China Harbour Engineering Company Limited

Contract No. CV/2004/05
Maintenance Dredging (2005-2008)

Approach Channel to Tai O Bay
(Works Order No. MD/125/04)

Baseline Water Quality Monitoring Report
(Version 2.0)

January 2008

Approved 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.

CINOTECH CONSULTANTS LTD
Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong
Tel: (852) 2151 2083 Fax: (852) 3107 1388
Email: info@cinotech.com.hk

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EXECUTIVE SUMMARY

1. This Baseline Water Quality Monitoring Report was prepared by Cinotech Consultants Ltd. for the CEDD's Contract No. CV/2004/05 "Maintenance Dredging". This report presents the baseline water quality monitoring works performed for the Works Order no. MD/125/04 "Approach Channel to Tai O Bay" between 2nd November 2007 and 14th November 2007.

2. The baseline water quality monitoring was conducted at eight designated monitoring stations (i.e. Stations C1 to C3, TO1 to TO3, SR1 and SR2), at frequency of three days per week, for two consecutive weeks prior to commencement of works. The monitoring was conducted for a total of 6 days at both mid-ebb and mid-flood tides to monitor the parameters including dissolved oxygen, dissolved oxygen saturation, turbidity, suspended solids and salinity.

3. During the baseline monitoring period, no marine construction works (dredging works) and other observable pollution source were identified in the vicinity of the monitoring stations. The baseline water quality data established in this report are considered representative of the baseline conditions.

4. The baseline data were processed, reviewed and analyzed to derive the Action and Limit Levels for dissolved oxygen, turbidity and suspended solids during impact monitoring throughout the construction phase of the Project (Table I).

Table I Action and Limit Levels for Water Quality Monitoring

Parameter (unit)	Water Depth	Action Level	Limit Level
DO (mg/L)	Surface and Middle	***5.6***	***5.4***
	Bottom	***5.5***	***5.4***
Turbidity (NTU)	Depth average	***34.0*** or 120% of upstream control station's turbidity at the same tide of the same day	***38.7*** or 130% of upstream control station's turbidity at the same tide of same day
SS (mg/L)	Depth average	***33.9*** or 120% of upstream control station's SS at the same tide of the same day	***42.5*** or 130% of upstream control station's SS at the same tide of the same day

1. INTRODUCTION

Background

1.1 The works "Maintenance Dredging (2005-2008)" under Contract No. CV/2004/05 were awarded to China Harbour Engineering Company Limited (hereinafter called the "Contractor") by the Civil Engineering and Development Department (CEDD) of the Hong Kong Special Administrative Region (HKSAR).

1.2 Cinotech Consultants Ltd. was employed by the Contractor to undertake the environmental monitoring services for the contract.

1.3 A Works Order no. MD/125/04 was issued for the dredging work at Approach Channel to Tai O Bay. Prior to the commencement of dredging, a baseline water quality monitoring program was conducted.

Purpose of the Report

1.4 The purpose of this Baseline Water Quality Monitoring Report is to establish the baseline conditions for various water quality parameters in the vicinity of the dredging site. These baseline levels will be used as the basis for the impact and post-project monitoring during and after dredging work of the Project. This report presents the monitoring locations, equipment, period, methodology, results and observations for the water quality measurements during the baseline period.

2. WATER QUALITY

Monitoring Requirements

2.1 Baseline water quality monitoring was conducted three times per week for two consecutive weeks at eight monitoring stations between 2nd November 2007 and 14th November 2007. Monitoring took place two times per monitoring day at mid ebb and mid flood tides at three water depths (1 meter below surface, mid-water depth and 1 meter above seabed) or only at mid-water depth for shallow regions. Dissolved oxygen (DO) concentration, DO saturation, suspended solids (SS), turbidity and salinity were monitored in accordance with the Specification.

Monitoring Locations

2.2 A total of eight monitoring stations (i.e. Stations C1 to C3, TO1 to TO3, SR1 and SR2) were selected for the water quality monitoring program. Table 2.1 describes the locations of these monitoring stations. The locations of the control and impact monitoring stations are shown in **Figure 2.1**.

Table 2.1 Water Quality Monitoring Stations

Monitoring Stations	Coordinates	
	Northing	Easting
Control Stations		
C1	813660	802814
C2	812705	802036
C3	811836	802624
Impact Stations		
TO1	813300	802440
TO2	812674	803236
TO3	812296	803118
SR1	812728	803648
SR2	812055	803520

Monitoring Equipment

2.3 For *in situ* monitoring, a multi-parameter meter (Model YSI 6820 C-M) was used to measure DO, DO saturation, turbidity, salinity and temperature. A sampler (Kahlsico) was used to collect water samples for laboratory analysis of SS.

2.4 Table 2.2 summarizes the equipment used in the baseline water quality monitoring program. Copies of the calibration certificates of the equipment are attached in **Appendix A**.

Table 2.2 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Water Sampler	Kahlsico Water-Bottle Model 135DW 150	1
Multi-parameter Water Quality System	YSI 6820-C-M	2

Monitoring Parameters, Frequency and Duration

2.5 Table 2.3 summarizes the monitoring parameters, monitoring period and frequency of baseline water quality monitoring.

Table 2.3 Baseline Water Quality Monitoring Parameters and Frequency

Monitoring Station	Parameter, unit	Depth	Frequency
C1 C2 C3 SR1 SR2 TO1 TO2 TO3	• DO, mg/L • DO Saturation, % • Salinity, ppt • Turbidity, NTU • SS, mg/L	• 3 water depths: 1m below water surface, mid-depth and 1m above sea bed. • If the water depth is less than 3m, mid-depth sampling only. • If the water depth is between 3-6m, omit mid-depth sampling.	• Baseline monitoring: 3 times per week for 2 consecutive weeks prior to the commencement of dredging work.

Monitoring Methodology and QA/QC Procedures

Instrumentation

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

Operating/Analytical Procedures

2.7 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.

2.8 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

2.9 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.

2.10 Quality control reports as attached in **Appendix D** are available for the SS analyzed in the HOKLAS-accredited laboratory, WELLAB Ltd.

Results and Observations

Results

2.11 Baseline water quality monitoring was conducted between 2nd November 2007 and 14th November 2007. The monitoring schedule is provided in **Appendix F**. The monitoring results and the graphical presentation are provided in **Appendices B** and **C**, respectively.

2.12 The results of DO, SS and turbidity levels for all monitoring stations at the mid-ebb and mid-flood tides are summarized in Tables 2.4 and 2.5, respectively, which show the averages and ranges of readings recorded. Detailed weather conditions during the baseline monitoring period are shown in **Appendix E**.

Table 2.4 Baseline Water Quality Monitoring Results during Mid-Ebb

Station	DO, surface & middle level (mg/L)			DO, bottom level (mg/L)			Turbidity, depth average (NTU)			SS, depth average (mg/L)		
	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.
C1	7.1	8.3	5.4	6.9	8.2	5.3	17.2	23.2	12.4	22.38	34.8	17.5
C2	7.3	8.5	5.6	6.9	8.1	5.7	22.7	27.7	20.7	24.08	32.3	19.0
C3	7.4	8.6	6.0	7.0	8.4	5.7	22.4	37.2	12.3	23.40	29.3	15.0
SR1	7.4	8.2	6.3	6.9	8.2	5.6	13.4	18.7	10.2	20.47	25.0	14.5
SR2	7.2	8.7	5.8	N/A	N/A	N/A	23.6	43.0	8.1	24.75	42.0	20.0
TO1	7.2	8.7	5.5	6.8	8.1	5.4	19.4	24.2	17.1	35.30	81.5	14.5
TO2	7.5	8.7	6.2	6.9	8.3	5.7	15.3	26.2	5.7	20.05	29.0	13.3
TO3	7.4	8.5	6.0	7.0	8.3	5.9	19.3	33.7	6.5	36.88	83.0	14.0

Table 2.5 Baseline Water Quality Monitoring Results during Mid-Flood

Station	DO, surface & middle level (mg/L)			DO, bottom level (mg/L)			Turbidity, depth average (NTU)			SS, depth average (mg/L)		
	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.
C1	7.2	8.5	5.4	6.8	8.1	5.4	19.2	29.6	11.7	25.5	34.7	15.3
C2	7.2	8.5	5.5	6.9	8.0	5.5	22.6	28.6	18.7	36.4	68.8	21.0
C3	7.3	8.4	5.9	6.8	8.3	5.7	23.8	37.2	11.6	22.9	30.0	15.0
SR1	7.3	8.2	6.3	7.0	8.1	5.9	15.0	21.6	10.0	20.9	31.0	16.0
SR2	7.1	8.6	5.7	N/A	N/A	N/A	19.1	37.4	7.2	23.5	30.5	18.5
TO1	7.2	8.6	5.5	6.8	8.0	5.4	21.2	26.4	17.8	31.0	66.8	18.3
TO2	7.3	8.4	6.1	6.9	8.2	5.8	15.3	27.3	7.0	26.3	51.0	15.0
TO3	7.3	8.3	6.0	6.9	8.2	5.9	17.7	32.6	6.8	20.4	31.5	15.0

Observations

2.13 During the baseline water quality monitoring period, no observable pollution source was identified at all the designated monitoring stations during the baseline monitoring period.

2.14 Measurement and water sampling were conducted at one water depth (middle) only at Station SR2. Measurements and water sampling were conducted at two water depths (surface and bottom) only at Stations C3, SR1, TO2 and TO3 according to the instructions listed in Table 2.3. Measurements and water sampling were done at three water depths at Station C1, C2 and TO1.

2.15 The monitoring results showed that water quality within the concerned water body was bad. The monitoring results showed that the maximum of turbidity and SS levels at all monitoring stations were 43 NTU and 83 mg/L respectively.

2.16 Since no observable pollution activity was observed for all stations during sampling, the baseline monitoring results are considered representative of the ambient water quality levels.

Statistical Analysis

2.17 Normal Distribution was applied to find out outlier in terms of Suspended Solids in November 2007 between 8 designated water quality monitoring locations. The analysis results, as presented in Table 2.6, show the criterion of outlier among the 8 monitoring locations.

Table 2.6 Summary of the Results of Normal Distribution

Parameter	Stations involved	Sample Size	Normal Distribution (95% interval)	Outlier Criteria
SS (mg/L)	All	96	Between 0.847 and 50.99	> 50.99

2.18 The water monitoring data of Suspended Solid is reviewed again. The monitoring data considered to be outlier were excluded in the calculation of Action /Limit Level. It

summarizes as presented in Table 2.7.

Table 2.7 Summary of the Outliers in terms of SS

Date	Stations involved	Tide	Monitoring Result (mg/L)	Outlier Criteria
2007/11/2	TO3	Mid-Ebb	51.5	> 50.99
2007/11/5	C2	Mid-Flood	68.8	
2007/11/5	TO2	Mid-Flood	51.0	
2007/11/5	TO3	Mid-Ebb	83.0	
2007/11/9	TO1	Mid-Ebb	81.5	
2007/11/9	TO1	Mid-Flood	66.8	

Action and Limit Levels

2.19 Guidelines for establishment of the Action and Limit levels for the impact monitoring during construction phase and post-project monitoring of the Project are provided in Table 2.8. An exceedance will be considered to be valid when the monitoring result exceeds both the A/L levels derived from the baseline data and the monitoring results at the control stations.

Table 2.8 Guidelines for Establishment of Action and Limit Levels

Parameter (unit)	Water Depth	Action Level	Limit Level
DO (mg/L)	Surface and Middle	5%-ile of baseline data	4 mg/L or 1%-ile of baseline data
	Bottom	5%-ile of baseline data	2 mg/L or 1%-ile of baseline data
Turbidity (NTU)	Depth average	95%-ile of baseline data or 120% of upstream control station's turbidity at the same tide of the same day	99%-ile of baseline data or 130% of turbidity at the upstream control station at the same tide of same day
SS (mg/L)	Depth average	95%-ile of baseline data or 120% of upstream control station's SS at the same tide of the same day	99%-ile of baseline data or 130% of SS readings at the upstream control station at the same tide of same day

2.20 Following these criteria, the Action and Limit Levels for water quality impact monitoring have been established as Table 2.9.

Table 2.9 Calculated Action and Limit Levels for Water Quality

Parameter (unit)	Water Depth	Action Level	Limit Level
DO (mg/L)	Surface and Middle	***5.6***	***5.4***
	Bottom	***5.5***	***5.4***

Turbidity (NTU)	Depth average	***34.0*** or 120% of upstream control station's turbidity at the same tide of the same day	***38.7*** or 130% of upstream control station's turbidity at the same tide of same day
SS (mg/L)	Depth average	***33.9*** or 120% of upstream control station's SS at the same tide of the same day	***42.5*** or 130% of upstream control station's SS at the same tide of the same day

Notes:
- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of water quality limits occurs when monitoring result is higher than the limits.

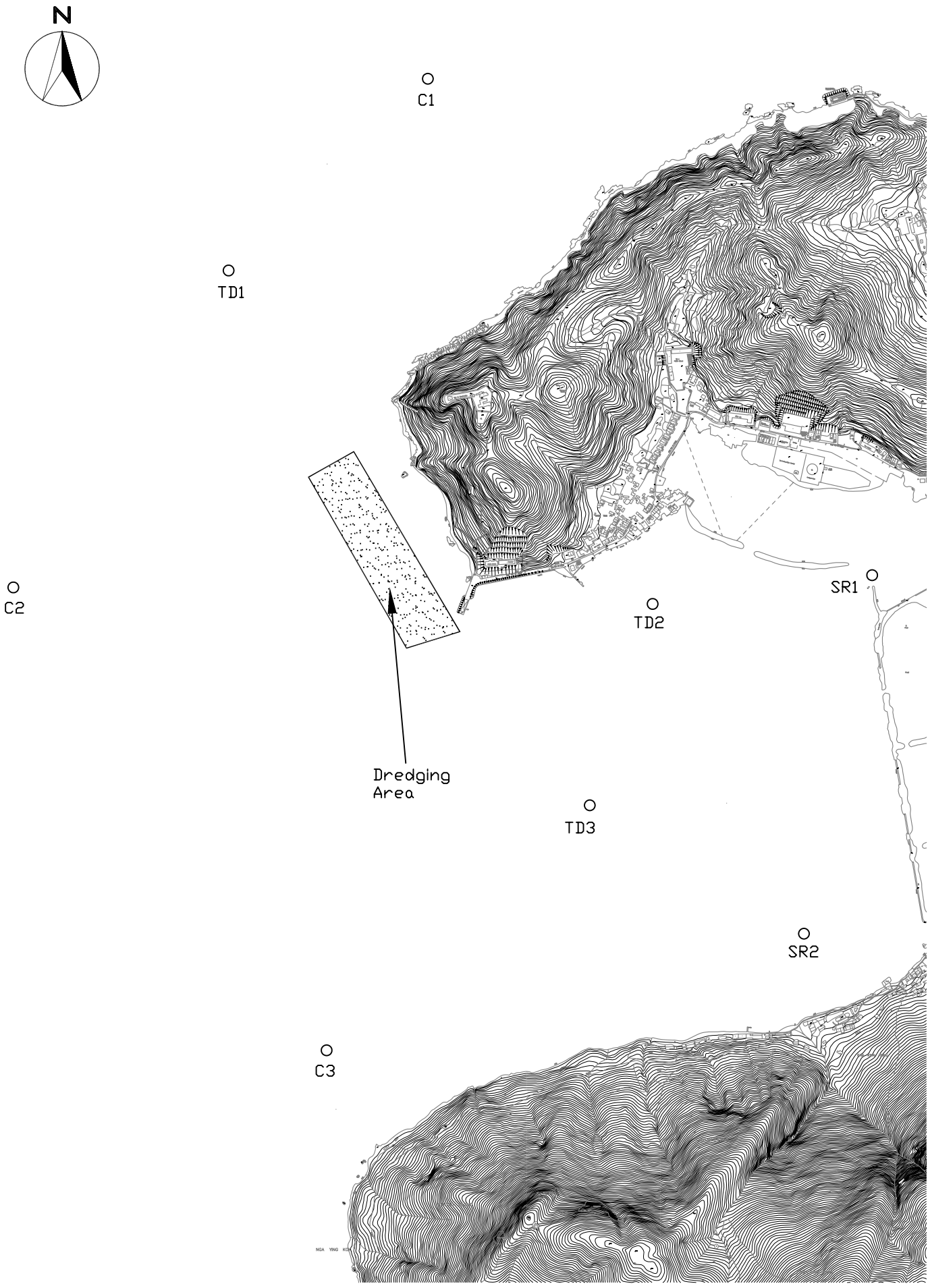
3. CONCLUSIONS

3.1 The baseline environmental monitoring was conducted at eight designated stations (i.e. Stations C1 to C3, TO1 to TO3, SR1 and SR2.) between 2nd November 2007 and 14th November 2007.

3.2 During the baseline routine water quality monitoring was conducted at eight monitoring stations, no marine construction works and observable pollution source were identified in the vicinity at the stations.

3.3 The baseline water quality data established in this report is considered representative of the baseline condition of the project. The monitoring results were used to establish the Action and Limit Levels for the relevant parameters during impact/compliance monitoring and also post-project monitoring throughout the implementation of the Project.

FIGURE



CINOTECH
Cinotech Consultants Limited

Contract No. CV/2004/05 Maintenance Dredging (2005-2008 Approach Channel to Tai □ Bay - Works Order MD/125/04

Location of Water Quality Monitoring Stations

SCALE	NTS	DATE	November 2007
CHECK	IT	DRAWN	IAN
JOB No.	MA5004	DRAWING No.	2.1
		REV	—

APPENDIX A
COPIES OF CALIBRATION CERTIFICATES FOR WATER QUALITY MONITORING EQUIPMENT

WELLAB 匯
Testing and Research 力

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**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/70811-1
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
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	: 22 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
Senior Chemist

WELLAB 匯
Testing and Research 力

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/70811-1
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
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	
1422	1420	2	1420 ± 20

2. Salinity Performance check

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 water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
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_j , 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

**********END OF REPORT**********

WELLAB 匯
Testing and Research 力

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/71110-1
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09
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	: 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
Senior Chemist

WELLAB 匯
Testing and Research 力

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/71110-1
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09
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	
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 water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
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_j , 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

**********END OF REPORT**********

WELLAB 匯
Testing and Research 力

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**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/70811-2
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
Page:	1 of 2

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	: 22 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
Senior Chemist

WELLAB 匯
Testing and Research 力

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/70811-2
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
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	
1420	1419	1	1418 ± 20

2. Salinity Performance check

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 water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
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_j , 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

**********END OF REPORT**********

WELLAB 匯力
Testing and Research

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/71110-2
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09
Page:	1 of 2

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	: 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
Senior Chemist

WELLAB 匯
Testing and Research 力

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/71110-2
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09

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

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 water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
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_j , 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

**********END OF REPORT**********

APPENDIX B
BASELINE WATER QUALITY MONITORING RESULTS

Water Quality Monitoring Results at C1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	10:02	Surface	1	24.3 24.3	24.3	33.3 33.3	33.3	78.5 78.2	78.4	5.4 5.4	5.4	5.4	16.5 16.1	16.3	16.9	20 20	20.0	17.5
				Middle	6	24.3 24.3	24.3	33.3 33.3	33.3	77.8 77.7	77.8	5.4 5.4	5.4		16.7 16.7	16.7		14 15	14.5	
				Bottom	11	24.3 24.3	24.3	33.4 33.4	33.4	77.2 76.9	77.1	5.3 5.3	5.3	5.3	17.8 17.4	17.6		18 18	18.0	
5-Nov-07	Cloudy	Moderate	10:32	Surface	1	23.7 23.7	23.7	31.8 32.1	32.0	99.2 98.8	99.0	7.0 7.0	7.0	6.8	15.0 14.5	14.8	15.4	48 48	48.0	34.8
				Middle	6	23.7 23.7	23.7	32.1 32.1	32.1	92.9 92.9	92.9	6.5 6.5	6.5		15.2 15.2	15.2		33 33	33.0	
				Bottom	11	23.7 23.7	23.7	32.1 32.1	32.1	97.2 97.1	97.2	6.9 6.8	6.9	6.9	16.3 15.8	16.1		23 24	23.5	
7-Nov-07	Cloudy	Moderate	11:48	Surface	1	22.7 22.7	22.7	32.6 32.7	32.7	106.8 106.4	106.6	6.6 6.6	6.6	6.4	16.5 16.1	16.3	16.9	26 26	26.0	23.2
				Middle	6	22.7 22.7	22.7	32.7 32.7	32.7	101.1 101.0	101.1	6.2 6.2	6.2		16.7 16.7	16.7		22 22	22.0	
				Bottom	11	22.7 22.7	22.7	32.7 32.7	32.7	97.4 97.3	97.4	6.1 6.1	6.1	6.1	17.8 17.4	17.6		21 22	21.5	
9-Nov-07	Sunny	Moderate	12:45	Surface	1	23.2 23.2	23.2	35.0 35.0	35.0	119.3 118.9	119.1	8.3 8.3	8.3	8.3	16.7 16.3	16.5	18.1	13 12	12.5	22.2
				Middle	6.5	23.1 23.1	23.1	35.0 35.0	35.0	117.1 116.9	117.0	8.2 8.2	8.2		17.8 18.3	18.1		27 28	27.5	
				Bottom	12	23.1 23.1	23.1	35.0 35.0	35.0	116.4 116.2	116.3	8.2 8.1	8.2	8.2	19.6 19.8	19.7		26 27	26.5	
12-Nov-07	Sunny	Moderate	14:41	Surface	1	23.4 23.4	23.4	34.7 34.8	34.8	122.8 122.2	122.5	8.5 8.5	8.5	8.3	15.6 16.3	16.0	23.2	26 26	26.0	18.5
				Middle	6.5	23.3 23.3	23.3	35.0 35.0	35.0	114.5 114.8	114.7	8.0 8.0	8.0		24.0 24.0	24.0		15 15	15.0	
				Bottom	12	23.3 23.3	23.3	35.0 35.0	35.0	112.2 111.8	112.0	7.9 7.8	7.9	7.9	29.9 29.3	29.6		14 15	14.5	
14-Nov-07	Sunny	Moderate	15:35	Surface	1	23.5 23.5	23.5	34.7 34.7	34.7	110.4 110.0	110.2	7.7 7.7	7.7	7.6	11.0 10.6	10.8	12.4	28 28	28.0	20.8
				Middle	6.5	23.3 23.3	23.3	34.7 34.7	34.7	105.9 105.7	105.8	7.4 7.4	7.4		12.1 12.5	12.3		16 16	16.0	
				Bottom	12	23.2 23.3	23.3	34.7 34.6	34.7	102.4 102.4	102.4	7.2 7.2	7.2	7.2	13.9 14.1	14.0		19 18	18.5	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at C1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (^{o}C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:59	Surface	1	24.3 24.3	24.3	33.3 33.3	33.3	78.0 77.9	78.0	5.4 5.4	5.4	5.4	16.5 16.9	16.7	17.2	22 22	22.0	22.5
				Middle	6	24.4 24.4	24.4	33.4 33.3	33.4	77.7 77.7	77.7	5.4 5.4	5.4		17.4 17.4	17.4		27 26	26.5	
				Bottom	11	24.4 24.4	24.4	33.4 33.4	33.4	77.3 76.6	77.0	5.4 5.3	5.4	5.4	17.6 17.4	17.5		19 19	19.0	
5-Nov-07	Cloudy	Moderate	16:30	Surface	1	23.8 23.8	23.8	32.1 32.1	32.1	98.7 98.8	98.8	7.0 7.0	7.0	6.9	15.0 15.4	15.2	15.7	35 35	35.0	28.3
				Middle	6	23.8 23.8	23.8	32.1 32.1	32.1	94.2 95.3	94.8	6.6 6.7	6.7		15.8 15.8	15.8		26 26	26.0	
				Bottom	11	23.8 23.8	23.8	32.1 32.1	32.1	86.7 86.7	86.7	6.1 6.1	6.1	6.1	16.1 15.8	16.0		24 24	24.0	
7-Nov-07	Cloudy	Moderate	17:13	Surface	1	22.8 22.8	22.8	32.7 32.7	32.7	106.6 106.6	106.6	6.6 6.6	6.6	6.5	16.5 16.9	16.7	17.2	36 36	36.0	34.7
				Middle	6	22.8 22.8	22.8	32.7 32.7	32.7	101.4 101.8	101.6	6.3 6.3	6.3		17.4 17.4	17.4		45 45	45.0	
				Bottom	11	22.8 22.8	22.8	32.7 32.7	32.7	93.1 92.1	92.6	5.8 5.7	5.8	5.8	17.6 17.4	17.5		23 23	23.0	
9-Nov-07	Sunny	Moderate	18:08	Surface	1	23.3 23.3	23.3	35.0 35.0	35.0	118.9 118.7	118.8	8.3 8.3	8.3	8.2	22.0 22.7	22.4	29.6	32 33	32.5	27.7
				Middle	6.5	23.1 23.1	23.1	35.0 35.0	35.0	116.2 116.0	116.1	8.1 8.1	8.1		30.4 30.4	30.4		23 25	24.0	
				Bottom	12	23.0 23.0	23.0	35.0 35.0	35.0	114.6 114.5	114.6	8.0 8.0	8.0	8.0	36.3 35.6	36.0		28 25	26.5	
12-Nov-07	Sunny	Moderate	09:38	Surface	1	23.5 23.5	23.5	34.8 34.8	34.8	128.2 127.2	127.7	8.9 8.9	8.9	8.5	10.3 9.9	10.1	11.7	21 20	20.5	15.3
				Middle	6.5	23.2 23.2	23.2	35.0 35.0	35.0	114.2 113.5	113.9	8.0 7.9	8.0		11.4 11.9	11.7		16 16	16.0	
				Bottom	12	23.2 23.2	23.2	34.9 34.9	34.9	115.5 115.3	115.4	8.1 8.1	8.1	8.1	13.2 13.4	13.3		9 10	9.5	
14-Nov-07	Sunny	Moderate	11:18	Surface	1	23.3 23.4	23.4	34.7 34.7	34.7	108.3 108.2	108.3	7.6 7.6	7.6	7.5	16.3 16.9	16.6	23.8	19 19	19.0	24.3
				Middle	6.5	23.2 23.2	23.2	34.7 34.7	34.7	105.2 105.0	105.1	7.4 7.4	7.4		24.6 24.6	24.6		26 26	26.0	
				Bottom	12	23.2 23.2	23.2	34.6 34.6	34.6	100.6 100.4	100.5	7.1 7.1	7.1	7.1	30.6 29.9	30.3		28 28	28.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at C2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:43	Surface	1	24.2 24.2	24.2	33.4 33.3	33.4	80.2 80.0	80.1	5.6 5.6	5.6	5.6	18.0 17.8	17.9	22.7	19 19	19.0	20.8
				Middle	6	24.2 24.2	24.2	33.4 33.4	33.4	79.2 78.9	79.1	5.5 5.5	5.5		23.8 24.0	23.9		24 24	24.0	
				Bottom	11	24.3 24.3	24.3	33.6 33.6	33.6	78.8 78.9	78.9	5.5 5.5	5.5	5.5	26.2 26.2	26.2		19 20	19.5	
5-Nov-07	Cloudy	Moderate	10:14	Surface	1	23.7 23.7	23.7	32.1 32.1	32.1	97.6 97.9	97.8	6.9 6.9	6.9	6.9	16.5 16.3	16.4	21.1	27 27	27.0	32.3
				Middle	6	23.7 23.7	23.7	31.7 31.8	31.8	95.7 96.1	95.9	6.8 6.8	6.8		22.2 22.4	22.3		34 34	34.0	
				Bottom	11	23.7 23.7	23.7	32.1 31.8	32.0	94.0 95.0	94.5	6.6 6.7	6.7	6.7	24.6 24.6	24.6		36 36	36.0	
7-Nov-07	Cloudy	Moderate	11:30	Surface	1	22.7 22.7	22.7	32.7 32.7	32.7	106.4 106.4	106.4	6.6 6.6	6.6	6.5	16.1 15.8	16.0	20.7	21 21	21.0	22.3
				Middle	6	22.7 22.7	22.7	32.6 32.6	32.6	102.5 102.7	102.6	6.4 6.4	6.4		21.8 22.0	21.9		21 21	21.0	
				Bottom	11	22.7 22.7	22.7	32.8 32.7	32.8	99.9 100.2	100.1	6.2 6.2	6.2	6.2	24.2 24.2	24.2		25 25	25.0	
9-Nov-07	Sunny	Moderate	12:15	Surface	1	23.3 23.3	23.3	35.0 35.0	35.0	122.9 122.7	122.8	8.6 8.6	8.6	8.4	20.9 21.3	21.1	27.7	11 10	10.5	23.3
				Middle	6.5	23.0 23.0	23.0	35.0 35.0	35.0	117.5 117.2	117.4	8.2 8.2	8.2		27.3 27.3	27.3		29 32	30.5	
				Bottom	12	23.0 23.0	23.0	35.0 35.0	35.0	115.6 115.4	115.5	8.1 8.1	8.1	8.1	34.8 34.5	34.7		28 30	29.0	
12-Nov-07	Sunny	Moderate	14:10	Surface	1	23.5 23.5	23.5	34.9 34.8	34.9	124.4 123.5	124.0	8.7 8.6	8.7	8.5	14.5 15.0	14.8	22.2	14 14	14.0	19.0
				Middle	6.5	23.2 23.2	23.2	34.9 34.9	34.9	119.4 118.1	118.8	8.3 8.3	8.3		24.2 24.2	24.2		20 20	20.0	
				Bottom	12	23.2 23.2	23.2	35.0 35.0	35.0	111.5 110.9	111.2	7.8 7.8	7.8	7.8	27.7 27.5	27.6		23 23	23.0	
14-Nov-07	Sunny	Moderate	15:05	Surface	1	23.5 23.5	23.5	34.7 34.7	34.7	112.0 111.4	111.7	7.8 7.8	7.8	7.7	15.2 15.6	15.4	22.0	24 24	24.0	26.8
				Middle	6	23.2 23.2	23.2	34.7 34.7	34.7	108.1 107.9	108.0	7.6 7.6	7.6		21.6 21.6	21.6		35 35	35.0	
				Bottom	11	23.2 23.2	23.2	34.6 34.7	34.7	102.7 102.5	102.6	7.2 7.2	7.2	7.2	29.0 28.8	28.9		21 22	21.5	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at C2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:40	Surface	1	24.2 24.3	24.3	33.4 33.4	33.4	79.8 79.5	79.7	5.5 5.5	5.5	5.5	20.2 20.9	20.6	24.1	20 20	20.0	27.0
				Middle	6.5	24.3 24.4	24.4	33.5 33.5	33.5	78.6 78.7	78.7	5.4 5.4	5.4		24.6 26.2	25.4		33 33	33.0	
				Bottom	12	24.4 24.4	24.4	33.7 33.7	33.7	79.0 79.1	79.1	5.5 5.5	5.5	5.5	26.8 26.0	26.4		28 28	28.0	
5-Nov-07	Cloudy	Moderate	16:12	Surface	1	23.8 23.8	23.8	30.5 31.7	31.1	99.1 99.1	99.1	7.0 7.0	7.0	6.8	17.2 17.8	17.5	20.0	27 26	26.5	68.8
				Middle	6.5	23.8 23.8	23.8	32.1 32.1	32.1	92.9 92.9	92.9	6.5 6.5	6.5		20.0 21.6	20.8		84 84	84.0	
				Bottom	12	23.8 23.8	23.8	32.1 32.1	32.1	92.2 93.9	93.1	6.5 6.6	6.6	6.6	22.2 21.3	21.8		96 96	96.0	
7-Nov-07	Cloudy	Moderate	16:54	Surface	1	22.8 22.8	22.8	31.9 32.5	32.2	107.2 107.1	107.2	6.7 6.6	6.7	6.5	15.8 16.5	16.2	18.7	18 18	18.0	26.7
				Middle	6.5	22.8 22.8	22.8	32.8 32.8	32.8	99.4 99.4	99.4	6.2 6.1	6.2		18.7 20.2	19.5		52 52	52.0	
				Bottom	12	22.8 22.8	22.8	32.9 32.9	32.9	97.7 98.1	97.9	6.0 6.1	6.1	6.1	20.9 20.0	20.5		10 10	10.0	
9-Nov-07	Sunny	Moderate	17:38	Surface	1	23.3 23.3	23.3	35.0 35.0	35.0	119.1 119.1	119.1	8.3 8.3	8.3	8.3	20.9 21.3	21.1	28.6	10 10	10.0	21.0
				Middle	6	23.0 23.0	23.0	35.0 35.0	35.0	116.3 115.9	116.1	8.2 8.1	8.2		30.6 30.6	30.6		25 26	25.5	
				Bottom	11	23.0 23.0	23.0	35.0 35.0	35.0	114.3 114.2	114.3	8.0 8.0	8.0	8.0	34.1 33.9	34.0		27 28	27.5	
12-Nov-07	Sunny	Moderate	09:08	Surface	1	23.5 23.5	23.5	34.8 34.9	34.9	126.4 125.7	126.1	8.8 8.8	8.8	8.5	14.5 15.0	14.8	21.3	50 49	49.5	28.5
				Middle	6	23.2 23.2	23.2	35.0 35.0	35.0	117.1 117.1	117.1	8.2 8.2	8.2		20.9 20.9	20.9		20 20	20.0	
				Bottom	11	23.2 23.2	23.2	35.0 35.0	35.0	110.6 110.9	110.8	7.8 7.8	7.8	7.8	28.4 28.2	28.3		16 16	16.0	
14-Nov-07	Sunny	Moderate	10:48	Surface	1	23.5 23.5	23.5	34.7 34.7	34.7	109.6 109.3	109.5	7.7 7.7	7.7	7.6	15.2 15.6	15.4	22.9	28 28	28.0	46.5
				Middle	6.5	23.2 23.2	23.2	34.7 34.7	34.7	105.6 105.4	105.5	7.4 7.4	7.4		24.9 24.9	24.9		25 26	25.5	
				Bottom	12	23.1 23.1	23.1	34.7 34.6	34.7	101.5 101.6	101.6	7.1 7.1	7.1	7.1	28.4 28.2	28.3		86 86	86.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at C3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:33	Surface	1	24.0 24.0	24.0	33.4 33.3	33.4	85.8 85.4	85.6	6.0 5.9	6.0	6.0	29.9 29.0	29.5	37.2	24 24	24.0	26.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	24.0 24.0	24.0	33.4 33.4	33.4	82.4 82.2	82.3	5.7 5.7	5.7	5.7	45.1 44.4	44.8		29 28	28.5	
5-Nov-07	Cloudy	Moderate	10:03	Surface	1	23.7 23.7	23.7	31.8 31.8	31.8	99.4 99.6	99.5	7.0 7.0	7.0	7.0	26.8 26.0	26.4	31.0	25 26	25.5	29.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.5 23.5	23.5	32.1 32.1	32.1	90.5 91.0	90.8	6.4 6.4	6.4	6.4	35.9 35.2	35.6		33 33	33.0	
7-Nov-07	Cloudy	Moderate	11:19	Surface	1	22.7 22.7	22.7	32.6 32.6	32.6	107.4 107.4	107.4	6.6 6.6	6.6	6.6	19.6 18.7	19.2	23.8	23 23	23.0	22.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.5 22.5	22.5	32.7 32.7	32.7	94.5 94.8	94.7	5.9 5.9	5.9	5.9	28.6 27.9	28.3		21 22	21.5	
9-Nov-07	Sunny	Moderate	12:03	Surface	1	23.1 23.2	23.2	35.0 35.0	35.0	122.2 122.0	122.1	8.6 8.5	8.6	8.6	12.1 12.3	12.2	15.8	27 26	26.5	26.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.9 22.9	22.9	34.9 34.9	34.9	120.1 119.8	120.0	8.4 8.4	8.4	8.4	19.1 19.6	19.4		27 26	26.5	
12-Nov-07	Sunny	Moderate	13:58	Surface	1	23.3 23.3	23.3	34.8 34.8	34.8	121.3 120.1	120.7	8.4 8.3	8.4	8.4	11.7 11.4	11.6	14.2	18 18	18.0	21.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	35.0 35.0	35.0	116.6 116.7	116.7	8.1 8.2	8.2	8.2	16.3 17.2	16.8		24 24	24.0	
14-Nov-07	Sunny	Moderate	14:53	Surface	1	23.3 23.4	23.4	34.7 34.7	34.7	112.5 112.8	112.7	7.9 7.9	7.9	7.9	10.8 11.0	10.9	12.3	12 12	12.0	15.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	34.6 34.6	34.6	106.8 106.3	106.6	7.5 7.5	7.5	7.5	13.4 13.9	13.7		18 18	18.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at C3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:30	Surface	1	24.1 24.1	24.1	33.4 33.4	33.4	85.0 84.8	84.9	5.9 5.9	5.9	5.9	41.4 41.4	41.4	44.1^	29 28	28.5	27.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	24.2 24.2	24.2	33.3 33.3	33.3	81.3 81.2	81.3	5.7 5.6	5.7	5.7	48.2 45.1	46.7		26 26	26.0	
5-Nov-07	Cloudy	Moderate	16:01	Surface	1	23.9 23.9	23.9	31.9 31.9	31.9	98.4 98.4	98.4	6.9 6.9	6.9	6.9	32.1 32.1	32.1	34.8	22 22	22.0	30.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.6 23.6	23.6	32.1 32.1	32.1	88.6 88.3	88.5	6.3 6.2	6.3	6.3	38.9 35.9	37.4		38 38	38.0	
7-Nov-07	Cloudy	Moderate	16:44	Surface	1	22.8 22.9	22.9	32.6 32.6	32.6	106.9 106.8	106.9	6.6 6.6	6.6	6.6	24.9 24.9	24.9	27.6	17 16	16.5	17.8
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.6 22.6	22.6	32.7 32.7	32.7	93.0 92.9	93.0	5.8 5.8	5.8	5.8	31.7 28.6	30.2		19 19	19.0	
9-Nov-07	Sunny	Moderate	17:25	Surface	1	23.1 23.1	23.1	35.0 35.0	35.0	119.3 119.3	119.3	8.4 8.3	8.4	8.4	13.6 13.4	13.5	18.3	27 28	27.5	27.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.9 22.9	22.9	34.9 34.9	34.9	117.9 117.6	117.8	8.3 8.3	8.3	8.3	22.7 23.5	23.1		25 28	26.5	
12-Nov-07	Sunny	Moderate	08:54	Surface	1	23.3 23.3	23.3	34.8 34.8	34.8	119.6 119.5	119.6	8.3 8.3	8.3	8.3	10.1 10.3	10.2	11.6	9 9	9.0	15.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.0 23.0	23.0	35.0 35.0	35.0	115.0 114.9	115.0	8.0 8.0	8.0	8.0	12.8 13.2	13.0		21 21	21.0	
14-Nov-07	Sunny	Moderate	10:35	Surface	1	23.3 23.3	23.3	34.6 34.6	34.6	105.7 105.7	105.7	7.4 7.4	7.4	7.4	12.3 12.1	12.2	14.8	25 25	25.0	20.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	34.7 34.7	34.7	98.0 97.3	97.7	6.9 6.8	6.9	6.9	16.9 17.8	17.4		16 16	16.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.
^ : Outlier

Water Quality Monitoring Results at SR1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:00	Surface	1	24.0 24.0	24.0	33.1 33.1	33.1	90.6 90.9	90.8	6.3 6.3	6.3	6.3	17.8 18.0	17.9	18.7	18 18	18.0	20.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	24.4 24.4	24.4	33.5 33.5	33.5	88.9 88.7	88.8	6.1 6.1	6.1	6.1	19.6 19.4	19.5		23 23	23.0	
5-Nov-07	Cloudy	Moderate	09:30	Surface	1	23.7 23.7	23.7	31.8 31.7	31.8	99.8 100.0	99.9	7.0 7.1	7.1	7.1	16.3 16.5	16.4	17.2	13 13	13.0	14.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.5 23.6	23.6	32.1 32.1	32.1	90.1 89.5	89.8	6.4 6.3	6.4	6.4	18.0 17.8	17.9		16 16	16.0	
7-Nov-07	Cloudy	Moderate	10:46	Surface	1	22.7 22.7	22.7	32.4 32.4	32.4	108.2 108.1	108.2	6.7 6.7	6.7	6.7	11.9 12.1	12.0	12.8	21 21	21.0	18.8
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.5 22.5	22.5	32.8 32.8	32.8	90.3 90.0	90.2	5.6 5.6	5.6	5.6	13.6 13.4	13.5		16 17	16.5	
9-Nov-07	Sunny	Moderate	11:27	Surface	1	22.7 22.7	22.7	34.8 34.8	34.8	113.5 112.9	113.2	8.0 8.0	8.0	8.0	4.8 4.6	4.7	10.2	27 28	27.5	25.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.5 22.5	22.5	34.9 34.9	34.9	111.2 110.8	111.0	7.9 7.9	7.9	7.9	15.6 15.8	15.7		21 24	22.5	
12-Nov-07	Sunny	Moderate	13:22	Surface	1	22.9 22.9	22.9	34.7 34.7	34.7	118.3 118.2	118.3	8.2 8.2	8.2	8.2	10.8 10.8	10.8	10.9	16 16	16.0	24.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.7 22.7	22.7	34.9 34.9	34.9	117.5 117.9	117.7	8.2 8.2	8.2	8.2	10.8 11.2	11.0		32 32	32.0	
14-Nov-07	Sunny	Moderate	14:16	Surface	1	22.9 22.9	22.9	34.7 34.7	34.7	112.2 112.6	112.4	7.8 7.9	7.9	7.9	11.0 11.2	11.1	10.6	22 22	22.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.7 22.7	22.7	34.6 34.6	34.6	102.9 102.2	102.6	7.3 7.2	7.3	7.3	9.9 10.1	10.0		18 18	18.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at SR1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (^{o}C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	13:56	Surface	1	24.1 24.1	24.1	33.1 33.1	33.1	90.7 90.6	90.7	6.3 6.3	6.3	6.3	18.3 18.5	18.4	21.6	19 18	18.5	22.8
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	24.5 24.5	24.5	33.6 33.6	33.6	87.9 87.7	87.8	6.1 6.1	6.1	6.1	24.4 25.1	24.8		27 27	27.0	
5-Nov-07	Cloudy	Moderate	15:28	Surface	1	23.8 23.8	23.8	31.5 31.5	31.5	100.1 100.3	100.2	7.1 7.1	7.1	7.1	16.7 16.9	16.8	20.0	18 18	18.0	18.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.6 23.6	23.6	32.1 32.1	32.1	92.6 92.1	92.4	6.6 6.5	6.6	6.6	22.9 23.5	23.2		19 19	19.0	
7-Nov-07	Cloudy	Moderate	16:10	Surface	1	22.8 22.8	22.8	32.3 32.3	32.3	108.0 108.1	108.1	6.7 6.7	6.7	6.7	12.3 12.5	12.4	15.6	18 18	18.0	18.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.6 22.6	22.6	32.9 32.9	32.9	93.9 93.6	93.8	5.9 5.8	5.9	5.9	18.5 19.1	18.8		18 18	18.0	
9-Nov-07	Sunny	Moderate	16:49	Surface	1	22.6 22.6	22.6	34.8 34.8	34.8	113.1 112.5	112.8	8.0 7.9	8.0	8.0	4.4 4.4	4.4	10.9	34 38	36.0	31.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.4 22.4	22.4	34.9 34.9	34.9	110.8 110.5	110.7	7.8 7.8	7.8	7.8	17.2 17.6	17.4		26 26	26.0	
12-Nov-07	Sunny	Moderate	08:19	Surface	1	22.8 22.8	22.8	34.7 34.7	34.7	118.5 118.6	118.6	8.2 8.2	8.2	8.2	10.3 10.6	10.5	10.0	10 10	10.0	16.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.6 22.6	22.6	34.9 34.9	34.9	116.0 116.1	116.1	8.1 8.1	8.1	8.1	9.2 9.5	9.4		22 22	22.0	
14-Nov-07	Sunny	Moderate	09:59	Surface	1	22.8 22.8	22.8	34.7 34.7	34.7	106.5 106.5	106.5	7.5 7.5	7.5	7.5	11.4 11.4	11.4	11.6	25 25	25.0	19.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.6 22.6	22.6	34.6 34.6	34.6	103.6 103.7	103.7	7.3 7.3	7.3	7.3	11.4 11.9	11.7		13 13	13.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at SR2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:26	Surface	-	-	-	-	-	-	-	-	-	5.8	-	-	43.0	-	-	42.0
						-		-		-		-			-			-		
				Middle	1.1	23.2	23.2	32.7	32.7	81.3	81.0	5.8	5.8		43.1	43.0		42	42.0	
						23.2		32.6		80.6		5.7			42.9			42		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
5-Nov-07	Cloudy	Moderate	09:57	Surface	-	-	-	-	-	-	-	-	-	7.0	-	-	38.4	-	-	25.0
						-		-		-		-			-			-		
				Middle	1	23.8	23.8	32.0	32.0	99.2	99.3	7.0	7.0		38.5	38.4		25	25.0	
						23.8		32.0		99.3		7.0			38.3			25		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
7-Nov-07	Cloudy	Moderate	11:12	Surface	-	-	-	-	-	-	-	-	-	6.1	-	-	31.1	-	-	20.0
						-		-		-		-			-			-		
				Middle	1	22.7	22.7	32.3	32.3	111.5	111.2	6.1	6.1		31.2	31.1		20	20.0	
						22.7		32.3		110.8		6.0			31.0			20		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
9-Nov-07	Sunny	Moderate	11:56	Surface	-	-	-	-	-	-	-	-	-	8.7	-	-	8.1	-	-	20.0
						-		-		-		-			-			-		
				Middle	0.8	23.1	23.1	34.9	34.9	124.2	124.1	8.7	8.7		8.1	8.1		19	20.0	
						23.1		34.9		123.9		8.7			8.1			21		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
12-Nov-07	Sunny	Moderate	13:51	Surface	-	-	-	-	-	-	-	-	-	8.1	-	-	9.6	-	-	20.5
						-		-		-		-			-			-		
				Middle	0.8	23.3	23.3	34.6	34.7	117.1	117.1	8.1	8.1		9.7	9.6		21	20.5	
						23.3		34.7		117.1		8.1			9.5			20		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
14-Nov-07	Sunny	Moderate	14:45	Surface	-	-	-	-	-	-	-	-	-	7.4	-	-	11.2	-	-	21.0
						-		-		-		-			-			-		
				Middle	0.7	23.3	23.3	34.6	34.6	105.3	105.3	7.4	7.4		11.2	11.2		21	21.0	
						23.3		34.6		105.2		7.4			11.2			21		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at SR2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (^{o}C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:23	Surface	-	-	-	-	-	-	-	-	-	5.7	-	-	37.4	-	-	26.0
				Middle	1.4	23.1	23.1	32.0	31.9	80.1	79.9	5.7	5.7		37.6	37.4		26	26.0	
						23.1		31.8		79.7		5.7			37.2			26		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
5-Nov-07	Cloudy	Moderate	15:54	Surface	-	-	-	-	-	-	-	-	-	7.2	-	-	28.2	-	-	30.5
				Middle	1.4	23.8	23.8	28.8	29.3	100.8	100.8	7.2	7.2		28.4	28.2		31	30.5	
						23.8		29.7		100.7		7.2			27.9			30		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
7-Nov-07	Cloudy	Moderate	16:37	Surface	-	-	-	-	-	-	-	-	-	5.9	-	-	20.9	-	-	24.0
				Middle	1.4	22.8	22.8	30.4	30.6	109.4	109.1	5.9	5.9		21.1	20.9		24	24.0	
						22.8		30.7		108.8		5.9			20.7			24		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
9-Nov-07	Sunny	Moderate	17:17	Surface	-	-	-	-	-	-	-	-	-	8.6	-	-	7.2	-	-	20.0
				Middle	0.8	23.1	23.1	34.9	34.9	123.1	123.1	8.6	8.6		7.3	7.2		19	20.0	
						23.1		34.9		123.0		8.6			7.0			21		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
12-Nov-07	Sunny	Moderate	08:46	Surface	-	-	-	-	-	-	-	-	-	8.0	-	-	10.6	-	-	18.5
				Middle	0.8	23.2	23.2	35.0	35.0	114.1	114.1	8.0	8.0		10.6	10.6		18	18.5	
						23.2		35.0		114.1		8.0			10.6			19		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		
14-Nov-07	Sunny	Moderate	10:26	Surface	-	-	-	-	-	-	-	-	-	7.4	-	-	10.2	-	-	22.0
				Middle	0.7	23.2	23.2	34.6	34.6	104.2	104.5	7.3	7.4		10.3	10.2		22	22.0	
						23.2		34.6		104.7		7.4			10.1			22		
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-		-		-		-			-			-		

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at TO1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:54	Surface	1	24.2 24.2	24.2	33.4 33.3	33.4	80.1 79.7	79.9	5.6 5.5	5.6	5.5	14.3 14.5	14.4	19.1	17 17	17.0	16.5
				Middle	6.5	24.2 24.2	24.2	33.4 33.3	33.4	78.2 78.1	78.2	5.4 5.4	5.4		21.6 21.3	21.5		13 14	13.5	
				Bottom	12	24.2 24.1	24.2	33.3 33.3	33.3	78.2 78.0	78.1	5.4 5.4	5.4	5.4	21.1 21.6	21.4		19 19	19.0	
5-Nov-07	Cloudy	Moderate	10:24	Surface	1	23.7 23.7	23.7	32.1 32.0	32.1	98.3 98.3	98.3	6.9 6.9	6.9	6.8	12.8 13.0	12.9	17.5	39 39	39.0	33.0
				Middle	6.5	23.7 23.7	23.7	32.0 32.0	32.0	94.4 94.9	94.7	6.7 6.7	6.7		20.0 19.8	19.9		21 21	21.0	
				Bottom	12	23.7 23.7	23.7	32.1 32.1	32.1	90.0 90.0	90.0	6.3 6.3	6.3	6.3	19.6 20.0	19.8		39 39	39.0	
7-Nov-07	Cloudy	Moderate	11:40	Surface	1	22.7 22.7	22.7	32.7 32.7	32.7	106.5 106.4	106.5	6.6 6.6	6.6	6.5	12.3 12.5	12.4	17.1	30 30	30.0	25.0
				Middle	6.5	22.7 22.7	22.7	32.7 32.7	32.7	101.5 101.6	101.6	6.3 6.3	6.3		19.6 19.4	19.5		26 26	26.0	
				Bottom	12	22.7 22.7	22.7	32.7 32.7	32.7	98.1 97.9	98.0	6.1 6.1	6.1	6.1	19.1 19.6	19.4		19 19	19.0	
9-Nov-07	Sunny	Moderate	12:31	Surface	1	23.0 23.0	23.0	34.9 34.9	34.9	118.4 118.2	118.3	8.3 8.3	8.3	8.2	16.5 16.7	16.6	24.2	26 27	26.5	81.5
				Middle	6	22.9 22.9	22.9	34.9 34.9	34.9	115.6 115.3	115.5	8.1 8.1	8.1		21.6 20.7	21.2		41 46	43.5	
				Bottom	11	22.9 22.9	22.9	34.9 34.9	34.9	114.6 114.5	114.6	8.1 8.0	8.1	8.1	35.2 34.1	34.7		171 178	174.5	
12-Nov-07	Sunny	Moderate	14:27	Surface	1	23.2 23.2	23.2	34.7 34.7	34.7	132.0 132.3	132.2	9.2 9.2	9.2	8.7	11.9 11.9	11.9	20.0	20 20	20.0	14.5
				Middle	6	23.1 23.1	23.1	34.9 34.9	34.9	115.9 115.8	115.9	8.1 8.1	8.1		21.1 20.5	20.8		14 14	14.0	
				Bottom	11	23.1 23.1	23.1	35.0 35.0	35.0	113.3 114.0	113.7	7.9 7.9	7.9	7.9	26.8 27.7	27.3		9 10	9.5	
14-Nov-07	Sunny	Moderate	15:21	Surface	1	23.2 23.2	23.2	34.7 34.7	34.7	110.8 110.9	110.9	7.8 7.8	7.8	7.6	10.8 11.0	10.9	18.4	72 72	72.0	41.3
				Middle	6	23.1 23.1	23.1	34.7 34.7	34.7	106.2 106.2	106.2	7.4 7.4	7.4		15.8 15.0	15.4		31 31	31.0	
				Bottom	11	23.1 23.1	23.1	34.6 34.6	34.6	102.1 102.0	102.1	7.2 7.2	7.2	7.2	29.5 28.4	29.0		21 21	21.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at TO1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:51	Surface	1	24.3 24.2	24.3	33.3 33.3	33.3	79.2 78.6	78.9	5.5 5.5	5.5	5.5	21.3 21.3	21.3	21.3	15 15	15.0	27.7
				Middle	7	24.3 24.3	24.3	33.3 33.3	33.3	78.0 78.0	78.0	5.4 5.4	5.4		20.9 20.7	20.8		36 36	36.0	
				Bottom	13	24.2 24.2	24.2	33.3 33.4	33.4	78.1 78.0	78.1	5.4 5.4	5.4	5.4	21.8 21.8	21.8		32 32	32.0	
5-Nov-07	Cloudy	Moderate	16:22	Surface	1	23.8 23.8	23.8	32.0 30.6	31.3	98.9 99.2	99.1	7.0 7.0	7.0	6.9	19.8 19.8	19.8	19.8	29 29	29.0	28.5
				Middle	7	23.8 23.8	23.8	32.1 32.1	32.1	96.1 96.7	96.4	6.8 6.8	6.8		19.4 19.1	19.3		30 30	30.0	
				Bottom	13	23.8 23.8	23.8	32.1 32.1	32.1	90.2 90.3	90.3	6.4 6.4	6.4	6.4	20.2 20.2	20.2		27 26	26.5	
7-Nov-07	Cloudy	Moderate	17:05	Surface	1	22.8 22.8	22.8	32.7 32.0	32.4	107.0 107.1	107.1	6.6 6.6	6.6	6.5	21.3 21.3	21.3	21.3	26 26	26.0	20.7
				Middle	7	22.8 22.8	22.8	32.7 32.7	32.7	102.2 102.3	102.3	6.3 6.3	6.3		20.9 20.7	20.8		15 15	15.0	
				Bottom	13	22.8 22.8	22.8	32.7 32.7	32.7	98.3 98.2	98.3	6.1 6.1	6.1	6.1	21.8 21.8	21.8		21 21	21.0	
9-Nov-07	Sunny	Moderate	17:54	Surface	1	23.0 23.0	23.0	34.9 34.9	34.9	115.8 115.9	115.9	8.1 8.1	8.1	8.1	18.3 18.3	18.3	26.4	23 21	22.0	66.8
				Middle	6	22.9 22.9	22.9	34.9 34.9	34.9	114.8 114.6	114.7	8.1 8.1	8.1		27.5 26.8	27.2		36 38	37.0	
				Bottom	11	22.9 22.9	22.9	35.0 34.9	35.0	113.6 113.5	113.6	8.0 8.0	8.0	8.0	33.2 34.1	33.7		140 143	141.5	
12-Nov-07	Sunny	Moderate	09:24	Surface	1	23.1 23.1	23.1	34.8 34.8	34.8	129.2 129.2	129.2	9.0 9.0	9.0	8.6	10.1 10.3	10.2	17.8	16 16	16.0	18.3
				Middle	6	23.1 23.1	23.1	34.9 34.9	34.9	116.4 116.0	116.2	8.1 8.1	8.1		15.2 14.3	14.8		22 22	22.0	
				Bottom	11	23.1 23.1	23.1	35.0 35.0	35.0	111.0 110.9	111.0	7.8 7.8	7.8	7.8	28.8 27.7	28.3		17 17	17.0	
14-Nov-07	Sunny	Moderate	11:04	Surface	1	23.1 23.1	23.1	34.7 34.7	34.7	108.9 108.5	108.7	7.6 7.6	7.6	7.5	12.5 12.5	12.5	20.7	21 21	21.0	24.0
				Middle	6	23.1 23.1	23.1	34.7 34.7	34.7	105.4 105.3	105.4	7.4 7.4	7.4		21.8 21.1	21.5		18 18	18.0	
				Bottom	11	23.1 23.1	23.1	34.6 34.6	34.6	100.8 100.7	100.8	7.1 7.1	7.1	7.1	27.5 28.4	28.0		33 33	33.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at TO2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:09	Surface	1	23.9 23.9	23.9	33.1 33.0	33.1	88.8 88.2	88.5	6.2 6.2	6.2	6.2	15.2 15.2	15.2	26.2	12 12	12.0	19.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.9 23.9	23.9	33.2 33.2	33.2	85.9 85.5	85.7	6.0 6.0	6.0	6.0	37.0 37.4	37.2		26 26	26.0	
5-Nov-07	Cloudy	Moderate	09:40	Surface	1	23.7 23.7	23.7	31.7 31.7	31.7	100.1 100.1	100.1	7.1 7.1	7.1	7.1	13.6 13.6	13.6	22.3	14 15	14.5	13.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.5 23.4	23.5	32.1 32.1	32.1	91.1 90.7	90.9	6.4 6.4	6.4	6.4	30.8 31.2	31.0		12 12	12.0	
7-Nov-07	Cloudy	Moderate	10:55	Surface	1	22.7 22.7	22.7	32.4 32.4	32.4	107.8 107.7	107.8	6.7 6.7	6.7	6.7	9.2 9.2	9.2	16.5	17 17	17.0	14.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.4 22.4	22.4	32.7 32.7	32.7	90.5 90.3	90.4	5.7 5.7	5.7	5.7	23.5 24.0	23.8		11 11	11.0	
9-Nov-07	Sunny	Moderate	11:39	Surface	1	23.1 23.1	23.1	34.9 34.9	34.9	124.6 124.0	124.3	8.7 8.7	8.7	8.7	5.3 5.1	5.2	5.7	38 40	39.0	29.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.9 22.9	22.9	34.9 34.9	34.9	118.0 117.9	118.0	8.3 8.3	8.3	8.3	5.9 6.2	6.1		18 20	19.0	
12-Nov-07	Sunny	Moderate	13:35	Surface	1	23.3 23.3	23.3	34.8 34.8	34.8	117.8 117.8	117.8	8.2 8.2	8.2	8.2	9.7 9.2	9.5	9.5	16 16	16.0	23.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.1 23.1	23.1	35.0 35.0	35.0	112.0 111.7	111.9	7.8 7.8	7.8	7.8	9.2 9.5	9.4		30 30	30.0	
14-Nov-07	Sunny	Moderate	14:29	Surface	1	23.2 23.2	23.2	34.7 34.6	34.7	113.2 113.0	113.1	7.9 7.9	7.9	7.9	10.6 10.8	10.7	11.4	27 27	27.0	22.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.1 23.1	23.1	34.6 34.6	34.6	100.9 100.6	100.8	7.1 7.1	7.1	7.1	12.1 11.9	12.0		17 17	17.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at TO2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:06	Surface	1	23.9 23.9	23.9	33.0 33.0	33.0	87.8 87.8	87.8	6.1 6.1	6.1	6.1	15.0 15.0	15.0	27.3	21 21	21.0	17.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.9 24.0	24.0	33.2 33.3	33.3	85.2 84.8	85.0	5.9 5.9	5.9	5.9	39.2 39.8	39.5		14 14	14.0	
5-Nov-07	Cloudy	Moderate	15:37	Surface	1	23.8 23.8	23.8	31.5 31.4	31.5	99.5 99.9	99.7	7.0 7.1	7.1	7.1	13.4 13.4	13.4	21.1	19 19	19.0	51.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.5 23.5	23.5	32.0 32.1	32.1	92.8 91.1	92.0	6.6 6.5	6.6	6.6	28.4 29.0	28.7		83 83	83.0	
7-Nov-07	Cloudy	Moderate	16:20	Surface	1	22.8 22.8	22.8	32.2 32.2	32.2	107.7 107.8	107.8	6.7 6.7	6.7	6.7	9.0 9.0	9.0	15.3	19 19	19.0	18.3
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.5 22.5	22.5	32.6 32.7	32.7	91.9 91.1	91.5	5.8 5.7	5.8	5.8	21.1 21.8	21.5		17 18	17.5	
9-Nov-07	Sunny	Moderate	17:02	Surface	1	23.0 23.0	23.0	35.0 34.9	35.0	119.8 119.4	119.6	8.4 8.4	8.4	8.4	7.3 6.8	7.1	7.0	34 34	34.0	29.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	5	22.8 22.8	22.8	34.9 34.9	34.9	116.5 116.1	116.3	8.2 8.2	8.2	8.2	6.8 7.0	6.9		22 26	24.0	
12-Nov-07	Sunny	Moderate	08:32	Surface	1	23.2 23.2	23.2	34.8 34.8	34.8	117.8 117.9	117.9	8.2 8.2	8.2	8.2	9.9 10.1	10.0	10.7	25 25	25.0	27.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.0 23.0	23.0	35.0 35.0	35.0	112.5 112.4	112.5	7.9 7.9	7.9	7.9	11.4 11.2	11.3		29 29	29.0	
14-Nov-07	Sunny	Moderate	10:12	Surface	1	23.2 23.3	23.3	34.6 34.6	34.6	104.8 104.8	104.8	7.4 7.4	7.4	7.4	10.3 9.9	10.1	10.1	13 13	13.0	15.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	23.1 23.0	23.1	34.6 34.7	34.7	100.2 99.6	99.9	7.1 7.0	7.1	7.1	9.9 10.1	10.0		17 17	17.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at TO3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	09:17	Surface	1	23.7 23.7	23.7	33.3 33.3	33.3	86.0 85.9	86.0	6.0 6.0	6.0	6.0	26.6 27.5	27.1	33.7	57 57	57.0	51.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.7 23.7	23.7	33.3 33.3	33.3	84.7 84.4	84.6	5.9 5.9	5.9	5.9	40.3 40.0	40.2		46 46	46.0	
5-Nov-07	Cloudy	Moderate	09:47	Surface	1	23.7 23.7	23.7	29.2 29.4	29.3	100.8 100.8	100.8	7.2 7.2	7.2	7.2	23.5 24.4	24.0	29.8	83 83	83.0	83.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.5 23.5	23.5	31.8 31.9	31.9	93.3 93.7	93.5	6.6 6.6	6.6	6.6	35.6 35.4	35.5		83 83	83.0	
7-Nov-07	Cloudy	Moderate	11:03	Surface	1	22.7 22.7	22.7	31.3 31.4	31.4	108.1 108.1	108.1	6.7 6.7	6.7	6.7	16.3 17.2	16.8	22.6	16 16	16.0	17.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.5 22.5	22.5	32.6 32.6	32.6	100.0 100.2	100.1	6.2 6.2	6.2	6.2	28.4 28.2	28.3		19 19	19.0	
9-Nov-07	Sunny	Moderate	11:48	Surface	1	22.9 23.0	23.0	35.0 34.9	35.0	120.4 120.3	120.4	8.5 8.4	8.5	8.5	4.6 4.4	4.5	6.5	23 21	22.0	32.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.6 22.6	22.6	34.9 34.9	34.9	117.0 116.6	116.8	8.3 8.3	8.3	8.3	8.6 8.4	8.5		41 45	43.0	
12-Nov-07	Sunny	Moderate	13:43	Surface	1	23.1 23.2	23.2	34.6 34.6	34.6	118.0 117.6	117.8	8.2 8.1	8.2	8.2	9.2 9.2	9.2	10.3	24 24	24.0	22.8
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.7 22.7	22.7	35.0 35.0	35.0	111.3 110.8	111.1	7.8 7.8	7.8	7.8	11.2 11.4	11.3		21 22	21.5	
14-Nov-07	Sunny	Moderate	14:38	Surface	1	23.2 23.2	23.2	34.6 34.6	34.6	112.2 111.9	112.1	7.9 7.8	7.9	7.9	11.2 11.4	11.3	12.6	13 13	13.0	14.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.8 22.8	22.8	34.6 34.6	34.6	99.9 99.6	99.8	7.0 7.0	7.0	7.0	13.9 13.6	13.8		15 15	15.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

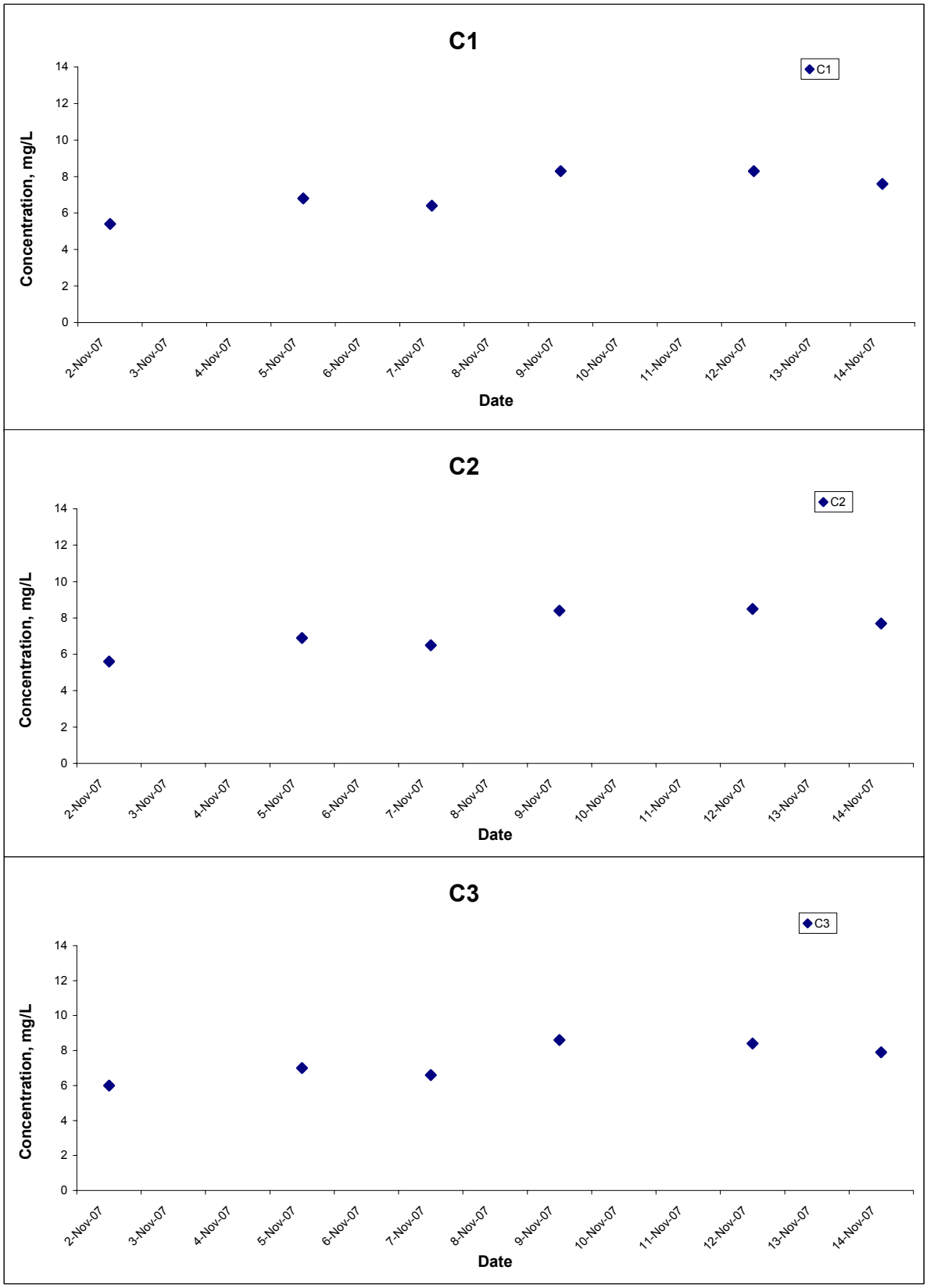
Water Quality Monitoring Results at To3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Average		DA*
2-Nov-07	Cloudy	Rough	14:14	Surface	1	23.8 23.8	23.8	33.3 33.3	33.3	85.6 85.4	85.5	6.0 6.0	6.0	6.0	23.1 23.3	23.2	32.6	14 14	14.0	15.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.8 23.8	23.8	33.3 33.3	33.3	83.9 83.6	83.8	5.9 5.8	5.9	5.9	42.2 41.6	41.9		16 16	16.0	
5-Nov-07	Cloudy	Moderate	15:45	Surface	1	23.8 23.8	23.8	31.8 31.8	31.8	100.6 100.7	100.7	7.1 7.1	7.1	7.1	21.6 21.8	21.7	25.7	30 30	30.0	23.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.7 23.7	23.7	32.1 32.1	32.1	92.4 92.7	92.6	6.5 6.5	6.5	6.5	29.9 29.3	29.6		16 16	16.0	
7-Nov-07	Cloudy	Moderate	16:27	Surface	1	22.8 22.8	22.8	32.6 32.6	32.6	108.1 108.1	108.1	6.7 6.7	6.7	6.7	14.3 14.5	14.4	18.4	24 24	24.0	19.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.6 22.7	22.7	32.7 32.7	32.7	97.8 97.9	97.9	6.1 6.1	6.1	6.1	22.7 22.0	22.4		15 15	15.0	
9-Nov-07	Sunny	Moderate	17:10	Surface	1	23.0 23.0	23.0	35.0 34.9	35.0	118.1 117.9	118.0	8.3 8.3	8.3	8.3	6.8 6.8	6.8	6.8	37 37	37.0	31.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.5 22.5	22.5	34.9 34.9	34.9	116.0 115.6	115.8	8.2 8.2	8.2	8.2	6.6 6.8	6.7		26 26	26.0	
12-Nov-07	Sunny	Moderate	08:40	Surface	1	23.2 23.2	23.2	34.6 34.6	34.6	119.8 118.7	119.3	8.3 8.2	8.3	8.3	10.6 10.8	10.7	11.9	13 13	13.0	17.0
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.7 22.7	22.7	35.0 35.0	35.0	110.7 111.0	110.9	7.7 7.8	7.8	7.8	13.2 13.0	13.1		21 21	21.0	
14-Nov-07	Sunny	Moderate	10:20	Surface	1	23.1 23.1	23.1	34.7 34.6	34.7	105.4 104.8	105.1	7.4 7.4	7.4	7.4	9.9 9.9	9.9	11.0	18 18	18.0	16.5
				Middle	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	22.7 22.7	22.7	34.7 34.7	34.7	99.2 98.5	98.9	7.0 6.9	7.0	7.0	11.9 12.1	12.0		15 15	15.0	

Remarks: *DA: Depth-Averaged **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

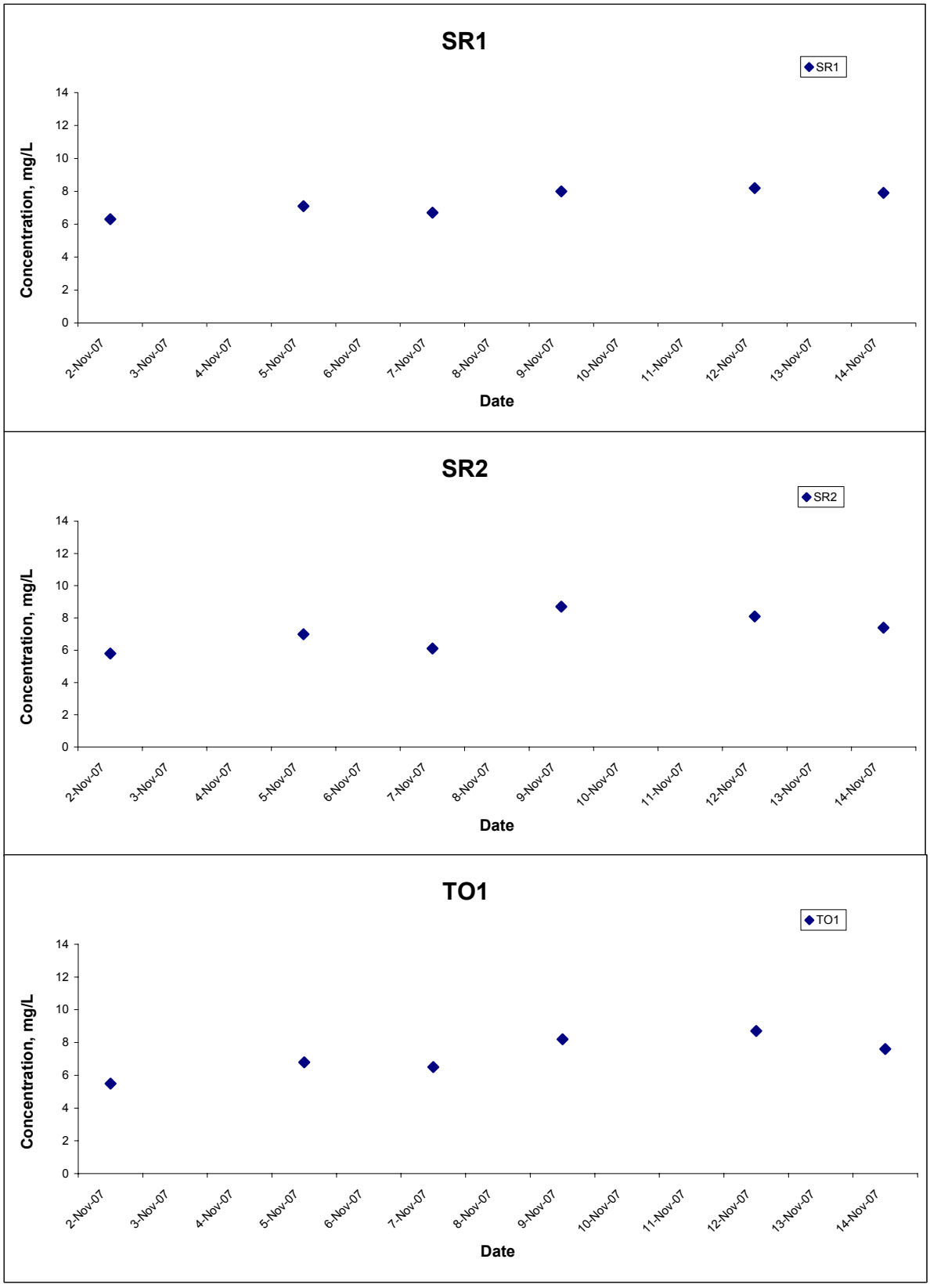
APPENDIX C
GRAPHICAL PRESENTATION OF BASELINE WATER QUALITY MONITORING DATA

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



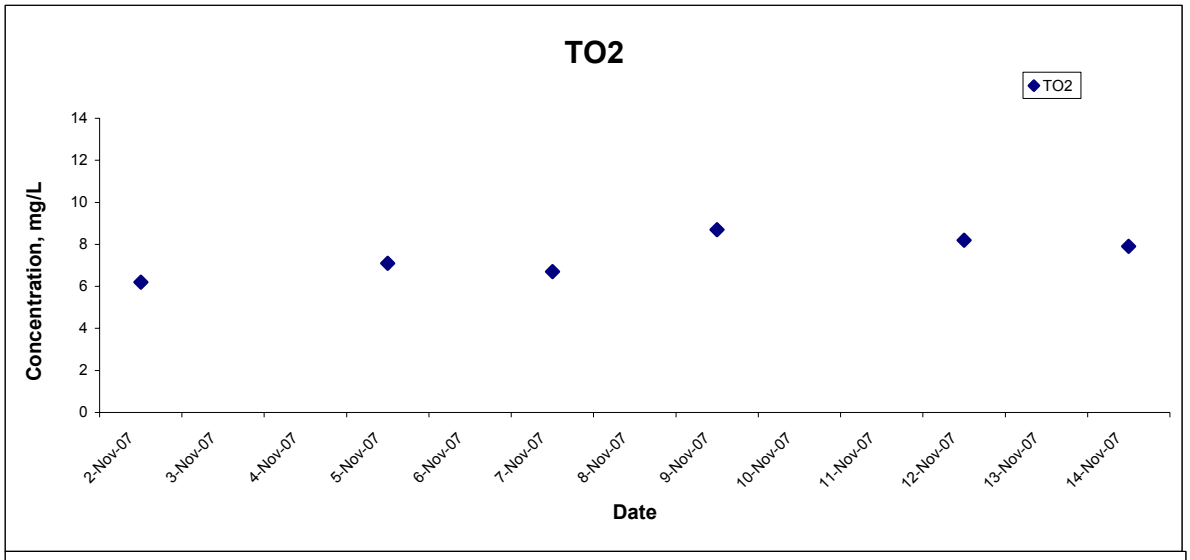
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

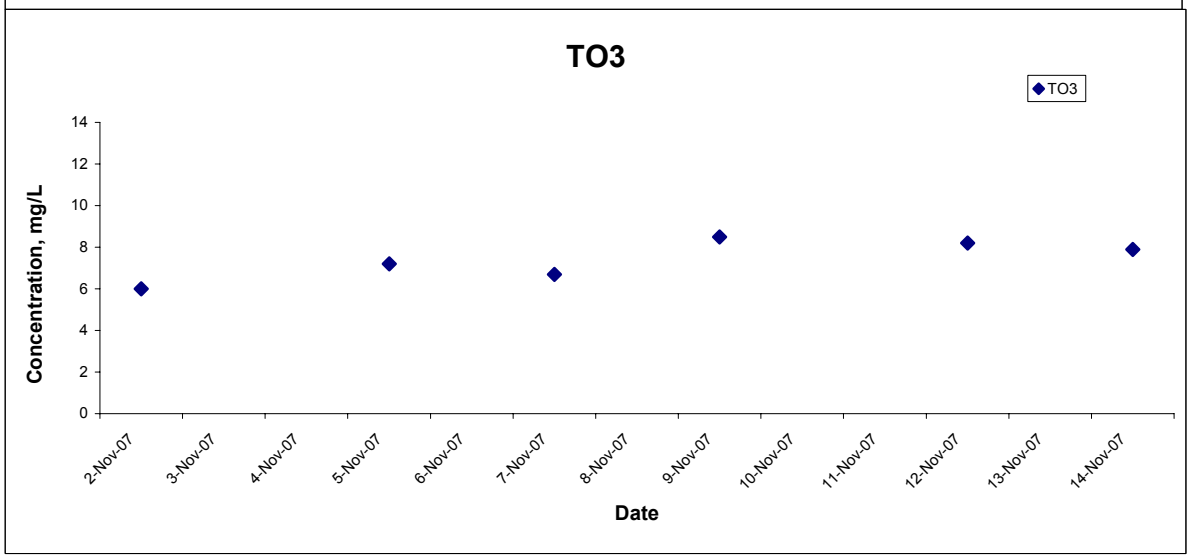
Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide



Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

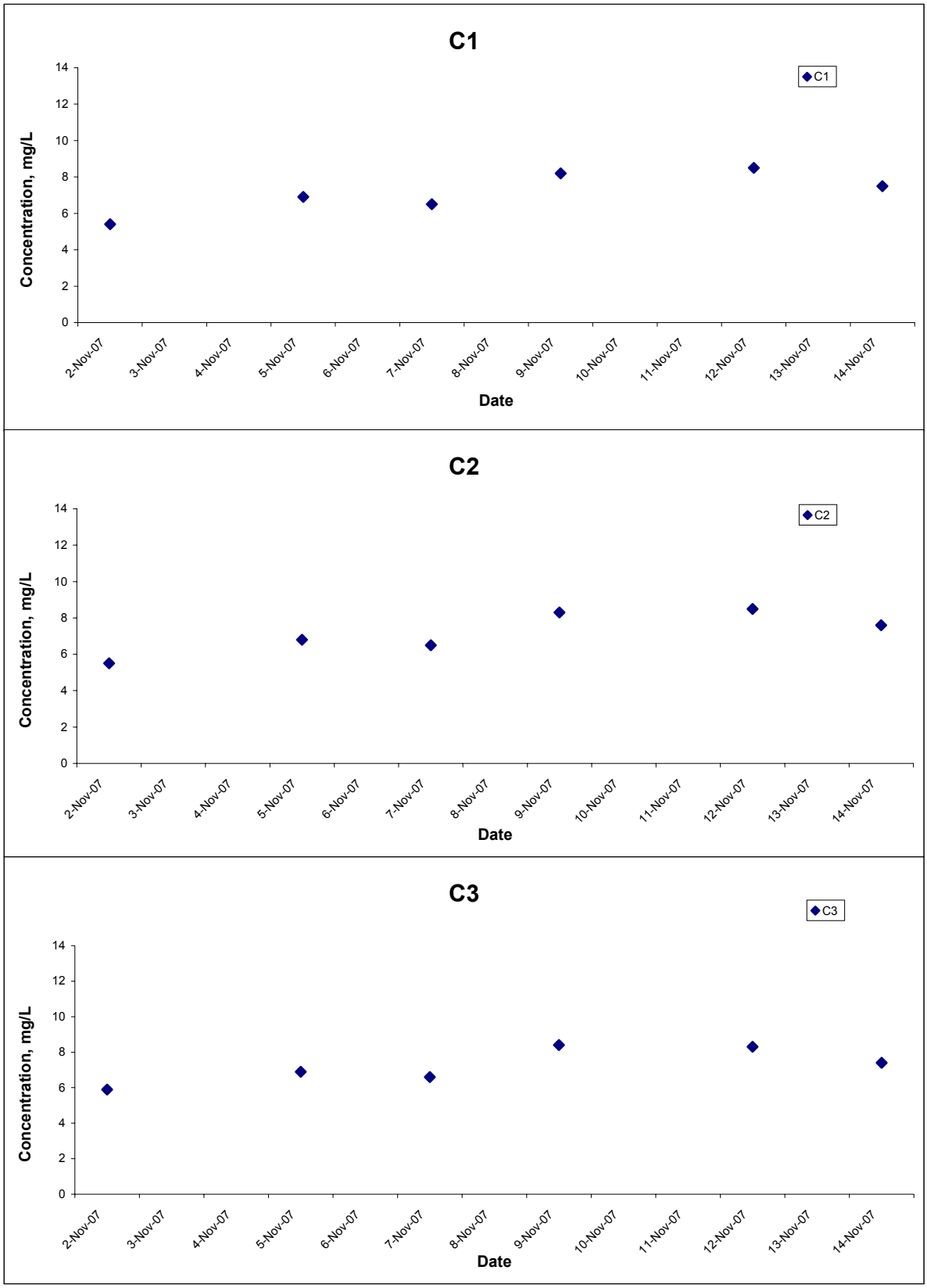
Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide





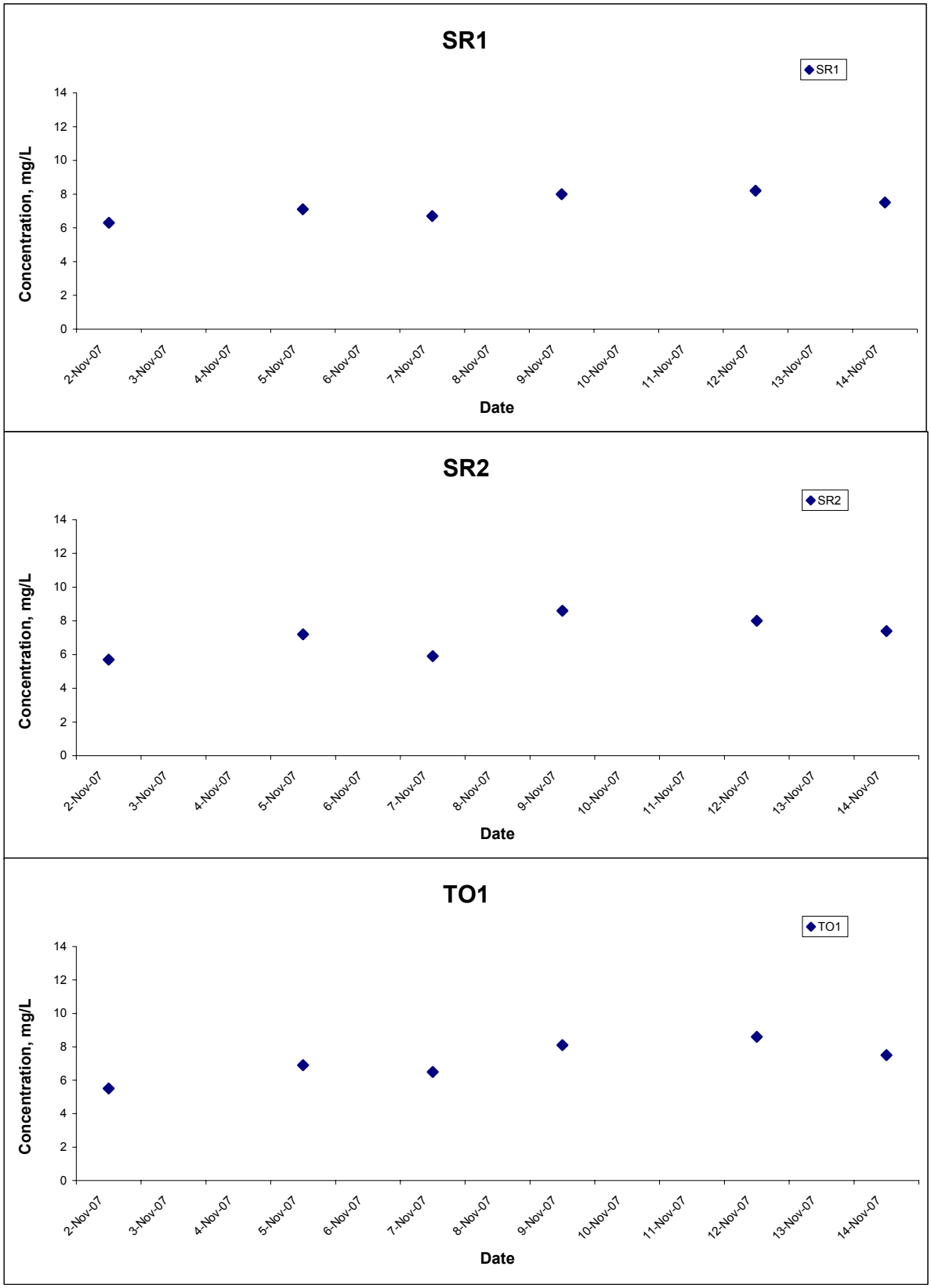
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S Date: Nov 07	Project No.: MA5004 Appendix: C	CINOTECH

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



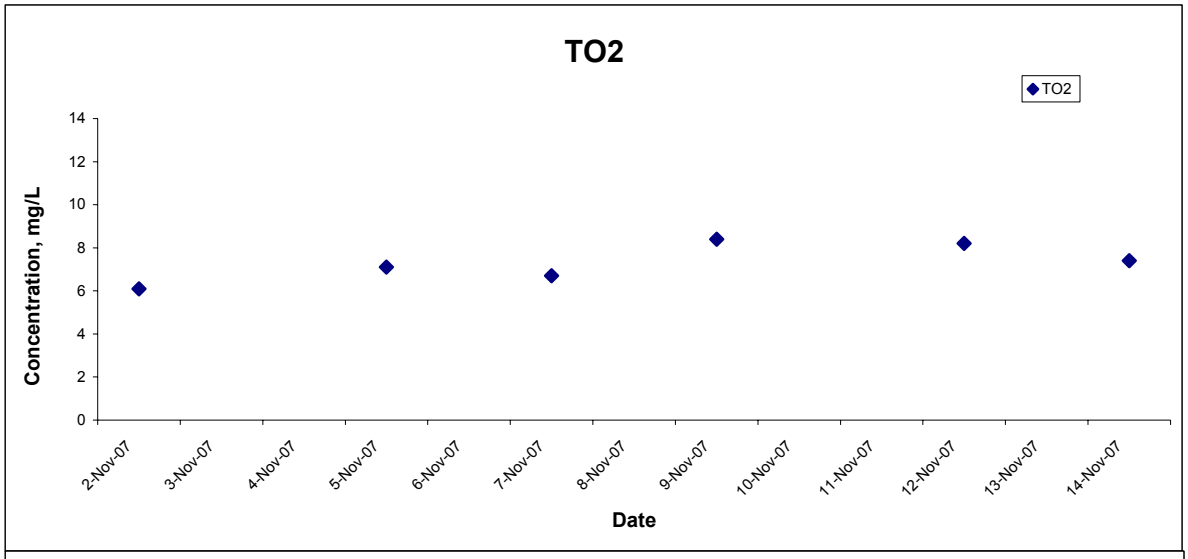
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S Date Nov 07	Project No. MA5004 Appendix C	CINOTECH

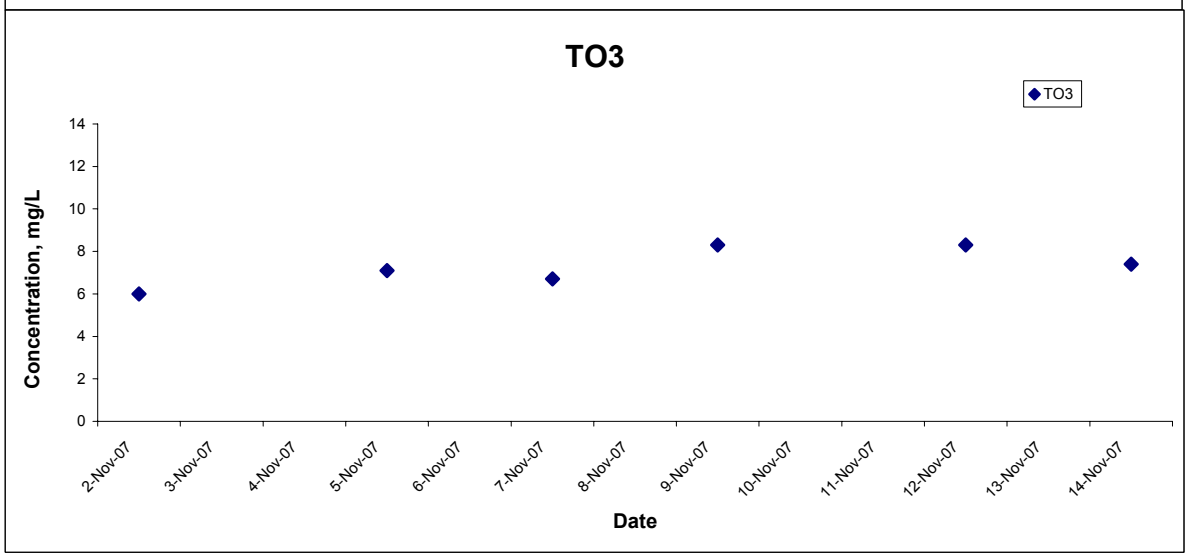
Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide



Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

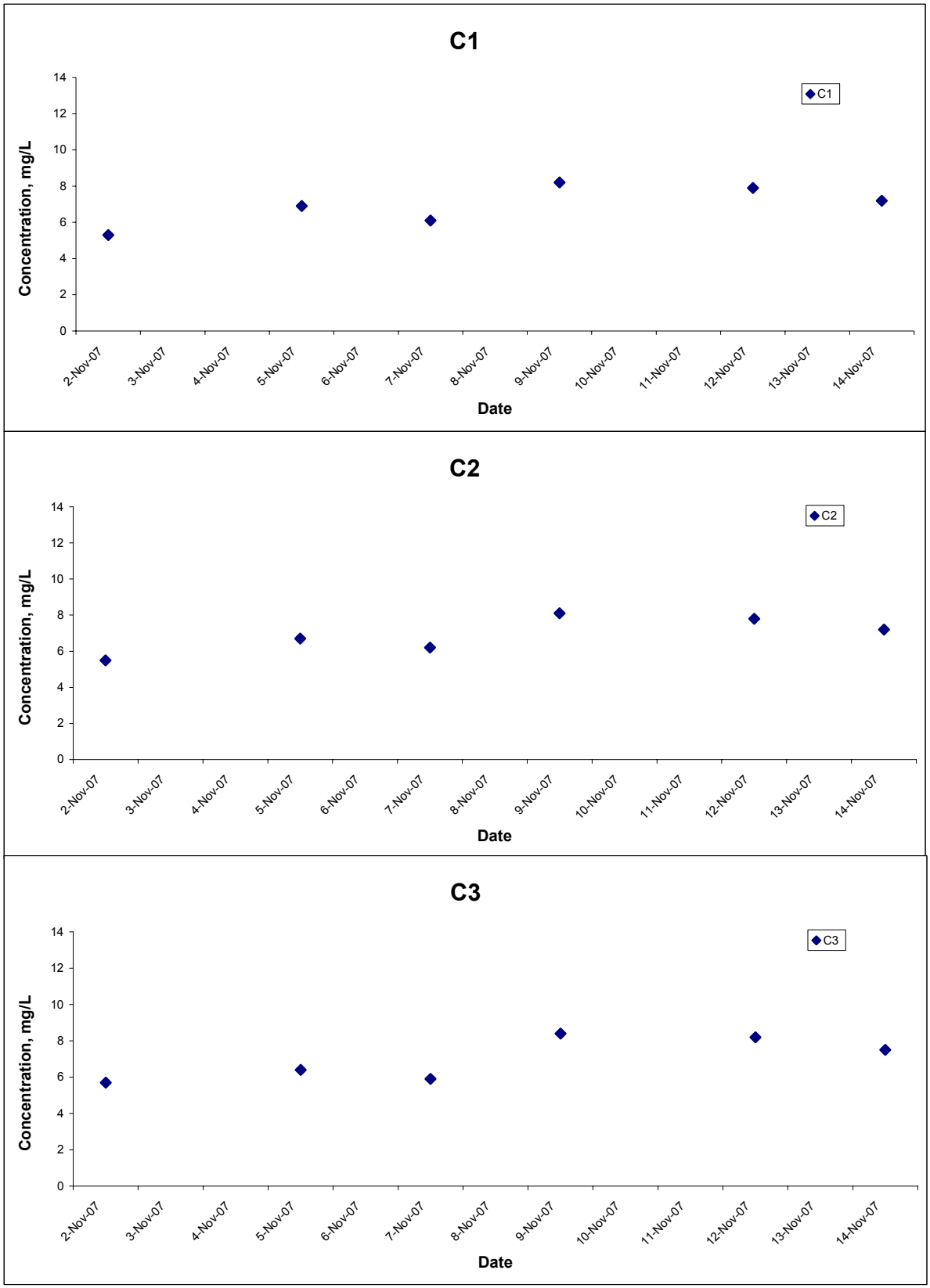
Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide





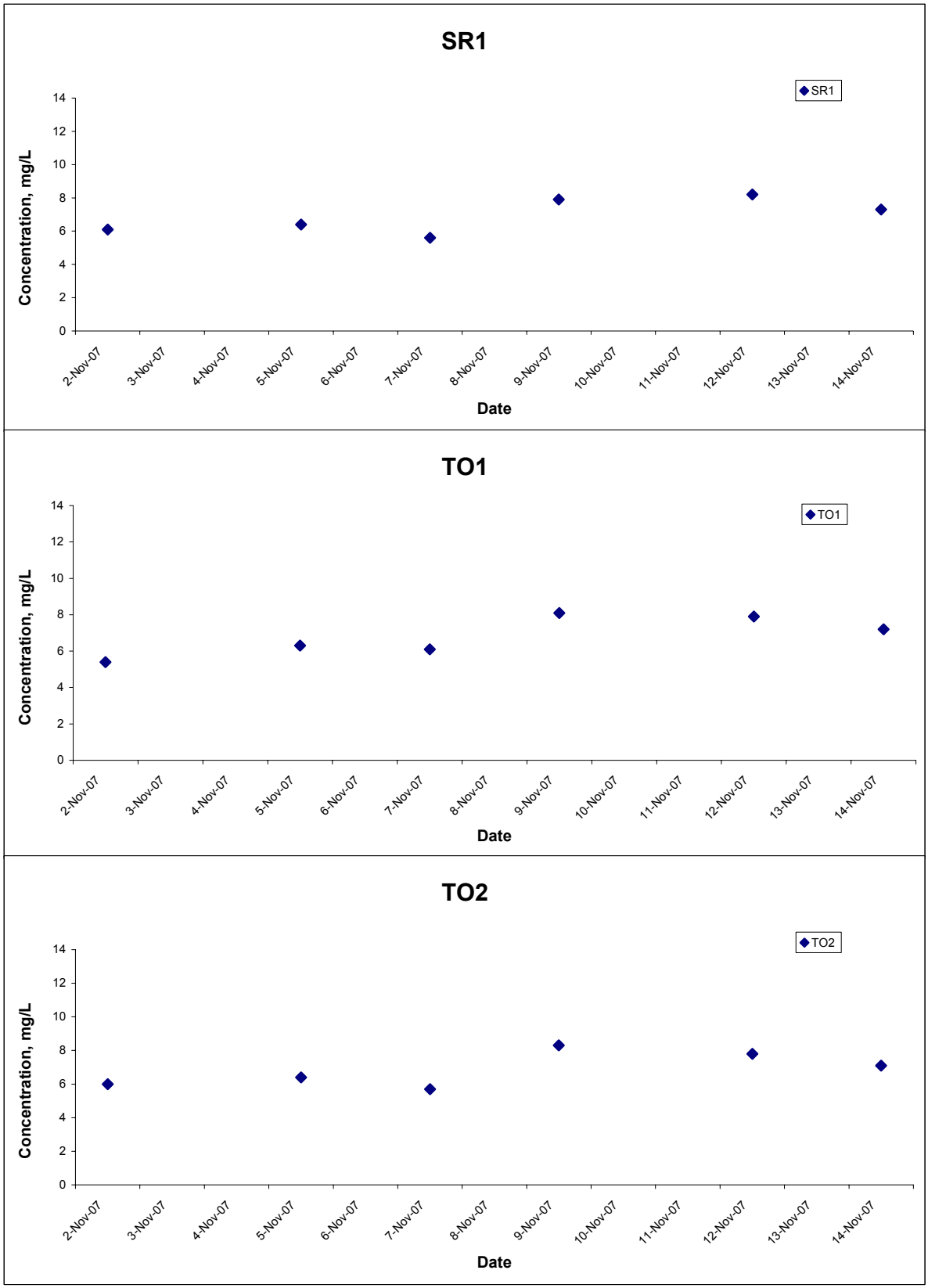
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Dissolved Oxygen (Bottom) at Mid-Ebb Tide



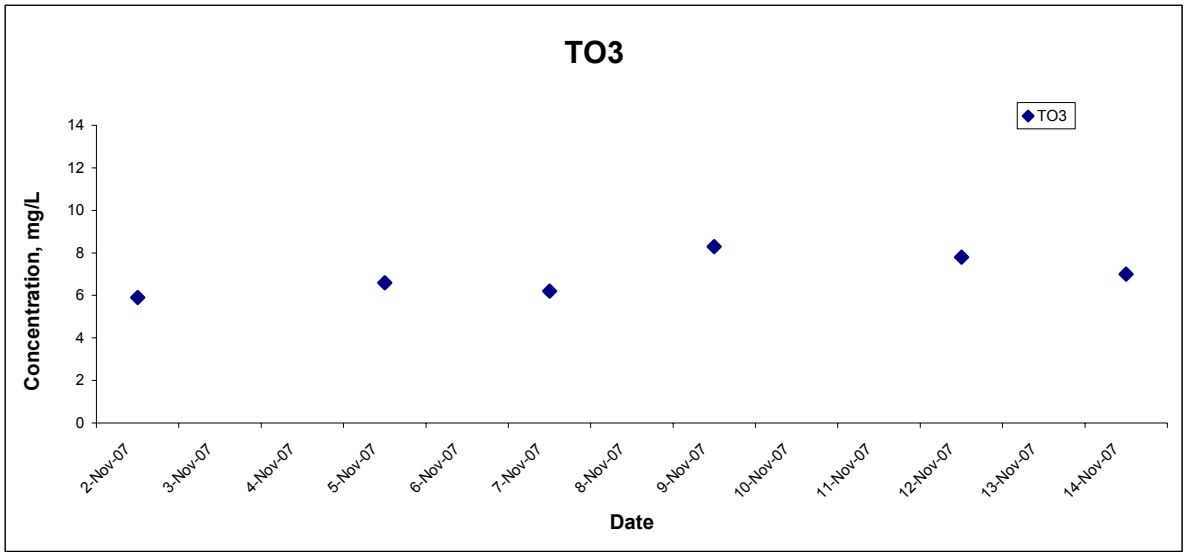
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Dissolved Oxygen (Bottom) at Mid-Ebb Tide



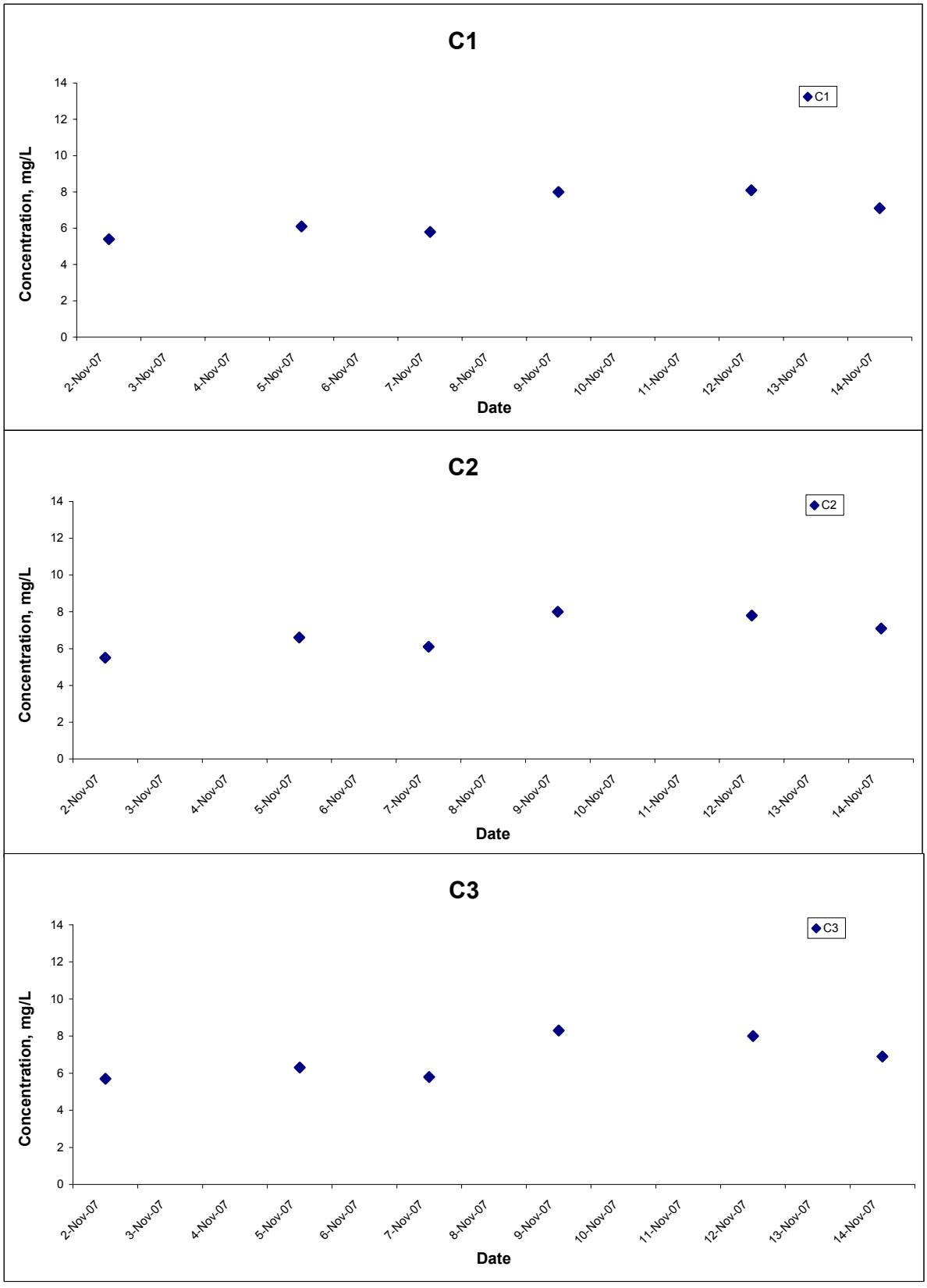
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Dissolved Oxygen (Bottom) at Mid-Ebb Tide



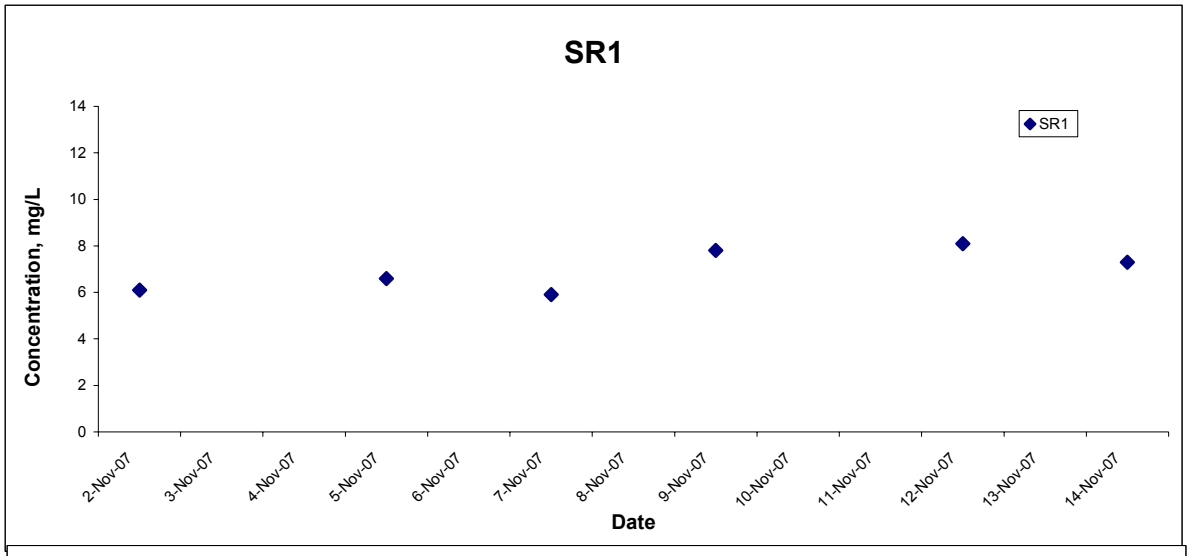
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S	Project No. MA5004	CINOTECH
		Date Nov 07	Appendix C	

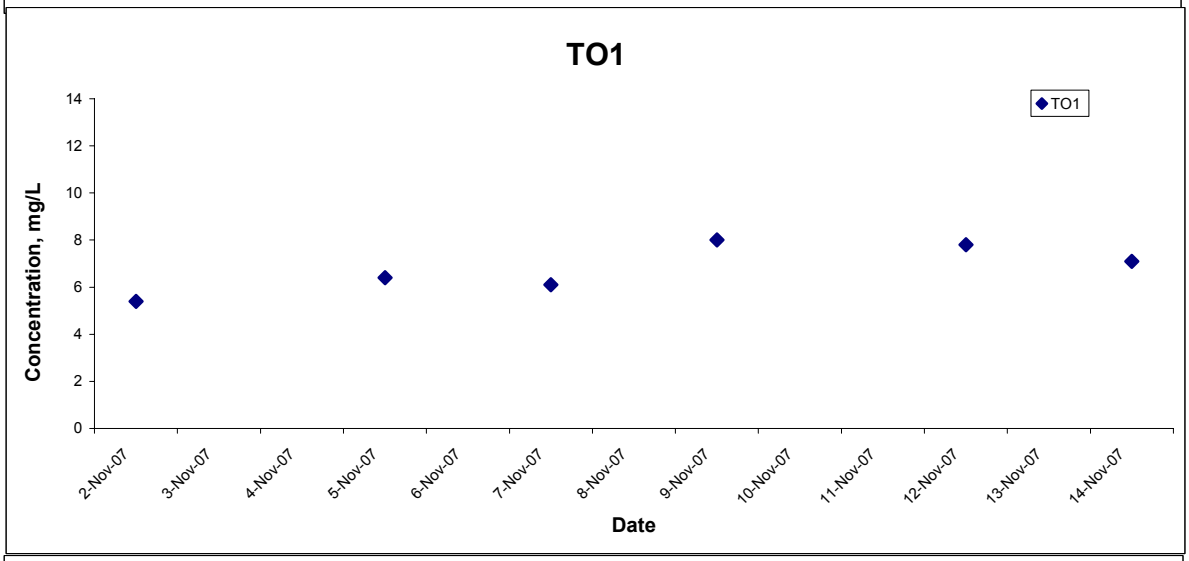
Dissolved Oxygen (Bottom) at Mid-Flood Tide

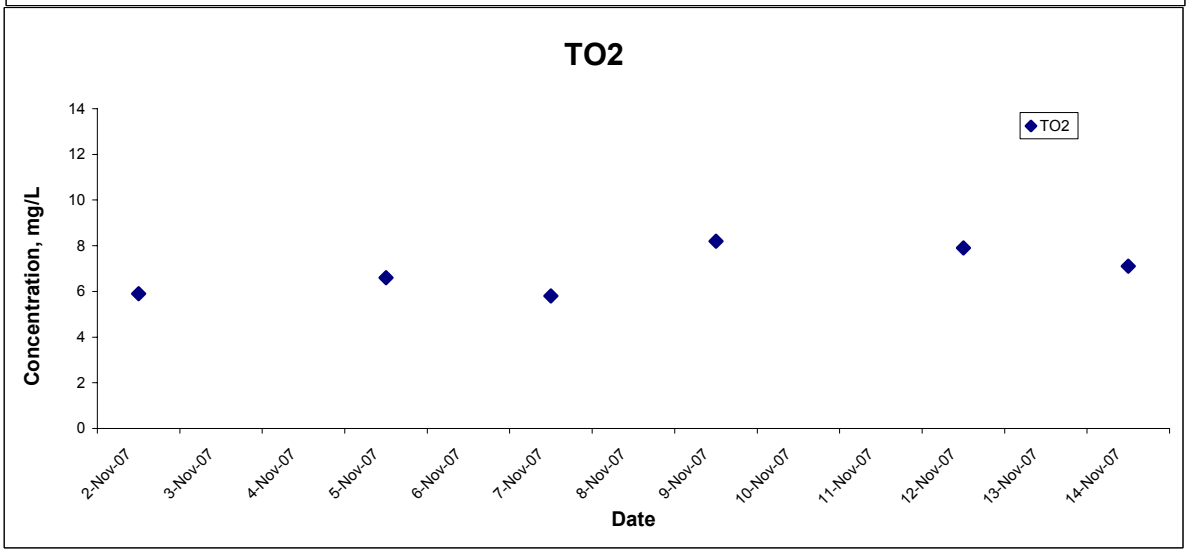


Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Dissolved Oxygen (Bottom) at Mid-Flood Tide

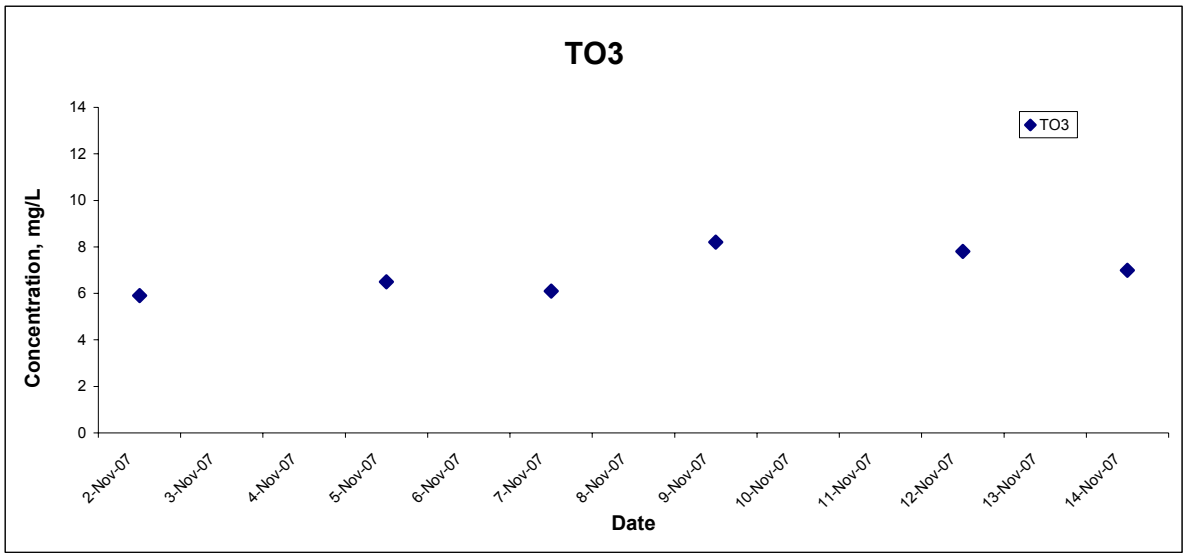






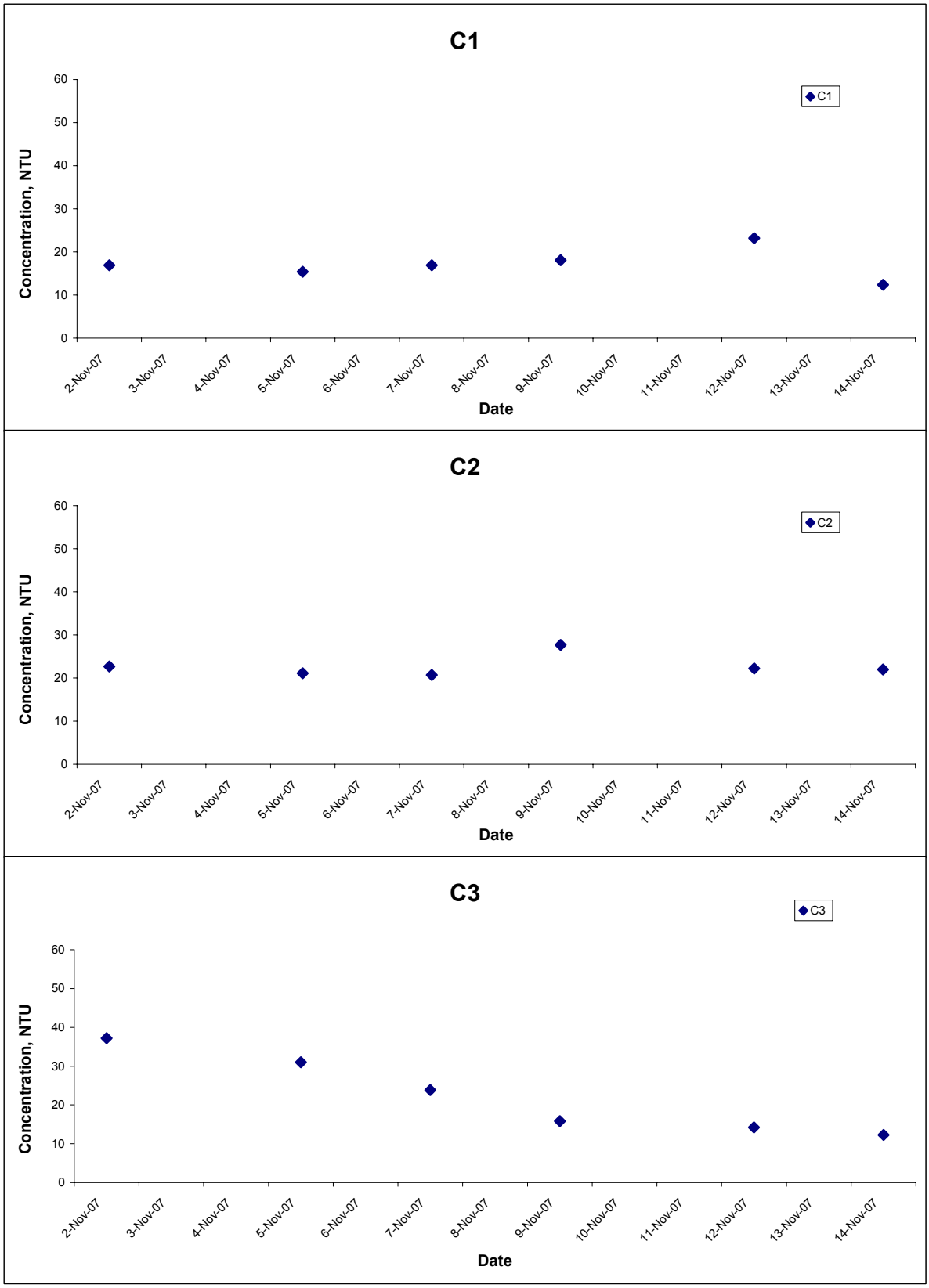
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Dissolved Oxygen (Bottom) at Mid-Flood Tide



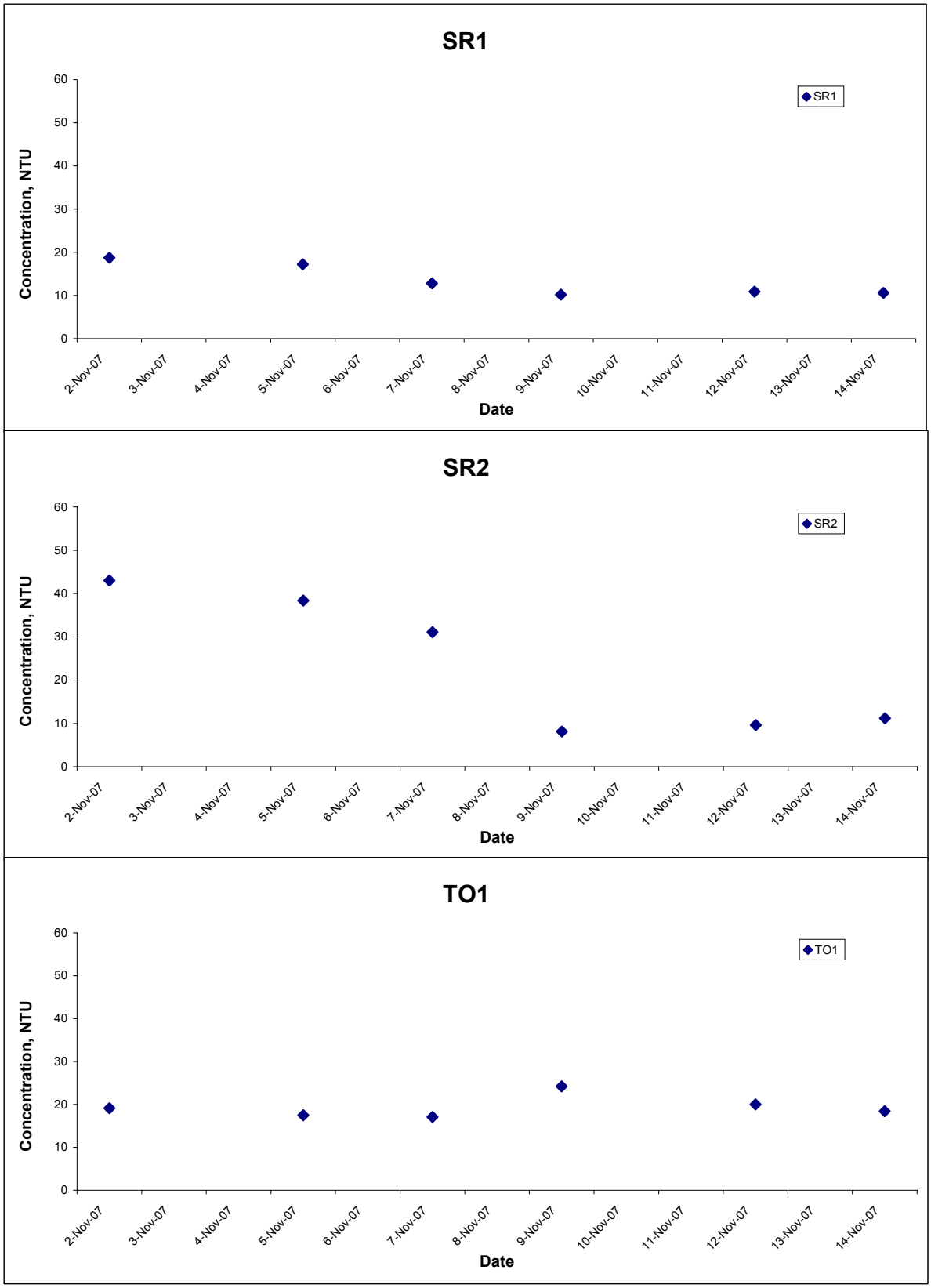
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Turbidity (Depth-averaged) at Mid-Ebb Tide



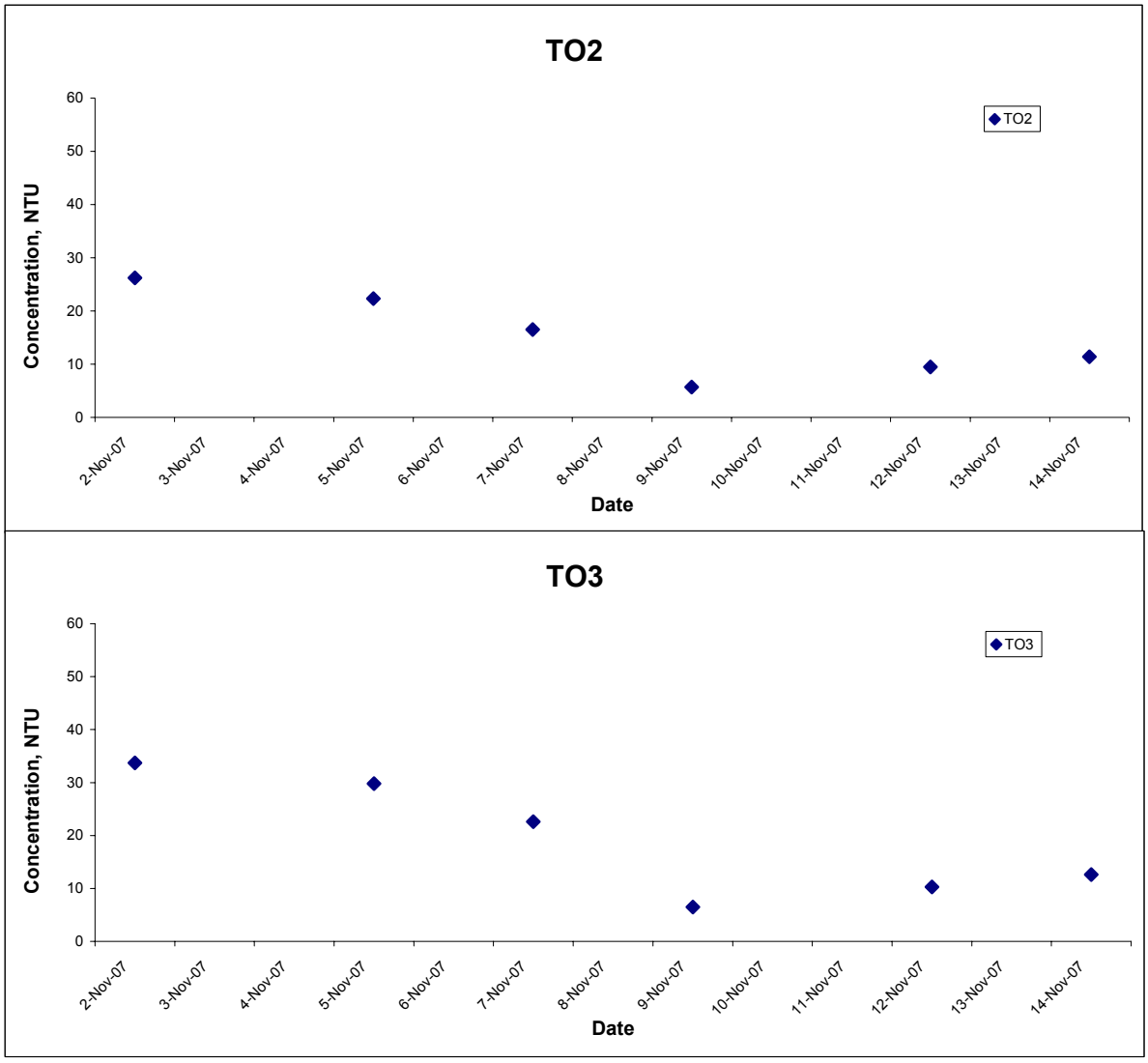
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Turbidity (Depth-averaged) at Mid-Ebb Tide



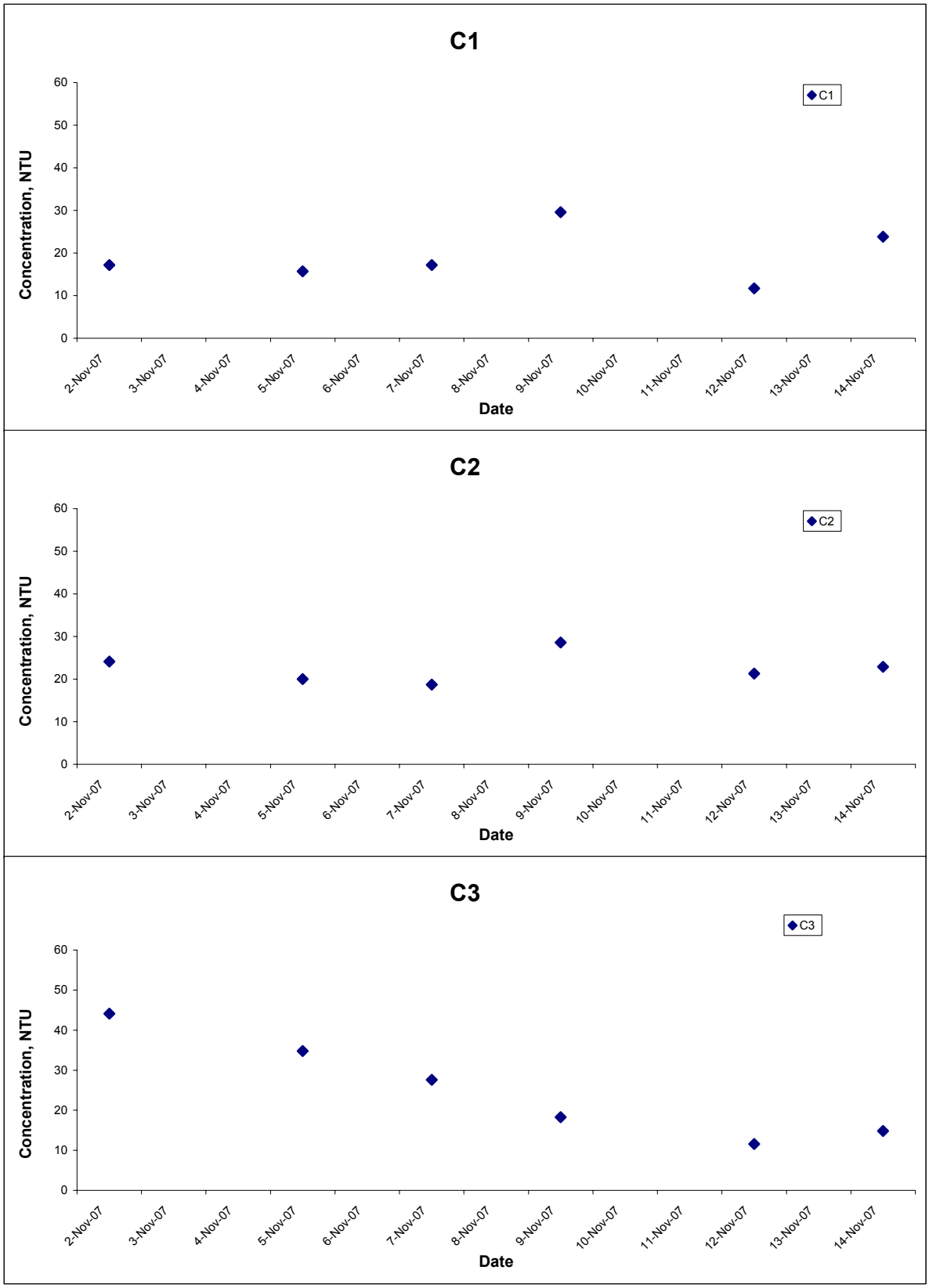
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Turbidity (Depth-averaged) at Mid-Ebb Tide



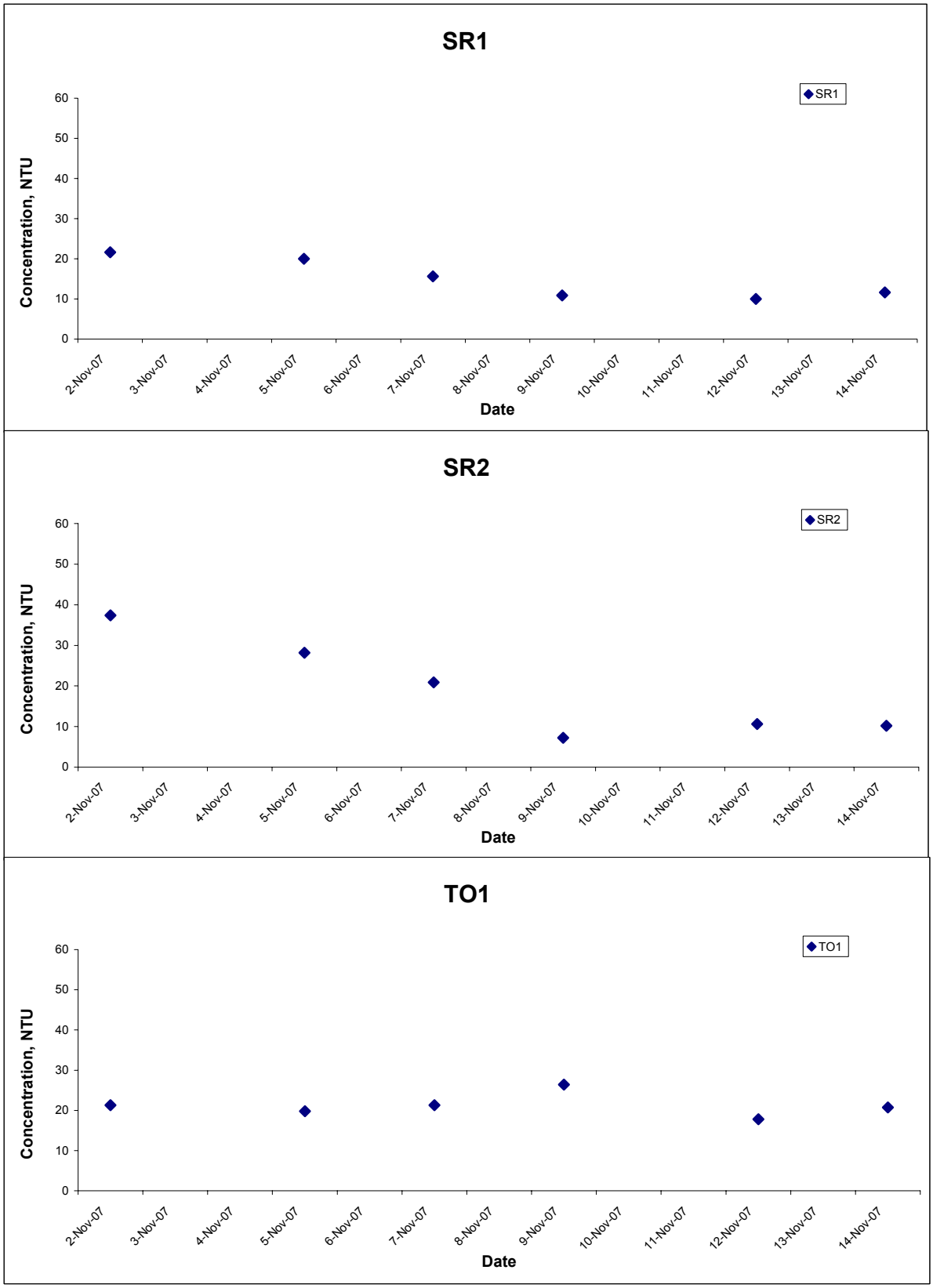
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S Date Nov 07	Project No. MA5004 Appendix C	CINOTECH

Turbidity (Depth-averaged) at Mid-Flood Tide



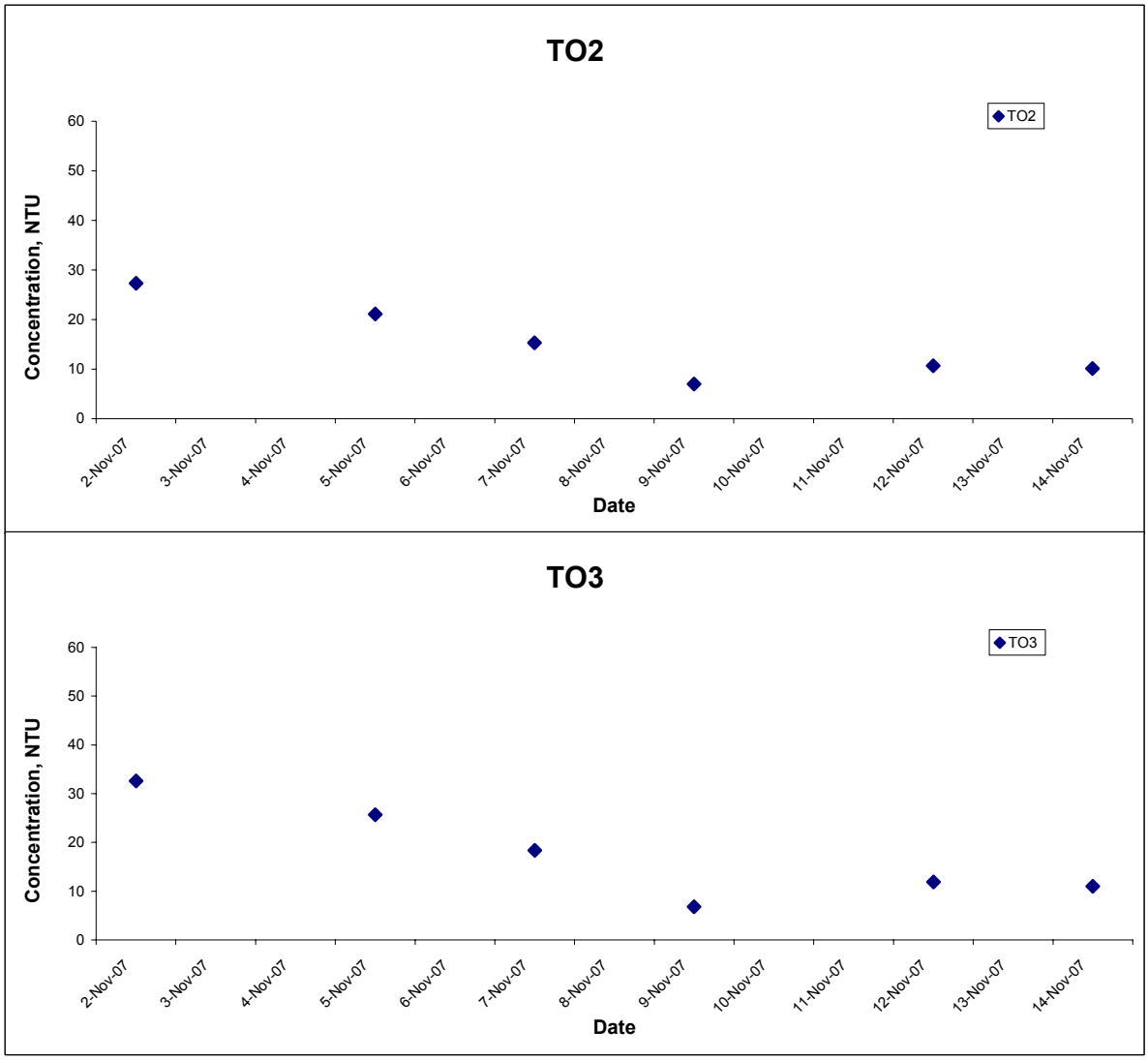
Title		Scale	Project No.	
	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04	N.T.S	MA5004	CINOTECH
	Graphical Presentation of Baseline Water Quality Monitoring Results	Date: Nov 07	Appendix: C	

Turbidity (Depth-averaged) at Mid-Flood Tide



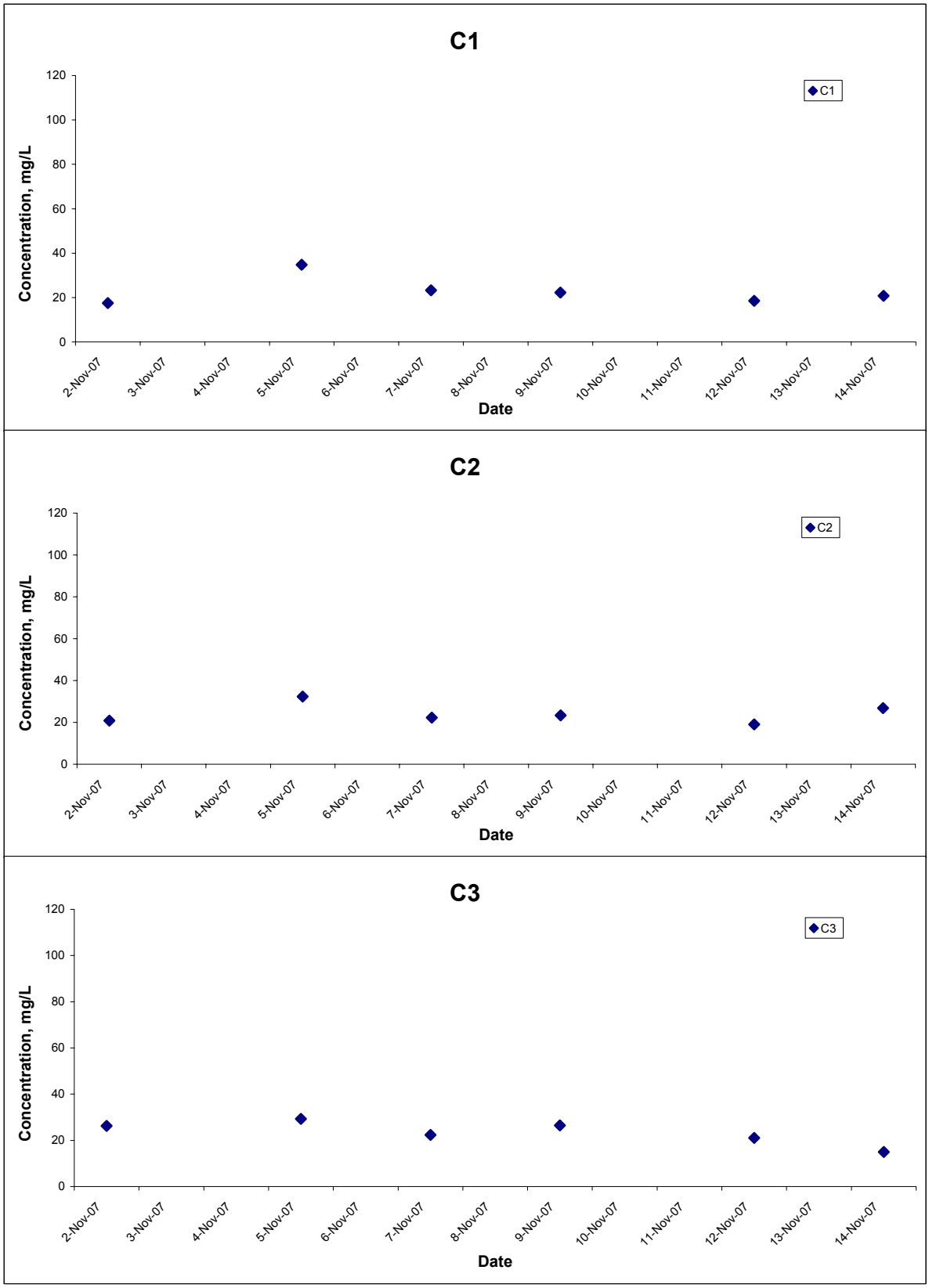
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Turbidity (Depth-averaged) at Mid-Flood Tide



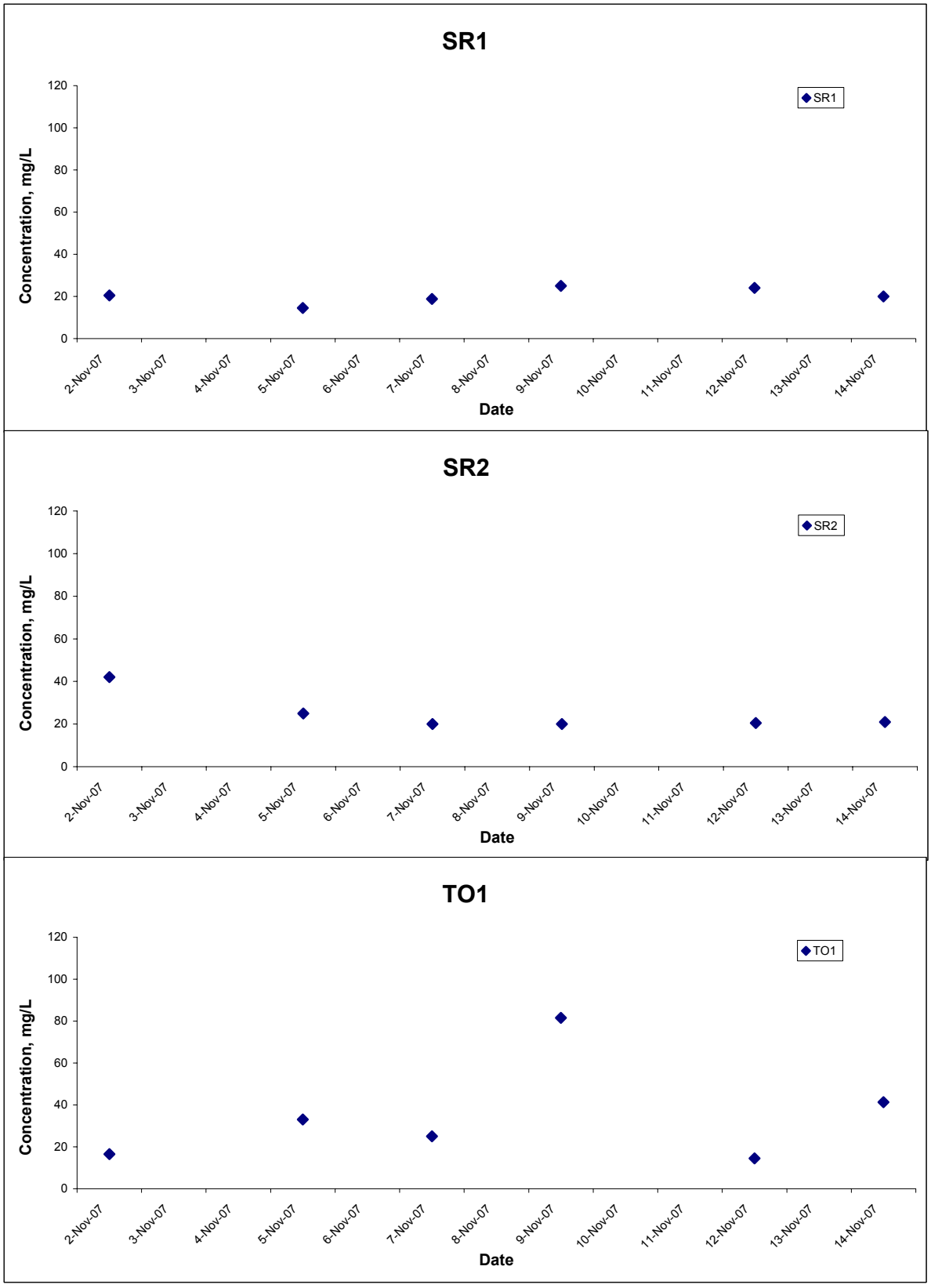
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S Date: Nov 07	Project No.: MA5004 Appendix: C	CINOTECH

Suspended Solids (Depth-averaged) at Mid-Ebb Tide



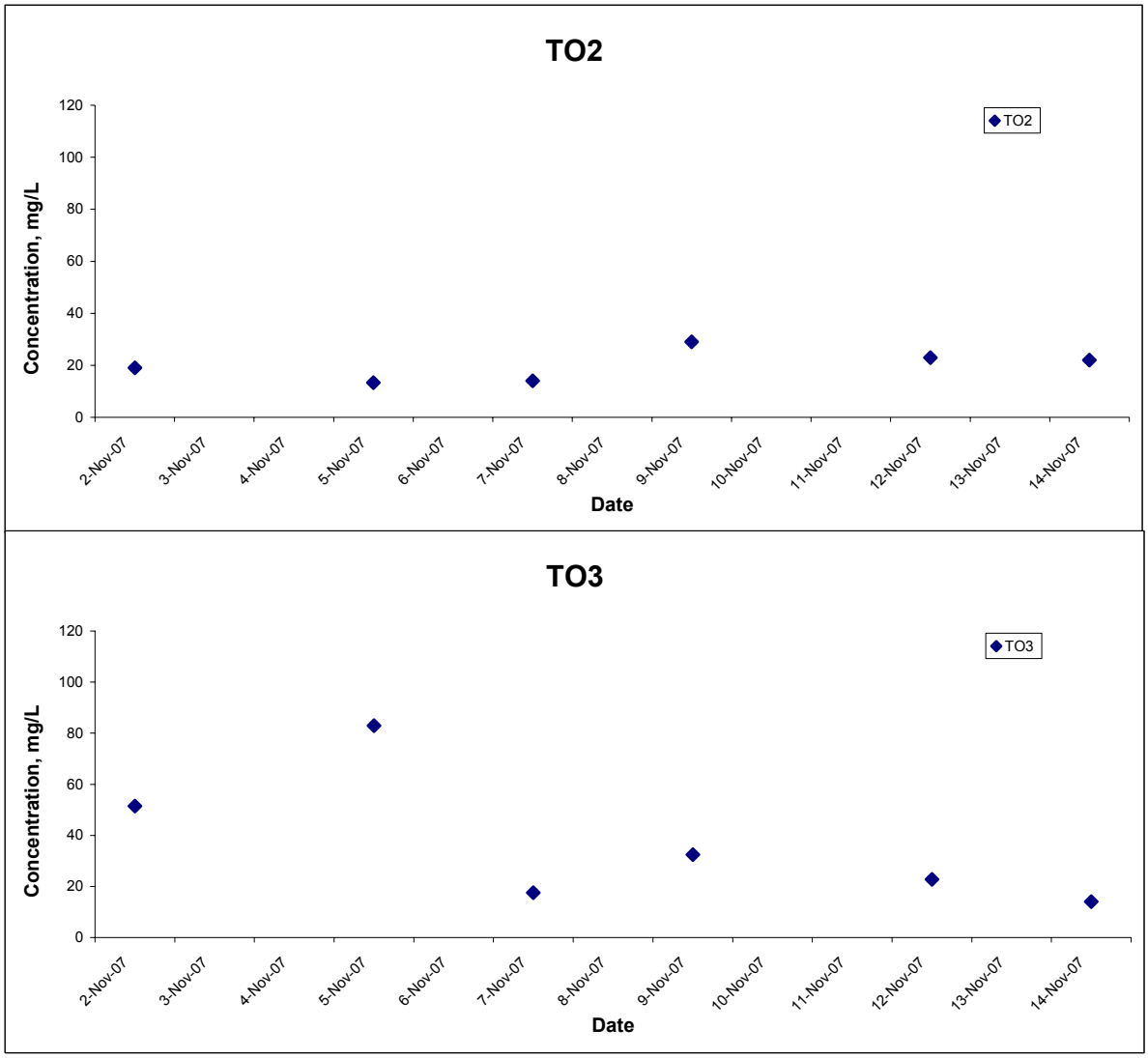
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S	Project No. MA5004	CINOTECH
		Date Nov 07	Appendix C	

Suspended Solids (Depth-averaged) at Mid-Ebb Tide



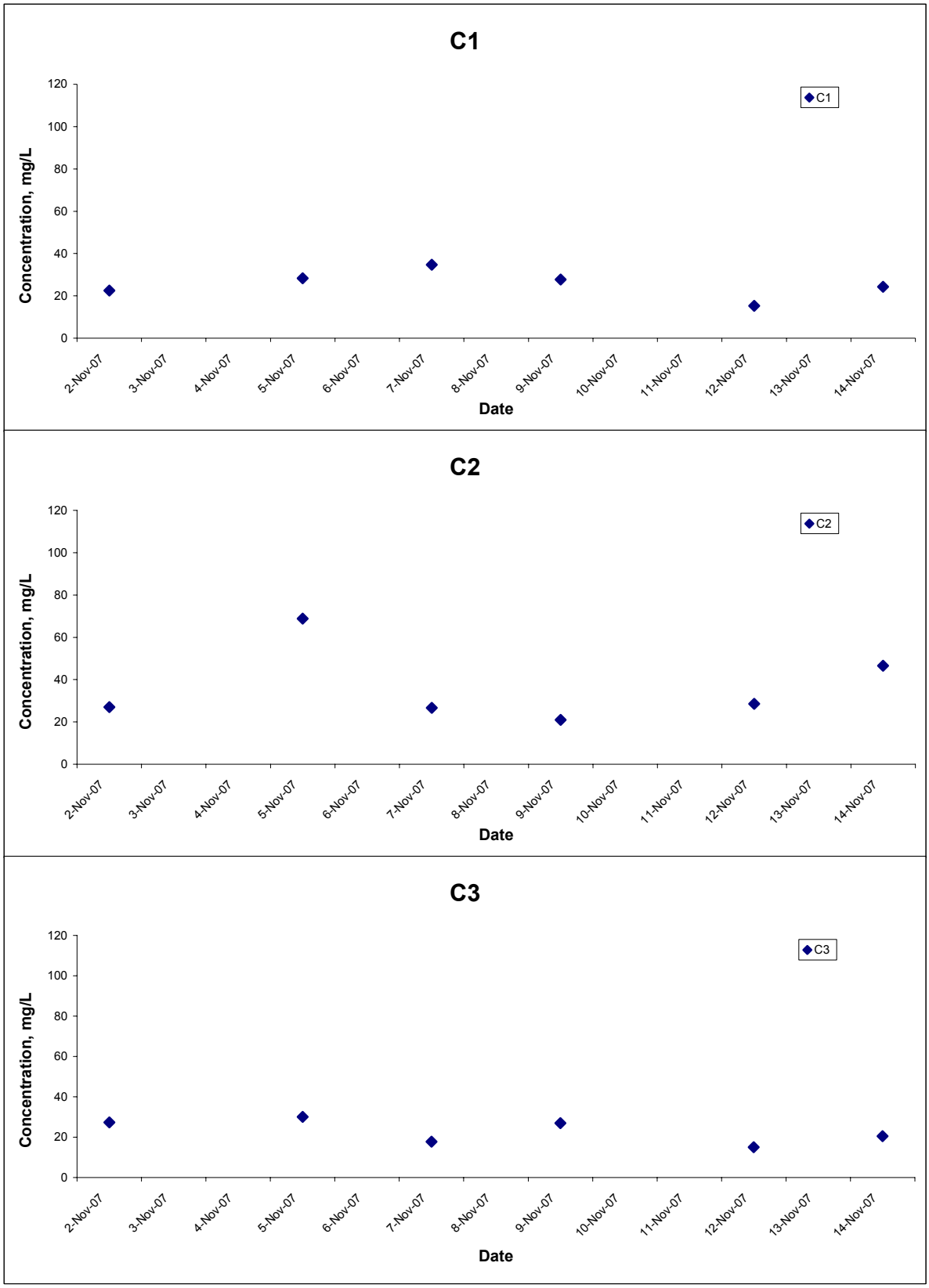
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S	Project No. MA5004	CINOTECH
		Date Nov 07	Appendix C	

Suspended Solids (Depth-averaged) at Mid-Ebb Tide



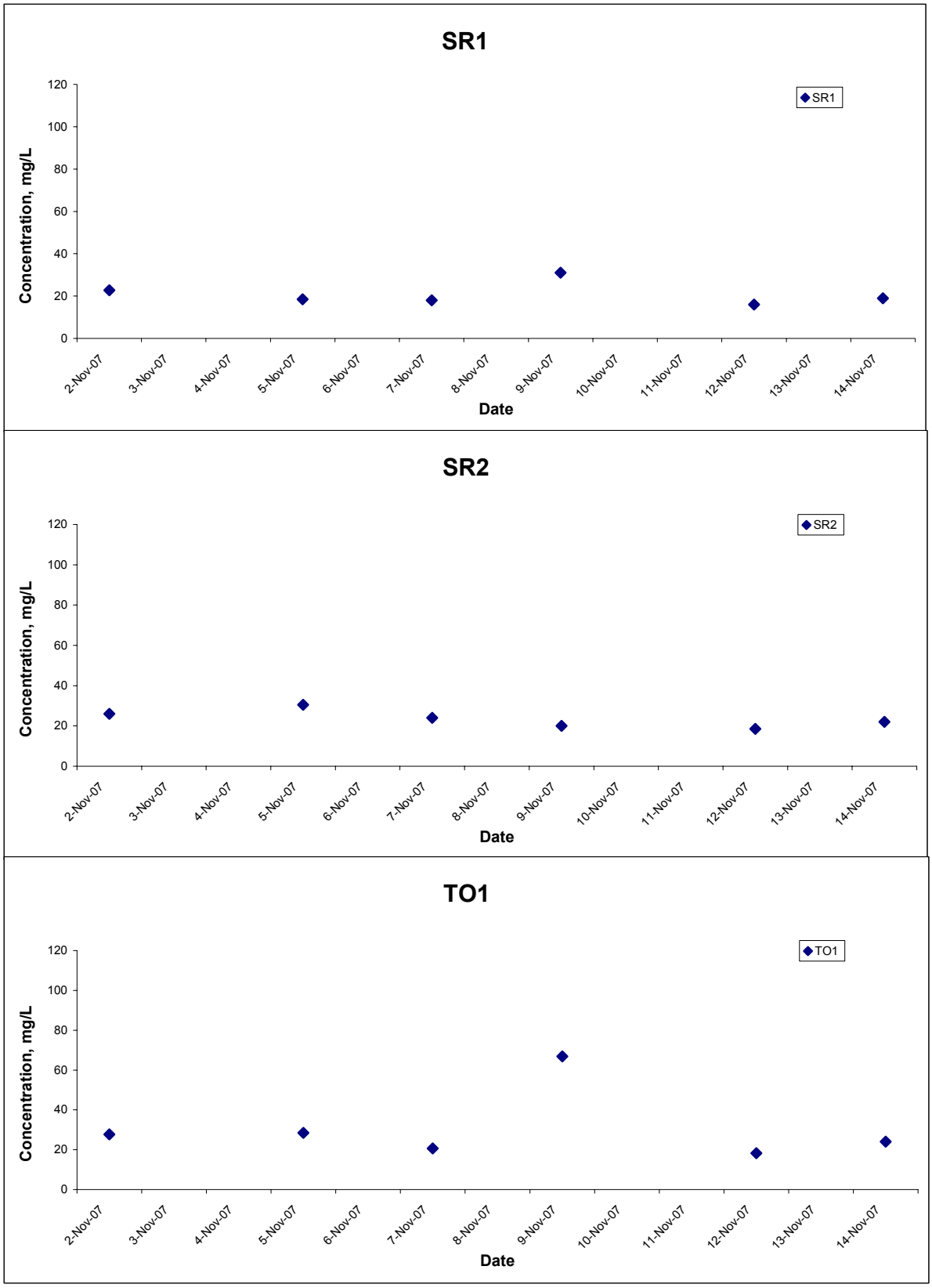
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S Date Nov 07	Project No. MA5004 Appendix C	CINOTECH

Suspended Solids (Depth-averaged) at Mid-Flood Tide



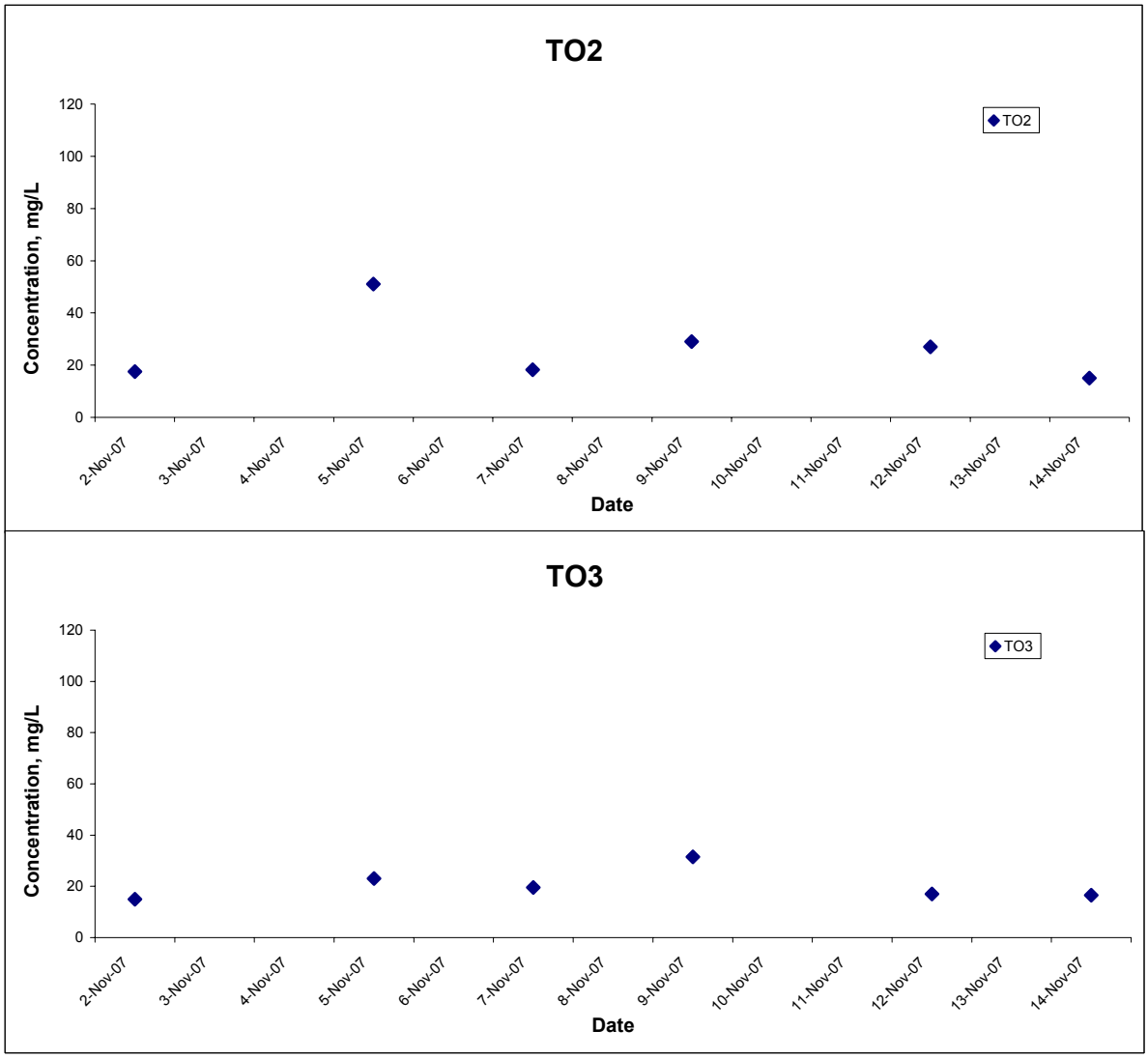
Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Suspended Solids (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale: N.T.S	Project No.: MA5004	CINOTECH
		Date: Nov 07	Appendix: C	

Suspended Solids (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2004/05 Maintenance Dredging at Approach Channel to Tai O Bay Work Order No. MD/125/04 Graphical Presentation of Baseline Water Quality Monitoring Results	Scale N.T.S Date Nov 07	Project No. MA5004 Appendix C	CINOTECH

APPENDIX D
QUALITY CONTROL REPORT FOR LABORATORY ANALYSIS

WELLAB 匯力
Testing and Research

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05652
Date of Issue:	2007/11/05
Date Received:	2007/11/02
Date Tested:	2007/11/02
Date Completed:	2007/11/05
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/02
Number of Sample: 72
Custody No.: MA5004/TO/71102

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
TO1me	13	12	7	95

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
Testing and Research

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05659
Date of Issue:	2007/11/06
Date Received:	2007/11/05
Date Tested:	2007/11/05
Date Completed:	2007/11/06
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/05
Number of Sample: 72
Custody No.: MA5004/TO/71105

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1mf	26	25	2	95

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
Testing and Research

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05671
Date of Issue:	2007/11/08
Date Received:	2007/11/07
Date Tested:	2007/11/07
Date Completed:	2007/11/08
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/07
Number of Sample: 72
Custody No.: MA5004/TO/71107

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1mf	45	44	2	97

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
Testing and Research

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05685
Date of Issue:	2007/11/12
Date Received:	2007/11/09
Date Tested:	2007/11/09
Date Completed:	2007/11/12
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/09
Number of Sample: 72
Custody No.: MA5004/TO/71109

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1mf	23	21	8	100

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
Testing and Research

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05697
Date of Issue:	2007/11/13
Date Received:	2007/11/12
Date Tested:	2007/11/12
Date Completed:	2007/11/13
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/12
Number of Sample: 72
Custody No.: MA5004/TO/71112

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
TO1me	14	14	0	103

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick Tse

PATRICK TSE
Senior Chemist

WELLAB 匯
Testing and Research 力

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

QC REPORT

APPLICANT: Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Laboratory No.:	05712
Date of Issue:	2007/11/15
Date Received:	2007/11/14
Date Tested:	2007/11/14
Date Completed:	2007/11/15
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Maintenance Dredging (Tai O Bay)
Project No.: MA5004
Sampling Date: 2007/11/14
Number of Sample: 72
Custody No.: MA5004/TO/71114

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
TO1me	31	30	2	94

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

APPENDIX E
WEATHER CONDITIONS DURING THE MONITORING PERIOD

Appendix E – Weather Conditions During Baseline Monitoring Period

(From 2nd Nov to 14th Nov 2007)

Date	General Weather Conditions	Mean Air Temperature (°C)	Precipitation (mm)	Mean Relative Humidity (%)
2nd Nov 07	Cloudy	19.0	1.6	74
5th Nov 07	Sunny	21.8	0	53
7th Nov 07	Cloudy	22.7	Trace	56
9th Nov 07	Sunny	23.0	0	64
12th Nov 07	Sunny	21.0	0	70
14th Nov 07	Sunny	21.5	0	74

APPENDIX F
BASELINE WATER QUALITY MONITORING SCHEDULE

Maintenance Dredging at Approach Channel to Tai O Bay (Works Order No. MD/125/04)
Baseline Water Quality Monitoring Schedule for November 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Nov	2-Nov	3-Nov
					Mid-Ebb 8:00 Mid-Flood 14:59	
4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov
	Mid-Ebb 9:44 Mid-Flood 16:28		Mid-Ebb 11:18 Mid-Flood 17:12		Mid-Ebb 12:30 Mid-Flood 17:59	
11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov
	Mid-Flood 8:41 Mid-Ebb 14:01		Mid-Flood 10:10 Mid-Ebb 15:05			
18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov
25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec

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