

VSNL Intra Asia Submarine Cable System - Deep Water Bay

Baseline Water Quality
Monitoring Report (Part A)

March 2009

Environmental Resources Management
21/F Lincoln House
Taikoo Place 979 King's Road
Island East Hong Kong
Telephone 2271 3000
Facsimile 2723 5660

www.erm.com



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21/F Lincoln House
 979 King's Road
 Taikoo Place
 Island East
 Hong Kong
 Telephone: (852) 2271 3000
 Facsimile: (852) 2723 5660
 E-mail: post.hk@erm.com
 http://www.erm.com

Baseline Water Quality Monitoring Report (Part A)

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|--|--|---|---------|---|-----------|
| Client: | | Proposal No: | | | |
| Tata Communications (Bermuda) Ltd | | 0096120 | | | |
| Summary: | | Date: | | | |
| <p>This report presents the monitoring requirements, methodologies and results of the baseline ambient marine water quality measurements at the monitoring locations near Deep Water Bay in accordance with the EM&A Manual.</p> | | 24 March 2009 | | | |
| | | Approved by: | | | |
| | |  Dr Robin Kennish Project Director | | | |
| | | | | | |
| | | | | | |
| 1 | Baseline Water Quality Monitoring Report | JK | TFONG | RK | 24 Mar 09 |
| 0 | Baseline Water Quality Monitoring Report | JK | TFONG | RK | 11 Mar 09 |
| Revision | Description | By | Checked | Approved | Date |
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EXECUTIVE SUMMARY

ERM-Hong Kong, Limited (ERM) was appointed by Tata Communications (Bermuda) Ltd to undertake baseline water quality monitoring (ie for cable installation) prior to the commencement of construction works for VSNL Intra Asia Submarine Cable System – Deep Water Bay (Application No. *DIR-155/2007*).

This Baseline Monitoring Report has been prepared in compliance with the Further Environmental Permit (FEP-01/294/2007) and Environmental Monitoring and Audit Manual for VSNL Intra Asia Submarine Cable System – Deep Water Bay (the ‘Project’).

Baseline water quality monitoring (ie for cable installation) was conducted between 27 February and 9 March 2009 at eight designated monitoring stations near Deep Water Bay (ie Zones A and E) established for the Project. The monitoring was carried out 3 days per week, at mid-flood and mid-ebb tides, at three depths (surface, middle and bottom), for 2 weeks prior to the commencement of construction works. No major activities were undertaken during baseline monitoring. Water quality monitoring results are, therefore, representative of the baseline conditions for the Project.

Tata Communications (Bermuda) Ltd (formerly Videsh Sanchar Nigam Limited (VSNL)) proposes to install a submarine telecommunications cable, which will run from Deep Water Bay and through southeast Hong Kong offshore waters. The cable landing site will be at the western edge of Deep Water Bay beach at an existing cable landing manhole location. From Deep Water Bay, the cable will extend southwards towards the East Lamma Channel. Near to Round Island, the cable will turn approximately parallel to the East Lamma Channel passing to the south of Po Toi island. The cable will then run eastward close to the boundary of HKSAR waters and then out beyond Hong Kong territorial waters into the South China Sea. At the southeast offshore waters, it will be necessary to install a grout mattress to protect the cable where it crosses HongKong Electric Co., Ltd' s (HKE) gas pipeline. A map of the proposed cable route is presented in *Figure 1.1*.

In August 2007, a Project Profile (PP) for the Project included an assessment of the potential environmental impacts associated with the installation of the submarine cable circuit was prepared and 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 Environmental Permit (EP). The Environmental Protection Department, subsequently issued an Environmental Permit (EP-294/2007) and Further Environmental Permit (FEP-01/294/2007). Amendments to the permitting requirements were incorporated into Environmental Permit to address potential environmental impacts associated with cable crossings over the HKE' s gas pipeline in southeast Hong Kong waters. Under the requirements of *Condition 3* of the EP, an EM&A programme as set out in the *Environmental Monitoring and Audit Manual (EM&A Manual)* is required to be implemented. In accordance with the *EM&A Manual*, baseline monitoring of water quality is required for the Project.

ERM-Hong Kong, Limited (ERM) was appointed by Tata Communications (Bermuda) Limited as the Monitoring Team (MT) to implement the part of the EM&A programme (ie Cable Installation Water Quality Monitoring and Site Inspection) for the Project.

Given that the water sampling stations in Zones A and E (Deep Water Bay) are situated quite far away from those in Zones B to D (Po Toi) and the expected different water quality characterises, we recommend to present the baseline data in two separate reports (ie Part A for Deep Water Bay and Part B for Po Toi) and the corresponding Action and Limit Levels will be derived from the baseline data for each side (ie Deep Water Bay, Po Toi). Due to rough sea conditions and foggy weather, the baseline water quality monitoring survey scheduled on 1 March 2009 for the Po Toi side was cancelled in consideration

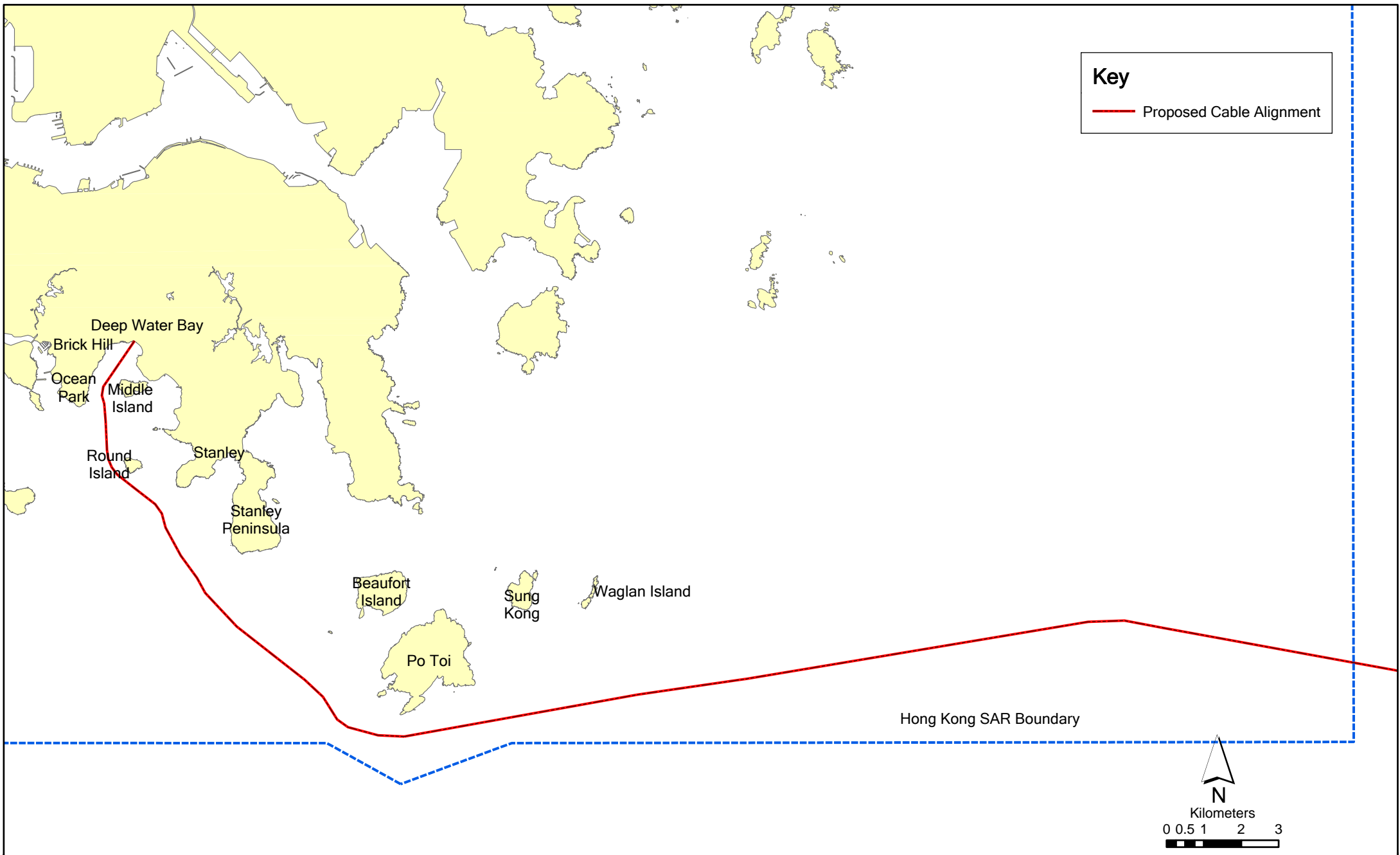


Figure 1.1

The Route of the Proposed Cable System

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 Date: 21/01/2009

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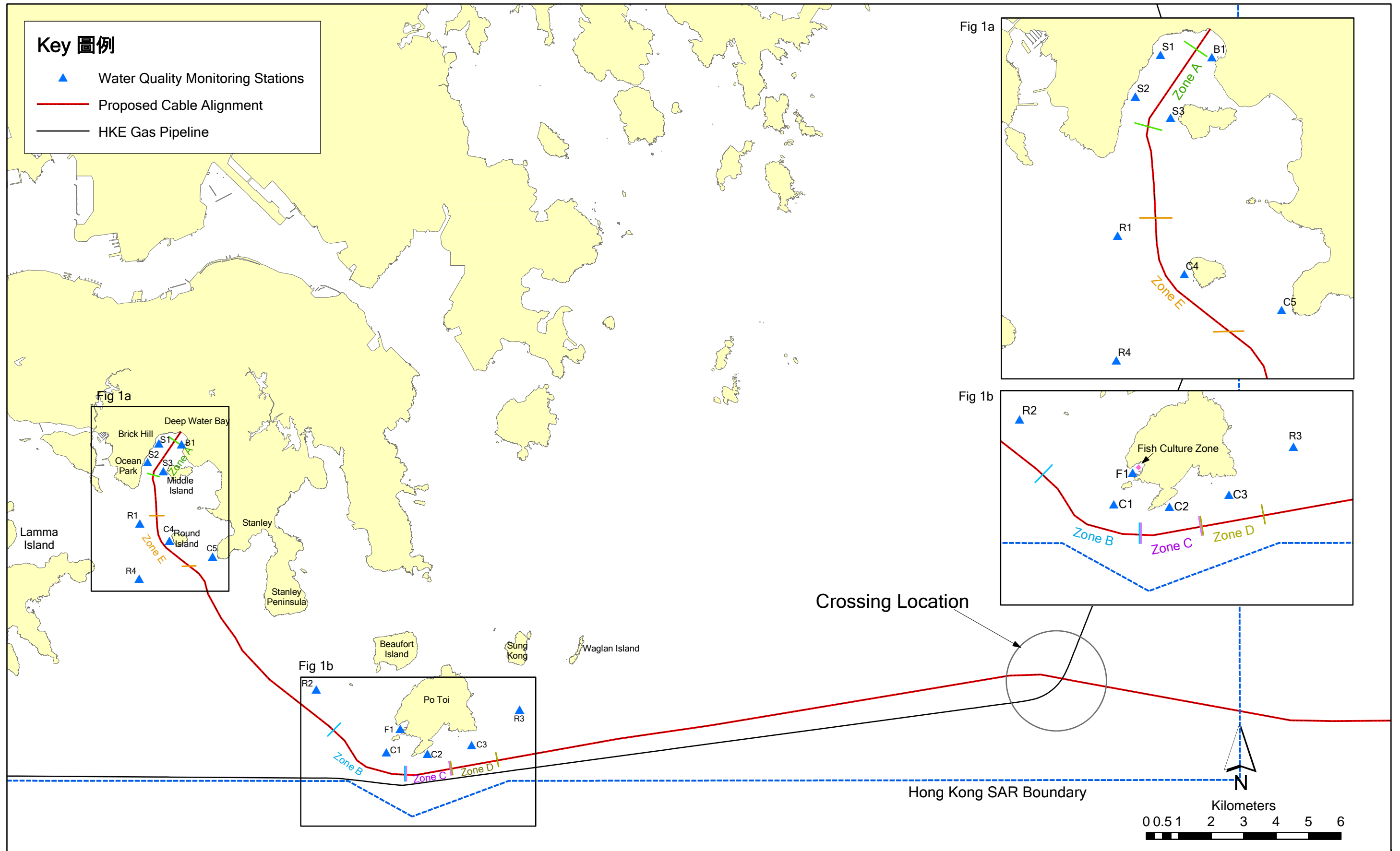


Figure 1.2

Location of Water Quality Monitoring Stations

of safety issues and concerns. As such, the baseline monitoring for the Po Toi section of works will be delayed and an additional baseline monitoring survey will be arranged on 13 March 2009 subject to the weather conditions. This report (ie *Baseline Water Quality Monitoring Report Part A*), therefore, only presents results of the data obtained from monitoring stations near Deep Water Bay (ie Monitoring Zones A and E) (*Figure 1.2*). Results of the monitoring data for Zones B to D near Po Toi Island will be presented in *Baseline Water Quality Monitoring Report Part B*, which will be submitted to EPD within one week after the completion of the survey near Po Toi Island.

1.2 PURPOSE OF THE REPORT

The purpose of this *Baseline Water Quality Monitoring Report Part A* is to determine the baseline marine water quality at the designated monitoring locations near Deep Water Bay (ie Monitoring Zones A and E) prior to the commencement of the works of jetting machine operation. These levels will be used as the basis for assessing environmental impact and compliance monitoring during the construction (jetting machine operation) of the Project. This report presents the monitoring requirements, methodologies and results of the baseline ambient marine water quality measurements at the monitoring locations in accordance with the *EM&A Manual*

1.3 STRUCTURE OF THE REPORT

The structure of the report is as follows:

Section 1 : Introduction

Details the background, purpose and structure of the report.

Section 2 : Water Quality Monitoring

Summarises the water quality monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, monitoring results and establishes the Action and Limit Levels in accordance with the *EM&A Manual*.

Section 3 : Conclusions

Concludes the representativeness of the baseline monitoring results and observations for the Project.

The following Section provides details of the baseline monitoring of water quality prior to the installation of the submarine cable.

2.1 MONITORING LOCATIONS

In accordance with the *EM&A Manual*, prior to the installation of the cable, water quality sampling were undertaken at monitoring stations near Deep Water Bay (ie Zones A and E). The locations of the sampling stations are shown in *Figure 2.1*.

- Zone A: S1 and S2 are situated at the two Seawater Intake Points in Deep Water Bay. They are within 500 m west/northwest of the cable alignment at Deep Water Bay for monitoring the effect of cable laying works in the area;
- Zone A: S3 is a Sensitive Receiver used to monitor the water quality conditions of the Coastal Protection Areas at Middle Island;
- Zone A: B1 is an Impact Station used to monitor the effect of the construction works on Deep Water Bay Beach;
- Zone A: R1 is a Control Station for S1, S2, S3 and B1 at Deep Water Bay which is not supposed to be influenced by the cable laying works due to its remoteness to the construction works;
- Zone E: C4 and C5 are Impact Stations used to monitor the effect of cable laying works on the water quality conditions for the coral communities found at Round Island and the southern side of Chung Hom Wan, respectively; and
- Zone E: R4 is Control Station for C4 and C5 in Zone E. It is not expected to be influenced by the construction works.

The suggested co-ordinates of Zones A and E as well as the above monitoring stations are listed in *Table 2.1* and *Table 2.2*, respectively.

Table 2.1 Co-ordinates of Starting Points and Ending Points for Zones A and E (HK Grid)

| Zone | Starting Point | | Ending Point | |
|------|----------------|------------|--------------|------------|
| | Easting | Northing | Easting | Northing |
| A | 837029.763 | 811601.699 | 836367.572 | 810545.975 |
| E | 836469.415 | 809294.174 | 837478.871 | 807740.633 |

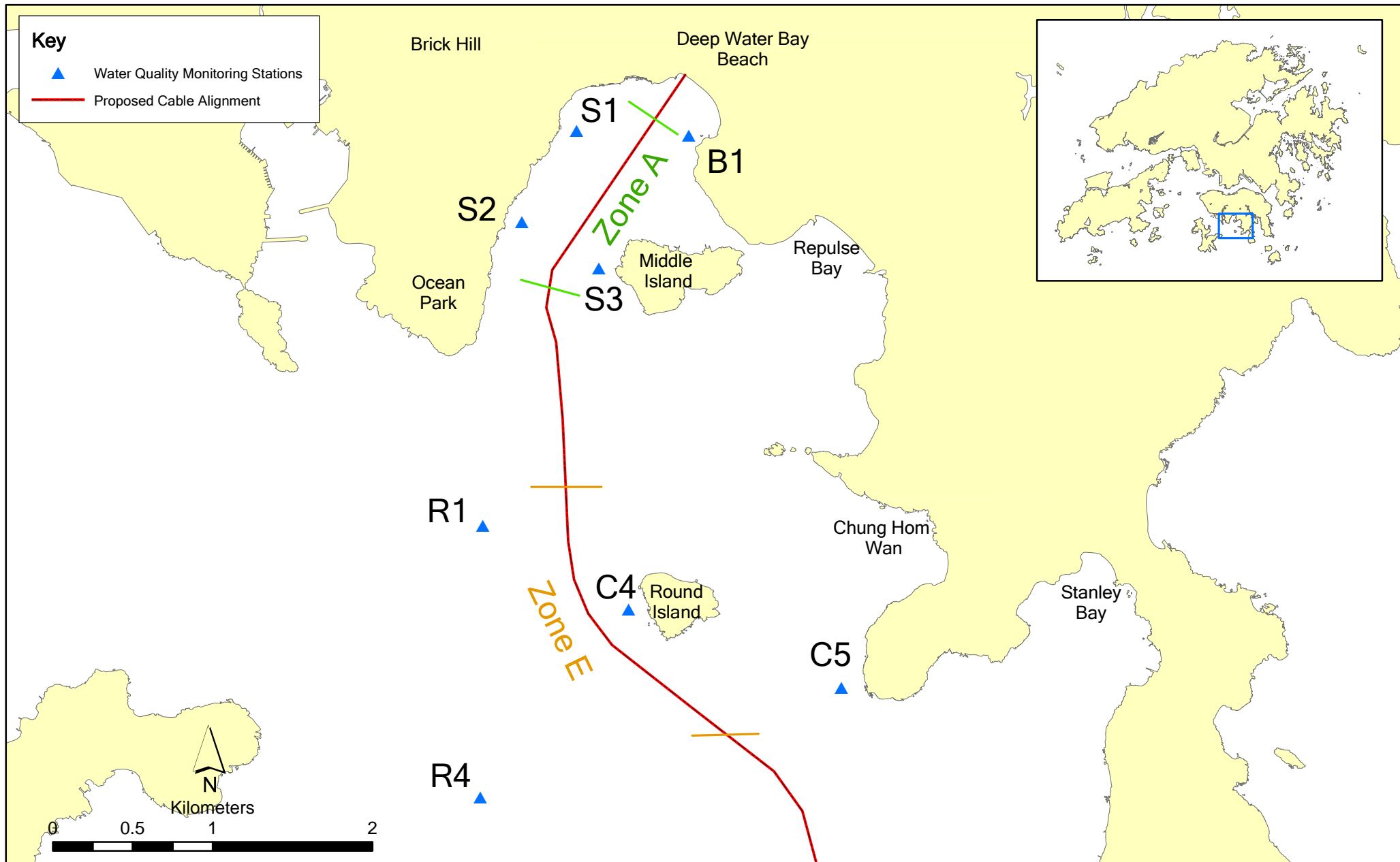


Figure 2.1

Location of Water Quality Monitoring Stations (Zones A & E)

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Date: 11/03/2009

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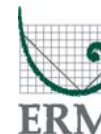


Table 2.2 Co-ordinates of Baseline Monitoring Stations (HK Grid)

| Station | Nature | Corresponding Control Station | Easting | Northing |
|---------|--------------------------|-------------------------------|------------|------------|
| S1 | Seawater Intakes | R1 | 836538.669 | 811528.535 |
| S2 | Seawater Intakes | R1 | 836195.047 | 810956.409 |
| S3 | Coastal Protection Areas | R1 | 836677.103 | 810666.744 |
| B1 | Gazetted Beach | R1 | 837241.114 | 811498.400 |
| C4 | Coral Colonies | R4 | 836863.233 | 808528.950 |
| C5 | Coral Colonies | R4 | 838197.242 | 808036.724 |
| R1 | Control Station | - | 835951.109 | 809052.535 |
| R4 | Control Station | - | 835934.876 | 807347.391 |

2.2 MONITORING PARAMETERS AND FREQUENCY

The baseline water quality monitoring was conducted in accordance with the requirements stated in the EM&A Manual, which are presented below.

2.2.1 Monitoring Parameters

Parameters measured *in situ* were:

- dissolved oxygen (DO) (% saturation and mg L⁻¹);
- temperature (°C);
- turbidity (NTU); and
- salinity (‰).

The only parameter measured in the laboratory was:

- suspended solids (SS) (mgL⁻¹).

In addition to the water quality parameters, other relevant data were measured and recorded in field logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal state, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

2.2.2 Monitoring Frequency

Baseline water quality monitoring was carried out for two weeks, with the frequency of three days per week. The interval between two sets of monitoring was not less than 36 hours. The monitoring was undertaken at eight locations (six impact monitoring stations S1, S2, S3, B1, C1, C2 and two control monitoring stations R1 and R4), as shown in *Figure 2.1*. Samples were taken during mid-flood and mid-ebb tidal state on each sampling occasion.

2.3

MONITORING EQUIPMENT AND METHODOLOGY

2.3.1

Monitoring Equipment

Dissolved Oxygen, Temperature, Salinity, Turbidity Measuring Equipment

The instrument was a portable, weatherproof multi-parameter measuring instrument (YSI 6820) complete with cables, multi-probe sensor, comprehensive operation manuals, and was operable from a DC power source. It was capable of measuring:

- dissolved oxygen levels in the range of 0 – 50 mg L⁻¹; and 0-500% saturation;
- temperature of -5 to 50 °C;
- turbidity levels between 0-1000 NTU (response of the sensor was checked with certified standard turbidity solutions before the start of measurement); and,
- salinity in the range of 0-40 ppt (checked with 30 ppt Salinity solutions before the start of the measurement).

Water Depth Gauge

The water depth gauge affixed to the bottom of the water quality monitoring vessel was used.

Current Velocity and Direction

Current velocity and direction was estimated by conducting float tracking.

Positioning Device

A Global Positioning System (GPS) was used (C-Navigator World DGPS, GPS 72A) during monitoring to ensure the accurate recording of the position of the monitoring vessel before taking measurements. The use of DGPS was used for positioning device, which was well calibrated at appropriate checkpoint.

Water Sampling Equipment

Water samples for suspended solids measurement were collected by the use of a multi-bottle water sampling system (General Oceanics Inc., Rosette Sampler ROS02), consisting of PVC bottles of more than two litres, which could be effectively sealed with cups at both ends. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

2.3.2

Monitoring Methodology

Timing & Frequency

The water quality sampling was undertaken within a 3 hour window of 1.5 hours before and 1.5 hours after mid-flood and mid-ebb tides. Tidal range for flood and ebb tides was not be less than 0.5m for capturing representative tides.

Reference were made to the predicted tides at Waglan Island, which is the tidal station nearest to the Project site, published on the website of Hong Kong Observatory⁽¹⁾. Based on the predicted water levels at Waglan Island, the baseline water quality monitoring was conducted between 27 February and 9 March 2009, following the schedule presented in *Annex A*.

Duplicate samples were collected from each of the monitoring events for *in situ* measurements and laboratory analysis.

Depths

Each station was sampled and measurements were taken at three depths, 1 m below the sea surface, mid depth and 1m above the sea bed. For stations that were less than 3 m in depth, only the mid depth sample was taken.

Protocols

The multi-parameter measuring instrument (YSI 6820) was checked and calibrated by an HOKLAS accredited laboratory before use (see calibration reports in *Annex B*). Onsite calibration was also carried out to check the responses of sensors and electrodes using certified standard solutions before each use. Sufficient stocks of spare parts were maintained for replacements when necessary, and backup monitoring equipment was made available.

Water samples for SS measurements were collected in high density polythene bottles, packed in ice (cooled to 4° C without being frozen), and delivered to an HOKLAS accredited laboratory as soon as possible after collection.

Laboratory Analysis

All laboratory work was carried out by an HOKLAS accredited laboratory. Water samples of about 1,000 mL were collected at the monitoring and control stations for carrying out the laboratory determinations. The determination work started within the next working day after collection of the water samples. The SS laboratory measurements were provided to the client within 2 days of the sampling event (48 hours). The analyses followed the standard methods as described in *APHA Standard Methods for the Examination of Water and Wastewater*, 19th Edition, unless otherwise specified (APHA 2540D for SS).

(1) Hong Kong Observatory (2009) <http://www.hko.gov.hk/tide/eWAGtide.htm>

The QA/QC details were in accordance with requirements of HOKLAS or another internationally accredited scheme (details refer to *Annex C*).

2.4

BASELINE MONITORING RESULTS

The monitoring data and graphical presentations are summarised in *Annex D*. No major activities influencing the water quality were identified during the monitoring period.

The Action and Limit Levels were set in the *EM&A Manual* and the proposed Action and Limit Levels were determined as shown in *Table 2.3*.

Table 2.3 *Determination of Action and Limit Level of Water Quality*

| Parameter | Action Level | Limit Level |
|--|--|---|
| DO in mgL ⁻¹ ^(b) | <u>Surface and Mid-depth</u> 5%-ile of baseline data for surface and middle layer | <u>Surface and Mid-depth</u> 4mg/L or 1%-ile of baseline for surface and middle layer |
| | <u>Bottom</u> 5%-ile of baseline data for bottom layers | <u>Bottom</u> 2mg/L or 1%-ile of baseline data for bottom layer |
| SS in mgL ⁻¹ (Depth-averaged) ^(a) ^(c) | 95%-ile of baseline data, or 20% exceedance of value at any impact station compared with corresponding data from control stations | 99%-ile of baseline data, or 30% exceedance of value at any impact station compared with corresponding data from control stations |
| Turbidity in NTU (Depth-averaged) ^(a) ^(c) | 95%-ile of baseline data, or 20% exceedance of value at any impact station compared with corresponding data from control stations | 99%-ile of baseline data, or 30% exceedance of value at any impact station compared with corresponding data from control stations |
| Notes: | | |
| a. | “Depth-averaged” is calculated by taking the arithmetic means of reading of all three depths. | |
| b. | For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the Action/Limit Levels. | |
| c. | For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the Action/Limit Levels. | |

The Action and Limit Levels are derived from the baseline monitoring data for all impact stations for Zones A and E (including Stations S1, S2, S3, B1, C4 and C5), and the results are presented in *Table 2.4*. Please note that the results of *Part A Baseline Monitoring* are used to determine the Action and Limit Levels for the works to be undertaken near Deep Water Bay (ie Zones A and E).

Table 2.4 Proposed Action and Limit Levels of Water Quality for Zones A and E

| Parameter | Action Level | Limit Level |
|--|--|--|
| Dissolved Oxygen (DO) (1) | <u>Surface and Mid-depth</u> (2) | <u>Surface and Mid-depth</u> (2) |
| | 5%-ile of baseline data for surface and middle layer = 6.59 mg L ⁻¹ | 1%-ile of baseline data for bottom layer = 6.42 mg L ⁻¹ |
| | <u>Bottom</u> | <u>Bottom</u> |
| | 5%-ile of baseline data for bottom layers = 6.58 mg L ⁻¹ | 1%-ile of baseline for bottom layer = 6.42 mg L ⁻¹ |
| Depth-averaged Suspended Solids (SS) (3) (4) | 95%-ile of baseline data = 7.91 mg L ⁻¹ | 99%-ile of baseline data = 8.96 mg L ⁻¹ |
| | or 120% of control station's SS at the same tide of the same day | or 130% of control station's SS at the same tide of the same day |
| Depth-averaged Turbidity (Tby) (3)(4) | 95%-ile of baseline data = 5.17 NTU | 99%-ile of baseline data = 5.72 NTU |
| | or 120% of control station's Tby at the same tide of the same day | or 130% of control station's Tby at the same tide of the same day |

Notes:

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

CONCLUSION

Baseline water quality monitoring was conducted between 27 February and 9 March 2009 at eight designated monitoring stations near Deep Water Bay (ie Zones A and E) established for the Project. The monitoring was carried out 3 days per week, at mid-flood and mid-ebb tides, at three depths (surface, middle and bottom), for 2 weeks prior to the commencement of construction works. No major activities were undertaken during baseline monitoring. Water quality monitoring results are, therefore, representative of the baseline conditions for the Project.

The baseline monitoring results were used to determine the Action and Limit Levels for the DO, SS and turbidity for impact monitoring to be conducted at Zones A and E throughout the construction phase of the Project.

Annex A

Baseline Monitoring Schedule

**VSNL Intra Asia Submarine Cable System - Deep Water Bay
Tentative Baseline Water Quality Monitoring Schedule - February 2009**

Reference Tidal Station: Waglan Island (source: HK Observatory Department)

as of 5 March 2009

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|---|----------|
| 1-Feb | 2-Feb | 3-Feb | 4-Feb | 5-Feb | 6-Feb | 7-Feb |
| 8-Feb | 9-Feb | 10-Feb | 11-Feb | 12-Feb | 13-Feb | 14-Feb |
| 15-Feb | 16-Feb | 17-Feb | 18-Feb | 19-Feb | 20-Feb | 21-Feb |
| 22-Feb | 23-Feb | 24-Feb | 25-Feb | 26-Feb | 27-Feb | 28-Feb |
| | | | | | Mid-Flood 7:54 Mid-Ebb 13:51 (Deep Water Bay - Zones A and E) Baseline Monitoring | |

This schedule is subject to the FSRO gazette approval and agreement from the EPD and AFCD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**VSNL Intra Asia Submarine Cable System - Deep Water Bay
Tentative Baseline Water Quality Monitoring Schedule - March 2009**

Reference Tidal Station: Waglan Island (source: HK Observatory Department)

as of 5 March 2009

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|-----------|---|--------|---|
| 1-Mar | 2-Mar | 3-Mar | 4-Mar | 5-Mar | 6-Mar | 7-Mar |
| Mid-Flood 8:43 Mid-Ebb 15:04 (Deep Water Bay - Zones A and E) Baseline Monitoring | | Mid-Flood 9:30 Mid-Ebb 16:38 (Deep Water Bay - Zones A and E) Baseline Monitoring | | Mid-Flood 6:42 Mid-Ebb 19:46 (Deep Water Bay - Zones A and E) Baseline Monitoring | | Mid-Flood 9:36 Mid-Ebb 21:55 (Deep Water Bay - Zones A and E) Baseline Monitoring |
| 8-Mar | 9-Mar | 10-Mar | 11-Mar | 12-Mar | 13-Mar | 14-Mar |
| | Mid-Flood 5:50 Mid-Ebb 11:17 (Deep Water Bay - Zones A and E) Baseline Monitoring | | | | | |
| 15-Mar | 16-Mar | 17-Mar | 18-Mar | 19-Mar | 20-Mar | 21-Mar |
| 22-Mar | 23-Mar | 24-Mar | 25-Mar | 26-Mar | 27-Mar | 28-Mar |
| 29-Mar | 30-Mar | 31-Mar | | | | |

This schedule is subject to the FSRO gazette approval and agreement from the EPD and AFCD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Annex B

Calibration Reports of Multi-parameter Sensor



Form Name : **Temperature/Salinity Calibration Record**

Procedure Type **Calibration**
 Form No/Rev **En10R / 2**
 Date **19th September 2006**
 Approved by **REH**

CALIBRATION RECORD FOR TEMPERATURE/SALINITY SENSOR

Instrument model: **YSI** Calibration date **16 Dec 2008**
 Serial Number **07K101951** EGS Instrument No **MPP23** Calibration Engineer **Ricky Wong**

| Cal Thermometers | 0-15 °C | 15-30 °C | 30-45 °C | Cal Salinometer | Ref A | Ref B | Cal A | Cal B |
|------------------|---------|----------|----------|-----------------|-------|-------|-------|-------|
| Thermoschneider | 916265 | 991271 | 991335 | RTASAL 69470 | 0 | 0 | 0 | 0 |

TEMPERATURE CALIBRATION

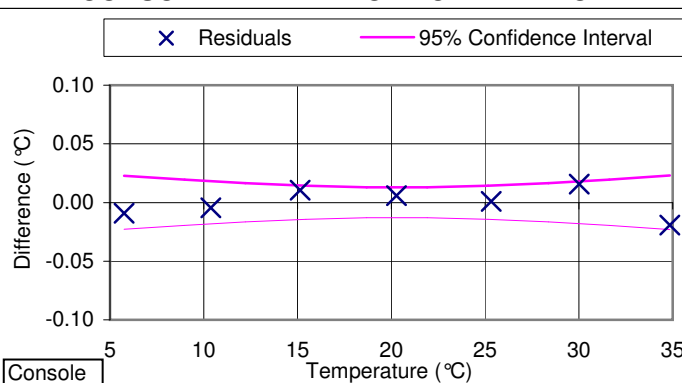
Console temperature calibration record (°C)

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|------------------|-------------------|
| 5.75 | 10.38 | 15.14 | 20.28 | 25.32 | 30.02 | 34.85 | Reference | |
| 5.73 | 10.36 | 15.11 | 20.26 | 25.31 | 30 | 34.87 | | Console |
| 5.759 | 10.384 | 15.130 | 20.274 | 25.319 | 30.004 | 34.869 | | Calculated |
| -0.009 | -0.004 | 0.010 | 0.006 | 0.001 | 0.016 | -0.019 | | Residual |

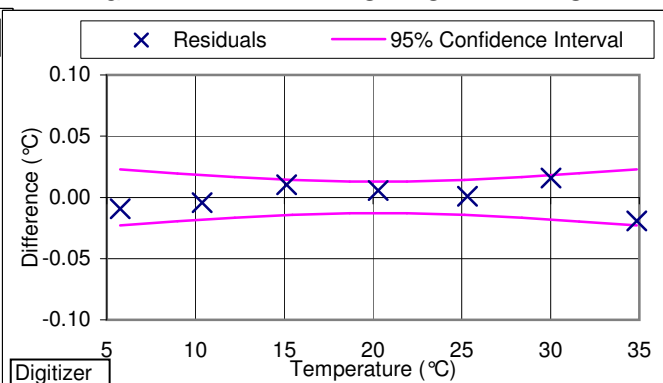
Digitizer temperature calibration record (°C)

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|------------------|-------------------|
| 5.73 | 10.36 | 15.11 | 20.26 | 25.31 | 30 | 34.87 | Digitizer | |
| 5.759 | 10.384 | 15.130 | 20.274 | 25.319 | 30.004 | 34.869 | | Calculated |
| -0.009 | -0.004 | 0.010 | 0.006 | 0.001 | 0.016 | -0.019 | | Residual |

CONSOLE TEMPERATURE CALIBRATION



DIGITIZER TEMPERATURE CALIBRATION



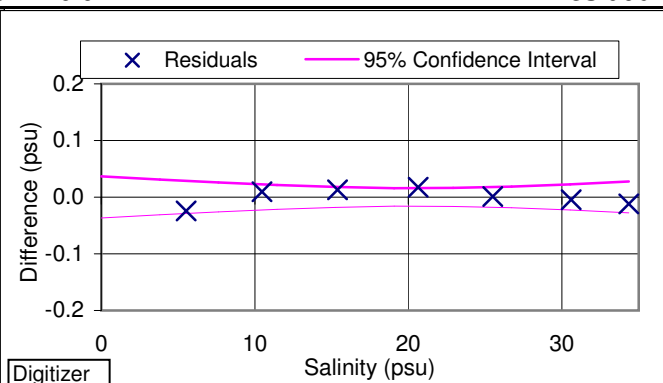
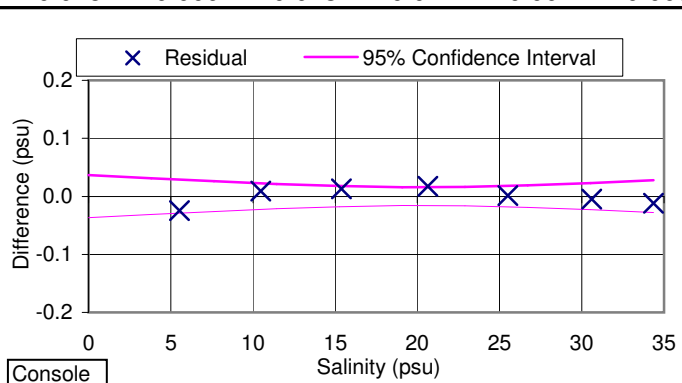
SALINITY CALIBRATION

Console salinity calibration record (psu)

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|------------------|-------------------|
| 5.53 | 10.47 | 15.38 | 20.64 | 25.5 | 30.6 | 34.35 | Reference | |
| 5.52 | 10.43 | 15.34 | 20.6 | 25.48 | 30.59 | 34.35 | | Console |
| 5.555 | 10.461 | 15.367 | 20.623 | 25.499 | 30.605 | 34.362 | | Calculated |
| -0.025 | 0.009 | 0.013 | 0.017 | 0.001 | -0.005 | -0.012 | | Residual |

Digitizer salinity calibration record (psu)

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|------------------|-------------------|
| 5.52 | 10.43 | 15.34 | 20.6 | 25.48 | 30.59 | 34.35 | Digitizer | |
| 5.555 | 10.461 | 15.367 | 20.623 | 25.499 | 30.605 | 34.362 | | Calculated |
| -0.025 | 0.009 | 0.013 | 0.017 | 0.001 | -0.005 | -0.012 | | Residual |



CALIBRATION SUMMARY

| | Temperature console | digitizer | Salinity console | Salinity digitizer |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Calibration gradient, m | 0.9990 ±0.0002 | 0.9990 ±0.0002 | 0.9992 ±0.0003 | 0.9992 ±0.0003 |
| Calibration intercept, c | 0.04 ±0.00 | 0.04 ±0.00 | 0.04 ±0.00 | 0.04 ±0.00 |
| 95% Confidence interval | 0.023 °C | 0.023 °C | 0.037 psu | 0.037 psu |
| PASS/FAIL CRITERION | 0.1 PASS | 0.1 PASS | 0.2 PASS | 0.2 PASS |

Calibration Engineer **Ricky Wong** Geoscientist **R E Hale** Senior Engineer **Anderson Leung**

EGS (ASIA) LIMITED

CALIBRATION RECORD FOR YSI SILTMETER

| | | | |
|--------------------------|-----------------------|-----------|------------------|
| Job No : HK201606 | Pre-cal. X | Post-cal. | 12Mth cal. |
| EGS No : MPP23 | Model : YSI 6920-V2-M | S/N : | 07K101951 |

SILTMETER CALIBRATION

| Formazin Concentration (NTU) | Console Voltage (Volts) | Console Formazin Conc. (NTU) | Ratio=NTU/Console Reading |
|------------------------------|-------------------------|------------------------------|---------------------------|
| 100 | | 99.90 | Not Used |
| 90 | | 88.80 | 1.014 |
| 80 | | 79.50 | 1.006 |
| 70 | | 69.40 | 1.009 |
| 60 | | 59.30 | 1.012 |
| 50 | | 49.30 | 1.014 |
| 40 | | 39.00 | Not Used |
| 30 | | 29.40 | Not Used |
| 20 | | 19.40 | Not Used |
| 10 | | 10.30 | Not Used |
| 0 | | 0.00 | Not Used |

Mean Ratio, M : **1.011**
Standard Deviation of Ratio : **0.003**

Acceptance Criteria :

- i) $0.75 < \text{Mean Ratio} < 1.25$
- ii) Standard Deviation of Ratio < 0.05
- iii) $-2.5 \text{ NTU} < \text{Console Reading in Distilled Water} < 2.5 \text{ NTU}$

Calibration Equation : $M \times \text{Console Reading} + C$

M = **1.011** C = **0.000**

| | | | |
|---------------------------------|-------------------|--------|------------------|
| CALIBRATING ENGINEER : | Ricky Wong | Date : | 17-Dec-08 |
| PLOT ACCEPTED BY GEOSCIENTIST : | R E Hale | | 19-Dec-08 |
| ACCEPTED BY SENIOR ENGINEER : | Anderson Leung | Date : | 19-Dec-08 |

CALIBRATION SCHEDULE UPDATED

Annex C

QA/QC Results for Suspended Solids Testing



CERTIFICATE OF ANALYSIS

| | | | | | |
|---------------------|--|---------------------|---|-----------------------|-------------------------|
| <i>Client</i> | : ERM HONG KONG | <i>Laboratory</i> | : ALS Technichem HK Pty Ltd | <i>Page</i> | : 1 of 13 |
| <i>Contact</i> | : MS JOANNA KWAN | <i>Contact</i> | : Wong Wai Man, Alice | <i>Work Order</i> | : HK0903669 |
| <i>Address</i> | : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG | <i>Address</i> | : 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong | | |
| <i>E-mail</i> | : Joanna.kwan@erm.com | <i>E-mail</i> | : Alice.Wong@alsenviro.com | | |
| <i>Telephone</i> | : +852 2271 3000 | <i>Telephone</i> | : +852 2610 1044 | | |
| <i>Facsimile</i> | : +852 2723 5660 | <i>Facsimile</i> | : +852 2610 2021 | | |
| <i>Project</i> | : WATER QUALITY MONITORING PROGRAMME DEEP WATER BAY AND PO TOI | <i>Quote number</i> | : ---- | <i>Date received</i> | : 27-FEB-2009 |
| <i>Order number</i> | : ---- | | | <i>Date of issue</i> | : 03-MAR-2009 |
| <i>C-O-C number</i> | : ---- | | | <i>No. of samples</i> | - <i>Received</i> : 168 |
| <i>Site</i> | : ---- | | | | - <i>Analysed</i> : 168 |

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0903669 supersedes any previous reports with this reference. The completion date of analysis is 02-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0903669 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |

ALS Laboratory Group

Trading Name: **ALS Technichem (HK) Pty Ltd**

11/F., Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong
Tel: +852 2610 1044 Fax: +852 2610 2021 www.alsenviro.com

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Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906458) | | | | | | | | |
| HK0903669-001 | 2009/02/27/1431/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| HK0903669-011 | 2009/02/27/1422/S2/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906459) | | | | | | | | |
| HK0903669-021 | 2009/02/27/1448/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 2 | 4 | 96.2 |
| HK0903669-031 | 2009/02/27/1318/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906460) | | | | | | | | |
| HK0903669-041 | 2009/02/27/1350/R1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 6 | 34.4 |
| HK0903669-051 | 2009/02/27/1332/C1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906461) | | | | | | | | |
| HK0903669-061 | 2009/02/27/1428/C3/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| HK0903669-071 | 2009/02/27/1322/F1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906462) | | | | | | | | |
| HK0903669-081 | 2009/02/27/1440/R3/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | <1 | <1 | 0.0 |
| HK0903669-091 | 2009/02/27/0830/S2/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906463) | | | | | | | | |
| HK0903669-101 | 2009/02/27/0822/S3/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 25.0 |
| HK0903669-111 | 2009/02/27/0751/C4/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 3 | 36.8 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906464) | | | | | | | | |
| HK0903669-121 | 2009/02/27/0801/R1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 12 | 10 | 9.3 |
| HK0903669-131 | 2009/02/27/0715/R4/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 10 | 11 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906465) | | | | | | | | |
| HK0903669-141 | 2009/02/27/0819/C2/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| HK0903669-151 | 2009/02/27/0742/F1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 3 | 48.1 |



| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 906466) | | | | | | | | |
| HK0903669-161 | 2009/02/27/0713/R2/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |

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 | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906458) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 88.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906459) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 97.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906460) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 101 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906461) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 88.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906462) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 93.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906463) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906464) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 92.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906465) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 105 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 906466) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.5 | ---- | 85 | 115 | ---- | ---- | |

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> | : ERM HONG KONG | <i>Laboratory</i> | : ALS Technichem HK Pty Ltd | <i>Page</i> | : 1 of 9 |
| <i>Contact</i> | : MS JOANNA KWAN | <i>Contact</i> | : Wong Wai Man, Alice | <i>Work Order</i> | : HK0903724 |
| <i>Address</i> | : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG | <i>Address</i> | : 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong | | |
| <i>E-mail</i> | : Joanna.kwan@erm.com | <i>E-mail</i> | : Alice.Wong@alsenviro.com | | |
| <i>Telephone</i> | : +852 2271 3000 | <i>Telephone</i> | : +852 2610 1044 | | |
| <i>Facsimile</i> | : +852 2723 5660 | <i>Facsimile</i> | : +852 2610 2021 | | |
| <i>Project</i> | : WATER QUALITY MONITORING PROGRAMME DEEP WATER BAY AND PR TOI | <i>Quote number</i> | : ---- | <i>Date received</i> | : 02-MAR-2009 |
| <i>Order number</i> | : ---- | | | <i>Date of issue</i> | : 03-MAR-2009 |
| <i>C-O-C number</i> | : ---- | | | <i>No. of samples</i> | - Received : 96 |
| <i>Site</i> | : ---- | | | | - Analysed : 96 |

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0903724 supersedes any previous reports with this reference. The completion date of analysis is 03-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0903724 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |



Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 907184) | | | | | | | | |
| HK0903724-001 | 2009/03/01/1532/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 5 | 0.0 |
| HK0903724-012 | 2009/03/01/1527/S2/T/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 4 | 22.6 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 907185) | | | | | | | | |
| HK0903724-021 | 2009/03/01/1543/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 7 | 0.0 |
| HK0903724-031 | 2009/03/01/1434/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 11 | 12 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 907186) | | | | | | | | |
| HK0903724-041 | 2009/03/01/1505/R1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 6 | 0.0 |
| HK0903724-051 | 2009/03/01/0922/S1/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 907187) | | | | | | | | |
| HK0903724-061 | 2009/03/01/0901/S3/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 13 | 12 | 0.0 |
| HK0903724-072 | 2009/03/01/0935/B1/T/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 5 | 51.6 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 907188) | | | | | | | | |
| HK0903724-082 | 2009/03/01/0824/C5/B/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 4 | 49.7 |
| HK0903724-091 | 2009/03/01/0801/R4/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 25 | 26 | 4.2 |

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 |
| EA/ED: Physical and Aggregate Properties (QCLot: 907184) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- |
| EA/ED: Physical and Aggregate Properties (QCLot: 907185) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- |
| EA/ED: Physical and Aggregate Properties (QCLot: 907186) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- |
| EA/ED: Physical and Aggregate Properties (QCLot: 907187) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.5 | ---- | 85 | 115 | ---- | ---- |
| EA/ED: Physical and Aggregate Properties (QCLot: 907188) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- |



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG
Contact : MS JOANNA KWAN
Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD,
TAIKOO PLACE, ISLAND EAST,
QUARRY BAY, HONG KONG
E-mail : Joanna.kwan@erm.com
Telephone : +852 2271 3000
Facsimile : +852 2723 5660
Project : WATER QUALITY MONITORING PROGRAMME
DEEP WATER BAY AND PO TOI
Order number : ----
C-O-C number : ----
Site : ----

Laboratory : ALS Technichem HK Pty Ltd
Contact : Wong Wai Man, Alice
Address : 11/F., Chung Shun Knitting Centre,
1 - 3 Wing Yip Street,
Kwai Chung, N.T., Hong Kong
E-mail : Alice.Wong@alsenviro.com
Telephone : +852 2610 1044
Facsimile : +852 2610 2021
Quote number : ----

Page : 1 of 13
Work Order : **HK0903922**

Date received : **04-MAR-2009**

Date of issue : **05-MAR-2009**

No. of samples - *Received* : **168**
- *Analysed* : **168**

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0903922 supersedes any previous reports with this reference. The completion date of analysis is 05-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0903922 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |

ALS Laboratory Group

Trading Name: **ALS Technichem (HK) Pty Ltd**

11/F., Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong
Tel: +852 2610 1044 Fax: +852 2610 2021 www.alsenviro.com

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Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909873) | | | | | | | | |
| HK0903922-001 | 2009/03/03/1701/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 7 | 0.0 |
| HK0903922-011 | 2009/03/03/1655/S2/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 8 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909874) | | | | | | | | |
| HK0903922-021 | 2009/03/03/1713/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| HK0903922-031 | 2009/03/03/1555/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909875) | | | | | | | | |
| HK0903922-042 | 2009/03/03/1631/R1/T/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 4 | 0.0 |
| HK0903922-053 | 2009/03/03/1617/C1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 8 | 29.3 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909876) | | | | | | | | |
| HK0903922-061 | 2009/03/03/1623/C3/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 11 | 13.3 |
| HK0903922-071 | 2009/03/03/1602/F1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909877) | | | | | | | | |
| HK0903922-081 | 2009/03/03/1536/R3/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 23.5 |
| HK0903922-091 | 2009/03/03/0954/S2/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 8 | 12.4 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909878) | | | | | | | | |
| HK0903922-101 | 2009/03/03/0948/S3/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 5 | 32.0 |
| HK0903922-111 | 2009/03/03/0915/C4/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909879) | | | | | | | | |
| HK0903922-121 | 2009/03/03/0925/R1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 16 | 13 | 16.1 |
| HK0903922-131 | 2009/03/03/0843/R4/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 8 | 85.3 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909880) | | | | | | | | |
| HK0903922-141 | 2009/03/03/0921/C2/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 6 | 0.0 |
| HK0903922-151 | 2009/03/03/0838/F1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 4 | 29.2 |



| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 909881) | | | | | | | | |
| HK0903922-161 | 2009/03/03/0946/R2/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 8 | 20.5 |

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 | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909873) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909874) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909875) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 108 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909876) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 100 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909877) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 106 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909878) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 109 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909879) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 104 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909880) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 909881) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 108 | ---- | 85 | 115 | ---- | ---- | |

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> | : ERM HONG KONG | <i>Laboratory</i> | : ALS Technichem HK Pty Ltd | <i>Page</i> | : 1 of 13 |
| <i>Contact</i> | : MS JOANNA KWAN | <i>Contact</i> | : Wong Wai Man, Alice | <i>Work Order</i> | : HK0904132 |
| <i>Address</i> | : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG | <i>Address</i> | : 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong | | |
| <i>E-mail</i> | : Joanna.kwan@erm.com | <i>E-mail</i> | : Alice.Wong@alsenviro.com | | |
| <i>Telephone</i> | : +852 2271 3000 | <i>Telephone</i> | : +852 2610 1044 | | |
| <i>Facsimile</i> | : +852 2723 5660 | <i>Facsimile</i> | : +852 2610 2021 | | |
| <i>Project</i> | : WATER QUALITY MONITORING PROGRAMME DEEP WATER BAY AND PO TOI | <i>Quote number</i> | : ---- | <i>Date received</i> | : 06-MAR-2009 |
| <i>Order number</i> | : ---- | | | <i>Date of issue</i> | : 09-MAR-2009 |
| <i>C-O-C number</i> | : ---- | | | <i>No. of samples</i> | - Received : 168 |
| <i>Site</i> | : ---- | | | | - Analysed : 168 |

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0904132 supersedes any previous reports with this reference. The completion date of analysis is 09-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0904132 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |



Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912698) | | | | | | | | |
| HK0904132-001 | 2009/03/05/2013/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 5 | 0.0 |
| HK0904132-011 | 2009/03/05/2006/S2/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912699) | | | | | | | | |
| HK0904132-021 | 2009/03/05/2025/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 0.0 |
| HK0904132-031 | 2009/03/05/1904/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 9 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912700) | | | | | | | | |
| HK0904132-041 | 2009/03/05/1940/R1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 6 | 20.1 |
| HK0904132-051 | 2009/03/05/1922/C1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912701) | | | | | | | | |
| HK0904132-061 | 2009/03/05/1931/C3/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 9 | 0.0 |
| HK0904132-071 | 2009/03/05/1914/F1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912702) | | | | | | | | |
| HK0904132-081 | 2009/03/05/1849/R3/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 10 | 16.9 |
| HK0904132-091 | 2009/03/05/0802/S2/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 8 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912703) | | | | | | | | |
| HK0904132-102 | 2009/03/05/0757/S3/T/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 6 | 0.0 |
| HK0904132-111 | 2009/03/05/0721/C4/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 9 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912704) | | | | | | | | |
| HK0904132-121 | 2009/03/05/0732/R1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 10 | 0.0 |
| HK0904132-131 | 2009/03/05/0646/R4/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 11 | 10 | 10.2 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912705) | | | | | | | | |
| HK0904132-141 | 2009/03/05/0720/C2/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 7 | 0.0 |
| HK0904132-151 | 2009/03/05/0646/F1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 10 | 19.1 |



| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 912707) | | | | | | | | |
| HK0904132-161 | 2009/03/05/0741/R2/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 24.2 |

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 | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912698) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912699) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 97.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912700) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 97.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912701) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912702) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912703) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912704) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912705) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 912707) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |

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> | : ERM HONG KONG | <i>Laboratory</i> | : ALS Technichem HK Pty Ltd | <i>Page</i> | : 1 of 13 |
| <i>Contact</i> | : MS JOANNA KWAN | <i>Contact</i> | : Wong Wai Man, Alice | <i>Work Order</i> | : HK0904331 |
| <i>Address</i> | : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG | <i>Address</i> | : 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong | | |
| <i>E-mail</i> | : Joanna.kwan@erm.com | <i>E-mail</i> | : Alice.Wong@alsenviro.com | | |
| <i>Telephone</i> | : +852 2271 3000 | <i>Telephone</i> | : +852 2610 1044 | | |
| <i>Facsimile</i> | : +852 2723 5660 | <i>Facsimile</i> | : +852 2610 2021 | | |
| <i>Project</i> | : WATER QUALITY MONITORING PROGRAMME DEEP WATER BAY AND PO TOI | <i>Quote number</i> | : ---- | <i>Date received</i> | : 09-MAR-2009 |
| <i>Order number</i> | : ---- | | | <i>Date of issue</i> | : 10-MAR-2009 |
| <i>C-O-C number</i> | : ---- | | | <i>No. of samples</i> | - <i>Received</i> : 168 |
| <i>Site</i> | : ---- | | | | - <i>Analysed</i> : 168 |

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0904331 supersedes any previous reports with this reference. The completion date of analysis is 10-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0904331 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |

ALS Laboratory Group

Trading Name: **ALS Technichem (HK) Pty Ltd**

11/F., Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong
Tel: +852 2610 1044 Fax: +852 2610 2021 www.alsenviro.com

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Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914035) | | | | | | | | |
| HK0904331-001 | 2009/03/07/2246/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 6 | 22.6 |
| HK0904331-011 | 2009/03/07/2237/S2/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914036) | | | | | | | | |
| HK0904331-021 | 2009/03/07/2259/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| HK0904331-031 | 2009/03/07/2129/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 7 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914037) | | | | | | | | |
| HK0904331-041 | 2009/03/07/2209/R1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 4 | 42.2 |
| HK0904331-051 | 2009/03/07/2156/C1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 5 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914038) | | | | | | | | |
| HK0904331-061 | 2009/03/07/2205/C3/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 12 | 13 | 14.2 |
| HK0904331-071 | 2009/03/07/2147/F1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914039) | | | | | | | | |
| HK0904331-081 | 2009/03/07/2120/R3/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 6 | 0.0 |
| HK0904331-091 | 2009/03/07/1026/S2/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 16 | 18 | 9.6 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914040) | | | | | | | | |
| HK0904331-101 | 2009/03/07/1019/S3/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 9 | 18.6 |
| HK0904331-111 | 2009/03/07/0941/C4/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 8 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914041) | | | | | | | | |
| HK0904331-121 | 2009/03/07/0956/R1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 11 | 11 | 0.0 |
| HK0904331-131 | 2009/03/07/0907/R4/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 11 | 13.4 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914042) | | | | | | | | |
| HK0904331-141 | 2009/03/07/0934/C2/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 7 | 6 | 0.0 |
| HK0904331-151 | 2009/03/07/0850/F1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 8 | 0.0 |



| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914043) | | | | | | | | |
| HK0904331-161 | 2009/03/07/0957/R2/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 5 | 58.8 |

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 | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914035) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 93.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914036) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914037) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914038) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 101 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914039) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 93.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914040) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 105 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914041) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 103 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914042) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914043) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 104 | ---- | 85 | 115 | ---- | ---- | |

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> | : ERM HONG KONG | <i>Laboratory</i> | : ALS Technichem HK Pty Ltd | <i>Page</i> | : 1 of 13 |
| <i>Contact</i> | : MS JOANNA KWAN | <i>Contact</i> | : Wong Wai Man, Alice | <i>Work Order</i> | : HK0904339 |
| <i>Address</i> | : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG | <i>Address</i> | : 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong | | |
| <i>E-mail</i> | : Joanna.kwan@erm.com | <i>E-mail</i> | : Alice.Wong@alsenviro.com | | |
| <i>Telephone</i> | : +852 2271 3000 | <i>Telephone</i> | : +852 2610 1044 | | |
| <i>Facsimile</i> | : +852 2723 5660 | <i>Facsimile</i> | : +852 2610 2021 | | |
| <i>Project</i> | : WATER QUALITY MONITORING PROGRAMME DEEP WATER BAY AND PO TOI | <i>Quote number</i> | : ---- | <i>Date received</i> | : 09-MAR-2009 |
| <i>Order number</i> | : ---- | | | <i>Date of issue</i> | : 11-MAR-2009 |
| <i>C-O-C number</i> | : ---- | | | <i>No. of samples</i> | - <i>Received</i> : 168 |
| <i>Site</i> | : ---- | | | | - <i>Analysed</i> : 168 |

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0904339 supersedes any previous reports with this reference. The completion date of analysis is 10-MAR-2009. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0904339 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance' of Hong Kong. Chapter 553. Section 6.

| <i>Signatory</i> | <i>Position</i> | <i>Authorised results for:-</i> |
|------------------------|-----------------|---------------------------------|
| Fung Lim Chee, Richard | General Manager | Inorganics |

ALS Laboratory Group

Trading Name: **ALS Technichem (HK) Pty Ltd**

11/F., Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong
Tel: +852 2610 1044 Fax: +852 2610 2021 www.alsenviro.com

A Campbell Brothers Limited Company



Laboratory Duplicate (DUP) Report

| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914049) | | | | | | | | |
| HK0904339-001 | 2009/03/09/1156/S1/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 10 | 9 | 12.3 |
| HK0904339-011 | 2009/03/09/1150/S2/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914050) | | | | | | | | |
| HK0904339-021 | 2009/03/09/1214/B1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| HK0904339-031 | 2009/03/09/1024/C5/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 8 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914051) | | | | | | | | |
| HK0904339-041 | 2009/03/09/1116/R1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| HK0904339-051 | 2009/03/09/1050/C1/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914052) | | | | | | | | |
| HK0904339-061 | 2009/03/09/1058/C3/B/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| HK0904339-071 | 2009/03/09/1040/F1/M/E/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914053) | | | | | | | | |
| HK0904339-081 | 2009/03/09/1011/R3/T/E/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |
| HK0904339-091 | 2009/03/09/0618/S2/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 9 | 8 | 18.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914054) | | | | | | | | |
| HK0904339-101 | 2009/03/09/0612/S3/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 4 | 0.0 |
| HK0904339-111 | 2009/03/09/0538/C4/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 6 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914055) | | | | | | | | |
| HK0904339-121 | 2009/03/09/0549/R1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 16 | 15 | 0.0 |
| HK0904339-131 | 2009/03/09/0500/R4/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 8 | 8 | 0.0 |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914056) | | | | | | | | |
| HK0904339-141 | 2009/03/09/0618/C2/T/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 4 | 5 | 24.3 |
| HK0904339-151 | 2009/03/09/0543/F1/B/F/ REPL.1 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 6 | 4 | 23.4 |



| Matrix: WATER | | | | Laboratory Duplicate (DUP) Report | | | | |
|--|-----------------------------------|------------------------------|------------|-----------------------------------|------|-----------------|------------------|---------|
| Laboratory sample ID | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) |
| EA/ED: Physical and Aggregate Properties (QC Lot: 914057) | | | | | | | | |
| HK0904339-161 | 2009/03/09/0639/R2/M/F/ REPL.2 | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 3 | 3 | 0.0 |

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 | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914049) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 100 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914050) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 95.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914051) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.5 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914052) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914053) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 96.0 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914054) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914055) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 104 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914056) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 101 | ---- | 85 | 115 | ---- | ---- | |
| EA/ED: Physical and Aggregate Properties (QCLot: 914057) | | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 102 | ---- | 85 | 115 | ---- | ---- | |

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

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

Annex D

Baseline Water Quality Monitoring Results

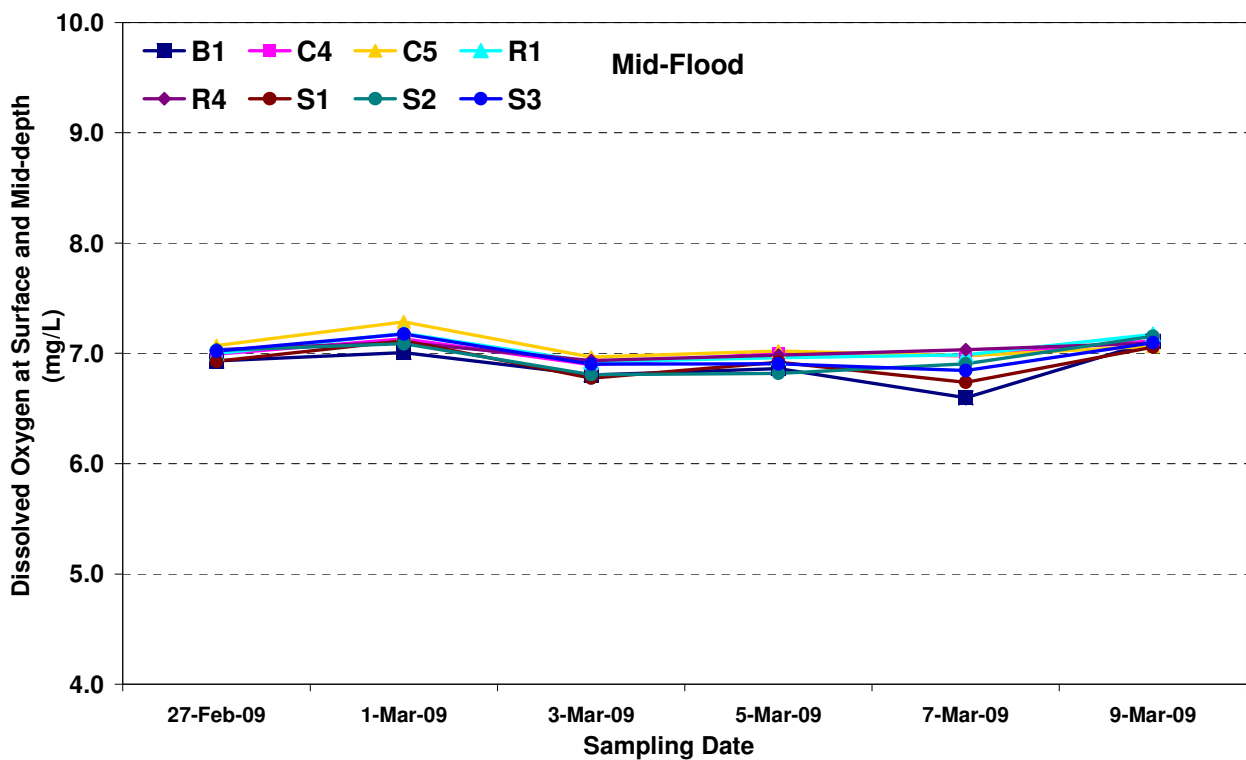
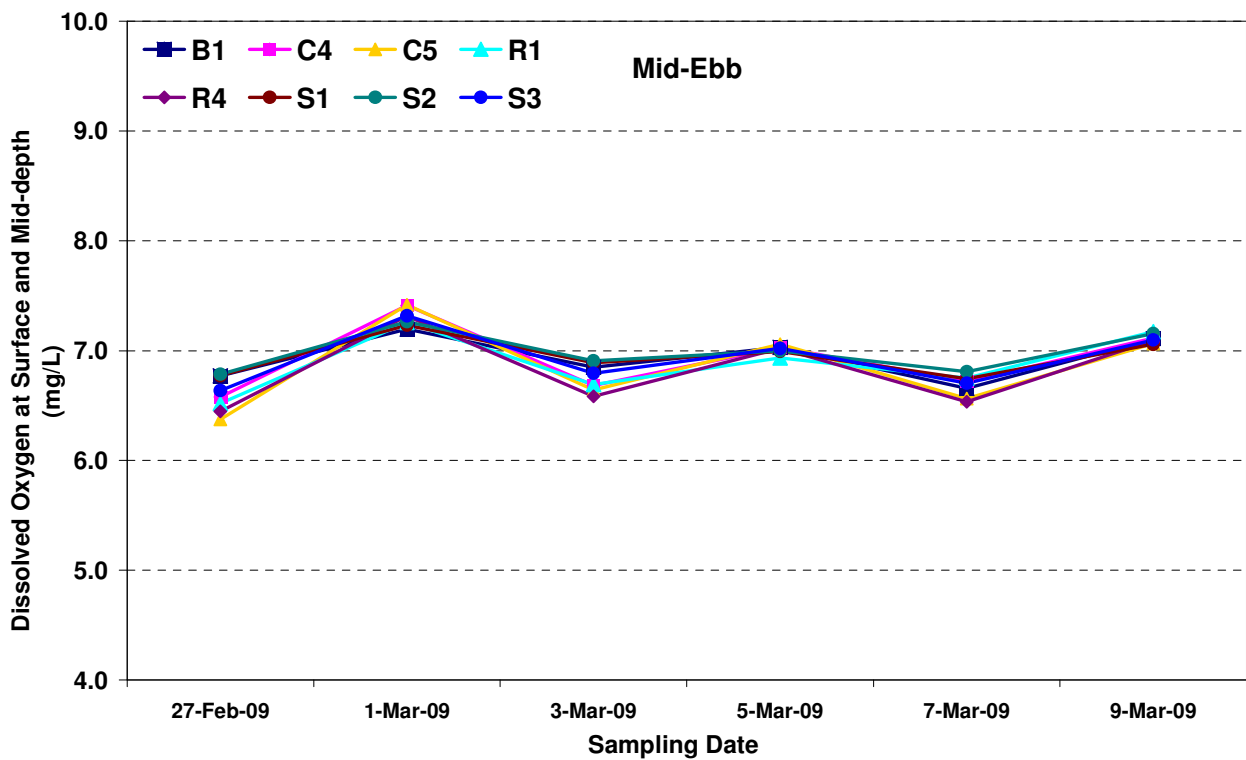


Figure D1 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured during the baseline monitoring period from 27 February to 9 March 2009 for Monitoring Zones A and E.



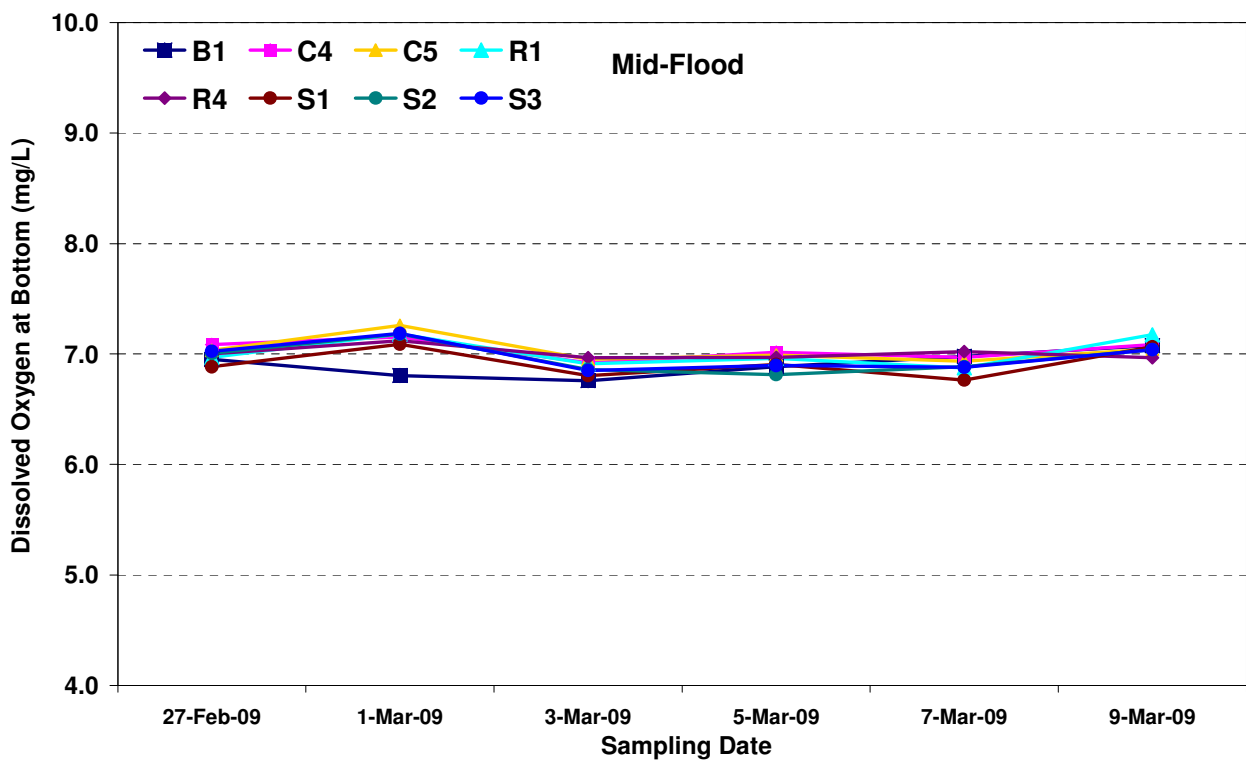
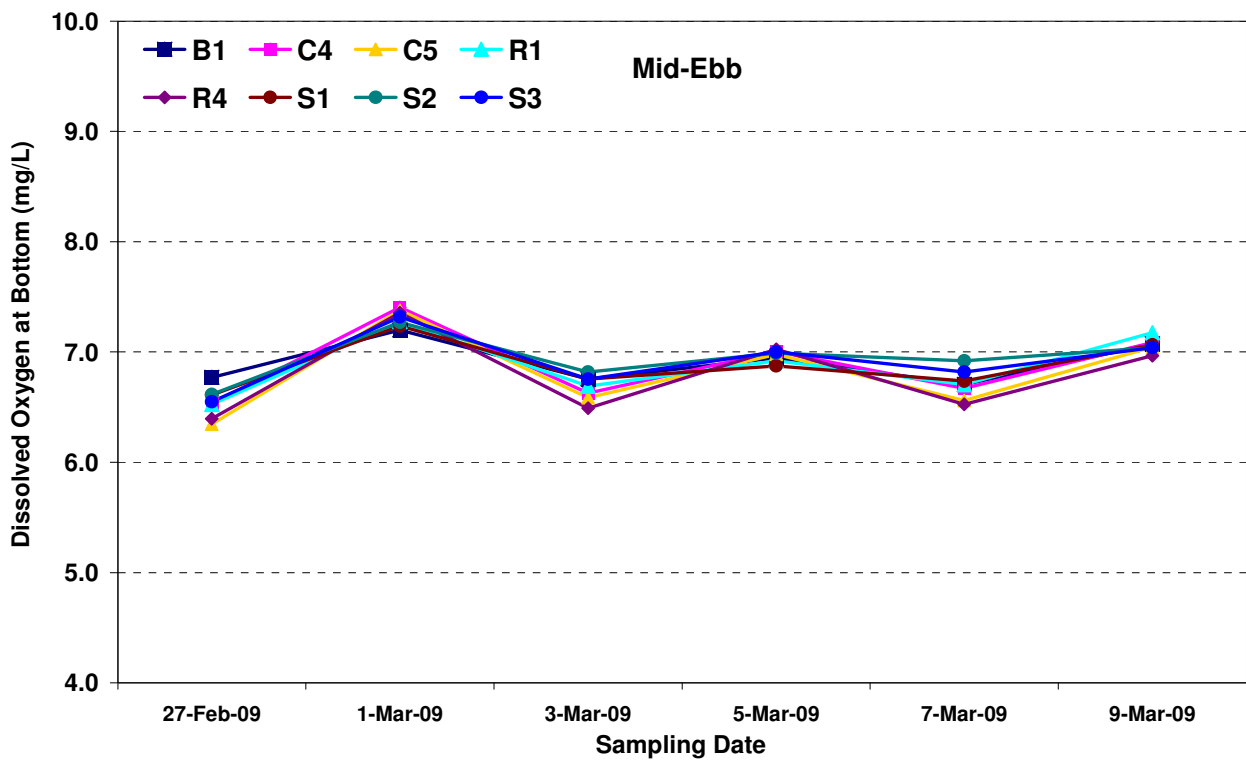


Figure D2 Dissolved Oxygen (mg/L) near the bottom of the water column measured during the baseline monitoring period from 27 February to 9 March 2009 for Monitoring Zones A and E.



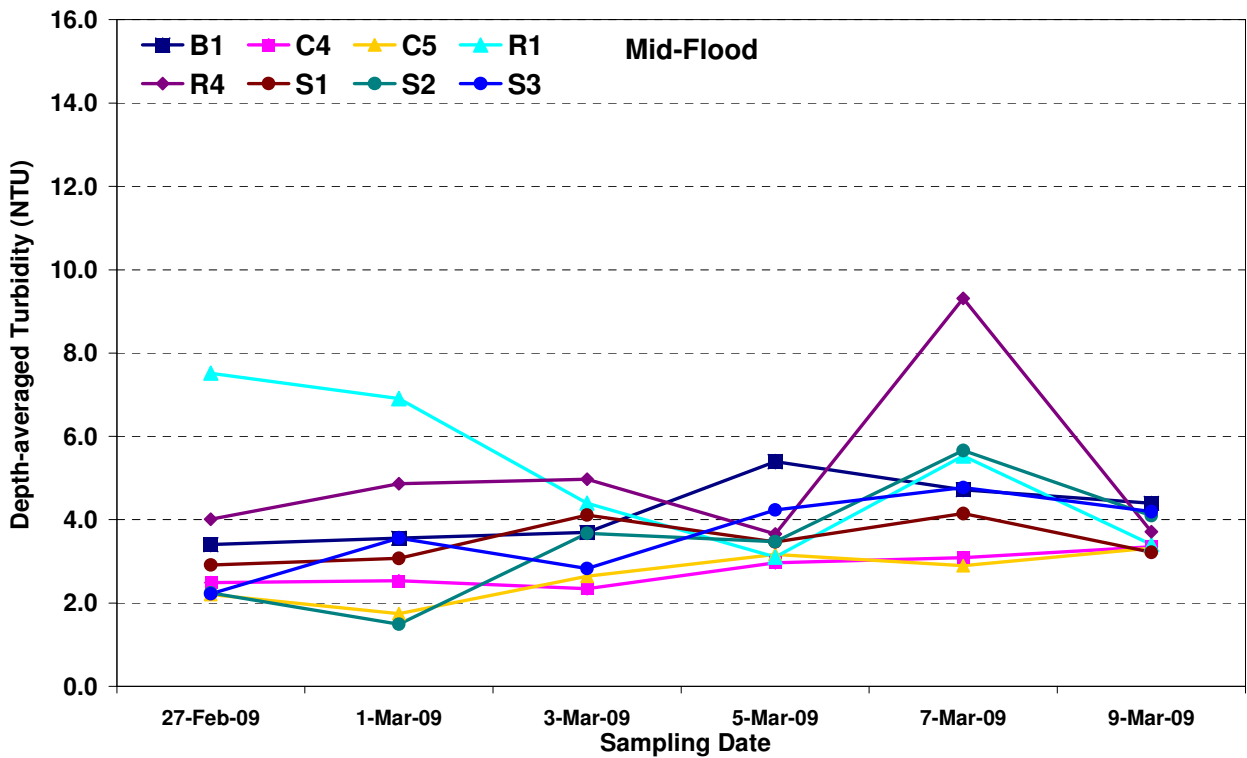
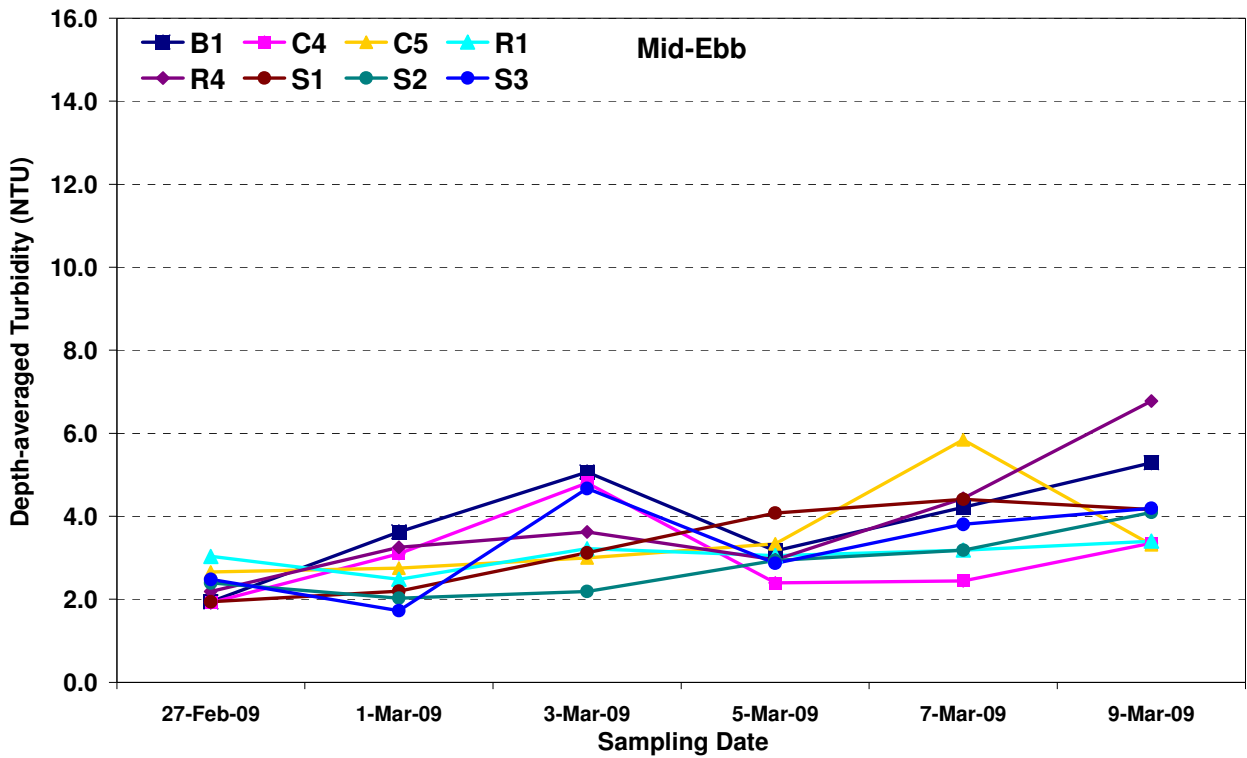


Figure D3 Depth-averaged turbidity (NTU) of water samples measured during the baseline monitoring period from 27 February to 9 March 2009 for Monitoring Zones A and E.



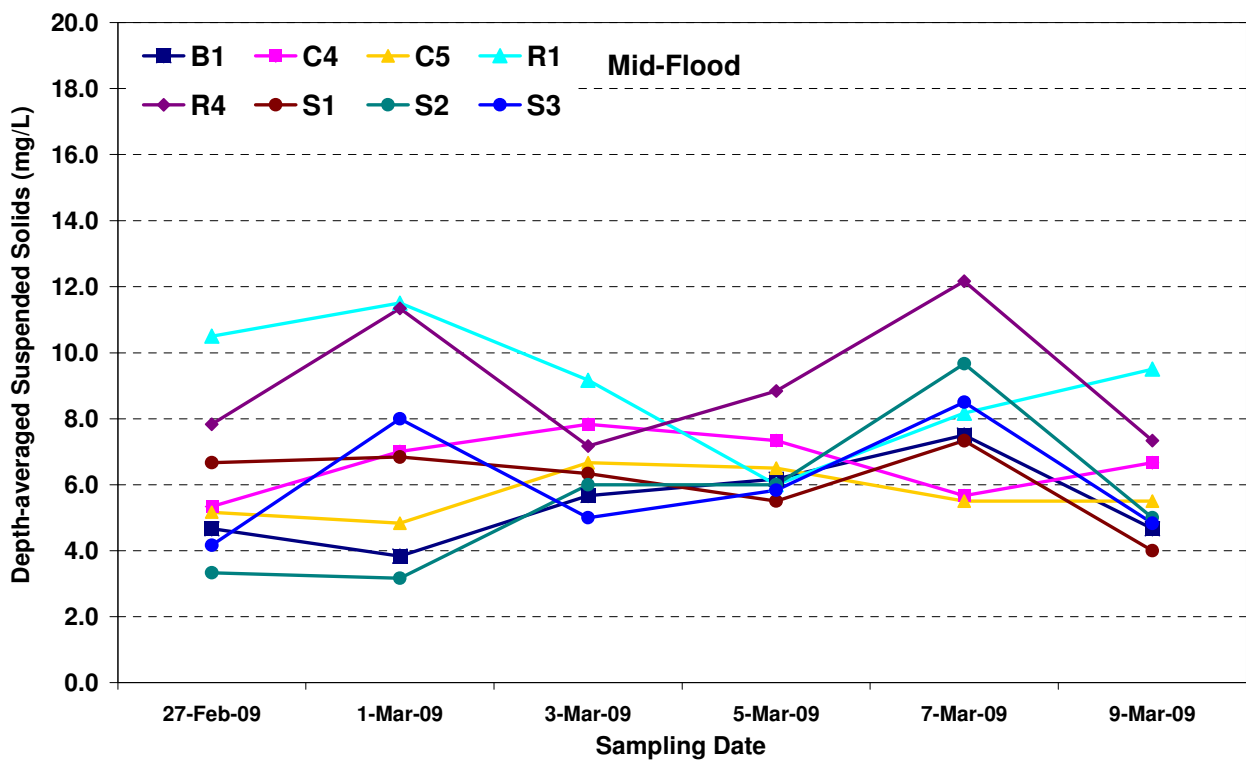
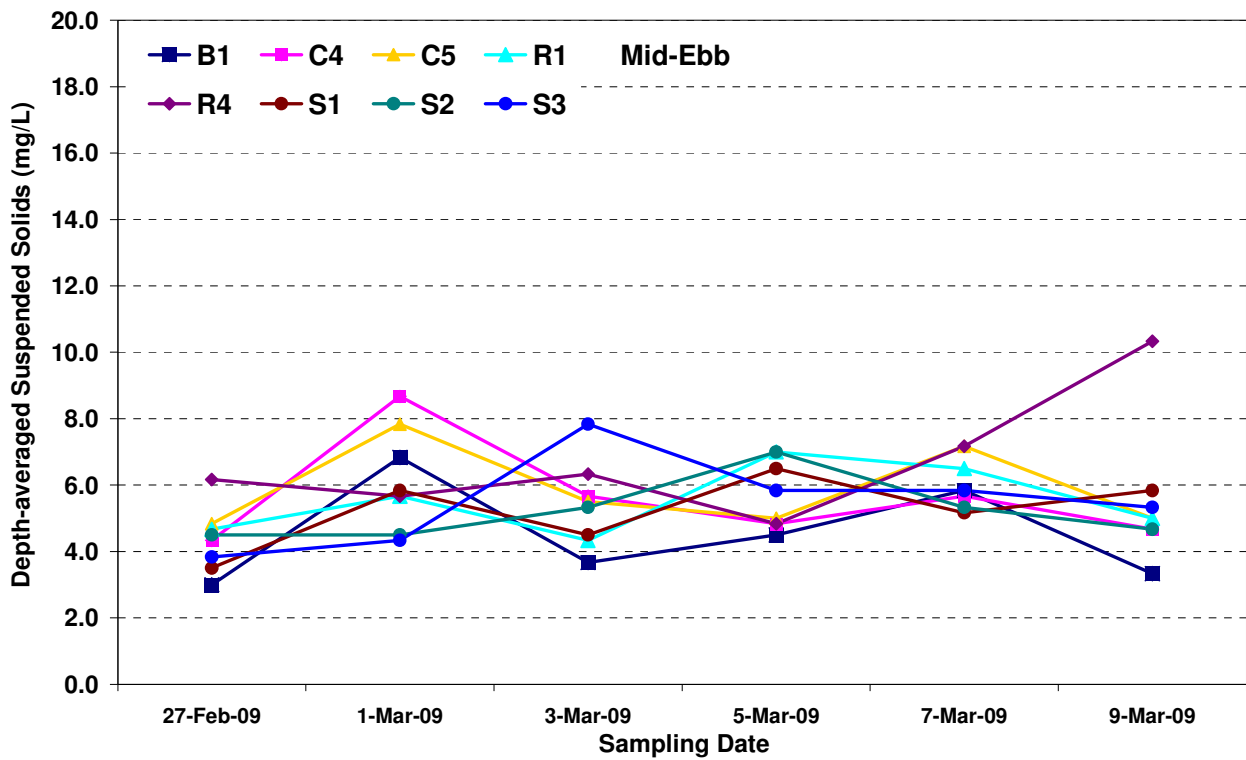


Figure D4 Depth-averaged Suspended Solids (mg/L) of water samples measured during the baseline monitoring period from 27 February to 9 March 2009 for Monitoring Zones A and E.



Annex D1 Baseline Water Quality Monitoring Results during mid-ebb tide for 27 February 2009

Deep Water Bay

| | |
|--------------------------|-----------|
| Sampling Date | 2/27/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 13:45-13:51 | | | | | | | | |
| Water Depth (m) | 22.40 | | | | | | | | |
| Monitoring Depth (m) | 1.05 | 11.05 | | | | 21.25 | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.3 | 20.3 | 20.1 | 20.0 | 19.7 | 19.7 | 20.01 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.41 | - | - |
| D.O. Saturation (%) | 87.7 | 88.7 | 86.5 | 87.3 | 86.6 | 87.1 | 87.34 | - | - |
| D.O. (mg/L) | 6.51 | 6.59 | 6.45 | 6.52 | 6.51 | 6.54 | 6.52 | 6.52 | 6.53 |
| Turbidity (NTU) | 2.73 | 2.83 | 3.34 | 3.24 | 2.93 | 3.13 | 3.03 | - | - |
| SS (mg/L) | 6.0 | 3.0 | 4.0 | 4.0 | 6.0 | 5.0 | 4.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 14:47-14:51 | | | | | | | | |
| Water Depth (m) | 6.20 | | | | | | | | |
| Monitoring Depth (m) | 1.05 | 3.00 | | | 5.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.5 | 21.0 | 20.4 | 20.2 | 20.2 | 20.2 | 20.42 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.4 | 33.4 | 33.4 | 33.45 | - | - |
| D.O. Saturation (%) | 91.4 | 92.7 | 91.2 | 91.2 | 90.9 | 90.9 | 91.39 | - | - |
| D.O. (mg/L) | 6.76 | 6.79 | 6.75 | 6.78 | 6.77 | 6.77 | 6.77 | 6.77 | 6.77 |
| Turbidity (NTU) | 1.92 | 2.02 | 2.02 | 1.92 | 1.92 | 1.82 | 1.94 | - | - |
| SS (mg/L) | 2.0 | 2.0 | 4.0 | 3.0 | 3.0 | 4.0 | 3.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 14:31-14:37 | | | | | | | | |
| Water Depth (m) | 8.00 | | | | | | | | |
| Monitoring Depth (m) | 1.05 | 4.20 | | | 7.20 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.9 | 21.0 | 20.3 | 20.5 | 20.0 | 19.9 | 20.44 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.5 | 33.5 | 33.44 | - | - |
| D.O. Saturation (%) | 92.1 | 92.9 | 90.9 | 91.6 | 88.5 | 88.5 | 90.75 | - | - |
| D.O. (mg/L) | 6.76 | 6.81 | 6.75 | 6.77 | 6.60 | 6.62 | 6.72 | 6.77 | 6.61 |
| Turbidity (NTU) | 1.52 | 1.62 | 1.62 | 1.82 | 2.33 | 2.73 | 1.94 | - | - |
| SS (mg/L) | 3.0 | 2.0 | 2.0 | 5.0 | 5.0 | 4.0 | 3.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 12:57-13:04 | | | | | | | | |
| Water Depth (m) | 25.00 | | | | | | | | |
| Monitoring Depth (m) | 1.05 | 12.45 | | | 23.95 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.2 | 19.8 | 19.8 | 19.6 | 19.6 | 19.84 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.42 | - | - |
| D.O. Saturation (%) | 86.4 | 87.0 | 85.4 | 86.4 | 84.4 | 85.6 | 85.86 | - | - |
| D.O. (mg/L) | 6.45 | 6.46 | 6.40 | 6.47 | 6.35 | 6.44 | 6.43 | 6.45 | 6.40 |
| Turbidity (NTU) | 1.52 | 2.02 | 2.22 | 1.72 | 3.34 | 2.33 | 2.19 | - | - |
| SS (mg/L) | 5.0 | 3.0 | 4.0 | 9.0 | 6.0 | 10.0 | 6.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 14:17-14:22 | | | | | | | | |
| Water Depth (m) | 10.10 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | 4.35 | | | 8.05 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.7 | 20.9 | 20.5 | 20.5 | 20.0 | 20.1 | 20.44 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.44 | - | - |
| D.O. Saturation (%) | 92.2 | 92.8 | 91.1 | 91.7 | 88.4 | 89.1 | 90.87 | - | - |
| D.O. (mg/L) | 6.79 | 6.82 | 6.74 | 6.79 | 6.59 | 6.64 | 6.73 | 6.79 | 6.62 |
| Turbidity (NTU) | 1.52 | 1.52 | 1.92 | 1.72 | 4.65 | 3.03 | 2.39 | - | - |
| SS (mg/L) | 4.0 | 3.0 | 3.0 | 4.0 | 7.0 | 6.0 | 4.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 13:33-13:38 | | | | | | | | |
| Water Depth (m) | 14.00 | | | | | | | | |
| Monitoring Depth (m) | 1.15 | 6.85 | | | 13.00 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 19.8 | 19.8 | 19.7 | 19.7 | 19.89 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.41 | - | - |
| D.O. Saturation (%) | 88.4 | 89.2 | 87.1 | 87.5 | 87.2 | 87.0 | 87.72 | - | - |
| D.O. (mg/L) | 6.59 | 6.65 | 6.52 | 6.55 | 6.54 | 6.52 | 6.56 | 6.58 | 6.53 |
| Turbidity (NTU) | 1.52 | 1.21 | 2.12 | 1.82 | 2.22 | 2.63 | 1.92 | - | - |
| SS (mg/L) | 3.0 | 3.0 | 6.0 | 5.0 | 4.0 | 5.0 | 4.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 14:01-14:11 | | | | | | | | |
| Water Depth (m) | 12.20 | | | | | | | | |
| Monitoring Depth (m) | 1.05 | 5.90 | | | 11.20 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.3 | 20.3 | 20.2 | 20.0 | 20.0 | 20.0 | 20.15 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.5 | 33.4 | 33.44 | - | - |
| D.O. Saturation (%) | 89.5 | 90.7 | 88.3 | 88.6 | 87.6 | 87.9 | 88.75 | - | - |
| D.O. (mg/L) | 6.64 | 6.73 | 6.57 | 6.61 | 6.54 | 6.56 | 6.61 | 6.64 | 6.55 |
| Turbidity (NTU) | 1.62 | 1.92 | 2.12 | 3.34 | 2.83 | 3.03 | 2.48 | - | - |
| SS (mg/L) | 2.0 | 3.0 | 4.0 | 3.0 | 4.0 | 7.0 | 3.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 13:18-13:24 | | | | | | | | |
| Water Depth (m) | 21.20 | | | | | | | | |
| Monitoring Depth (m) | 1.00 | 10.60 | | | 20.10 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 19.7 | 19.7 | 19.93 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.41 | - | - |
| D.O. Saturation (%) | 85.4 | 86.3 | 84.8 | 85.3 | 84.6 | 84.5 | 85.16 | - | - |
| D.O. (mg/L) | 6.36 | 6.43 | 6.33 | 6.37 | 6.35 | 6.34 | 6.36 | 6.37 | 6.35 |
| Turbidity (NTU) | 1.72 | 1.72 | 2.22 | 2.22 | 3.74 | 4.35 | 2.66 | - | - |
| SS (mg/L) | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.83 | - | - |
| Remarks | | | | | | | | | |

Annex D2 Baseline Water Quality Monitoring Results during mid-flood tide for 27 February 2009

Deep Water Bay

| | |
|--------------------------|-----------|
| Sampling Date | 2/27/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station | | Zone A: R1 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 08:01-08:09 | | | | | | | | |
| Water Depth (m) | | 22.50 | | | | | | | | |
| Monitoring Depth (m) | | 1.25 | | 12.00 | | 21.30 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.1 | 19.9 | 20.0 | 20.02 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.47 | - | - | |
| D.O. Saturation (%) | 93.8 | 94.6 | 93.0 | 93.9 | 92.6 | 94.0 | 93.68 | - | - | |
| D.O. (mg/L) | 6.99 | 7.06 | 6.94 | 7.00 | 6.92 | 7.02 | 6.99 | 7.00 | 6.97 | |
| Turbidity (NTU) | 3.94 | 4.25 | 9.40 | 8.09 | 9.81 | 9.60 | 7.52 | - | - | |
| SS (mg/L) | 4.0 | 7.0 | 12.0 | 13.0 | 12.0 | 15.0 | 10.50 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone A: B1 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 08:53-08:58 | | | | | | | | |
| Water Depth (m) | | 7.20 | | | | | | | | |
| Monitoring Depth (m) | | 1.15 | | 3.30 | | 6.05 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 19.9 | 19.9 | 19.99 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - | |
| D.O. Saturation (%) | 93.2 | 93.0 | 93.1 | 92.8 | 93.0 | 93.0 | 92.97 | - | - | |
| D.O. (mg/L) | 6.94 | 6.93 | 6.94 | 6.92 | 6.95 | 6.95 | 6.94 | 6.93 | 6.95 | |
| Turbidity (NTU) | 2.73 | 2.53 | 2.83 | 4.55 | 3.24 | 4.55 | 3.41 | - | - | |
| SS (mg/L) | 6.0 | 3.0 | 3.0 | 6.0 | 6.0 | 4.0 | 4.67 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone A: S1 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 08:43-08:47 | | | | | | | | |
| Water Depth (m) | | 9.20 | | | | | | | | |
| Monitoring Depth (m) | | 1.20 | | 4.35 | | 8.10 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.2 | 20.3 | 20.2 | 20.2 | 19.9 | 19.9 | 20.09 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.47 | - | - | |
| D.O. Saturation (%) | 93.5 | 93.3 | 92.8 | 93.3 | 91.8 | 92.4 | 92.82 | - | - | |
| D.O. (mg/L) | 6.95 | 6.93 | 6.90 | 6.93 | 6.86 | 6.91 | 6.91 | 6.93 | 6.89 | |
| Turbidity (NTU) | 2.93 | 2.63 | 2.93 | 2.63 | 3.64 | 2.73 | 2.92 | - | - | |
| SS (mg/L) | 3.0 | 5.0 | 6.0 | 4.0 | 11.0 | 11.0 | 6.67 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone E: R4 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 07:08-07:16 | | | | | | | | |
| Water Depth (m) | | 24.80 | | | | | | | | |
| Monitoring Depth (m) | | 0.90 | | 12.70 | | 23.75 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.4 | 20.4 | 20.3 | 20.3 | 20.2 | 20.2 | 20.30 | - | - | |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - | |
| D.O. Saturation (%) | 95.1 | 95.0 | 94.6 | 94.7 | 94.1 | 94.1 | 94.61 | - | - | |
| D.O. (mg/L) | 7.05 | 7.04 | 7.02 | 7.03 | 7.00 | 7.00 | 7.02 | 7.04 | 7.00 | |
| Turbidity (NTU) | 2.43 | 2.73 | 4.55 | 4.04 | 4.85 | 5.46 | 4.01 | - | - | |
| SS (mg/L) | 5.0 | 2.0 | 8.0 | 10.0 | 8.0 | 14.0 | 7.83 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone A: S2 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 08:30-08:36 | | | | | | | | |
| Water Depth (m) | | 10.20 | | | | | | | | |
| Monitoring Depth (m) | | 1.30 | | 5.00 | | 9.30 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 20.0 | 20.0 | 20.04 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - | |
| D.O. Saturation (%) | 94.3 | 94.7 | 93.8 | 94.2 | 93.8 | 94.0 | 94.12 | - | - | |
| D.O. (mg/L) | 7.03 | 7.06 | 7.00 | 7.02 | 7.00 | 7.01 | 7.02 | 7.03 | 7.01 | |
| Turbidity (NTU) | 2.12 | 1.92 | 2.43 | 2.53 | 2.33 | 2.12 | 2.24 | - | - | |
| SS (mg/L) | 3.0 | 2.0 | 3.0 | 6.0 | 3.0 | 3.0 | 3.33 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone E: C4 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 07:49-07:53 | | | | | | | | |
| Water Depth (m) | | 14.40 | | | | | | | | |
| Monitoring Depth (m) | | 1.35 | | 7.20 | | 13.40 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.3 | 20.3 | 20.1 | 20.2 | 19.9 | 20.0 | 20.12 | - | - | |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.5 | 33.5 | 33.44 | - | - | |
| D.O. Saturation (%) | 94.5 | 94.1 | 93.9 | 93.9 | 93.9 | 95.8 | 94.33 | - | - | |
| D.O. (mg/L) | 7.01 | 6.99 | 6.99 | 6.98 | 7.01 | 7.16 | 7.02 | 6.99 | 7.09 | |
| Turbidity (NTU) | 2.12 | 2.22 | 2.73 | 2.43 | 3.44 | 2.02 | 2.49 | - | - | |
| SS (mg/L) | 4.0 | 4.0 | 4.0 | 5.0 | 8.0 | 7.0 | 5.33 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone A: S3 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 08:19-08:23 | | | | | | | | |
| Water Depth (m) | | 12.20 | | | | | | | | |
| Monitoring Depth (m) | | 1.30 | | 6.05 | | 11.30 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 19.9 | 19.9 | 20.02 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - | |
| D.O. Saturation (%) | 94.7 | 94.1 | 93.9 | 94.0 | 93.8 | 94.2 | 94.12 | - | - | |
| D.O. (mg/L) | 7.05 | 7.01 | 7.00 | 7.02 | 7.01 | 7.04 | 7.02 | 7.02 | 7.03 | |
| Turbidity (NTU) | 1.82 | 1.82 | 2.33 | 3.03 | 2.22 | 2.12 | 2.22 | - | - | |
| SS (mg/L) | 4.0 | 2.0 | 3.0 | 4.0 | 9.0 | 3.0 | 4.17 | - | - | |
| Remarks | | | | | | | | | | |

| Station | | Zone E: C5 | | | | | | | | |
|------------------------|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|--|
| Time (hh:mm) | | 07:31-07:37 | | | | | | | | |
| Water Depth (m) | | 21.10 | | | | | | | | |
| Monitoring Depth (m) | | 1.05 | | 10.85 | | 19.90 | | | | |
| Tide | | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.90 | - | - | |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - | |
| D.O. Saturation (%) | 95.0 | 94.9 | 94.4 | 94.2 | 94.1 | 94.0 | 94.41 | - | - | |
| D.O. (mg/L) | 7.10 | 7.09 | 7.05 | 7.04 | 7.04 | 7.03 | 7.06 | 7.07 | 7.04 | |
| Turbidity (NTU) | 2.12 | 1.82 | 2.12 | 2.53 | 2.43 | 2.22 | 2.21 | - | - | |
| SS (mg/L) | 4.0 | 5.0 | 7.0 | 6.0 | 3.0 | 6.0 | 5.17 | - | - | |
| Remarks | | | | | | | | | | |

Annex D3 Baseline Water Quality Monitoring Results during mid-ebb tide for 1 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/1/2009 |
| Weather | Cloudy |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:01-15:06 | | | | | | | | | |
| Water Depth (m) 21.80 | | | | | | | | | |
| Monitoring Depth (m) 1.20 11.15 20.85 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.8 | 19.8 | 19.88 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.07 | - | - |
| D.O. Saturation (%) | 97.1 | 96.7 | 96.9 | 96.6 | 97.3 | 96.7 | 96.87 | - | - |
| D.O. (mg/L) | 7.27 | 7.25 | 7.26 | 7.25 | 7.30 | 7.25 | 7.26 | 7.26 | 7.28 |
| Turbidity (NTU) | 2.31 | 2.52 | 2.52 | 2.72 | 2.31 | 2.52 | 2.48 | - | - |
| SS (mg/L) | 5.0 | 3.0 | 9.0 | 6.0 | 6.0 | 5.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:41-15:46 | | | | | | | | | |
| Water Depth (m) 6.10 | | | | | | | | | |
| Monitoring Depth (m) 1.10 3.00 5.05 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.1 | 20.0 | 20.0 | 20.04 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.11 | - | - |
| D.O. Saturation (%) | 96.2 | 96.3 | 96.4 | 96.5 | 97.1 | 95.3 | 96.28 | - | - |
| D.O. (mg/L) | 7.18 | 7.18 | 7.21 | 7.21 | 7.27 | 7.13 | 7.20 | 7.20 | 7.20 |
| Turbidity (NTU) | 3.32 | 3.42 | 3.12 | 2.52 | 4.43 | 4.93 | 3.62 | - | - |
| SS (mg/L) | 7.0 | 5.0 | 5.0 | 6.0 | 10.0 | 8.0 | 6.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:32-15:36 | | | | | | | | | |
| Water Depth (m) 8.00 | | | | | | | | | |
| Monitoring Depth (m) 1.05 4.10 6.95 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.1 | 20.0 | 20.0 | 20.07 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.11 | - | - |
| D.O. Saturation (%) | 96.7 | 97.0 | 97.1 | 96.7 | 97.2 | 96.3 | 96.82 | - | - |
| D.O. (mg/L) | 7.22 | 7.23 | 7.26 | 7.22 | 7.27 | 7.20 | 7.23 | 7.23 | 7.24 |
| Turbidity (NTU) | 2.11 | 2.01 | 1.71 | 2.01 | 2.82 | 2.52 | 2.20 | - | - |
| SS (mg/L) | 4.0 | 7.0 | 9.0 | 4.0 | 5.0 | 6.0 | 5.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 14:17-14:23 | | | | | | | | | |
| Water Depth (m) 25.00 | | | | | | | | | |
| Monitoring Depth (m) 1.20 12.65 24.10 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.05 | - | - |
| Salinity (ppt) | 33.0 | 33.1 | 33.2 | 33.1 | 33.3 | 33.3 | 33.16 | - | - |
| D.O. Saturation (%) | 97.6 | 97.6 | 98.2 | 98.1 | 98.9 | 98.3 | 98.10 | - | - |
| D.O. (mg/L) | 7.29 | 7.30 | 7.34 | 7.33 | 7.38 | 7.33 | 7.33 | 7.32 | 7.36 |
| Turbidity (NTU) | 2.52 | 2.31 | 3.12 | 3.02 | 4.53 | 4.02 | 3.25 | - | - |
| SS (mg/L) | 4.0 | 5.0 | 7.0 | 5.0 | 6.0 | 7.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:23-15:27 | | | | | | | | | |
| Water Depth (m) 11.00 | | | | | | | | | |
| Monitoring Depth (m) 1.25 5.50 10.00 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.03 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.11 | - | - |
| D.O. Saturation (%) | 97.8 | 97.2 | 97.2 | 96.7 | 98.2 | 96.3 | 97.22 | - | - |
| D.O. (mg/L) | 7.30 | 7.26 | 7.27 | 7.23 | 7.34 | 7.20 | 7.27 | 7.27 | 7.27 |
| Turbidity (NTU) | 1.61 | 1.61 | 2.21 | 1.71 | 2.41 | 2.62 | 2.03 | - | - |
| SS (mg/L) | 3.0 | 5.0 | 4.0 | 4.0 | 5.0 | 6.0 | 4.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 14:48-14:54 | | | | | | | | | |
| Water Depth (m) 13.10 | | | | | | | | | |
| Monitoring Depth (m) 1.15 6.80 13.15 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.80 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.2 | 33.2 | 33.13 | - | - |
| D.O. Saturation (%) | 98.8 | 98.8 | 98.8 | 98.7 | 99.0 | 98.4 | 98.73 | - | - |
| D.O. (mg/L) | 7.41 | 7.41 | 7.42 | 7.41 | 7.43 | 7.38 | 7.41 | 7.41 | 7.41 |
| Turbidity (NTU) | 2.31 | 2.41 | 2.31 | 2.72 | 4.12 | 4.73 | 3.10 | - | - |
| SS (mg/L) | 5.0 | 6.0 | 11.0 | 14.0 | 8.0 | 8.0 | 8.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:15-15:19 | | | | | | | | | |
| Water Depth (m) 12.00 | | | | | | | | | |
| Monitoring Depth (m) 1.20 6.10 10.95 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 19.9 | 20.0 | 19.9 | 19.9 | 19.96 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.09 | - | - |
| D.O. Saturation (%) | 98.0 | 98.0 | 97.8 | 97.4 | 98.3 | 97.3 | 97.78 | - | - |
| D.O. (mg/L) | 7.33 | 7.33 | 7.32 | 7.29 | 7.36 | 7.28 | 7.32 | 7.32 | 7.32 |
| Turbidity (NTU) | 1.41 | 1.31 | 2.01 | 1.71 | 1.91 | 2.01 | 1.73 | - | - |
| SS (mg/L) | 5.0 | 3.0 | 3.0 | 4.0 | 5.0 | 6.0 | 4.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 14:34-14:40 | | | | | | | | | |
| Water Depth (m) 20.90 | | | | | | | | | |
| Monitoring Depth (m) 1.15 10.65 19.35 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.80 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.11 | - | - |
| D.O. Saturation (%) | 99.2 | 99.0 | 98.7 | 98.4 | 98.7 | 98.0 | 98.66 | - | - |
| D.O. (mg/L) | 7.44 | 7.43 | 7.41 | 7.39 | 7.41 | 7.35 | 7.41 | 7.42 | 7.38 |
| Turbidity (NTU) | 1.91 | 1.81 | 2.21 | 2.31 | 4.43 | 3.82 | 2.75 | - | - |
| SS (mg/L) | 4.0 | 6.0 | 12.0 | 4.0 | 11.0 | 10.0 | 7.83 | - | - |
| Remarks | | | | | | | | | |

Annex D4 Baseline Water Quality Monitoring Results during mid-flood tide for 1 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/1/2009 |
| Weather | Cloudy |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 08:46-08:51 | | | | | | | | |
| Water Depth (m) | 22.10 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | 10.90 | | | | 20.75 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.9 | 19.8 | 19.9 | 19.8 | 19.8 | 19.83 | - | - |
| Salinity (ppt) | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.03 | - | - |
| D.O. Saturation (%) | 96.1 | 95.6 | 95.9 | 95.4 | 96.0 | 95.3 | 95.67 | - | - |
| D.O. (mg/L) | 7.21 | 7.17 | 7.20 | 7.15 | 7.21 | 7.15 | 7.18 | 7.18 | 7.18 |
| Turbidity (NTU) | 3.12 | 2.92 | 7.65 | 4.02 | 10.76 | 12.98 | 6.91 | - | - |
| SS (mg/L) | 5.0 | 8.0 | 12.0 | 7.0 | 14.0 | 23.0 | 11.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 09:30-09:35 | | | | | | | | |
| Water Depth (m) | 8.10 | | | | | | | | |
| Monitoring Depth (m) | 1.20 | 4.15 | | | | 7.05 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 19.9 | 19.9 | 19.9 | 19.9 | 19.93 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.07 | - | - |
| D.O. Saturation (%) | 95.1 | 93.5 | 93.9 | 92.0 | 91.0 | 90.6 | 92.70 | - | - |
| D.O. (mg/L) | 7.11 | 7.00 | 7.03 | 6.89 | 6.82 | 6.79 | 6.94 | 7.01 | 6.81 |
| Turbidity (NTU) | 1.11 | 1.21 | 1.71 | 2.01 | 12.17 | 3.12 | 3.56 | - | - |
| SS (mg/L) | 1.0 | 3.0 | 5.0 | 2.0 | 6.0 | 6.0 | 3.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 09:20-09:24 | | | | | | | | |
| Water Depth (m) | 9.20 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | 4.50 | | | | 8.20 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 19.99 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.08 | - | - |
| D.O. Saturation (%) | 95.2 | 95.1 | 95.3 | 94.9 | 94.7 | 94.7 | 95.00 | - | - |
| D.O. (mg/L) | 7.12 | 7.11 | 7.13 | 7.10 | 7.09 | 7.09 | 7.11 | 7.12 | 7.09 |
| Turbidity (NTU) | 1.11 | 1.41 | 1.91 | 1.81 | 7.75 | 4.43 | 3.07 | - | - |
| SS (mg/L) | 5.0 | 8.0 | 12.0 | 7.0 | 14.0 | 23.0 | 11.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 08:01-08:08 | | | | | | | | |
| Water Depth (m) | 24.20 | | | | | | | | |
| Monitoring Depth (m) | 1.45 | 13.20 | | | | 23.25 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.1 | 20.0 | 19.9 | 19.8 | 19.98 | - | - |
| Salinity (ppt) | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.02 | - | - |
| D.O. Saturation (%) | 95.1 | 95.2 | 94.7 | 94.8 | 95.1 | 94.8 | 94.94 | - | - |
| D.O. (mg/L) | 7.11 | 7.12 | 7.08 | 7.09 | 7.13 | 7.11 | 7.11 | 7.10 | 7.12 |
| Turbidity (NTU) | 1.71 | 1.81 | 1.91 | 2.01 | 6.94 | 14.79 | 4.86 | - | - |
| SS (mg/L) | 3.0 | 3.0 | 3.0 | 6.0 | 25.0 | 28.0 | 11.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 09:10-09:14 | | | | | | | | |
| Water Depth (m) | 9.20 | | | | | | | | |
| Monitoring Depth (m) | 1.25 | 4.55 | | | | 8.15 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.0 | 20.0 | 19.9 | 19.9 | 19.98 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.08 | - | - |
| D.O. Saturation (%) | 94.9 | 94.4 | 95.3 | 94.4 | 96.7 | 94.9 | 95.13 | - | - |
| D.O. (mg/L) | 7.10 | 7.06 | 7.13 | 7.06 | 7.25 | 7.11 | 7.12 | 7.09 | 7.18 |
| Turbidity (NTU) | 1.41 | 1.61 | 1.31 | 1.71 | 1.51 | 1.41 | 1.49 | - | - |
| SS (mg/L) | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 3.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 08:35-08:39 | | | | | | | | |
| Water Depth (m) | 13.10 | | | | | | | | |
| Monitoring Depth (m) | 1.30 | 6.75 | | | | 12.10 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.91 | - | - |
| Salinity (ppt) | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.0 | 33.02 | - | - |
| D.O. Saturation (%) | 95.3 | 95.2 | 95.3 | 95.0 | 96.0 | 94.9 | 95.24 | - | - |
| D.O. (mg/L) | 7.14 | 7.13 | 7.14 | 7.12 | 7.20 | 7.11 | 7.14 | 7.13 | 7.16 |
| Turbidity (NTU) | 2.21 | 2.41 | 2.72 | 2.82 | 2.52 | 2.52 | 2.53 | - | - |
| SS (mg/L) | 7.0 | 6.0 | 5.0 | 8.0 | 10.0 | 6.0 | 7.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 09:01-09:06 | | | | | | | | |
| Water Depth (m) | 13.20 | | | | | | | | |
| Monitoring Depth (m) | 1.20 | 6.60 | | | | 12.10 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.8 | 19.8 | 19.89 | - | - |
| Salinity (ppt) | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.07 | - | - |
| D.O. Saturation (%) | 95.9 | 95.7 | 95.9 | 95.5 | 96.3 | 95.1 | 95.77 | - | - |
| D.O. (mg/L) | 7.19 | 7.17 | 7.19 | 7.16 | 7.23 | 7.14 | 7.18 | 7.18 | 7.19 |
| Turbidity (NTU) | 1.31 | 1.21 | 2.01 | 1.21 | 7.55 | 8.05 | 3.56 | - | - |
| SS (mg/L) | 3.0 | 4.0 | 6.0 | 6.0 | 13.0 | 16.0 | 8.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 08:21-08:26 | | | | | | | | |
| Water Depth (m) | 19.60 | | | | | | | | |
| Monitoring Depth (m) | 1.25 | 10.30 | | | | 19.05 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.7 | 19.7 | 19.7 | 19.7 | 19.7 | 19.7 | 19.72 | - | - |
| Salinity (ppt) | 33.0 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.05 | - | - |
| D.O. Saturation (%) | 97.1 | 97.0 | 96.9 | 96.7 | 96.7 | 96.5 | 96.79 | - | - |
| D.O. (mg/L) | 7.30 | 7.29 | 7.28 | 7.27 | 7.27 | 7.25 | 7.28 | 7.29 | 7.26 |
| Turbidity (NTU) | 1.41 | 1.41 | 1.61 | 1.81 | 1.71 | 2.52 | 1.75 | - | - |
| SS (mg/L) | 6.0 | 4.0 | 3.0 | 3.0 | 7.0 | 6.0 | 4.83 | - | - |
| Remarks | | | | | | | | | |

Annex D5 Baseline Water Quality Monitoring Results during mid-ebb tide for 3 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/3/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 16:25-16:31 | | | | | | | | | |
| Water Depth (m) 23.10 | | | | | | | | | |
| Monitoring Depth (m) 1.00 11.55 22.00 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 20.2 | 20.2 | 20.2 | 20.2 | 20.14 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.6 | 33.6 | 33.50 | - | - |
| D.O. Saturation (%) | 89.9 | 90.1 | 89.6 | 89.9 | 89.9 | 90.1 | 89.89 | - | - |
| D.O. (mg/L) | 6.70 | 6.71 | 6.67 | 6.69 | 6.68 | 6.70 | 6.69 | 6.69 | 6.69 |
| Turbidity (NTU) | 2.63 | 2.53 | 2.93 | 2.83 | 3.84 | 4.55 | 3.22 | - | - |
| SS (mg/L) | 6.0 | 3.0 | 2.0 | 7.0 | 3.0 | 5.0 | 4.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 17:11-17:15 | | | | | | | | | |
| Water Depth (m) 7.30 | | | | | | | | | |
| Monitoring Depth (m) 1.10 3.55 6.05 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 19.8 | 19.8 | 19.8 | 19.8 | 19.88 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.35 | - | - |
| D.O. Saturation (%) | 91.8 | 91.9 | 91.5 | 91.1 | 89.2 | 90.9 | 91.06 | - | - |
| D.O. (mg/L) | 6.85 | 6.86 | 6.85 | 6.83 | 6.69 | 6.82 | 6.82 | 6.85 | 6.76 |
| Turbidity (NTU) | 3.34 | 6.67 | 3.03 | 6.67 | 3.84 | 6.87 | 5.07 | - | - |
| SS (mg/L) | 5.0 | 4.0 | 4.0 | 2.0 | 3.0 | 4.0 | 3.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 17:01-17:06 | | | | | | | | | |
| Water Depth (m) 8.80 | | | | | | | | | |
| Monitoring Depth (m) 1.05 4.55 7.90 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.90 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.36 | - | - |
| D.O. Saturation (%) | 92.1 | 92.6 | 91.7 | 92.0 | 90.7 | 89.9 | 91.50 | - | - |
| D.O. (mg/L) | 6.89 | 6.93 | 6.86 | 6.88 | 6.78 | 6.73 | 6.85 | 6.89 | 6.76 |
| Turbidity (NTU) | 2.83 | 2.43 | 2.73 | 2.73 | 3.34 | 4.65 | 3.12 | - | - |
| SS (mg/L) | 6.0 | 2.0 | 3.0 | 6.0 | 6.0 | 4.0 | 4.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:34-15:41 | | | | | | | | | |
| Water Depth (m) 26.10 | | | | | | | | | |
| Monitoring Depth (m) 1.05 12.95 25.00 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.21 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.56 | - | - |
| D.O. Saturation (%) | 88.8 | 88.8 | 88.2 | 88.5 | 87.2 | 87.7 | 88.18 | - | - |
| D.O. (mg/L) | 6.60 | 6.61 | 6.55 | 6.57 | 6.47 | 6.51 | 6.55 | 6.58 | 6.49 |
| Turbidity (NTU) | 3.44 | 2.53 | 3.03 | 2.73 | 4.95 | 5.06 | 3.62 | - | - |
| SS (mg/L) | 6.0 | 4.0 | 3.0 | 9.0 | 8.0 | 8.0 | 6.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 16:49-16:55 | | | | | | | | | |
| Water Depth (m) 11.70 | | | | | | | | | |
| Monitoring Depth (m) 1.05 5.50 10.50 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.91 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.37 | - | - |
| D.O. Saturation (%) | 92.5 | 92.7 | 92.0 | 92.1 | 91.0 | 91.4 | 91.96 | - | - |
| D.O. (mg/L) | 6.92 | 6.94 | 6.88 | 6.89 | 6.80 | 6.84 | 6.88 | 6.91 | 6.82 |
| Turbidity (NTU) | 1.82 | 2.02 | 2.02 | 2.12 | 2.63 | 2.53 | 2.19 | - | - |
| SS (mg/L) | 6.0 | 5.0 | 2.0 | 8.0 | 7.0 | 4.0 | 5.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 16:12-16:17 | | | | | | | | | |
| Water Depth (m) 15.20 | | | | | | | | | |
| Monitoring Depth (m) 1.00 7.35 14.15 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.19 | - | - |
| Salinity (ppt) | 33.6 | 33.5 | 33.6 | 33.5 | 33.6 | 33.6 | 33.57 | - | - |
| D.O. Saturation (%) | 90.1 | 90.3 | 89.4 | 89.7 | 89.3 | 89.1 | 89.65 | - | - |
| D.O. (mg/L) | 6.70 | 6.71 | 6.65 | 6.67 | 6.63 | 6.62 | 6.66 | 6.68 | 6.63 |
| Turbidity (NTU) | 3.44 | 3.24 | 4.75 | 3.54 | 6.98 | 6.87 | 4.80 | - | - |
| SS (mg/L) | 3.0 | 5.0 | 7.0 | 4.0 | 7.0 | 8.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 16:41-16:45 | | | | | | | | | |
| Water Depth (m) 13.00 | | | | | | | | | |
| Monitoring Depth (m) 1.00 6.40 11.95 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 19.9 | 20.0 | 20.0 | 20.0 | 20.1 | 20.00 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.5 | 33.5 | 33.45 | - | - |
| D.O. Saturation (%) | 91.5 | 91.5 | 90.5 | 90.4 | 91.0 | 90.4 | 90.86 | - | - |
| D.O. (mg/L) | 6.84 | 6.84 | 6.75 | 6.75 | 6.78 | 6.73 | 6.78 | 6.80 | 6.76 |
| Turbidity (NTU) | 2.93 | 2.83 | 4.85 | 5.16 | 6.57 | 5.66 | 4.67 | - | - |
| SS (mg/L) | 3.0 | 6.0 | 12.0 | 6.0 | 8.0 | 12.0 | 7.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 15:55-16:01 | | | | | | | | | |
| Water Depth (m) 21.70 | | | | | | | | | |
| Monitoring Depth (m) 0.95 10.80 20.70 | | | | | | | | | |
| Tide Mid-Ebb | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.19 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.59 | - | - |
| D.O. Saturation (%) | 89.4 | 89.7 | 89.1 | 89.2 | 88.8 | 88.6 | 89.13 | - | - |
| D.O. (mg/L) | 6.65 | 6.67 | 6.62 | 6.63 | 6.59 | 6.58 | 6.62 | 6.64 | 6.59 |
| Turbidity (NTU) | 2.93 | 2.33 | 2.53 | 2.53 | 3.94 | 3.74 | 3.00 | - | - |
| SS (mg/L) | 8.0 | 4.0 | 4.0 | 7.0 | 5.0 | 5.0 | 5.50 | - | - |
| Remarks | | | | | | | | | |

Annex D6 Baseline Water Quality Monitoring Results during mid-flood tide for 3 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/3/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 09:25-09:32 | | | | | | | | | |
| Water Depth (m) 23.10 | | | | | | | | | |
| Monitoring Depth (m) 1.05 11.45 22.05 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.1 | 20.2 | 20.3 | 20.3 | 20.14 | - | - |
| Salinity (ppt) | 33.3 | 33.4 | 33.5 | 33.6 | 33.6 | 33.6 | 33.50 | - | - |
| D.O. Saturation (%) | 92.6 | 92.7 | 92.8 | 93.3 | 92.9 | 93.2 | 92.92 | - | - |
| D.O. (mg/L) | 6.92 | 6.92 | 6.91 | 6.94 | 6.90 | 6.92 | 6.92 | 6.92 | 6.91 |
| Turbidity (NTU) | 2.12 | 1.92 | 2.63 | 2.73 | 8.90 | 8.09 | 4.40 | - | - |
| SS (mg/L) | 3.0 | 10.0 | 7.0 | 3.0 | 16.0 | 16.0 | 9.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 10:29-10:34 | | | | | | | | | |
| Water Depth (m) 7.00 | | | | | | | | | |
| Monitoring Depth (m) 1.10 3.45 6.00 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.9 | 19.8 | 19.8 | 19.8 | 19.8 | 19.79 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.36 | - | - |
| D.O. Saturation (%) | 91.3 | 91.7 | 89.5 | 90.8 | 89.3 | 91.1 | 90.59 | - | - |
| D.O. (mg/L) | 6.84 | 6.86 | 6.71 | 6.81 | 6.70 | 6.82 | 6.79 | 6.81 | 6.76 |
| Turbidity (NTU) | 3.24 | 3.54 | 3.24 | 5.36 | 3.34 | 3.44 | 3.69 | - | - |
| SS (mg/L) | 4.0 | 8.0 | 5.0 | 5.0 | 5.0 | 7.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 10:08-10:18 | | | | | | | | | |
| Water Depth (m) 10.20 | | | | | | | | | |
| Monitoring Depth (m) 0.95 4.95 9.10 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.9 | 19.8 | 19.8 | 19.8 | 19.8 | 19.84 | - | - |
| Salinity (ppt) | 33.3 | 33.3 | 33.4 | 33.4 | 33.4 | 33.4 | 33.36 | - | - |
| D.O. Saturation (%) | 90.2 | 90.7 | 90.7 | 90.3 | 90.9 | 90.8 | 90.58 | - | - |
| D.O. (mg/L) | 6.75 | 6.79 | 6.80 | 6.76 | 6.81 | 6.80 | 6.79 | 6.78 | 6.81 |
| Turbidity (NTU) | 2.83 | 2.63 | 3.44 | 3.03 | 8.29 | 4.45 | 4.11 | - | - |
| SS (mg/L) | 4.0 | 2.0 | 4.0 | 5.0 | 14.0 | 9.0 | 6.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 08:29-08:43 | | | | | | | | | |
| Water Depth (m) 26.10 | | | | | | | | | |
| Monitoring Depth (m) 0.90 13.05 24.90 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.1 | 20.2 | 20.2 | 20.3 | 20.3 | 20.18 | - | - |
| Salinity (ppt) | 33.3 | 33.4 | 33.5 | 33.5 | 33.6 | 33.7 | 33.50 | - | - |
| D.O. Saturation (%) | 92.6 | 93.4 | 93.1 | 93.3 | 93.9 | 93.8 | 93.38 | - | - |
| D.O. (mg/L) | 6.92 | 6.96 | 6.92 | 6.94 | 6.97 | 6.96 | 6.95 | 6.94 | 6.97 |
| Turbidity (NTU) | 1.82 | 2.22 | 2.83 | 2.63 | 7.99 | 12.33 | 4.97 | - | - |
| SS (mg/L) | 4.0 | 4.0 | 6.0 | 3.0 | 10.0 | 16.0 | 7.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 09:54-10:02 | | | | | | | | | |
| Water Depth (m) 12.10 | | | | | | | | | |
| Monitoring Depth (m) 1.00 6.00 11.15 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.8 | 19.9 | 19.8 | 19.8 | 19.8 | 19.9 | 19.84 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.37 | - | - |
| D.O. Saturation (%) | 91.2 | 91.7 | 90.2 | 90.3 | 91.0 | 92.2 | 91.13 | - | - |
| D.O. (mg/L) | 6.83 | 6.87 | 6.76 | 6.77 | 6.82 | 6.90 | 6.83 | 6.81 | 6.86 |
| Turbidity (NTU) | 2.33 | 2.12 | 2.53 | 2.83 | 6.27 | 5.96 | 3.67 | - | - |
| SS (mg/L) | 3.0 | 8.0 | 5.0 | 2.0 | 9.0 | 9.0 | 6.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 09:14-09:19 | | | | | | | | | |
| Water Depth (m) 14.20 | | | | | | | | | |
| Monitoring Depth (m) 1.10 6.85 13.05 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.0 | 20.0 | 20.2 | 20.2 | 20.06 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.6 | 33.5 | 33.44 | - | - |
| D.O. Saturation (%) | 92.6 | 92.5 | 92.3 | 92.3 | 93.4 | 92.8 | 92.63 | - | - |
| D.O. (mg/L) | 6.91 | 6.91 | 6.88 | 6.89 | 6.94 | 6.90 | 6.91 | 6.90 | 6.92 |
| Turbidity (NTU) | 1.82 | 2.02 | 2.12 | 2.22 | 3.03 | 2.83 | 2.34 | - | - |
| SS (mg/L) | 3.0 | 4.0 | 6.0 | 6.0 | 13.0 | 15.0 | 7.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 09:42-09:49 | | | | | | | | | |
| Water Depth (m) 12.90 | | | | | | | | | |
| Monitoring Depth (m) 1.10 6.55 11.95 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.8 | 19.8 | 19.8 | 19.8 | 19.85 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 | 33.37 | - | - |
| D.O. Saturation (%) | 92.7 | 92.8 | 91.6 | 91.5 | 91.6 | 91.2 | 91.92 | - | - |
| D.O. (mg/L) | 6.94 | 6.94 | 6.87 | 6.86 | 6.87 | 6.83 | 6.89 | 6.90 | 6.85 |
| Turbidity (NTU) | 1.82 | 1.72 | 2.73 | 2.63 | 4.04 | 4.04 | 2.83 | - | - |
| SS (mg/L) | 2.0 | 2.0 | 5.0 | 7.0 | 6.0 | 8.0 | 5.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) 08:57-09:04 | | | | | | | | | |
| Water Depth (m) 21.70 | | | | | | | | | |
| Monitoring Depth (m) 1.15 10.45 20.10 | | | | | | | | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.1 | 20.1 | 20.2 | 20.2 | 20.2 | 20.2 | 20.15 | - | - |
| Salinity (ppt) | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.58 | - | - |
| D.O. Saturation (%) | 93.8 | 93.6 | 93.7 | 93.6 | 93.8 | 93.3 | 93.60 | - | - |
| D.O. (mg/L) | 6.99 | 6.96 | 6.96 | 6.96 | 6.97 | 6.93 | 6.96 | 6.97 | 6.95 |
| Turbidity (NTU) | 2.53 | 2.22 | 2.83 | 2.53 | 2.93 | 2.83 | 2.65 | - | - |
| SS (mg/L) | 3.0 | 7.0 | 8.0 | 7.0 | 6.0 | 9.0 | 6.67 | - | - |
| Remarks | | | | | | | | | |

Annex D7 Baseline Water Quality Monitoring Results during mid-ebb tide for 5 March 2009

Deep Water Bay

| | |
|--------------------------|----------------|
| Sampling Date | 3/5/2009 |
| Weather | Rainy & Cloudy |
| Ambient Temperature (°C) | |

| Station | | Zone A: R1 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 19:34-19:41 | | | | | | | | | | |
| Water Depth (m) | 22.20 | | | | | | | | | | |
| Monitoring Depth (m) | 1.20 | | | 11.25 | | | 21.20 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 19.9 | 19.9 | 20.00 | - | - | | |
| Salinity (ppt) | 32.9 | 32.8 | 33.5 | 33.5 | 33.5 | 33.5 | 33.31 | - | - | | |
| D.O. Saturation (%) | 92.0 | 92.6 | 93.4 | 93.3 | 92.7 | 92.6 | 92.74 | - | - | | |
| D.O. (mg/L) | 6.88 | 6.92 | 6.97 | 6.96 | 6.92 | 6.92 | 6.93 | 6.93 | 6.92 | | |
| Turbidity (NTU) | 2.43 | 2.02 | 2.53 | 2.73 | 4.25 | 4.35 | 3.05 | - | - | | |
| SS (mg/L) | 8.0 | 6.0 | 5.0 | 7.0 | 10.0 | 6.0 | 7.00 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone A: B1 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 20:23-20:29 | | | | | | | | | | |
| Water Depth (m) | 6.90 | | | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 3.45 | | | 5.80 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.2 | 20.2 | 20.2 | 20.1 | 19.9 | 19.9 | 20.07 | - | - | | |
| Salinity (ppt) | 33.2 | 33.4 | 33.3 | 33.4 | 33.5 | 33.5 | 33.37 | - | - | | |
| D.O. Saturation (%) | 94.7 | 94.5 | 94.2 | 94.3 | 92.5 | 93.2 | 93.89 | - | - | | |
| D.O. (mg/L) | 7.05 | 7.04 | 7.01 | 7.02 | 6.92 | 6.97 | 7.00 | 7.03 | 6.95 | | |
| Turbidity (NTU) | 2.73 | 2.53 | 2.83 | 2.83 | 4.65 | 3.44 | 3.17 | - | - | | |
| SS (mg/L) | 4.0 | 2.0 | 5.0 | 6.0 | 5.0 | 5.0 | 4.50 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone A: S1 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 20:13-20:18 | | | | | | | | | | |
| Water Depth (m) | 8.10 | | | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 3.85 | | | 7.00 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.0 | 20.0 | 19.9 | 20.0 | 19.9 | 19.9 | 19.94 | - | - | | |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.4 | 33.5 | 33.5 | 33.44 | - | - | | |
| D.O. Saturation (%) | 94.3 | 93.7 | 93.5 | 93.1 | 91.8 | 92.0 | 93.08 | - | - | | |
| D.O. (mg/L) | 7.04 | 6.99 | 6.99 | 6.95 | 6.87 | 6.88 | 6.95 | 6.99 | 6.88 | | |
| Turbidity (NTU) | 2.83 | 3.34 | 3.13 | 3.64 | 5.56 | 5.96 | 4.08 | - | - | | |
| SS (mg/L) | 8.0 | 2.0 | 4.0 | 14.0 | 5.0 | 6.0 | 6.50 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone E: R4 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 18:44-18:50 | | | | | | | | | | |
| Water Depth (m) | 24.70 | | | | | | | | | | |
| Monitoring Depth (m) | 1.20 | | | 12.40 | | | 23.70 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.0 | 20.0 | 19.8 | 19.8 | 19.6 | 19.6 | 19.81 | - | - | | |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.5 | 33.5 | 33.47 | - | - | | |
| D.O. Saturation (%) | 94.0 | 94.0 | 93.9 | 93.7 | 93.4 | 93.5 | 93.75 | - | - | | |
| D.O. (mg/L) | 7.02 | 7.02 | 7.03 | 7.01 | 7.03 | 7.02 | 7.02 | 7.02 | 7.03 | | |
| Turbidity (NTU) | 2.33 | 3.13 | 2.83 | 2.63 | 3.44 | 3.34 | 2.95 | - | - | | |
| SS (mg/L) | 2.0 | 5.0 | 7.0 | 3.0 | 4.0 | 8.0 | 4.83 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone A: S2 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 20:02-20:07 | | | | | | | | | | |
| Water Depth (m) | 9.30 | | | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 4.20 | | | 8.05 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.2 | 20.2 | 19.9 | 19.9 | 19.9 | 19.9 | 19.99 | - | - | | |
| Salinity (ppt) | 33.4 | 33.5 | 33.5 | 33.5 | 33.6 | 33.5 | 33.47 | - | - | | |
| D.O. Saturation (%) | 94.7 | 94.9 | 92.7 | 92.8 | 93.9 | 93.2 | 93.71 | - | - | | |
| D.O. (mg/L) | 7.05 | 7.06 | 6.94 | 6.95 | 7.02 | 6.96 | 7.00 | 7.00 | 6.99 | | |
| Turbidity (NTU) | 2.12 | 1.92 | 3.44 | 3.34 | 3.44 | 3.34 | 2.93 | - | - | | |
| SS (mg/L) | 2.0 | 8.0 | 6.0 | 6.0 | 8.0 | 12.0 | 7.00 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone E: C4 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 19:20-19:26 | | | | | | | | | | |
| Water Depth (m) | 13.80 | | | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 7.15 | | | 12.75 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.1 | 20.1 | 20.0 | 20.0 | 19.9 | 19.9 | 19.99 | - | - | | |
| Salinity (ppt) | 33.3 | 33.3 | 33.5 | 33.5 | 33.5 | 33.5 | 33.43 | - | - | | |
| D.O. Saturation (%) | 94.4 | 94.6 | 94.0 | 94.0 | 93.7 | 93.6 | 94.05 | - | - | | |
| D.O. (mg/L) | 7.04 | 7.05 | 7.01 | 7.02 | 7.01 | 7.00 | 7.02 | 7.03 | 7.01 | | |
| Turbidity (NTU) | 1.92 | 1.82 | 2.12 | 2.33 | 2.83 | 3.34 | 2.39 | - | - | | |
| SS (mg/L) | 5.0 | 3.0 | 2.0 | 6.0 | 9.0 | 4.0 | 4.83 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone A: S3 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 19:51-19:55 | | | | | | | | | | |
| Water Depth (m) | 12.40 | | | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 6.10 | | | 11.25 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.2 | 20.2 | 19.9 | 19.9 | 19.9 | 19.9 | 19.99 | - | - | | |
| Salinity (ppt) | 32.9 | 32.8 | 33.5 | 33.5 | 33.6 | 33.6 | 33.31 | - | - | | |
| D.O. Saturation (%) | 94.1 | 93.8 | 94.0 | 93.9 | 93.7 | 93.7 | 93.86 | - | - | | |
| D.O. (mg/L) | 7.03 | 7.01 | 7.02 | 7.02 | 7.00 | 7.00 | 7.01 | 7.02 | 7.00 | | |
| Turbidity (NTU) | 2.12 | 2.33 | 2.63 | 2.73 | 3.64 | 3.74 | 2.87 | - | - | | |
| SS (mg/L) | 4.0 | 6.0 | 6.0 | 4.0 | 5.0 | 10.0 | 5.83 | - | - | | |
| Remarks | | | | | | | | | | | |

| Station | | Zone E: C5 | | | | | | | | | |
|------------------------|-------------|------------|---------|---------|---------|---------|----------------|------------------|--------|--|--|
| Time (hh:mm) | 19:04-19:11 | | | | | | | | | | |
| Water Depth (m) | 21.00 | | | | | | | | | | |
| Monitoring Depth (m) | 1.25 | | | 10.70 | | | 20.05 | | | | |
| Tide | Mid-Ebb | | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom | | |
| Water Temperature (°C) | 20.1 | 20.1 | 19.9 | 19.9 | 19.8 | 19.8 | 19.94 | - | - | | |
| Salinity (ppt) | 33.1 | 33.1 | 33.5 | 33.5 | 33.5 | 33.5 | 33.38 | - | - | | |
| D.O. Saturation (%) | 95.1 | 95.3 | 93.8 | 93.9 | 93.2 | 93.2 | 94.08 | - | - | | |
| D.O. (mg/L) | 7.10 | 7.11 | 7.01 | 7.02 | 6.98 | 6.98 | 7.03 | 7.06 | 6.98 | | |
| Turbidity (NTU) | 2.33 | 2.02 | 2.83 | 2.53 | 5.16 | 5.16 | 3.34 | - | - | | |
| SS (mg/L) | 3.0 | 3.0 | 3.0 | 6.0 | 9.0 | 6.0 | 5.00 | - | - | | |
| Remarks | | | | | | | | | | | |

Annex D8 Baseline Water Quality Monitoring Results during mid-flood tide for 5 March 2009

Deep Water Bay

| | |
|--------------------------|----------------|
| Sampling Date | 3/5/2009 |
| Weather | Rainy & Cloudy |
| Ambient Temperature (°C) | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone A: R1 | | | | | | | | |
| Time (hh:mm) | 07:32-07:40 | | | | | | | | |
| Water Depth (m) | 22.30 | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 11.35 | | | 21.10 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 19.9 | 19.9 | 19.9 | 19.9 | 19.92 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.57 | - | - |
| D.O. Saturation (%) | 93.1 | 93.0 | 93.4 | 93.3 | 93.1 | 93.1 | 93.17 | - | - |
| D.O. (mg/L) | 6.95 | 6.94 | 6.98 | 6.97 | 6.96 | 6.96 | 6.96 | 6.96 | 6.96 |
| Turbidity (NTU) | 2.73 | 2.73 | 2.83 | 2.53 | 3.74 | 4.04 | 3.10 | - | - |
| SS (mg/L) | 6.0 | 3.0 | 4.0 | 7.0 | 9.0 | 7.0 | 6.00 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone A: B1 | | | | | | | | |
| Time (hh:mm) | 08:25-08:32 | | | | | | | | |
| Water Depth (m) | 7.20 | | | | | | | | |
| Monitoring Depth (m) | 1.20 | | | 3.50 | | | 6.15 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.8 | 19.9 | 19.8 | 19.8 | 19.9 | 19.84 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.49 | - | - |
| D.O. Saturation (%) | 92.1 | 91.4 | 92.0 | 91.3 | 92.1 | 92.0 | 91.80 | - | - |
| D.O. (mg/L) | 6.89 | 6.84 | 6.88 | 6.84 | 6.89 | 6.88 | 6.87 | 6.86 | 6.89 |
| Turbidity (NTU) | 2.83 | 6.98 | 3.74 | 6.98 | 4.95 | 6.87 | 5.39 | - | - |
| SS (mg/L) | 6.0 | 3.0 | 3.0 | 6.0 | 11.0 | 8.0 | 6.17 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone A: S1 | | | | | | | | |
| Time (hh:mm) | 08:15-08:19 | | | | | | | | |
| Water Depth (m) | 9.20 | | | | | | | | |
| Monitoring Depth (m) | 1.30 | | | 4.25 | | | 8.20 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.8 | 19.8 | 19.85 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.49 | - | - |
| D.O. Saturation (%) | 92.7 | 92.6 | 92.5 | 92.3 | 92.5 | 92.0 | 92.41 | - | - |
| D.O. (mg/L) | 6.93 | 6.92 | 6.92 | 6.91 | 6.92 | 6.89 | 6.92 | 6.92 | 6.91 |
| Turbidity (NTU) | 3.03 | 3.13 | 3.13 | 3.34 | 3.84 | 4.35 | 3.47 | - | - |
| SS (mg/L) | 4.0 | 7.0 | 5.0 | 3.0 | 5.0 | 9.0 | 5.50 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone E: R4 | | | | | | | | |
| Time (hh:mm) | 06:40-06:47 | | | | | | | | |
| Water Depth (m) | 24.80 | | | | | | | | |
| Monitoring Depth (m) | 1.20 | | | 12.55 | | | 23.75 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 20.0 | 20.0 | 20.0 | 20.0 | 19.9 | 19.9 | 19.97 | - | - |
| Salinity (ppt) | 33.6 | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.58 | - | - |
| D.O. Saturation (%) | 93.8 | 93.5 | 93.7 | 93.6 | 93.4 | 93.3 | 93.54 | - | - |
| D.O. (mg/L) | 7.00 | 6.97 | 6.99 | 6.98 | 6.97 | 6.97 | 6.98 | 6.99 | 6.97 |
| Turbidity (NTU) | 2.53 | 2.93 | 2.83 | 2.43 | 6.67 | 4.55 | 3.66 | - | - |
| SS (mg/L) | 6.0 | 5.0 | 3.0 | 11.0 | 16.0 | 12.0 | 8.83 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone A: S2 | | | | | | | | |
| Time (hh:mm) | 08:02-08:07 | | | | | | | | |
| Water Depth (m) | 10.10 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | | | 4.95 | | | 9.10 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.7 | 19.7 | 19.7 | 19.7 | 19.8 | 19.7 | 19.74 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.5 | 33.4 | 33.44 | - | - |
| D.O. Saturation (%) | 91.0 | 91.2 | 90.7 | 90.8 | 91.4 | 90.5 | 90.93 | - | - |
| D.O. (mg/L) | 6.83 | 6.84 | 6.80 | 6.81 | 6.84 | 6.79 | 6.82 | 6.82 | 6.82 |
| Turbidity (NTU) | 3.13 | 3.44 | 3.64 | 3.54 | 3.24 | 3.84 | 3.47 | - | - |
| SS (mg/L) | 9.0 | 4.0 | 4.0 | 8.0 | 7.0 | 4.0 | 6.00 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone E: C4 | | | | | | | | |
| Time (hh:mm) | 07:20-07:24 | | | | | | | | |
| Water Depth (m) | 14.10 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | | | 6.95 | | | 13.00 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.8 | 19.8 | 19.89 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.59 | - | - |
| D.O. Saturation (%) | 93.8 | 93.6 | 93.7 | 93.7 | 93.8 | 93.7 | 93.73 | - | - |
| D.O. (mg/L) | 7.01 | 6.99 | 7.01 | 7.00 | 7.02 | 7.01 | 7.01 | 7.00 | 7.02 |
| Turbidity (NTU) | 2.63 | 2.63 | 2.93 | 2.83 | 3.03 | 3.74 | 2.97 | - | - |
| SS (mg/L) | 9.0 | 8.0 | 4.0 | 4.0 | 7.0 | 12.0 | 7.33 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone A: S3 | | | | | | | | |
| Time (hh:mm) | 07:52-07:57 | | | | | | | | |
| Water Depth (m) | 12.20 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | | | 5.85 | | | 11.20 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.90 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.51 | - | - |
| D.O. Saturation (%) | 92.5 | 92.6 | 92.2 | 92.3 | 92.3 | 92.2 | 92.34 | - | - |
| D.O. (mg/L) | 6.91 | 6.92 | 6.89 | 6.90 | 6.90 | 6.89 | 6.90 | 6.91 | 6.90 |
| Turbidity (NTU) | 3.64 | 3.74 | 4.35 | 4.15 | 3.94 | 5.56 | 4.23 | - | - |
| SS (mg/L) | 4.0 | 6.0 | 5.0 | 8.0 | 8.0 | 4.0 | 5.83 | - | - |
| Remarks | | | | | | | | | |

| | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | Zone E: C5 | | | | | | | | |
| Time (hh:mm) | 07:02-07:09 | | | | | | | | |
| Water Depth (m) | 21.00 | | | | | | | | |
| Monitoring Depth (m) | 1.15 | | | 10.30 | | | 20.00 | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.9 | 19.9 | 19.8 | 19.9 | 19.8 | 19.8 | 19.85 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.59 | - | - |
| D.O. Saturation (%) | 94.2 | 94.0 | 93.8 | 93.6 | 93.4 | 93.4 | 93.74 | - | - |
| D.O. (mg/L) | 7.04 | 7.03 | 7.01 | 7.00 | 6.99 | 6.99 | 7.01 | 7.02 | 6.99 |
| Turbidity (NTU) | 2.83 | 2.93 | 3.24 | 3.03 | 3.34 | 3.64 | 3.17 | - | - |
| SS (mg/L) | 4.0 | 8.0 | 8.0 | 5.0 | 6.0 | 8.0 | 6.50 | - | - |
| Remarks | | | | | | | | | |

Annex D9 Baseline Water Quality Monitoring Results during mid-ebb tide for 7 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/7/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 22:04-22:10 | | | | | | | | |
| Water Depth (m) | 22.50 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 11.35 | | | | 21.40 | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.5 | 19.5 | 19.5 | 19.4 | 19.4 | 19.46 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.5 | 33.5 | 33.45 | - | - |
| D.O. Saturation (%) | 89.7 | 90.0 | 89.4 | 89.6 | 88.5 | 89.2 | 89.38 | - | - |
| D.O. (mg/L) | 6.75 | 6.77 | 6.73 | 6.75 | 6.68 | 6.73 | 6.74 | 6.75 | 6.71 |
| Turbidity (NTU) | 2.22 | 1.92 | 2.33 | 2.83 | 5.26 | 4.55 | 3.19 | - | - |
| SS (mg/L) | 3.0 | 6.0 | 4.0 | 5.0 | 9.0 | 12.0 | 6.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 22:57-23:02 | | | | | | | | |
| Water Depth (m) | 6.20 | | | | | | | | |
| Monitoring Depth (m) | 1.15 | 3.20 | | | 5.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.59 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - |
| D.O. Saturation (%) | 88.4 | 88.7 | 88.3 | 88.6 | 88.1 | 90.3 | 88.73 | - | - |
| D.O. (mg/L) | 6.65 | 6.67 | 6.64 | 6.66 | 6.62 | 6.79 | 6.67 | 6.66 | 6.71 |
| Turbidity (NTU) | 4.35 | 4.04 | 4.55 | 4.25 | 4.35 | 3.74 | 4.21 | - | - |
| SS (mg/L) | 4.0 | 4.0 | 6.0 | 7.0 | 7.0 | 7.0 | 5.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 22:46-22:52 | | | | | | | | |
| Water Depth (m) | 8.00 | | | | | | | | |
| Monitoring Depth (m) | 1.45 | 4.00 | | | 7.00 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.58 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 89.6 | 89.9 | 89.5 | 89.8 | 89.4 | 89.7 | 89.65 | - | - |
| D.O. (mg/L) | 6.74 | 6.76 | 6.73 | 6.75 | 6.72 | 6.75 | 6.74 | 6.75 | 6.74 |
| Turbidity (NTU) | 3.84 | 4.75 | 4.45 | 3.94 | 4.55 | 4.95 | 4.41 | - | - |
| SS (mg/L) | 3.0 | 4.0 | 5.0 | 5.0 | 7.0 | 7.0 | 5.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 21:05-21:12 | | | | | | | | |
| Water Depth (m) | 25.10 | | | | | | | | |
| Monitoring Depth (m) | 1.25 | 12.45 | | | 24.05 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 19.39 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - |
| D.O. Saturation (%) | 86.8 | 87.1 | 86.2 | 86.6 | 86.6 | 86.1 | 86.56 | - | - |
| D.O. (mg/L) | 6.54 | 6.57 | 6.50 | 6.53 | 6.55 | 6.50 | 6.53 | 6.54 | 6.53 |
| Turbidity (NTU) | 3.84 | 4.65 | 4.45 | 4.45 | 3.74 | 5.46 | 4.43 | - | - |
| SS (mg/L) | 6.0 | 7.0 | 7.0 | 6.0 | 5.0 | 12.0 | 7.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 22:32-22:38 | | | | | | | | |
| Water Depth (m) | 9.30 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 4.45 | | | 8.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.51 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.45 | - | - |
| D.O. Saturation (%) | 90.3 | 90.7 | 90.1 | 90.5 | 89.7 | 94.0 | 90.88 | - | - |
| D.O. (mg/L) | 6.80 | 6.83 | 6.79 | 6.81 | 6.76 | 7.08 | 6.85 | 6.81 | 6.92 |
| Turbidity (NTU) | 3.24 | 2.93 | 3.13 | 3.74 | 3.54 | 2.53 | 3.19 | - | - |
| SS (mg/L) | 4.0 | 4.0 | 9.0 | 4.0 | 5.0 | 6.0 | 5.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 21:46-21:56 | | | | | | | | |
| Water Depth (m) | 14.40 | | | | | | | | |
| Monitoring Depth (m) | 1.50 | 7.25 | | | 13.25 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.42 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 88.8 | 89.6 | 88.6 | 89.2 | 87.8 | 89.0 | 88.83 | - | - |
| D.O. (mg/L) | 6.70 | 6.76 | 6.68 | 6.73 | 6.62 | 6.72 | 6.70 | 6.72 | 6.67 |
| Turbidity (NTU) | 2.22 | 1.92 | 2.22 | 2.43 | 2.83 | 3.03 | 2.44 | - | - |
| SS (mg/L) | 6.0 | 6.0 | 3.0 | 6.0 | 9.0 | 4.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 22:21-22:27 | | | | | | | | |
| Water Depth (m) | 12.50 | | | | | | | | |
| Monitoring Depth (m) | 1.50 | 6.15 | | | 11.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.5 | 19.5 | 19.5 | 19.4 | 19.4 | 19.48 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 88.7 | 89.3 | 88.7 | 89.3 | 90.6 | 90.1 | 89.46 | - | - |
| D.O. (mg/L) | 6.68 | 6.72 | 6.68 | 6.73 | 6.84 | 6.80 | 6.74 | 6.70 | 6.82 |
| Turbidity (NTU) | 4.04 | 3.84 | 4.04 | 3.84 | 3.74 | 3.34 | 3.81 | - | - |
| SS (mg/L) | 6.0 | 5.0 | 5.0 | 7.0 | 7.0 | 5.0 | 5.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 21:29-21:36 | | | | | | | | |
| Water Depth (m) | 21.20 | | | | | | | | |
| Monitoring Depth (m) | 1.25 | 10.80 | | | 20.10 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.43 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.47 | - | - |
| D.O. Saturation (%) | 87.1 | 87.2 | 86.8 | 87.0 | 87.2 | 86.7 | 87.00 | - | - |
| D.O. (mg/L) | 6.57 | 6.58 | 6.54 | 6.56 | 6.58 | 6.54 | 6.56 | 6.56 | 6.56 |
| Turbidity (NTU) | 2.73 | 6.37 | 3.34 | 6.27 | 7.68 | 8.69 | 5.85 | - | - |
| SS (mg/L) | 3.0 | 6.0 | 12.0 | 9.0 | 7.0 | 6.0 | 7.17 | - | - |
| Remarks | | | | | | | | | |

Annex D10 Baseline Water Quality Monitoring Results during mid-flood tide for 7 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/7/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 09:56-10:04 | | | | | | | |
| Water Depth (m) | | 22.20 | | | | | | | |
| Monitoring Depth (m) | | 1.20 | 11.10 | | | | 21.30 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.51 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.45 | - | - |
| D.O. Saturation (%) | 93.0 | 93.1 | 92.3 | 92.5 | 91.6 | 90.9 | 92.27 | - | - |
| D.O. (mg/L) | 7.01 | 7.02 | 6.95 | 6.97 | 6.90 | 6.85 | 6.95 | 6.99 | 6.88 |
| Turbidity (NTU) | 5.16 | 5.16 | 5.46 | 5.26 | 5.56 | 6.57 | 5.53 | - | - |
| SS (mg/L) | 7.0 | 7.0 | 8.0 | 7.0 | 11.0 | 9.0 | 8.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 10:53-10:59 | | | | | | | |
| Water Depth (m) | | 6.80 | | | | | | | |
| Monitoring Depth (m) | | 1.15 | 3.45 | | | | 5.95 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.7 | 19.7 | 19.7 | 19.7 | 19.7 | 19.7 | 19.68 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.49 | - | - |
| D.O. Saturation (%) | 87.8 | 87.8 | 88.0 | 87.9 | 97.7 | 88.3 | 89.61 | - | - |
| D.O. (mg/L) | 6.59 | 6.59 | 6.61 | 6.60 | 7.33 | 6.63 | 6.73 | 6.60 | 6.98 |
| Turbidity (NTU) | 5.26 | 4.45 | 5.26 | 5.06 | 3.94 | 4.35 | 4.72 | - | - |
| SS (mg/L) | 6.0 | 6.0 | 6.0 | 8.0 | 13.0 | 6.0 | 7.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 10:39-10:44 | | | | | | | |
| Water Depth (m) | | 9.30 | | | | | | | |
| Monitoring Depth (m) | | 1.20 | 4.35 | | | | 8.25 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.7 | 19.7 | 19.7 | 19.7 | 19.8 | 19.7 | 19.71 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 89.9 | 90.4 | 89.6 | 89.1 | 90.8 | 89.6 | 89.91 | - | - |
| D.O. (mg/L) | 6.75 | 6.79 | 6.72 | 6.69 | 6.81 | 6.72 | 6.75 | 6.74 | 6.77 |
| Turbidity (NTU) | 4.15 | 3.64 | 4.15 | 4.25 | 4.04 | 4.65 | 4.15 | - | - |
| SS (mg/L) | 6.0 | 7.0 | 6.0 | 5.0 | 7.0 | 13.0 | 7.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 08:59-09:08 | | | | | | | |
| Water Depth (m) | | 25.60 | | | | | | | |
| Monitoring Depth (m) | | 1.10 | 12.50 | | | | 24.00 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.45 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - |
| D.O. Saturation (%) | 93.8 | 93.2 | 93.2 | 93.0 | 93.5 | 92.7 | 93.24 | - | - |
| D.O. (mg/L) | 7.07 | 7.03 | 7.03 | 7.01 | 7.05 | 6.99 | 7.03 | 7.04 | 7.02 |
| Turbidity (NTU) | 5.26 | 6.57 | 8.59 | 8.69 | 15.06 | 11.73 | 9.32 | - | - |
| SS (mg/L) | 6.0 | 4.0 | 10.0 | 9.0 | 24.0 | 20.0 | 12.17 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 10:26-10:32 | | | | | | | |
| Water Depth (m) | | 10.20 | | | | | | | |
| Monitoring Depth (m) | | 1.25 | 5.05 | | | | 9.25 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.60 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.4 | 33.4 | 33.5 | 33.4 | 33.44 | - | - |
| D.O. Saturation (%) | 91.8 | 92.1 | 91.7 | 91.8 | 91.0 | 92.1 | 91.74 | - | - |
| D.O. (mg/L) | 6.90 | 6.93 | 6.89 | 6.90 | 6.84 | 6.93 | 6.90 | 6.91 | 6.89 |
| Turbidity (NTU) | 2.73 | 2.63 | 4.55 | 3.74 | 11.02 | 9.30 | 5.66 | - | - |
| SS (mg/L) | 8.0 | 5.0 | 5.0 | 8.0 | 16.0 | 16.0 | 9.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 09:39-09:45 | | | | | | | |
| Water Depth (m) | | 14.20 | | | | | | | |
| Monitoring Depth (m) | | 1.40 | 6.95 | | | | 13.15 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.47 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 92.6 | 92.8 | 92.4 | 92.7 | 92.2 | 92.8 | 92.58 | - | - |
| D.O. (mg/L) | 6.98 | 6.99 | 6.96 | 6.99 | 6.95 | 6.99 | 6.98 | 6.98 | 6.97 |
| Turbidity (NTU) | 3.13 | 2.73 | 3.24 | 2.93 | 3.24 | 3.24 | 3.09 | - | - |
| SS (mg/L) | 8.0 | 6.0 | 4.0 | 3.0 | 7.0 | 6.0 | 5.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 10:15-10:20 | | | | | | | |
| Water Depth (m) | | 12.50 | | | | | | | |
| Monitoring Depth (m) | | 1.15 | 6.00 | | | | 11.50 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.62 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.4 | 33.5 | 33.4 | 33.5 | 33.44 | - | - |
| D.O. Saturation (%) | 91.2 | 91.1 | 91.2 | 91.1 | 91.8 | 91.3 | 91.25 | - | - |
| D.O. (mg/L) | 6.85 | 6.84 | 6.85 | 6.84 | 6.90 | 6.86 | 6.86 | 6.85 | 6.88 |
| Turbidity (NTU) | 2.43 | 2.63 | 3.54 | 3.74 | 7.78 | 8.49 | 4.77 | - | - |
| SS (mg/L) | 7.0 | 5.0 | 7.0 | 8.0 | 13.0 | 11.0 | 8.50 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---|---------|-------------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | | 09:22-09:30 | | | | | | | |
| Water Depth (m) | | 21.40 | | | | | | | |
| Monitoring Depth (m) | | 1.20 | 10.70 | | | | 20.15 | | |
| Tide Mid-Flood | | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.5 | 19.4 | 19.5 | 19.5 | 19.45 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.46 | - | - |
| D.O. Saturation (%) | 92.9 | 92.7 | 92.3 | 92.5 | 92.2 | 91.9 | 92.37 | - | - |
| D.O. (mg/L) | 7.00 | 6.99 | 6.96 | 6.97 | 6.95 | 6.92 | 6.97 | 6.98 | 6.94 |
| Turbidity (NTU) | 2.63 | 2.53 | 2.83 | 2.53 | 4.15 | 2.73 | 2.90 | - | - |
| SS (mg/L) | 4.0 | 6.0 | 4.0 | 4.0 | 8.0 | 7.0 | 5.50 | - | - |
| Remarks | | | | | | | | | |

Annex D11 Baseline Water Quality Monitoring Results during mid-ebb tide for 9 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/9/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Station Zone A: R1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 11:06-11:20 | | | | | | | | |
| Water Depth (m) | 22.00 | | | | | | | | |
| Monitoring Depth (m) | 1.50 | 11.15 | | | | 20.95 | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.27 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.7 | 33.6 | 33.7 | 33.7 | 33.64 | - | - |
| D.O. Saturation (%) | 95.3 | 95.8 | 94.6 | 94.0 | 96.5 | 93.5 | 94.93 | - | - |
| D.O. (mg/L) | 7.20 | 7.24 | 7.15 | 7.10 | 7.29 | 7.06 | 7.17 | 7.17 | 7.18 |
| Turbidity (NTU) | 2.22 | 3.13 | 3.24 | 3.24 | 2.73 | 5.86 | 3.40 | - | - |
| SS (mg/L) | 5.0 | 5.0 | 3.0 | 4.0 | 6.0 | 7.0 | 5.00 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: B1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 12:11-12:19 | | | | | | | | |
| Water Depth (m) | 6.20 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 3.30 | | | 5.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.37 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.49 | - | - |
| D.O. Saturation (%) | 94.4 | 94.3 | 94.0 | 94.0 | 93.3 | 94.2 | 94.03 | - | - |
| D.O. (mg/L) | 7.12 | 7.12 | 7.10 | 7.10 | 7.04 | 7.11 | 7.10 | 7.11 | 7.08 |
| Turbidity (NTU) | 3.03 | 6.87 | 4.85 | 3.94 | 7.28 | 5.76 | 5.29 | - | - |
| SS (mg/L) | 4.0 | 3.0 | 5.0 | 2.0 | 3.0 | 3.0 | 3.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S1 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 11:56-12:06 | | | | | | | | |
| Water Depth (m) | 8.20 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 4.25 | | | 7.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.5 | 19.3 | 19.3 | 19.3 | 19.3 | 19.36 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.48 | - | - |
| D.O. Saturation (%) | 93.3 | 93.7 | 93.6 | 93.3 | 93.6 | 93.4 | 93.48 | - | - |
| D.O. (mg/L) | 7.03 | 7.06 | 7.08 | 7.06 | 7.07 | 7.06 | 7.06 | 7.06 | 7.07 |
| Turbidity (NTU) | 0.91 | 2.83 | 2.33 | 3.94 | 8.90 | 6.07 | 4.16 | - | - |
| SS (mg/L) | 5.0 | 3.0 | 4.0 | 4.0 | 10.0 | 9.0 | 5.83 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: R4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 09:48-10:13 | | | | | | | | |
| Water Depth (m) | 25.00 | | | | | | | | |
| Monitoring Depth (m) | 1.45 | 12.35 | | | 23.80 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.28 | - | - |
| Salinity (ppt) | 33.5 | 33.6 | 33.6 | 33.6 | 33.7 | 33.7 | 33.61 | - | - |
| D.O. Saturation (%) | 95.0 | 95.3 | 92.3 | 92.9 | 92.1 | 92.2 | 93.31 | - | - |
| D.O. (mg/L) | 7.18 | 7.20 | 6.97 | 7.02 | 6.96 | 6.97 | 7.05 | 7.09 | 6.97 |
| Turbidity (NTU) | 2.43 | 2.93 | 5.86 | 3.64 | 13.35 | 12.44 | 6.78 | - | - |
| SS (mg/L) | 4.0 | 4.0 | 7.0 | 5.0 | 20.0 | 22.0 | 10.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S2 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 11:42-11:51 | | | | | | | | |
| Water Depth (m) | 10.30 | | | | | | | | |
| Monitoring Depth (m) | 1.50 | 5.10 | | | 9.25 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.3 | 19.3 | 19.3 | 19.3 | 19.36 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.6 | 33.6 | 33.51 | - | - |
| D.O. Saturation (%) | 98.0 | 93.7 | 93.9 | 93.6 | 93.3 | 93.0 | 94.25 | - | - |
| D.O. (mg/L) | 7.39 | 7.07 | 7.09 | 7.07 | 7.05 | 7.03 | 7.12 | 7.16 | 7.04 |
| Turbidity (NTU) | 2.33 | 2.73 | 3.54 | 3.13 | 6.47 | 6.37 | 4.10 | - | - |
| SS (mg/L) | 2.0 | 3.0 | 6.0 | 4.0 | 6.0 | 7.0 | 4.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C4 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 10:48-10:58 | | | | | | | | |
| Water Depth (m) | 13.20 | | | | | | | | |
| Monitoring Depth (m) | 1.35 | 6.55 | | | 12.00 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.29 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.59 | - | - |
| D.O. Saturation (%) | 94.9 | 93.9 | 94.6 | 93.4 | 93.8 | 93.6 | 94.05 | - | - |
| D.O. (mg/L) | 7.17 | 7.09 | 7.14 | 7.06 | 7.09 | 7.08 | 7.11 | 7.12 | 7.09 |
| Turbidity (NTU) | 2.22 | 2.63 | 3.03 | 3.54 | 4.65 | 4.04 | 3.35 | - | - |
| SS (mg/L) | 4.0 | 3.0 | 3.0 | 5.0 | 7.0 | 6.0 | 4.67 | - | - |
| Remarks | | | | | | | | | |

| Station Zone A: S3 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 11:29-11:38 | | | | | | | | |
| Water Depth (m) | 12.40 | | | | | | | | |
| Monitoring Depth (m) | 1.20 | 6.20 | | | 11.45 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.3 | 19.3 | 19.3 | 19.3 | 19.34 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.6 | 33.5 | 33.6 | 33.6 | 33.52 | - | - |
| D.O. Saturation (%) | 93.1 | 93.0 | 97.5 | 92.3 | 93.5 | 92.9 | 93.71 | - | - |
| D.O. (mg/L) | 7.03 | 7.02 | 7.37 | 6.97 | 7.06 | 7.02 | 7.08 | 7.10 | 7.04 |
| Turbidity (NTU) | 5.86 | 2.22 | 2.73 | 3.94 | 5.46 | 4.95 | 4.19 | - | - |
| SS (mg/L) | 6.0 | 4.0 | 5.0 | 5.0 | 6.0 | 6.0 | 5.33 | - | - |
| Remarks | | | | | | | | | |

| Station Zone E: C5 | | | | | | | | | |
|---------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Time (hh:mm) | 10:24-10:40 | | | | | | | | |
| Water Depth (m) | 21.20 | | | | | | | | |
| Monitoring Depth (m) | 1.30 | 10.60 | | | 20.15 | | | | |
| Tide | Mid-Ebb | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.2 | 19.2 | 19.2 | 19.2 | 19.22 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.7 | 33.7 | 33.7 | 33.7 | 33.62 | - | - |
| D.O. Saturation (%) | 93.2 | 93.1 | 93.4 | 94.0 | 93.2 | 93.0 | 93.31 | - | - |
| D.O. (mg/L) | 7.04 | 7.03 | 7.07 | 7.12 | 7.05 | 7.04 | 7.06 | 7.07 | 7.05 |
| Turbidity (NTU) | 3.03 | 3.24 | 3.13 | 2.83 | 4.55 | 3.13 | 3.32 | - | - |
| SS (mg/L) | 4.0 | 6.0 | 4.0 | 3.0 | 8.0 | 5.0 | 5.00 | - | - |
| Remarks | | | | | | | | | |

Annex D12 Baseline Water Quality Monitoring Results during mid-flood tide for 9 March 2009

Deep Water Bay

| | |
|--------------------------|----------|
| Sampling Date | 3/9/2009 |
| Weather | Fine |
| Ambient Temperature (°C) | |

| Zone A: R1 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 05:49-05:55 | | | | | | | | |
| Water Depth (m) | 22.30 | | | | | | | | |
| Monitoring Depth (m) | 1.30 | 11.30 | | | | 21.15 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 19.35 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.6 | 33.6 | 33.49 | - | - |
| D.O. Saturation (%) | 91.0 | 91.2 | 90.4 | 90.6 | 91.1 | 90.8 | 90.84 | - | - |
| D.O. (mg/L) | 6.87 | 6.89 | 6.83 | 6.84 | 6.88 | 6.86 | 6.86 | 6.86 | 6.87 |
| Turbidity (NTU) | 2.93 | 2.53 | 4.15 | 4.25 | 9.60 | 7.48 | 5.16 | - | - |
| SS (mg/L) | 3.0 | 6.0 | 6.0 | 6.0 | 16.0 | 20.0 | 9.50 | - | - |
| Remarks | | | | | | | | | |

| Zone A: B1 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 06:40-06:45 | | | | | | | | |
| Water Depth (m) | 7.10 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | 3.65 | | | | 6.00 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.33 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.6 | 33.5 | 33.6 | 33.6 | 33.53 | - | - |
| D.O. Saturation (%) | 88.9 | 87.0 | 91.2 | 91.2 | 91.5 | 91.3 | 90.15 | - | - |
| D.O. (mg/L) | 6.71 | 6.58 | 6.88 | 6.89 | 6.91 | 6.89 | 6.81 | 6.77 | 6.90 |
| Turbidity (NTU) | 3.74 | 6.98 | 3.34 | 6.07 | 3.44 | 6.37 | 4.99 | - | - |
| SS (mg/L) | 6.0 | 4.0 | 3.0 | 5.0 | 6.0 | 4.0 | 4.67 | - | - |
| Remarks | | | | | | | | | |

| Zone A: S1 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 06:29-06:35 | | | | | | | | |
| Water Depth (m) | 9.00 | | | | | | | | |
| Monitoring Depth (m) | 1.00 | 4.35 | | | | 7.90 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.4 | 19.4 | 19.34 | - | - |
| Salinity (ppt) | 33.5 | 33.4 | 33.5 | 33.5 | 33.6 | 33.5 | 33.49 | - | - |
| D.O. Saturation (%) | 89.6 | 89.7 | 89.3 | 89.6 | 88.5 | 89.1 | 89.30 | - | - |
| D.O. (mg/L) | 6.77 | 6.78 | 6.75 | 6.77 | 6.68 | 6.73 | 6.75 | 6.77 | 6.71 |
| Turbidity (NTU) | 2.73 | 2.63 | 2.83 | 2.93 | 4.45 | 4.25 | 3.30 | - | - |
| SS (mg/L) | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.00 | - | - |
| Remarks | | | | | | | | | |

| Zone E: R4 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 04:51-05:01 | | | | | | | | |
| Water Depth (m) | 25.30 | | | | | | | | |
| Monitoring Depth (m) | 1.25 | 12.70 | | | | 24.15 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.37 | - | - |
| Salinity (ppt) | 33.4 | 33.5 | 33.5 | 33.5 | 33.6 | 33.6 | 33.50 | - | - |
| D.O. Saturation (%) | 91.1 | 91.0 | 91.0 | 91.0 | 90.8 | 90.8 | 90.95 | - | - |
| D.O. (mg/L) | 6.88 | 6.87 | 6.87 | 6.87 | 6.85 | 6.85 | 6.87 | 6.87 | 6.85 |
| Turbidity (NTU) | 3.24 | 3.13 | 4.35 | 4.15 | 8.90 | 6.07 | 4.97 | - | - |
| SS (mg/L) | 3.0 | 4.0 | 13.0 | 8.0 | 6.0 | 10.0 | 7.33 | - | - |
| Remarks | | | | | | | | | |

| Zone A: S2 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 06:18-06:23 | | | | | | | | |
| Water Depth (m) | 10.30 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 4.95 | | | | 9.20 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.29 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.53 | - | - |
| D.O. Saturation (%) | 91.2 | 91.2 | 91.0 | 91.1 | 92.4 | 91.2 | 91.32 | - | - |
| D.O. (mg/L) | 6.89 | 6.89 | 6.88 | 6.88 | 6.98 | 6.89 | 6.90 | 6.89 | 6.94 |
| Turbidity (NTU) | 2.83 | 2.53 | 3.64 | 3.54 | 3.03 | 3.13 | 3.12 | - | - |
| SS (mg/L) | 2.0 | 4.0 | 5.0 | 4.0 | 9.0 | 6.0 | 5.00 | - | - |
| Remarks | | | | | | | | | |

| Zone E: C4 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 05:36-05:42 | | | | | | | | |
| Water Depth (m) | 14.30 | | | | | | | | |
| Monitoring Depth (m) | 1.10 | 7.25 | | | | 13.15 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.4 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 19.34 | - | - |
| Salinity (ppt) | 33.4 | 33.4 | 33.5 | 33.5 | 33.6 | 33.6 | 33.50 | - | - |
| D.O. Saturation (%) | 90.9 | 91.1 | 90.8 | 91.1 | 91.5 | 91.8 | 91.23 | - | - |
| D.O. (mg/L) | 6.87 | 6.88 | 6.86 | 6.88 | 6.91 | 6.94 | 6.89 | 6.87 | 6.93 |
| Turbidity (NTU) | 2.73 | 2.73 | 3.13 | 3.34 | 4.55 | 4.25 | 3.46 | - | - |
| SS (mg/L) | 6.0 | 10.0 | 4.0 | 4.0 | 9.0 | 7.0 | 6.67 | - | - |
| Remarks | | | | | | | | | |

| Zone A: S3 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 06:08-06:13 | | | | | | | | |
| Water Depth (m) | 12.30 | | | | | | | | |
| Monitoring Depth (m) | 1.40 | 5.85 | | | | 11.30 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.32 | - | - |
| Salinity (ppt) | 33.5 | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.56 | - | - |
| D.O. Saturation (%) | 90.7 | 90.5 | 90.9 | 91.0 | 90.7 | 90.5 | 90.71 | - | - |
| D.O. (mg/L) | 6.85 | 6.84 | 6.87 | 6.87 | 6.84 | 6.83 | 6.85 | 6.86 | 6.84 |
| Turbidity (NTU) | 2.53 | 2.63 | 3.13 | 3.64 | 5.26 | 4.95 | 3.69 | - | - |
| SS (mg/L) | 3.0 | 3.0 | 5.0 | 4.0 | 6.0 | 8.0 | 4.83 | - | - |
| Remarks | | | | | | | | | |

| Zone E: C5 | | | | | | | | | |
|------------------------|-------------|---------|---------|---------|---------|---------|----------------|------------------|--------|
| Station | | | | | | | | | |
| Time (hh:mm) | 05:15-05:25 | | | | | | | | |
| Water Depth (m) | 21.10 | | | | | | | | |
| Monitoring Depth (m) | 1.30 | 10.70 | | | | 19.70 | | | |
| Tide | Mid-Flood | | | | | | | | |
| Trial | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Trial 1 | Trial 2 | Depth-averaged | Surface & Middle | Bottom |
| Water Temperature (°C) | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.31 | - | - |
| Salinity (ppt) | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.57 | - | - |
| D.O. Saturation (%) | 91.2 | 91.4 | 91.1 | 90.9 | 91.4 | 90.7 | 91.11 | - | - |
| D.O. (mg/L) | 6.89 | 6.90 | 6.88 | 6.86 | 6.90 | 6.86 | 6.88 | 6.88 | 6.88 |
| Turbidity (NTU) | 3.13 | 3.24 | 3.44 | 3.24 | 3.94 | 3.54 | 3.42 | - | - |
| SS (mg/L) | 4.0 | 4.0 | 6.0 | 4.0 | 6.0 | 9.0 | 5.50 | - | - |
| Remarks | | | | | | | | | |

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ERM' s Hong Kong Office

**21/F Lincoln House
Taikoo Place, 979 King' s Road
Island East, Hong Kong
T: 2271 3000
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