Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Pier (2005-2008) Construction of Yung Shue Wan Helipad -Works Order No. YSW/01/03

> **Environmental Monitoring and Audit** Monthly Report (Version 1)

> > July 2008

Certified By

(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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ABBREVIATION AND ACRONYM

AL Levels Action and Limit Levels

CEDD Civil Engineering & Development Department

E / ER Engineer/Engineer's Representative

EIA Environmental Impact Assessment

EM&A Environmental Monitoring and Audit

EMIS Environmental Mitigation Implementation Schedule

EP Environmental Permit

EPD Environmental Protection Department

ET Environmental Team

HVS High Volume Sampler

IEC Independent Environmental Checker

RE Resident Engineer

RH Relative Humidity

TSP Total Suspended Particulates

QA/QC Quality Assurance / Quality Control

SLM Sound Level Meter

WMP Waste Management Plan

EXECUTIVE SUMMARY

Introduction

- 1. This is the 11th Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Construction of Yung Shue Wan Helipad Works order No. YSW/01/03 under Contract No. CV/2004/03" (the Project). This report documents the findings of EM&A Works conducted in July 2008.
- 2. The site activities undertaken in the reporting month included:
 - Insitu Concrete to Helipad Deck;
 - Erection of Steel Works; and
 - Miscellanous Works.

Environmental Monitoring Works

3. Environmental monitoring for the Project was performed in accordance with the updated EM&A Manual and the monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

4. Summary of the non-compliance of the reporting month is tabulated in Table I.

Table I Summary Table for Non-compliance Recorded in the Reporting Month

Parameter	No. of Ex	ceedance	No. of Exceedance	Due to the Project	Action
	Action Level	Limit Level	Action Level	Limit Level	Taken
Noise	0	0	0	0	N/A
Water	0	0	0	0	N/A

Construction Noise

5. All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Water Quality

6. All water quality impact monitoring and post-project water quality monitoring were conducted as scheduled in the reporting month. No Action/Limit level exceedance was recorded.

Environmental Licenses and Permits

7. Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, An Environmental Permit No. EP-242/2006 was issued on 13 March 2006 for this Project (EP) to the CEDD as Permit Holder.

Key Information in the Reporting Month

8. Summary of key information in the reporting month is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	0		N/A	N/A	
Changes to the assumptions and key construction / operation activities recorded	0		N/A	N/A	
Status of submissions under EP	1	Monthly EM&A Report (June 08)	Submitted to EPD on 11th July 2008 (EP condition 4.4).	N/A	
Notifications of any summons & prosecutions received	0		N/A	N/A	

Future Key Issues:

Major site activities for the coming month include:

• Removal of Temporary Working Platform & Demobilization Works.

1. INTRODUCTION

Background

- 1.1 The Project "Construction of Yung Shue Wan Helipad" (Works order No.YSWH/01/03) under Contract No. CV/2004/03 was awarded to CWE-ZHEC Joint Venture (hereinafter called the "Contractor") by the Civil Engineering and Development Department (CEDD) of the Hong Kong Special Administrative Region (HKSAR).
- 1.2 The Project has been planned and managed in-house by the Land Works Division of CEDD on behalf of the Home Affairs Department (HAD). The Project mainly comprises the construction works of a helipad used solely for emergency purpose with diameter of 25 metres and an Emergency Vehicular Access of about 25 metres long and 3.5 metres wide connecting the helipad with existing road. The general layout of the Project is shown in Figure 1.1.
- 1.3 The Project is a 'designated project' under Item B.2, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) by virtue of being: "A helipad within 300m of existing or planned residential development". An environmental impact assessment (EIA) report has been prepared in 2005 for the Project to consider the key issues of noise, air quality, water quality, construction waste, ecological and cultural impacts, and identify possible mitigation measures.
- 1.4 An Environmental Permit No. EP-242/2006 was issued on 13 March 2006 for this Project (EP) to the CEDD as the Permit Holder. An updated Environmental Monitoring and Audit Manual (the EM&A Manual) was prepared to fulfill requirements stipulated in Condition 2.4 of the EP.
- 1.5 Cinotech Consultants Limited was commissioned by the CWE-ZHEC Joint Venture (the Contractor) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The Updated EM&A Manual was prepared by Cinotech to fulfill the requirements of the EP. This is the 11th monthly EM&A report summarizing the EM&A works for the Project in July 2008.

Project Organizations

- 1.6 Different parties with different levels of involvement in the project organization include:
 - Project Proponent –Civil Engineering and Development Department (CEDD)
 - The Engineer of the Engineer's Representative (ER) –Civil Engineering and Development Department (CEDD)
 - Environmental Team (ET) Cinotech Consultants Limited.
 - Independent Environmental Checker (IEC) Mannings (Asia) Company Limited
 - Environmental Protection Department (EPD) Environmental Regulations Enforcer
 - Contractor CWE-ZHEC Joint Venture

- 1.7 The responsibilities of respective parties are detailed in Sections 1.21 to 1.38 of the Updated EM&A Manual of the Project.
- 1.8 The key contacts of the Project are shown in Table 1.1 and the organization chart of ET is shown in Figure 2.1.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.	
CEDD	Permit Holder	Mr. K.S Cheng	Engineer	2762 5455	2714 2054	
CLDD	T CHIIIC HOIGE	Mr. M.O Chiu	Senior Inspector of Works	2762 5552	2714 2034	
GED D		Mr. Fung Ping Lun	Engineer	2762 5068	251 1205 1	
CEDD	Engineer	Mr. K.S Cheng	Engineer	2762 5455	27142054	
		Dr. Priscilla Choy	ET Leader	2151 2089		
Cinotech	Cinotech Environmental Team		Project Coordinator & Audit Team Leader	2151 2095	3107 1388	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087		
Mannings	Independent Environmental	Mr. Mark Cheung	Independent Environmental Checker	31682028	31682022	
(Asia) Environmental Checker		Mr. Simon Ng	Assistant Independent Environmental Checker	31002020	31082022	
CWE-ZHEC	Contractor	Mr. Alan Mong	Site Agent	2727 0128	2379 5931	
Joint Venture	Contractor	Mr. Y.F. Chao	Project Manager	2727 0128	2379 5931	

Construction Programme

- 1.9 The site activities undertaken in the reporting month included:
 - Insitu Concrete to Helipad Deck;
 - Erection of Steel Works; and
 - Miscellanous Works.

Summary of EM&A Requirements

- 1.10 The EM&A programme requires construction phase monitoring construction noise and water quality and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
 - All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event Action Plans;
 - Environmental mitigation measures, as recommended in the project EIA study final report; and
 - Environmental requirements in contract documents.
- 1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.
- 1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely water and noise levels and audit works for the Project in July 2008.

2. NOISE

Monitoring Requirements

2.1 Two noise monitoring stations, namely N3 and N5 were designated in the Updated EM&A Manual for impact monitoring. Appendix A shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 Noise monitoring was conducted at two designated monitoring stations as listed in Table 2.1. Figure 3.1 shows the locations of these stations.

Table 2.1 Noise Monitoring Stations

Monitoring Stations	Locations
N3	North Lamma Clinic
N5	No. 105 Yung Shue Wan
IN3	Main Street

Monitoring Equipment

2.3 Table 2.2 summarizes the noise monitoring equipment. Copies of calibration certificates are provided in Appendix B.

Table 2.2 Noise Monitoring Equipment

Equipment	Model and Make	Qty.
Integrating Sound Level Meter	B&K Model 2238	3
Calibrator	B&K 4231	2

Monitoring Parameters, Frequency and Duration

2.4 Table 2.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in Appendix D.

Table 2.3	Noise Monitoring Parameters, Frequency and Duration
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Monitoring Stations	Parameter	Period	Frequency	Measurement
N3 N5	$\begin{array}{c} L_{10}(30 \text{ min.}) \\ dB(A) \\ L_{90}(30 \text{ min.}) \\ dB(A) \\ L_{eq}(30 \text{ min.}) \\ dB(A) \end{array}$	0700-1900 hrs on normal weekdays	Once per week	Façade

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2 m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

frequency weighting : Atime weighting : Fast

time measurement : 30 minutes / 5 minutes

- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused temporarily during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

- 2.5 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly.
- 2.6 The meters were sent to the supplier to check and calibrate on a yearly interval.

Results and Observations

- 2.7 Noise monitoring at the two designated locations was conducted as scheduled in the reporting month.
- 2.8 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the allowed CNL at each designated noise monitoring station are presented at Table 3.4.
- 2.9 No Action/Limit Level exceedance was recorded.
- 2.10 Noise monitoring results and graphical presentations are shown in Appendix E. In accordance with Condition 5.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website http://nteema.cedd.gov.hk/YSWHelipad/.
- 2.11 The major noise source identified at the designated noise monitoring stations was the activities around Yung Shue Wan Playground.

Table 2.4 Baseline Noise Level and Allowed Construction Noise Level for Monitoring Stations

Station	Baseline Noise Level, dB (A)	Allowed CNL, dB (A)
N3 – North Lamma Clinic	60.8 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
	59.7 (at 1900 – 2300 hrs on all days & 0700 – 1900 hrs on holidays)	
	59.4 (at 2300 – 0700 hrs of the next day)	
N4 – Yung Shue Wan Playground	63.8 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
	61.4 (at 1900 – 2300 hrs on all days & 0700 – 1900 hrs on holidays)	
	63.6 (at 2300 – 0700 hrs of the next day)	

3. WATER QUALITY

Monitoring Requirements

3.1 Dissolved oxygen (DO concentration in mg/L and DO saturation in percentage), Turbidity (Tby in NTU), Suspended Solid (SS in mg/L), pH, salinity and both water and ambient temperature monitoring were conducted to monitor the water quality. Appendix A shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

3.2 Locations of designated Water Quality Monitoring Stations are shown in **Figure 3.1** and described in Table 3.1. Samples shall be taken at all designated Monitoring and Control Stations.

Table 3.1 Locations for Water Quality Monitoring

Manitanina Stations	Coordinates		
Monitoring Stations —	Northing (m)	Easting (m)	
Control Station			
C1	809 608.0	829 207.7	
Impact Stations			
M1	809 544.0	829 213.0	
M2	809 559.2	829 243.0	

Monitoring Equipment

3.3 Table 3.2 summarizes the equipment used in the water quality monitoring program. All the monitoring equipment complied with the specifications is stipulated in the Updated EM&A Manual. Copies of the calibration certificates of the equipment are shown in Appendix B.

Table 3.2 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Multi-parameter Water Quality System	YSI 6820-C-M	2
Monitoring Position Equipment	"Magellan" Handheld GPS Model GPS-320	1

Monitoring Parameters, Frequency and Duration

3.4 Table 3.3 summarizes the monitoring parameters, monitoring period and frequencies of water quality monitoring.

Table 3.3	Frequency	and Parameters	of Water	Quality	Monitoring

Station	Parameters	Frequency
C1	DO, SS, turbidity,	1 day per week during the marine work and 3
M1	salinity, pH &	days per week during the piling work, at mid-
M2	temperature	flood and mid-ebb

Monitoring Methodology, Calibration Details and QA/QC Procedures

Instrumentation

3.5 A multi-parameter meter (Model YSI 6820 C-M) was used to measure DO, DO saturation, turbidity, salinity and temperature.

Operating/Analytical Procedures

- 3.6 At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity and temperature were taken. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.
- 3.7 For SS measurement, duplicate water samples for SS were taken and analysed at each monitoring station at each sample depth. The sample bottles were then packed in cool-boxes (without being frozen), and delivered to a HOKLAS accredited laboratory for analysis of suspended solids concentrations within 24 hours.

Maintenance and Calibration

- 3.8 Before each round of monitoring, a zero check in distilled water was performed with the turbidity probe of YSI 6820-C-M. The probe was then calibrated with a solution of known NTU.
- 3.9 QA/QC procedures as attached in Appendix C are available for the SS analyzed in the HOKLAS-accredited laboratory, WELLAB Ltd.

Results and Observations

- 3.10 Water quality impact monitoring and post-project water quality monitoring were conducted as scheduled in the reporting month. The monitoring data and graphical presentations of the monitoring results are shown in Appendix F. Details of the Exceedance Report are shown in Appendix G.
- 3.11 Since all piling works and related marine works were completed on 31 May 2008, the impact water monitoring and post-project water monitoring at the designated monitoring/control stations were conducted in July and early August.

- 3.12 In accordance with Condition 5.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website http://nteema.cedd.gov.hk/YSWHelipad/.
- 3.13 No Action/Limit Level exceedance was recorded in the reporting month.

4. ENVIRONMENTAL AUDIT

Site Audits

- 4.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in Appendix H.
- 4.2 Site audits were conducted on 2nd, 9th, 16th, 23rd and 30th July 2008. No non-compliance was observed during the site audits.

Review of Environmental Monitoring Procedures

4.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

Water Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- The monitoring team recorded the weather condition on the monitoring day.

Status of Environmental Licensing and Permitting

4.4 All permits/licenses obtained for the Project are summarized in Table 4.1.

Status of Waste Management

4.5 The amount of wastes generated by the activities of the Project in July 2008 is shown in Appendix I.

 Table 4.1
 Summary of Environmental Licensing and Permit Status

Permit No.	Valid l	alid Period Section		Status
1 ci ilit 140.	From	To	Section	Status
Environmental	Permit (EP)			
EP-242/2006	13/3/2006	N/A	A helipad used solely for emergency purpose with diameter of 25 metres and an Emergency Vehicular Access of about 25 metres long and 3.5 metres wide connecting the helipad with existing road.	Valid

Implementation Status of Environmental Mitigation Measures

4.6 According to the *EIAO Guidance Note No. 14/2003*, the key information in the EIA Report is summarized in Table 4.2. According to the EIA Report, air quality, noise and water quality would be the key issues during the construction and operation of the Yung Shue Wan Helipad. Details of the implementation of mitigation measures are provided in the Appendix K.

Table 4.2 Key Information in the EIA Report and the Status of EMIS

	Issues	Assumptions and Assessment	Recommended Mitigation Measures
	Air	With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO.	 Restricting heights from which material are dropped Covering the materials on truck with tarpaulin sheet Watering of the dusty areas, at least twice a day Provide wheel-washing facilities at site exit(s) Traveling speeds should be controlled
Construction	Noise	Noise level at most of NSRs would exceed the noise criteria without mitigation measures.	Good site practice, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier and avoid simultaneous noisy activities.
Ö	Water	Adverse impacts on the water quality	Good site practice, adoption of use holding tank that should be fitted with a tight fitting seal, excavator grab seal is tightly closed and the hoist speed is suitably low, large objects should be removed from the excavator grab and use small diameter pre-bored piling instead of dredging and reclamation for construction of helipad

	Issues	Assumptions and Assessment	Recommended Mitigation Measures
	Ecology	Ecology concentration, if unmitigated, it would not comply with the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586). [Replaced the animals & Plants Ordinance (Protection of Endangered Species) (Cap. 187) in December 2006]	 Silt curtain should be installed Good site practice measures: Particular care should be taken when demolishing the existing concrete planter and decommissioning the silt curtain Materials storage areas should be located well away from the seawall and covered during the works. Holding tank that should be fitted with a tight fitting seal Excavator seal is tightly closed and the hoist speed is suitably low Large objects should be removed from the excavator grab and use small diameter prebored piling instead of dredging and reclamation for construction of helipad
	Waste	Potential for environmental impacts (Visual impacts and nuisance)	Good site practice, adoption of proper on-site handling and storage (covered containers), reuse (of inert C&D materials) and off-site disposal (via approved waste collectors to approved waste facilities and/or disposal grounds) the generation.
eration	Noise	NSRs along the alignment would be exposed to noise level exceeding the noise limit without mitigation measures.	 Use of quieter helicopter type EC155B1 in priority Reduce the angle of the helicopter flights path The helipad will be solely for emergency use
odO	Waste	Potential for environmental impacts without mitigation measures.	 The helipad will only be used for emergency purposes. No equipment will be placed on the landing pad or along the EVA

4.7 During the weekly environmental site inspections in the reporting period, no non-conformance was identified. There are no observations and recommendations.

Implementation Status of Event Action Plans

4.8 The Event Action Plans for noise and water quality are presented in Appendix J.

Construction Noise

4.9 No Action/Limit Level exceedance was recorded for construction noise.

Water Quality

4.10 No Action/Limit Level exceedance was recorded for water quality.

Summary of Complaints and Prosecutions

- 4.11 No environmental prosecution and complaint was received in the reporting month.
- 4.12 No environmental prosecution was received in the reporting month.
- 4.13 There were no environmental complaint and no prosecution received since the commencement of the Project. The Complaint Log is attached in Appendix M.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

- 5.1 Key environmental issues in the coming month include:
 - Cast concrete on slab; and
 - Installation of steelwork & miscellaneous.

Monitoring Schedule for the Next Month

5.2 The tentative environmental monitoring schedules for the next month are shown in Appendix D.

Construction Program for the Next Month

5.3 The tentative construction program for the Project is provided in **Appendix L**.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

Construction Noise Monitoring

6.2 All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Water Quality Monitoring

6.3 All water quality monitoring was performed as scheduled. No Action/Limit Level exceedance was recorded.

Complaint and Prosecution

6.4 No environmental prosecution and complaint was received in the reporting month.

Recommendations

6.5 According to the environmental audit performed in the reporting month, the following recommendations were made:

Dust Impact

- To prohibit any open burning on site.
- To regularly maintain the machinery and vehicles on site.
- To follow up any exceedance caused by the construction works.
- To implement dust suppression measures on all haul roads, stockpiles, dry surfaces and excavation works.
- To provide hoarding

Noise Impact

- To inspect the noise sources inside the site.
- To follow up any exceedance caused by the construction works.
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers.
- To provide temporary noise barriers for operations of noisy equipment near the noise sensitive receivers in an appropriate location.

Water Impact

- To identify any wastewater discharges from site.
- To provide silt curtain surrounding the whole of the piling site.
- To check the holding tank should be fitted with a tight fitting seal.
- To ensure the excavator grab seal is tightly closed.

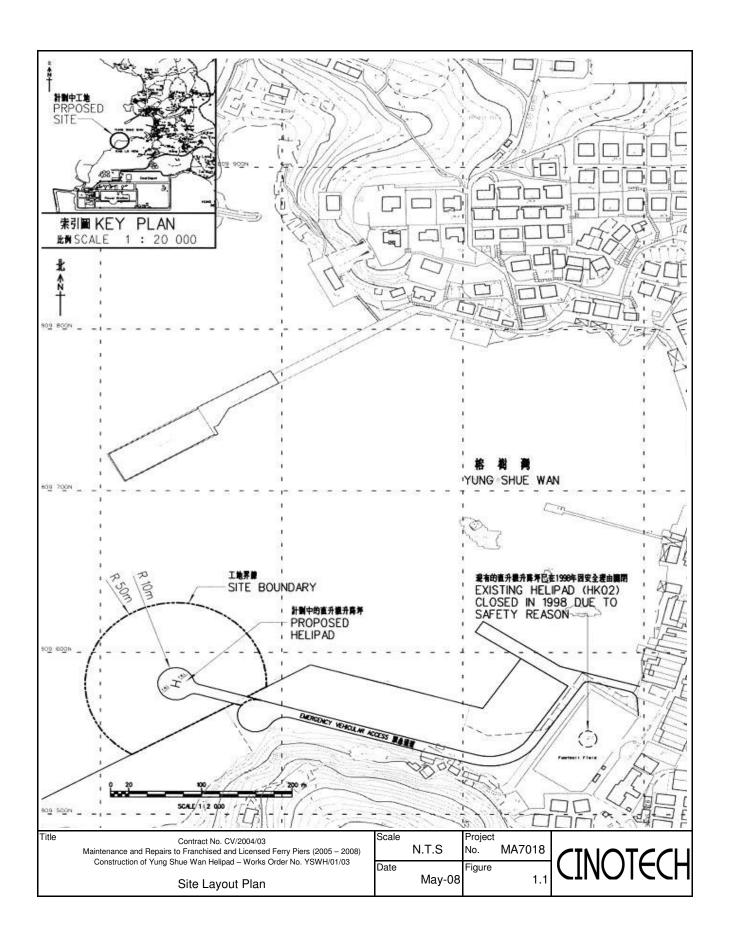
Waste/Chemical Management

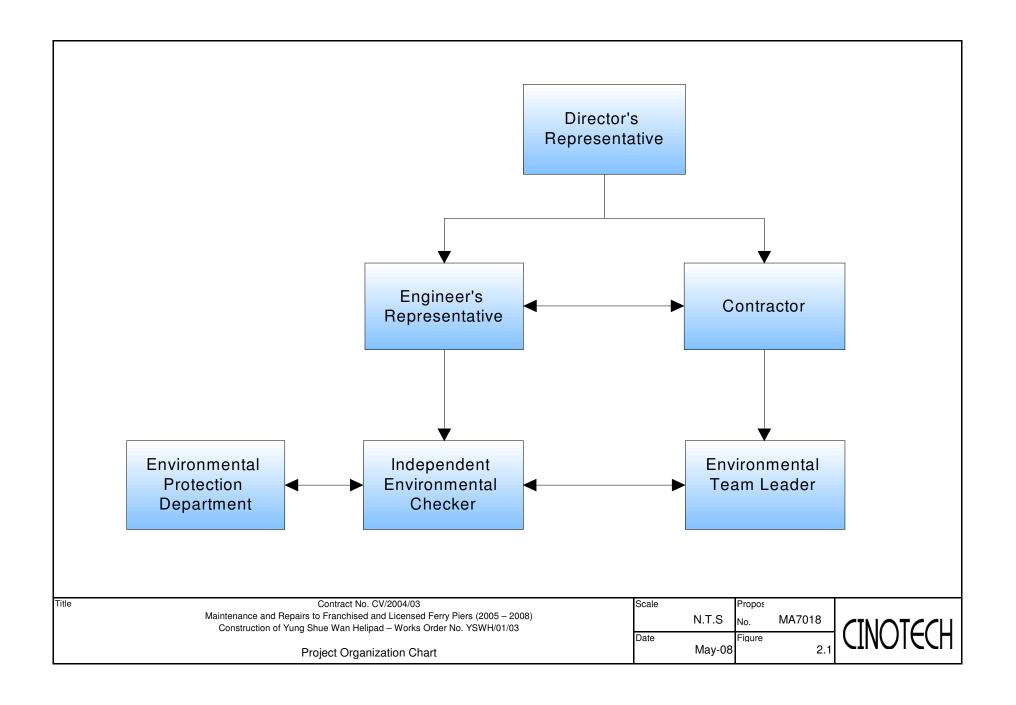
- To check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the site.
- To avoid improper handling or storage of oil drum on site.

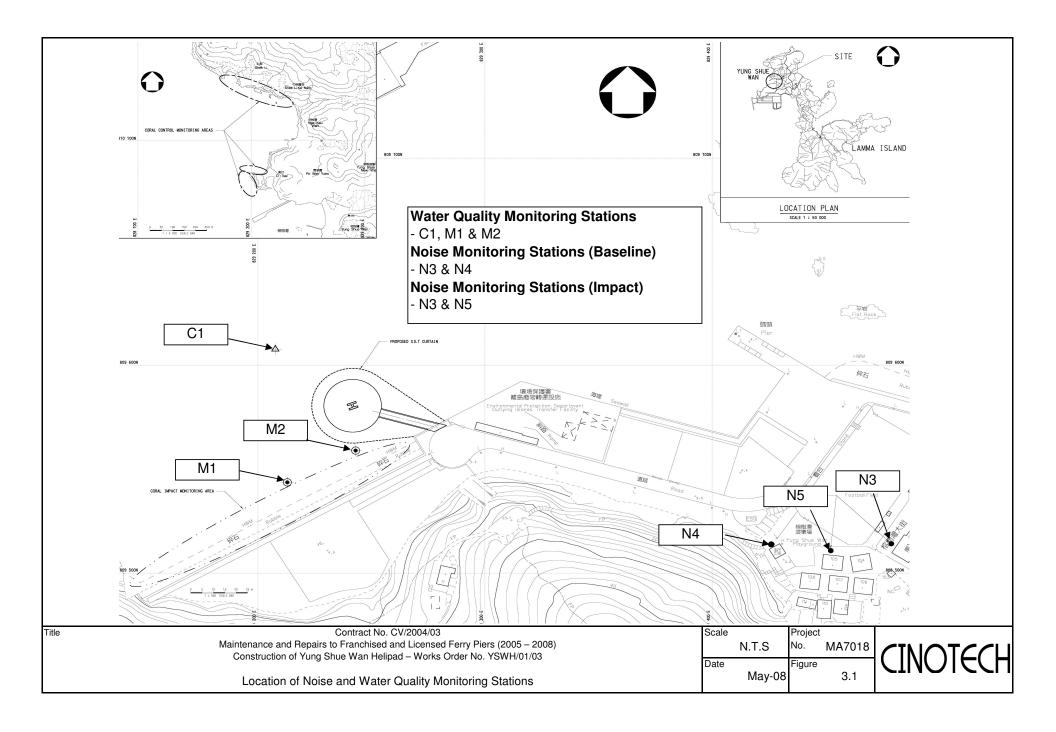
Ecology

• To provide silt curtain, checked and maintenance throughout the construction period

FIGURES







APPENDIX A ACTION AND LIMIT LEVELS

Action and Limit Levels

Table A-1 Action and Limit Level for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)

Table A-2 Action and Limit Level for Water Quality

Parameter (unit)	Action	Limit
Dissolved Oxygen (mg/L)	Surface and middle	Surface and middle
(surface, middle, bottom)	5%-ile of baseline for surface and	4 mg/L or 1%-ile of baseline
	middle layers	for surface and middle layers
	Bottom	Bottom
	5%-ile of baseline for bottom	2 mg/L or 1%-ile of baseline
	layer	for bottom layer
SS (mg/L)	95%-ile of baseline data or 120%	99%-ile of baseline or 130%
Depth average	of upstream control station's SS	of SS readings at the upstream
	at the same tide of the same day.	control station at the same tide
		of same day and specific
		sensitive receiver water quality
		requirements.
Turbidity (NTU)	95%-ile of baseline data or 120	99%-ile of baseline or 130%
(depth average)	% of upstream control station's	of turbidity at the upstream
	turbidity at the same tide of the	control station at the same tide
	same day.	of same day.

Notes:

- "Depth-averaged" is calculated by taking the arithmetic means of reading all three depths.
- For DO, non-compliance of the water quality limit occurs when monitoring result is lower than the limit.
- For SS & turbidity non-compliance of the water quality limits occur when monitoring result is higher than the limits.
- All the figures given in the table are used for reference only and the Engineer may amend the figures whenever it is considered as necessary

APPENDIX B COPIES OF CALIBRATION CERTIFCATES



Unit C, 1/F., Goldlion Holdings Center, 13-15 Yuen Shun Circuit, Shatin, NT, HK. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/71213/1
Date of Issue: 2007-12-14
Date Received: 2007-12-13
Date Tested: 2007-12-14
Date Completed: 2007-12-14
Next Due Date: 2008-12-13

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer

: Brüel & Kjær : B&K 2238

Model No. Serial No.

: 2337665

Microphone No.

: 2289749

Equipment No.

: N-01-01

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB	
94	94.0	
114	114.0	10

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist





TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/N/71015/1
Date of Issue:	2007-10-15
Date Received:	2007-10-13
Date Tested:	2007-10-13
Date Completed:	2007-10-15
Next Due Date:	2008-10-14

ATTN:

Mr. Henry Leung

Page:

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Certificate of Calibration

Item for calibration:

Description

: Integrating Sound Level Meter

Manufacturer Model No. Serial No. : Brüel & Kjær : B&K 2238

Microphone No. Equipment No. : 2394976 : 2407349 : N-01-05

Test conditions:

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE Senior Chemist



FACTORY CALIBRATION DATA OF THE SVAN 955 nr.: 12553

1. CALIBRATION

(electrical)

2. CALIBRATION'

(acoustical)

LEVEL METER; Characteristic: Z; fsin=1000Hz

Nominal result [dB]	Indication [dB]	Error [dB]
114.0	114.0	0.0

LEVEL METER; Range: High; Reference frequency: 1000Hz; Calibration factor: -0.2

Characteristic	Correct value [dB]	Indication [dB]	Error [dB]
Z	113.9	113.7	-0.2
. A	113.9	113.7	-0.2
С	113.9	113.7	-0.2

Calibration measured with the microphone ACO type 7052S No. 35222.

3. LINEARITY TEST (electrical)

LEVEL METER; Characteristic: A; f sin = 31.5 Hz

Nominal result [dB]	25.0	26.0	27.0	28.0	29.0	30.0	40.0	50.0	60.0	70.0	80.0
Error [dB]	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0
Nominal result [dB]	90.0	93.0	94.0	95.0	96.0	97.0	98.0	-	-	-	-
Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	850		12.5

LEVEL METER; Characteristic: A; f sia= 1000 Hz

Nominal result [dB]	25.0	26.0	27.0	28.0	29.0	30.0	40.0	50.0	60.0	70.0	80.0
Error [dB]	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Nominal result [dB]	90.0	100.0	110.0	120.0	130.0	133.0	134.0	135.0	136.0	137.0	138.0
Error [dB]	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1

LEVEL METER; Characteristic: A; f sin= 8000 Hz

DE TEE METER, Character	ribero. 11, 1 sin	GOOG IIE							- 2		
Nominal result [dB]	25.0	26.0	27.0	28.0	29.0	30.0	40.0	50.0	60.0	70.0	80.0
Error [dB]	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nominal result [dB]	90.0	100.0	110.0	120.0	130.0	132.0	133.0	134.0	135.0	136.0	137.0
Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

4. TONEBURST RESPONSE' (electrical)

LEVEL METER; Characteristic: A; f sin= 4000 Hz; Burst duration: 2s;

Steady level nominal result = 135dB

Result	Detector	Duration [ms]	1000	500	200	100	50	20	10	5	2	1	0.5	0.25
	Fast	Indication [dB]	134.9	134.9	134.0	132.4	130.1	126.6	123,8	120.9	116.9	113.9	110.9	107.8
MAX	rast	Error [dB]	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.2
MAX	Slow	Indication [dB]	132.9	130.8	127.4	124.6	121.7	117.8	114.8	111.8	107.8	-	-	-
	Slow	Error [dB]	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2			7.6
SEL		Indication [dB]	134.9	131.9	128.0	124.9	121.9	117.9	114.9	111.9	107.9	104.9	101.8	98.8
SEL	. B.	Error [dB]	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2

Steady level nominal result = 115dB

Result	Detector	Duration [ms]	1000	500	200	100	50	20	10	5	2	1.	0.5	0.25
	Fast	Indication [dB]	115.0	115.0	114.1	112.5	110.2	106.7	103.9	101.0	97.0	94.0	91.0	87.9
MAX	rast	Error [dB]	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1
MAA	Slow	Indication [dB]	113.0	110.9	107.5	104.7	101.8	97.9	94.9	91.9	87.9	U _S		
	Slow	Error [dB]	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1		-	-
SEL		Indication [dB]	115.0	112.0	108.0	105.0	102.0	98.0	95.0	92.0	88.0	85.0	81.9	78.9
SEL	973	Error [dB]	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1

Steady level nominal result = 95dB

Result	Detector	Duration [ms]	1000	500	200	100	50	20	10	5	2	1	0.5	0.25
3	F4	Indication [dB]	95.0	94.9	94.0	92.4	90.2	86.7	83.9	80.9	77.0	74.0	70.9	67.9
MAX	Fast	Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
MAX	Slow	Indication [dB]	93.0	90.9	.87.5	84.7	81.8	77.9	74.9	71.9	67.9			-
	Siow	Error [dB]	0,0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1			-
SEL		Indication [dB]	95.0	92.0	88.0	85.0	82.0	78.0	75.0	72.0	68.0	65.0	61.9	58.9
SEL		Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1

Steady level nominal result = 75dB

Result	Detector	Duration [ms]	1000	500	200	100	50	20	10	5	2	ı	0.5	0.25
- 4	Fast	Indication [dB]	75.0	74.9	74.0	72.4	70,2	66.7	63.9	60.9	57.0	54.0	50.9	47.9
MAY	rast	Error [dB]	0.0	0.0	0.0	0.0	0.0 ^	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
MAX	Slow	Indication [dB]	73.0	70.9	67.5	64.7	61.8	57.9	54.9	51.9	47.9		-	-
	Slow	Error [dB]	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-	-
SEL	22	Indication [dB]	75.0	72.0	68.0	65.0	62.0	58.0	55.0	52.0	48.0	45.0	41.9	38.9
SEL		Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1

Steady level nominal result = 55dB

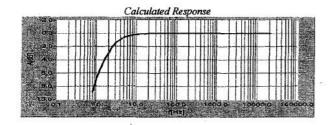
Result	Detector	Duration [ms]	1000	500	200	100	50	20	10	5	2
	Fast	Indication [dB]	55.0	54.9	54.0	52.4	50.2	46.7	43.9	40.9	37.0
MAX	rast	Error [dB]	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0
MAX	Slow	Indication [dB]	53.0	50.9	47.5	44.7	41.8	37.9	34.9	31.9	27.9
	Slow	Error [dB]	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0,1
SEL	492	Indication [dB]	55.0	52.0	48.0	45.0	42.0	38.0	35.0	32.0	28.0
SEL	-	Error [dB]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Steady level nominal result = 35dB

Result	Detector	Duration [ms]	1000	500	200	100
	Fast	Indication [dB]	35.0	34.9	34.0	32.4
MAX	rast	Error [dB]	0.0	-0.0	0.0	-0.0
MAA	Slow	Indication [dB]	32.9	30.9	27.4	24.6
	Slow	Error [dB]	-0.1	0.0	-0.2	-0.2
SEL		Indication [dB]	35.0	32.0	28.0	25.0
SEL	S T 3	Error [dB]	0.0	0.0	0.0	0,0

5. FREQUENCY RESPONSE' (electrical)

LEVEL METER; Characteristic: Z; Nominal result (1kHz)=135 dB;



Measured Response (f-frequency, A-attenuation) f(Hz) A [dB] f(Hz) f(Hz) f(

All frequencies are nominal center values for the 1/3 octave bands

6. INTERNAL NOISE LEVEL* (electrical - compensated)

LEVEL METER; Backlight - off

Characteristic	Z	A	C
Indication [dB]	10.0	10.0	10.0

^{*} measured with preamplifier SVANTEK type SV12L No. 13508.

7. INTERNAL NOISE LEVEL (acoustical - compensated)

LEVEL METER; Range: LOW; Backlight - off

Characteristic	A	
Indication [dB]	<17	

Noise measured in special chamber, with reference microphone G.R.A.S type 40AN No. 13529

ENVIRONMENTAL CONDITIONS

ENVIRONMENTAL CONDITIONS		
Relative humidity	Ambient pressure	
48 %	1005 hPa	
	Relative humidity	Relative humidity Ambient pressure

TEST EQUIPMENT

Item	Manufacturer	Model	Serial no.	Description
1.	SVANTEK	SVAN 401	84	Signal generator
2.	SVANTEK	SVAN 912A	3000	Sound & Vibration Analyser
3.	SOAR	3430	90CA1811	Digital voltmeter
4.	SVANTEK	SV30A	7921	Acoustic calibrator
5.	SVANTEK	ST02	1-	Microphone equivalent electrical impedance (18pF)

CONFORMITY & TEST DECLARATION

- 1. Herewith Svantek company declares that this instrument has been calibrated and tested in compliance with the internal ISO9001 procedures and meets all specification given in the Manual(s) or respectively surpass them.
- 2. The acoustic calibration was performed using the Sound Calibrator and is traceable to the GUM (Central Office of Measures) reference standard sound level calibrator type 4231 No 2292773.
- 3. The information appearing on this sheet has been compiled specifically for this instrument. This form is produced with advanced equipment & procedures which permit comprehensive quality assurance verification of all data supplied herein.
- 4. This calibration sheet shall not be reproduced except in full, without written permission of the SVANTEK Ltd.

Calibration specialist: Anna Domańska ...



Test date: 2007-09-25



Unit C, 1/F., Goldlion Holdings Center, 13-15 Yuen Shun Circuit, Shatin, NT, HK. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

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Test Report No.:	C/N/71116/2
Date of Issue:	2007-11-16
Date Received:	2007-11-15
Date Tested:	2007-11-15
Date Completed:	2007-11-16
Next Due Date:	2008-11-15

ATTN:

Mr. Henry Leung

Page:

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Item for calibration:

Description

Manufacturer

: Acoustical Calibrator : Brüel & Kjær

Model No.

: 4231 : 2326353

Serial No. Project No.

: C13

Equipment No.

: N-02-01

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 59%

Pressure

: 1015.2 hPa

Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level	Measured SPL	Tolerance	
At 94 dB SPL	94.0	94.0 ± 0.1 dB	

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Senior Chemist

This report may not be reproduced except with prior written approval from WELLAB LIMITED and the results relate only to the items calibrated or tested.



TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/06/80305
Date of Issue:	2008-03-05
Date Received:	2008-03-03
Date Tested:	2008-03-03
Date Completed:	2008-03-05
Next Due Date:	2009-03-04

ATTN:

Mr. Henry Leung

Page:

1 of 1

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2343007

Project No.

: C13

Equipment No.

: N-02-02

Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 65%

Pressure

: 1020.1hPa

Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.2 dB

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager

Sound Calibrator Certificate

Calibrator: Svantek Type SV30A



Serial no:

10929

Level 1:

94.01 dB

Level 2:

114.01 dB

Frequency:

1000 Hz

The stated level is valid at reference conditions.

Calibrator signal distortion for 94dB level:

Calibrator signal distortion for 114dB level:

Short term level stability:

0.07 %

0.13 %

0.05 dB 0.01 %

Frequency stability:

Measured according to IEC 60942.

The stated level is relative to 20 uPa.

The level is traceable to GUM, Poland,

with a calculated uncertainty less then ± 0.15 dB (2 * sd).

Reference conditions

Pressure:

1013.2 hPa

Temperature:

23.0 °C

Relativite humidity:

50 %RH

Masurment conditions

Presure:

1001 hPa

Temperature:

21 °C

Relativite humidity:

56 %RH

Date:

2007-09-28

Signature:



Unit C. 1/F., Goldlion Holdings Center, 13-15 Yuen Shun Circuit, Shatin, NT, HK. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	C/W/80505-1
Date of Issue:	2008-05-06
Date Received:	2008-05-05
Date Tested:	2008-05-05
Date Completed:	2008-05-06
Next Due Date:	2008-08-05

ATTN:

Mr. Henry Leung

Page:

1 of 2

Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No. Equipment No.

: 02D0126AA : W.03.01

Project No.

: C013

Test conditions:

Room Temperature

: 21 degree Celsius

Relative Humidity

: 62%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 05A1209

- 1. Conductivity performance check with Potassium Chloride standard solution
- 2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0145

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05A1610AJ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 01J

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

- 1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
- 2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



Unit C, 1/F., Goldlion Holdings Center, 13-15 Yuen Shun Circuit, Shatin, NT, HK. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Test Report No.: C/W/80505-1
Date of Issue: 2008-05-06
Date Received: 2008-05-05
Date Tested: 2008-05-05
Date Completed: 2008-05-06
Next Due Date: 2008-08-05

Page:

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Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	3.00
1421	1420	2	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in	Dissolved Oxygen, mg O ₂ /L		Correction, mg	Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05



Room 1516 & 816, Technology Park 18 Cn Lai Street, Shatin, N.T., Hong Kong Tel: 2898 7538 Fax: 2898 7076 Website: http://www.wellab.com.hk B-mail: wellab@wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/W/80805-1
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06
Next Due Date: 2008-11-05

ATTN:

Mr. Henry Leung

Page:

1 of 2

Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0126AA

Equipment No.

: W.03.01

Project No.

: C013

Test conditions:

Room Temperature

: 23 degree Celsius

Relative Humidity

: 63%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 05A1209

1. Conductivity performance check with Potassium Chloride standard solution

2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0145

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05A1610AJ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 01J

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

- 1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
- 2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

Test Report No.: C/W/80805-1
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06
Next Due Date: 2008-11-05

Page:

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Results:

1. Conductivity performance check

Specific (Specific Conductivity, μS/cm Correction, μS/cm		
Salinity Meter (C1)		D = C1 - C2	
1421	1420	2	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in	Dissolved Oxygen, mg O ₂ /L		Correction, mg	Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05



Unit C, 1/F., Goldlion Holdings Center. 13-15 Yuen Shun Circuit, Shatin, NT, HK, Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/W/80505-2
Date of Issue: 2008-05-06
Date Received: 2008-05-05
Date Tested: 2008-05-05
Date Completed: 2008-05-06
Next Due Date: 2008-05-05

1 of 2

ATTN: Mr. Henry Leung

Certificate of Calibration

Page:

Item for calibration:

Description : Sonde Environmental Monitoring System

Manufacturer : YSI

Model No. : 6820-C-M

Serial No. : 02D0293AA

Equipment No. : W.03.02 Project No. : C013

Test conditions:

Room Temperature : 21 degree Celsius

Relative Humidity : 62%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0886

1. Conductivity performance check with Potassium Chloride standard solution

2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 0261137

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05F2030AQ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 02A

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual

2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

Test Report No.: C/W/80505-2
Date of Issue: 2008-05-06
Date Received: 2008-05-05
Date Tested: 2008-05-05
Date Completed: 2008-05-06
Next Due Date: 2008-08-05

Page:

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Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salini	Salinity, ppt Correction		Salinity, ppt Correction, ppt		Acceptable range
Instrument Reading	Theoretical Value				
30.1	30.0	0.1	30.0 ± 3		

3. Dissolved Oxygen check

Oxygen level in	Dissolved O	Dissolved Oxygen, mg O ₂ /L		Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range
Saturated	9.0	9.0	0.0	± 0.2
Half-saturated	5.8	5.8	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH _i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05



Room 1516 & 816, Technology Park 18 On Lai Street, Shatin, N.T., Hong Keng Tel: 2898 7388 Fax: 2898 7076 Website: http://www.wellab.com.hk B-mail: wellab@wellab.com.hk

TEST REPORT

Cinotech Consultants Limited APPLICANT:

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/W/80805-2 Date of Issue: 2008-08-06 Date Received: 2008-08-05 Date Tested: 2008-08-05 2008-08-06 Date Completed: Next Due Date:

ATTN:

Mr. Henry Leung

Page:

1 of 2

2008-11-05

Certificate of Calibration

Item for calibration:

Description

: Sonde Environmental Monitoring System

Manufacturer

: YSI

Model No.

: 6820-C-M

Serial No.

: 02D0293AA

Equipment No.

: W.03.02

Project No.

: C013

Test conditions:

Room Temperature

: 23 degree Celsius

Relative Humidity

: 63%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0886

1. Conductivity performance check with Potassium Chloride standard solution

2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 0261137

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05F2030AQ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 02A

1. Calibration check with standard pH buffer

Depth Meter

1. Calibration check at 1m water level depth

Methodologies:

- 1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
- 2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

Test Report No.: C/W/80805-2
Date of Issue: 2008-08-06
Date Received: 2008-08-05
Date Tested: 2008-08-05
Date Completed: 2008-08-06
Next Due Date: 2008-11-05

Page:

2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, μS/cm		Correction, µS/cm	Acceptable range	
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	50/4	
1420	1420	0	1420 ± 20	

2. Salinity Performance check

Salini	Salinity, ppt Correction, ppt Acceptable range		
Instrument Reading	Theoretical Value	Action to the state of the stat	
30,1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in	Dissolved O	Dissolved Oxygen, mg O ₂ /L		Acceptable
water at 20°C	D.O. Meter	Winkler Titration	O ₂ /L	range
Saturated	9.0	9.0	0.0	± 0.2
Half-saturated	5.8	5.8	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_i , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH _s , pH unit	0.01	Less than 0.02
Noise ΔpH _n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

APPENDIX C QUALITY CONTROL REPORTS FOR SS LABORATORY ANALYSIS





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06900

Page:

Date of Issue: 2008/07/04

Date Received: 2008/07/03

Date Tested: 2008/07/03

Date Completed: 2008/07/04

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/03

Number of Sample: 28

Custody No.: MA7018/80703

Total Suspe	nded Solids	Du	plicate Analy	QC Recovery, %	
Samplin	g Point	Trial 1,	Trial 2,	Difference,	
		mg/L	mg/L	%	
C11	BF	6	5	18	95

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PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06928

Date of Issue: 2008/07/08

Date Received: 2008/07/07

Date Tested: 2008/07/07

Page:

Date Completed: 2008/07/08

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

2008/07/07

Project No.: MA7018

Number of Sample: 28

Sampling Date:

Custody No.: MA7018/80707

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1BF	16	17	9	107

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PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06944

Date of Issue: 2008/07/10

Date Received: 2008/07/09

Date Tested: 2008/07/09

1 of 1

Date Completed: 2008/07/10

Page:

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/09

Number of Sample: 28

Custody No.: MA7018/80709

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M2SE	6	5	7	98

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06964

Date of Issue: 2008/07/14

Date Received: 2008/07/11

Date Tested: 2008/07/11 Date Completed: 2008/07/14

ATTN: Mr. Henry Leung Page: 1 of 1

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/11

Number of Sample: 28

Custody No.: MA7018/80711

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1BF	12	14	15	91

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06978

Date of Issue: 2008/07/15

Date Received: 2008/07/14

Date Tested: 2008/07/14 Date Completed: 2008/07/15

Page: 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/14

Number of Sample: 28

Custody No.: MA7018/80714

Total Suspended Solids	Du	plicate Anal	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M2SE	3	4	8	97

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06991

Date of Issue: 2008/07/17

Date Received: 2008/07/16

Date Tested: 2008/07/16 Date Completed: 2008/07/17

ATTN: Mr. Henry Leung Page: 1 of 1

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/16

Number of Sample: 28

Custody No.: MA7018/80716

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1MF	6	7	14	94

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APPLICANT: Cinotech Consultants Limited

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18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 06997

Page:

Date of Issue: 2008/07/21

Date Received: 2008/07/18

Date Tested: 2008/07/18

Date Completed: 2008/07/21

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/18

Number of Sample: 28

Custody No.: MA7018/80718

Total Suspended Solids	Du	plicate Analy	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1MF	7	7	11	105

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APPLICANT: Cinotech Consultants Limited

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18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07010

Page:

Date of Issue: 2008/07/22

Date Received: 2008/07/21

Date Tested: 2008/07/21

Date Completed: 2008/07/22

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/21

Number of Sample: 28

Custody No.: MA7018/80721

Total Suspended Solids	Du	plicate Anal	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1SE	8	9	9	106

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07025

Date of Issue: 2008/07/24

Date Received: 2008/07/23

Date Tested: 2008/07/23

1 of 1

Date Completed: 2008/07/24

Page:

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/23

Number of Sample: 28

Custody No.: MA7018/80723

Total Suspended Solids	Du	plicate Anal	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1BF	6	6	4	93

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APPLICANT: Cinotech Consultants Limited

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18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07037

Page:

Date of Issue: 2008/07/28

Date Received: 2008/07/25

Date Tested: 2008/07/25

Date Completed: 2008/07/28

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/25

Number of Sample: 28

Custody No.: MA7018/80725

Total Suspended Solids	Du	plicate Anal	QC Recovery, %	
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1ME	5	6	16	98

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07045

Page:

Date of Issue: 2008/07/29

Date Received: 2008/07/28

Date Tested: 2008/07/28

Date Completed: 2008/07/29

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/07/28

Number of Sample: 28

Custody No.: MA7018/80728

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M2SF	16	16	2	99

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07061

Date of Issue: 2008/07/31

Date Received: 2008/07/30

Date Tested: 2008/07/30 Date Completed: 2008/07/31

Date Completed: 2008/0 Page: 1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018

Sampling Date: 2008/07/30

Number of Sample: 28

Custody No.: MA7018/80730

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M2BF	11	12	13	103

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For and On Behalf of WELLAB Ltd.

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07075

Date of Issue: 2008/08/04

Date Received: 2008/08/01

Date Tested: 2008/08/01 Date Completed: 2008/08/04

Page: 1 of 1

ATTN: Mr. Henry Leung

Sampling Site:

Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/08/01

Number of Sample: 28

Custody No.: MA7018/80801

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M1SF	6	6	11	98

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For and On Behalf of WELLAB Ltd.

PATRICK TSE





APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07084

Date of Issue: 2008/08/05

Date Received: 2008/08/04

Date Tested: 2008/08/04

1 of 1

Date Completed: 2008/08/05

Page:

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018

Sampling Date: 2008/08/04 Number of Sample: 28

Custody No.: MA7018/80804

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M1BE	7	7	2	99

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07096

Page:

Date of Issue: 2008/08/08

Date Received: 2008/08/07

Date Tested: 2008/08/07

Date Completed: 2008/08/08

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/08/07

Number of Sample: 28

Custody No.: MA7018/80807

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
M2BE	8	9	9	116

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APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Laboratory No.: 07107

Page:

Date of Issue: 2008/08/11

Date Received: 2008/08/09

Date Tested: 2008/08/09

Date Completed: 2008/08/11

1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad

Project No.: MA7018 Sampling Date: 2008/08/09

Number of Sample: 28

Custody No.: MA7018/80809

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1,	Trial 2,	Difference,	
	mg/L	mg/L	%	
C1SF	7	7	2	94

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For and On Behalf of WELLAB Ltd.

PATRICK TSE

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 Impact Noise Monitoring Schedule for July 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29-Jun	30-Jun	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
				Noise Monitoring at N3 and N5		
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
			Noise Monitoring at N3 and N5			
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
			Noise Monitoring at N3 and N5			
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
			Noise Monitoring at N3 and N5			
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
			Noise Monitoring at N3 and N5			

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 Tentative Impact Noise Monitoring Schedule for August 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug
				Noise Monitoring at N3 and N5		
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
			Noise Monitoring at N3 and N5			
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
		Noise Monitoring at N3 and N5				
24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug
	Noise Monitoring at N3 and N5					

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 **Impact Water Quality Monitoring Schedule for July 2008**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
				Mid-Flood 8:00 Mid-Ebb 12:25		
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
0 3	Mid-Flood 8:38 Mid-Ebb 15:34		Mid-Flood 10:21 Mid-Ebb 16:51		Mid-Ebb 8:00 Mid-Flood 13:24	
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
	Mid-Ebb 10:13 Mid-Flood 18:00		Mid-Ebb 11:24 Mid-Flood 18:00		Mid-Ebb 12:32 Mid-Flood 18:00	
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
	Mid-Flood 8:00 Mid-Ebb 14:17		Mid-Flood 8:54 Mid-Ebb 15:23		Mid-Flood 10:43 Mid-Ebb 16:41	
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
	Mid-Ebb 8:39 Mid-Flood 16:21		Mid-Ebb 10:34 Mid-Flood 18:00		Mid-Ebb 12:18 Mid-Flood 18:00	

The schedule may be changed due to unforeseen circumstances (adverse weather, etc) NA indicated favourable tide occurs during non-working hours

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 Tentative Impact Water Quality Monitoring Schedule for August 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
			Mid-Ebb 10:34 Mid-Flood 18:00		Mid-Ebb 12:17 Mid-Flood 18:00	
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug
	Mid-Flood 8:00 Mid-Ebb 14:22			Mid-Flood 9:45 Mid-Ebb 16:00		Mid-Flood 11:30 Mid-Ebb 17:00
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
24-Aug	25-Aug	26- Aug	27-Aug	28-Aug	29-Aug	30-Aug
24-Aug	25-Aug	20-Aug	21-Aug	Zo-Aug	29-Aug	JU-Aug

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

NA indicated favourable tide occurs during non-working hours

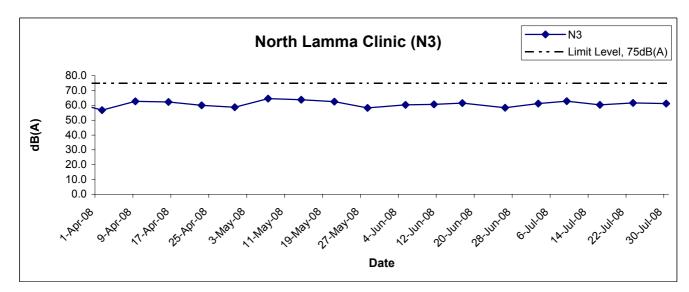
APPENDIX E NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

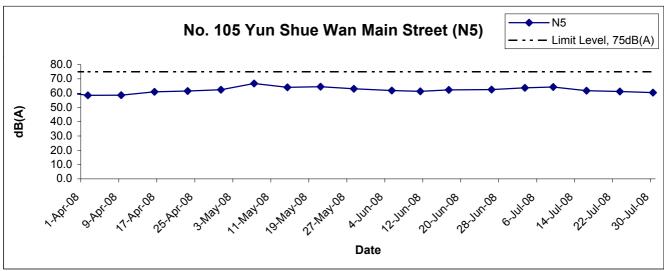
Appendix E - Noise Monitoring Results

Location N3 -	North Lamm	a Clinic			
Data	T:	\\/oothor	dE	3 (A) (30-min))
Date	Time	Weather	L _{eq}	L ₁₀	L 90
3-Jul-08	13:00	Sunny	61.2	64.5	55.0
9-Jul-08	13:00	Fine	62.8	64.5	56.5
16-Jul-08	13:00	Sunny	60.4	61.2	58.4
23-Jul-08	09:25	Sunny	61.6	62.5	58.0
30-Jul-08	13:00	Fine	61.2	62.5	59.0
_		Average	61.5	63.2	57.6
		Minimum	60.4	61.2	55.0
		Maximum	62.8	64.5	59.0

Location N5 - No. 105 Yun Shue Wan Main Street						
Data	Time	Weather	dB	3 (A) (30-min))	
Date	Time	vveatriei	L _{eq}	L ₁₀	L 90	
3-Jul-08	14:00	Sunny	63.8	68.0	59.0	
9-Jul-08	14:00	Fine	64.3	65.5	58.0	
16-Jul-08	13:35	Sunny	61.7	62.4	58.6	
23-Jul-08	10:00	Sunny	61.2	62.0	59.0	
30-Jul-08	13:35	Fine	60.4	62.0	58.5	
		Average	62.5	64.7	58.6	
		Minimum	60.4	62.0	58.0	
		Maximum	64.3	68.0	59.0	

Noise Levels





Title	Contract No. CV/2004/03
	Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008)
	Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03
	Graphical Presentation of Construction Noise Monitoring

Results

Date

Scale

N.T.S

Jul 08

Project No. MA7018 Appendix

Ε

APPENDIX F WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATION

Water Quality Monitoring Results at C1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C) Ambient Temperature (°C)			pН		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)			
Bate						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Jul-08	Sunny	Calm	12:32	Surface	1	28.7 28.7	28.7	29.6 29.6	29.6	7.4 7.4	7.4	29.5 29.4	29.5	73.5 73.2	73.4	5.3 5.2	5.3	5.2	3.1 2.8	3.0		11.0 11.0	11.0	
				Middle	3	28.7 28.8	28.8	29.6 29.6	29.6	7.4 7.4	7.4	29.7 30.0	29.9	72.7 70.0	71.4	5.2 5.0	5.1	5.2	4.2 4.2	4.2	4.3	8.0 8.0	8.0	10.2
				Bottom	5	28.8 28.8	28.8	29.6 29.6	29.6	7.4 7.4	7.4	30.3 30.2	30.3	64.1 64.8	64.5	4.6 4.6	4.6	4.6	6.3 5.2	5.8		12.0 11.0	11.5	
7-Jul-08	Sunny	Calm	16:32	Surface	1	28.2 28.2	28.2	25.9 25.9	25.9	7.3 7.3	7.3	30.6 30.7	30.7	83.9 82.9	83.4	7.5 7.5	7.5	7.3	3.7 3.3	3.5	4.4	17.0 17.0	17.0	
				Middle	3	27.8 27.8	27.8	25.9 25.9 25.9	25.9	7.4 7.4	7.4	30.9 30.9	30.9	91.7 90.0	90.9	6.9 7.2	7.1		4.2 4.2	4.2		13.0	13.0	14.2
				Bottom	5	26.5 25.9	26.2	25.9 25.9	25.9	7.3 7.3	7.3	31.1 31.2	31.2	77.0 79.4	78.2	6.5 6.6	6.6	6.6	5.3 5.8	5.6		12.0 13.0	12.5	
9-Jul-08	Cloudy	Calm	17:32	Surface	1	28.1 28.1	28.1	26.1 26.1	26.1	7.5 7.5	7.5	30.4 30.4	30.4	92.9 92.6	92.8	6.8 6.8	6.8	6.7	3.6 3.3	3.5	4.9	5.0 5.0	5.0	
				Middle	3	28.2 28.3	28.3	26.1 26.1	26.1	7.4 7.4	7.4	30.6 31.0	30.8	92.1 89.4	90.8	6.7 6.5	6.6		4.8 4.8	4.8		7.0 7.0	7.0	8.3
				Bottom	5	28.3 28.3	28.3	26.1 26.1	26.1	7.5 7.5	7.5	31.2 31.1	31.2	83.5 84.2	83.9	6.1 6.2	6.2		6.8 5.7	6.3		13.0 13.0	13.0	
11-Jul-08	Cloudy	Calm	08:01	Surface	1	24.7 24.7	24.7	23.8	23.8	7.4 7.4	7.4	30.8 30.7	30.8	77.7 77.4	77.6	6.5 6.5	6.5	6.4 5.9	4.3 4.0	4.2	5.7	4.0 5.0	4.5	
				Middle	3	24.7 24.8	24.8	23.8 23.8	23.8	7.4 7.4	7.4	31.0 31.3	31.2	76.9 74.2	75.6	6.4 6.2	6.3		5.4 5.4	5.4		8.0 8.0	8.0	6.8
				Bottom	5	24.8 24.8	24.8	23.8 23.8	23.8	7.4 7.4	7.4	31.6 31.5	31.6	68.3 69.0	68.7	5.8 5.9	5.9		7.5 7.4	7.5		8.0 8.0	8.0	
14-Jul-08	Sunny	Calm	11:31	Surface	1	29.0 29.0	29.0	27.9 27.9	27.9	7.3 7.3	7.3	32.2 32.3	32.3	80.9 79.9	80.4	7.0 6.9	7.0		3.6 3.8	3.7	4.7	4.0 4.0	4.0	5.7
				Middle	Middle 3	28.6 28.6	28.6	27.9 27.9	27.9	7.3 7.3	7.3	32.5 32.5	32.5	88.7 87.0	87.9	6.3 6.1	6.2	6.6	4.5 4.4	4.5		3.0	3.0	
				Bottom	5	27.3 26.7	27.0	27.9 27.9	27.9	7.3 7.3	7.3	35.2 35.3	35.3	74.0 76.3	75.2	5.9 6.1	6.0	6.0	5.8 6.1	6.0		10.0 10.0	10.0	
16-Jul-08	Sunny	Calm	11:26	Surface	1	28.5 28.5	28.5	29.2 29.2	29.2	7.5 7.5	7.5	21.5 21.6	21.6	111.3 111.4	111.4	7.8 7.8	7.8	7.1 5.7	3.4 3.5	3.5	3.4	5.0 6.0	5.5	7.2
				Middle	3	27.9 27.9	27.9	29.2 29.2	29.2	7.4 7.4	7.4	22.1 22.1	22.1	89.9 89.9	89.9	6.3 6.3	6.3		3.3 3.3	3.3		10.0 10.0	10.0	
				Bottom	5	27.2 27.1	27.2	29.2 29.2	29.2	7.5 7.5	7.5	26.2 26.2	26.2	83.5 83.6	83.6	5.7 5.7	5.7		3.3 3.2	3.3		6.0 6.0	6.0	
18-Jul-08	Sunny	Calm	13:32	Surface	1	29.4 29.4	29.4	29.6 29.6	29.6	7.5 7.5	7.5	31.8 31.9	31.9	89.3 88.3	88.8	7.1 7.1	7.1	6.0	3.2 3.4	3.3	4.3	6.0 6.0	6.0	7.3
				Middle	3	29.0 29.0	29.0	29.6 29.6	29.6	7.5 7.5	7.5	32.1 32.1	32.1	97.1 95.4	96.3	6.4 6.3	6.4	6.8	4.1 4.0	4.1		7.0 7.0	7.0	
				Bottom	5	27.7 27.1	27.4	29.6 29.6	29.6	7.5 7.4	7.5	34.8 34.9	34.9	82.4 84.7	83.6	6.0 6.2	6.1	6.1	5.4 5.7	5.6		9.0 9.0	9.0	
21-Jul-08	Sunny	Calm	14:08	Surface	Surface 1 Middle 3	28.7 28.7	28.7	32.2 32.2	32.2	7.4 7.4	7.4	26.2 26.2	26.2	102.8 101.9	102.4	7.3 7.2	7.3	6.9	3.3 3.3	3.3	3.8	8.0 8.0	8.0	
				Middle		28.7 28.7	28.7	32.2 32.2	32.2	7.4 7.4	7.4	31.4 31.4	31.4	90.2 90.2	90.2	6.5 6.5	6.5		4.1 4.0	4.1		5.0 5.0	5.0	6.5
				Bottom	5	28.3 28.3	28.3	32.2 32.2	32.2	7.4 7.4	7.4	33.6 33.6	33.6	87.9 86.8	87.4	6.3 6.2	6.3	6.3	3.9 4.0	4.0		6.0 7.0	6.5	
23-Jul-08	Sunny	Calm	15:17	Surface	1	27.8 27.8	27.8	32.1 32.1	32.1	7.5 7.5	7.5	23.9 23.9	23.9	99.5 98.0	98.8	6.9 6.8	6.9	6.6	4.0 4.0	4.0	4.1	8.0 8.0	8.0	
				Middle	ddle 3	27.8 27.7	27.8	32.1 32.1	32.1	7.5 7.5	7.5	26.2 26.2	26.2	89.0 88.9	89.0	6.2 6.2	6.2	0.0	4.5 4.5	4.5		4.0 3.0	3.5	5.5
				Bottom	5	27.7 27.7	27.7	32.1 32.1	32.1	7.5 7.5	7.5	31.2 31.2	31.2	84.5 84.6	84.6	5.9 5.9	5.9	5.9	3.8 3.9	3.9		5.0 5.0	5.0	<u></u>

Water Quality Monitoring Results at C1 - Mid-Ebb Tide

Date	Weather	Sea	Sampling	Dept	h (m)	Water Tem	perature (°C)	Ambient Ten	nperature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)		Turbidity(NTL	J)	Suspe	ended Solids	(mg/L)
Date	Condition	Condition**	Time	Бері	.11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.6 28.6	28.6	32.2 32.2	32.2	7.4 7.4	7.4	22.8 22.9	22.9	98.8 98.8	98.8	7.1 7.1	7.1	6.7	3.9 4.0	4.0		8.0 8.0	8.0	
25-Jul-08	Sunny	Calm	15:06	Middle	3.5	28.3 28.3	28.3	32.2 32.2	32.2	7.3 7.4	7.4	24.1 24.1	24.1	87.9 87.8	87.9	6.3 6.3	6.3	0.7	3.7 3.4	3.6	3.9	5.0 6.0	5.5	6.5
				Bottom	6	27.9 27.9	27.9	32.2 32.2	32.2	7.4 7.4	7.4	28.7 28.7	28.7	84.1 84.1	84.1	5.9 6.0	6.0	6.0	4.2 4.1	4.2		6.0 6.0	6.0	
				Surface	1	28.6 28.5	28.6	31.0 31.0	31.0	7.4 7.4	7.4	29.7 29.7	29.7	94.5 94.0	94.3	6.7 6.7	6.7		3.8 3.8	3.8		11.0 11.0	11.0	
28-Jul-08	Sunny	Calm	08:38	Middle	3	28.6 28.6	28.6	31.0 31.0	31.0	7.4 7.4	7.4	32.3 32.3	32.3	87.2 87.3	87.3	6.2	6.2	6.5	4.2 4.2	4.2	4.1	10.0	10.0	11.8
				Bottom	5	28.3 28.3	28.3	31.0 31.0	31.0	7.4 7.4	7.4	33.4 33.4	33.4	84.6 83.9	84.3	6.0	6.0	6.0	4.4 4.4	4.4		15.0 14.0	14.5	
				Surface	1	26.7 26.7	26.7	26.5 26.5	26.5	7.4 7.4	7.4	29.8 29.8	29.8	95.3 93.8	94.6	7.0 6.9	7.0		3.6 3.7	3.7		5.0 6.0	5.5	
30-Jul-08	Sunny	Calm	10:23	Middle	3	26.5 26.5	26.5	26.5 26.5	26.5	7.4 7.4	7.4	31.0 31.0	31.0	88.5 88.4	88.5	6.5 6.4	6.5	6.8	3.5 3.3	3.4	3.5	10.0 9.0	9.5	8.0
				Bottom	5	26.3 26.3	26.3	26.5 26.5	26.5	7.5 7.5	7.5	31.8 31.8	31.8	86.9 87.0	87.0	6.3 6.3	6.3	6.3	3.5 3.4	3.5		9.0 9.0	9.0	
				Surface	1	26.1 26.1	26.1	31.0 31.0	31.0	7.4 7.4	7.4	30.9 30.9	30.9	99.4 99.1	99.3	6.8 6.8	6.8		3.7 3.7	3.7		5.0 5.0	5.0	
1-Aug-08	Sunny	Calm	12:08	Middle	3	26.0 26.0	26.0	31.0 31.0	31.0	7.3 7.3	7.3	32.2 32.2	32.2	95.5 95.5	95.5	6.5 6.5	6.5	6.7	3.8 3.8	3.8	3.9	4.0 4.0	4.0	4.3
				Bottom	5	25.8 25.8	25.8	31.0 31.0	31.0	7.4 7.4	7.4	32.8 32.8	32.8	93.6 93.3	93.5	6.4 6.4	6.4	6.4	4.1 4.1	4.1		4.0 4.0	4.0	
				Surface	1	25.8 25.8	25.8	32.0 32.0	32.0	7.3 7.3	7.3	32.9 32.9	32.9	95.9 95.8	95.9	6.4 6.4	6.4	0.4	3.3 3.3	3.3		4.0 4.0	4.0	
4-Aug-08	Cloudy	Calm	14:23	Middle	3	25.8 25.9	25.9	32.0 32.0	32.0	7.4 7.4	7.4	32.9 32.9	32.9	95.0 94.5	94.8	6.4 6.4	6.4	6.4	3.9 3.8	3.9	3.8	8.0 8.0	8.0	6.2
				Bottom	5	26.0 26.0	26.0	32.0 32.0	32.0	7.3 7.3	7.3	32.9 32.9	32.9	99.5 98.3	98.9	6.7 6.6	6.7	6.7	4.1 4.1	4.1		7.0 6.0	6.5	1
				Surface	1	24.9 24.9	24.9	27.3 27.3	27.3	7.4 7.4	7.4	31.4 31.4	31.4	94.4 93.5	94.0	6.6 6.6	6.6	6.4	3.8 3.8	3.8		5.0 5.0	5.0	
7-Aug-08	Cloudy	Calm	15:57	Middle	3	24.9 24.9	24.9	27.3 27.3	27.3	7.3 7.3	7.3	31.6 31.6	31.6	88.2 88.2	88.2	6.2 6.2	6.2	6.4	4.1 4.1	4.1	4.1	4.0 5.0	4.5	7.2
				Bottom	5	24.7 24.7	24.7	27.3 27.3	27.3	7.4 7.4	7.4	32.0 32.0	32.0	87.0 86.9	87.0	6.1 6.1	6.1	6.1	4.5 4.5	4.5		12.0 12.0	12.0	<u> </u>
				Surface	1	24.7 24.7	24.7	28.6 28.6	28.6	7.4 7.4	7.4	30.5 30.6	30.6	94.1 94.1	94.1	6.8 6.8	6.8	6.5	3.5 3.6	3.6		9.0 9.0	9.0	
9-Aug-08	Sunny	Calm	17:53	Middle	3.5	24.7 24.7	24.7	28.6 28.6	28.6	7.4 7.4	7.4	30.3 30.3	30.3	86.6 86.7	86.7	6.2 6.2	6.2	0.5	3.8 3.6	3.7	4.1	7.0 7.0	7.0	7.0
				Bottom	6	24.5 24.4	24.5	28.6 28.6	28.6	7.4 7.4	7.4	31.5 31.5	31.5	84.6 83.9	84.3	6.1 6.0	6.1	6.1	4.9 4.8	4.9		5.0 5.0	5.0	

Water Quality Monitoring Results at C1 - Mid-Flood Tide

Date	Weather	Sea	Sampling	Dept	h (m)	Water Temp	perature (°C)	Ambient Ten	nperature (°C)	ŗ	Н	Salir	ity ppt	DO Satu	ration (%)	Disso	ved Oxygen	(mg/L)		Turbidity(NTL	J)	Suspe	nded Solids	s (mg/L)
Dute	Condition	Condition**	Time	Бері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	30.2 30.2	30.2	27.1 27.1	27.1	7.4 7.4	7.4	30.0 30.1	30.1	102.1 103.1	102.6	7.1 7.1	7.1		4.2 4.5	4.4		7.0 7.0	7.0	
3-Jul-08	Sunny	Calm	08:01	Middle	3	29.6 29.6	29.6	27.1 27.1	27.1	7.4 7.4	7.4	30.3 30.3	30.3	91.9 90.2	91.1	6.4 6.3	6.4	6.8	4.9 5.1	5.0	5.9	5.0 6.0	5.5	6.2
				Bottom	5	27.8 27.7	27.8	27.1 27.1	27.1	7.4 7.4	7.4	33.0 33.1	33.1	67.3 59.5	63.4	4.8 4.3	4.6	4.6	8.5 7.8	8.2		6.0	6.0	1
				Surface	1	27.3 27.3	27.3	24.2	24.2	7.4	7.4	30.1 30.1	30.1	85.2 84.0	84.6	5.8	5.9		3.3	3.3		15.0	15.0	1
7-Jul-08	Sunny	Calm	10:01	Middle	3	27.3 27.4	27.4	24.2 24.2 24.2	24.2	7.3	7.3	30.1 30.3 30.6	30.5	81.9 82.8	82.4	7.0	7.0	6.5	4.8	4.8	4.9	15.0 14.0	14.0	15.0
				Bottom	5	27.4 27.4 27.4	27.4	24.2 24.2 24.2	24.2	7.3 7.4	7.4	30.9	30.9	82.0	81.9	7.0 6.6	6.7	6.7	4.8 6.7	6.6		16.0	16.0	1
				Surface	1	29.6	29.7	26.3	26.3	7.3 7.5	7.5	30.8	31.0	81.8 86.0	86.5	6.7 7.6	7.5		6.5 3.7	3.9		4.0	3.5	
9-Jul-08	Cloudy	Calm	11:31	Middle	3	29.7 29.1 29.1	29.1	26.3 26.3 26.3	26.3	7.5 7.5 7.5	7.5	31.0 31.2 31.2	31.2	87.0 75.8 74.1	75.0	7.3 7.1 7.0	7.1	7.3	4.0 4.4 4.6	4.5	4.9	3.0 6.0 6.0	6.0	6.5
				Bottom	5	27.3 27.2	27.3	26.3 26.3	26.3	7.4 7.4	7.4	33.9 34.0	34.0	72.5 71.8	72.2	5.5 5.0	5.3	5.3	6.2	6.2		10.0	10.0	-
				Surface	1	26.2 26.2	26.2	25.2 25.2	25.2	7.3	7.3	31.3	31.4	106.3	106.8	8.3	8.3		4.4	4.6		4.0	4.5	
11-Jul-08	Sunny	Calm	13:32	Middle	3	25.6 25.6	25.6	25.2 25.2 25.2	25.2	7.3 7.4 7.4	7.4	31.4 31.6 31.6	31.6	107.3 96.1 94.4	95.3	8.3 7.6 7.5	7.6	8.0	4.7 5.1 5.3	5.2	5.4	5.0 4.0 4.0	4.0	6.8
				Bottom	5	23.8 23.7	23.8	25.2 25.2 25.2	25.2	7.4 7.3 7.3	7.3	34.3 34.4	34.4	71.5 63.7	67.6	6.0 5.5	5.8	5.8	6.7 6.0	6.4		12.0 12.0	12.0	
				Surface	1	28.1 28.1	28.1	27.7 27.7	27.7	7.3 7.3	7.3	31.6 31.7	31.7	73.3 73.0	73.2	5.5 5.5	5.5		3.4 3.6	3.5		4.0 5.0	4.5	
14-Jul-08	Sunny	Calm	18:02	Middle	3	28.1 28.2	28.2	27.7 27.7	27.7	7.3 7.3	7.3	31.8 32.2	32.0	73.0 73.2	73.1	6.5 6.5	6.5	6.0	5.8 5.9	5.9	5.5	11.0 11.0	11.0	9.7
				Bottom	5	28.2 28.2	28.2	27.7 27.7	27.7	7.3 7.3	7.3	32.5 32.3	32.4	70.0 70.2	70.1	6.5 6.5	6.5	6.5	7.1 7.0	7.1		13.0 14.0	13.5	1
			1	Surface	1	28.4 28.4	28.4	28.1 28.1	28.1	7.5 7.5	7.5	20.9	20.9	98.4 98.4	98.4	6.9 6.9	6.9		3.4 3.4	3.4		8.0 8.0	8.0	
16-Jul-08	Sunny	Calm	17:58	Middle	4	28.0 28.0	28.0	28.1	28.1	7.5 7.5	7.5	22.2 22.2	22.2	87.3 87.6	87.5	6.2 6.2	6.2	6.6	3.0	3.0	3.3	6.0 5.0	5.5	7.8
				Bottom	7	27.6 27.5	27.6	28.1 28.1	28.1	7.4 7.4	7.4	24.0 24.0	24.0	81.1 82.7	81.9	5.7 5.9	5.8	5.8	3.4 3.5	3.5		10.0 10.0	10.0	
				Surface	1	28.5 28.5	28.5	28.9 28.9	28.9	7.5 7.5	7.5	31.2 31.3	31.3	81.7 81.4	81.6	5.7 5.6	5.7		3.0 3.2	3.1		5.0 6.0	5.5	
18-Jul-08	Sunny	Calm	17:31	Middle	3	28.5 28.6	28.6	28.9 28.9	28.9	7.5 7.5	7.5	31.4 31.8	31.6	81.4 81.6	81.5	5.6 5.6	5.6	5.7	4.4 4.3	4.4	4.7	7.0	7.0	5.3
				Bottom	5	28.6 28.6	28.6	28.9 28.9	28.9	7.5 7.5	7.5	32.1 31.9	32.0	78.4 78.6	78.5	6.6 6.6	6.6	6.6	6.7 6.6	6.7		3.0 4.0	3.5	
				Surface	1	27.9 27.9	27.9	28.2 28.2	28.2	7.4 7.4	7.4	24.4 24.4	24.4	100.7 101.2	101.0	7.1 7.1	7.1		3.3 3.2	3.3		10.0	10.0	
21-Jul-08	Sunny	Calm	07:56	Middle	3.5	27.7 27.7	27.7	28.2 28.2	28.2	7.4 7.4	7.4	31.1 31.1	31.1	86.0 88.0	87.0	6.1 6.3	6.2	6.7	3.9 3.9	3.9	3.8	11.0 11.0	11.0	9.5
				Bottom	6	27.3 27.3	27.3	28.2 28.2	28.2	7.4 7.4	7.4	34.6 34.6	34.6	76.6 74.6	75.6	5.5 5.3	5.4	5.4	4.3 4.3	4.3		7.0	7.5	
				Surface	1	27.5 27.5	27.5	27.0 27.0	27.0	7.5 7.5	7.5	23.3 23.3	23.3	97.3 97.3	97.3	6.9 6.9	6.9		3.9 3.8	3.9		5.0 5.0	5.0	
23-Jul-08	Sunny	Calm	08:49	Middle	3.5	27.5 27.5	27.5	27.0 27.0	27.0	7.5 7.5	7.5	26.1 26.1	26.1	85.0 84.8	84.9	5.9 5.9	5.9	6.4	4.3 4.3	4.3	4.1	5.0 6.0	5.5	5.5
				Bottom	6	27.4 27.4	27.4	27.0 27.0	27.0	7.5 7.5	7.5	30.3 30.3	30.3	71.4 71.1	71.3	5.0 5.0	5.0	5.0	4.2 4.1	4.2		6.0 6.0	6.0	

Water Quality Monitoring Results at C1 - Mid-Flood Tide

Date	Weather	Sea	Sampling	Depth	(m)	Water Temp	perature (°C)	Ambient Ten	nperature (°C)	r	Н	Salin	ity ppt	DO Satu	ıration (%)	Disso	ved Oxygen	(mg/L)	1	Furbidity(NTL	I)	Suspe	nded Solids	(mg/L)
Date	Condition	Condition**	Time	Бериі	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.6 28.6	28.6	28.5 28.5	28.5	7.4 7.4	7.4	22.4 22.4	22.4	92.6 92.5	92.6	6.4 6.4	6.4		3.7 3.8	3.8		6.0 6.0	6.0	
25-Jul-08	Sunny	Calm	10:33	Middle	3	28.4 28.4	28.4	28.5 28.5	28.5	7.4 7.4	7.4	24.1 24.1	24.1	87.7 87.6	87.7	6.1 6.2	6.2	6.3	3.6 3.6	3.6	3.9	6.0 6.0	6.0	5.8
				Bottom	5	28.1 28.1	28.1	28.5 28.5	28.5	7.3 7.3	7.3	26.5 26.5	26.5	84.3 84.7	84.5	5.9 6.0	6.0	6.0	4.4 4.4	4.4		5.0	5.5	
				Surface	1	28.9	28.9	32.2 32.2	32.2	7.4 7.4	7.4	28.3 28.3	28.3	93.8 93.9	93.9	6.6 6.6	6.6		3.6 3.5	3.6		15.0 15.0	15.0	
28-Jul-08	Sunny	Calm	16:16	Middle	3	28.8 28.8	28.8	32.2 32.2	32.2	7.4 7.4 7.4	7.4	31.7 31.7	31.7	86.7 87.6	87.2	6.1 6.2	6.2	6.4	3.9	3.9	3.9	14.0 14.0	14.0	14.2
				Bottom	5	28.5 28.6	28.6	32.2 32.2	32.2	7.4 7.4 7.4	7.4	33.4 33.4	33.4	82.0 80.7	81.4	5.8 5.7	5.8	5.8	4.0 4.1	4.1		13.0	13.5	
						26.7		27.2		7.4		29.6		93.3		6.7			3.3			12.0		-
				Surface	1	26.7 26.4	26.7	27.2	27.2	7.4 7.4	7.4	29.6 30.9	29.6	92.9 89.6	93.1	6.7 6.5	6.7	6.6	3.3	3.3		12.0	12.0	
30-Jul-08	Fine	Calm	17:57	Middle	4	26.4	26.4	27.2	27.2	7.4	7.4	30.9	30.9	89.6	89.6	6.5	6.5		3.2	3.3	3.4	7.0	7.0	8.2
				Bottom	7	26.4 26.4	26.4	27.2 27.2	27.2	7.4 7.4	7.4	31.7 31.7	31.7	88.2 88.2	88.2	6.4 6.3	6.4	6.4	3.7 3.7	3.7		5.0 6.0	5.5	
				Surface	1	25.8 25.8	25.8	28.8 28.8	28.8	7.3 7.3	7.3	30.1 30.1	30.1	93.3 93.3	93.3	6.5 6.5	6.5	0.5	3.5 3.5	3.5		5.0 5.0	5.0	
1-Aug-08	Fine	Calm	17:51	Middle	3	25.8 25.8	25.8	28.8 28.8	28.8	7.4 7.4	7.4	31.8 31.8	31.8	90.4 90.6	90.5	6.3 6.4	6.4	6.5	3.8 3.8	3.8	3.8	5.0 5.0	5.0	5.2
				Bottom	5	25.6 25.6	25.6	28.8 28.8	28.8	7.3 7.3	7.3	32.7 32.7	32.7	87.7 86.7	87.2	6.2 6.1	6.2	6.2	4.0 3.9	4.0		5.0 6.0	5.5	
				Surface	1	25.9 26.0	26.0	28.1 28.1	28.1	7.4 7.4	7.4	32.9 32.9	32.9	92.2 93.9	93.1	6.2 6.3	6.3		2.3 2.1	2.2		4.0 5.0	4.5	
4-Aug-08	Sunny	Calm	08:48	Middle	3	26.0 25.9	26.0	28.1 28.1	28.1	7.4 7.4	7.4	32.9 32.9	32.9	91.6 91.1	91.4	6.2 6.2	6.2	6.3	2.6 2.5	2.6	2.9	5.0 5.0	5.0	5.8
				Bottom	5	25.9 25.8	25.9	28.1 28.1	28.1	7.4 7.4	7.4	32.9 32.9	32.9	90.5 90.6	90.6	6.1 6.1	6.1	6.1	4.0 3.8	3.9		8.0 8.0	8.0	
				Surface	1	24.6 24.6	24.6	26.1 26.1	26.1	7.4 7.4	7.4	30.7 30.7	30.7	90.3 90.3	90.3	6.3 6.3	6.3	2.4	3.6 3.5	3.6		7.0 6.0	6.5	
7-Aug-08	Cloudy	Calm	09:29	Middle	3	24.6 24.6	24.6	26.1 26.1	26.1	7.4 7.4	7.4	31.0 31.0	31.0	83.7 83.7	83.7	5.8 5.8	5.8	6.1	3.9 3.9	3.9	3.8	7.0 7.0	7.0	6.8
				Bottom	5	24.5 24.5	24.5	26.1 26.1	26.1	7.5 7.5	7.5	31.3 31.3	31.3	77.5 76.9	77.2	5.5 5.4	5.5	5.5	4.0 3.9	4.0		7.0	7.0	
				Surface	1	24.9 24.9	24.9	29.9 29.9	29.9	7.6 7.6	7.6	29.2 29.2	29.2	90.0 89.8	89.9	6.4 6.4	6.4		3.4 3.5	3.5		7.0 7.0	7.0	
9-Aug-08	Sunny	Calm	12:42	Middle	3	24.9 24.8	24.9	29.9 29.9	29.9	7.6 7.6	7.6	29.2 29.2	29.2	87.2 86.9	87.1	6.2 6.2	6.2	6.3	3.7 3.8	3.8	4.0	7.0 7.0	7.0	6.5
				Bottom	5	24.6 24.5	24.6	29.9 29.9	29.9	7.8 7.8	7.8	29.4 29.4	29.4	85.3 85.4	85.4	6.1 6.1	6.1	6.1	4.7 4.8	4.8		5.0	5.5	

Water Quality Monitoring Results at M1 - Mid-Ebb Tide

Date	Weather	Sea	Sampling	Dent	h (m)	Water Tem	perature (°C)	Ambient Ten	nperature (°C)	ŗ	эΗ	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)	-	Turbidity(NTL	J)	Susp	ended Solids	(mg/L)
Date	Condition	Condition**	Time	Бері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.7 28.8	28.8	29.6 29.6	29.6	7.4 7.4	7.4	29.6 29.7	29.7	69.2 69.2	69.2	4.9 4.9	4.9	4.9	3.3 3.2	3.3		5.0 5.0	5.0	
3-Jul-08	Sunny	Calm	12:41	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	4.3	-	-	5.0
				Bottom	3	28.8 28.8	28.8	29.6 29.6	29.6	7.4 7.4	7.4	29.8 29.8	29.8	69.9 69.3	69.6	5.0 4.9	5.0	5.0	5.2 5.2	5.2		5.0 5.0	5.0	
				Surface	1	27.8 28.2	28.0	25.9 25.9	25.9	7.4 7.4	7.4	30.6 30.7	30.7	88.2 91.9	90.1	6.7 6.8	6.8		3.3 3.3	3.3		14.0 14.0	14.0	
7-Jul-08	Sunny	Calm	16:41	Middle	-	-	-	-	-	-	-	-		-	-	-	-	6.8	-	-	3.9	-	-	15.0
				Bottom	3	27.9 27.9	27.9	25.9 25.9	25.9	7.4 7.4	7.4	31.0 31.4	31.2	88.4 85.9	87.2	6.6 6.4	6.5	6.5	4.3 4.6	4.5		16.0 16.0	16.0	
				Surface	1	28.2 28.2	28.2	26.1 26.1	26.1	7.5 7.5	7.5	30.5 30.6	30.6	87.2 87.6	87.4	6.4 6.4	6.4		3.2 3.1	3.2		4.0 4.0	4.0	
9-Jul-08	Cloudy	Calm	17:41	Middle	-	-	-	-	-	-	-	-	-		-	-	-	6.4	-	-	4.5	-	-	4.0
				Bottom	3	28.2 28.3	28.3	26.1 26.1	26.1	7.5 7.5	7.5	30.7 30.7	30.7	87.4 86.7	87.1	6.4 6.3	6.4	6.4	5.7 5.7	5.7		4.0 4.0	4.0	
				Surface	1	24.7 24.8	24.8	23.8 23.8	23.8	7.3 7.3	7.3	30.9 31.0	31.0	72.0 72.4	72.2	6.1 6.1	6.1		4.8 4.5	4.7		6.0	6.0	
11-Jul-08	Cloudy	Calm	08:11	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	-	5.6	-	-	6.5
				Bottom	3	24.8 24.8	24.8	23.8 23.8	23.8	7.4 7.4	7.4	31.1 31.1	31.1	72.2 71.5	71.9	6.1 6.0	6.1	6.1	6.4 6.4	6.4		7.0 7.0	7.0	
				Surface	1	28.6 28.9	28.8	27.9 27.9	27.9	7.3 7.3	7.3	32.1 32.2	32.2	85.2 88.9	87.1	6.1 6.2	6.2		3.8 3.6	3.7		4.0 4.0	4.0	
14-Jul-08	Sunny	Calm	11:41	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	4.1	-	-	6.5
				Bottom	3	28.7 28.7	28.7	27.9 27.9	27.9	7.4 7.4	7.4	32.5 32.6	32.6	85.4 82.9	84.2	6.0 5.9	6.0	6.0	4.4 4.4	4.4		9.0 9.0	9.0	
				Surface	1	28.6 28.6	28.6	29.2 29.2	29.2	7.4 7.4	7.4	19.8 18.4	19.1	86.8 86.8	86.8	6.1 6.1	6.1	0.4	3.6 3.8	3.7		6.0 6.0	6.0	
16-Jul-08	Sunny	Calm	11:33	Middle	-	-	-	-	-		-		-	 	-	-	-	6.1	-	-	3.3	-	-	5.5
				Bottom	4	28.4 28.4	28.4	29.2 29.2	29.2	7.5 7.5	7.5	20.4 20.5	20.5	95.1 95.2	95.2	6.6 6.6	6.6	6.6	2.9 2.8	2.9		5.0 5.0	5.0	
				Surface	1	29.0 29.3	29.2	29.6 29.6	29.6	7.5 7.5	7.5	31.7 31.8	31.8	93.6 97.3	95.5	6.3 6.3	6.3		3.4 3.2	3.3		4.0 4.0	4.0	
18-Jul-08	Sunny	Calm	13:41	Middle	-	-	-	-	-	-	-	-		-	-	-	-	6.3	-	-	3.7	-	-	4.3
				Bottom	3	29.1 29.1	29.1	29.6 29.6	29.6	7.5 7.5	7.5	32.1 32.1	32.1	93.8 91.3	92.6	6.1 6.0	6.1	6.1	4.0 4.0	4.0		4.0 5.0	4.5	
				Surface	1	28.7 28.7	28.7	32.2 32.2	32.2	7.4 7.4	7.4	26.1 26.1	26.1	94.5 94.7	94.6	6.5 6.5	6.5	0.5	3.4 3.4	3.4		5.0 5.0	5.0	
21-Jul-08	Sunny	Calm	14:14	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.5	-	-	3.8	-	-	5.3
				Bottom	3	28.5 28.5	28.5	32.2 32.2	32.2	7.5 7.5	7.5	33.7 33.7	33.7	88.7 87.4	88.1	6.4 6.3	6.4	6.4	4.0 4.1	4.1		6.0 5.0	5.5	
				Surface	1	27.8 27.8	27.8	32.1 32.1	32.1	7.5 7.5	7.5	24.9 24.9	24.9	94.6 94.7	94.7	6.6 6.6	6.6	0.0	3.3 3.3	3.3		4.0 5.0	4.5	
23-Jul-08	Sunny	Calm	15:23	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.6	-	-	4.1	-	-	4.8
				Bottom	3	27.7 27.7	27.7	32.1 32.1	32.1	7.6 7.6	7.6	27.2 27.2	27.2	88.3 89.1	88.7	6.1 6.1	6.1	6.1	4.8 4.9	4.9		5.0 5.0	5.0	

Water Quality Monitoring Results at M1 - Mid-Ebb Tide

Date	Weather	Sea	Sampling	Depti	h (m)	Water Tem	perature (°C)	Ambient Ten	nperature (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)	-	Turbidity(NTL	J)	Suspe	ended Solids	(mg/L)
Date	Condition	Condition**	Time	Бери	1 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.7 28.7	28.7	32.2 32.2	32.2	7.4 7.4	7.4	22.0 21.3	21.7	91.5 91.4	91.5	6.5 6.5	6.5	6.5	3.8 4.0	3.9		6.0 6.0	6.0	
25-Jul-08	Sunny	Calm	15:12	Middle	-	-	-	-	-	-	-	-	-	-	-		-	0.0	-	-	3.8	-	-	7.0
				Bottom	3	28.6 28.6	28.6	32.2 32.2	32.2	7.4 7.4	7.4	23.3 23.4	23.4	87.6 87.7	87.7	6.3 6.3	6.3	6.3	3.6 3.6	3.6		8.0 8.0	8.0	
				Surface	1	28.6 28.6	28.6	31.0 31.0	31.0	7.4 7.4	7.4	29.6 29.6	29.6	90.7 90.6	90.7	6.4 6.4	6.4	6.4	4.0 3.9	4.0		12.0 12.0	12.0	
28-Jul-08	Sunny	Calm	08:44	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	-	-	4.2	-	-	12.5
				Bottom	3	28.6 28.6	28.6	31.0 31.0	31.0	7.5 7.4	7.5	33.5 33.5	33.5	86.7 85.9	86.3	6.2 6.1	6.2	6.2	4.2 4.3	4.3		13.0 13.0	13.0	
				Surface	1	26.7 26.7	26.7	26.5 26.5	26.5	7.4 7.4	7.4	29.8 29.8	29.8	90.8 90.7	90.8	6.6 6.6	6.6	6.6	3.8 4.0	3.9		8.0 8.0	8.0	
30-Jul-08	Sunny	Calm	10:31	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	-	3.5	-	-	6.8
				Bottom	3	26.5 26.5	26.5	26.5 26.5	26.5	7.4 7.4	7.4	31.0 31.0	31.0	81.9 81.8	81.9	5.9 5.9	5.9	5.9	3.1 3.0	3.1		5.0 6.0	5.5	
				Surface	1	26.2 26.2	26.2	31.0 31.0	31.0	7.4 7.4	7.4	30.9 30.9	30.9	98.6 98.6	98.6	6.7 6.7	6.7	0.7	3.9 3.9	3.9		3.0 3.0	3.0	
1-Aug-08	Sunny	Calm	12:14	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.7	-	-	4.2	-	-	3.5
				Bottom	3	26.1 26.1	26.1	31.0 31.0	31.0	7.3 7.3	7.3	32.8 32.8	32.8	96.3 95.8	96.1	6.6 6.6	6.6	6.6	4.3 4.4	4.4		4.0 4.0	4.0	
				Surface	1	26.0 25.9	26.0	32.0 32.0	32.0	7.3 7.3	7.3	32.9 32.9	32.9	91.6 91.1	91.4	6.2 6.2	6.2	0.0	2.3 2.1	2.2		7.0 6.0	6.5	
4-Aug-08	Cloudy	Calm	14:29	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	2.8	-	-	6.8
				Bottom	3	25.9 25.8	25.9	32.0 32.0	32.0	7.3 7.3	7.3	32.9 32.9	32.9	90.5 90.6	90.6	6.1 6.1	6.1	6.1	3.5 3.2	3.4		7.0 7.0	7.0	
				Surface	1	25.0 25.0	25.0	27.3 27.3	27.3	7.4 7.4	7.4	30.9 30.9	30.9	94.6 94.6	94.6	6.6 6.6	6.6	6.6	3.8 3.8	3.8		5.0 5.0	5.0	
7-Aug-08	Cloudy	Calm	16:04	Middle	-		-	-	-	-	-	-	-	 	-	-	-	6.6	-	-	4.1	-	-	5.0
				Bottom	3	24.9 24.9	24.9	27.3 27.3	27.3	7.5 7.5	7.5	31.0 31.0	31.0	90.3 90.4	90.4	6.3 6.3	6.3	6.3	4.4 4.4	4.4		5.0 5.0	5.0	
				Surface	1	24.8 24.8	24.8	28.6 28.6	28.6	7.4 7.4	7.4	29.8 30.3	30.1	88.8 88.7	88.8	6.4 6.4	6.4	6.4	3.6 3.8	3.7		5.0 5.0	5.0	
9-Aug-08	Sunny	Calm	17:59	Middle	-	-	-	-	-	-	-	-	-	-	-		-	0.4	-	-	3.9	-	-	6.0
				Bottom	3	24.7 24.7	24.7	28.6 28.6	28.6	7.5 7.5	7.5	30.3 30.0	30.2	86.7 86.8	86.8	6.2 6.3	6.3	6.3	4.0 4.0	4.0		7.0 7.0	7.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Water Quality Monitoring Results at M1 - Mid-Flood Tide

Date	Weather	Sea	Sampling	Dept	h (m)	Water Temp	perature (°C)	Ambient Ten	nperature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ıration (%)	Dissol	ved Oxygen	(mg/L)	1	Furbidity(NTL	I)	Suspe	nded Solids	(mg/L)
Date	Condition	Condition**	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	29.6 29.9	29.8	27.1 27.1	27.1	7.4 7.4	7.4	29.9 30.1	30.0	88.4 91.7	90.1	6.2 6.3	6.3	6.3	4.0 4.0	4.0		3.0 4.0	3.5	
3-Jul-08	Sunny	Calm	08:11	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	4.6	-	-	4.3
				Bottom	4	29.7 29.7	29.7	27.1 27.1	27.1	7.5 7.5	7.5	30.3 30.3	30.3	88.6 86.1	87.4	6.1 6.0	6.1	6.1	5.1 5.1	5.1		5.0 5.0	5.0	
				Surface	1	27.3 27.3	27.3	24.2	24.2	7.3 7.3	7.3	30.3 30.2	30.3	84.7 84.8	84.8	6.9 6.9	6.9		3.6 3.5	3.6		16.0 16.0	16.0	
7-Jul-08	Sunny	Calm	10:11	Middle	-	-	-	- 24.2	-	-	-	- 30.2	-	- 04.0	-	- 0.9	-	6.9	- 3.5	-	4.7	-	-	17.0
				Bottom	4	27.4 27.4	27.4	24.2 24.2	24.2	7.4	7.4	30.4 30.4	30.4	85.3 84.7	85.0	6.8 6.9	6.9	6.9	5.8 5.5	5.7		18.0	18.0	
				Surface	1	29.1	29.3	26.3	26.3	7.4	7.5	30.9	31.0	72.3	74.0	6.9	7.0		3.5	3.5		18.0 6.0	6.0	
9-Jul-08	Cloudy	Calm	11:41	Middle	-	29.4	-	26.3	-	7.5	-	31.0	-	75.6 -	-	7.0	_	7.0	3.5	_	4.1	6.0	-	7.8
	•			Bottom	4	29.2	29.2	26.3	26.3	7.5	7.5	31.3	31.3	72.5	71.3	6.8	6.8	6.8	4.6	4.6		10.0	9.5	
				Surface	1	29.2 25.6	25.8	26.3 25.2	25.2	7.5	7.4	31.3 31.3	31.4	70.0 92.6	94.3	7.4	7.5		3.7	3.7		9.0	9.0	
11-Jul-08	Sunny	Calm	13:41	Middle	-	25.9	-	25.2	-	7.4	-	31.4	-	95.9	-	7.6	-	7.5	3.7	-	4.5	9.0	-	7.5
				Bottom	4	25.7	25.7	25.2	25.2	7.4	7.4	31.7	31.7	92.8	91.6	7.4	7.3	7.3	5.3	5.3		6.0	6.0	
				Surface	1	25.7 28.1	28.1	25.2 27.7	27.7	7.4 7.3	7.3	31.6 31.8	31.8	90.3 73.0	73.1	7.2 6.7	6.8		5.3 4.8	4.8		6.0 3.0	3.5	
14-Jul-08	Sunny	Calm	18:11	Middle	-	28.1	_	27.7	-	7.3	-	31.8	-	73.2	-	6.8	-	6.8	4.7		5.5	4.0	-	8.3
	,			Bottom	4	28.2	28.2	27.7	27.7	7.3	7.3	31.9	32.0	73.3	72.8	6.5	6.6	6.6	6.1	6.1		13.0	13.0	
				Surface	1	28.2	28.1	27.7	28.1	7.3	7.5	32.0 20.9	20.9	72.3 86.9	86.9	6.7	6.1		3.0	3.0		4.0	4.5	
16-Jul-08	Sunny	Calm	18:04	Middle	-	28.0	-	28.1	-	7.5	-	20.9	-	86.9	-	6.1	-	6.1	3.0	-	3.0	5.0	-	5.8
				Bottom	3	27.8	27.8	28.1	28.1	7.5	7.5	22.1	22.1	86.6	86.7	6.1	6.1	6.1	2.9	3.0		7.0	7.0	
				Surface	1	27.7 28.5	28.5	28.1 28.9	28.9	7.5 7.5	7.5	22.1 31.4	31.4	86.8 81.4	81.5	6.1	6.9		3.0	3.7		7.0 3.0	3.5	
18-Jul-08	Sunny	Calm	17:41	Middle	-	28.5	-	28.9	-	7.5	-	31.4	-	81.6	-	6.9	-	6.9	3.7	_	4.7	4.0	-	4.8
				Bottom	4	28.6 28.6	28.6	28.9 28.9	28.9	7.5 7.5	7.5	31.5 31.6	31.6	81.7 80.7	81.2	6.7 6.8	6.8	6.8	5.7 5.6	5.7		6.0 6.0	6.0	
				Surface	1	28.0	28.0	28.2	28.2	7.4	7.4	24.5	24.5	92.2	92.3	6.5	6.5		3.7	3.7		7.0	7.0	
21-Jul-08	Sunny	Calm	08:02	Middle	-	28.0	-	28.2	-	7.4	-	24.5	-	92.3	-	6.5	-	6.5	3.7	-	3.8	7.0	-	8.5
				Bottom	4	27.6 27.6	27.6	28.2 28.2	28.2	7.5 7.5	7.5	34.7 34.7	34.7	88.0 87.9	88.0	6.3 6.3	6.3	6.3	3.9 3.8	3.9		10.0 10.0	10.0	
				Surface	1	27.5	27.5	27.0	27.0	7.6	7.6	24.4	24.4	89.0	89.1	6.3	6.3		3.9	3.9		4.0	4.5	
23-Jul-08	Sunny	Calm	08:55	Middle	-	27.4	-	27.0	-	7.6	-	24.3	-	89.1	-	6.3	-	6.3	3.9	-	4.0	5.0	-	4.8
	-			Bottom	4	27.5	27.5	27.0	27.0	7.6	7.6	26.9	26.9	87.7	87.7	6.1	6.1	6.1	4.0	4.1		5.0	5.0	
		<u> </u>	<u> </u>	<u> </u>	1	27.5	l .	27.0	<u> </u>	7.6	<u> </u>	26.9	<u> </u>	87.7	<u> </u>	6.1	<u> </u>	1	4.2	<u> </u>		5.0	<u> </u>	

Water Quality Monitoring Results at M1 - Mid-Flood Tide

Date	Weather	Sea	Sampling	Depth	(m)	Water Temp	perature (°C)	Ambient Ten	nperature (°C)	ļ.	Н	Salin	ity ppt	DO Satu	ıration (%)	Dissol	ved Oxygen	(mg/L)	1	Furbidity(NTL	I)	Suspe	nded Solids	(mg/L)
Date	Condition	Condition**	Time	Бериі	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.5 28.5	28.5	28.5 28.5	28.5	7.4 7.4	7.4	22.4 22.5	22.5	87.1 87.3	87.2	6.1 6.1	6.1	6.1	3.6 3.7	3.7		5.0 5.0	5.0	
25-Jul-08	Sunny	Calm	10:40	Middle	-	-	-		-	-	-		-	-	-	-	-	0.1	-	-	3.8	-	-	5.0
				Bottom	3	28.3 28.3	28.3	28.5 28.5	28.5	7.4 7.4	7.4	27.1 27.1	27.1	86.1 86.2	86.2	6.1 6.1	6.1	6.1	3.7 3.8	3.8		5.0 5.0	5.0	
				Surface	1	29.1 29.1	29.1	32.2 32.2	32.2	7.4 7.4	7.4	28.4 28.4	28.4	89.5 89.4	89.5	6.2 6.2	6.2	6.2	3.7 3.7	3.7		10.0 10.0	10.0	
28-Jul-08	Sunny	Calm	16:23	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	3.8	-	-	12.0
				Bottom	3	29.0 29.0	29.0	32.2 32.2	32.2	7.5 7.5	7.5	33.4 33.4	33.4	86.6 85.9	86.3	6.1 6.1	6.1	6.1	3.9 3.9	3.9		14.0 14.0	14.0	
				Surface	1	26.6 26.6	26.6	27.2 27.2	27.2	7.4 7.4	7.4	29.7 29.7	29.7	88.2 89.6	88.9	6.4 6.5	6.5	6.5	3.0 3.0	3.0		8.0 9.0	8.5	
30-Jul-08	Fine	Calm	18:04	Middle	-	-	-	1 1	-	-	-	1 1	-	1 1	-	-	-	0.5	-	-	3.4	-	-	7.3
				Bottom	4	26.4 26.4	26.4	27.2 27.2	27.2	7.4 7.4	7.4	30.9 30.9	30.9	83.2 83.3	83.3	6.1 6.0	6.1	6.1	3.7 3.6	3.7		6.0 6.0	6.0	
				Surface	1	25.9 25.9	25.9	28.8 28.8	28.8	7.4 7.4	7.4	30.2 30.2	30.2	91.4 91.5	91.5	6.4 6.4	6.4	6.4	3.7 3.7	3.7		7.0 6.0	6.5	
1-Aug-08	Fine	Calm	17:58	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	3.8	-	-	5.8
				Bottom	3	25.9 25.9	25.9	28.8 28.8	28.8	7.4 7.4	7.4	32.8 32.8	32.8	89.1 88.7	88.9	6.3 6.3	6.3	6.3	3.9 3.9	3.9		5.0 5.0	5.0	
				Surface	1	25.7 25.7	25.7	28.1 28.1	28.1	7.3 7.3	7.3	32.9 32.9	32.9	99.5 98.3	98.9	6.7 6.6	6.7	6.7	2.2 2.1	2.2		6.0 6.0	6.0	
4-Aug-08	Sunny	Calm	08:28	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	3.2	-	-	6.5
				Bottom	3	25.7 25.7	25.7	28.1 28.1	28.1	7.3 7.3	7.3	32.9 32.9	32.9	97.0 96.9	97.0	6.5 6.5	6.5	6.5	4.2 4.1	4.2		7.0 7.0	7.0	
				Surface	1	24.7 24.7	24.7	26.1 26.1	26.1	7.3 7.3	7.3	30.3 30.3	30.3	88.2 88.3	88.3	6.2 6.2	6.2	6.2	3.7 3.7	3.7		7.0 7.0	7.0	
7-Aug-08	Cloudy	Calm	09:35	Middle	-	-	-	1 1	-	-	-	1 1	-	1 1	-	-	-	0.2	-	-	3.8	-	-	7.8
				Bottom	3	24.7 24.7	24.7	26.1 26.1	26.1	7.3 7.3	7.3	30.8 30.8	30.8	86.4 86.2	86.3	6.1 6.0	6.1	6.1	3.8 3.9	3.9		9.0 8.0	8.5	
				Surface	1	25.0 25.0	25.0	29.9 29.9	29.9	7.6 7.6	7.6	29.2 29.2	29.2	83.2 83.1	83.2	6.0 6.0	6.0	6.0	3.5 3.5	3.5		3.0 4.0	3.5	
9-Aug-08	Sunny	Calm	12:50	Middle	-	-	-		-	-	-		-		-	-	-	0.0	-	-	4.0	-	-	3.8
				Bottom	3	24.6 24.6	24.6	29.9 29.9	29.9	7.5 7.5	7.5	30.7 30.7	30.7	82.3 82.4	82.4	6.0 5.9	6.0	6.0	4.4 4.5	4.5		4.0 4.0	4.0	

Water Quality Monitoring Results at M2 - Mid-Ebb Tide

Date	Weather	Sea	Sampling	Dent	h (m)	Water Tem	perature (°C)	Ambient Ten	nperature (°C)	ŗ	эΗ	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)	-	Turbidity(NTL	I)	Susp	ended Solids	(mg/L)
Date	Condition	Condition**	Time	Бері	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.8 28.8	28.8	29.6 29.6	29.6	7.4 7.4	7.4	29.4 29.4	29.4	69.5 69.4	69.5	4.9 4.9	4.9	4.9	3.5 2.9	3.2		5.0 5.0	5.0	
3-Jul-08	Sunny	Calm	12:52	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	4.2	-	-	9.0
				Bottom	3	28.8 28.8	28.8	29.6 29.6	29.6	7.5 7.5	7.5	29.8 29.9	29.9	69.6 69.6	69.6	4.9 5.0	5.0	5.0	5.1 5.1	5.1		13.0 13.0	13.0	
				Surface	1	28.2 27.7	28.0	25.9 25.9	25.9	7.4 7.4	7.4	30.7 30.9	30.8	91.8 91.7	91.8	6.7 6.8	6.8		2.8 3.2	3.0		16.0 16.0	16.0	
7-Jul-08	Sunny	Calm	16:52	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	4.3	-	-	16.3
				Bottom	3	27.6 27.3	27.5	25.9 25.9	25.9	7.4 7.4	7.4	31.5 31.9	31.7	90.2 92.7	91.5	6.7 7.0	6.9	6.9	5.6 5.5	5.6		16.0 17.0	16.5	
				Surface	1	28.2 28.2	28.2	26.1 26.1	26.1	7.5 7.5	7.5	30.3 30.3	30.3	86.2 86.5	86.4	6.3 6.3	6.3		4.0 3.4	3.7		6.0 5.0	5.5	
9-Jul-08	Cloudy	Calm	17:52	Middle	-		-	-	-	-	-	-	-	-	-		-	6.3	-	-	4.7	-	-	5.8
				Bottom	3	28.3 28.3	28.3	26.1 26.1	26.1	7.5 7.5	7.5	30.7 30.8	30.8	84.0 83.0	83.5	6.1 6.1	6.1	6.1	5.6 5.6	5.6		6.0 6.0	6.0	
				Surface	1	24.8 24.8	24.8	23.8 23.8	23.8	7.4 7.4	7.4	30.7 30.7	30.7	71.0 71.3	71.2	6.0	6.0		4.7 4.1	4.4		6.0 6.0	6.0	
11-Jul-08	Cloudy	Calm	08:22	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-	-	5.4	-	-	8.0
				Bottom	3	24.8 24.8	24.8	23.8 23.8	23.8	7.4 7.4	7.4	31.1 31.2	31.2	68.8 67.8	68.3	5.8 5.8	5.8	5.8	6.3 6.3	6.3		10.0 10.0	10.0	
				Surface	1	29.0 28.5	28.8	27.9 27.9	27.9	7.3 7.4	7.4	32.2 32.4	32.3	87.6 88.6	88.1	6.2 6.2	6.2		3.3 3.4	3.4		3.0 4.0	3.5	
14-Jul-08	Sunny	Calm	11:52	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	4.5	-	-	3.0
				Bottom	3	28.4 28.1	28.3	27.9 27.9	27.9	7.4 7.4	7.4	33.1 33.4	33.3	87.2 79.3	83.3	6.2 6.5	6.4	6.4	5.6 5.5	5.6		<2.5 <2.5	<2.5	
				Surface	1	29.1 29.1	29.1	29.2 29.2	29.2	7.5 7.5	7.5	19.6 19.6	19.6	94.5 94.5	94.5	6.6 6.6	6.6	0.0	2.9 2.9	2.9		9.0 9.0	9.0	
16-Jul-08	Sunny	Calm	11:36	Middle	-	-	-	-	-		-		-	 	-	-	-	6.6	-	-	3.2	-	-	7.8
				Bottom	4	28.1 28.1	28.1	29.2 29.2	29.2	7.5 7.5	7.5	20.3 20.9	20.6	95.3 95.2	95.3	6.7 6.6	6.7	6.7	3.4 3.5	3.5		7.0 6.0	6.5	
				Surface	1	29.4 28.9	29.2	29.6 29.6	29.6	7.5 7.5	7.5	31.8 32.0	31.9	96.0 97.0	96.5	6.3 6.4	6.4	0.4	2.9 3.0	3.0		6.0 6.0	6.0	
18-Jul-08	Sunny	Calm	13:52	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	-	-	4.1	-	-	5.3
				Bottom	3	28.8 28.5	28.7	29.6 29.6	29.6	7.5 7.5	7.5	32.7 33.0	32.9	95.6 87.7	91.7	6.3 6.6	6.5	6.5	5.2 5.2	5.2		4.0 5.0	4.5	
				Surface	1	28.5 28.5	28.5	32.2 32.2	32.2	7.5 7.5	7.5	25.9 25.9	25.9	96.4 96.5	96.5	6.8 6.8	6.8	0.0	3.5 3.5	3.5		5.0 5.0	5.0	
21-Jul-08	Sunny	Calm	14:19	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.8	-	-	3.6	-	-	6.0
				Bottom	3	28.0 28.0	28.0	32.2 32.2	32.2	7.5 7.5	7.5	34.4 34.4	34.4	91.8 90.3	91.1	6.6 6.5	6.6	6.6	3.6 3.7	3.7		7.0 7.0	7.0	
				Surface	1	27.8 27.8	27.8	32.1 32.1	32.1	7.6 7.6	7.6	24.9 24.9	24.9	94.3 93.8	94.1	6.6 6.5	6.6		3.8 3.9	3.9		7.0 7.0	7.0	
23-Jul-08	Sunny	Calm	15:30	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	-	4.1	-	-	6.5
				Bottom	3	27.8 27.8	27.8	32.1 32.1	32.1	7.6 7.6	7.6	27.2 27.2	27.2	90.7 90.6	90.7	6.3 6.2	6.3	6.3	4.2 4.1	4.2		6.0 6.0	6.0	

Water Quality Monitoring Results at M2 - Mid-Ebb Tide

Date	Weather	Sea	Sampling	Dept	h (m)	Water Tem	perature (°C)	Ambient Ten	nperature (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)	1	urbidity(NTL	J)	Suspe	nded Solids	(mg/L)
Dute	Condition	Condition**	Time	Бері	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.6 28.9	28.8	32.2 32.2	32.2	7.4 7.4	7.4	21.9 21.9	21.9	91.2 91.2	91.2	6.5 6.5	6.5	6.5	3.7 3.6	3.7		6.0 6.0	6.0	
25-Jul-08	Sunny	Calm	15:15	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	3.9	-	-	7.5
				Bottom	3	28.4 28.4	28.4	32.2 32.2	32.2	7.4 7.4	7.4	23.2 23.5	23.4	90.6 90.6	90.6	6.5 6.5	6.5	6.5	4.0 4.0	4.0		9.0 9.0	9.0	
				Surface	1	28.5 28.5	28.5	31.0 31.0	31.0	7.5 7.5	7.5	29.5 29.5	29.5	89.9 89.8	89.9	6.3 6.3	6.3		3.8 3.8	3.8		12.0 13.0	12.5	
28-Jul-08	Sunny	Calm	08:49	Middle	-	-	-	-	-	-	-	-	-	-	-		-	6.3	-	-	3.9	-	-	13.8
				Bottom	3	28.2 28.2	28.2	31.0 31.0	31.0	7.5 7.5	7.5	33.8 33.8	33.8	86.0 85.5	85.8	6.1 6.0	6.1	6.1	4.0 4.0	4.0		15.0 15.0	15.0	
				Surface	1	26.8 26.8	26.8	26.5 26.5	26.5	7.4 7.4	7.4	29.8 29.8	29.8	90.7 90.5	90.6	6.7 6.6	6.7	6.7	3.5 3.6	3.6		8.0 8.0	8.0	
30-Jul-08	Sunny	Calm	10:35	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	3.6	-	-	8.0
				Bottom	3	26.5 26.5	26.5	26.5 26.5	26.5	7.4 7.4	7.4	31.0 31.0	31.0	83.0 82.8	82.9	6.0 6.0	6.0	6.0	3.4 3.5	3.5		8.0 8.0	8.0	
				Surface	1	26.2 26.2	26.2	31.0 31.0	31.0	7.4 7.4	7.4	30.9 30.9	30.9	97.3 97.3	97.3	6.6 6.6	6.6	0.0	4.0 4.0	4.0		4.0 4.0	4.0	
1-Aug-08	Sunny	Calm	12:19	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	-	4.1	-	-	4.3
				Bottom	3	26.1 26.1	26.1	31.0 31.0	31.0	7.4 7.4	7.4	33.0 33.0	33.0	95.6 95.3	95.5	6.5 6.5	6.5	6.5	4.1 4.2	4.2		5.0 4.0	4.5	
				Surface	1	25.8 25.8	25.8	32.0 32.0	32.0	7.3 7.3	7.3	32.9 32.9	32.9	95.9 95.8	95.9	6.4 6.4	6.4	0.4	2.3 2.6	2.5		5.0 5.0	5.0	
4-Aug-08	Cloudy	Calm	14:37	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	-	-	2.4	-	-	5.0
				Bottom	3	25.8 25.8	25.8	32.0 32.0	32.0	7.4 7.4	7.4	32.9 32.9	32.9	95.0 94.5	94.8	6.4 6.4	6.4	6.4	2.1 2.4	2.3		5.0 5.0	5.0	
				Surface	1	25.0 25.0	25.0	27.3 27.3	27.3	7.4 7.4	7.4	30.9 30.9	30.9	93.8 93.5	93.7	6.6 6.6	6.6	6.6	3.9 3.9	3.9		8.0 7.0	7.5	
7-Aug-08	Cloudy	Calm	16:09	Middle	-	-	-	 	-	-	-		-	 	-	-	-	0.0	-	-	4.0	-	-	7.8
				Bottom	3	25.0 25.0	25.0	27.3 27.3	27.3	7.5 7.5	7.5	31.1 31.1	31.1	91.1 90.9	91.0	6.4 6.4	6.4	6.4	4.1 4.1	4.1		8.0 8.0	8.0	
				Surface	1	24.8 24.9	24.9	28.6 28.6	28.6	7.5 7.5	7.5	30.1 30.1	30.1	88.2 88.3	88.3	6.3 6.3	6.3	6.3	3.3 3.4	3.4		4.0 5.0	4.5	
9-Aug-08	Sunny	Calm	18:06	Middle	-		-		-	-	-	-	-		-	-	-	0.3	-	-	3.9	-		5.3
				Bottom	3	24.6 24.7	24.7	28.6 28.6	28.6	7.7 7.7	7.7	30.2 30.2	30.2	86.4 86.7	86.6	6.2 6.2	6.2	6.2	4.4 4.4	4.4		6.0 6.0	6.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged

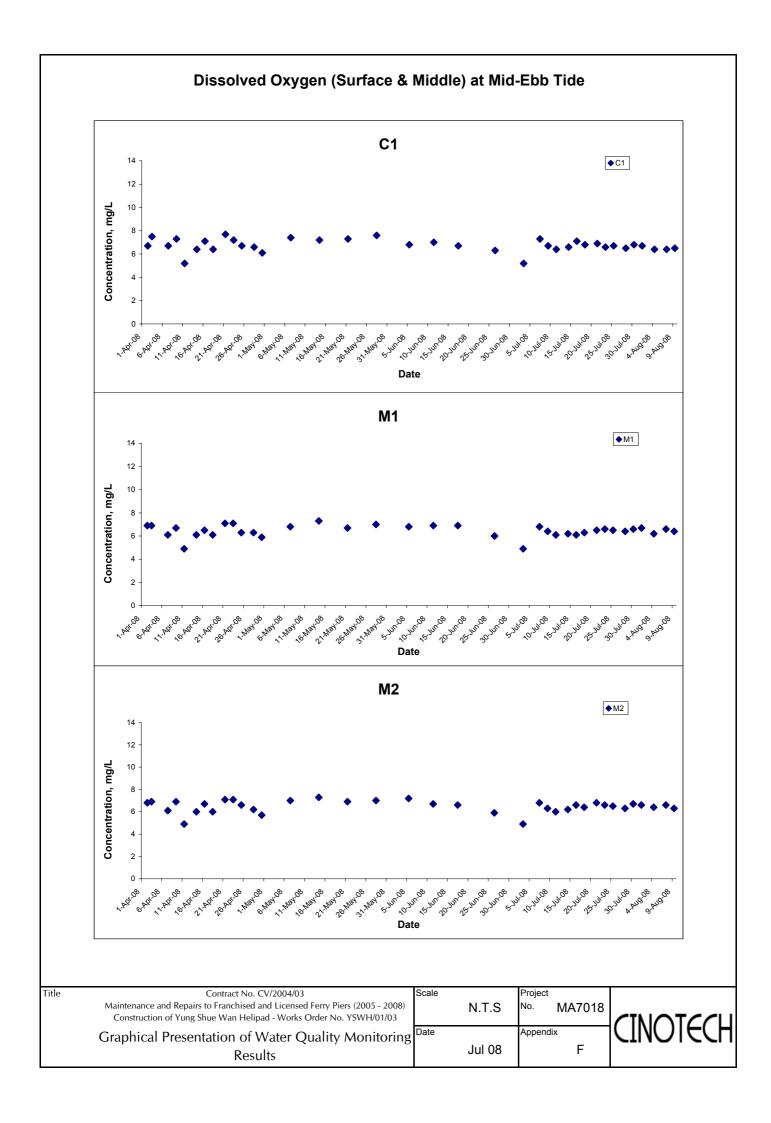
^{**} Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

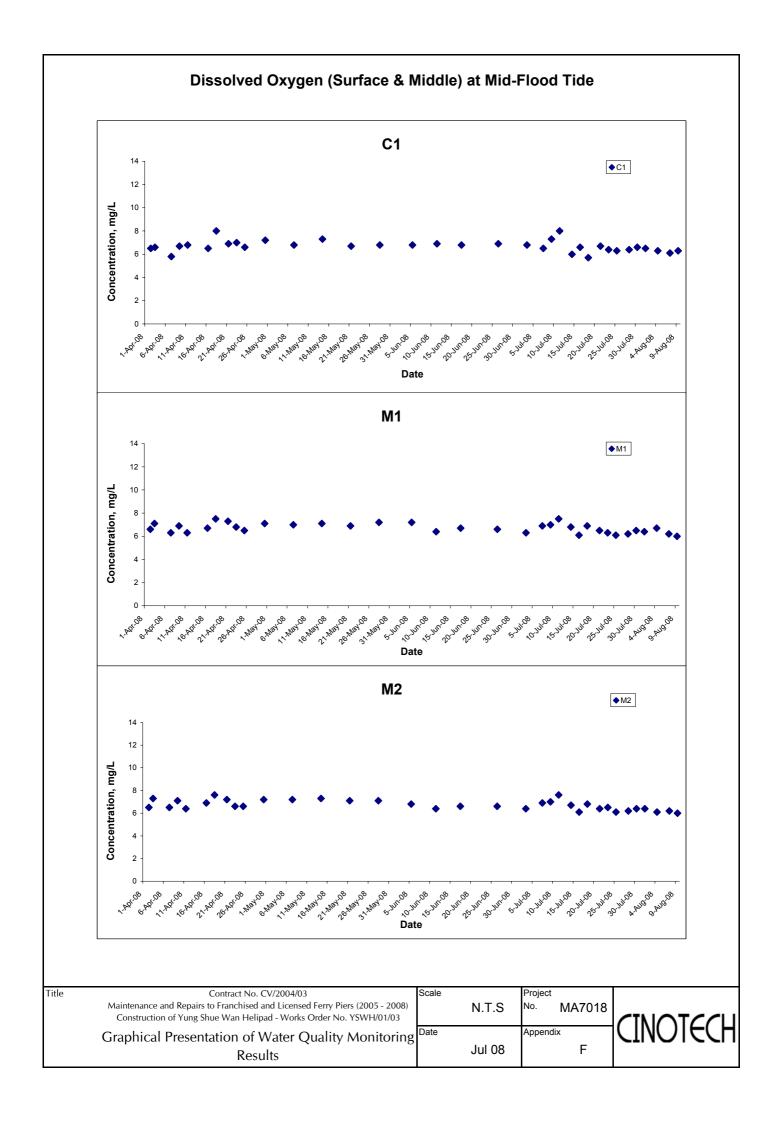
Water Quality Monitoring Results at M2 - Mid-Flood Tide

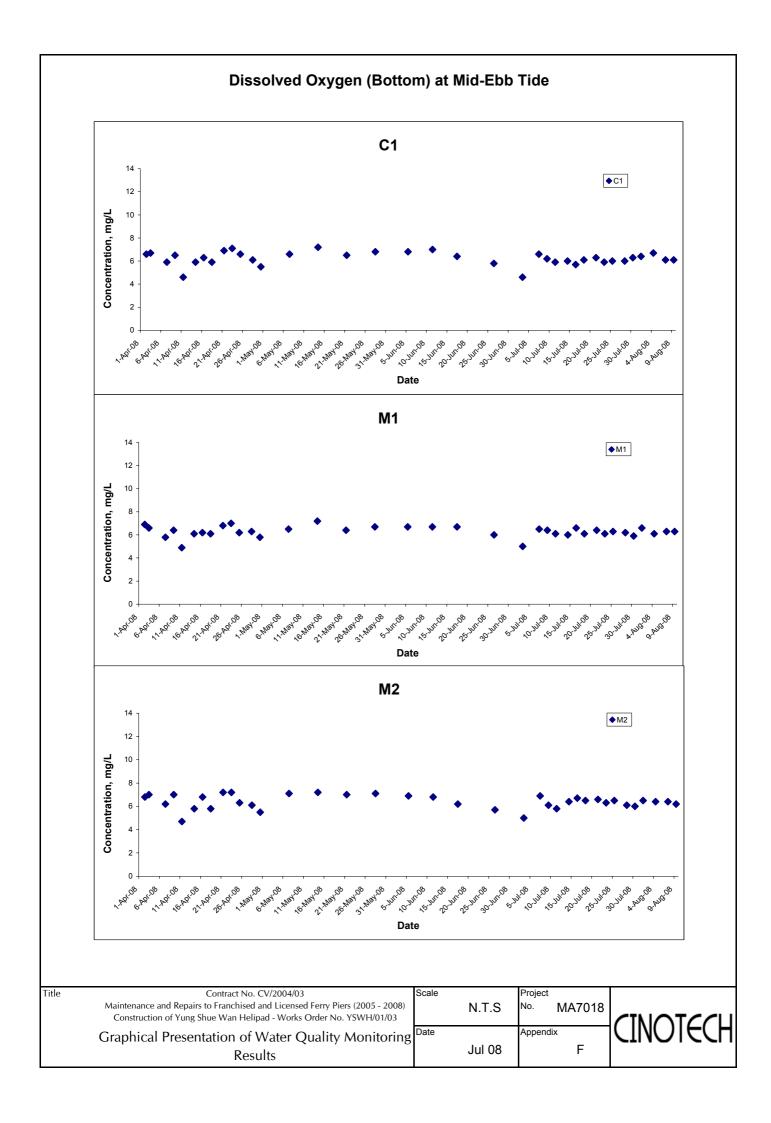
Date	Weather	Sea	Sampling	Depth	(m)	Water Temp	erature (°C)	Ambient Ten	nperature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)	1	Turbidity(NTL	J)	Suspe	nded Solids	(mg/L)
	Condition	Condition**	Time	Бери	1 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	30.0 29.9	30.0	27.1 27.1	27.1	7.4 7.4	7.4	30.0 30.2	30.1	90.8 91.8	91.3	6.3 6.4	6.4	6.4	3.3 3.3	3.3		3.0 4.0	3.5	
3-Jul-08	Sunny	Calm	08:22	Middle	-	-	-	-	-	-	-	-	-	-	-		-	0.4	-	-	5.1	-	-	3.3
				Bottom	3	29.4 28.9	29.2	27.1 27.1	27.1	7.4 7.4	7.4	30.8 31.2	31.0	90.4 79.5	85.0	6.3 5.6	6.0	6.0	6.1 7.4	6.8		3.0 3.0	3.0	
				Surface	1	27.4 27.4	27.4	24.2 24.2	24.2	7.4 7.4	7.4	30.2 30.1	30.2	83.6 84.6	84.1	6.9 6.9	6.9		3.3 3.2	3.3		14.0 15.0	14.5	
7-Jul-08	Sunny	Calm	10:22	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-	4.5	-	-	15.8
				Bottom	4	27.2 27.1	27.2	24.2 24.2	24.2	7.4 7.4	7.4	30.4 30.5	30.5	84.0 83.2	83.6	6.6 6.7	6.7	6.7	5.2 5.9	5.6		17.0 17.0	17.0	
				Surface	1	29.4 29.4	29.4	26.3 26.3	26.3	7.5 7.5	7.5	30.9 31.1	31.0	74.7 75.7	75.2	7.0 7.0	7.0		2.8 2.8	2.8		6.0 6.0	6.0	
9-Jul-08	Cloudy	Calm	11:52	Middle	-	-	-	-	-	-	-	-	-	-	-		-	7.0	-	-	4.8	-	-	7.5
				Bottom	4	28.8 28.4	28.6	26.3 26.3	26.3	7.5 7.5	7.5	31.7 32.1	31.9	74.3 63.4	68.9	7.0 6.3	6.7	6.7	6.8 6.8	6.8		9.0 9.0	9.0	
				Surface	1	26.0 25.9	26.0	25.2 25.2	25.2	7.4 7.4	7.4	31.3 31.5	31.4	95.0 96.0	95.5	7.5 7.6	7.6		3.5 3.5	3.5		6.0 7.0	6.5	
11-Jul-08	Sunny	Calm	13:52	Middle	-		-	-	-	-	-	-	-	-	-	-	-	7.6	-	-	4.5		-	6.8
				Bottom	4	25.4 24.9	25.2	25.2 25.2	25.2	7.5 7.5	7.5	32.1 32.5	32.3	94.6 83.7	89.2	7.5 6.8	7.2	7.2	5.3 5.4	5.4		7.0 7.0	7.0	
				Surface	1	28.2 28.2	28.2	27.7 27.7	27.7	7.3 7.4	7.4	31.6 31.6	31.6	71.9 72.0	72.0	6.7 6.7	6.7		3.8 3.7	3.8		11.0 11.0	11.0	
14-Jul-08	Sunny	Calm	18:22	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	4.6	-	-	11.3
				Bottom	4	28.0 27.8	27.9	27.7 27.7	27.7	7.4 7.4	7.4	32.0 32.0	32.0	70.6 69.6	70.1	6.4 6.4	6.4	6.4	5.4 5.4	5.4		11.0 12.0	11.5	
				Surface	1	28.2 28.2	28.2	28.1 28.1	28.1	7.5 7.5	7.5	20.9 20.9	20.9	86.1 86.2	86.2	6.1 6.1	6.1	0.4	3.2 3.2	3.2		6.0 6.0	6.0	
16-Jul-08	Sunny	Calm	18:08	Middle	-	-	-	- 1	-	-	-		-	-	-		-	6.1	-	-	3.2	-	-	9.0
				Bottom	3	28.1 27.9	28.0	28.1 28.1	28.1	7.5 7.5	7.5	22.1 22.1	22.1	83.1 83.6	83.4	5.9 5.9	5.9	5.9	3.2 3.2	3.2		12.0 12.0	12.0	
				Surface	1	28.6 28.6	28.6	28.9 28.9	28.9	7.5 7.5	7.5	31.2 31.2	31.2	80.3 80.4	80.4	6.8 6.8	6.8		3.4 3.3	3.4		3.0 3.0	3.0	
18-Jul-08	Sunny	Calm	17:52	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	4.2	-	-	4.0
				Bottom	4	28.4 28.2	28.3	28.9 28.9	28.9	7.5 7.5	7.5	31.6 31.6	31.6	79.0 78.0	78.5	6.6 6.6	6.6	6.6	5.0 5.0	5.0		5.0 5.0	5.0	
				Surface	1	27.9 27.9	27.9	28.2 28.2	28.2	7.5 7.5	7.5	24.5 24.5	24.5	90.2 91.1	90.7	6.4 6.4	6.4	0.4	3.2 3.1	3.2		7.0 7.0	7.0	
21-Jul-08	Sunny	Calm	08:07	Middle	-	-	-	- 1	-	-	-		-	-	-		-	6.4	-	-	3.6	-	-	6.3
				Bottom	4	27.5 27.5	27.5	28.2 28.2	28.2	7.5 7.5	7.5	34.6 34.6	34.6	85.5 82.8	84.2	6.1 5.9	6.0	6.0	3.9 4.1	4.0		5.0 6.0	5.5	
				Surface	1	27.4 27.4	27.4	27.0 27.0	27.0	7.6 7.6	7.6	24.4 24.4	24.4	92.0 91.6	91.8	6.5 6.4	6.5	0.5	3.4 3.3	3.4		4.0 5.0	4.5	
23-Jul-08	Sunny	Calm	09:00	Middle	-	-	-	-	-		-		-	-	-	-	-	6.5	-	-	3.9	-	-	5.5
				Bottom	4	27.4 27.4	27.4	27.0 27.0	27.0	7.6 7.6	7.6	26.9 26.9	26.9	86.9 86.9	86.9	6.0 6.0	6.0	6.0	4.4 4.4	4.4		7.0 6.0	6.5	

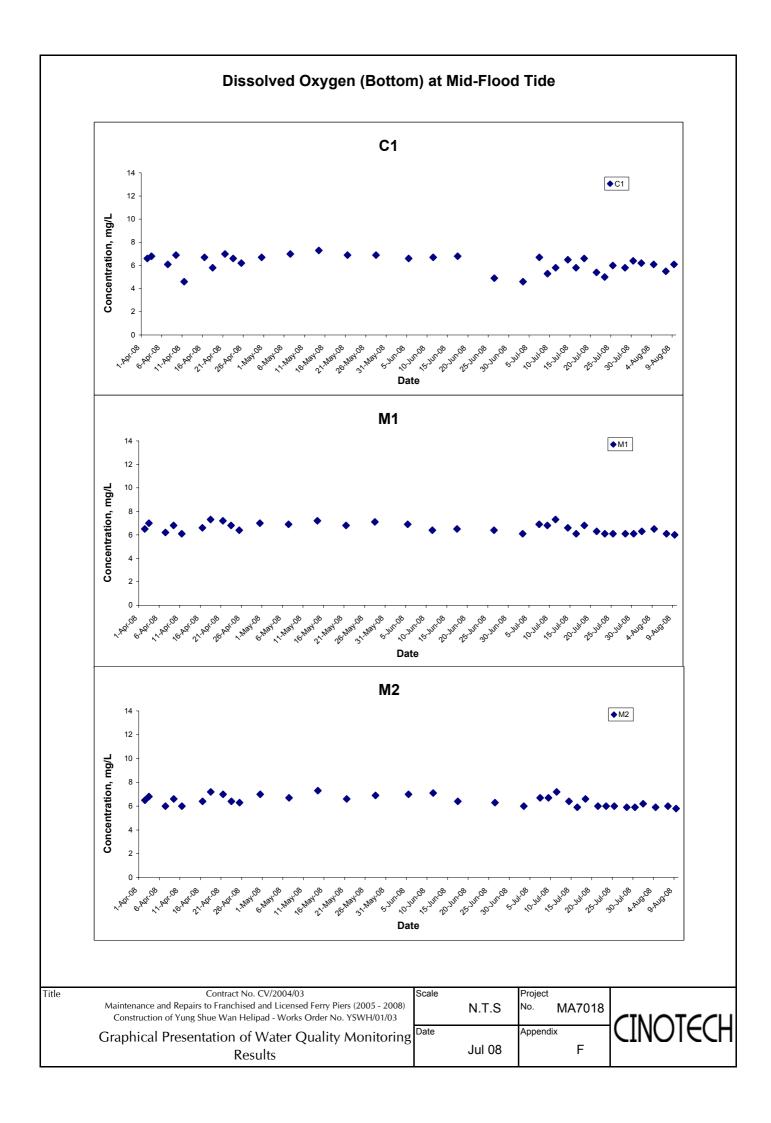
Water Quality Monitoring Results at M2 - Mid-Flood Tide

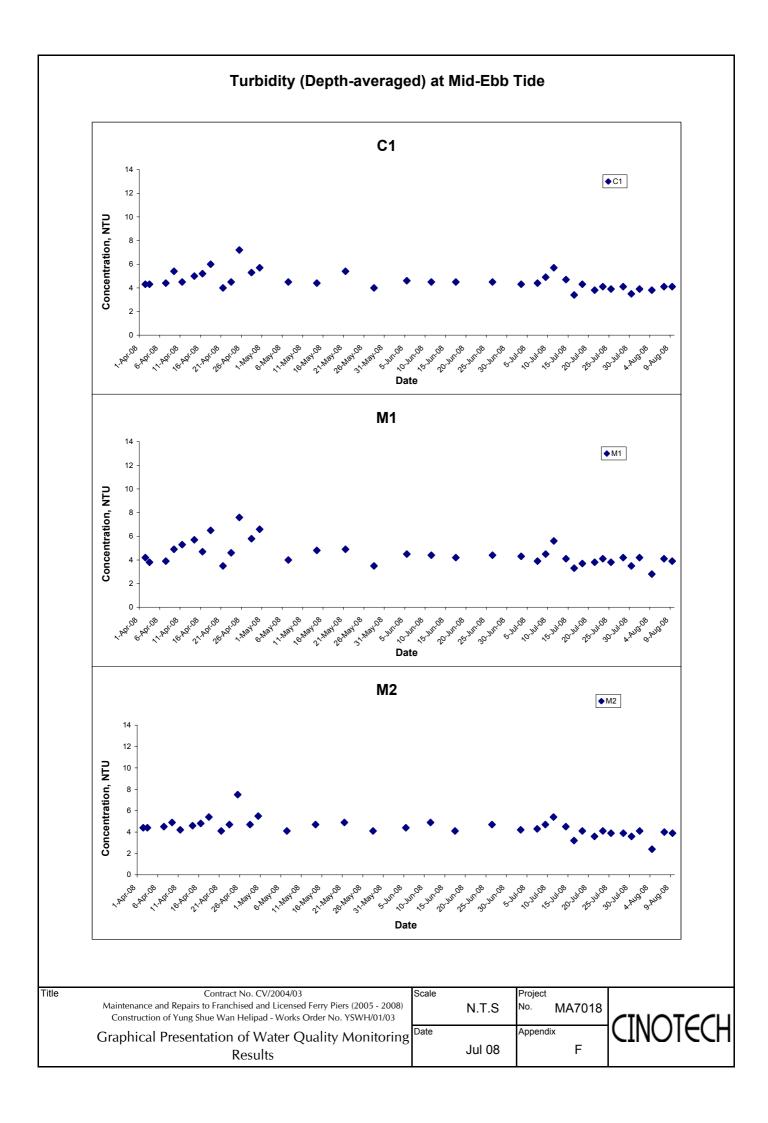
Date	Weather	Sea	Sampling	Depth (i	m)	Water Temp	perature (°C)	Ambient Ten	nperature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissol	ved Oxygen	(mg/L)		Furbidity(NTL	1)	Suspe	nded Solids	(mg/L)
Date	Condition	Condition**	Time	Deptii (i	111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
				Surface	1	28.6 28.6	28.6	28.5 28.5	28.5	7.4 7.4	7.4	22.5 22.5	22.5	86.0 85.8	85.9	6.1 6.1	6.1	6.1	3.8 3.7	3.8		8.0 8.0	8.0	
25-Jul-08	Sunny	Calm	10:44	Middle	-	-	-	1 1	-	-	-	-	-	-	-	-	-	•	-	-	4.0	-	-	6.5
				Bottom	3	28.4 28.4	28.4	28.5 28.5	28.5	7.4 7.4	7.4	26.1 26.1	26.1	84.3 84.6	84.5	6.0 6.0	6.0	6.0	4.1 4.1	4.1		5.0 5.0	5.0	
				Surface	1	29.1 29.1	29.1	32.2 32.2	32.2	7.5 7.5	7.5	28.3 28.4	28.4	87.8 88.2	88.0	6.2 6.2	6.2	6.2	3.5 3.5	3.5		16.0 16.0	16.0	
28-Jul-08	Sunny	Calm	16:29	Middle	-	-	-		-	-	-	-	-	-	-	-	-	0.2	-	-	3.8	-	-	13.0
				Bottom	3	28.9 28.9	28.9	32.2 32.2	32.2	7.5 7.5	7.5	33.5 33.5	33.5	83.8 82.3	83.1	5.9 5.8	5.9	5.9	4.1 4.1	4.1		10.0 10.0	10.0	
				Surface	1	26.5 26.5	26.5	27.2 27.2	27.2	7.4 7.4	7.4	29.7 29.7	29.7	88.0 88.1	88.1	6.4 6.4	6.4	6.4	3.3 3.4	3.4		5.0 6.0	5.5	
30-Jul-08	Fine	Calm	18:07	Middle	-	1 1	-	1 1	-	-	-	-	-	1 1	-		-	0.4		-	3.3	-	-	8.3
				Bottom	4	26.3 26.3	26.3	27.2 27.2	27.2	7.5 7.5	7.5	30.9 30.9	30.9	81.9 82.2	82.1	5.9 5.9	5.9	5.9	3.2 3.2	3.2		11.0 11.0	11.0	
				Surface	1	25.6 25.9	25.8	28.8 28.8	28.8	7.4 7.3	7.4	30.3 30.3	30.3	89.8 89.8	89.8	6.3 6.4	6.4	0.4	3.6 3.5	3.6		5.0 5.0	5.0	
1-Aug-08	Fine	Calm	18:04	Middle	-		-		-	-	-	 	-		-	-	-	6.4	-	-	3.8	-	-	5.8
				Bottom	3	25.7 25.7	25.7	28.8 28.8	28.8	7.3 7.3	7.3	32.8 32.8	32.8	87.7 87.0	87.4	6.2 6.2	6.2	6.2	4.0 4.0	4.0		7.0 6.0	6.5	
				Surface	1	25.7 25.8	25.8	28.1 28.1	28.1	7.3 7.3	7.3	32.9 32.9	32.9	90.6 90.3	90.5	6.1 6.1	6.1	6.1	1.5 1.6	1.6		6.0 5.0	5.5	
4-Aug-08	Sunny	Calm	08:37	Middle	-		-	1 1	-	-	-	-	-	1 1	-		-	0.1		-	2.0	-	-	5.5
				Bottom	3	25.8 25.8	25.8	28.1 28.1	28.1	7.3 7.3	7.3	32.9 32.9	32.9	87.8 87.8	87.8	5.9 5.9	5.9	5.9	2.4 2.1	2.3		5.0 6.0	5.5	
				Surface	1	24.5 24.6	24.6	26.1 26.1	26.1	7.3 7.3	7.3	30.3 30.3	30.3	88.9 88.7	88.8	6.2 6.2	6.2	6.2	3.4 3.3	3.4		7.0 7.0	7.0	
7-Aug-08	Cloudy	Calm	09:40	Middle	-		1	1 1	-	-	-	-	-	1 1	-		-	0.2		-	3.8	-	-	8.0
				Bottom	4	24.5 24.5	24.5	26.1 26.1	26.1	7.5 7.5	7.5	30.8 30.9	30.9	85.3 84.9	85.1	6.0 6.0	6.0	6.0	4.1 4.1	4.1		9.0 9.0	9.0	
				Surface	1	25.2 25.2	25.2	29.9 29.9	29.9	7.4 7.4	7.4	29.4 29.4	29.4	82.3 82.2	82.3	5.9 6.0	6.0	6.0	3.4 3.3	3.4		4.0 4.0	4.0	
9-Aug-08	Sunny	Calm	12:56	Middle	-	-	-	1 1	-	-	-	-	-		-	-	-	0.0	-	-	4.0	-	-	4.3
				Bottom	3	25.1 25.0	25.1	29.9 29.9	29.9	7.5 7.5	7.5	30.2 30.2	30.2	80.1 80.1	80.1	5.8 5.8	5.8	5.8	4.4 4.5	4.5		4.0 5.0	4.5	

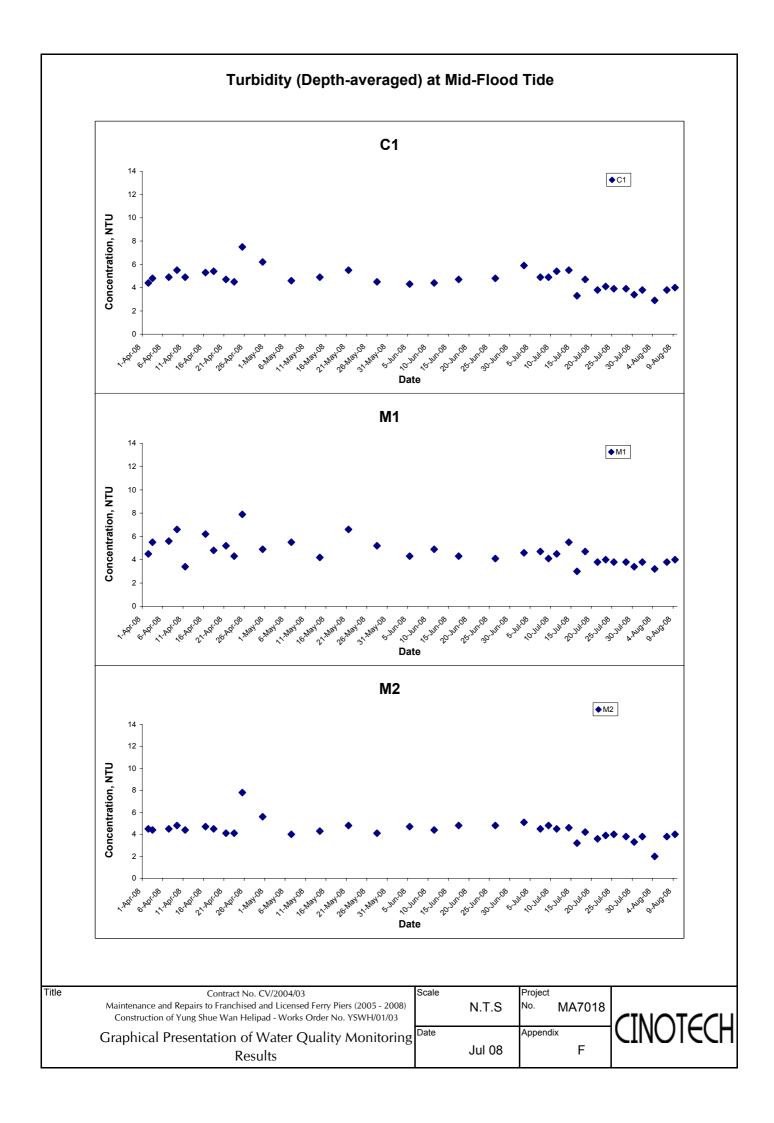


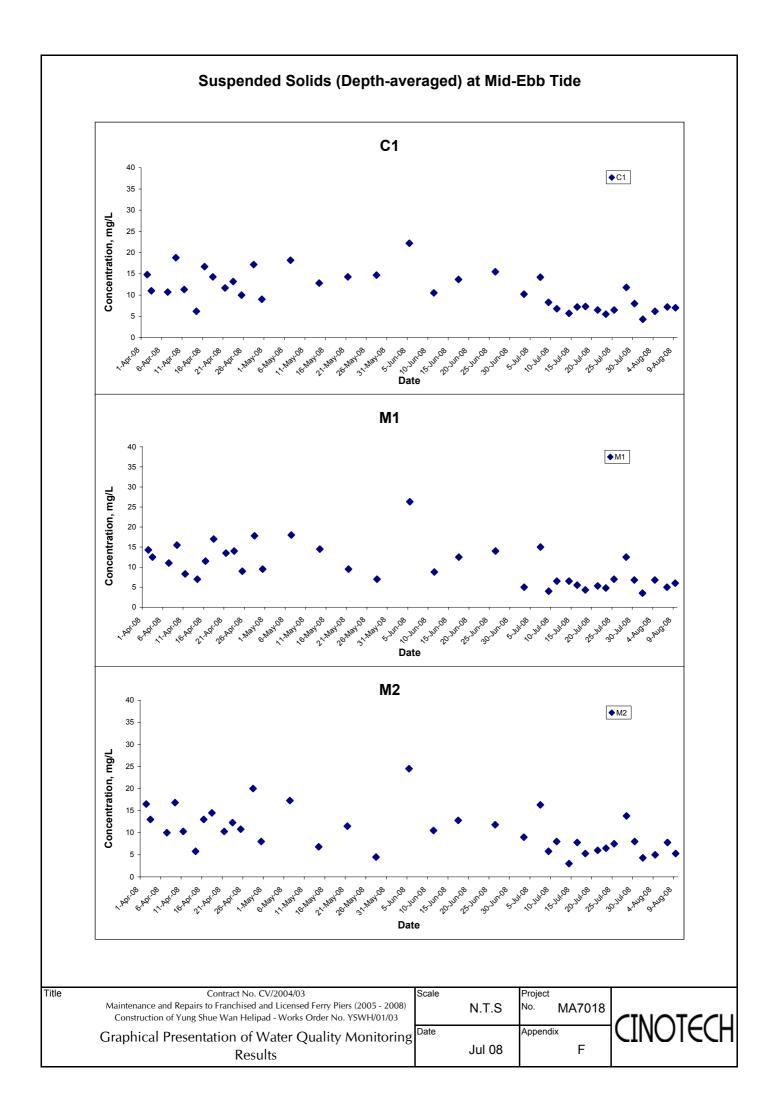


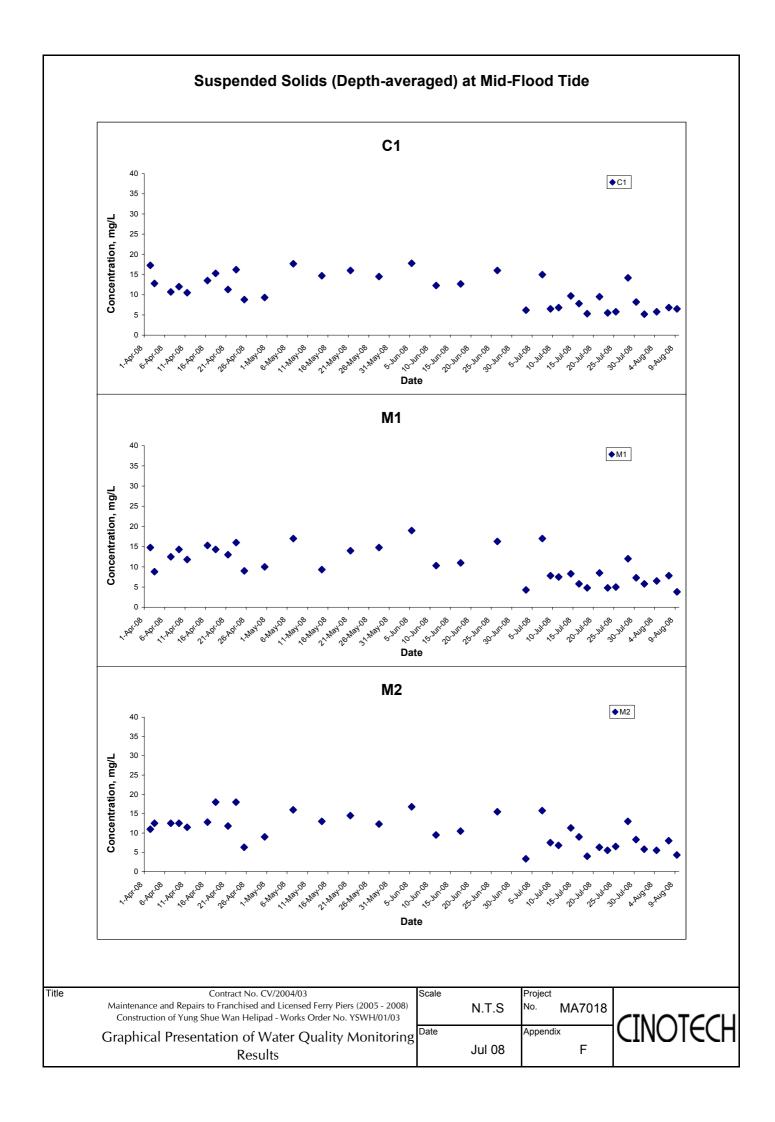












APPENDIX G SUMMARY OF EXCEEDANCE

Contract No. CV/2004/03 – Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005-2008)

Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03

Exceedance Report

- (A) Exceedance Report for Construction Noise (NIL in the reporting month)
- (B) Exceedance Report for water quality monitoring (NIL in the reporting month)

APPENDIX H SITE AUDIT SUMMARY

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)

Contract No. CV/2004/03 Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inst	nection	Inform	ation
T110	110011011	TARROL SIL	***

Checklist Reference Number	80702
Date	2 July 2008
Time	13:00

Ref. No.	Non-Compliance	Related Item No.
.	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality	
	No environmental deficiency was identified during site inspection.	
	Air Quality	
	No environmental deficiency was identified during site inspection.	
	Noise	
	No environmental deficiency was identified during site inspection.	
	Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	Permit / Licenses	
	No environmental deficiency was identified during site inspection.	
	Others	
	• Follow-up on previous site audit session (Ref. No. 80626), no environmental	
	deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Chan Hon Kwan	el e	2 July 2008
Checked by	Dr. Priscilla Choy	MI	2 July 2008

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)

Contract No. CV/2004/03 Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information		
Checklist Reference Number	80709	
Date	9 July 2008	
Time	13:00	

Ref. No.	Non-Compliance	Related Item No.
_	None	•
Ref. No.	Remarks/Observations	Related Item No.
	Water Quality	

Ref. No.	Remarks/Observations	Related Item No.
!	Water Quality	
	No environmental deficiency was identified during site inspection.	
	Air Quality	
	No environmental deficiency was identified during site inspection.	
	Noise	-
	No environmental deficiency was identified during site inspection.	į
	Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	Permit / Licenses	
	No environmental deficiency was identified during site inspection.	
	Others	
	• Follow-up on previous site audit session (Ref. No. 80702), no environmental	
	deficiency was identified during site inspection.	
		1

	Name	Signature	Date
Recorded by	Chan Hon Kwan	20	9 July 2008
Checked by	Dr. Priscilla Choy	With	9 July 2008

CINOTECH MA7018 80709

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008)

Contract No. CV/2004/03 Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information		
Checklist Reference Number	80716	
Date	16 July 2008	
Time	14:08	

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality	
	No environmental deficiency was identified during site inspection.	
	Air Quality	
	No environmental deficiency was identified during site inspection.	
	Noise	
	No environmental deficiency was identified during site inspection.	
	Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	Permit/Licenses	
	No environmental deficiency was identified during site inspection.	
	Others	
	• Follow-up on previous site audit session (Ref. No. 80709), no environmental	
	deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Chan Hon Kwan	choi	16 July 2008
Checked by	Dr. Priscilla Choy	Wit	16 July 2008

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008)

Contract No. CV/2004/03 Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information		
Checklist Reference Number	80723	
Date	23 July 2008	
Time	09:15	

_	Ref. No.	Non-Compliance	Related Item No.
	•	None	

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality	
	No environmental deficiency was identified during site inspection.	
	Air Quality No environmental deficiency was identified during site inspection.	
	Noise No environmental deficiency was identified during site inspection.	
:	 Waste / Chemical Management No environmental deficiency was identified during site inspection. 	
	Permit / Licenses No environmental deficiency was identified during site inspection.	
	 Others Follow-up on previous site audit session (Ref. No. 80716), no environmental deficiency was identified during site inspection. 	

	Name	Signature	Date
Recorded by	Choi Wai Yi	Choi	23 July 2008
Checked by	Dr. Priscilla Choy	NA	23 July 2008

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008)

Contract No. CV/2004/03 Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information		
Checklist Reference Number	80730	
Date	30 July 2008	
Time	10:50	

Ref. No.	Non-Compliance		Related Item No.
-	None		<u></u>
		•	

Ref. No.	Remarks/Observations	Related Item No.
	 Water Quality No environmental deficiency was identified during site inspection. 	
	Air Quality No environmental deficiency was identified during site inspection.	
	Noise No environmental deficiency was identified during site inspection.	
	Waste / Chemical Management No environmental deficiency was identified during site inspection.	į
	Permit / Licenses No environmental deficiency was identified during site inspection.	
	 Others Follow-up on previous site audit session (Ref. No. 80723), no environmental deficiency was identified during site inspection. 	

	Name	Signature	Date
Recorded by	Choi Wai Yi	cha	30 July 2008
Checked by	Dr. Priscilla Choy	WI	30 July 2008

APPENDIX I SUMMARY OF AMOUNT OF WASTE GENERATED

Appendix I

Name of Department: CWE-ZHEC Joint Venture

Contract No.: CV/2004/03

Monthly Summary Waste Flow Table For <u>2008</u> (year)

	Actual Quantities of Inert C&D Materials Generated Monthly				A	Actual Quantities of C&D Waste Generated Monthly				
Month	Total Quantity Generated	Broken Concrete (see Note 2)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 1)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	0.000	0.000	0.000	0.000	20.000	0.000	0.000	0.000	0.000	5.000
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.000
Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Apr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
May	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sub-total	0.000	0.000	0.000	0.000	20.000	0.000	0.000	0.000	0.000	10.000
July	0.000	0.000	0.000	0.000	10.000	0.000	0.000	0.000	0.000	0.000
Aug										
Sep										
Oct										
Nov										
Dec										
Total	0.000	0.000	0.000	0.000	30.000	0.000	0.000	0.000	0.000	10.000

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

(2) Broken concrete for recycling into aggregates.

APPENDIX J EVENT ACTION PLANS

APPENDIX J – Event / Action Plan Table J-1 Event / Action Plan Construction Noise

Event	ACTION							
	ET Leader	IC (E)	ER	Contractor				
Action Level	Notify IC(E) and Contractor Carry out investigation	Review the analysed results submitted by the ET Paview the proposed.	Confirm receipt of notification of failure in writing Notify Contractor	Submit noise mitigation proposal to IC(E) Implement poise mitigation				
	3. Report the results of investigation to the IC(E) and Contractor	Review the proposed remedial measures by the Contractor and advise the	 Notify Contractor Require Contractor to propose remedial measures for the 	2. Implement noise mitigation proposals				
	4. Discuss with the Contractor and formulate remedial measures5. Increase monitoring frequency to	ER accordingly 3. Supervise the implementation of remedial	analysed noise problem4. Ensure remedial measures are properly implemented					
	check mitigation effectiveness	measures	1 1 0 1					

	1. Notify IC(E), ER, EPD and	1. Discuss amongst ER, ET,	1. Confirm receipt of notification	1. Take immediate action to
Limit			-	
Level	Contractor	and Contractor on the	of failure in writing	avoid further exceedance
	2. Identify source	potential remedial actions	2. Notify Contractor	2. Submit proposal for remedial
	3. Repeat measurement to confirm	2. Review Contractor's	3. Require Contractor to propose	actions to IC(E) within 3
	findings	remedial actions whenever	remedial measures for the	working days of notification
	4. Increase monitoring frequency	necessary to assure their the	analysed noise problem	3. Implement the agreed
	5. Carry out analysis of	ER accordingly	4. Ensure remedial measures are	proposals
	Contractor's working procedures	3. Supervise the	properly implemented	4. Resubmit proposals if
	to determine possible mitigation	implementation of remedial	5. If exceedance continues,	problem still not under
	to be implemented	measures	consider what portion of the	control
	6. Inform IE(E), ER and EPD the		work is responsible and	5. Stop the relevant portion of
	causes & actions taken for the		instruct the Contractor to stop	works as determined by the
	exceedances		that portion of work until the	ER until the exceedance is
	7. Assess effectiveness of		exceedance is abated	abated
	Contractor's remedial actions			
	and keep IC(E), EPD and ER			
	informed of the results			
	8. If exceedance stops, cease			
	additional monitoring			

Table J-2 Event / Action Plan for Water Quality Monitoring

EVENT	ACTION						
EVENT	ET	IEC	ER	CONTRACTOR			
ACTION LEVEL							
1.Exceedance for one sample	 Identify source Inform ER & IEC Repeat measurement to confirm finding Increase monitoring frequency to daily 	Check monitoring data submitted by ET	1.Notify Contractor 2.Check monitoring data and Contractor's working methods	1.Rectify any unacceptable practice 2.Amend working methods if appropriate			
2.Exceedance for two or more consecutiv e samples	I. Identify source Inform ER & IEC Repeat measurements to confirm findings Increase monitoring frequency to daily Discuss with ER & IEC for remedial actions required If exceedance continues, arrange meeting with ER & IEC If exceedance stops, cease additional monitoring	ring frequency to daily ER & IEC for remedial dontinues, arrange meeting T. Checking monitoring data submitted by ET 2. Advise the ER & ET on the effectiveness of the proposed remedial measures 3. Supervise the implementation of the		1.Submit proposals for remedial actions to ER within 3 working days of notification 2.Implement the agreed proposals 3.Amend proposal if appropriate			
LIMIT LEVEL							
1.Exceedance for one sample	I. Identify source Inform ER & IEC and EPD Repeat measurement to confirm finding Increase monitoring frequency to daily Assess effectiveness of Contractor's remedial actions and keep EPD and ER & IEC informed of the results	1.Check monitoring data submitted by ET 2.Advise the ER & ET on the effectiveness of the proposed remedial measures 3.Supervise the implementation of the remedial measures	1.Confirm receipt of notification of failure in writing 2.Notify Contractor 3.Check monitoring data and Contractor's working methods 4.Discuss with ET, IEC and Contractor on proposed remedial actions 5.Ensure remedial actions properly implemented	1.Take immediate action to avoid further exceedance 2.Submit proposals for remedial actions to ER within 3 working days of notification 3.Implement the agreed proposals 4.Amend proposal if appropriate			
2.Exceedance	1. Identify source	1.Check monitoring data submitted by	1.Confirm receipt of notification of	1. Take immediate action to			

EVENT	ACTION				
EVENT	ET	IEC	ER	CONTRACTOR	
for two or more consecutiv e samples	 Inform ER, IEC and EPD the causes & actions taken for the exceedances Repeat measurement to confirm findings Increase monitoring frequency to daily Investigate the causes of exceedance Arrange meeting with & IEC and ER to discuss the remedial actions to be taken Assess effectiveness of Contractor's remedial actions and keep ER, IEC and EPD informed of the results If exceedance stops, cease additional monitoring 	ET 2.Review Contractor's remedial actions to assure their effectiveness and advise the ER accordingly 3.Supervise the implementation of the remedial measures	failure in writing 2.Notify Contractor 3.Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 4.Discuss amongst ET, IEC and the Contractor on proposed remedial actions 5.Ensure remedial measure are properly implemented 6.If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	avoid further exceedance 2. Submit proposals for remedial actions to ER within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated	

APPENDIX K ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Types of	Mitigation Measures	Status		
Impacts	 Restricting heights from which materials are dropped, as far as practicable to minimise the fugitive dust arising from unloading/loading. 			
	 All stockpiles of excavated materials or spoil of more than 50m³ should be enclosed, covered or dampened during dry or windy conditions. 	^		
	 Effective water sprays should be used to control potential dust emission sources such as unpaved haul roads and active construction areas. 	۸		
	All spraying of materials and surfaces should avoid excessive water usage.	٨		
Construction Dust	• Vehicles that have the potential to create dust while transporting materials should be covered, with the cover properly secured and extended over the edges of the side and tail boards.			
	Materials should be dampened, if necessary, before transportation.	٨		
	 Travelling speeds should be controlled to reduce traffic induced dust dispersion and re-suspension from the operating haul trucks. 	۸		
	Vehicle washing facilities will be provided to minimize the quantity of material deposited on public roads.	^		
	Erection of hoarding not less than 2.4m high from ground level along the site boundary.	٨		
Construction	Construction Phase			
Noise	Use of silenced plant, or plant equipped with mufflers or dampers in substitute or ordinary plant.	۸		
	Movable noise barriers positioned as close as possible to PMEs such that none of the PMEs will be visible when viewed from any noise sensitive facades.			
	Noisy equipment and noisy activities should be located as far away from the NSRs as is practical.	۸		
	Unused equipment should be turned off.	۸		
	 Number of powered mechanical equipment (PME) should be kept to minimum and the parallel use of noisy equipment/machinery should be avoided. 	^		

Types of Impacts	Mitigation Measures	Status		
•	Regular maintenance of all plant and equipment.			
	Observe and comply with the statutory requirements and guidelines.			
	Operation Phase			
	Use of quieter helicopter type EC 155 B1 in priority.	-		
	• Reduce the angle of the helicopter flight path from the standard 150 degrees to 80 degrees for the 'EC 155 B1' and to 70 degrees for 'Super Puma AS332 L2' helicopter	-		
	The helipad will be solely for emergency use.	-		
	Silt curtain to be installed surrounding the whole of the piling site.	٨		
	Good site practice			
	 Particular care should be taken when demolishing the existing concrete planter to ensure no waste enters the water column. 	N/A		
	 Particular care should be taken when decommissioning the silt curtain to avoid sudden dispersion of muddy water which may cause adverse impact to the nearby marine life; 	N/A		
Factors	 Materials storage areas should be located well away from the seawall, and any such areas should be covered during the works. 	۸		
Ecology	 The holding tank for sediment excavated from within the pile casing should be fitted with a tight fitting seal to prevent leakage. 	N/A		
	Ensure that excavator seal is tightly closed and the hoist speed is suitably low.	N/A		
	The holding tank should not be filled to a level that will cause overflow of sediment during loading and transportation.	N/A		
	Large objects should be removed from the excavator grab to avoid sediment spills.	N/A		
	The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.	-		
***	Construction Phase			
Water Quality	Silt curtain to be installed surrounding the whole of the piling site.	٨		
	Good site practice			

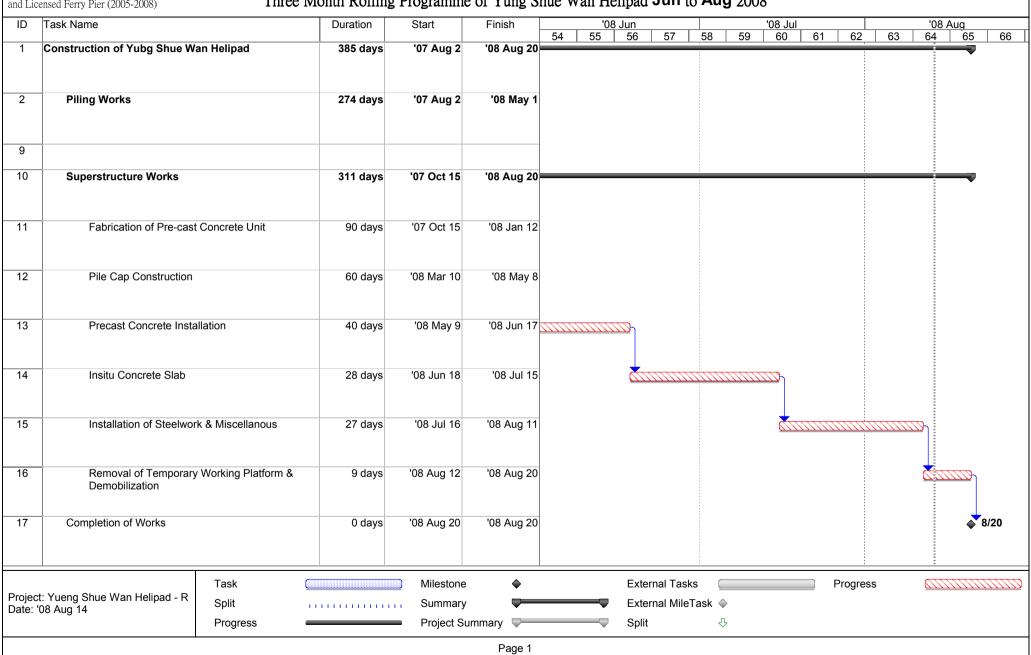
Types of Impacts	Mitigation Measures	Status			
· ·	The holding tank should be fitted with a tight fitting seal to prevent sediment leakage.				
	Ensure that excavator grab seal is tightly closed and the hoist speed is suitably low.	N/A			
	• The holding tank should not be filled to a level which will cause overflow of sediment during loading and transportation.	N/A			
	Large objects should be removed from the excavator grab to avoid sediment spills.	N/A			
	The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.	-			
Waste / Chemical	• Ensure that proper handling, storage, transportation and disposal of materials is implemented at the outset and throughout the construction phase of the helipad.	^			
	• In line with Government's position on waster minimization, the practice of avoiding and minimizing waster generation and waste recycling should be adopted as far as practicable.	^			
	• An on-site environmental co-ordinator should be identified at the outset of the works. The co-ordinaror shall prepare a Waste Management Plan.	^			
	 Spoil generated from the piling activities will need to be properly handled to minimize contamination to the marine water and any exposed ground areas due to leakage or improper storage (i.e. onto bare ground instead of into tanks). 	٨			
	The reuse/recycling of all materials on site shall be investigated prior to treatment/disposal off site	^			
	 Good site practices shall be adopted from the commencement of works to avoid the generation of waste and to promote waste minimization practices. 	٨			
	• All waste material shall be sorted on site into inert and non-inert C&D materials, and where the materials will be recycling or reused, these shall be further segregated. The Contractor shall be responsible for identifying which materials can be recycled/reused, whether on site or off site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of to the refuse transfer station whilst any non-inert C&D material shall be re-used on site as far as possible. If no use of the material can be found on site, the inert C&D material can be delivered to a public filling area, public barging point or public stockpile area after obtaining the appropriate licence.	۸			
	• A trip ticket system should be established at the outset of the construction of the helipad to monitor the disposal of C&D and solid wastes from the site to public filling facilities and landfills.	^			

Types of Impacts	Mitigation Measures	Status		
	 The Contractor shall register with EPD as a Chemical Waste Producer if there is any use of chemicals on site including lubricants, paints, diesel fuel, etc. Only licensed chemical waste collectors shall be employed to collect any chemical waster generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the relevant guidelines as published by Government. 	۸		
	• A sufficient number of covered bins shall be provided on site for the containment of general refuse to prevent visual impacts and nuisance to sensitive receivers. These bins shall be cleared daily and the collected waste disposal of to the refuse transfer station. Further to the issue of Environment, Transport and Works Bureau Technical Circular (Works) No. 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness, the Contractor is required to maintain a clean and hygienic site throughout the Project works.	۸		
	 All Chemical toilets shall be regularly cleaned and the nightsoil collected and transported by a licensed contractor to a Government Sewage Treatment Works facility for disposal. 	٨		
	• Tool box talks shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.	٨		
	Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions.			
	The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.			
	Operation Phase			
	• The helipad will only be used for emergency purposes. No equipment will be placed on the landing pad or along the EVA. Helicopters will not be parked at the landing pad and all repair and maintenance works (on the helicopters) will be conducted off site. As such the only source of waste generation during the operation of the helipad is anticipated to be from the long-term maintenance of the pad.	-		
D. I				
Remarks:	^ Compliance of mitigation measure; X Non-compliance of mitigation measure; N/A Not Applicable; • Non-compliance but rectified by the contractor;			
	* Recommendation was made during site audit but improved/rectified by the contractor.			

APPENDIX L CONSTRUCTION PROGRAMME

Contract No: CV200403 Maintenance and Repairs to Franchised and Licensed Ferry Pier (2005-2008)

Works Order No. YSWH/01/03 Three Month Rolling Programme of Yung Shue Wan Helipad Jun to Aug 2008



APPENDIX M COMPLAINT LOG

APPENDIX M - COMPLAINT LOG

Reporting Month: July 2008

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

Remarks: No environmental complaint was received in the reporting month.