.

Thank you very much for your kind attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully

**Cindy CHUNG**  
Independent Environmental Checker

cc: AECOM Ms. Lemon LAM

(By Email: lemon.lam@aecom.com)

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## **EXECUTIVE SUMMARY**

The impact EM&A programme for the Project commenced on 21 April 2021. The impact environmental monitoring included water quality monitoring and marine mammal observations.

This report documents the findings of EM&A works conducted in the period from 21 to 28 April 2021.

### **Breaches of Action and Limit Levels for Water Quality Monitoring**

11 Action Level exceedances recorded in the reporting period, in which 10 exceedances related to dissolved oxygen and 1 exceedance related to suspended solid. After investigations, all recorded Action Level exceedances were considered non-project related.

21 Limit Level exceedances recorded in the reporting period, in which 11 exceedances related to dissolved oxygen, 3 exceedances related to turbidity and 7 exceedances related to suspended solid. After investigations, all recorded Limit Level exceedances were considered non-project related.

### **Marine Mammal Observation**

No cetacean was observed in the exclusion zone for 30 minutes before and during the cable laying works in the reporting period.

### **Complaint, Notification of Summons and Successful Prosecution**

2 noise complaints were received by EPD on 12 and 13 April 2021. Complaint investigations were conducted for the received complaints. After investigations, the received noise complaints were considered not due to the Project. The complaint investigations were sent to the EPD on 12 and 16 April 2021.

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

## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 The South-East Asia Japan Cable System (SJC) is a submarine telecommunications cable connecting Japan, China, Hong Kong, the Philippines, Brunei, Thailand, Singapore and Indonesia, which was completed in 2013. Construction of the second South East Asia – Japan Cable System (SJC2) is proposed and this Project comprises the Hong Kong Segment of SJC2. The indicative alignment of the whole SJC2 cable is shown in **Figure 1.1**.
- 1.1.2 Buried below the seabed, the SJC2-HK Cable enters the eastern waters of Hong Kong, follows the established “east-west cable corridor (south)” and lands at an existing Beach Manhole (BMH) at Sha Shek Tan Beach (SST Beach) on the Chung Hom Kok (CHK) peninsula, which is at the south side of Hong Kong Island. This is the same landing location of the existing SJC Cable and other cables, including City-to-City Cable System (“C2C”) and the East Asia Crossing + C2C cable system (“EAC-C2C”).
- 1.1.3 CHK is an important telecommunications and media hub in Hong Kong. There are currently teleports, GB21 Cable Station Chung Hom Kok Teleport Substation and Smartone Station Chung Hom Kok Teleport Substation, located at CHK. It is anticipated that this area further developed to cater for more telecommunication infrastructure in the future.
- 1.1.4 A Project Profile was prepared to assess potential environmental impacts associated with the installation of the submarine telecommunications cable system within Hong Kong. The Project Profile was submitted to the Environmental Protection Department (EPD) under section 5(1)(b) and 5(11) of the Environmental Impact Assessment Ordinance (EIAO) for application for permission to apply directly for an Environmental Permit (EP) (Application No.: DIR -269/2019). Permission granted by EPD via an approval letter dated 21 January 2020 (Ref. EP2/H19/C/09) and the Environmental Permit (EP-572/2020) issued by the EPD on 4 March 2020.
- 1.1.5 The Project Profile recommended carrying out precautionary water quality monitoring to ensure no adverse impacts to the water quality, marine ecology and fisheries.
- 1.1.6 The impact EM&A programme for the Project commenced on 21 April 2021. The impact environmental monitoring included water quality monitoring and marine mammal observations.

### 1.2 Scope of Report

- 1.2.1 This is the monthly Environmental Monitoring and Audit (EM&A) Report and this report presents a summary of the environmental monitoring and audit works, list of activities and mitigation measures of the Project in April 2021.

### 1.3 Project Organization

1.3.1 The project organization is shown in **Appendix A**. The key personnel contact names and numbers are summarized in **Table 1.1**.

**Table 1.1 Contact Information of Key Personnel**

Party	Position	Name	Telephone	Fax
<b>IEC</b> (SMEC Asia Limited)	Independent Environmental Checker	Cindy Chung	3995 8124	3995 8101
<b>Contractor</b> (OPTIC MARINE GROUP)	OSP Manager	Vincent Chia	+603 5569 3881 / +6012 670 6588	--
<b>ET</b> (AECOM)	ET Leader	Lemon Lam	3922 3981	2371 7609

### 1.4 Summary of Construction Works

1.4.1 Details of the construction works carried out by the Contractor in this reporting period are listed below:

- Mobilization and preparation
- Set up injector & Conduct Route Clearance
- Preparation of cable landing work
- Cable Landing at Chung Hom Kok
- Commence lay and bury cable with Injector
- Uraduct installation for pipeline crossing
- Cable end cap seal and stream off

1.4.2 The EM&A programme required environmental monitoring for water quality monitoring and marine mammal observations. The EM&A requirements for each parameter described in the following sections include:

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

## 2 WATER QUALITY MONITORING

### 2.1 Monitoring Requirements

2.1.1 In accordance with the Project Profile, the impact water quality monitoring shall be conducted three times each week and the interval between any two sets of monitoring shall not be less than 36 hours. For each set, monitoring should undertake within a 4 hours window of 2 hours before and 2 hours after mid-flood and mid-ebb tides.

### 2.2 Monitoring Equipment

2.2.1 The brand and model of water quality monitoring equipment is given in **Table 2.1**.

**Table 2.1 Water Quality Monitoring Equipment**

Equipment	Brand and Model
Dissolved Oxygen Meter	YSI 6820 V2
Water Temperature Meter	
Salinity Meter	
Water Sampler	Kahlsico Water Sampler
Echo Sounder	Lowrance x-4
Global Positioning System	Garmin GPS72H
Air Velocity Meter	TSI 9555-P

### 2.3 Monitoring Locations

2.3.1 In accordance with the Project Profile, the stations for impact water quality monitoring are presented in **Table 2.2** and shown in **Figure 2.1**.

**Table 2.2 Locations of Impact Water Quality Monitoring Stations**

Type of Station	Station	Location	Easting	Northing	Closest Distance from Cable Alignment (m)
Water Quality Monitoring Station	B2	St. Stephen's Bay Beach	839 902	808 259	580
	C2	Coral Communities along Southwest Coat of Chung Hom Kok	838 882	807 959	920
	C4/F1	Coral Communities along the Coast of Po Toi & Po Toi FCZ	843 536	801 809	C4: 1,020 F1: 1,420
	F2	Fish Spawning Grounds	838 774	807 362	0
	G1	Gradient Station	839 695	808 291	200
Control Station	CS1	Control Station	837 879	801 901	3000

2.3.2 In accordance with F.4.17 of the Project Profile, due to the length of the cable in Hong Kong waters, the impact monitoring stations were divided into two zones to effectively and efficiently monitor the water quality, as shown in **Figure 2.1**.

- Zone A. Monitoring at stations B2, C2, F2, G1 and CS1 was conducted when the cable laying work area within the boundary of Zone A.
- Zone B. Monitoring at stations CS1 and C4/F1 was conducted when the cable laying work area within the boundary of Zone B.

**2.4 Monitoring Parameters, Frequency and Duration**

2.4.1 The monitoring parameters, frequency and duration of water quality monitoring are summarized in **Table 2.3**.

**Table 2.3 Water Quality Monitoring Parameters, Frequency and Duration**

Parameter	Frequency and Duration
Turbidity, Suspended Solids, Dissolved Oxygen, Salinity and Temperature	Three times each week, at mid-flood and mid-ebb tides

**2.5 Monitoring Methodology**

2.5.1 The water quality monitoring procedures are presented in the following:

- All monitoring equipment were checked and calibrated before use. Responses of sensors and electrodes were also checked with certified standard solutions before each use.
- For each set, monitoring was undertaken within a 4 hours window of 2 hours before and 2 hours after mid-flood and mid-ebb tides.
- The interval between 2 sets of monitoring was not less than 36 hours.
- Duplicate in-situ measurements and water sampling were carried out in each sampling event.
- Measurements were taken at 3 water depths, namely, 1m below water surface, mid-depth and 1m above seabed, except where the water depth less than 6m, the mid-depth station may be omitted. Should the water depth be less than 3m, only the mid-depth station was monitored.
- Analysis of suspended solids was carried out by ALS Technichem (HK) Pty Ltd. Sufficient water samples were collected at the monitoring stations for carrying out the laboratory analysis. The analysis followed the standard methods as described in APHA Standard Methods for the Examination of Water and Wastewater, 19th Edition (APHA 2540D for SS).
- Water samples for suspended solids measurements were collected in high density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to a HOKLAS laboratory as soon as possible after collection.
- All monitoring equipment were certified by a laboratory accredited under HOKLAS. Calibration certificates of all monitoring equipment are provided in **Appendix B**.

**2.6 Monitoring Schedule for the Reporting Period**

2.6.1 The schedule for environmental monitoring in April 2021 is provided in **Appendix C**.

**2.7 Action/Limit Levels**

2.7.1 A baseline water quality monitoring for 6 locations were carried out 3 days per week for 4 weeks between 27 February 2021 and 25 March 2021. Action and Limit Levels for water quality were established and summarized in **Table 2.4** and **Appendix F**.



## 2.8 Results and Observations

- 2.8.1 The water quality monitoring was conducted on 22, 24 and 27 April 2021.
- 2.8.2 In accordance with F.4.17 of the Project Profile, due to the length of the cable in Hong Kong waters, the impact monitoring stations were divided into two zones (Zone A and Zone B) to effectively and efficiently monitor the water quality.
- 2.8.3 The monitoring works were conducted within Zone A on 22 April 2021 and conducted within Zone B on 24 and 27 April 2021.
- 2.8.4 The monitoring results are summarized in **Table 2.4**. Detailed water quality monitoring data and laboratory results are presented in **Appendix D** and **Appendix E** respectively.
- 2.8.5 The event and action plan is presented in **Appendix G**.

**Table 2.4 Summary of Water Quality Monitoring Results in the Reporting Period**

Monitoring Zone	Locations		Dissolved Oxygen (mg/L)		Turbidity (NTU)	Suspended Solids (mg/L)
			Result (Surface & Middle)	Result (Bottom)	Result	Result
Control Station	CS1	Avg.	7.33	7.25	2.62	3.08
		Min.	7.14	7.13	2.22	2.25
		Max.	7.52	7.37	3.22	4.92
Zone B	C4/F1	Avg.	7.30	7.20	2.75	2.72
		Min.	7.18	7.13	2.65	2.55
		Max.	7.42	7.27	2.80	2.88
Zone A	F2	Avg.	7.42	7.35	2.72	3.50
		Min.	7.17	7.12	2.02	2.67
		Max.	7.67	7.57	3.42	4.33
	C2	Avg.	7.28	7.20	3.18	4.17
		Min.	7.26	7.17	3.10	4.12
		Max.	7.30	7.23	3.27	4.22
	G1	Avg.	7.30	7.25	3.27	4.44
		Min.	7.29	7.24	3.20	4.27
		Max.	7.31	7.26	3.33	4.62
	B2	Avg.	7.34	7.30	2.90	4.56
		Min.	7.34	7.29	2.75	4.08
		Max.	7.35	7.31	3.05	5.03
Action Level			7.40	7.34	3.43 <sup>*1</sup>	2.85 <sup>*1</sup>
Limit Level			7.33	7.20	3.70 <sup>*2</sup>	3.39 <sup>*2</sup>

\*1 According with the Project Profile, the Action Level shall be derived as 95<sup>th</sup> percentile of baseline date, which listed on the Table 2.4, or 20% exceedance of value at any impact station with the control station.

\*2 According with the Project Profile, the Limit Level shall be derived as 99<sup>th</sup> percentile of baseline date, which listed on the Table 2.4, or 30% exceedance of value at any impact station with the control station.

- 2.8.6 11 Action Level exceedances recorded in the reporting period, in which 10 exceedances related to dissolved oxygen and 1 exceedance related to suspended solid. After investigations, all recorded Action Level exceedances were considered non-project related.
- 2.8.7 21 Limit Level exceedances recorded in the reporting period, in which 11 exceedances related to dissolved oxygen, 3 exceedances related to turbidity and 7 exceedances related to suspended solid. After investigations, all recorded Limit Level exceedances were considered non-project related.
- 2.8.8 3 Action Level exceedances related to dissolved oxygen, 5 Limit Level exceedances related to dissolved oxygen and 4 Limit Level exceedances related to suspended solid were recorded at mid-ebb tide on 22 April 202. With reviewing the dissolved oxygen levels and suspended solid level at control station at the same tide, the dissolved oxygen levels and suspended solid level at control station were both exceeded Limit Levels, the exceedances considered due to the local factor. Therefore, the exceedances were considered not due to the Project.
- 2.8.9 4 Action Level exceedances related to dissolved oxygen, 2 Limit Level exceedances related to dissolved oxygen, 3 Limit Level exceedances related to turbidity and 3 Limit Level exceedances related to suspended solid were recorded at mid-flood tide on 22 April 2021. The water quality monitoring was conducted from 8 am to 10 am. According to the information from the Contractor, there was no cable laying and burial work was conducted during the water quality monitoring. Therefore, the exceedances were considered not due to the Project.
- 2.8.10 2 Action Level exceedances related to dissolved oxygen were recorded at mid-ebb tide on 24 April 2021. The measured dissolved oxygen level at the surface & middle layers and the bottom layer was 7.34 mg/L and 7.27 mg/L. After reviewing the baseline data at the same monitoring station(C4/F1), 7.31 mg/L and 7.28 mg/L were recorded at the surface & middle layers and bottom layers respectively, the exceeded dissolved oxygen levels were very close to the baseline data recorded. The measured water quality was closed to the baseline condition, the exceedances were considered not due to the Project.
- 2.8.11 1 Action Level exceedance related to dissolved oxygen and 1 Action Level exceedance related to suspended solid were recorded at mid-flood tide on 24 April 2021. The water quality monitoring was conducted from 4 pm to 5 pm. According to the information from the Contractor, the construction works were stopped since 4 pm due the bad weather, no cable laying work was expected during the water quality monitoring. Therefore, the exceedances were considered not due to the Project.
- 2.8.12 2 Limit Level exceedances related to dissolved oxygen were recorded at mid-ebb tide and 2 Limit Level exceedances related to dissolved oxygen were recorded at mid-flood tide on 27 April 2021. With reviewing the dissolved oxygen levels at control station at mid-ebb and mid-flood tides, the dissolved oxygen levels at control station of each tides were lower than Limit Levels, the low dissolved oxygen levels considered due to the local factor. Therefore, the exceedances were considered not due to the Project.
- 2.8.13 Proper mitigation measures on water quality (e.g. maximum speed of the Cable Burial Tool shall be limited) have been provided to reduce adverse impacts on water quality during construction activities. The effective implementation of mitigation measures ensured the compliance with action and limit levels of water quality during the reporting period.

### 3 MARINE MAMMAL OBSERVATION

#### 3.1 Monitoring Requirements

3.1.1 In accordance with the Project Profile, marine mammal observations shall be conducted each day during the cable laying works in day-time hours along the section starting within the boundary of HKSAR waters.

#### 3.2 Monitoring Equipment

3.2.1 Table 3.1 summarizes the equipment used for the marine mammal observation.

**Table 3.1 Marine Mammal Observation Equipment**

Equipment	Brand and Model
Binocular	Bushnell 8x32
Camera	Sony RX10 III 24-600mm
Global Positioning System	Garmin GPS MAP 64S

#### 3.3 Monitoring Locations and Frequency

3.3.1 In accordance with the Project Profile, a marine mammal exclusion zone within a radius of 250m from the cable laying works was set up. The mammal observations were performed before 30 minutes and during the cable laying works in day-time hours along the section starting from southern end of Zone A up to the boundary of HKSAR waters, as shown in **Figure 2.1**.

#### 3.4 Results and Observations

3.4.1 Marine mammal observations were conducted on 21 to 28 April 2021.

3.4.2 The weathers during the observation days were mainly sunny with good visibility. Sea conditions were mainly at a Beaufort Sea State of 2 to 5

3.4.3 No cetacean was observed in the exclusion zone for 30 minutes before and during the cable laying works on 21 to 28 April 2021.

## **4 ENVIRONMENTAL COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION**

### **4.1 Environmental Complaint**

- 4.1.1 1 noise complaint was received by the EPD on 12 April 2021. The complaint was about noise and strong lighting from working barge/vessels at Chung Hom Kok till midnight on 8 April 2021. After investigation, the cable installation work for SJC2-HK did not start on 8 April 2021. Therefore, the complaint was not due to the works relating to the Project. The environmental investigation was sent to the EPD on 12 April 2021.
- 4.1.2 1 noise complaint was received by the EPD on 13 April 2021. The complaint was about noise generated from marine works at the sea area near Regalia Bay (No. 88 of Wong Ma Kok Road) from 1300-1800 on 11 April 2021 (Sunday). After investigation, there was no construction work was conducted under the Project on 11 April 2021. Therefore, the complaint was not due to the works relating to the Project. The environmental investigation was sent to the EPD on 16 April 2021.

### **4.2 Notification of Summons and Successful Prosecution**

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

## **5 CONCLUSIONS AND RECOMMENDATIONS**

- 5.1.1 11 Action Level exceedances recorded in the reporting period, in which 10 exceedances related to dissolved oxygen and 1 exceedance related to suspended solid. After investigations, all recorded Action Level exceedances were considered non-project related.
- 5.1.2 21 Limit Level exceedances recorded in the reporting period, in which 11 exceedances related to dissolved oxygen, 3 exceedances related to turbidity and 7 exceedances related to suspended solid. After investigations, all recorded Limit Level exceedances were considered non-project related.
- 5.1.3 No cetacean was observed in the exclusion zone for 30 minutes before and during the cable laying works in the reporting period.
- 5.1.4 2 noise complaints were received by EPD on 12 and 13 April 2021. Complaint investigations were conducted for the received complaints. After investigations, the received noise complaints were considered not due to the Project. The complaint investigations were sent to the EPD on 12 and 16 April 2021.
- 5.1.5 No notification of summons and successful prosecution was received in the reporting period.

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## FIGURES

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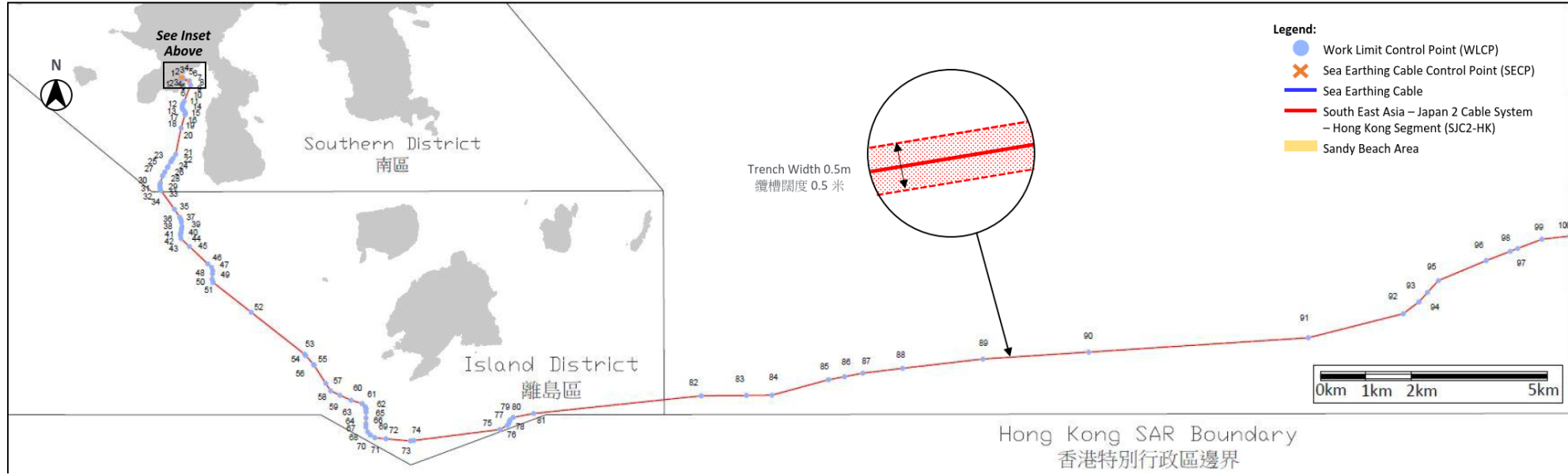


Figure 1.1 Alignment of SJC2-HK Cable System within Hong Kong (Source: Figure 1.3 of the Project Profile)

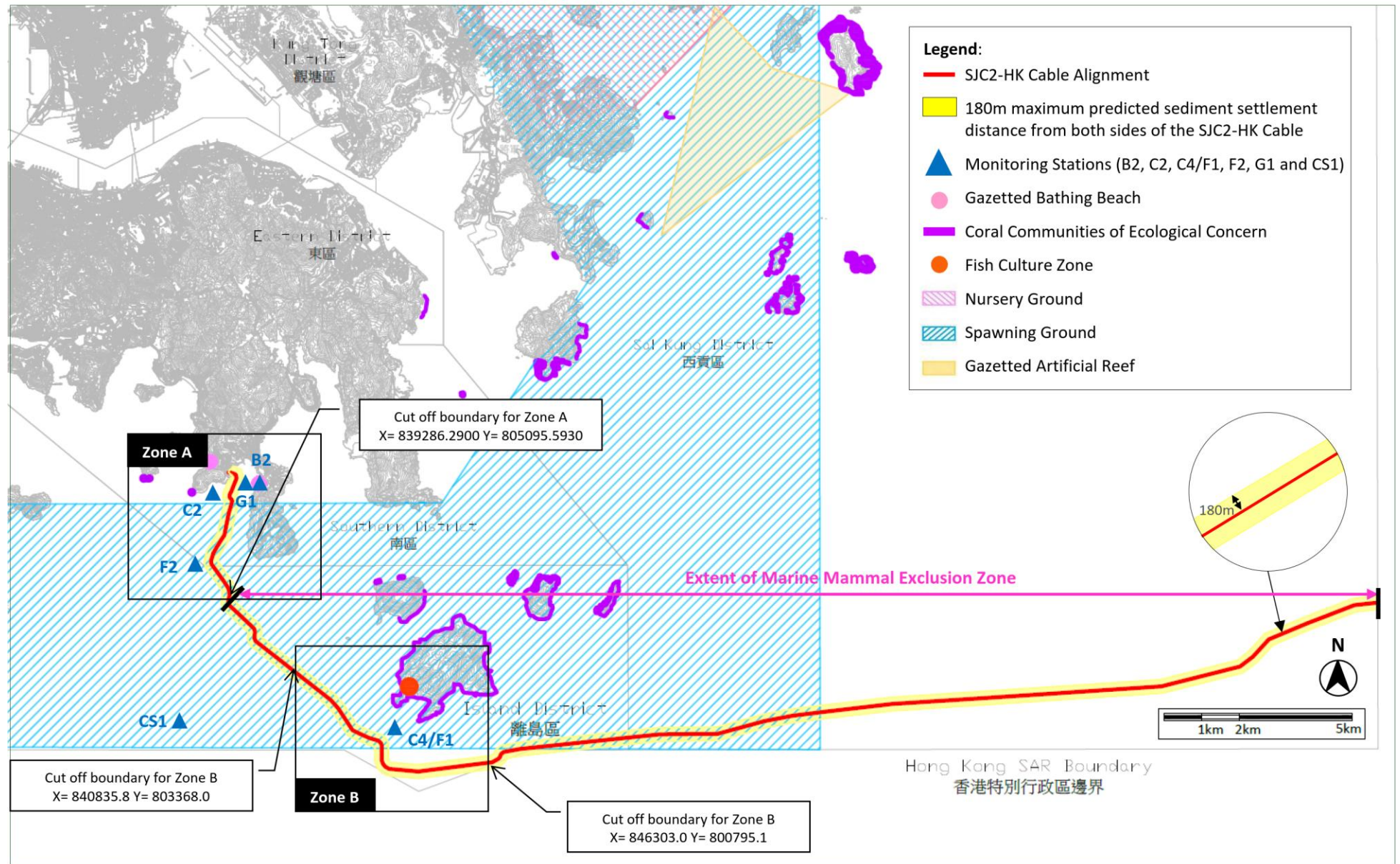


Figure 2.1 Locations of Water Quality Monitoring Station (Source: Figure F.1 of the Project profile)

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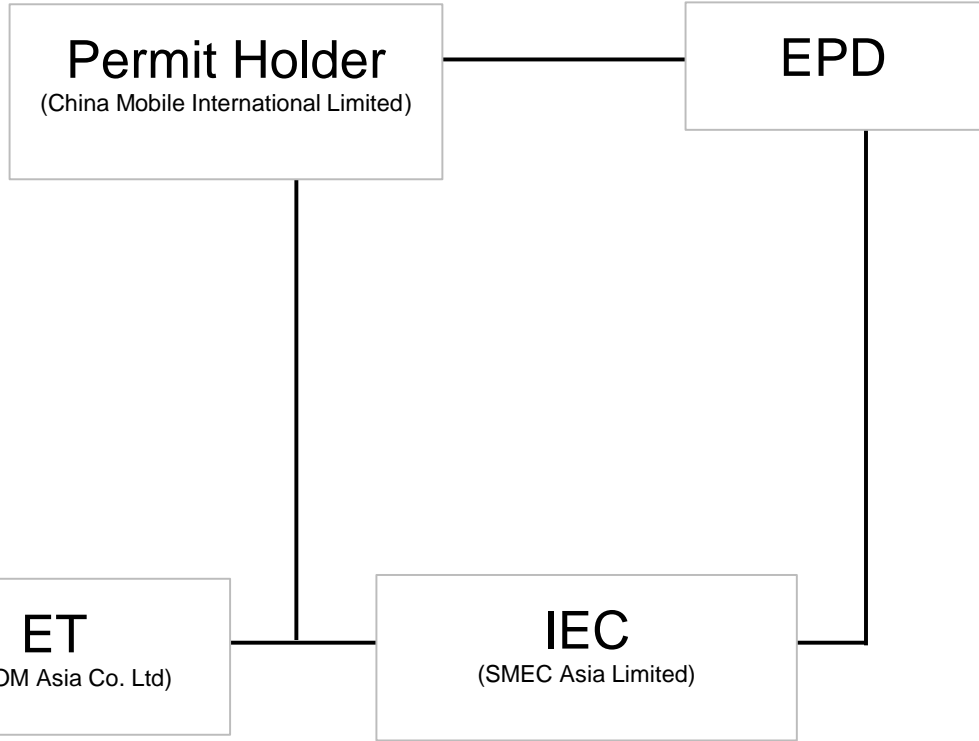
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**APPENDIX A  
PROJECT ORGANIZATION STRUCTURE**

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**APPENDIX B  
CALIBRATION CERTIFICATES OF  
MONITORING EQUIPMENT**

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**ALS Technichem (HK) Pty Ltd**  
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N.T., Hong Kong  
T: +852 2610 1044 | F: +852 2610 2021

## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

**CONTACT:** MR MIKE SHEK  
**CLIENT:** AECOM ASIA COMPANY LIMITED  
**ADDRESS:** 13/F, TOWER 2, GRAND CENTRAL PLAZA,  
138 SHATIN RURAL COMMITTEE ROAD,  
SHATIN, HONG KONG

**WORK ORDER:** HK2114769  
**SUB- BATCH:** 0  
**LABORATORY:** HONG KONG  
**DATE RECEIVED:** 15- Apr- 2021  
**DATE OF ISSUE:** 19- Apr- 2021

### SPECIFIC COMMENTS

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client. The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source. The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the laboratory or quoted from relevant international standards. The "Next Calibration Date" is recommended according to best practice principle as practised by the laboratory or quoted from relevant international standards. The validity of equipment/ meter performance only applies to the result(s) stated in the report.

Equipment Type: Multifunctional Meter  
Service Nature: Performance Check  
Scope: Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature  
Brand Name/ Model No.: [YSI]/ [6820 V2]  
Serial No./ Equipment No.: [00H1019]/ [W.026.09]  
Date of Calibration: 15- April- 2021

### GENERAL COMMENTS

This is the Final Report and supersedes any preliminary report with this batch number.

Mr Chan Siu Ming, Vico  
Manager - Inorganic

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# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION



WORK ORDER: HK2114769  
SUB- BATCH: 0  
DATE OF ISSUE: 19- Apr- 2021  
CLIENT: AECOM ASIA COMPANY LIMITED

Equipment Type: Multifunctional Meter  
Brand Name/ Model No.: [YSI]/ [6820 V2]  
Serial No./ Equipment No.: [00H1019]/ [W.026.09]  
Date of Calibration: 15- April- 2021 Date of Next Calibration: 15- July- 2021

## PARAMETERS:

Conductivity Method Ref: APHA (21st edition), 2510B

Expected Reading ( $\mu\text{S}/\text{cm}$ )	Displayed Reading ( $\mu\text{S}/\text{cm}$ )	Tolerance (%)
146.9	145.0	- 1.3
6667	6657	- 0.1
12890	12949	+ 0.5
58670	57984	- 1.2
	Tolerance Limit (%)	$\pm 10.0$

Dissolved Oxygen Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.80	2.86	+ 0.06
5.25	5.20	- 0.05
7.65	7.68	+ 0.03
	Tolerance Limit (mg/L)	$\pm 0.20$

pH Value Method Ref: APHA (21st edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	4.06	+ 0.06
7.0	6.99	- 0.01
10.0	10.00	+ 0.00
	Tolerance Limit (pH unit)	$\pm 0.20$

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr Chan Siu Ming, Vico  
Manager - Inorganic

# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION



WORK ORDER: HK2114769  
SUB- BATCH: 0  
DATE OF ISSUE: 19- Apr- 2021  
CLIENT: AECOM ASIA COMPANY LIMITED

Equipment Type: Multifunctional Meter  
Brand Name/  
Model No.: [YSI]/ [6820 V2]  
Serial No./  
Equipment No.: [00H1019]/ [W.026.09]  
Date of Calibration: 15- April- 2021

Date of Next Calibration: 15- July- 2021

## PARAMETERS:

### Turbidity

Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.0	--
4	4.2	+ 5.0
10	10.3	+ 3.0
20	19.9	- 0.5
50	49.4	- 1.2
100	100.1	+ 0.1
	Tolerance Limit (%)	± 10.0

### Salinity

Method Ref: APHA (21st edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	--
10	10.17	+ 1.7
20	19.88	- 0.6
30	29.56	- 1.5
	Tolerance Limit (%)	± 10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr Chan Siu Ming, Vico  
Manager - Inorganic

# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION



WORK ORDER: HK2114769  
SUB- BATCH: 0  
DATE OF ISSUE: 19- Apr- 2021  
CLIENT: AECOM ASIA COMPANY LIMITED

Equipment Type: Multifunctional Meter  
Brand Name/ Model No.: [YSI]/ [6820 V2]  
Serial No./ Equipment No.: [00H1019]/ [W.026.09]  
Date of Calibration: 15- April- 2021 Date of Next Calibration: 15- July- 2021

## PARAMETERS:

### Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
10.0	9.91	- 0.1
20.5	20.12	- 0.4
39.5	39.64	+ 0.1
	Tolerance Limit (°C)	± 2.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr Chan Siu Ming, Vico  
Manager - Inorganic



# Certificate of Calibration 校正證書

Certificate No. : C202803  
證書編號

**ITEM TESTED / 送檢項目** ( Job No. / 序引編號 : IC20-0967 )      **Date of Receipt / 收件日期** : 7 May 2020  
**Description / 儀器名稱** : Air Velocity Meter  
**Manufacturer / 製造商** : TSI  
**Model No. / 型號** : 9555-P  
**Serial No. / 編號** : 9555P0836010  
**Supplied By / 委託者** : Aecom Asia Co., Ltd.  
13/F., Tower 2, Grand Central Plaza,  
138 Shatin Rural Committee Road, Shatin, N.T.

## TEST CONDITIONS / 測試條件

**Temperature / 溫度** : (23 ± 2)°C      **Relative Humidity / 相對濕度** : (50 ± 25)%  
**Line Voltage / 電壓** : ---

## TEST SPECIFICATIONS / 測試規範

Calibration check

**DATE OF TEST / 測試日期** : 20 to 21 May 2020

## TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.  
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :  
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory  
- South China National Centre of Metrology, China  
- Agilent Technologies / Keysight Technologies  
- Testo Industrial Services GmbH, Germany  
- Fluke Everett Service Center, USA

**Tested By / 測試** :   
T F Lee  
Assistant Engineer

**Certified By / 核證** :   
H C Chan  
Engineer

**Date of Issue / 簽發日期** : 22 May 2020

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.  
本證書所載校正用之測試器材均可溯源至國際標準。此證書應以本證書全文為准，未經本實驗室書面批准，不得翻印。



# Certificate of Calibration

## 校正證書

Certificate No. : C202803  
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- Test equipment :

Equipment ID	Description	Certificate No.
CL018	Portable Calibrator	C191834
CL041 & CL041B	Digital Thermometer	C201018
CL042 & CL042B	Digital Thermometer	C201019
CL272 & CL272A	Humidity Control Chamber	C183502 & C183457
CL292	Recorder	C192930
CL316 & CL316A	Precision Multi-function Measuring Instrument	C180363
CL330	Environmental Chamber	C190296
CL360	Portable Air Pressure	RYB201909837
CL410 & CL410D	Multi Functionally Measuring Instrument & Psychrometer	C195787

- Test procedure : MA006, MA103N, MA109N & MA130N.
- Results :

### 4.1 Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.00	2.10	-0.10	0.31	2.0
4.00	4.11	-0.11	0.36	2.0
6.03	6.21	-0.18	0.41	2.0
8.02	8.46	-0.44	0.50	2.0
10.01	10.95	-0.94	0.57	2.0

The results presented are the mean of 10 measurements at each calibration point.

### 4.2 Temperature

Applied Value (°C)	UUT Reading (°C)	Measured Correction		
		Value (°C)	Measurement Uncertainty	
			Expanded Uncertainty (°C)	Coverage Factor
25.0	24.8	+0.2	0.5	2.0

The results presented are the mean of 3 measurements at each calibration point.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門安里一號四樓

Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: call@suncreation.com Website/網址: www.suncreation.com





# Certificate of Calibration

## 校正證書

Certificate No. : C202803  
證書編號

### 4.3 Relative Humidity (23°C)

Applied Value (%)	UUT Reading (%)	Measured Correction		
		Value (%)	Measurement Uncertainty	
			Expanded Uncertainty (%)	Coverage Factor
60.0	63.8	-3.8	1.5	2.0

The results presented are the mean of 3 measurements at each calibration point.

### 4.4 Barometric Pressure

Applied Value (hPa)	UUT Reading (hPa)	Measured Correction		
		Value (hPa)	Measurement Uncertainty	
			Expanded Uncertainty (hPa)	Coverage Factor
1 001.3	995.3	+6.0	2.0	2.0

The results presented are the mean of 3 measurements at each calibration point.

Test Medium : Air

- Remarks :
- UUT Probe Model : 964  
S/N : P08350010
  - UUT Setting : ACTUAL/STANDARD : ACTUAL  
Temperature Source : Probe
  - The Measured Corrections are defined as :  
Value = Applied Value - UUT Reading
  - The expanded uncertainties are for a level of confidence of 95 %.

Note :  
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.  
本證書所載校正用之測試器材均可溯源至國際標準。如加印本證書需先獲本實驗室書面批准。

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**APPENDIX C  
ENVIRONMENTAL MONITORING SCHEDULE**

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## Appendix C - Environmental Monitoring Schedule for SJC2 Cable System

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Apr	2-Apr	3-Apr
4-Apr	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr	10-Apr
11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr
18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr
			<i>MMO</i>	<b>WQM</b> <i>MMO</i>	<i>MMO</i>	<b>WQM</b> <i>MMO</i>
25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	
	<i>MMO</i>	<b>WQM</b> <i>MMO</i>	<i>MMO</i>			

*MMO : Marine Mammal Observations*

*WQM: Water Quality Monitoring*

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**APPENDIX D  
WATER QUALITY MONITORING RESULTS**

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## Appendix D - Water Quality Monitoring Result

### Water Quality Monitoring Result on 22 April 2021 - Mid-Ebb Tide

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity (NTU)		Suspended Solids (mg/L)		Wind		Remark						
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average		Value	Average	Value	Average	Direction	Speed (m/s)
							DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*		DA*	DA*	DA*	DA*	DA*	DA*
Control Station	22-Apr-21	CS1	Sunny	Moderate	21:10	Surface	1.0	21.41 21.37	21.39	36.97 36.96	36.97	8.02 8.02	8.02	101.1 101.1	101.1	7.21 7.21	7.21	7.19	3.00 3.10	3.05	3.22	5.50 5.90	5.70	4.92	E	4.2	No any influencing factor was observed during monitoring.		
						Middle	12.0	20.76 20.76	20.76	36.98 36.98	36.98	8.02 8.02	8.02	99.4 99.2	99.3	7.17 7.15	7.16	3.30 3.20	3.25	3.42	5.00 4.70	4.85	4.92	E	4.2				
						Bottom	23.0	20.77 20.78	20.78	37.00 37.00	37.00	8.02 8.01	8.02	98.9 98.8	98.9	7.13 7.12	7.13	3.30 3.40	3.35	3.22	4.30 4.10	4.20	4.92	E	4.2				
Zone A	22-Apr-21	F2	Sunny	Moderate	20:37	Surface	1.0	21.33 21.35	21.34	36.97 36.96	36.97	7.99 7.99	7.99	100.9 101.1	101.0	7.20 7.22	7.21	7.17	3.30 3.20	3.25	3.42	5.40 4.80	5.10	4.33	E	3.6	No any influencing factor was observed during monitoring.		
						Middle	9.1	20.77 20.77	20.77	36.98 36.98	36.98	7.99 7.99	7.99	98.9 98.9	98.9	7.13 7.13	7.13	3.40 3.40	3.45	3.42	4.20 3.80	4.00	4.33	E	3.6				
						Bottom	17.2	20.77 20.76	20.77	36.99 36.98	36.99	7.99 7.99	7.99	98.9 98.6	98.8	7.13 7.11	7.12	3.60 3.50	3.55	3.42	4.00 3.80	3.90	4.33	E	3.6				
	22-Apr-21	C2	Sunny	Moderate	20:09	Surface	1.0	21.21 21.17	21.19	37.02 37.00	37.01	8.04 8.05	8.05	102.2 101.9	102.1	7.31 7.29	7.30	7.26	3.00 2.90	2.95	3.10	4.00 3.80	3.90	4.22	E	3.4	No any influencing factor was observed during monitoring.		
						Middle	6.9	20.81 20.81	20.81	37.01 37.01	37.01	8.05 8.04	8.05	100.0 100.0	100.0	7.21 7.21	7.21	3.00 3.10	3.05	3.10	4.10 4.10	3.80	4.22	E	3.4				
						Bottom	12.8	20.77 20.78	20.78	37.02 37.02	37.02	8.04 8.05	8.05	99.8 99.3	99.8	7.19 7.15	7.17	3.30 3.30	3.30	3.10	4.60 4.60	4.95	4.22	E	3.4				
	22-Apr-21	G1	Sunny	Moderate	19:42	Surface	1.0	21.15 21.22	21.19	37.01 37.01	37.01	8.03 8.03	8.03	102.8 102.3	102.6	7.36 7.31	7.34	7.31	3.00 3.00	3.00	3.20	5.30 6.00	5.65	4.27	E	3.6	No any influencing factor was observed during monitoring.		
						Middle	3.9	20.83 20.82	20.83	37.01 37.02	37.02	8.03 8.02	8.03	101.3 101.1	101.2	7.29 7.29	7.29	3.20 3.30	3.25	3.20	4.00 3.20	3.60	4.27	E	3.6				
						Bottom	6.9	20.80 20.78	20.79	37.02 37.02	37.02	8.01 8.01	8.01	100.7 100.8	100.8	7.25 7.27	7.26	3.30 3.40	3.35	3.20	3.40 3.70	3.55	4.27	E	3.6				
	22-Apr-21	B2	Sunny	Moderate	19:19	Surface	1.0	21.46 21.07	21.27	37.01 36.99	37.00	8.02 8.02	8.02	102.9 102.6	102.8	7.33 7.36	7.35	7.35	2.70 2.60	2.65	2.75	5.20 5.40	5.30	5.03	E	3.0	No any influencing factor was observed during monitoring.		
						Middle	3.2	21.08 21.00	21.04	37.03 36.99	37.01	8.01 8.01	8.01	102.1 102.3	102.2	7.34 7.35	7.35	2.80 2.80	2.80	2.75	5.30 5.10	5.20	5.03	E	3.0				
						Bottom	5.4	20.83 20.89	20.86	37.02 37.01	37.02	8.00 8.00	8.00	101.1 101.9	101.5	7.28 7.30	7.29	2.80 2.80	2.80	2.75	4.30 4.90	4.60	5.03	E	3.0				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

### Water Quality Monitoring Result on 22 April 2021 - Mid-Flood Tide

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity (NTU)		Suspended Solids (mg/L)		Wind		Remark						
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average		Value	Average	Value	Average	Direction	Speed (m/s)
							DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*		DA*	DA*	DA*	DA*	DA*	DA*
Control Station	22-Apr-21	CS1	Sunny	Moderate	7:22	Surface	1.0	21.68 21.63	21.66	36.68 36.69	36.69	7.99 7.99	7.99	106.9 106.9	106.9	7.59 7.60	7.60	7.51	2.00 1.90	1.95	2.22	3.10 3.40	3.25	3.90	E	4.0	No any influencing factor was observed during monitoring.		
						Middle	12.2	21.05 21.03	21.04	36.80 36.79	36.80	7.97 7.97	7.97	103.4 103.6	103.5	7.42 7.44	7.43	2.30 2.30	2.30	2.22	3.40 3.30	3.35	3.90	E	4.0				
						Bottom	23.4	21.07 21.02	21.05	36.94 36.96	36.95	7.96 7.96	7.96	102.6 102.7	102.7	7.36 7.37	7.37	2.40 2.40	2.40	2.22	5.20 5.00	5.10	3.90	E	4.0				
Zone A	22-Apr-21	F2	Sunny	Moderate	8:01	Surface	1.0	21.85 21.76	21.81	36.64 36.67	36.66	8.01 8.00	8.01	108.4 108.4	108.4	7.68 7.69	7.69	7.67	2.00 1.90	1.95	2.02	2.30 2.40	2.35	2.67	E	3.6	No any influencing factor was observed during monitoring.		
						Middle	9.2	21.15 21.36	21.26	36.76 36.73	36.75	8.02 8.00	8.01	106.7 107.4	107.1	7.65 7.67	7.66	2.00 2.10	2.05	2.02	2.50 3.00	2.75	2.67	E	3.6				
						Bottom	17.5	21.05 21.04	21.05	36.80 36.79	36.80	8.00 8.00	8.00	105.0 105.8	105.4	7.54 7.60	7.57	2.00 2.10	2.05	2.02	3.20 2.60	2.90	2.67	E	3.6				
	22-Apr-21	C2	Sunny	Moderate	8:31	Surface	1.0	21.56 21.56	21.56	36.98 36.99	36.99	8.03 8.02	8.03	103.0 103.0	103.0	7.32 7.32	7.32	7.30	3.00 3.20	3.10	3.27	3.00 3.90	3.45	4.12	E	3.2	No any influencing factor was observed during monitoring.		
						Middle	7.0	21.26 21.23	21.25	36.99 37.00	37.00	8.03 8.02	8.03	101.7 101.9	101.8	7.27 7.29	7.28	3.30 3.20	3.25	3.27	4.60 4.10	4.35	4.12	E	3.2				
						Bottom	13.1	20.95 20.80	20.88	36.98 37.01	37.00	8.02 8.02	8.02	100.6 100.3	100.5	7.23 7.23	7.23	3.40 3.50	3.45	3.27	4.80 4.30	4.55	4.12	E	3.2				
	22-Apr-21	G1	Sunny	Moderate	8:56	Surface	1.0	21.47 21.53	21.50	36.99 36.99	36.99	8.03 8.03	8.03	102.5 102.9	102.7	7.30 7.32	7.31	7.29	3.10 3.10	3.10	3.33	4.30 3.80	4.05	4.62	E	3.0	No any influencing factor was observed during monitoring.		
						Middle	4.0	21.30 21.20	21.25	36.99 37.00	37.00	8.02 8.03	8.03	101.9 101.7	101.8	7.28 7.27	7.28	3.40 3.30	3.35	3.33	4.50 4.90	4.70	4.62	E	3.0				
						Bottom	7.0	20.80 20.82	20.81	37.01 37.00	37.01	8.03 8.02	8.03	100.4 100.5	100.5	7.23 7.24	7.24	3.50 3.60	3.55	3.33	4.80 5.40	5.10	4.62	E	3.0				
	22-Apr-21	B2	Sunny	Moderate	9:12	Surface	1.0	21.53 21.54	21.54	36.99 36.99	36.99	8.03 8.04	8.04	103.3 103.2	103.3	7.34 7.34	7.34	7.34	2.90 2.90	2.90	3.05	4.20 5.00	4.60	4.08	E	2.5	No any influencing factor was observed during monitoring.		
						Middle	3.3	21.29 21.40	21.35	37.00 36.99	37.00	8.03 8.04	8.04	102.6 103.2	102.9	7.33 7.36	7.35	3.20 3.00	3.10	3.05	4.20 4.80	4.50	4.08	E	2.5				
						Bottom	5.5	21.19 21.07	21.13	36.98 36.97	36.98	8.02 8.02	8.02	102.5 101.6	102.1	7.33 7.29	7.31	3.10 3.20	3.15	3.05	3.30 3.00	3.15	4.08	E	2.5				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

**Water Quality Monitoring Result on 24 April 2021 - Mid-Ebb Tide**

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)			Suspended Solids (mg/L)			Wind		Remark		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average		DA*	Direction
Zone B	24-Apr-21	C4/F1	Sunny	Moderate	9:33	Surface	1.0	21.50 21.49	21.50	36.88 36.89	36.89	7.99 7.97	7.98	104.2 103.1	103.7	7.42 7.34	7.38	7.34	2.30 2.40	2.35	2.80	2.40 3.00	2.70	2.55	E	3.6	No any influencing factor was observed during monitoring.
						Middle	13.0	21.24 21.24	21.24	36.98 36.97	36.98	7.98 7.96	7.97	103.0 101.3	102.2	7.36 7.24	7.30		2.50 2.50	2.50		2.10 2.90	2.50				
						Bottom	25.0	21.21 21.26	21.24	36.98 36.95	36.97	7.93 7.98	7.96	100.9 102.4	101.7	7.22 7.32	7.27		2.50 2.40	2.45		2.20 2.70	2.45				
Control Station	24-Apr-21	CS1	Sunny	Moderate	10:03	Surface	1.0	21.50 21.51	21.51	36.87 36.87	36.87	7.99 8.00	8.00	104.4 106.3	105.4	7.44 7.57	7.51	7.47	2.10 2.20	2.15	2.40	2.30 2.60	2.45	2.62	E	3.9	No any influencing factor was observed during monitoring.
						Middle	12.0	21.25 21.28	21.27	36.97 36.96	36.97	7.99 8.00	8.00	103.5 104.3	103.9	7.41 7.45	7.43		2.60 2.50	2.55		2.40 2.50	2.45				
						Bottom	23.0	21.26 21.17	21.22	36.96 36.99	36.98	7.99 7.97	7.98	103.3 101.5	102.4	7.38 7.26	7.32		7.32	2.40 2.60		2.50	2.50 3.40				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

**Water Quality Monitoring Result on 24 April 2021 - Mid-Flood Tide**

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)			Suspended Solids (mg/L)			Wind		Remark		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average		DA*	Direction
Zone B	24-Apr-21	C4/F1	Sunny	Moderate	16:47	Surface	1.0	21.46 21.47	21.47	36.85 36.86	36.86	8.05 8.04	8.05	104.2 103.9	104.1	7.42 7.44	7.43	7.42	2.60 2.70	2.65	2.75	1.60 2.50	2.05	2.88	E	4.2	No any influencing factor was observed during monitoring.
						Middle	13.2	21.15 21.20	21.18	37.00 36.98	36.99	8.03 8.04	8.04	104.1 103.5	103.8	7.42 7.41	7.42		2.80 2.80	2.80		3.00 3.20	3.10				
						Bottom	25.4	21.16 21.12	21.14	36.95 36.97	36.96	8.03 8.02	8.03	101.8 100.9	101.4	7.28 7.22	7.25		7.25	2.80 2.80		2.80	3.40 3.60				
Control Station	24-Apr-21	CS1	Sunny	Moderate	16:12	Surface	1.0	21.47 21.48	21.48	36.86 36.85	36.86	8.03 8.03	8.03	105.1 106.0	105.6	7.52 7.55	7.54	7.52	2.80 2.90	2.85	2.95	2.20 2.00	2.10	2.33	E	3.6	No any influencing factor was observed during monitoring.
						Middle	12.1	21.26 21.24	21.25	36.96 36.97	36.97	8.03 8.02	8.03	105.0 105.0	105.0	7.48 7.51	7.50		2.80 2.80	2.80		2.40 2.10	2.25				
						Bottom	23.2	21.21 21.27	21.24	36.94 36.94	36.94	8.01 8.03	8.02	102.7 103.1	102.9	7.34 7.37	7.36		7.36	3.20 3.20		3.20	3.00 2.30				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

**Water Quality Monitoring Result on 27 April 2021 - Mid-Ebb Tide**

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)			Suspended Solids (mg/L)			Wind		Remark		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average		DA*	Direction
Zone B	27-Apr-21	C4/F1	Rainy	Moderate	12:32	Surface	1.0	21.26 21.26	21.26	36.83 36.84	36.84	8.10 8.10	8.10	100.9 101.0	101.0	7.22 7.22	7.22	7.18	2.30 2.10	2.20	2.80	2.10 1.90	2.00	2.12	N	1.7	No any influencing factor was observed during monitoring.
						Middle	13.2	21.17 21.16	21.17	36.94 36.95	36.95	8.08 8.08	8.09	99.6 99.8	99.7	7.13 7.15	7.14		2.50 2.50	2.50		2.40 1.90	2.15				
						Bottom	25.3	21.16 21.17	21.17	36.95 36.93	36.94	8.06 8.09	8.08	100.1 99.4	99.8	7.17 7.12	7.15		7.15	2.60 2.70		2.65	2.00 2.40				
Control Station	27-Apr-21	CS1	Rainy	Moderate	12:06	Surface	1.0	21.25 21.25	21.25	36.84 36.83	36.84	8.09 8.09	8.09	100.2 101.0	100.6	7.17 7.22	7.20	7.15	2.20 2.30	2.25	2.35	2.70 2.30	2.50	2.25	N	1.3	No any influencing factor was observed during monitoring.
						Middle	12.1	21.16 21.16	21.16	36.95 36.94	36.95	8.09 8.09	8.09	99.4 99.3	99.4	7.11 7.11	7.11		2.40 2.20	2.30		2.60 2.20	2.40				
						Bottom	23.2	21.15 21.16	21.16	36.96 36.95	36.96	8.07 8.07	8.08	100.2 99.9	100.1	7.17 7.15	7.16		7.16	2.40 2.60		2.50	2.10 1.60				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

**Water Quality Monitor data on 27 April 2021 (Mid-Flood Tide)**

Zone	Date	Location	Weather Condition	Sea Condition	Sampling Time	Depth (m)	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)			Suspended Solids (mg/L)			Wind		Remark		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average		DA*	Direction
Zone B (Construction Area)	27-Apr-21	C4/F1	Rainy	Moderate	4:51	Surface	1.0	21.15 21.15	21.15	36.97 36.97	36.97	8.04 8.05	8.05	100.4 103.0	101.7	7.19 7.38	7.29	7.24	2.40 2.50	2.45	2.65	1.50 1.80	1.65	2.50	E	2.1	No any influencing factor was observed during monitoring.
						Middle	13.0	21.13 21.13	21.13	37.03 37.00	37.02	8.04 8.05	8.05	100.2 100.8	100.5	7.18 7.22	7.20		2.50 2.60	2.55		3.20 2.30	2.75				
						Bottom	25.0	21.12 21.12	21.12	37.02 37.05	37.04	8.05 8.05	8.05	99.2 99.6	99.5	7.11 7.15	7.13		7.13	3.00 2.90		3.00	3.60 2.60				
Control Station	27-Apr-21	CS1	Rainy	Moderate	5:16	Surface	1.0	21.16 21.15	21.16	36.95 36.96	36.96	8.04 8.05	8.05	100.0 99.9	100.0	7.16 7.16	7.16	7.14	2.70 2.40	2.55	2.57	3.00 2.50	2.75	2.48	E	0.3	No any influencing factor was observed during monitoring.
						Middle	12.0	21.15 21.14	21.15	36.97 36.99	36.98	8.02 8.05	8.04	100.2 98.7	99.5	7.18 7.07	7.13		2.50 2.60	2.55		2.80 2.20	2.50				
						Bottom	23.1	21.15 21.12	21.14	36.97 37.01	36.99	8.04 8.02	8.02	100.5 99.3	99.9	7.20 7.11	7.16		7.16	2.70 2.50		2.60	2.10 2.30				

\* Depth Average  
Action Level Exceedances  
Limit Level Exceedance

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**APPENDIX E  
LABORATORY ANALYSIS RESULTS**

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### CERTIFICATE OF ANALYSIS

<i>Client</i>	: AECOM ASIA COMPANY LIMITED	<i>Laboratory</i>	: ALS Technichem (HK) Pty Ltd	<i>Page</i>	: 1 of 6
<i>Contact</i>	: MR Y W FUNG	<i>Contact</i>	: Richard Fung	<i>Work Order</i>	: <b>HK2114444</b>
<i>Address</i>	: 12/F, TOWER 2, GRAND CENTRAL PLAZA, NO. 138 SHATIN RURAL COMMITTEE ROAD, SHATIN, N.T.,	<i>Address</i>	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
<i>E-mail</i>	: <a href="mailto:yw.fung@aecom.com">yw.fung@aecom.com</a>	<i>E-mail</i>	: <a href="mailto:richard.fung@alsglobal.com">richard.fung@alsglobal.com</a>	<i>Date received</i>	: 22-Apr-2021
<i>Telephone</i>	: +852 3105 8544	<i>Telephone</i>	: +852 2610 1044	<i>Date of issue</i>	: 04-May-2021
<i>Facsimile</i>	: ---	<i>Facsimile</i>	: +852 2610 2021	<i>No. of samples</i>	- Received : 72
<i>Project</i>	: ET SERVICES FOR SJC2 AND BTOBE CABLE PROJECTS (SJC2)				- Analysed : 72
<i>Order number</i>	: —	<i>Quote number</i>	: HKE/1289/2021_V2		
<i>C-O-C number</i>	: —				
<i>Site</i>	: —				

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This document has been signed by those names that appear on this report and are the authorised signatories.

*Signatory*

*Position*

*Authorised results for:*

Fung Lim Chee, Richard

Managing Director

Inorganics





### **General Comments**

This report supersedes any previous report(s) with this reference. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes. Testing period is from 22-Apr-2021 to 04-May-2021.

Key: LOR = Limit of reporting; CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

### **Specific Comments for Work Order HK2114444 :**

Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in chilled condition. The result(s) related only to the item(s) tested.

Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.

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**Analytical Results**

Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
B2/S/ Mid-Ebb	22-Apr-2021	HK2114444-001	5.2	---	---	---	---	---
B2/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-002	5.4	---	---	---	---	---
B2/M/ Mid-Ebb	22-Apr-2021	HK2114444-003	5.3	---	---	---	---	---
B2/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-004	5.1	---	---	---	---	---
B2/B/ Mid-Ebb	22-Apr-2021	HK2114444-005	4.3	---	---	---	---	---
B2/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-006	4.9	---	---	---	---	---
C2/S/ Mid-Ebb	22-Apr-2021	HK2114444-007	4.0	---	---	---	---	---
C2/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-008	3.8	---	---	---	---	---
C2/M/ Mid-Ebb	22-Apr-2021	HK2114444-009	3.5	---	---	---	---	---
C2/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-010	4.1	---	---	---	---	---
C2/B/ Mid-Ebb	22-Apr-2021	HK2114444-011	5.3	---	---	---	---	---
C2/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-012	4.6	---	---	---	---	---
C4/F1/S/ Mid-Ebb	22-Apr-2021	HK2114444-013	4.1	---	---	---	---	---
C4/F1/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-014	5.0	---	---	---	---	---
C4/F1/M/ Mid-Ebb	22-Apr-2021	HK2114444-015	3.7	---	---	---	---	---
C4/F1/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-016	4.6	---	---	---	---	---
C4/F1/B/ Mid-Ebb	22-Apr-2021	HK2114444-017	3.2	---	---	---	---	---
C4/F1/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-018	3.6	---	---	---	---	---
F2/S/ Mid-Ebb	22-Apr-2021	HK2114444-019	5.4	---	---	---	---	---
F2/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-020	4.8	---	---	---	---	---
F2/M/ Mid-Ebb	22-Apr-2021	HK2114444-021	4.2	---	---	---	---	---
F2/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-022	3.8	---	---	---	---	---
F2/B/ Mid-Ebb	22-Apr-2021	HK2114444-023	4.0	---	---	---	---	---
F2/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-024	3.8	---	---	---	---	---
G1/S/ Mid-Ebb	22-Apr-2021	HK2114444-025	5.3	---	---	---	---	---
G1/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-026	6.0	---	---	---	---	---
G1/M/ Mid-Ebb	22-Apr-2021	HK2114444-027	4.0	---	---	---	---	---
G1/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-028	3.2	---	---	---	---	---
G1/B/ Mid-Ebb	22-Apr-2021	HK2114444-029	3.4	---	---	---	---	---
G1/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-030	3.7	---	---	---	---	---
CS1/S/ Mid-Ebb	22-Apr-2021	HK2114444-031	5.5	---	---	---	---	---



Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
CS1/S/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-032	5.9	---	---	---	---	---
CS1/M/ Mid-Ebb	22-Apr-2021	HK2114444-033	5.0	---	---	---	---	---
CS1/M/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-034	4.7	---	---	---	---	---
CS1/B/ Mid-Ebb	22-Apr-2021	HK2114444-035	4.3	---	---	---	---	---
CS1/B/Duplicate Mid-Ebb	22-Apr-2021	HK2114444-036	4.1	---	---	---	---	---
B2/S/ Mid-Flood	22-Apr-2021	HK2114444-037	4.2	---	---	---	---	---
B2/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-038	5.0	---	---	---	---	---
B2/M/ Mid-Flood	22-Apr-2021	HK2114444-039	4.2	---	---	---	---	---
B2/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-040	4.8	---	---	---	---	---
B2/B/ Mid-Flood	22-Apr-2021	HK2114444-041	3.3	---	---	---	---	---
B2/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-042	3.0	---	---	---	---	---
C2/S/ Mid-Flood	22-Apr-2021	HK2114444-043	3.0	---	---	---	---	---
C2/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-044	3.9	---	---	---	---	---
C2/M/ Mid-Flood	22-Apr-2021	HK2114444-045	4.6	---	---	---	---	---
C2/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-046	4.1	---	---	---	---	---
C2/B/ Mid-Flood	22-Apr-2021	HK2114444-047	4.8	---	---	---	---	---
C2/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-048	4.3	---	---	---	---	---
C4/F1/S/ Mid-Flood	22-Apr-2021	HK2114444-049	2.1	---	---	---	---	---
C4/F1/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-050	2.3	---	---	---	---	---
C4/F1/M/ Mid-Flood	22-Apr-2021	HK2114444-051	2.3	---	---	---	---	---
C4/F1/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-052	2.6	---	---	---	---	---
C4/F1/B/ Mid-Flood	22-Apr-2021	HK2114444-053	2.8	---	---	---	---	---
C4/F1/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-054	3.2	---	---	---	---	---
F2/S/ Mid-Flood	22-Apr-2021	HK2114444-055	2.3	---	---	---	---	---
F2/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-056	2.4	---	---	---	---	---
F2/M/ Mid-Flood	22-Apr-2021	HK2114444-057	2.5	---	---	---	---	---
F2/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-058	3.0	---	---	---	---	---
F2/B/ Mid-Flood	22-Apr-2021	HK2114444-059	3.2	---	---	---	---	---
F2/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-060	2.6	---	---	---	---	---
G1/S/ Mid-Flood	22-Apr-2021	HK2114444-061	4.3	---	---	---	---	---
G1/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-062	3.8	---	---	---	---	---
G1/M/ Mid-Flood	22-Apr-2021	HK2114444-063	4.5	---	---	---	---	---
G1/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-064	4.9	---	---	---	---	---



Sub-Matrix: WATER

			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
G1/B/ Mid-Flood	22-Apr-2021	HK2114444-065	4.8	---	---	---	---	---
G1/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-066	5.4	---	---	---	---	---
CS1/S/ Mid-Flood	22-Apr-2021	HK2114444-067	3.1	---	---	---	---	---
CS1/S/Duplicate Mid-Flood	22-Apr-2021	HK2114444-068	3.4	---	---	---	---	---
CS1/M/ Mid-Flood	22-Apr-2021	HK2114444-069	3.4	---	---	---	---	---
CS1/M/Duplicate Mid-Flood	22-Apr-2021	HK2114444-070	3.3	---	---	---	---	---
CS1/B/ Mid-Flood	22-Apr-2021	HK2114444-071	5.2	---	---	---	---	---
CS1/B/Duplicate Mid-Flood	22-Apr-2021	HK2114444-072	5.0	---	---	---	---	---



**Laboratory Duplicate (DUP) Report**

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3640182)</b>								
HK2114444-001	B2/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.2	5.5	6.09
HK2114444-011	C2/B/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	5.5	4.16
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3640183)</b>								
HK2114444-021	F2/M/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.2	4.5	6.27
HK2114444-031	CS1/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.7	4.01
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3640184)</b>								
HK2114444-041	B2/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.3	3.6	10.1
HK2114444-051	C4/F1/M/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.7	16.9
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3640185)</b>								
HK2114444-062	G1/S/Duplicate Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.8	3.5	6.90
HK2114444-071	CS1/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.2	5.7	9.22

**Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report**

Matrix: WATER				Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)		
						LCS	DCS	Low	High	Value	Control Limit	
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3640182)</b>												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.0	----	85.9	117	----	----	
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3640183)</b>												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	104	----	85.9	117	----	----	
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3640184)</b>												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	102	----	85.9	117	----	----	
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3640185)</b>												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	108	----	85.9	117	----	----	

**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report**

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.



### CERTIFICATE OF ANALYSIS

<i>Client</i>	: AECOM ASIA COMPANY LIMITED	<i>Laboratory</i>	: ALS Technichem (HK) Pty Ltd	<i>Page</i>	: 1 of 6
<i>Contact</i>	: MR Y W FUNG	<i>Contact</i>	: Richard Fung	<i>Work Order</i>	: <b>HK2115426</b>
<i>Address</i>	: 12/F, TOWER 2, GRAND CENTRAL PLAZA, NO. 138 SHATIN RURAL COMMITTEE ROAD, SHATIN, N.T.,	<i>Address</i>	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
<i>E-mail</i>	: <a href="mailto:yw.fung@aecom.com">yw.fung@aecom.com</a>	<i>E-mail</i>	: <a href="mailto:richard.fung@alsglobal.com">richard.fung@alsglobal.com</a>	<i>Date received</i>	: <b>24-Apr-2021</b>
<i>Telephone</i>	: +852 3105 8544	<i>Telephone</i>	: +852 2610 1044	<i>Date of issue</i>	: <b>04-May-2021</b>
<i>Facsimile</i>	: ---	<i>Facsimile</i>	: +852 2610 2021	<i>No. of samples</i>	- <i>Received</i> : 72
<i>Project</i>	: ET SERVICES FOR SJC2 AND BTOBE CABLE PROJECTS (SJC2)				- <i>Analysed</i> : 72
<i>Order number</i>	: —	<i>Quote number</i>	: HKE/1289/2021_V2		
<i>C-O-C number</i>	: —				
<i>Site</i>	: —				

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This document has been signed by those names that appear on this report and are the authorised signatories.

*Signatory*

*Position*

*Authorised results for:*

**Fung Lim Chee, Richard**

**Managing Director**

**Inorganics**



### **General Comments**

This report supersedes any previous report(s) with this reference. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes. Testing period is from 24-Apr-2021 to 04-May-2021.

Key: LOR = Limit of reporting; CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

### **Specific Comments for Work Order HK2115426 :**

Sample(s) was/ were picked up from client by ALS staff. Sample(s) arrived laboratory in chilled condition. The result(s) related only to the item(s) tested.

Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.

---



**Analytical Results**

Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
B2/S/ Mid-Ebb	24-Apr-2021	HK2115426-001	3.1	---	---	---	---	---
B2/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-002	2.8	---	---	---	---	---
B2/M/ Mid-Ebb	24-Apr-2021	HK2115426-003	2.6	---	---	---	---	---
B2/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-004	2.5	---	---	---	---	---
B2/B/ Mid-Ebb	24-Apr-2021	HK2115426-005	2.8	---	---	---	---	---
B2/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-006	1.9	---	---	---	---	---
C2/S/ Mid-Ebb	24-Apr-2021	HK2115426-007	2.4	---	---	---	---	---
C2/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-008	1.8	---	---	---	---	---
C2/M/ Mid-Ebb	24-Apr-2021	HK2115426-009	1.9	---	---	---	---	---
C2/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-010	2.8	---	---	---	---	---
C2/B/ Mid-Ebb	24-Apr-2021	HK2115426-011	3.9	---	---	---	---	---
C2/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-012	3.1	---	---	---	---	---
C4/F1/S/ Mid-Ebb	24-Apr-2021	HK2115426-013	2.4	---	---	---	---	---
C4/F1/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-014	3.0	---	---	---	---	---
C4/F1/M/ Mid-Ebb	24-Apr-2021	HK2115426-015	2.1	---	---	---	---	---
C4/F1/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-016	2.9	---	---	---	---	---
C4/F1/B/ Mid-Ebb	24-Apr-2021	HK2115426-017	2.2	---	---	---	---	---
C4/F1/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-018	2.7	---	---	---	---	---
F2/S/ Mid-Ebb	24-Apr-2021	HK2115426-019	1.9	---	---	---	---	---
F2/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-020	2.5	---	---	---	---	---
F2/M/ Mid-Ebb	24-Apr-2021	HK2115426-021	2.3	---	---	---	---	---
F2/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-022	2.2	---	---	---	---	---
F2/B/ Mid-Ebb	24-Apr-2021	HK2115426-023	2.5	---	---	---	---	---
F2/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-024	2.8	---	---	---	---	---
G1/S/ Mid-Ebb	24-Apr-2021	HK2115426-025	2.8	---	---	---	---	---
G1/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-026	2.6	---	---	---	---	---
G1/M/ Mid-Ebb	24-Apr-2021	HK2115426-027	2.5	---	---	---	---	---
G1/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-028	2.1	---	---	---	---	---
G1/B/ Mid-Ebb	24-Apr-2021	HK2115426-029	2.6	---	---	---	---	---
G1/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-030	2.2	---	---	---	---	---
CS1/S/ Mid-Ebb	24-Apr-2021	HK2115426-031	2.3	---	---	---	---	---





Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
CS1/S/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-032	2.6	---	---	---	---	---
CS1/M/ Mid-Ebb	24-Apr-2021	HK2115426-033	2.4	---	---	---	---	---
CS1/M/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-034	2.5	---	---	---	---	---
CS1/B/ Mid-Ebb	24-Apr-2021	HK2115426-035	2.5	---	---	---	---	---
CS1/B/Duplicate Mid-Ebb	24-Apr-2021	HK2115426-036	3.4	---	---	---	---	---
B2/S/ Mid-Flood	24-Apr-2021	HK2115426-037	2.5	---	---	---	---	---
B2/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-038	2.3	---	---	---	---	---
B2/M/ Mid-Flood	24-Apr-2021	HK2115426-039	2.2	---	---	---	---	---
B2/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-040	2.0	---	---	---	---	---
B2/B/ Mid-Flood	24-Apr-2021	HK2115426-041	2.7	---	---	---	---	---
B2/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-042	2.6	---	---	---	---	---
C2/S/ Mid-Flood	24-Apr-2021	HK2115426-043	1.9	---	---	---	---	---
C2/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-044	2.5	---	---	---	---	---
C2/M/ Mid-Flood	24-Apr-2021	HK2115426-045	1.7	---	---	---	---	---
C2/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-046	2.0	---	---	---	---	---
C2/B/ Mid-Flood	24-Apr-2021	HK2115426-047	2.2	---	---	---	---	---
C2/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-048	1.8	---	---	---	---	---
C4/F1/S/ Mid-Flood	24-Apr-2021	HK2115426-049	1.6	---	---	---	---	---
C4/F1/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-050	2.5	---	---	---	---	---
C4/F1/M/ Mid-Flood	24-Apr-2021	HK2115426-051	3.0	---	---	---	---	---
C4/F1/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-052	3.2	---	---	---	---	---
C4/F1/B/ Mid-Flood	24-Apr-2021	HK2115426-053	3.4	---	---	---	---	---
C4/F1/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-054	3.6	---	---	---	---	---
F2/S/ Mid-Flood	24-Apr-2021	HK2115426-055	3.0	---	---	---	---	---
F2/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-056	3.5	---	---	---	---	---
F2/M/ Mid-Flood	24-Apr-2021	HK2115426-057	2.4	---	---	---	---	---
F2/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-058	2.9	---	---	---	---	---
F2/B/ Mid-Flood	24-Apr-2021	HK2115426-059	2.5	---	---	---	---	---
F2/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-060	2.5	---	---	---	---	---
G1/S/ Mid-Flood	24-Apr-2021	HK2115426-061	2.7	---	---	---	---	---
G1/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-062	2.4	---	---	---	---	---
G1/M/ Mid-Flood	24-Apr-2021	HK2115426-063	2.1	---	---	---	---	---
G1/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-064	1.6	---	---	---	---	---



Sub-Matrix: WATER

			<i>Compound</i>				
			<b>EA025: Suspended Solids (SS)</b>	----	----	----	----
			<i>LOR Unit</i>	1.0 mg/L	----	----	----
<i>Sample ID</i>	<i>Sampling date / time</i>	<i>Laboratory sample ID</i>	EA/ED: Physical and Aggregate Properties	----	----	----	----
G1/B/ Mid-Flood	24-Apr-2021	HK2115426-065	1.7	----	----	----	----
G1/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-066	1.5	----	----	----	----
CS1/S/ Mid-Flood	24-Apr-2021	HK2115426-067	2.2	----	----	----	----
CS1/S/Duplicate Mid-Flood	24-Apr-2021	HK2115426-068	2.0	----	----	----	----
CS1/M/ Mid-Flood	24-Apr-2021	HK2115426-069	2.4	----	----	----	----
CS1/M/Duplicate Mid-Flood	24-Apr-2021	HK2115426-070	2.1	----	----	----	----
CS1/B/ Mid-Flood	24-Apr-2021	HK2115426-071	3.0	----	----	----	----
CS1/B/Duplicate Mid-Flood	24-Apr-2021	HK2115426-072	2.3	----	----	----	----



**Laboratory Duplicate (DUP) Report**

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3642262)</b>								
HK2115426-001	B2/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.1	2.9	6.67
HK2115426-011	C2/B/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.9	3.6	8.00
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3642263)</b>								
HK2115426-021	F2/M/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.8	18.7
HK2115426-031	CS1/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.3	0.00
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3642264)</b>								
HK2115426-041	B2/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	2.8	6.33
HK2115426-051	C4/F1/M/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.4	14.2
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3642265)</b>								
HK2115426-061	G1/S/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	3.0	12.3
HK2115426-071	CS1/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	3.0	0.00

**Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report**

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3642262)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	93.5	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3642263)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	96.0	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3642264)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	103	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3642265)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	95.5	----	85.9	117	----	----

**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report**

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.



### CERTIFICATE OF ANALYSIS

<i>Client</i>	: AECOM ASIA COMPANY LIMITED	<i>Laboratory</i>	: ALS Technichem (HK) Pty Ltd	<i>Page</i>	: 1 of 6
<i>Contact</i>	: MR Y W FUNG	<i>Contact</i>	: Richard Fung	<i>Work Order</i>	: <b>HK2115428</b>
<i>Address</i>	: 12/F, TOWER 2, GRAND CENTRAL PLAZA, NO. 138 SHATIN RURAL COMMITTEE ROAD, SHATIN, N.T.,	<i>Address</i>	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
<i>E-mail</i>	: <a href="mailto:yw.fung@aecom.com">yw.fung@aecom.com</a>	<i>E-mail</i>	: <a href="mailto:richard.fung@alsglobal.com">richard.fung@alsglobal.com</a>	<i>Date received</i>	: 27-Apr-2021
<i>Telephone</i>	: +852 3105 8544	<i>Telephone</i>	: +852 2610 1044	<i>Date of issue</i>	: 07-May-2021
<i>Facsimile</i>	: ---	<i>Facsimile</i>	: +852 2610 2021	<i>No. of samples</i>	- Received : 72
<i>Project</i>	: ET SERVICES FOR SJC2 AND BTOBE CABLE PROJECTS (SJC2)				- Analysed : 72
<i>Order number</i>	: —	<i>Quote number</i>	: HKE/1289/2021_V2		
<i>C-O-C number</i>	: —				
<i>Site</i>	: —				

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This document has been signed by those names that appear on this report and are the authorised signatories.

*Signatory*

*Position*

*Authorised results for:*

**Fung Lim Chee, Richard**

**Managing Director**

**Inorganics**



### **General Comments**

This report supersedes any previous report(s) with this reference. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes. Testing period is from 27-Apr-2021 to 07-May-2021.

Key: LOR = Limit of reporting; CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

### **Specific Comments for Work Order HK2115428 :**

Sample(s) was/ were picked up from client by ALS staff. Sample(s) arrived laboratory in chilled condition. The result(s) related only to the item(s) tested.

Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.

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**Analytical Results**

Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
B2/S/ Mid-Ebb	27-Apr-2021	HK2115428-001	1.6	---	---	---	---	---
B2/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-002	1.2	---	---	---	---	---
B2/M/ Mid-Ebb	27-Apr-2021	HK2115428-003	1.2	---	---	---	---	---
B2/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-004	1.9	---	---	---	---	---
B2/B/ Mid-Ebb	27-Apr-2021	HK2115428-005	2.3	---	---	---	---	---
B2/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-006	3.1	---	---	---	---	---
C2/S/ Mid-Ebb	27-Apr-2021	HK2115428-007	1.7	---	---	---	---	---
C2/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-008	2.5	---	---	---	---	---
C2/M/ Mid-Ebb	27-Apr-2021	HK2115428-009	1.7	---	---	---	---	---
C2/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-010	2.0	---	---	---	---	---
C2/B/ Mid-Ebb	27-Apr-2021	HK2115428-011	1.4	---	---	---	---	---
C2/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-012	1.5	---	---	---	---	---
C4/F1/S/ Mid-Ebb	27-Apr-2021	HK2115428-013	2.1	---	---	---	---	---
C4/F1/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-014	1.9	---	---	---	---	---
C4/F1/M/ Mid-Ebb	27-Apr-2021	HK2115428-015	2.4	---	---	---	---	---
C4/F1/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-016	1.9	---	---	---	---	---
C4/F1/B/ Mid-Ebb	27-Apr-2021	HK2115428-017	2.0	---	---	---	---	---
C4/F1/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-018	2.4	---	---	---	---	---
F2/S/ Mid-Ebb	27-Apr-2021	HK2115428-019	2.0	---	---	---	---	---
F2/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-020	3.1	---	---	---	---	---
F2/M/ Mid-Ebb	27-Apr-2021	HK2115428-021	2.8	---	---	---	---	---
F2/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-022	2.4	---	---	---	---	---
F2/B/ Mid-Ebb	27-Apr-2021	HK2115428-023	2.3	---	---	---	---	---
F2/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-024	2.7	---	---	---	---	---
G1/S/ Mid-Ebb	27-Apr-2021	HK2115428-025	2.4	---	---	---	---	---
G1/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-026	2.6	---	---	---	---	---
G1/M/ Mid-Ebb	27-Apr-2021	HK2115428-027	2.9	---	---	---	---	---
G1/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-028	2.5	---	---	---	---	---
G1/B/ Mid-Ebb	27-Apr-2021	HK2115428-029	2.8	---	---	---	---	---
G1/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-030	2.9	---	---	---	---	---
CS1/S/ Mid-Ebb	27-Apr-2021	HK2115428-031	2.7	---	---	---	---	---



Sub-Matrix: WATER			Compound	EA025: Suspended Solids (SS)	---	---	---	---
			LOR Unit	1.0 mg/L	---	---	---	---
Sample ID	Sampling date / time	Laboratory sample ID	EA/ED: Physical and Aggregate Properties	---	---	---	---	---
CS1/S/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-032	2.3	---	---	---	---	---
CS1/M/ Mid-Ebb	27-Apr-2021	HK2115428-033	2.6	---	---	---	---	---
CS1/M/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-034	2.2	---	---	---	---	---
CS1/B/ Mid-Ebb	27-Apr-2021	HK2115428-035	2.1	---	---	---	---	---
CS1/B/Duplicate Mid-Ebb	27-Apr-2021	HK2115428-036	1.6	---	---	---	---	---
B2/S/ Mid-Flood	27-Apr-2021	HK2115428-037	1.5	---	---	---	---	---
B2/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-038	2.0	---	---	---	---	---
B2/M/ Mid-Flood	27-Apr-2021	HK2115428-039	3.2	---	---	---	---	---
B2/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-040	2.5	---	---	---	---	---
B2/B/ Mid-Flood	27-Apr-2021	HK2115428-041	2.8	---	---	---	---	---
B2/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-042	3.4	---	---	---	---	---
C2/S/ Mid-Flood	27-Apr-2021	HK2115428-043	2.8	---	---	---	---	---
C2/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-044	2.3	---	---	---	---	---
C2/M/ Mid-Flood	27-Apr-2021	HK2115428-045	2.6	---	---	---	---	---
C2/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-046	2.7	---	---	---	---	---
C2/B/ Mid-Flood	27-Apr-2021	HK2115428-047	1.4	---	---	---	---	---
C2/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-048	2.0	---	---	---	---	---
C4/F1/S/ Mid-Flood	27-Apr-2021	HK2115428-049	1.5	---	---	---	---	---
C4/F1/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-050	1.8	---	---	---	---	---
C4/F1/M/ Mid-Flood	27-Apr-2021	HK2115428-051	3.2	---	---	---	---	---
C4/F1/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-052	2.3	---	---	---	---	---
C4/F1/B/ Mid-Flood	27-Apr-2021	HK2115428-053	3.6	---	---	---	---	---
C4/F1/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-054	2.6	---	---	---	---	---
F2/S/ Mid-Flood	27-Apr-2021	HK2115428-055	3.5	---	---	---	---	---
F2/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-056	2.7	---	---	---	---	---
F2/M/ Mid-Flood	27-Apr-2021	HK2115428-057	2.2	---	---	---	---	---
F2/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-058	2.3	---	---	---	---	---
F2/B/ Mid-Flood	27-Apr-2021	HK2115428-059	2.0	---	---	---	---	---
F2/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-060	2.0	---	---	---	---	---
G1/S/ Mid-Flood	27-Apr-2021	HK2115428-061	2.5	---	---	---	---	---
G1/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-062	2.1	---	---	---	---	---
G1/M/ Mid-Flood	27-Apr-2021	HK2115428-063	2.8	---	---	---	---	---
G1/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-064	2.0	---	---	---	---	---



Sub-Matrix: WATER

			<i>Compound</i>	EA025: Suspended Solids (SS)	----	----	----	----
			<i>LOR Unit</i>	1.0 mg/L	----	----	----	----
<i>Sample ID</i>	<i>Sampling date / time</i>	<i>Laboratory sample ID</i>	EA/ED: Physical and Aggregate Properties	----	----	----	----	----
G1/B/ Mid-Flood	27-Apr-2021	HK2115428-065	3.4	----	----	----	----	----
G1/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-066	2.7	----	----	----	----	----
CS1/S/ Mid-Flood	27-Apr-2021	HK2115428-067	3.0	----	----	----	----	----
CS1/S/Duplicate Mid-Flood	27-Apr-2021	HK2115428-068	2.5	----	----	----	----	----
CS1/M/ Mid-Flood	27-Apr-2021	HK2115428-069	2.8	----	----	----	----	----
CS1/M/Duplicate Mid-Flood	27-Apr-2021	HK2115428-070	2.2	----	----	----	----	----
CS1/B/ Mid-Flood	27-Apr-2021	HK2115428-071	2.1	----	----	----	----	----
CS1/B/Duplicate Mid-Flood	27-Apr-2021	HK2115428-072	2.3	----	----	----	----	----





**Laboratory Duplicate (DUP) Report**

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3649261)</b>								
HK2115428-001	B2/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.6	1.8	12.1
HK2115428-011	C2/B/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.4	1.6	11.6
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3649262)</b>								
HK2115428-021	F2/M/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	2.4	14.2
HK2115428-031	CS1/S/ Mid-Ebb	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.7	3.3	21.7
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3649263)</b>								
HK2115428-041	B2/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.8	3.0	6.96
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 3649264)</b>								
HK2115428-061	G1/S/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.5	2.8	9.52
HK2115428-071	CS1/B/ Mid-Flood	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.1	2.4	13.5

**Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report**

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						LCS	DCS	Low	High	Value	Control Limit
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3649261)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3649262)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3649263)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	106	----	85.9	117	----	----
<b>EA/ED: Physical and Aggregate Properties (QCLot: 3649264)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20 mg/L	110	----	85.9	117	----	----

**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report**

- No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

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**APPENDIX F**  
**SUMMARY OF ACTION AND LIMIT LEVELS**

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## Appendix F - Summary of Action and Limit Levels

### Action and Limit Levels Impact Water Quality Monitoring

<b>Parameters</b>	<b>Action</b>	<b>Limit</b>
DO in mg/L (Surface, Middle & Bottom)	<u>Surface &amp; Middle:</u> <b>7.40</b> (5th percentile of baseline data for surface and middle layer)  <u>Bottom:</u> <b>7.34</b> (5th percentile of baseline data for bottom layer)	<u>Surface &amp; Middle:</u> <b>7.33</b> (1st percentile of baseline data for surface and middle layer)  <u>Bottom:</u> <b>7.20</b> (1st percentile of baseline data for bottom layer)
SS in mg/L (Depth-averaged)	<b>2.85<sup>*1</sup></b> (95th percentile of baseline data)	<b>3.39<sup>*2</sup></b> (99th percentile of baseline data)
Turbidity in NTU (Depth-averaged)	<b>2.60<sup>*1</sup></b> (95th percentile of baseline data)	<b>3.34<sup>*2</sup></b> (99th percentile of baseline data)

\*1 According to the Project Profile, the Action Level shall be derived as 95<sup>th</sup> percentile of baseline data, which listed on the Table, or 20% exceedance of value at any impact station with the control station.

\*2 According to the Project Profile, the Limit Level shall be derived as 99<sup>th</sup> percentile of baseline data, which listed on the Table, or 30% exceedance of value at any impact station with the control station

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**APPENDIX G  
EVENT AND ACTION PLAN**

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## Appendix G - Event / Action Plan for Water Quality

Event	Environmental Team
Action Level Exceedance	<ol style="list-style-type: none"><li>1. Repeat sampling event.</li><li>2. Inform EPD and AFCD and confirm notification of the non-compliance in writing.</li><li>3. Discuss with cable installation contractor and the IEC/IC the most appropriate method of reducing suspended solids during cable installation and agree with EPD.</li><li>4. Repeat measurements after implementation of mitigation for confirmation of compliance.</li><li>5. If non-compliance continues, increase measures in Step 3 and repeat measurement in Step 4. If non-compliance occurs a third time, suspend cable laying operations and continue sampling until normal water quality resumes.</li></ol>
Limit Level Exceedance	Suspend cable laying operations and undertake Step 1-4 immediately. Cable laying should only continue when the water quality shows compliance again.