

Monthly Environmental Monitoring & Audit Report

(June 2014)

Contract No. : CV/2012/01

Project : Sediment Removal at Yim Tin Tsai (East)
Fish Culture Zone

Client : Civil Engineering and Development
Department (CEDD)

Main Contractor : Zhen Hua Engineering Company Limited

Certified By



Dr. Priscilla Choy (Environmental Team Leader)
Cinotech Consultants Limited
Date: 4th July 2014

Verified By



Mr. Thomas Chan
(Independent Environmental Checker)
Ove Arup & Partners Hong Kong Ltd.
Date: 4th July 2014

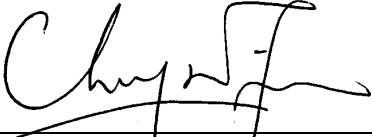
Zhen Hua Engineering Company Limited

Contract No. CV/2012/01
Sediment Removal at
Yim Tin Tsai (East) Fish Culture Zone

Monthly Environmental Monitoring &
Audit Report

June 2014

(Version 1.0)

Certified By	 _____ (Environmental Team Leader)
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REMARKS:

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

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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
Introduction.....	1
Environmental Monitoring and Audit Works	1
Environmental Licenses and Permits.....	2
Future Key Issues.....	3
1. INTRODUCTION.....	4
Background.....	4
Project Organizations.....	4
Construction Programme	5
Summary of EM&A Requirements	5
2. WATER QUALITY.....	7
Monitoring Requirements	7
Monitoring Locations.....	7
Monitoring Equipment.....	8
Monitoring Parameters and Frequency	9
Monitoring Methodology.....	10
Laboratory Analytical Methods	10
QA/QC Requirements.....	11
Results and Observation	11
Event and Action Plan	12
3. CORAL MONITORING.....	13
Monitoring Requirement.....	13
Monitoring Locations.....	13
Monitoring Frequency and Methodology	13
Results and Observations.....	14
Summary of Coral Monitoring Results.....	15
Event and Action Plan	16
4. ARDEIDS AND WHITE-BELLIES SEA EAGLES MONITORING.....	17
Monitoring Requirements	17
Monitoring Routes & Locations	17
Monitoring Frequencies & Durations	17
Monitoring Methodology.....	17
Results & Observations.....	18
5. ENVIRONMENTAL AUDIT	19
Site Audits.....	19
Status of Environmental Licensing and Permitting.....	19
Implementation Status of Environmental Mitigation Measures	20
Summary of Exceedances	21
Summary of Complaint and Prosecution	21
Status of Waste Management.....	21
6. FUTURE KEY ISSUES.....	22
Monitoring Schedule for the Next Month.....	22

7. CONCLUSIONS	23
Conclusions.....	23
Recommendations.....	23

LIST OF TABLES

Table I	Summary Table for Non-compliance Recorded in the Reporting Month
Table II	Summary Table for Key Information in the Reporting Month
Table 1.1	Key Project Contacts
Table 2.1	Water Quality Monitoring Stations
Table 2.2	Water Quality Monitoring Equipment
Table 2.3	Impact Water Quality Monitoring Parameters and Frequency
Table 2.4	Methods for Laboratory Analysis for Water Samples
Table 3.1	Summary of Coral Monitoring Stations
Table 3.2	Locations and Physical attributes of Sites for Dive Survey (T2, T3 and Site C)
Table 3.3	Evaluation of Monitoring Results against Action and Limit Level for Coral Monitoring Surveys
Table 4.1	Number of Ardeids and White-bellied Sea Eagle Recorded
Table 5.1	Summary of Environmental Licensing and Permit Status
Table 5.2	Observations and Recommendations of Site Audit

LIST OF FIGURE

Figure 1	Site Layout Plan
Figure 2	Location of Water Quality Monitoring Stations
Figure 3	Location of Coral Monitoring Stations
Figure 4	Survey Area, Transect Route and Point Count Locations of Bird Count
Figure 5	Organization Chart

LIST OF APPENDICES

Appendix A	Action and Limit Levels
Appendix B	Environmental Monitoring Schedules
Appendix C	Event Action Plan for Water Quality
Appendix D	Coral Monitoring Results
Appendix E	Photo records of Coral Monitoring Surveys
Appendix F	Summary of Exceedance
Appendix G	Environmental Mitigation Implementation Schedule
Appendix H	Site Audit Summary
Appendix I	Complaint Log
Appendix J	Ardeids and White-bellied Sea Eagle Monitoring Results
Appendix K	Photographic records of Ardeids and White-bellied Sea Eagle Monitoring
Appendix L	Copies of Calibration Certificates for Water Quality Monitoring
Appendix M	Water Quality Monitoring Results
Appendix N	Graphical Presentation of Water Quality Monitoring Results
Appendix O	Laboratory Testing Report for Water Quality
Appendix P	Quality Control Report for Water Quality Monitoring
Appendix Q	Waste Generation in the Reporting Month

EXECUTIVE SUMMARY

Introduction

1. This is the 8th Monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for CEDD Contract no. CV/2012/01 “Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone”. This report documents the findings of EM&A Works conducted in June 2014.
2. The major site activities undertaken in the reporting month included:
 - Daily cleaning and weekly tidying;
 - Relocation of fish rafts;
 - Bird and coral monitoring; and
 - Water Quality Monitoring.

Environmental Monitoring and Audit Works

3. Environmental monitoring and audit works for the Project were performed regularly as stipulated in the Environmental Monitoring and Audit Requirements in Project Profile and the results were checked and reviewed. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
4. Summary of the events and action taken in the reporting month is tabulated in **Table I**.

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

Media/ Nature	No. of Exceedances		Action Taken	Results of action taken	Remarks
	Action Level	Limit Level			
Water Quality					
DO (S+M)*	0	0	N/A	N/A	N/A
DO (B)*	0	0			
Turbidity	0	0			
SS	0	0			
Copper	0	0			
Zinc	0	0			
Arsenic	0	0			
Lead	0	0			
Coral Quality					
Mortality (%)	0	0	N/A	N/A	N/A
Sediment cover (%)	0	0			
Bleaching (%)	0	0			

*Note: (S), (M) and (B) represent depths of water, such as Surface (1 metre below surface), Middle (mid-water depth) and Bottom (1 metre above seabed).

Water Quality

5. All water quality monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
6. No Action/Limit Level exceedance was recorded at the impact monitoring stations in the reporting month.

Coral Quality

7. Post project coral quality monitoring was conducted as scheduled in the reporting month. Level of sedimentation, bleaching and mortality on corals were monitored in accordance with the approved Proposal for Coral Monitoring.
8. No Action/Limit Level exceedance was recorded at the impact monitoring stations in the reporting month.

Ardeids & White-bellied Sea Eagles Monitoring

9. Ardeids & White-bellied Sea Eagles monitoring were conducted as scheduled in the reporting month.

Environmental Licenses and Permits

10. Environmental related licenses/permits granted to the Project include the Environmental Permit (EP) for the Project.

Key Information in the Reporting Month

11. Summary of key information in this 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	7 th Monthly EM&A Report (EP Condition 2.8)	Submitted to EPD on 13 th June 2014	N/A	---
Notifications of any summons & prosecutions	0	---	N/A	N/A	---

Future Key Issues

12. Major site activities for the coming month will include:
 - Daily cleaning and weekly tidying;
 - Relocation of fish rafts; and
 - Bird monitoring.

13. The future environmental concerns are water quality, coral quality and impacts on ecology.

1. INTRODUCTION

Background

- 1.1 A priority list for removing sediments at the 26 Fish Culture Zones (FCZs) in Hong Kong (HK) had been prepared by the Agriculture, Fisheries and Conservation Department (AFCD). Civil Engineering and Development Department (CEDD) and AFCD consulted marine culturists' representatives on this list in May 2007. The representatives supported the government to carry out the sediment removal at the top five priority FCZs. Yim Yin Tsai (East) Fish Culture Zone was selected as one of them for improvement to the fish farming environment.
- 1.2 The works "Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone" under Contract No. CV/2012/01 (hereinafter called the "Project") was awarded to Zhen Hua Engineering Company Limited (hereinafter called the "Contractor") by the Civil Engineering and Development Department (CEDD) of the Hong Kong Special Administrative Region (HKSAR).
- 1.3 Cinotech Consultants Ltd. (CINOTECH) was employed by the Contractor to serve as the Environmental Team (ET) to undertake the environmental monitoring services for the Project. Dr. Priscilla CHOY of Cinotech Consultants Ltd. was appointed as the ET Leader as per the Condition 2.1 of the EP. This is the 8th monthly EM&A report summarizing the EM&A works for the Project in June 2014.

Project Organizations

- 1.4 Different parties with different levels of involvement in the project organization include:
- Project Proponent / Engineer's Representative (ER) – Civil Engineering and Development Department (CEDD)
 - Environmental Team (ET) – Cinotech Consultants Ltd.
 - Independent Environmental Checker (IEC) – Ove Arup & Partners Hong Kong Ltd.
 - Contractor – Zhen Hua Engineering Co., Ltd. (Zhen Hua)
- 1.5 The Project Organization during Construction Phase is listed in Table 1.1.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.
CEDD	Project Proponent	Mr. Walter Wong	Engineer Representative	2762 5584	2762 4015
Cinotech	Environmental Team	Dr. Priscilla Choy	ET Leader	2151 2089	3107 1388
		Ms. Ivy Tam	Project Coordinator and Audit Team Leader	2151 2090	
		Mr. Tang Wing Kwai	Monitoring Team Leader	2151 2073	
Ove Arup	Independent Environmental Checker	Mr. Thomas Chan	Independent Environmental Checker	2268 3093	2268 3950
Zhen Hua	Contractor	Mr. Y F Cho	Senior Project Manager	2727 0128	2512 0427
		Mr. C K Li	Site Agent		

Construction Programme

1.6 The site activities undertaken in the reporting month were:

- Daily cleaning and weekly tidying;
- Relocation of fish rafts;
- Bird and coral monitoring; and
- Water Quality Monitoring.

Summary of EM&A Requirements

1.7 The EM&A programme requires construction phase water quality monitoring and coral monitoring as well as environmental site audits. The EM&A requirements 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.

1.8 As set out in Specific Conditions 2.7 of the EP for this Project, a monitoring programme on ardeids and White-bellied Sea Eagles nesting at Yeung Chau was submitted and approved by the Authority. The monitoring programme will commence when the relocation of fish rafts begins until completion of subsequent relocation of fish raft to the original Fish Culture Zone after dredging.

1.9 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 7 of this report.

- 1.10 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely water quality, coral quality and bird counts as well as audit works for the Project in the reporting month.

2. WATER QUALITY

Monitoring Requirements

General

- 2.1 Post project water quality monitoring shall be conducted three occasions (days) within one week at after completion of the sediment removal works at the same stations as Baseline and Impact Monitoring. Monitoring took place two times per monitoring day during mid ebb and mid flood tides at three depths (1 meter from surface, mid depth and 1 meter from the bottom). If the water depth is less than 6m, the mid-depth measurement may be omitted. If the depth is less than 3m, only the mid-depth measurements need to be taken.
- 2.2 Duplicate *in-situ* measurements (Dissolved oxygen (DO) concentration, DO saturation, turbidity, pH, temperature and salinity) and one water sample at each depth (suspended solids (SS) and metals) shall be monitored in accordance with the requirements set out in the Project Profile.
- 2.3 For selection of tides for *in-situ* measurement and water sampling, tidal range of individual flood and ebb tides shall not be less than 0.5m.
- 2.4 Other relevant data shall also be recorded, such as monitoring location / position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or work underway nearby.
- 2.5 Water quality monitoring shall be conducted in accordance with the approved Proposal for Water Quality Monitoring. Action/Limit Levels for the environmental monitoring works are shown in **Appendix A**.

Monitoring Locations

- 2.6 The monitoring stations for water quality monitoring are shown in **Figure 2. Table 2.1** summarizes the water quality monitoring stations for the Project.

Table 2.1 Water Quality Monitoring Stations

Stations	Marine Water Quality Stations	Coordinates	
		Easting	Northing
F4	Relocation site for Yim Tin Tsai FCZ	840174	833468
F5	Temporary Fish Raft Relocation site for Yim Tin Tsai East FCZ	840303	835819
F6		843004	835347
F7	Existing Yim Tin Tsai FCZ	839720	834870
F8	Existing Yim Tin Tsai East FCZ	840871	835101
G2	Gradient Station	839760	834165
G3	Gradient Station	840637	835503
G4	Gradient Station	842184	835872

Monitoring Equipment

- 2.7 For in-situ monitoring, a multi-parameter meter (Model YSI 6820 C-M / YSI 6920-M) was used to measure DO, DO saturation, pH, turbidity, salinity and temperature. A sampler was used to collect water samples for laboratory analysis of SS and metal levels.

Dissolved Oxygen (DO) and Temperature Measuring Equipment

- 2.8 The instrument for measuring dissolved oxygen and temperature was portable and weatherproof complete with cable, sensor, comprehensive operation manuals and use DC power source. It was capable of measuring:
- a dissolved oxygen level in the range of 0-20 mg/L and 0-200% saturation; and
 - a temperature of 0-45 degree Celsius.
- 2.9 It has a membrane electrode with automatic temperature compensation complete with a cable.
- 2.10 Sufficient stocks of spare electrodes and cables were available for replacement where necessary.
- 2.11 Salinity compensation was built-in in the DO equipment.

Turbidity

- 2.12 Turbidity was measured *in situ* by the nephelometric method. The instrument was portable and weatherproof using a DC power source complete with cable, sensor and comprehensive operation manuals. The equipment was capable of measuring turbidity between 0-1000 NTU. The probe cable was not less than 25m in length.

Salinity

- 2.13 A portable salinometer capable of recording salinity within the range of 0-40 ppt was used for salinity measurements.

pH

- 2.14 The instrument was consisting of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It was readable to 0.1pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 were used for calibration of the instrument before and after use.

Water Depth Detector

- 2.15 A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring station.

Water Sampler

- 2.16 A water sampler, consisting of a transparent PVC cylinder of a capacity of not less than two litres which can be effectively sealed with cups at both ends was used. The water sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

Monitoring Position Equipment

- 2.17 A hand held Global Positioning System (GPS) was used to ensure that the correct location has been selected prior to sample collection.

Sample Container and Storage

- 2.18 Following collection, water samples for laboratory analysis were stored in high density polythene bottles, packed in ice (cooled to 4°C without being frozen) and delivered to the HOKLAS accredited laboratory and analyzed as soon as possible after collection. Sufficient volume of samples was collected to achieve the detection limit.

Calibration of In Situ Instruments

- 2.19 All *in situ* monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring.
- 2.20 For the on-site calibration of field equipment, the BS 1427:1993, "Guide to Field and on-site test methods for the analysis of waters" was observed.
- 2.21 Before each round of monitoring, a zero check in distilled water was performed with the turbidity probe of YSI 6820-C-M / YSI 6920-M. The probe was then be calibrated with a solution of known NTU.
- 2.22 Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was also being made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.
- 2.23 **Table 2.2** summarizes the equipment used in the water quality monitoring program. Copies of the calibration certificates of the equipment are shown in **Appendix L**.

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, YSI 6920-M	2
Monitoring Position Equipment	"Magellan" Handheld GPS Model GPS-320	1
Water Depth Detector	Fishfinder 140	1

Monitoring Parameters and Frequency

- 2.24 Table 2.3 summarizes the monitoring parameters, monitoring period and frequencies of the impact water quality monitoring.

Table 2.3 Post Project Water Quality Monitoring Parameters and Frequency

Station	Key Parameters	Frequency Note 1	Depth	No. of samples events
F4 F5 F6 F7 F8 G2 G3 G4	<p><u>In-situ:</u> Dissolved oxygen (DO) concentration, DO saturation, turbidity, pH, temperature and salinity</p> <p><u>Laboratory Testing:</u> Suspended Solids (SS), Copper (Cu), Lead (Pb), Zinc (Zn) and Arsenic (As)</p>	3 times within one week after completion of the sediment removal works (each series of sampling / measurement should not be less than 36 hours)	<ul style="list-style-type: none"> 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 less than 6m, omit mid-depth sampling. 	2 per monitoring day (1 for mid-ebb and 1 for mid-flood)

Notes:

1. For selection of tides for *in-situ* measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.

- 2.25 Monitoring location/position, time, water depth, sampling depth, pH, salinity, DO saturation, water temperature, tidal stages, weather conditions and any special phenomena or work underway nearby were recorded.

Monitoring Methodology

- 2.26 The monitoring stations were accessed using survey boat to within 3 m by the guide of a hand-held Global Positioning System (GPS). The depth of the monitoring location was measured using depth meter in order to determine the sampling depths. Afterwards, the probes of the in-situ measurement equipment was lowered to the predetermined depths (1 m below water surface, mid-depth and 1 m above seabed) and the measurements was carried out accordingly. The in-situ measurements at predetermined depths were carried out in duplicate. In case the difference in the duplicate in-situ measurement results was larger than 25%, the third set of in-situ measurement would be carried out for result confirmation purpose.
- 2.27 Water sampler was lowered into the water to the required depths of sampling. Upon reaching the pre-determined depth, a messenger to activate the sampler was then released to travel down the wire. The water sample was sealed within the sampler before retrieving. At each station, water samples for SS and metals at three depths (1 m below water surface, mid-depth and 1 m above seabed) were collected accordingly. Water samples were stored in a cool box and kept at less than 4°C but without frozen and sent to the laboratory as soon as possible.

Laboratory Analytical Methods

- 2.28 The testing of all parameters were conducted by Wellab Ltd. (HOKLAS Registration No.083) and comprehensive quality assurance and control procedures in place in order

to ensure quality and consistency in results. The testing method and limit of reporting are provided in **Table 2.4**.

Table 2.4 Methods for Laboratory Analysis for Water Samples

Parameters (Unit)	Proposed Method	Reporting Limit
SS (mg/L)	APHA 17e 2540 D	0.5 ^(See Note 1)
Copper (µg/L)	In-house method SOP 076 (ICP-MS)	1
Zinc (µg/L)		2
Arsenic (µg/L)		1
Lead (µg/L)		1

Note:

- 1) Limit of Reporting is reported as Detection Limit for non-HOKLAS report.
- 2) The testing for the parameters in the table are HOKLAS accredited

QA/QC Requirements

Decontamination Procedures

- 2.29 Water sampling equipment used during the course of the monitoring programme was decontaminated by manual washing and rinsed clean seawater/distilled water after each sampling event. All disposal equipment was discarded after sampling.

Sampling Management and Supervision

- 2.30 Water samples were dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples were stored in a cool box and kept at less than 4°C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.

Results and Observation

Results

- 2.31 The established Action/Limit Levels for the water quality monitoring works for the project based on the baseline water quality monitoring results is presented in **Appendix A**.
- 2.32 All post project water quality monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. The monitoring data and graphical presentations of water quality monitoring results are shown in **Appendix M and Appendix N** respectively.
- 2.33 The summary of exceedance record in reporting month is shown in **Appendix F**.
- 2.34 The laboratory testing report and QC report are provided in **Appendix O and Appendix P** respectively.

Event and Action Plan

- 2.35 If there is Action / Limit Level exceedance in any parameters of the water quality, the actions in accordance with the Event and Action Plan as shown in **Appendix C** will be carried out.

3. CORAL MONITORING

Monitoring Requirement

- 3.1 Impact Monitoring Survey is required to determine whether impacts are occurring on the tagged corals during the construction phase. A particular focus of the Impact Monitoring will be the effects of sedimentation, bleaching and mortality on corals.
- 3.2 All monitoring surveys were conducted by a qualified marine biologist with specialist knowledge of corals and sound experience at identifying corals in the field.
- 3.3 According to Section 3.3.3 of Annex G – “Environmental Monitoring and Audit Requirements” of the Project Profile, the coral monitoring programme shall comprise a baseline survey (prior to the dredging work), impact monitoring surveys (during the dredging period) and a post-project monitoring survey (after completion all the dredging works). In addition, the corals should be monitored twice a month during the first 2 months of the construction works in accordance with approved Proposal for Coral Monitoring.

Monitoring Locations

- 3.4 The locations plan of the impact coral monitoring stations is shown in **Figure 3**. The summary for impact coral monitoring stations is shown in **Table 3.1**.

Table 3.1 Summary of Coral Monitoring Stations

Monitoring	Nature of Monitoring Station	Monitoring ID and Location
Impact Monitoring	Impact Coral Monitoring Station	T2 – North of Shuen Wan Typhoon Shelter
		T3 – Southeast of Shuen Wan Typhoon Shelter
	Impact Coral Control Station	Site C –Whitehead Peninsula

Monitoring Frequency and Methodology

- 3.5 For regular Impact Monitoring Survey, the tagged corals were monitored twice a month during the first 2 months of the construction works. If there is no exceedance recorded, the monitoring frequency will be adjusted to monthly during the rest of the construction phase.
- 3.6 During the Impact Monitoring Surveys, the health status of each tagged coral colony was recorded, including percentage cover (%) of (1) sedimentation; (2) bleaching and (3) mortality.
- 3.7 The condition of each tagged coral colony was recorded by taking a photograph from an angle and distance that best represents the entire colony.

3.8 The results of the Impact Monitoring Surveys were reviewed with reference to the findings of the Baseline Monitoring Survey and the data collected from the reference site (i.e. Site C) during the Impact Monitoring Survey.

Results and Observations

3.9 Post Project Coral Monitoring Survey has been conducted at two Impact Sites (Site T2 and T3) at Yam Tin Tsai and one Control Site (Site C) at Whitehead Peninsula which is away (>2km) from the area of construction work on 8 June 2014.

3.10 The locations of the survey sites are shown in **Figure 3**, and the coordinates of the start and end points and survey conditions are shown in **Table 3.2**.

Table 3.2 Locations and Physical attributes of Sites for Dive Survey (T2, T3 and Site C)

Sites	GPS Coordinates		Depth (m)	Visibility (m)	Substrate type	Weather	Tidal Condition	Sedimentation on Hard Substrate? (mm thickness)
17 May 2014								
T2	Start	N 22°27.208' E 114°12.753'	1.0 – 1.5	1 – 1.5	Sand with gravel, rubbles and boulders	Calm; Sunny	Ebb	YES (2 – 4)
	End	N 22°27.161' E 114°12.727'						
T3	Start	N 22°27.079' E 114°12.661'	1.0 – 1.5	1 – 1.5	Rubbles, boulders and sand with gravel	Calm; Sunny	Ebb	YES (2 – 4)
	End	N 22°27.049' E 114°12.615'						
Site C	Start	N 22°26.184' E 114°14.229'	1.0 – 1.5	1 – 1.5	Rubbles, boulders and sand with gravel	Calm; Sunny	Ebb	YES (2 – 4)
	End	N 22°26.139' E 114°14.210'						

3.11 All coral quality monitoring was conducted as scheduled in the reporting month. The monitoring coral quality monitoring results including the code, species name, area, percentage of sedimentation level, bleaching and mortality of the tagged coral colonies at each site are summarized in **Appendix D**. The photo records of coral quality surveys for the reporting month are shown in **Appendix E**. The survey team had tried to take photographs of the corals from an angle and distance that best represented the colonies but difficulties sometimes occurred as a result of low water visibility during the surveys.

3.12 Coral monitoring results were evaluated against Action and Limit Levels (**Appendix A**) and summarized in **Table 3.3**. Evaluation based on recorded changes in the percentages of partial mortality, sediment cover, and bleaching of the tagged corals.

Table 3.3 Evaluation of Monitoring Results against Action and Limit Level for Coral Monitoring Surveys.

12 th Coral Monitoring Survey on 8 June 2014								
Site	Exceedance		Sedimentation		Bleaching		Mortality	
	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
Site C	No	No	No	No	No	No	No	No
Site T2	No	No	No	No	No	No	No	No
Site T3	No	No	No	No	No	No	No	No

Note: Definition of Action/Limit levels are listed in Appendix A. “No” indicates NO exceedance.

- 3.13 Overall, the healthy status of the tagged coral colonies was normal, with usual level of sedimentation. No action/limit level of mortality was exceeded in the monitoring survey conducted in June 2014.

Summary of Coral Monitoring Results

8 June 2014

- Site C (Reference site)
- 3.14 Sedimentation cover on the coral colonies ranged from 0 to 10%, with thickness ~2mm. When compared with baseline data in August 2013, increased sedimentation cover was recorded on six colonies (C2, C4, C6, C7, C8 and C9) by 5 to 10%. No cover of bleaching or mortality was recorded.
- Site T2
- 3.15 Sedimentation cover on the coral colonies ranged from 0 to 5%, with thickness ~2mm. When compared with baseline data in August 2013, increased sedimentation cover was recorded on 2 colonies (A3 and A8) by 5%. No cover of bleaching or mortality was recorded.
- Site T3
- 3.16 Sedimentation cover ranged from 0 to 5%, with thickness ~2mm. When compared with baseline data in August 2013, increased sedimentation cover was recorded 1 colony (B9) by 5 %. No cover of bleaching or mortality was recorded.
- 3.17 In the monitoring surveys conducted on 8 June 2014, at Impact Sites T2 and T3 and the reference Site C, the change in level of sedimentation on the tagged colonies was less than 15% when compared with the baseline data in Aug 2013. As the sedimentation occurred at all sites including the reference Site C, the small change in sedimentation was likely a natural fluctuation as a result of tidal current, wave, northeast monsoon, disturbance by waves during low tide period, etc. No significant increment in level of blenching or partial mortality suggested that adverse effect, if any, was minor.
- 3.18 The data from this monitoring survey showed no significant enhancement in sedimentation, bleaching or mortality in both Sites T2 and T3 and the Reference Site C. Hence, no adverse impact by the construction activity on the coral community was observed.

Event and Action Plan

- 3.19 Upon action level being exceeded, appropriate actions should be taken to review the dredging operation and additional measures such as slowing down, or rescheduling of works should be implemented as necessary, with the agreement from the ET and AFCD. Upon limit level being exceeded, the Contractor shall suspend all works affecting the corals until an effective solution is identified. Once the solution has been identified and agreed by the ET and AFCD, construction works affecting seabed may recommence.

4. ARDEIDS AND WHITE-BELLIES SEA EAGLES MONITORING

Monitoring Requirements

- 4.1 In accordance with the approved monitoring programme under condition 2.7 of Environmental Permit No. EP-419/2011/A, surveys by counts on ardeids and White-bellied Sea Eagles should be conducted to quantify their existence in vicinity of the proposed dredging area and temporary relocation sites for fish rafts as well as to monitor ardeids and White-bellied Sea Eagles nesting at Yeung Chau. Their nests will be monitored if identified. The survey results enable comparison of their populations before, during and after construction works.
- 4.2 By comparison and evaluation of the survey results, any impact on the target species could be verified.

Monitoring Routes & Locations

- 4.3 Transect route with some vantage points is shown in **Figure 4**. There are a total of 9 point count locations. The counting vantage points are selected with at least 500m distance with each other to avoid double-counting. The main focus areas of survey are the location of existing fish rafts before and after dredging works and Yeung Chau, where ardeids were observed in the past records.

Monitoring Frequencies & Durations

- 4.4 The bird count was conducted at monthly intervals since the relocation of fish rafts begins. The survey would be carried out until completion of subsequent relocation of fish raft to the original Fish Culture Zone after dredging. Counts normally started after sunrise and last for 2-3 hours (normally before 10:00). Bird count should be postponed when it is on inclement weather.

Monitoring Methodology

- 4.5 The target species were surveyed quantitatively by transect count and point count method covering the survey area. Birds heard or seen within the survey area were identified to species and counted. They were counted directly from vantage points or along the edge of a colony with the use of 10x binoculars or by the naked-eye, depending on the proximity between the surveyor and the colony. It is advisable to travel with a pace of 10 km/hr by small boat for transect method, and point count was last for less than or equal to 10 mins for each station. The quantitatively monitoring results were undertaken by experienced bird watchers. Photographic records were taken when possible.
- 4.6 Furthermore, during each survey (both transect and point counting), nests of ardeids and White-bellied Sea Eagles were counted by tracking the landing locations of the found species at Yeung Chau. Similar to the method mentioned above, active nests, determined by the presence of incubating adults or chicks, were counted directly from vantage points or along the edge of the colony. If they were invisible due to dense vegetation, their landing locations were recorded and repeated landings around the same

location were considered as one nest.

Results & Observations

- 4.7 Bird counts were conducted on 23 June 2014. The species and number of birds observed, the nature of construction works within works area conducting during the impact monitoring visit were recorded. Also, weather condition and other noticeable activities occurring within the survey area were recorded. The data sheet showing the results was attached in **Appendix J**. The photographic records were attached in **Appendix K**.
- 4.8 A total of 28 and 1 individuals of Ardeids and White-bellied Sea Eagle were recorded respectively from the transect count and point count locations in the reporting month (**Table 4.1** refers).

Table 4.1 Number of Ardeids and White-bellied Sea Eagle recorded

Data of Survey	Abundance		Total number of birds	Nest of ardeids and White-Bellied Sea Eagles
	Ardeids	White-bellied Sea Eagle		
23 June 2014	28	1	29	1 (1 nest of White-Bellied Sea Eagles)

5. ENVIRONMENTAL AUDIT**Site Audits**

- 5.1 Site audits were carried out by ET to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.2 Site audits were conducted by ET on 6, 12, 20 and 26 June 2014. The details of observations during site audit can refer to **Table 5.2**.

Status of Environmental Licensing and Permitting

- 5.3 All permits/licenses obtained for the Project are summarized in **Table 5.1**.

Table 5.1 Summary of Environmental Licensing and Permit Status

Permit / License No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-419/2011/B	11/2/2014	N/A	<u>Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone :</u> (a) A dredging operation within a Fish Culture Zone and relocation of existing fish rafts and setting up of temporary sites for the relocated fish rafts; (b) To remove seabed sediments at the Yim Tin Tsai (East) Fish Culture Zone for a depth of 2m.	Valid
Construction Noise Permit (CNP)				
GW-RN0043-14	7/2/2014	6/8/2014	Use of powered mechanical equipment for carrying out construction work at Yim Tin Tsai (East) Fish Culture Zone, Tai Po, N.T. during 0000 – 2400 hours on general holidays (including Sundays), 0000 – 0700 hours and 1900 – 2400 hours on any day not being a general holiday.	Valid

Permit / License No.	Valid Period		Details	Status
	From	To		
GW-RN0327-14	23/5/2014	6/8/2014	Use of powered mechanical equipment for carrying out construction work at Yim Tin Tsai (East) Fish Culture Zone, Tai Po, N.T. during 0000 – 2400 hours on general holidays (including Sundays), 0000 – 0700 hours and 1900 – 2400 hours on any day not being a general holiday.	Valid
Dumping Permit				
EP/MD/15-014	9/5/2014	8/6/2014	<u>Under the Dumping at Sea Ordinance, authorizes the loading for dumping from Hong Kong and/or dumping in the sea of the materials described :</u> Dredged Sediment Requiring: Type 1 – Open Sea Disposal Type 1 – Open Sea Disposal (Dedicated Site) Type 2 – Confined Marine Disposal	Expired
Waste Disposal (Chemical Waste)				
WPN : 5411-728-Z4027-01	26/7/2013	End of Project	Disposal of Chemical Waste including surplus diesel, paint, spent lubricating oil, solvent and batteries containing heavy metal.	Valid

Implementation Status of Environmental Mitigation Measures

- 5.4 According to the EIA Study Report, Environmental Permit and the Project Profile of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. A summary of the EMIS is provided in **Appendix G**.
- 5.5 During site inspection in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit sessions are summarized in **Table 5.2**. The summaries of site audits are attached in **Appendix H**.

Table 5.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
--	6/6/2014	No environmental deficiency was identified during the site inspection.	N/A
--	12/6/2014	No environmental deficiency was identified during the site inspection.	N/A
--	20/6/2014	No environmental deficiency was identified during the site inspection.	N/A
--	26/6/2014	No environmental deficiency was identified during the site inspection.	N/A

Summary of Exceedances

- 5.6 No exceedance of monitoring results was recorded in the reporting month. Summary of exceedance is provided in **Appendix F**.

Summary of Complaint and Prosecution

- 5.7 No environmental related complaint, prosecution or notification of summons was received in the reporting month.
- 5.8 There was no environmental complaint, prosecution or notification of summons received since the Project commencement. The Complaint Log is attached in **Appendix I**.

Status of Waste Management

- 5.9 The amount of wastes generated by the major site activities of this Project during the reporting month is shown in **Appendix Q**.

6. FUTURE KEY ISSUES

6.1 The major construction activities in the coming month will include:

- Daily cleaning and weekly tidying;
- Relocation of fish rafts; and
- Bird monitoring.

Monitoring Schedule for the Next Month

6.2 The tentative environmental monitoring schedule for the next month is shown in **Appendix B**.

7. CONCLUSIONS

Conclusions

- 7.1 Environmental monitoring and audit works were conducted in the reporting month. Site inspections were conducted on 6, 12, 20 and 26 June 2014. The results were reviewed and checked.
- 7.2 No exceedance of monitoring results was recorded in the reporting month.
- 7.3 There was no environmental complaint, prosecution or notification of summons received.

Recommendations

- 7.4 According to the environmental audit performed in the reporting month and site activities in coming month, the following recommendations were made:

Dust Impact

- To prohibit any open burning on site.
- To regularly maintain the machinery and vessels on site.

Noise Impact

- To inspect the noise sources inside the site.
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers.

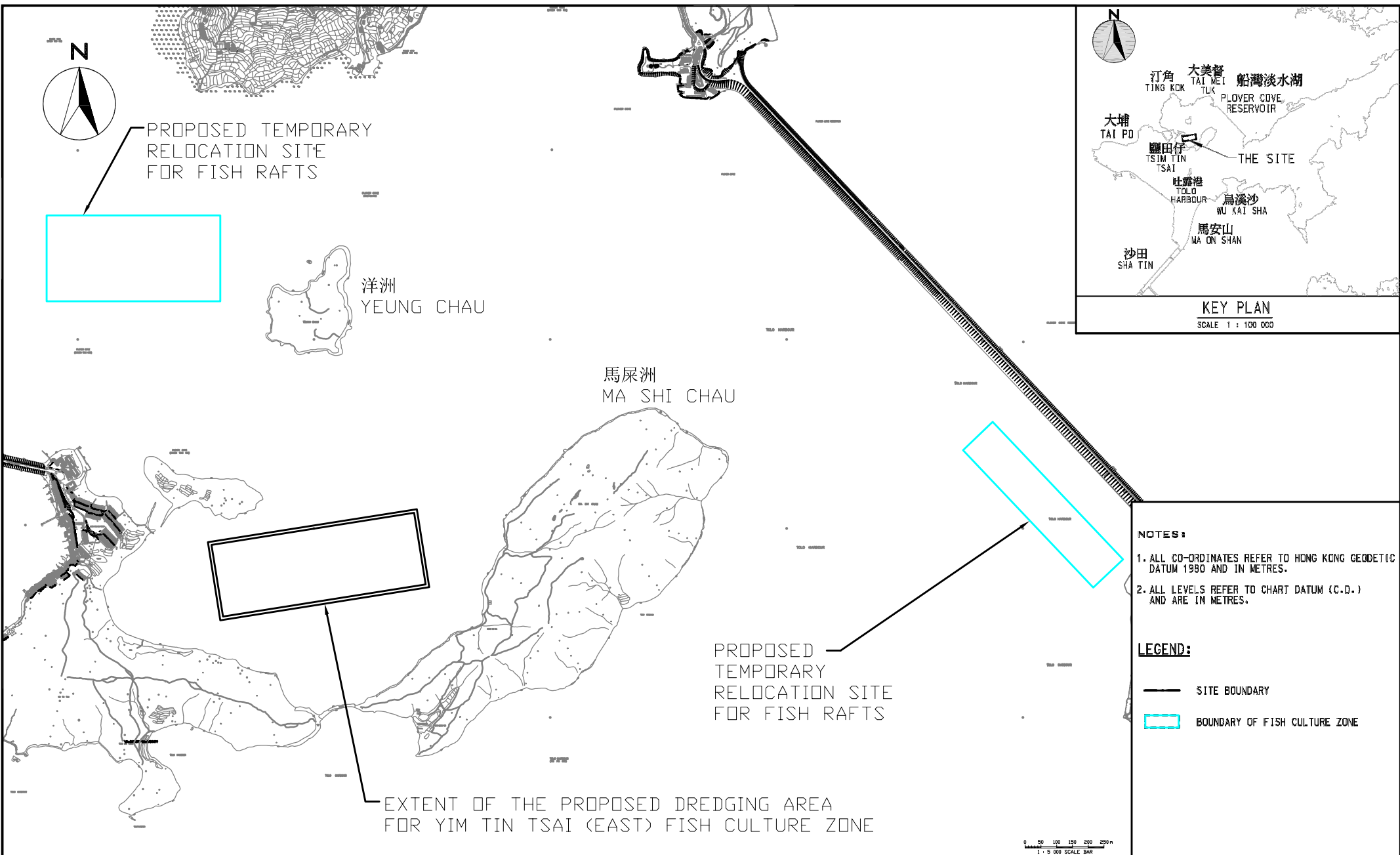
Water Impact

- To identify any wastewater discharges from site.

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.

FIGURE(S)



- NOTES:**
1. ALL CO-ORDINATES REFER TO HONG KONG GEODETIC DATUM 1980 AND IN METRES.
 2. ALL LEVELS REFER TO CHART DATUM (C.D.) AND ARE IN METRES.

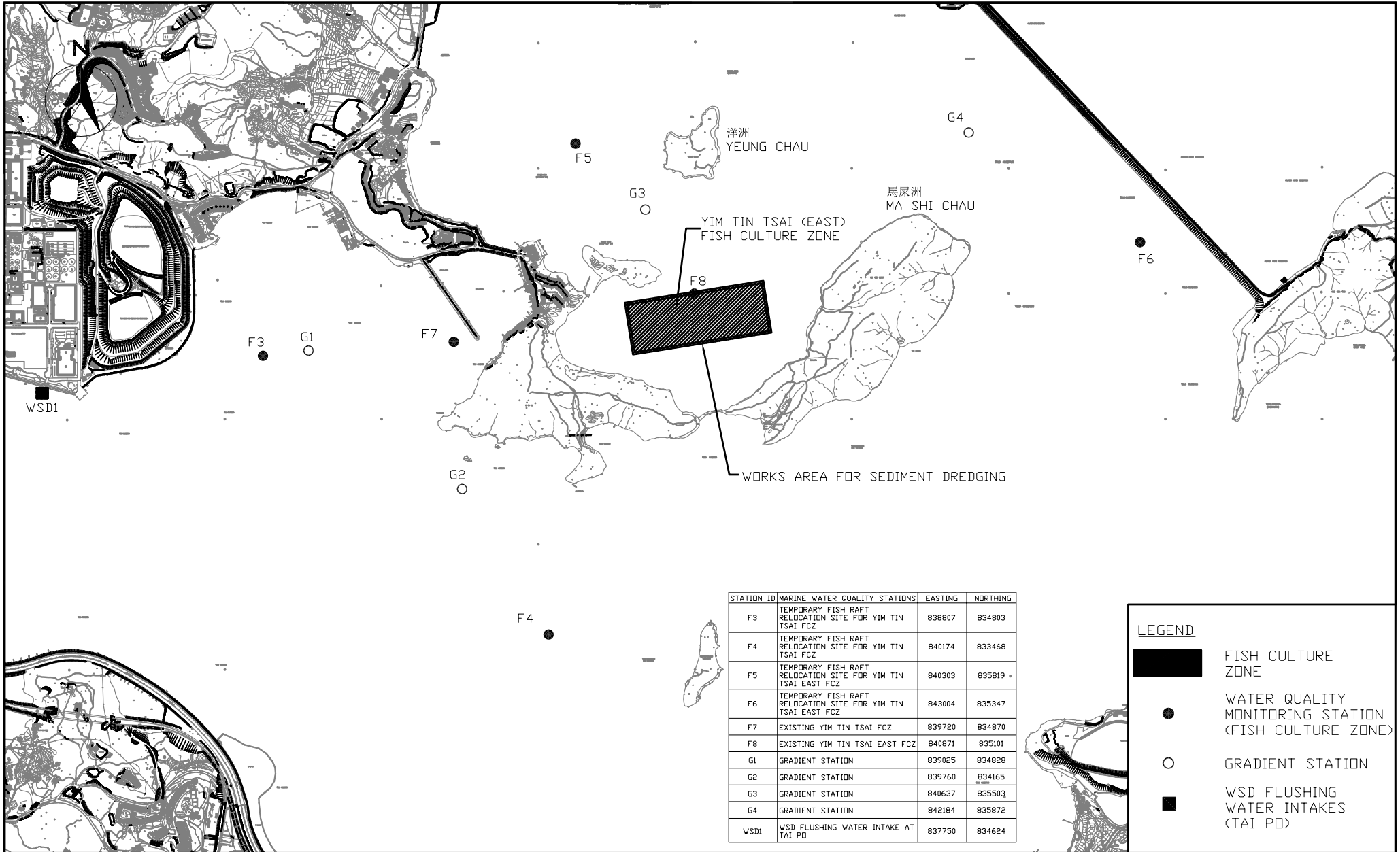
- LEGEND:**
- SITE BOUNDARY
 - BOUNDARY OF FISH CULTURE ZONE



SEDIMENT REMOVAL AT YIM TIN TSAI (EAST) FISH CULTURE ZONE





SITE LAYOUT PLAN

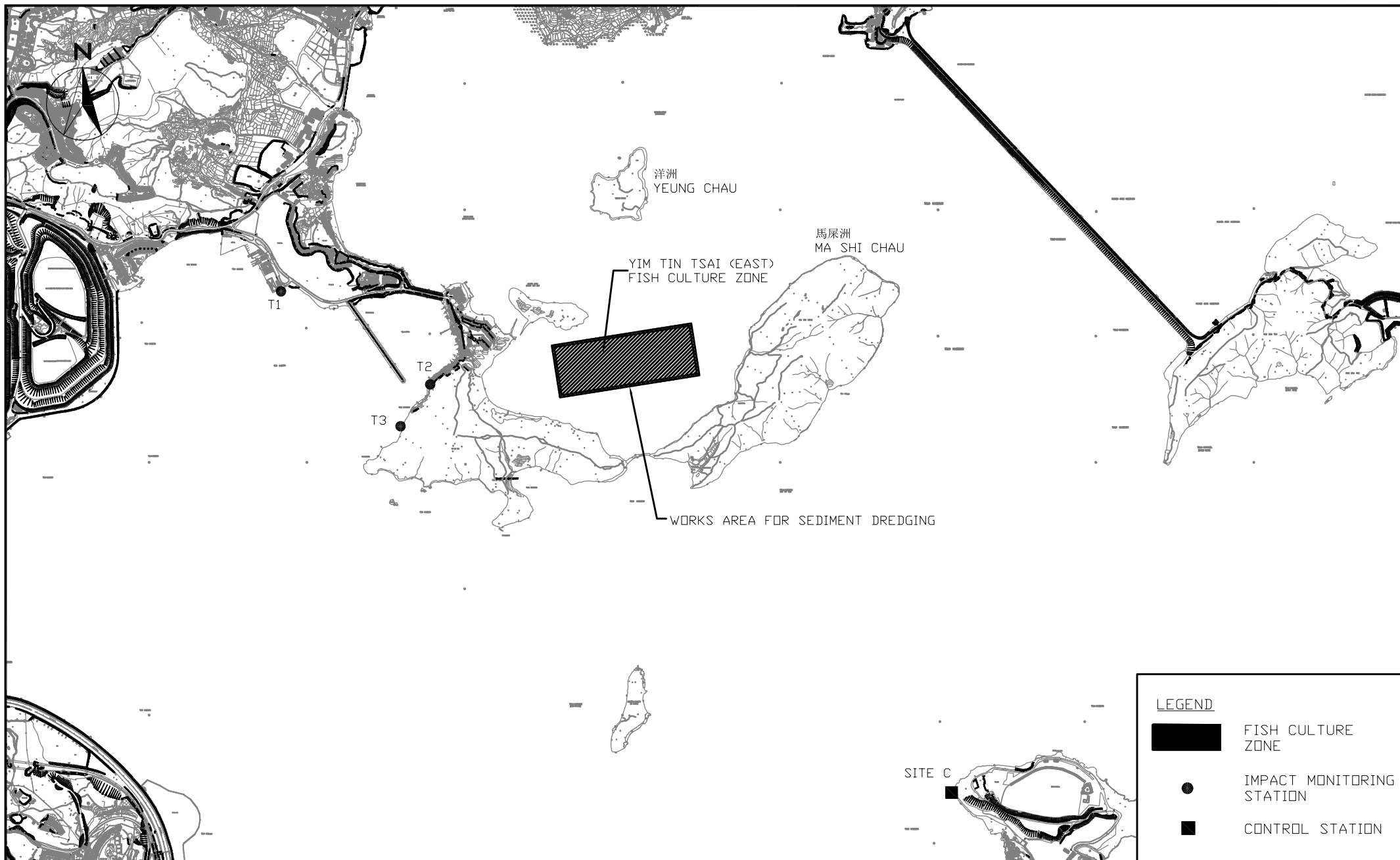
SCALE	1:400 @ A4	DATE	DEC 2013	
CHECK	IT	DRAWN	JW	
JOB No.	MA13027	FIGURE NO.	1	REV —






STATION ID	MARINE WATER QUALITY STATIONS	EASTING	NORTHING
F3	TEMPORARY FISH RAFT RELOCATION SITE FOR YIM TIN TSAI FCZ	838807	834803
F4	TEMPORARY FISH RAFT RELOCATION SITE FOR YIM TIN TSAI FCZ	840174	833468
F5	TEMPORARY FISH RAFT RELOCATION SITE FOR YIM TIN TSAI EAST FCZ	840303	835819
F6	TEMPORARY FISH RAFT RELOCATION SITE FOR YIM TIN TSAI EAST FCZ	843004	835347
F7	EXISTING YIM TIN TSAI FCZ	839720	834870
F8	EXISTING YIM TIN TSAI EAST FCZ	840871	835101
G1	GRADIENT STATION	839025	834828
G2	GRADIENT STATION	839760	834165
G3	GRADIENT STATION	840637	835503
G4	GRADIENT STATION	842184	835872
WSD1	WSD FLUSHING WATER INTAKE AT TAI PD	837750	834624

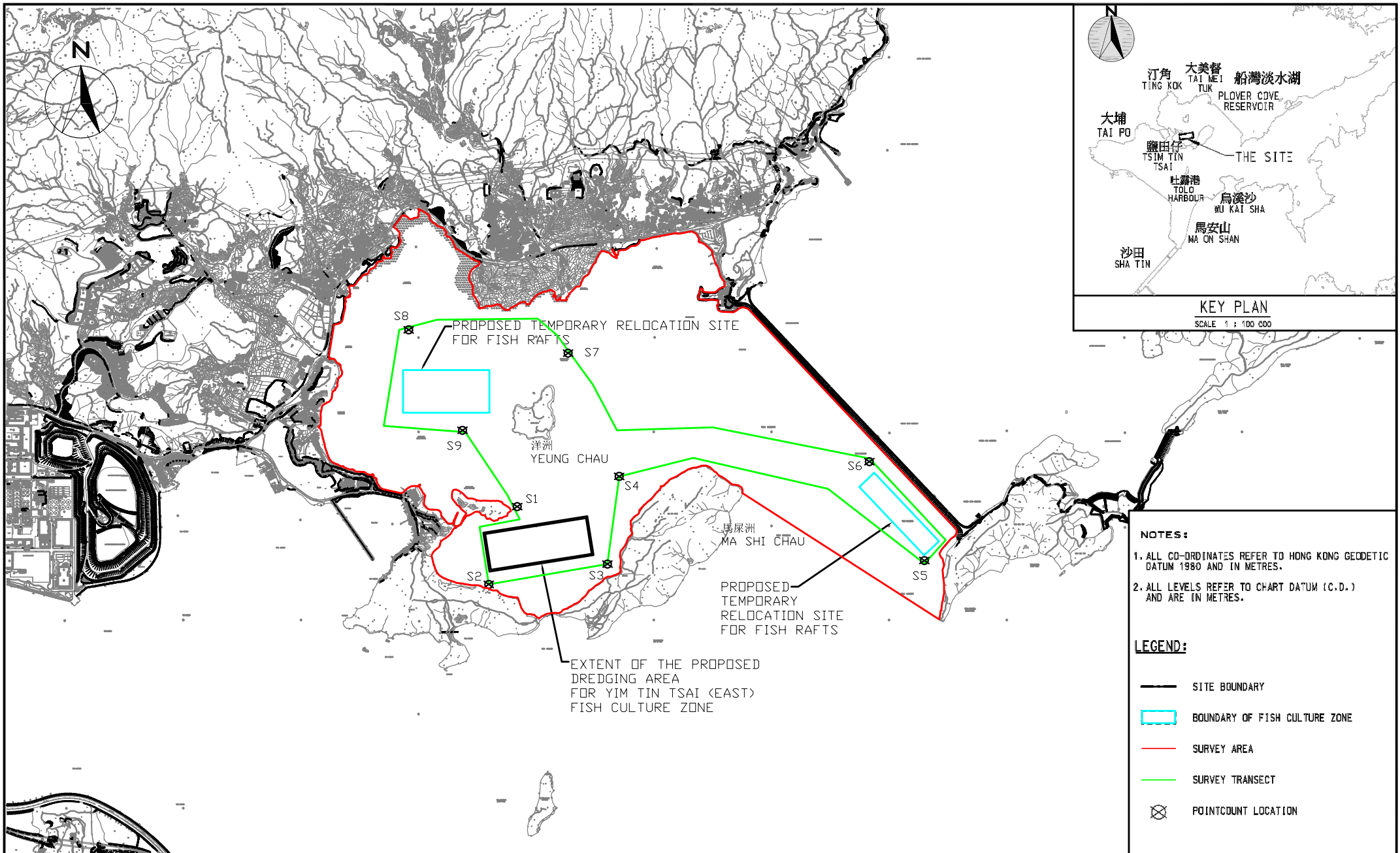
LEGEND

-  FISH CULTURE ZONE
-  WATER QUALITY MONITORING STATION (FISH CULTURE ZONE)
-  GRADIENT STATION
-  WSD FLUSHING WATER INTAKES (TAI PD)

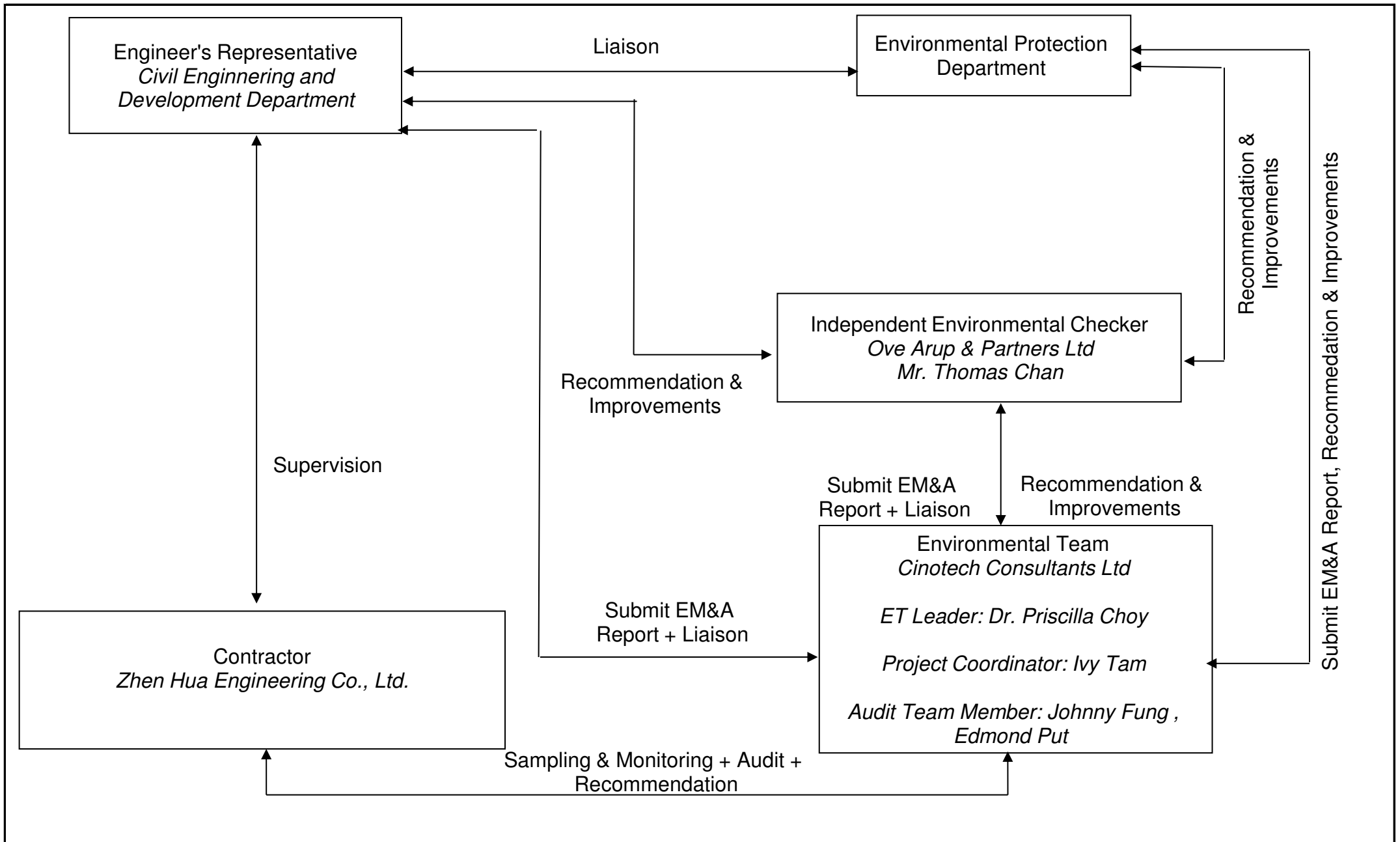


LEGEND	
	FISH CULTURE ZONE
	IMPACT MONITORING STATION
	CONTROL STATION

SCALE	1:600	DATE	JUN 2013
CHECK	GL	DRAWN	JW
JOB No.	MA13027	FIGURE NO.	3
		REV	—



SCALE	1:800 @ A4	DATE	DEC 2013	
CHECK	IT	DRAWN	JW	
JOB No.	MA13027	FIGURE NO.	4	REV —



Title	Contract No. CV/2012/01	Scale	Project	CINOTECH
	Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	N.T.S	No. MA13027	
Management Structure		Date	Figure	
		Apr-14	5	

**APPENDIX A
ACTION AND LIMIT LEVELS**

Appendix A**Guidelines for Establishment of Action and Limit Levels**

Parameter (unit)	Action Level	Limit Level
DO in mg/L (See Note 1)	<u>For Stations F4 and F7</u> <u>Surface or Mid-Depth</u> 5 percentile of baseline surface / mid-depth data or <4mg/L <u>Bottom</u> 5 percentile of baseline bottom data or <2mg/L	<u>For Stations F4 and F7</u> <u>Surface or Mid-Depth</u> 1 percentile of baseline surface / mid-depth data or <4mg/L <u>Bottom</u> 1 percentile of baseline bottom data or <2mg/L
	<u>For Stations F5, F6, F8</u> <u>Surface or Mid-Depth</u> 5 percentile of baseline surface / mid-depth data or <4mg/L <u>Bottom</u> 5 percentile of baseline bottom data or <3mg/L	<u>For Stations F5, F6, F8</u> <u>Surface or Mid-Depth</u> 1 percentile of baseline surface / mid-depth data or <4mg/L <u>Bottom</u> 1 percentile of baseline bottom data or <3mg/L
Turbidity in NTU (See Note 2)	95 percentile of baseline data	99 percentile of baseline data
SS in mg/L (See Note 2)	95 percentile of baseline data or 10mg/L	99 percentile of baseline data or 10mg/L
Copper in µg/L (See Note 2 and 4)	95 percentile of baseline data or 4.8µg/L	99 percentile of baseline data or 4.8µg/L
Zinc in µg/L (See Note 2 and 4)	95 percentile of baseline data or 40µg/L	99 percentile of baseline data or 40µg/L
Arsenic in µg/L (See Note 2 and 4)	95 percentile of baseline data or 25µg/L	99 percentile of baseline data or 25µg/L

Lead in mg/L (See Note 2 and 4)	95 percentile of baseline data or 25µg/L	99 percentile of baseline data or 25µg/L
---------------------------------	--	--

Notes:

1. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
2. For turbidity, SS and metals, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
3. All the figures given in the table are used for reference only and EPD may amend the figures whenever it is considered as necessary.
4. Action and limit values of metals are based on the assessment criteria adopted under the water quality impact assessment (refer to Appendix B of Project Profile).

Calculated Action and Limit Levels for Water Quality

<u>Parameter (unit)</u>	<u>Depth</u>	Action Level		Limit Level	
		<u>For Stations F4, F7 and G2</u>	<u>For Stations F5, F6, F8, G3 and G4</u>	<u>For Stations F4, F7 and G2</u>	<u>For Stations F5, F6, F8, G3 and G4</u>
DO in mg/L (See Note 1 and 4)	Surface	5.4mg/L	4.0mg/L	5.0mg/L	3.8mg/L
	Middle	4.3mg/L	3.8mg/L	4.0mg/L	3.5mg/L
	Bottom	2.2mg/L	<u>For Stations F5, G3</u> 2.2mg/L	<u>For Stations F6, F8 and G4</u> 2.8mg/L	<u>For Stations F5, G3</u> 1.8mg/L
Turbidity in NTU (See Note 2 and 4)	Depth-averaged	4.5NTU		4.7NTU	
SS in mg/L (See Note 2 and 4)	Depth-averaged	11.2mg/L		11.9mg/L	
Copper in µg/L (See Note 2 and 4)	Depth-averaged	8.0µg/L		8.4µg/L	
Zinc in µg/L (See Note 2 and 4)	Depth-averaged	22.0µg/L		26.4µg/L	
Arsenic in µg/L (See Note 2 and 4)	Depth-averaged	24.0µg/L		25.5µg/L	
Lead in mg/L (See Note 2 and 4)	Depth-averaged	1.0µg/L		1.0µg/L	

Notes:

1. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
2. For turbidity, SS and metals, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
3. All the figures given in the table are used for reference only and EPD may amend the figures whenever it is considered as necessary.
4. Action and limit values are derived based on baseline water quality monitoring results to show the actual baseline water quality condition.

Action and Limit Level for Coral Monitoring

Parameter	Action Level Definition	Limit Level Definition
Sedimentation	If during Impact Monitoring a 20% increase in the percentage of sediment cover on hard corals occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Action Level is exceeded.	If during the Impact Monitoring a 25% increase in the percentage of sediment cover occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Limit Level is exceeded.
Bleaching	If during Impact Monitoring a 15% increase in the percentage of bleaching (bleached white) on hard corals occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Action Level is exceeded.	If during the Impact Monitoring a 25% increase in the percentage of bleaching (bleached white) occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Limit Level is exceeded.
Mortality	If during Impact Monitoring a 15% increase in the percentage of partial mortality on hard corals occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Action Level is exceeded.	If during the Impact Monitoring a 25% increase in the percentage of partial mortality occurs at more than 20% of the tagged coral at any one Impact Monitoring Site that is not recorded at the Control Site, then the Limit Level is exceeded.

**APPENDIX B
ENVIRONMENTAL MONITORING
SCHEDULES**

**Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Post-Project Water Quality Monitoring in June 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun
		<u>Water Quality Monitoring</u> Mid-Flood 7:46 Mid-Ebb 14:57			<u>Water Quality Monitoring</u> Mid-Flood 10:19 Mid-Ebb 16:59	
8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun
	<u>Water Quality Monitoring</u> Mid-Ebb 9:49 Mid-Flood 16:13					
15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun
22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun
29-Jun	30-Jun					

Remark: Reference was made to the tidal information of Hong Kong Observatory

**Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Post Project Coral Monitoring Schedule in June 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun
8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun
Post Project Coral Monitoring						
15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun
22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun
29-Jun	30-Jun					

**Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Ardeids & White-bellied Sea Eagles Nesting Monitoring Schedule in June 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun
8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun
15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun
22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun
	Ardeids & White-bellied Sea Eagles Nesting Monitoring					
29-Jun	30-Jun					

**Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Tentative Ardeids & White-bellied Sea Eagles Nesting Monitoring Schedule in July 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
	Ardeids & White-bellied Sea Eagles Nesting Monitoring					
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul		

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

**APPENDIX C
EVENT ACTION PLAN FOR WATER
QUALITY**

Appendix C Event and Action Plan for Water Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> 1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform IEC and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC and Contractor; 6. (The above actions should be taken within 1 working day after the exceedance is identified) 7. Repeat measurement on next day of exceedance. 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented. 3. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Review the working methods and consider additional measures such as slowing down, or rescheduling of works; 5. Discuss with ET and IEC and propose mitigation measures to IEC and ER; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform IEC and Contractor; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IEC and Contractor; 5. Ensure mitigation measures are implemented; 6. Prepare to increase the monitoring 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation 	<ol style="list-style-type: none"> 1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should 	<ol style="list-style-type: none"> 1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Review the working methods and consider

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	frequency to daily; 7. (The above actions should be taken within 1 working day after the exceedance is identified) 8. Repeat measurement on next working day of exceedance.	measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	be taken within 1 working day after the exceedance is identified)	additional measures such as slowing down, or rescheduling of works; 5. Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)

APPENDIX D
CORAL MONITORING RESULTS

Appendix D Impact Coral Monitoring Results**Site C (Reference site) – Percentage of Sedimentation, Bleaching and Mortality of the Tagged Coral Colonies**

Code	Coral Species	Size (length x width, cm)	Sedimentation, % (thickness, mm)				Bleaching, %				Mortality, %			
			Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)
C1	<i>Oulastrea crispata</i>	5 x 2	5 (2)	5 (2)	5(2)	5 (2)	0	0	0	0	0	0	0	0
C2	<i>Oulastrea crispata</i>	5 x 4	0	10 (2) ▲	10 (2) ▲	10 (2) ▲	0	0	0	0	0	0	0	0
C3	<i>Oulastrea crispata</i>	3 x 3	0	0	0	0	0	0	0	0	0	0	0	0
C4	<i>Oulastrea crispata</i>	3 x 3	0	10 (2) ▲	10 (2) ▲	10 (2) ▲	0	0	0	0	0	0	0	0
C5	<i>Oulastrea crispata</i>	3 x 4	5 (2)	5 (2)	10(2) ▲	5 (2)	0	0	0	0	0	0	0	0
C6	<i>Oulastrea crispata</i>	6 x 2	0	10 (2) ▲	5 (2) ▲	10 (2) ▲	0	0	0	0	0	0	0	0
C7	<i>Oulastrea crispata</i>	5 x 4	0	5 (2) ▲	5 (2) ▲	5 (2) ▲	0	0	0	0	0	0	0	0
C8	<i>Oulastrea crispata</i>	4 x 3	0	5 (2) ▲	5 (2) ▲	5 (2) ▲	0	0	0	0	0	0	0	0
C9	<i>Oulastrea crispata</i>	6 x 4	0	10 (2) ▲	5 (2) ▲	5 (2) ▲	0	0	0	0	0	0	0	0
C10	<i>Oulastrea crispata</i>	15 x 7	5 (2)	10 (2) ▲	10 (2) ▲	5 (2)	0	0	0	0	0	0	0	0

Note:

- (1) Baseline Coral Monitoring Survey (10 Aug 2013), the 12th (26 April 2014), 13th (17 May 2014) and 14th (8 June 2014) Coral Monitoring Surveys.
(2) “▲” and “▼” indicate increased and decreased in percentage, respectively, when compared with the baseline data.

Site T2 - Percentage of Sedimentation, Bleaching and Mortality of the Tagged Coral Colonies

Code	Coral Species	Size (length x width, cm)	Sedimentation, % (thickness, mm)				Bleaching, %				Mortality, %			
			Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)
A1	<i>Oulastrea crispata</i>	15 x 8	0	0	0	0	0	0	0	0	0	0	0	0
A2	<i>Oulastrea crispata</i>	8 x 4	5 (2)	5 (2)	5 (2)	5 (2)	0	0	0	0	0	0	0	0
A3	<i>Oulastrea crispata</i>	4 x 4	0	0	5 (2) ▲	5 (2) ▲	0	0	0	0	0	0	0	0
A4	<i>Oulastrea crispata</i>	15 x 4	0	0	0	0	0	0	0	0	0	0	0	0
A5	<i>Oulastrea crispata</i>	5 x 3	0	0	0	0	0	0	0	0	0	0	0	0
A6	<i>Oulastrea crispata</i>	8 x 4	0	0	0	0	0	0	0	0	0	0	0	0
A7	<i>Oulastrea crispata</i>	8 x 4	5 (2)	5 (2)	5(2)	5(2)	0	0	0	0	0	0	0	0
A8	<i>Oulastrea crispata</i>	5 x 4	0	5 (2) ▲	5 (2) ▲	5 (2) ▲	0	0	0	0	0	0	0	0
A9	<i>Oulastrea crispata</i>	3 x 3	0	0	0	0	0	0	0	0	0	0	0	0
A10	<i>Oulastrea crispata</i>	7 x 4	0	5 (2) ▲	0	0	0	0	0	0	0	0	0	0

Note:

(3) Baseline Coral Monitoring Survey (10 Aug 2013), the 12th (26 April 2014), 13th (17 May 2014) and 14th (8 June 2014) Coral Monitoring Surveys.

(1) “▲” and “▼” indicate increased and decreased in percentage, respectively, when compared with the baseline data.

Site T3 – Percentage of Sedimentation, Bleaching and Mortality of the Tagged Coral Colonies

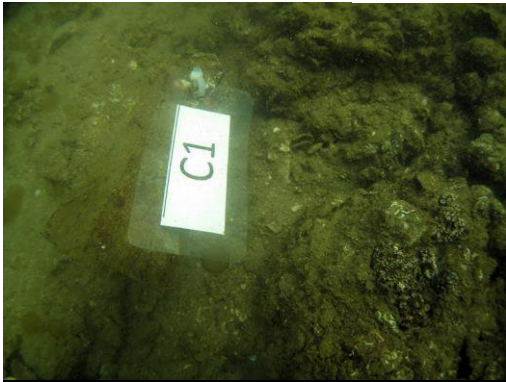
Code	Coral Species	Size (length x width, cm)	Sedimentation, % (thickness, mm)				Bleaching, %				Mortality, %			
			Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)	Baseline (10Aug)	12 th (26Apr)	13 th (17May)	14 th (08Jun)
B1	<i>Oulastrea crispata</i>	5 x 2	0	0	0	0	0	0	0	0	0	0	0	0
B2	<i>Oulastrea crispata</i>	10 x 8	0	0	5 (2) ▲	0	0	0	0	0	0	0	0	0
B3	<i>Oulastrea crispata</i>	5 x 3	0	0	5 (2) ▲	0	0	0	0	0	0	0	0	0
B4	<i>Oulastrea crispata</i>	5 x 3	0	0	5 (2) ▲	0	0	0	0	0	0	0	0	0
B5	<i>Oulastrea crispata</i>	3 x 3	0	0	0	0	0	0	0	0	0	0	0	0
B6	<i>Oulastrea crispata</i>	4 x 4	0	0	0	0	0	0	0	0	0	0	0	0
B7	<i>Oulastrea crispata</i>	5 x 4	0	0	0	0	0	0	0	0	0	0	0	0
B8	<i>Oulastrea crispata</i>	8 x 3	5 (2)	5 (2)	5 (2)	5 (2)	0	0	0	0	0	0	0	0
B9	<i>Oulastrea crispata</i>	4 x 4	0	5 (2) ▲	0	5 (2) ▲	0	0	0	0	0	0	0	0
B10	<i>Oulastrea crispata</i>	5 x 4	0	0	0	0	0	0	0	0	0	0	0	0

Note:

(4) Baseline Coral Monitoring Survey (10 Aug 2013), the 12th (26 April 2014), 13th (17 May 2014) and 14th (8 June 2014) Coral Monitoring Surveys.

(1) “▲” and “▼” indicate increased and decreased in percentage, respectively, when compared with the baseline data.

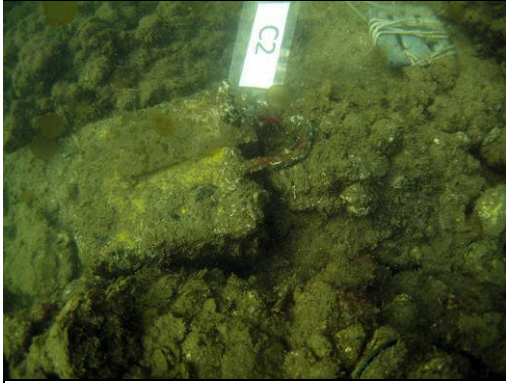
**APPENDIX E
PHOTO RECORDS OF CORAL
MONITORING SURVEYS**



C01- *Oulastrea crispata*



C01- *Oulastrea crispata*



C02- *Oulastrea crispata*



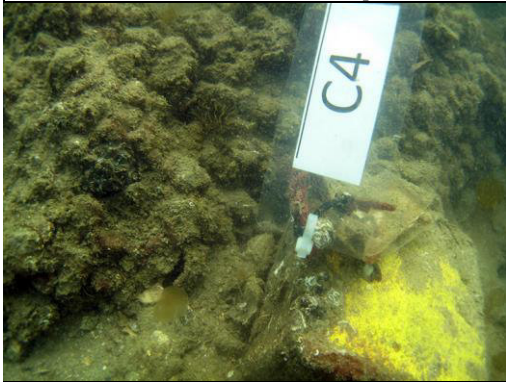
C02- *Oulastrea crispata*



C03- *Oulastrea crispata*



C03- *Oulastrea crispata*



C04- *Oulastrea crispata*



C04- *Oulastrea crispata*



C05- *Oulastrea crispata*



C05- *Oulastrea crispata*



C06- *Oulastrea crispata*



C06- *Oulastrea crispata*



C07- *Oulastrea crispata*



C07- *Oulastrea crispata*



C08- *Oulastrea crispata*



C08- *Oulastrea crispata*



C09- *Oulastrea crispata*



C09- *Oulastrea crispata*



C10- *Oulastrea crispata*



C10- *Oulastrea crispata*



A01- *Oulastrea crispata*



A01- *Oulastrea crispata*



A02- *Oulastrea crispata*



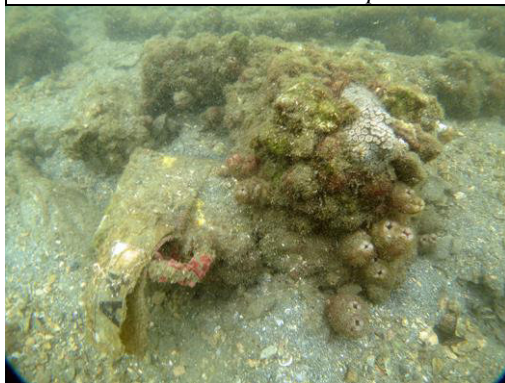
A02- *Oulastrea crispata*



A03- *Oulastrea crispata*



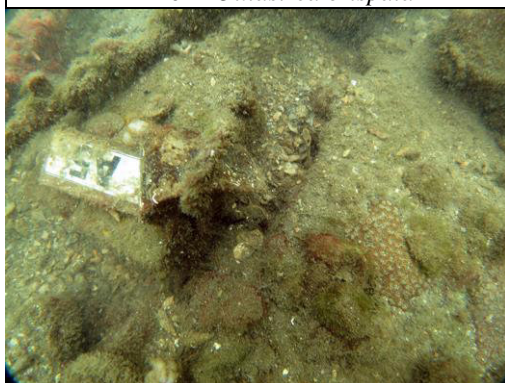
A03- *Oulastrea crispata*



A04- *Oulastrea crispata*



A04- *Oulastrea crispata*



A05- *Oulastrea crispata*



A05- *Oulastrea crispata*



A06- *Oulastrea crispata*



A06- *Oulastrea crispata*



A07- *Oulastrea crispata*



A07- *Oulastrea crispata*



A08- *Oulastrea crispata*



A08- *Oulastrea crispata*



A09- *Oulastrea crispata*



A09- *Oulastrea crispata*



A10- *Oulastrea crispata*



A10- *Oulastrea crispata*



B01- *Oulastrea crispata*



B01- *Oulastrea crispata*



B02- *Oulastrea crispata*



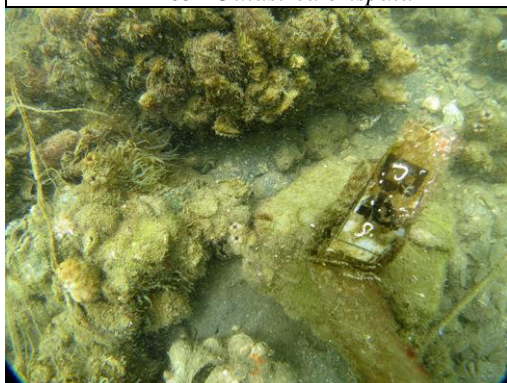
B02- *Oulastrea crispata*



B03- *Oulastrea crispata*



B03- *Oulastrea crispata*



B04- *Oulastrea crispata*



B04- *Oulastrea crispata*



B05- *Oulastrea crispata*



B05- *Oulastrea crispata*



B06– *Oulastrea crispata*



B06– *Oulastrea crispata*



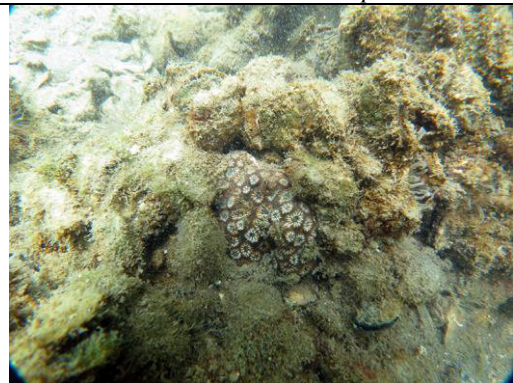
B07– *Oulastrea crispata*



B07– *Oulastrea crispata*



B08– *Oulastrea crispata*



B08 *Oulastrea crispata*



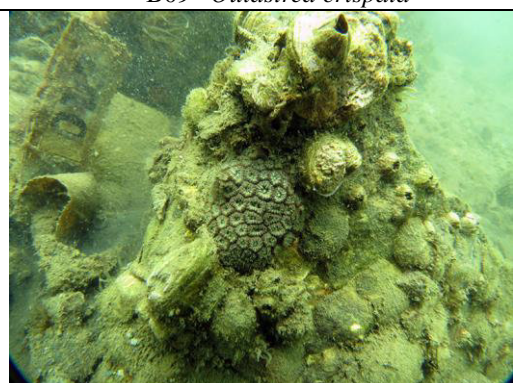
B09– *Oulastrea crispata*



B09– *Oulastrea crispata*



B10– *Oulastrea crispata*



B10– *Oulastrea crispata*

APPENDIX F
SUMMARY OF EXCEEDANCE

Exceedance Report

**(A) Exceedance Report for Water Quality
(NIL in the reporting period)**

**(B) Exceedance Report for Coral Monitoring
(NIL in the reporting period)**

**APPENDIX G
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE**

Appendix G – Environmental Mitigation and Implementation Schedule

Project Stage / Location	Potential Environmental Impact	Mitigation Measure	Implementation Agent
Construction / Construction Site and along the dredged sediment transportation route	Air quality	(1) The dredged sediment placed on barge will be properly covered as far as practicable. (2) Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, will be adhered to during the construction period. (3) Ultra low sulphur diesel fuel should be used for all diesel-operated plants and equipment on-site.	Contractor
Construction / Construction Site	Construction Noise	(1) Only well-maintained plants will be operated on-site and plants should be serviced regularly during the construction program. (2) Plants will be sited as far away from nearby NSRs as possible.	Contractor
Construction / Construction Site	Water quality impact	(1) Closed grab will be used for dredging to minimize release of fines and contaminants. (2) The maximum production rates as indicated in the approved Project Profile will be adopted for the proposed dredging activities. (3) Silt curtains will be deployed around the dredging operation. (4) Good site practices (as outlined in Section 5.7 above) will be adopted during dredging and during transportation and disposal of dredged sediments. (5) Discharge of sewage effluent into drainage and water environment is not allowed. Appropriate numbers of portable chemical toilets will be provided by a licensed contractor as necessary to serve the construction workers. (6) Collection and removal of floating refuse will be performed at regular intervals on a daily basis at or near the dredging sites. (7) Water quality monitoring will be undertaken before, during and after the dredging works	Contractor

Construction / Construction Site	Waste management	<p>(1) Disposal of dredged sediment will follow the requirements and procedures specified under the ETWB TCW No. 34/2002.</p> <p>(2) All chemical wastes from equipment maintenance will be handled, stored and disposed of in accordance with the requirements of the Waste Disposal (Chemical Waste) Regulation.</p> <p>(3) General refuse will be stored and disposed of separately from general construction waste and chemical waste. The storage bins for general refuse will be provided with lids, which will be kept closed to avoid odour nuisance and wind blown litter. The general refuse would be removed regularly and disposed of to licensed landfills.</p>	Contractor
Construction / Construction Site	Ecological impact	<p>(1) Mitigation measures to control water quality, i.e. constriction of dredging rate, use of closed grab for dredging and deployment of silt curtains, proposed in the water quality impact assessment will be adopted.</p> <p>(2) Standard good site practice and management proposed in the water quality impact assessment, such as tight fitting seals to bottom openings of barges/dredgers, effective site drainage, and provision of chemical toilets will be adopted.</p> <p>(3) Good site practices on noise control proposed in the noise impact assessment will be adopted.</p> <p>(4) The health status of the nearby coral colonies will be regularly monitored during the construction phase</p>	Contractor
Construction / Construction Site	Fisheries impact	<p>(1) Mitigation measures to control water quality, i.e. constriction of dredging rate, use of closed grab for dredging and deployment of silt curtains, proposed in the water quality impact assessment will be adopted.</p> <p>(2) Standard good site practice and management proposed in the water quality impact assessment, such as tight fitting seals to bottom openings of barges/dredgers, effective site drainage, and provision of chemical toilets will be adopted.</p>	Contractor
Construction / Construction Site	Visual impact	<p>(1) All construction plants would be sited as far away from nearby shoreline as possible.</p> <p>(2) All the sediment removal works will be carried out in day time (7:00 to 19:00) to minimize the use of night-time lighting.</p> <p>(3) Lighting will be carefully controlled if required</p>	Contractor

Construction / Construction Site	Cultural heritage impact	Antiquities and Monuments Office should be informed of any discovery of antiquities or supposed antiquities in the course of dredging work at all the Project sites in accordance with the Antiquities and Monuments Ordinance.	Contractor
Construction / Construction Site	Air quality, noise, water quality, ecology, fisheries, visual and cultural heritage	An environmental monitoring and audit programme as recommended in the approved Project Profile should be followed.	Contractor

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

APPENDIX H
SITE AUDIT SUMMARY

E-MAIL


TO :	Distribution List	DATE	9 June 2014
FROM	Dr. Priscilla Choy	SHEET 1 OF	1 + 6
REF. NO.	CCL/MA13027/Corres/Out/ep140609_audit140606		
SUBJECT	Contract No. CV/2012/01 Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Weekly Environmental Site Audit on 6 June 2014		

Dear Sir,

We have conducted the environmental site audits for the above project on 6 June 2014. Please find attached the completed checklist for your information and action.

Should you require any further information, please feel free to contact our Mr. Edmond Put at 2151 2035 or the undersigned at 2151 2089.

Yours faithfully,
Cinotech Consultants Limited



Dr. Priscilla Choy
Environmental Team Leader

Encl.

Distribution List:



ZHEC	(Attn.: Mr. C K LI)	lichikwong@yahoo.com.hk
	(Attn.: Mr. Y F CHO)	yufun.cho@chechk.com
CEDD	(Attn.: Mr. Walter WONG)	walterwong@cedd.gov.hk
	(Attn.: Mr. C M WONG)	cmwong@cedd.gov.hk
	(Attn.: Mr. T M WONG)	tmwong@cedd.gov.hk
ARUP	(Attn.: Mr. Thomas CHAN)	thomas.chan@arup.com
	(Attn.: Mr. Jacky LEE)	jacky-mh.lee@arup.com

Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	140606
Date	6 June 2014 (Friday)
Time	10:00-12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	B. Ecology	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	G. Others	
	• Follow-up on previous site audit session (Ref. No. 140528), all environmental deficiencies were observed to be improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Edmond Put		9 June 2014
Checked by	Dr. Priscilla Choy		9 June 2014

**Environmental Observations Identified during the Environmental Site Inspection
(6 June 2014)**

No environmental deficiency was identified during the site inspection.

**Rectification Actions taken by the Contractor for Environmental Deficiencies
Identified during Previous Audit Session**

No environmental deficiency was identified during previous site inspection.

Environmental Monitoring and Audit
Site Inspection Checklist

Audit Ref. No. 140606

Project	Contract No. <u>CV/2012/01</u>	Contractor	<u>Zhen Hua Engineering Company Limited</u>
	<u>Sediment Removal at Yin Tin Tsai (East) Fish Culture Zone</u>	Contractor ET	<u>Cinotech Consultants Ltd.</u>
Inspected By	ET Auditor: <u>Edward Pit</u>	Engineer Rep.	<u>Civil Engineer Development Department</u>
	ER: <u>/</u>	Inspection Date	<u>6/6/2014</u>
	Contractor: <u>Mr. C.K. Li</u>	Time Period	<u>10:00 - 12:00</u>
	IEC: <u>/</u>		

Part A Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy

Temperature 26 °C

Humidity High (RH>90%) Moderate (90%>RH>50%) Low (RH<50%)

Wind Calm Light Breeze Strong

	Work Area	Activities	Remarks
1.	<u>Dredging Area</u>	<u>N/A</u>	
2.			
3.			
4.			
5.			

Part B Water Quality
Land Based

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Is drainage system adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are there bunds to surround areas of earthworks for flood protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are cut-off ditches provide for all major site clearance/excavation works where soils would be exposed to control runoff from the areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 i. Are there temporary ditches for runoff discharge into appropriate watercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 ii. With silt retention pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are channels, earth/concrete bunds and sand bags deployed to direct surface runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 i. Do permanent drainage channels have: sediment basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 ii. traps and baffles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 i. Are there desilting facilities for settling runoff or groundwater pumped out from excavations / tunnels prior to disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 ii. Constructed from pre-formed individual cells?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 iii. Adequate capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 i. Are there oil interceptors in drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 ii. Oil and grease removed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 iii. Bypass to prevent flushing during periods of heavy rain?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are silt removal facilities, channels and manholes maintained and deposited silt/grit removed regularly to ensure that these facilities are functioning properly at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are exposed slope surfaces covered (by tarpaulin or other means)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Are open stockpiles of more than 50 m³ covered during rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are surface protection measures and arrangements implemented to prepare for arrival of a rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Are all sewer and drainage connections sealed to prevent debris, soil, sand etc. from entering public sewer before commencing any site formation work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Is ponding/stagnant water avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit
Site Inspection Checklist

	Yes	No	N/A*	Follow-up	N/C	Remarks
15 i. Is wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 ii. Are vehicles and plant cleaned of earth, mud and debris before leaving the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iii Sand and silt settled out and removed at least weekly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iv Access road leading to and exiting from wheel wash bay paved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 v. Access road sufficiently backfall toward the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Is toilet that connects to foul sewer or chemical toilets provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Marine Works

17. Are the barges loaded carefully to avoid splashing of material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. Are the barges used for transport of dredged materials fitted with tight bottom seals to prevent leakage during loading of materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Are the barges filled to a level to ensure the material not spill over during loading and transport to the disposal site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Is foam, oil, grease, sum, litter or other objectionable matter avoided on the water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Is overflow of material or polluted water from equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part C Marine Ecology

1. Is there silt curtain used to surround the piling barge & work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Is the silt curtain in well maintained and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Do the effluent discharge outside the silt curtain avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part D Air Quality

1. Are site vehicles travelling within speed limit of 8km/hr?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are site vehicles movements confined to designated haul roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Is the public road around the site entrance kept clean and free from dust?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Do areas of site with regular traffic movement have hard surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Are the haul roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Are unpaved areas watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Are the excavated dusty materials or stockpile of dusty materials covered by impervious materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Do the site vehicles use the wheel wash at the site exits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Are materials transports on trucks covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Is hoarding not less than 2.4 m tall provided beside roads or areas with public access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Are there enclosures around the main dust-generating activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Are site areas in which dust is likely to be generated sprayed with water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Observable dust sources	<input type="checkbox"/>	Wind erosion	<input type="checkbox"/>	Vehicle/equipment movements	<input type="checkbox"/>	_____
	<input type="checkbox"/>	Loading/unloading of materials	<input type="checkbox"/>	Others	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit
Site Inspection Checklist

		Yes	No	N/A*	Follow-up	N/C	Remarks
Part E Construction Noise Impact							
1.	Are the construction works scheduled to minimize noise nuisance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Are the works or equipment sited to minimize noise nuisance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Is silenced equipment used where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Are noise enclosures, noise barriers or portable noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Do air compressors have valid noise labels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Do compressors operate with doors closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others _____					

Part F Waste/Chemical Management							
1.	General refuse						
1 i.	Accumulation avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 ii.	Receptacles (e.g. rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 iii.	Disposed of regularly and properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Chemical waste, waste oil						
2 i.	Are good quality containers used for separating and storing chemical wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2 ii.	Transport and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Chemical/fuel storage area						
3 i.	Is storage area bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 ii.	Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 iii.	Area storage areas provided with locks & located on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Are appropriate labels securely attached on each chemical waste container to indicate their corresponding chemical characteristics?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 i.	Is construction waste reused where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 ii.	Disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Excavated Material						
6 i.	Appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6 ii.	If suspected contaminated, appropriate procedures followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Is the site general clean and tidy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Are oil leakage from machinery/vehicle/plant prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Is foam, oil, grease, litter or other objectionable matters in water of nearby drain/sewer avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Are inert wastes disposed to designated public fill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11.	Are non-inert wastes disposal to a licensed landfill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

**Environmental Monitoring and Audit
Site Inspection Checklist**

Part G Permits/Licences

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Are Construction Noise Permits available for inspection/posted at site entrance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are wastewater discharge licences available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Are trip tickets for chemical waste disposal available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Is Environmental Permit displaced conspicuously on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part H Follow-up for the Previous Site Audit on Date 29/4/2014 **(Ref. No.** 140528 **)**

1. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

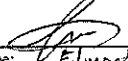
NA* - Not Applicable or Not Observed

Remarks/Observations

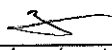
No major environmental deficiency was identified during inspection.

Signatures:


Contractor ET Auditor


(Name: Edmund Kit)
(Date: 6/6/2014)

Contractor's Representative


(Name: L. Chi Kwong)
(Date: 06/06/2014)

IEC Auditor


(Name: _____)
(Date: _____)

E-MAIL

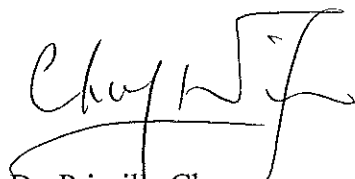
TO :	Distribution List	DATE	17 June 2014
FROM	Dr. Priscilla Choy	SHEET 1 OF	1 + 6
REF. NO.	CCL/MA13027/Corres/Out/ep140617_audit140612		
SUBJECT	Contract No. CV/2012/01 Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Weekly Environmental Site Audit on 12 June 2014		

Dear Sir,

We have conducted the environmental site audits for the above project on 12 June 2014. Please find attached the completed checklist for your information and action.

Should you require any further information, please feel free to contact our Mr. Edmond Put at 2151 2035 or the undersigned at 2151 2089.

Yours faithfully,
Cinotech Consultants Limited



Dr. Priscilla Choy
Environmental Team Leader

Encl.

Distribution List:



ZHEC	(Attn.: Mr. C K LI)	lichikwong@yahoo.com.hk
	(Attn.: Mr. Y F CHO)	yufun.cho@chechk.com
CEDD	(Attn.: Mr. Walter WONG)	walterwong@cedd.gov.hk
	(Attn.: Mr. C M WONG)	cmwong@cedd.gov.hk
	(Attn.: Mr. T M WONG)	tmwong@cedd.gov.hk
ARUP	(Attn.: Mr. Thomas CHAN)	thomas.chan@arup.com
	(Attn.: Mr. Jacky LEE)	jacky-mh.lee@arup.com

Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	140612
Date	12 June 2014 (Thursday)
Time	10:00-11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	B. Ecology	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	G. Others	
	• Follow-up on previous site audit session (Ref. No. 140606), all environmental deficiencies were observed to be improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Edmond Put		12 June 2014
Checked by	Dr. Priscilla Choy		12 June 2014

**Environmental Observations Identified during the Environmental Site Inspection
(12 June 2014)**

No environmental deficiency was identified during the site inspection.

**Rectification Actions taken by the Contractor for Environmental Deficiencies
Identified during Previous Audit Session**

No environmental deficiency was identified during previous site inspection.

Environmental Monitoring and Audit
Site Inspection Checklist

Audit Ref. No. 140612

Project	<u>Contract No. CV/2012/01</u> <u>Sediment Removal at Yin Tin Tsai (East) Fish Culture Zone</u>	Contractor	<u>Zhen Hua Engineering Company Limited</u> <u>Cinotech Consultants Ltd.</u> <u>Civil Engineer Development Department</u>
Inspected By	<u>ET Auditor: Edward Pit</u> <u>ER: /</u> <u>Contractor: Mr. C.K. Li</u> <u>IEC: /</u>	Inspection Date	<u>12/6/2014</u>
		Time Period	<u>10:00 - 11:00</u>

Part A Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy

Temperature 31 °C

Humidity High (RH>90%) Moderate (90%>RH>50%) Low (RH<50%)

Wind Calm Light Breeze Strong

	Work Area	Activities	Remarks
1.	<u>Dredging Area</u>	<u>N/A</u>	
2.			
3.			
4.			
5.			

Part B Water Quality
Land Based

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Is drainage system adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are there bunds to surround areas of earthworks for flood protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are cut-off ditches provide for all major site clearance/excavation works where soils would be exposed to control runoff from the areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 i. Are there temporary ditches for runoff discharge into appropriate watercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 ii. With silt retention pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are channels, earth/concrete bunds and sand bags deployed to direct surface runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 i. Do permanent drainage channels have: sediment basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 ii. traps and baffles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 i. Are there desilting facilities for settling runoff or groundwater pumped out from excavations / tunnels prior to disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 ii. Constructed from pre-formed individual cells?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 iii. Adequate capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 i. Are there oil interceptors in drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 ii. Oil and grease removed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 iii. Bypass to prevent flushing during periods of heavy rain?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are silt removal facilities, channels and manholes maintained and deposited silt/grit removed regularly to ensure that these facilities are functioning properly at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are exposed slope surfaces covered (by tarpaulin or other means)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Are open stockpiles of more than 50 m³ covered during rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are surface protection measures and arrangements implemented to prepare for arrival of a rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Are all sewer and drainage connections sealed to prevent debris, soil, sand etc. from entering public sewer before commencing any site formation work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Is ponding/stagnant water avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NA* - Not Applicable or Not Observed

**Environmental Monitoring and Audit
Site Inspection Checklist**

	Yes	No	N/A*	Follow-up	N/C	Remarks
15 i. Is wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 ii. Are vehicles and plant cleaned of earth, mud and debris before leaving the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iii Sand and silt settled out and removed at least weekly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iv Access road leading to and exiting from wheel wash bay paved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 v. Access road sufficiently backfall toward the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Is toilet that connects to foul sewer or chemical toilets provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Marine Works						
17. Are the barges loaded carefully to avoid splashing of material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. Are the barges used for transport of dredged materials fitted with tight bottom seals to prevent leakage during loading of materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Are the barges filled to a level to ensure the material not spill over during loading and transport to the disposal site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Is foam, oil, grease, sum, litter or other objectionable matter avoided on the water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Is overflow of material or polluted water from equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part C Marine Ecology

1. Is there silt curtain used to surround the piling barge & work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Is the silt curtain in well maintained and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Do the effluent discharge outside the silt curtain avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part D Air Quality

1. Are site vehicles travelling within speed limit of 8km/hr?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are site vehicles movements confined to designated haul roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Is the public road around the site entrance kept clean and free from dust?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Do areas of site with regular traffic movement have hard surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Are the haul roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Are unpaved areas watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Are the excavated dusty materials or stockpile of dusty materials covered by impervious materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Do the site vehicles use the wheel wash at the site exits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Are materials transports on trucks covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Is hoarding not less than 2.4 m tall provided beside roads or areas with public access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Are there enclosures around the main dust-generating activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Are site areas in which dust is likely to be generated sprayed with water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. Are vehicles and equipment switched off while not in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Observable dust sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Wind erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Vehicle/equipment movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Others _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit
Site Inspection Checklist

		Yes	No	N/A*	Follow-up	N/C	Remarks
Part E Construction Noise Impact							
1.	Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Is idle equipment turned off or throttled down?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Is silenced equipment used where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Are noise enclosures, noise barriers or portable noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Do air compressors have valid noise labels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Do compressors operate with doors closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Others _____					

Part F Waste/Chemical Management

1.	General refuse						
1 i.	Accumulation avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 ii.	Receptacles (e.g. rubbish bins) available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 iii.	Disposed of regularly and properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Chemical waste, waste oil						
2 i.	Are good quality containers used for separating and storing chemical wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2 ii.	Transport and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Chemical/fuel storage area						
3 i.	Is storage area bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 ii.	Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 iii.	Area storage areas provided with locks & located on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Are appropriate labels securely attached on each chemical waste container to indicate their corresponding chemical characteristics?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 i.	Is construction waste reused where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 ii.	Disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Excavated Material						
6 i.	Appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6 ii.	If suspected contaminated, appropriate procedures followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Is the site general clean and tidy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Are oil leakage from machinery/vehicle/plant prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Is foam, oil, grease, litter or other objectionable matters in water of nearby drain/sewer avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Are inert wastes disposed to designated public fill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11.	Are non-inert wastes disposal to a licensed landfill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

**Environmental Monitoring and Audit
Site Inspection Checklist**

Part G Permits/Licences

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Are Construction Noise Permits available for inspection/posted at site entrance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are wastewater discharge licences available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are trip tickets for chemical waste disposal available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is Environmental Permit displayed conspicuously on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Part H Follow-up for the Previous Site Audit on Date: 6/6/2014 (Ref. No. 140606)

1. Is the situation in item <u>1</u> improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NA* - Not Applicable or Not Observed

Remarks/Observations

No major environmental deficiency was identified during site inspection.

Signatures:

Contractor ET Auditor

[Signature]
(Name: Edmund Hui)
(Date: 12/6/2014)

Contractor's Representative

[Signature]
(Name: Li Chi Kwong)
(Date: 12-06-2014)

IEC Auditor

(Name: _____)
(Date: _____)

E-MAIL


TO :	Distribution List	DATE	23 June 2014
FROM	Dr. Priscilla Choy	SHEET 1 OF	1 + 6
REF. NO.	CCL/MA13027/Corres/Out/ep140623_audit140620		
SUBJECT	Contract No. CV/2012/01 Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Weekly Environmental Site Audit on 20 June 2014		

Dear Sir,

We have conducted the environmental site audits for the above project on 20 June 2014. Please find attached the completed checklist for your information and action.

Should you require any further information, please feel free to contact our Mr. Edmond Put at 2151 2035 or the undersigned at 2151 2089.

Yours faithfully,
Cinotech Consultants Limited



Dr. Priscilla Choy
Environmental Team Leader

Encl.

Distribution List:

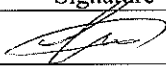

ZHEC	(Attn.: Mr. C K LI)	lichikwong@yahoo.com.hk
	(Attn.: Mr. Y F CHO)	yufun.cho@chechk.com
CEDD	(Attn.: Mr. Walter WONG)	walterwong@cedd.gov.hk
	(Attn.: Mr. C M WONG)	cmwong@cedd.gov.hk
	(Attn.: Mr. T M WONG)	tmwong@cedd.gov.hk
ARUP	(Attn.: Mr. Thomas CHAN)	thomas.chan@arup.com
	(Attn.: Mr. Jacky LEE)	jacky-mh.lee@arup.com

Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	140620
Date	20 June 2014 (Friday)
Time	10:00-12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	B. Ecology	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	G. Others	
	• Follow-up on previous site audit session (Ref. No. 140612), all environmental deficiencies were observed to be improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Edmond Put		20 June 2014
Checked by	Dr. Priscilla Choy		20 June 2014

**Environmental Observations Identified during the Environmental Site Inspection
(20 June 2014)**

No environmental deficiency was identified during the site inspection.

**Rectification Actions taken by the Contractor for Environmental Deficiencies
Identified during Previous Audit Session**

No environmental deficiency was identified during previous site inspection.

Environmental Monitoring and Audit
Site Inspection Checklist

Audit Ref. No. 140620

Project	Contract No. <u>CV/2012/01</u>	Contractor	<u>Zhen Hua Engineering Company Limited</u>
	<u>Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone</u>		<u>Cinotech Consultants Ltd.</u>
Inspected By	ET Auditor: <u>Edmond Pat</u>	Engineer Rep.	<u>Civil Engineer Development Department</u>
	ER: <u>/</u>	Inspection Date	<u>20/6/2014</u>
	Contractor: <u>Mr. C.K. Li</u>	Time Period	<u>10:00 - 12:00</u>
	IEC: <u>Mr. Thomas Chan</u>		

Part A Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy

Temperature 30 °C

Humidity High (RH>90%) Moderate (90%>RH>50%) Low (RH<50%)

Wind Calm Light Breeze Strong

	Work Area	Activities	Remarks
1.	<u>Dredging Area</u>	<u>NA</u>	
2.			
3.			
4.			
5.			

Part B Water Quality

Land Based

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Is drainage system adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are there bunds to surround areas of earthworks for flood protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are cut-off ditches provide for all major site clearance/excavation works where soils would be exposed to control runoff from the areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 i. Are there temporary ditches for runoff discharge into appropriate watercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 ii. With silt retention pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are channels, earth/concrete bunds and sand bags deployed to direct surface runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 i. Do permanent drainage channels have: sediment basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 ii. traps and baffles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 i. Are there desilting facilities for settling runoff or groundwater pumped out from excavations / tunnels prior to disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 ii. Constructed from pre-formed individual cells?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 iii. Adequate capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 i. Are there oil interceptors in drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 ii. Oil and grease removed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 iii. Bypass to prevent flushing during periods of heavy rain?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are silt removal facilities, channels and manholes maintained and deposited silt/grit removed regularly to ensure that these facilities are functioning properly at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are exposed slope surfaces covered (by tarpaulin or other means)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Are open stockpiles of more than 50 m³ covered during rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are surface protection measures and arrangements implemented to prepare for arrival of a rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Are all sewer and drainage connections sealed to prevent debris, soil, sand etc. from entering public sewer before commencing any site formation work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Is ponding/stagnant water avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NA* - Not Applicable or Not Observed

**Environmental Monitoring and Audit
Site Inspection Checklist**

	Yes	No	N/A*	Follow-up	N/C	Remarks
15 i. Is wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 ii. Are vehicles and plant cleaned of earth, mud and debris before leaving the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iii Sand and silt settled out and removed at least weekly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iv Access road leading to and exiting from wheel wash bay paved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 v. Access road sufficiently backfall toward the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Is toilet that connects to foul sewer or chemical toilets provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Marine Works

17. Are the barges loaded carefully to avoid splashing of material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. Are the barges used for transport of dredged materials fitted with tight bottom seals to prevent leakage during loading of materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Are the barges filled to a level to ensure the material not spill over during loading and transport to the disposal site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Is foam, oil, grease, sump, litter or other objectionable matter avoided on the water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Is overflow of material or polluted water from equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part C Marine Ecology

1. Is there silt curtain used to surround the piling barge & work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Is the silt curtain in well maintained and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Do the effluent discharge outside the silt curtain avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part D Air Quality

1. Are site vehicles travelling within speed limit of 8km/hr?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are site vehicles movements confined to designated haul roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Is the public road around the site entrance kept clean and free from dust?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Do areas of site with regular traffic movement have hard surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Are the haul roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Are unpaved areas watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Are the excavated dusty materials or stockpile of dusty materials covered by impervious materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Do the site vehicles use the wheel wash at the site exits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Are materials transports on trucks covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Is hoarding not less than 2.4 m tall provided beside roads or areas with public access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Are there enclosures around the main dust-generating activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Are site areas in which dust is likely to be generated sprayed with water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Observable dust sources	<input type="checkbox"/>	Wind erosion	<input type="checkbox"/>	Vehicle/equipment movements	<input type="checkbox"/>	_____
	<input type="checkbox"/>	Loading/unloading of materials	<input type="checkbox"/>	Others	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit Site Inspection Checklist

	Yes	No	N/A*	Follow-up	N/C	Remarks
Part E Construction Noise Impact						
1. Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Is silenced equipment used where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Are noise enclosures, noise barriers or portable noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Do air compressors have valid noise labels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Do compressors operate with doors closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Major noise source(s)	<input checked="" type="checkbox"/>	Traffic				
	<input type="checkbox"/>	Construction activities outside of site				
	<input type="checkbox"/>	Construction activities inside of site				
	<input type="checkbox"/>	Others _____				

Part F Waste/Chemical Management						
1. General refuse						
1 i.	Accumulation avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 ii.	Receptacles (e.g. rubbish bins) available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1 iii.	Disposed of regularly and properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2. Chemical waste, waste oil						
2 i.	Are good quality containers used for separating and storing chemical wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2 ii.	Transport and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3. Chemical/fuel storage area						
3 i.	Is storage area bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3 ii.	Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3 iii.	Area storage areas provided with locks & located on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.	Are appropriate labels securely attached on each chemical waste container to indicate their corresponding chemical characteristics?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5 i.	Is construction waste reused where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5 ii.	Disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. Excavated Material						
6 i.	Appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6 ii.	If suspected contaminated, appropriate procedures followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7.	Is the site general clean and tidy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Are oil leakage from machinery/vehicle/plant prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Is foam, oil, grease, litter or other objectionable matters in water of nearby drain/sewer avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Are inert wastes disposed to designated public fill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
11.	Are non-inert wastes disposal to a licensed landfill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

**Environmental Monitoring and Audit
Site Inspection Checklist**

Part G Permits/Licences

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Are Construction Noise Permits available for inspection/posted at site entrance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are wastewater discharge licences available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are trip tickets for chemical waste disposal available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is Environmental Permit displaced conspicuously on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Part H Follow-up for the Previous Site Audit on Date: 18/6/2014 (Ref. No. 140612)

1. Is the situation in item <u>1</u> improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	


NA* - Not Applicable or Not Observed

Remarks/Observations

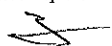
No major environmental deficiency was identified during site inspection.

Signatures:

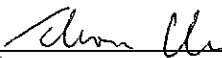
Contractor ET Auditor


 (Name: Edward Rot)
 (Date: 20/6/2014)

Contractor's Representative


 (Name: Yi Chi Kwok)
 (Date: 20/06-2014)

IEC Auditor


 (Name: Thomas Chan)
 (Date: 20/06/14)

E-MAIL

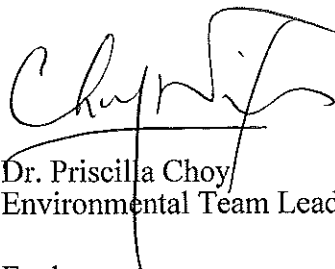
TO :	Distribution List	DATE	26 June 2014
FROM	Dr. Priscilla Choy	SHEET 1 OF	1 + 6
REF. NO.	CCL/MA13027/Corres/Out/ep140626_audit140626		
SUBJECT	Contract No. CV/2012/01 Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Weekly Environmental Site Audit on 26 June 2014		

Dear Sir,

We have conducted the environmental site audits for the above project on 26 June 2014. Please find attached the completed checklist for your information and action.

Should you require any further information, please feel free to contact our Mr. Edmond Put at 2151 2035 or the undersigned at 2151 2089.

Yours faithfully,
Cinotech Consultants Limited



Dr. Priscilla Choy
Environmental Team Leader

Encl.

Distribution List:

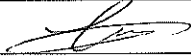
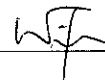
ZHEC	(Attn.: Mr. C K LI)	lichikwong@yahoo.com.hk
	(Attn.: Mr. Y F CHO)	yufun.cho@chechk.com
CEDD	(Attn.: Mr. Walter WONG)	walterwong@cedd.gov.hk
	(Attn.: Mr. C M WONG)	cmwong@cedd.gov.hk
	(Attn.: Mr. T M WONG)	tmwong@cedd.gov.hk
ARUP	(Attn.: Mr. Thomas CHAN)	thomas.chan@arup.com
	(Attn.: Mr. Jacky LEE)	jacky-mh.lee@arup.com

Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	140626
Date	26 June 2014 (Thursday)
Time	10:00-11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	B. Ecology	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	G. Others	
	• Follow-up on previous site audit session (Ref. No. 140620), all environmental deficiencies were observed to be improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Edmond Put		26 June 2014
Checked by	Dr. Priscilla Choy		26 June 2014

**Environmental Observations Identified during the Environmental Site Inspection
(26 June 2014)**

No environmental deficiency was identified during the site inspection.

**Rectification Actions taken by the Contractor for Environmental Deficiencies
Identified during Previous Audit Session**

No environmental deficiency was identified during previous site inspection.

Environmental Monitoring and Audit
Site Inspection Checklist

Audit Ref. No. 140626

Project	Contract No. <u>CV/2012/01</u>	Contractor	<u>Zhen Hua Engineering Company Limited</u>
	<u>Sediment Removal at Yin Tin Tsai (East) Fish Culture Zone</u>	Contractor ET	<u>Cinotech Consultants Ltd.</u>
Inspected By	ET Auditor: <u>Edward Pui</u>	Engineer Rep.	<u>Civil Engineer Development Department</u>
	ER: <u>/</u>	Inspection Date	<u>26/6/2014</u>
	Contractor: <u>Mr. C.K. Li</u>	Time Period	<u>10:00 - 11:00</u>
	IEC: <u>/</u>		

Part A Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy

Temperature 31 °C

Humidity High (RH>90%) Moderate (90%>RH>50%) Low (RH<50%)

Wind Calm Light Breeze Strong

1.	Work Area <u>Dredging Area</u>	Activities <u>N/A</u>	Remarks					
			Yes	No	N/A*	Follow-up	N/C	Remarks
2.								
3.								
4.								
5.								

Part B Water Quality

Land Based

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Is drainage system adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are there bunds to surround areas of earthworks for flood protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are cut-off ditches provide for all major site clearance/excavation works where soils would be exposed to control runoff from the areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 i. Are there temporary ditches for runoff discharge into appropriate watercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 ii. With silt retention pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are channels, earth/concrete bunds and sand bags deployed to direct surface runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 i. Do permanent drainage channels have: sediment basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 ii. traps and baffles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 i. Are there desilting facilities for settling runoff or groundwater pumped out from excavations / tunnels prior to disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 ii. Constructed from pre-formed individual cells?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 iii. Adequate capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 i. Are there oil interceptors in drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 ii. Oil and grease removed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8 iii. Bypass to prevent flushing during periods of heavy rain?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are silt removal facilities, channels and manholes maintained and deposited silt/grit removed regularly to ensure that these facilities are functioning properly at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is exposed earth stabilized after earthworks have been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are exposed slope surfaces covered (by tarpaulin or other means)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Are open stockpiles of more than 50 m³ covered during rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are surface protection measures and arrangements implemented to prepare for arrival of a rainstorm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Are all sewer and drainage connections sealed to prevent debris, soil, sand etc. from entering public sewer before commencing any site formation work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Is ponding/stagnant water avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit
Site Inspection Checklist

	Yes	No	N/A*	Follow-up	N/C	Remarks
15 i. Is wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 ii. Are vehicles and plant cleaned of earth, mud and debris before leaving the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iii Sand and silt settled out and removed at least weekly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 iv Access road leading to and exiting from wheel wash bay paved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15 v. Access road sufficiently backfall toward the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Is toilet that connects to foul sewer or chemical toilets provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Marine Works

17. Are the barges loaded carefully to avoid splashing of material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. Are the barges used for transport of dredged materials fitted with tight bottom seals to prevent leakage during loading of materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Are the barges filled to a level to ensure the material not spill over during loading and transport to the disposal site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Is foam, oil, grease, silt, litter or other objectionable matter avoided on the water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Is overflow of material or polluted water from equipment avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part C Marine Ecology

1. Is there silt curtain used to surround the piling barge & work?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Is the silt curtain in well maintained and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Do the effluent discharge outside the silt curtain avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Part D Air Quality

1. Are site vehicles travelling within speed limit of 8km/hr?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are site vehicles movements confined to designated haul roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Is the public road around the site entrance kept clean and free from dust?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Do areas of site with regular traffic movement have hard surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Are the haul roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Are unpaved areas watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Are the excavated dusty materials or stockpile of dusty materials covered by impervious materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Do the site vehicles use the wheel wash at the site exits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Are materials transports on trucks covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Is hoarding not less than 2.4 m tall provided beside roads or areas with public access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Are there enclosures around the main dust-generating activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Are site areas in which dust is likely to be generated sprayed with water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Observable dust sources	<input type="checkbox"/>	Wind erosion	<input type="checkbox"/>	Vehicle/equipment movements	<input type="checkbox"/>	_____
	<input type="checkbox"/>	Loading/unloading of materials	<input type="checkbox"/>	Others	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit Site Inspection Checklist

		Yes	No	N/A*	Follow-up	N/C	Remarks
Part E Construction Noise Impact							
1.	Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Is silenced equipment used where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Are noise enclosures, noise barriers or portable noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Do air compressors have valid noise labels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Do compressors operate with doors closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others _____					

Part F Waste/Chemical Management							
1.	General refuse						
1 i.	Accumulation avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 ii.	Receptacles (e.g. rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1 iii.	Disposed of regularly and properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	Chemical waste, waste oil						
2 i.	Are good quality containers used for separating and storing chemical wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2 ii.	Transport and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Chemical/fuel storage area						
3 i.	Is storage area bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 ii.	Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3 iii.	Area storage areas provided with locks & located on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Are appropriate labels securely attached on each chemical waste container to indicate their corresponding chemical characteristics?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 i.	Is construction waste reused where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5 ii.	Disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	Excavated Material						
6 i.	Appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6 ii.	If suspected contaminated, appropriate procedures followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	Is the site general clean and tidy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	Are oil leakage from machinery/vehicle/plant prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
9.	Is foam, oil, grease, litter or other objectionable matters in water of nearby drain/sewer avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
10.	Are inert wastes disposed to designated public fill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
11.	Are non-inert wastes disposal to a licensed landfill with appropriate records?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

NA* - Not Applicable or Not Observed

Environmental Monitoring and Audit
Site Inspection Checklist

Part G Permits/Licences

	Yes	No	N/A*	Follow-up	N/C	Remarks
1. Are Construction Noise Permits available for inspection/posted at site entrance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are wastewater discharge licences available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are trip tickets for chemical waste disposal available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is Environmental Permit displayed conspicuously on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Part H Follow-up for the Previous Site Audit on Date: 20/6/2014 (Ref. No. 140620)

1. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Is the situation in item _____ improved/rectified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

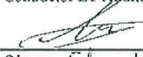
NA* - Not Applicable or Not Observed

Remarks/Observations


No major environmental deficiency was identified during site inspection.

Signatures:

Contractor ET Auditor


(Name: Edmund Pui)
(Date: 26/6/2014)

Contractor's Representative


(Name: Li Chi Kwong)
(Date: 26/06/2014)

IEC Auditor


(Name: _____)
(Date: _____)

**APPENDIX I
COMPLAINT LOG**

Appendix I – Complaint Log

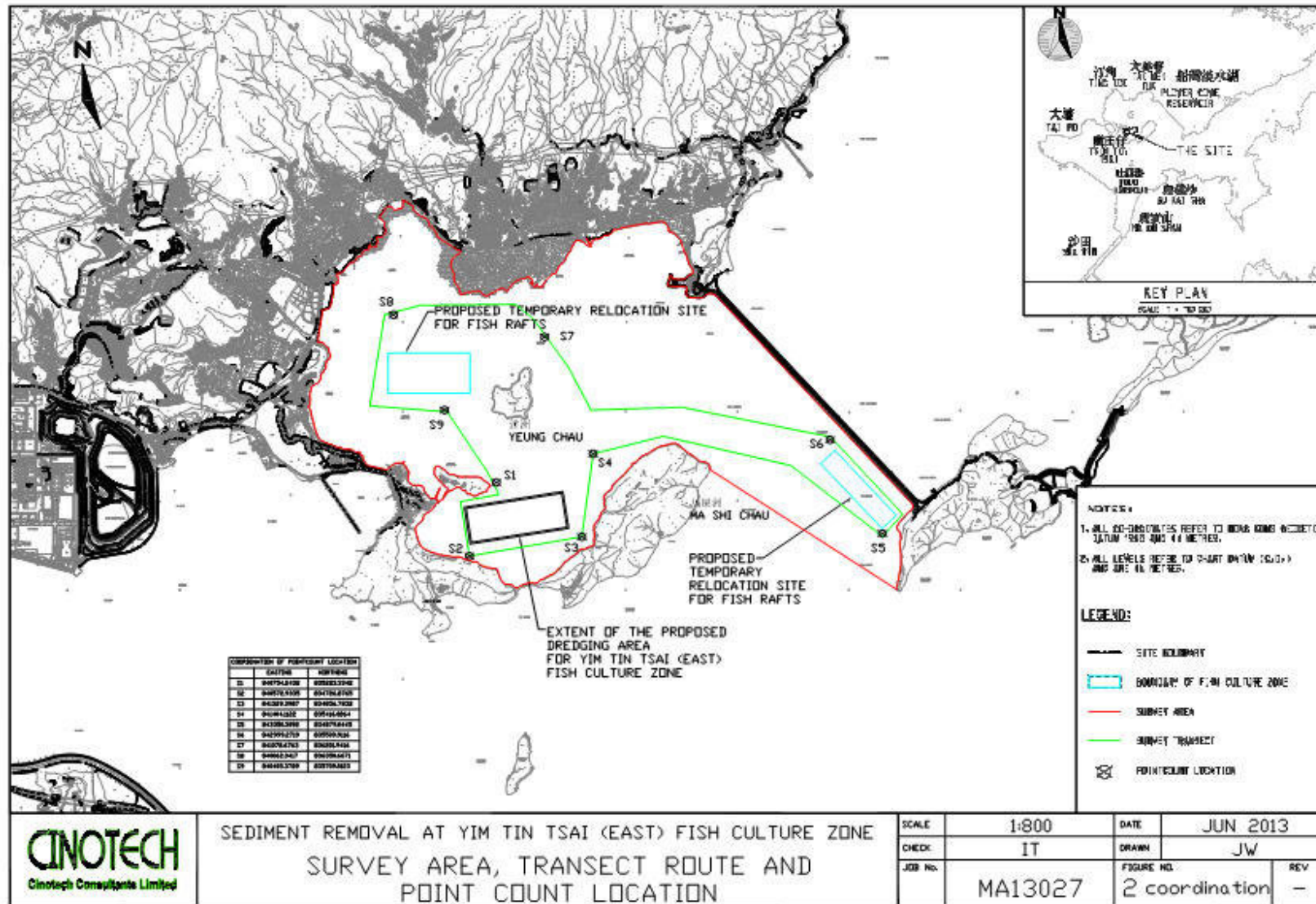
Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

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

**APPENDIX J
ARDEIDS AND WHITE-BELLIED
SEA EAGLE MONITORING
RESULTS**

Appendix J - Ardeids and White-bellied Sea Eagle Monitoring Results

Date	Time	Location	Construction Works within Works Area	Weather Conditions	Observed Activities outside Works Area
23/06/14	6:35-8:50	<ul style="list-style-type: none">● Point Count Location S1 – S9● Survey Transect Route <p>(Refer to figure below)</p>	Not Observed	Cloudy	Not Observed



Point count

Species	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	Point 9	Subtotal	Walk Transect
Ardeids											
● Great Egret	3	2	2	0	0	1	1	3	6	18	
● Little Egret	2	0	3	0	1	0	1	0	1	8	
● Grey Heron	0	0	0	0	0	0	0	0	1	1	
● Chinese Pond Heron	0	0	0	0	0	0	0	0	0	0	
● Night Heron	1	0	0	0	0	0	0	0	0	1	
White-bellied Sea Eagle	0	0	0	0	0	0	1	0	0	1	
No. of Birds at Each Point:	6	2	5	0	1	1	3	3	8	29	
No. of Birds recorded from Point Count:	29										
No. of Nests at Yeung Chau	Great Egret		Little Egret		Black-crowned Night Heron		Cattle Egret		White-bellied Sea Eagle		Other: (Specify) _____
	Not Observed								1	Not Observed	

Transect Count

Species	Transect 1→2	Transect 2→3	Transect 3→4	Transect 4→5	Transect 5→6	Transect 6→7	Transect 7→8	Transect 8→9	Transect 9→1	Subtotal
Ardeids										10
● Great Egret	1	1	0	1	0	0	1	0	0	4
● Little Egret	0	0	1	0	0	0	2	0	0	3
● Grey Heron	0	0	0	0	0	0	0	0	0	0
● Chinese Pond Heron	0	0	0	0	0	0	0	0	0	0
● Night Heron	3	0	0	0	0	0	0	0	0	3
White-bellied Sea Eagle	0	0	0	0	0	0	0	0	0	0

Summaries of total of Ardeids,, White-bellied Sea Eagles and Nests recorded each month

Species		Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	April 2014	May 2014	June 2014
Point count	Ardeids	54	45	46	39	34	36	64	28
	● Great Egret	36	17	17	13	14	11	12	18
	● Little Egret	14	18	15	21	10	22	50	8
	● Grey Heron	4	5	4	1	6	1	2	1
	● Chinese Pond Heron	0	4	10	2	4	1	0	0
	● Little Green Heron	0	1	0	0	0	0	0	0
	● Night Heron	0	0	0	0	0	0	0	1
	White-bellied Sea Eagle	2	2	1	2	0	2	1	1
No. of Nests at Yeung Chau	0	1	1	1	1	1	1	1	
Transect Count	Ardeids	56	43	40	31	32	14	13	10
	● Great Egret	25	21	18	19	15	7	8	4
	● Little Egret	26	18	16	9	11	5	4	3
	● Grey Heron	3	4	4	3	4	1	1	0
	● Chinese Pond Heron	2	0	2	0	2	1	0	0
	● Night Heron	0	0	0	0	0	0	0	3
	White-bellied Sea Eagle	0	0	0	0	0	0	0	0

**APPENDIX K
PHOTOGRAPHIC RECORDS OF
ARDEIDS AND WHITE-BELLIED
SEA EAGLE MONITORING**

Appendix K - Photographic records of Ardeids and White-bellied Sea Eagle Monitoring

Point count Location S1



Point count Location S1



Point count Location S2



Point count Location S2



Point count Location S3



Point count Location S3



Point count Location S4



Point count Location S4



Point count Location S5



Point count Location S5



Point count Location S6



Point count Location S7

Identified location of White-bellied Sea Eagle Nest



Point count Location S7



Point count Location S8



Point count Location S8



Point count Location S9



Point count Location S9



**APPENDIX L
COPIES OF CALIBRATION
CERTIFICATES FOR WATER
QUALITY MONITORING**

TEST REPORT

APPLICANT: Cinotech Consultants Limited
Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	C/W/140505-1
Date of Issue:	2014-05-05
Date Received:	2014-05-05
Date Tested:	2014-05-05
Date Completed:	2014-05-05
Next Due Date:	2014-08-06

ATTN: Mr. W.K. Tang

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

Test conditions:

Room Temperature : 23 degree Celsius
Relative Humidity : 57%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, L/N: 11J100025
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution
Dissolved Oxygen Sensor, Model: 6562, L/N: 07E100029
1. Performance check against Winkler titration
Turbidity Sensor, Model: 6136, S/N: 12B100900
1. Calibration check with Formazin standard solution
pH Meter, Model: 6561, L/N: 11H
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
Conductivity (APHA 20ed 2510), Salinity (APHA 20ed 2520B)
Dissolved Oxygen (APHA 20ed 4500-O C), Turbidity (APHA 19ed 2130 B),
pH (APHA 19th 4500-H+ B)

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE

Laboratory Manager

TEST REPORT

Test Report No.:	C/W/140505-1
Date of Issue:	2014-05-05
Date Received:	2014-05-05
Date Tested:	2014-05-05
Date Completed:	2014-05-05
Next Due Date:	2014-08-06

Page: 2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, $\mu\text{S}/\text{cm}$		Correction, $\mu\text{S}/\text{cm}$	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		
30.0	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
1000	1000	0	1000 ± 100

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*****

TEST REPORT

APPLICANT: Cinotech Consultants Limited
Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	C/W/140505-2
Date of Issue:	2014-05-05
Date Received:	2014-05-05
Date Tested:	2014-05-05
Date Completed:	2014-05-05
Next Due Date:	2014-08-06

ATTN: Mr. W.K. Tang

Page: 1 of 2

Certificate of Calibration

Item for calibration:

Description : Sonde Environmental Monitoring System
Manufacturer : YSI
Model No. : 6920-M
Serial No. : 03H1764AA
Equipment No. : W.03.03

Test conditions:

Room Temperature : 23 degree Celsius
Relative Humidity : 57%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, L/N: 03H1461
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution
Dissolved Oxygen Sensor, Model: 6562, L/N: 08C100610
1. Performance check against Winkler titration
Turbidity Sensor, Model: 6136, S/N: 09M100672
1. Calibration check with Formazin standard solution
pH Meter, Model: 6561, L/N: 07E
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
Conductivity (APHA 20ed 2510), Salinity (APHA 20ed 2520B)
Dissolved Oxygen (APHA 20ed 4500-O C), Turbidity (APHA 19ed 2130 B),
pH (APHA 19th 4500-H+ B)

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



PATRICK TSE
Laboratory Manager

TEST REPORT

Test Report No.:	C/W/140505-2
Date of Issue:	2014-05-05
Date Received:	2014-05-05
Date Tested:	2014-05-05
Date Completed:	2014-05-05
Next Due Date:	2014-08-06

Page: 2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, $\mu\text{S}/\text{cm}$		Correction, $\mu\text{S}/\text{cm}$	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 \pm 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 \pm 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	\pm 0.2
Half-saturated	5.6	5.6	0.0	\pm 0.2
Zero	0.0	0.0	0.0	\pm 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 \pm 0.05
100	100	0	100 \pm 5
1000	1000	0	1000 \pm 100

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 \pm 0.05

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

**APPENDIX M
WATER QUALITY MONITORING
RESULTS**

Water Quality Monitoring Results at F4 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	15:55	Surface	1	28.2 28.3	28.3	8.0 8.0	8.0	29.7 29.7	29.7	80.4 80.4	80.4	7.6 7.6	7.6	7.2	2.0 2.0	2.0	2.0	6.2	6.3
				Middle	4.5	25.6 25.2	25.4	7.9 7.8	7.9	31.3 31.4	31.4	66.3 65.1	65.7	6.8 6.7	6.8		2.0 2.0	2.0		5.5	
				Bottom	8	24.2 24.2	24.2	7.7 7.7	7.7	32.2 32.2	32.2	65.4 65.4	65.4	6.8 6.8	6.8		1.9 1.9	1.9		7.2	
6-Jun-14	Cloudy	Calm	17:09	Surface	1	28.3 28.3	28.3	8.3 8.3	8.3	30.2 30.3	30.3	105.9 108.0	107.0	7.0 7.1	7.1	7.4	4.0 4.0	4.0	3.9	8.9	7.3
				Middle	4.5	24.7 24.7	24.7	8.1 8.1	8.1	32.2 32.2	32.2	110.5 110.2	110.4	7.6 7.6	7.6		3.8 3.7	3.8		4.8	
				Bottom	8	23.6 23.6	23.6	8.0 8.0	8.0	32.8 32.8	32.8	91.2 90.5	90.9	6.4 6.4	6.4		3.8 3.7	3.8		8.2	
9-Jun-14	Cloudy	Calm	09:55	Surface	1	27.2 27.2	27.2	8.0 8.0	8.0	30.2 30.2	30.2	104.6 105.5	105.1	7.0 7.1	7.1	7.0	1.0 1.0	1.0	0.7	13.3	10.3
				Middle	4.5	26.8 26.8	26.8	8.0 8.0	8.0	31.3 31.4	31.4	102.8 101.3	102.1	6.9 6.8	6.9		0.7 0.6	0.7		8.4	
				Bottom	8	24.2 24.2	24.2	7.7 7.7	7.7	33.0 33.0	33.0	83.9 76.3	80.1	5.8 5.3	5.6		0.3 0.3	0.3		9.2	

Water Quality Monitoring Results at F4 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:58	Surface	1	28.1 28.2	28.2	8.0 8.0	8.0	29.9 29.9	29.9	66.3 68.5	67.4	6.6 6.8	6.7	7.0	2.0 2.0	2.0	2.7	5.6	9.8
				Middle	4.5	25.0 24.9	25.0	7.7 7.7	7.7	31.8 31.8	31.8	73.0 73.0	73.0	7.3 7.3	7.3		3.9 4.1	4.0		9.3	
				Bottom	8	24.1 24.0	24.1	7.6 7.6	7.6	32.4 32.4	32.4	68.0 68.0	68.0	7.0 7.0	7.0		2.0 2.0	2.0		14.4	
6-Jun-14	Cloudy	Calm	11:23	Surface	1	28.9 28.9	28.9	8.2 8.2	8.2	30.3 30.3	30.3	118.6 120.9	119.8	7.7 7.9	7.8	6.4	3.3 3.3	3.3	3.4	5.8	5.8
				Middle	4	24.2 24.3	24.3	8.1 8.1	8.1	32.6 32.6	32.6	72.0 71.9	72.0	5.0 5.0	5.0		3.6 3.6	3.6		4.3	
				Bottom	7	24.0 23.9	24.0	8.0 8.0	8.0	32.7 32.8	32.8	71.4 71.1	71.3	5.0 5.0	5.0		3.4 3.3	3.4		7.2	
9-Jun-14	Cloudy	Calm	16:34	Surface	1	26.9 26.8	26.9	8.4 8.4	8.4	31.2 31.3	31.3	156.0 156.2	156.1	10.5 10.5	10.5	10.4	1.2 1.1	1.2	0.9	6.0	5.7
				Middle	4.5	25.9 25.8	25.9	8.2 8.2	8.2	32.5 32.5	32.5	152.0 152.2	152.1	10.3 10.3	10.3		0.8 0.8	0.8		6.0	
				Bottom	8	22.5 22.5	22.5	7.8 7.8	7.8	34.4 34.4	34.4	99.5 99.6	99.6	7.1 7.1	7.1		0.6 0.6	0.6		5.0	

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

Water Quality Monitoring Results at F5 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	14:52	Surface	1	26.7 26.4	26.6	7.8 7.8	7.8	30.6 30.7	30.7	87.7 82.7	85.2	8.2 7.9	8.1	7.6	2.6 2.6	2.6	2.8	15.0	10.7
				Middle	4	24.6 24.6	24.6	7.6 7.6	7.6	31.4 31.4	31.4	67.3 67.4	67.4	6.9 7.0	7.0		2.6 2.9	2.8		9.2	
				Bottom	7	23.8 23.8	23.8	7.5 7.5	7.5	31.8 31.8	31.8	57.5 53.1	55.3	6.3 6.0	6.2		6.2	3.0 3.1		3.1	
6-Jun-14	Cloudy	Calm	16:07	Surface	1	24.7 24.7	24.7	7.8 7.8	7.8	31.9 31.9	31.9	87.7 88.7	88.2	6.1 6.2	6.2	6.0	3.3 3.4	3.4	4.0	4.6	6.9
				Middle	3.5	24.0 24.0	24.0	7.8 7.8	7.8	32.3 32.3	32.3	81.5 80.7	81.1	5.7 5.7	5.7		4.4 4.5	4.5		6.6	
				Bottom	6	23.6 23.6	23.6	7.8 7.8	7.8	32.7 32.7	32.7	78.3 77.8	78.1	5.5 5.5	5.5		5.5	4.2 4.2		4.2	
9-Jun-14	Cloudy	Calm	09:12	Surface	1	28.4 28.4	28.4	7.9 7.9	7.9	29.9 29.9	29.9	108.2 109.4	108.8	7.1 7.2	7.2	6.9	1.1 1.1	1.1	1.2	9.8	7.1
				Middle	4	25.2 25.2	25.2	7.5 7.5	7.5	32.1 32.1	32.1	98.0 90.1	94.1	6.7 6.2	6.5		1.1 1.1	1.1		7.1	
				Bottom	7	24.0 24.1	24.1	7.4 7.3	7.4	32.6 32.6	32.6	61.6 62.7	62.2	4.3 4.4	4.4		4.4	1.4 1.5		1.5	

Water Quality Monitoring Results at F5 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:10	Surface	1	27.5 27.5	27.5	7.8 7.8	7.8	30.2 30.2	30.2	104.7 104.7	104.7	9.3 9.3	9.3	8.5	5.1 5.1	5.1	3.8	13.8	9.4
				Middle	4	24.9 24.7	24.8	7.6 7.5	7.6	31.3 31.3	31.3	87.3 70.0	78.7	8.3 7.1	7.7		3.0 3.0	3.0		7.5	
				Bottom	7	24.1 23.9	24.0	7.4 7.4	7.4	31.6 31.7	31.7	57.4 57.5	57.5	6.3 6.3	6.3		6.3	3.4 3.4		3.4	
6-Jun-14	Cloudy	Calm	10:26	Surface	1	28.5 28.5	28.5	7.9 7.9	7.9	30.5 30.5	30.5	120.5 120.9	120.7	7.9 7.9	7.9	7.2	2.8 2.8	2.8	3.2	5.3	5.3
				Middle	4	24.0 24.0	24.0	7.6 7.6	7.6	32.3 32.3	32.3	92.6 92.0	92.3	6.5 6.4	6.5		3.0 3.1	3.1		5.9	
				Bottom	7	23.7 23.7	23.7	7.6 7.6	7.6	32.5 32.5	32.5	89.3 88.4	88.9	6.3 6.2	6.3		6.3	3.6 3.8		3.7	
9-Jun-14	Cloudy	Calm	16:03	Surface	1	28.9 28.9	28.9	7.7 7.7	7.7	30.5 30.5	30.5	132.8 132.7	132.8	8.7 8.6	8.7	9.1	1.6 1.5	1.6	1.4	3.7	6.6
				Middle	4	26.7 26.8	26.8	7.5 7.5	7.5	31.6 31.5	31.6	149.0 129.6	139.3	10.0 8.7	9.4		1.1 1.2	1.2		10.1	
				Bottom	7	23.8 23.8	23.8	7.1 7.1	7.1	33.1 33.1	33.1	39.2 39.2	39.2	2.7 2.7	2.7		2.7	1.3 1.2		1.3	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at F6 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	15:46	Surface	1	29.6 29.6	29.6	8.1 8.1	8.1	29.3 29.4	29.4	64.3 65.4	64.9	6.4 6.5	6.5	6.5	3.4 3.3	3.4	2.8	6.4	8.1
				Middle	5	24.2 24.1	24.2	7.5 7.5	7.5	32.1 32.1	32.1	59.8 57.6	58.7	6.4 6.3	6.4		2.7 2.7	2.7		8.0	
				Bottom	9	23.8 23.8	23.8	7.5 7.5	7.5	32.4 32.4	32.4	54.2 54.2	54.2	6.1 6.1	6.1		6.1	2.4 2.4		2.4	
6-Jun-14	Cloudy	Calm	16:54	Surface	1	28.7 28.7	28.7	8.3 8.3	8.3	29.8 29.8	29.8	111.7 112.4	112.1	7.3 7.4	7.4	7.2	4.4 4.4	4.4	4.4	6.9	5.2
				Middle	4.5	23.8 23.8	23.8	8.0 8.0	8.0	32.9 32.9	32.9	100.9 98.5	99.7	7.1 6.9	7.0		3.6 3.8	3.7		3.6	
				Bottom	8	23.5 23.4	23.5	7.8 7.8	7.8	33.1 33.2	33.2	73.1 72.4	72.8	5.1 5.1	5.1		5.1	5.0 5.1		5.1	
9-Jun-14	Cloudy	Calm	09:45	Surface	1	26.9 26.9	26.9	8.0 8.0	8.0	31.5 31.5	31.5	95.9 95.9	95.9	6.4 6.4	6.4	6.3	0.8 0.7	0.8	0.8	4.9	5.1
				Middle	5	25.7 25.7	25.7	7.8 7.8	7.8	32.4 32.4	32.4	91.9 88.7	90.3	6.2 6.0	6.1		0.8 0.8	0.8		5.4	
				Bottom	9	24.4 24.3	24.4	7.7 7.6	7.7	33.1 33.2	33.2	78.9 72.7	75.8	5.5 5.0	5.3		5.3	0.7 0.7		0.7	

Water Quality Monitoring Results at F6 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:51	Surface	1	29.4 29.4	29.4	8.0 8.0	8.0	29.4 29.4	29.4	71.1 71.1	71.1	6.9 6.9	6.9	7.2	1.8 1.8	1.8	1.9	13.3	10.5
				Middle	5	24.4 24.3	24.4	7.7 7.6	7.7	32.1 32.1	32.1	71.3 75.4	73.4	7.2 7.5	7.4		1.8 1.8	1.8		8.7	
				Bottom	9	23.8 23.8	23.8	7.5 7.5	7.5	32.4 32.4	32.4	66.2 66.3	66.3	6.9 6.9	6.9		6.9	2.1 2.0		2.1	
6-Jun-14	Cloudy	Calm	11:11	Surface	1	27.6 28.0	27.8	8.2 8.2	8.2	31.1 30.9	31.0	70.3 70.3	70.3	4.7 4.6	4.7	4.9	2.2 2.3	2.3	2.9	7.1	7.7
				Middle	4.5	23.8 23.8	23.8	8.0 8.0	8.0	32.9 32.9	32.9	71.8 71.4	71.6	5.0 5.0	5.0		2.9 3.0	3.0		8.7	
				Bottom	8	23.5 23.5	23.5	7.8 7.8	7.8	33.1 33.1	33.1	67.6 65.1	66.4	4.8 4.6	4.7		4.7	3.3 3.5		3.4	
9-Jun-14	Cloudy	Calm	16:25	Surface	1	24.2 24.2	24.2	8.1 8.1	8.1	34.1 34.1	34.1	125.6 125.6	125.6	8.7 8.7	8.7	8.7	0.8 0.8	0.8	0.8	6.3	5.6
				Middle	5	23.1 23.1	23.1	8.0 8.0	8.0	34.4 34.4	34.4	123.8 123.9	123.9	8.7 8.7	8.7		0.6 0.6	0.6		5.8	
				Bottom	9	21.6 21.6	21.6	7.7 7.6	7.7	35.4 35.4	35.4	89.4 89.5	89.5	6.4 6.4	6.4		6.4	0.9 0.9		0.9	

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

Water Quality Monitoring Results at F7 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	16:05	Surface	1	28.2	28.2	7.9	8.0	29.7	29.7	75.6	77.4	7.3	7.4	7.0	5.0	5.0	4.1	8.0	9.2	
						28.2		8.0		29.7		79.2		7.5						5.0		
				Middle	4	25.4	25.4	7.8	7.8	31.3	31.4	63.1	63.2	6.6	6.6	6.6	6.6	3.3		3.3		3.9
				25.3		7.8		31.4		63.2		6.6				3.9		15.6				
				23.9	23.9	7.6	7.6	32.4	32.5	58.5	58.1	6.4	6.4	6.4	6.4	3.9	4.0					
				23.9		7.6		32.5		57.7		6.3	6.4			4.0	4.0					
6-Jun-14	Cloudy	Calm	17:25	Surface	1	28.2	28.2	8.2	8.2	30.3	30.3	112.9	113.9	7.4	7.5	7.5	4.2	4.3	3.9	11.0	8.6	
						28.2		8.2		30.3		114.8		7.6						4.3		
				Middle	3.5	25.1	25.1	8.1	8.1	32.1	32.1	107.4	107.3	7.4	7.4	7.4	7.4	3.7		3.7		6.3
				25.0		8.1		32.1		107.1		7.4				3.7		8.4				
				23.7	23.7	8.0	8.0	32.7	32.7	98.7	97.4	6.9	6.9	6.9	6.9	3.7	3.7					
				23.7		8.0		32.7		96.1		6.8	6.9			3.7	3.7					
9-Jun-14	Cloudy	Calm	10:07	Surface	1	28.1	28.1	8.1	8.1	29.8	29.8	93.6	94.2	6.2	6.3	6.2	0.9	0.9	1.2	4.6	5.8	
						28.1		8.1		29.7		94.8		6.3	6.3							0.9
				Middle	3.5	27.5	27.5	8.0	8.0	30.9	30.9	92.5	91.6	6.2	6.1	6.2	6.1	0.8		0.8		5.9
				27.5		8.0		30.9		90.7		6.0	6.1			0.8		7.0				
				24.5	24.6	7.6	7.6	32.8	32.8	43.4	41.1	3.0	2.9	2.9	2.9	2.1	2.0					
				24.6		7.6		32.8		38.8		2.7				1.9						

Water Quality Monitoring Results at F7 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	08:09	Surface	1	28.1	28.2	7.9	8.0	29.8	29.8	65.0	65.4	6.6	6.6	6.9	1.9	1.9	2.2	11.4	9.3	
						28.2		8.0		29.8		65.8		6.6	6.6							1.8
				Middle	3.5	25.3	25.3	7.9	7.9	31.5	31.6	70.9	70.0	7.1	7.1	7.1	7.1	1.9		2.1		9.2
				25.2		7.8		31.6		69.0		7.0	7.1			2.2		7.3				
				24.2	24.2	7.7	7.7	32.3	32.3	62.6	62.7	6.6	6.6	6.6	6.6	2.4	2.5					
				24.1		7.7		32.3		62.7		6.6	6.6			2.6						
6-Jun-14	Cloudy	Calm	11:38	Surface	1	29.0	29.0	8.2	8.2	30.2	30.2	115.7	115.7	7.5	7.5	6.7	3.1	3.1	3.3	12.9	9.2	
						29.0		8.2		30.2		115.7		7.5	7.5							3.1
				Middle	3.5	24.3	24.3	8.1	8.1	32.7	32.7	85.5	84.8	5.9	5.9	5.9	5.9	3.1		3.1		5.7
				24.2		8.1		32.7		84.1		5.9				3.1		8.9				
				23.4	23.4	7.8	7.8	33.2	33.2	72.5	72.2	5.1	5.1	5.1	5.1	3.7	3.8					
				23.4		7.8		33.2		71.8		5.1	5.1			3.8						
9-Jun-14	Cloudy	Calm	16:41	Surface	1	23.3	23.4	8.2	8.3	34.0	34.0	112.1	115.3	7.9	8.1	8.2	0.7	0.7	1.1	5.1	6.5	
						23.4		8.3		33.9		118.4		8.3	8.1							0.7
				Middle	4	23.3	23.3	8.1	8.1	34.1	34.1	118.4	118.4	8.3	8.3	8.3	8.3	0.9		0.9		6.5
				23.2		8.1		34.1		118.4		8.3				0.8		7.8				
				22.0	22.1	7.8	7.8	35.1	35.1	68.5	64.9	4.9	4.7	4.7	4.7	1.8	1.8					
				22.1		7.8		35.1		61.3		4.4	4.7			1.7						

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at F8 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	15:30	Surface	1	26.1 26.2	26.2	7.6 7.6	7.6	30.8 30.8	30.8	64.7 63.0	63.9	6.7 6.6	6.7	6.7	3.3 3.5	3.4	3.6	4.0	5.3	
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-		
				Bottom	4.8	23.9 23.9	23.9	7.5 7.4	7.5	32.0 32.0	32.0	50.3 47.9	49.1	5.8 5.6	5.7		5.7	3.8 3.7		3.8		6.6
6-Jun-14	Cloudy	Calm	16:38	Surface	1	27.1 26.9	27.0	8.0 8.0	8.0	31.0 31.1	31.1	84.6 84.7	84.7	5.7 5.7	5.7	5.7	3.1 3.1	3.1	3.6	9.3	8.7	
				Middle	3	24.2 24.2	24.2	7.8 7.8	7.8	32.1 32.1	32.1	79.5 79.6	79.6	5.6 5.6	5.6		5.6	3.5 3.5		3.5		8.3
				Bottom	5	23.9 23.9	23.9	7.8 7.8	7.8	32.4 32.4	32.4	70.7 70.2	70.5	5.0 4.9	5.0		5.0	4.2 4.3		4.3		8.4
9-Jun-14	Cloudy	Calm	09:27	Surface	1	28.3 28.3	28.3	8.1 8.1	8.1	30.1 30.2	30.2	114.4 115.2	114.8	7.5 7.6	7.6	7.6	1.0 0.9	1.0	1.0	11.6	9.3	
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-		
				Bottom	4.6	27.2 27.2	27.2	7.9 7.9	7.9	31.3 31.4	31.4	88.0 82.1	85.1	5.9 5.5	5.7		5.7	1.0 0.9		1.0		7.0

Water Quality Monitoring Results at F8 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	07:36	Surface	1	26.1 26.1	26.1	7.6 7.6	7.6	30.8 30.8	30.8	53.5 53.5	53.5	5.9 5.9	5.9	5.9	3.7 3.7	3.7	3.6	8.0	9.8	
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-				
				Bottom	4.6	23.9 23.9	23.9	7.4 7.4	7.4	31.9 31.9	31.9	48.5 47.8	48.2	5.7 5.6	5.7		5.7	3.4 3.4		3.4		11.6
6-Jun-14	Cloudy	Calm	10:57	Surface	1	28.2 28.2	28.2	8.1 8.1	8.1	30.6 30.6	30.6	105.2 104.6	104.9	6.9 6.9	6.9	7.0	1.8 1.9	1.9	2.7	9.3	9.9	
				Middle	3	24.3 24.3	24.3	7.7 7.7	7.7	32.1 32.2	32.2	100.5 100.3	100.4	7.0 7.0	7.0		7.0	2.5 2.5		2.5		13.6
				Bottom	5	24.0 23.9	24.0	7.7 7.7	7.7	32.4 32.4	32.4	95.3 95.7	95.5	6.7 6.7	6.7		6.7	3.6 3.8		3.7		6.7
9-Jun-14	Cloudy	Calm	16:16	Surface	1	29.1 29.1	29.1	8.1 8.1	8.1	30.6 30.6	30.6	125.7 125.7	125.7	8.2 8.2	8.2	8.2	1.2 1.2	1.2	1.2	6.2	6.9	
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-				
				Bottom	4.9	26.9 26.9	26.9	7.9 7.9	7.9	31.6 31.6	31.6	131.4 131.3	131.4	8.8 8.8	8.8		8.8	1.2 1.2		1.2		7.5

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at G2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	16:00	Surface	1	28.0 28.1	28.1	8.0 8.0	8.0	29.9 29.9	29.9	76.2 76.1	76.2	7.3 7.3	7.3	7.2	2.2 2.2	2.2	2.3	5.9	5.6
				Middle	4.5	24.8 24.7	24.8	7.7 7.7	7.7	31.8 31.8	31.8	68.3 67.6	68.0	7.0 7.0	7.0		2.1 2.1	2.1		7.2	
				Bottom	8	23.9 23.8	23.9	7.6 7.6	7.6	32.5 32.5	32.5	63.6 64.3	64.0	6.7 6.8	6.8		2.6 2.6	2.6		3.8	
6-Jun-14	Cloudy	Calm	17:18	Surface	1	28.2 28.2	28.2	8.2 8.2	8.2	30.4 30.4	30.4	117.4 116.9	117.2	7.7 7.7	7.7	7.7	3.8 4.1	4.0	4.0	7.1	9.1
				Middle	4.5	24.8 24.8	24.8	8.1 8.1	8.1	32.3 32.3	32.3	111.6 111.0	111.3	7.7 7.7	7.7		4.2 3.9	4.1		12.3	
				Bottom	8	23.5 23.5	23.5	7.9 7.9	7.9	32.9 32.9	32.9	91.6 90.0	90.8	6.4 6.3	6.4		3.8 3.8	3.8		7.8	
9-Jun-14	Cloudy	Calm	10:02	Surface	1	27.1 27.1	27.1	8.0 8.0	8.0	30.2 30.2	30.2	98.3 99.5	98.9	6.6 6.7	6.7	6.7	1.0 1.0	1.0	2.0	5.1	4.7
				Middle	4.5	27.3 27.3	27.3	8.0 8.0	8.0	30.9 30.9	30.9	99.2 97.8	98.5	6.6 6.5	6.6		0.8 0.8	0.8		3.8	
				Bottom	8	23.7 23.6	23.7	7.6 7.5	7.6	33.4 33.4	33.4	75.2 74.1	74.7	5.3 5.2	5.3		4.2 4.2	4.2		5.2	

Water Quality Monitoring Results at G2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	08:04	Surface	1	28.0 28.0	28.0	8.0 8.0	8.0	30.0 30.0	30.0	78.7 78.7	78.7	7.5 7.5	7.5	7.4	2.0 2.1	2.1	2.1	9.3	10.7
				Middle	4.5	24.9 24.9	24.9	7.7 7.7	7.7	31.6 31.6	31.6	71.4 71.4	71.4	7.2 7.2	7.2		2.1 2.0	2.1		8.2	
				Bottom	8	23.9 23.9	23.9	7.6 7.6	7.6	32.5 32.5	32.5	67.8 65.4	66.6	7.0 6.8	6.9		2.0 1.9	2.0		14.6	
6-Jun-14	Cloudy	Calm	11:31	Surface	1	29.0 29.0	29.0	8.2 8.2	8.2	30.2 30.2	30.2	127.5 128.5	128.0	8.3 8.4	8.4	7.0	2.5 2.7	2.6	3.0	8.4	8.9
				Middle	4	24.4 24.4	24.4	8.1 8.1	8.1	32.6 32.6	32.6	80.2 79.1	79.7	5.6 5.5	5.6		3.2 3.1	3.2		7.6	
				Bottom	7	23.5 23.4	23.5	7.9 7.9	7.9	33.1 33.1	33.1	78.0 75.7	76.9	5.5 5.3	5.4		3.2 3.3	3.3		10.7	
9-Jun-14	Cloudy	Calm	16:38	Surface	1	26.5 26.5	26.5	8.3 8.3	8.3	31.6 31.6	31.6	119.1 124.4	121.8	8.0 8.4	8.2	8.7	2.2 2.0	2.1	1.4	7.4	8.3
				Middle	4.5	26.0 26.0	26.0	8.2 8.2	8.2	32.5 32.5	32.5	134.7 134.8	134.8	9.1 9.1	9.1		1.0 1.0	1.0		8.2	
				Bottom	8	23.2 23.1	23.2	7.8 7.8	7.8	34.1 34.1	34.1	108.4 108.5	108.5	7.6 7.6	7.6		1.2 1.2	1.2		9.2	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at G3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	15:02	Surface	1	26.2 26.2	26.2	7.8 7.8	7.8	30.7 30.7	30.7	60.4 66.4	63.4	6.4 6.8	6.6	6.1	3.0 2.8	2.9	3.0	6.3	6.5
				Middle	3.5	24.0 24.0	24.0	7.6 7.6	7.6	31.7 31.7	31.7	47.7 46.8	47.3	5.6 5.5	5.6		2.7 2.8	2.8		6.5	
				Bottom	6	23.6 23.6	23.6	7.5 7.5	7.5	31.9 31.9	31.9	40.0 40.0	40.0	5.1 5.1	5.1		3.3 3.3	3.3		6.6	
6-Jun-14	Cloudy	Calm	16:24	Surface	1	26.2 25.9	26.1	8.0 7.9	8.0	31.3 31.5	31.4	84.1 83.8	84.0	5.7 5.7	5.7	5.8	2.8 2.8	2.8	3.8	6.5	8.9
				Middle	3.5	24.0 24.0	24.0	7.9 7.9	7.9	32.5 32.5	32.5	82.4 81.4	81.9	5.8 5.7	5.8		3.6 3.7	3.7		9.5	
				Bottom	6	23.6 23.6	23.6	7.8 7.8	7.8	32.5 32.5	32.5	72.8 71.5	72.2	5.1 5.0	5.1		4.9 4.8	4.9		10.8	
9-Jun-14	Cloudy	Calm	09:20	Surface	1	28.5 28.5	28.5	8.0 8.0	8.0	30.0 30.0	30.0	111.5 112.3	111.9	7.3 7.4	7.4	7.3	1.0 1.1	1.1	1.1	5.2	5.1
				Middle	3.5	26.4 26.4	26.4	7.8 7.7	7.8	31.6 31.7	31.7	106.0 106.0	106.0	7.2 7.2	7.2		0.9 0.9	0.9		4.5	
				Bottom	6	24.4 24.3	24.4	7.5 7.5	7.5	32.8 32.8	32.8	50.0 50.0	50.0	3.5 3.5	3.5		1.3 1.4	1.4		5.7	

Water Quality Monitoring Results at G3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:20	Surface	1	26.1 26.1	26.1	7.8 7.8	7.8	30.8 30.8	30.8	46.3 45.6	46.0	5.4 5.4	5.4	5.3	2.0 1.9	2.0	2.5	8.6	8.6
				Middle	3.5	24.1 24.1	24.1	7.6 7.6	7.6	31.7 31.7	31.7	39.8 39.8	39.8	5.1 5.1	5.1		2.4 2.4	2.4		6.1	
				Bottom	6	23.7 23.7	23.7	7.5 7.5	7.5	31.8 31.9	31.9	38.9 38.9	38.9	5.0 5.0	5.0		3.2 3.2	3.2		11.2	
6-Jun-14	Cloudy	Calm	10:42	Surface	1	28.6 28.7	28.7	8.1 8.1	8.1	30.4 30.3	30.4	121.8 121.7	121.8	8.0 8.0	8.0	7.5	3.3 3.3	3.3	4.2	3.7	6.3
				Middle	3.5	24.4 24.4	24.4	7.7 7.7	7.7	32.2 32.2	32.2	101.7 98.9	100.3	7.1 6.9	7.0		3.8 3.9	3.9		7.8	
				Bottom	6	23.8 23.8	23.8	7.7 7.7	7.7	32.5 32.5	32.5	94.1 95.4	94.8	6.6 6.7	6.7		5.3 5.3	5.3		7.4	
9-Jun-14	Cloudy	Calm	16:10	Surface	1	28.0 28.0	28.0	7.9 7.9	7.9	31.3 31.3	31.3	137.2 137.4	137.3	9.0 9.0	9.0	9.1	1.6 1.5	1.6	2.0	8.4	8.2
				Middle	3.5	24.4 24.3	24.4	7.5 7.5	7.5	33.3 33.3	33.3	131.7 131.8	131.8	9.1 9.1	9.1		1.1 1.1	1.1		8.0	
				Bottom	6	22.9 22.9	22.9	7.3 7.3	7.3	33.8 33.8	33.8	56.3 54.8	55.6	4.0 3.9	4.0		3.5 3.0	3.3		8.3	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at G4 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	15:40	Surface	1	28.8 28.8	28.8	7.9 7.9	7.9	29.7 29.7	29.7	63.1 64.1	63.6	6.4 6.5	6.5	6.5	2.1 2.1	2.1	2.3	5.7	5.4
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	
				Bottom	4.8	25.1 25.0	25.1	7.7 7.7	7.7	31.6 31.5	31.6	61.9 62.0	62.0	6.5 6.5	6.5		6.5	2.5 2.5		2.5	
6-Jun-14	Cloudy	Calm	16:48	Surface	1	28.0 28.0	28.0	8.2 8.2	8.2	29.8 29.8	29.8	90.8 92.1	91.5	6.0 6.1	6.1	6.1	4.2 4.1	4.2	4.2	8.3	9.0
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-			
				Bottom	4.5	23.9 23.9	23.9	8.0 8.0	8.0	32.7 32.7	32.7	88.8 88.9	88.9	6.2 6.2	6.2		6.2	4.1 4.1		4.1	
9-Jun-14	Cloudy	Calm	09:32	Surface	1	27.8 27.8	27.8	8.1 8.1	8.1	30.5 30.5	30.5	109.2 110.5	109.9	7.2 7.3	7.3	7.3	0.8 0.7	0.8	0.8	5.6	5.6
				Middle	-	-	-	-	-	-	-	-	-	-	-		-				
				Bottom	4.7	25.7 25.7	25.7	7.8 7.8	7.8	32.2 32.2	32.2	75.2 70.2	72.7	5.1 4.8	5.0		5.0	0.7 0.7		0.7	

Water Quality Monitoring Results at G4 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:47	Surface	1	28.7 28.7	28.7	7.9 7.9	7.9	29.7 29.7	29.7	58.0 58.0	58.0	6.1 6.1	6.1	6.1	2.4 2.4	2.4	2.2	8.1	10.0
				Middle	-	-	-	-	-	-	-	-	-	-	-						
				Bottom	4.6	26.1 25.9	26.0	7.9 7.9	7.9	31.2 31.3	31.3	62.7 62.8	62.8	6.5 6.5	6.5		6.5	2.0 2.0		2.0	
6-Jun-14	Cloudy	Calm	11:05	Surface	1	27.1 27.2	27.2	8.1 8.1	8.1	31.2 31.2	31.2	100.1 98.9	99.5	6.7 6.6	6.7	6.7	3.5 3.5	3.5	4.1	6.6	7.8
				Middle	-	-	-	-	-	-	-	-	-	-	-						
				Bottom	4.3	23.9 23.9	23.9	7.9 7.9	7.9	32.8 32.8	32.8	96.8 96.6	96.7	6.8 6.8	6.8		6.8	4.6 4.6		4.6	
9-Jun-14	Cloudy	Calm	16:21	Surface	1	24.9 24.9	24.9	8.1 8.1	8.1	33.6 33.6	33.6	125.9 127.8	126.9	8.6 8.7	8.7	8.7	1.1 1.0	1.1	0.9	10.9	9.0
				Middle	-	-	-	-	-	-	-	-	-	-	-						
				Bottom	4.8	24.8 24.7	24.8	8.1 8.1	8.1	33.5 33.6	33.6	132.3 132.3	132.3	9.1 9.1	9.1		9.1	0.6 0.6		0.6	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at W1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	15:09	Surface	1	26.3 26.2	26.3	7.7 7.6	7.7	30.7 30.7	30.7	52.0 49.6	50.8	7.3 7.2	7.3	7.3	2.8 2.8	2.8	3.3	2.9	5.2
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	
				Bottom	4.8	24.5 24.4	24.5	7.5 7.5	7.5	31.6 31.5	31.6	43.2 42.6	42.9	6.8 6.8	6.8		6.8	3.8 3.8		3.8	
6-Jun-14	Cloudy	Calm	16:30	Surface	1	25.7 25.7	25.7	7.9 7.9	7.9	31.6 31.6	31.6	106.4 107.1	106.8	7.3 7.3	7.3	7.3	4.2 4.1	4.2	4.2	7.3	8.1
				Middle	-	-	-	-	-	-	-	-	-	-	-		-	-			
				Bottom	4.8	23.7 23.7	23.7	7.8 7.8	7.8	32.5 32.5	32.5	99.8 100.9	100.4	7.0 7.1	7.1		7.1	4.2 4.1		4.2	
9-Jun-14	Cloudy	Calm	09:23	Surface	1	28.5 28.5	28.5	8.1 8.1	8.1	30.2 30.2	30.2	116.0 116.0	116.0	7.6 7.6	7.6	7.6	1.4 1.4	1.4	1.3	7.3	6.7
				Middle	-	-	-	-	-	-	-	-	-	-	-		-				
				Bottom	4.8	26.0 25.7	25.9	7.8 7.7	7.8	32.1 32.2	32.2	100.3 101.2	100.8	6.8 6.9	6.9		6.9	1.0 1.1		1.1	

Water Quality Monitoring Results at W1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:27	Surface	1	25.8 25.8	25.8	7.6 7.6	7.6	30.9 30.9	30.9	69.8 68.7	69.3	7.5 7.4	7.5	7.5	2.4 2.3	2.4	4.2	6.8	7.7
				Middle	-	-	-	-	-	-	-	-	-	-	-		-				
				Bottom	4.8	24.0 24.0	24.0	7.4 7.4	7.4	31.7 31.7	31.7	53.1 53.1	53.1	6.8 6.8	6.8		6.8	6.0 6.0		6.0	
6-Jun-14	Cloudy	Calm	10:50	Surface	1	28.1 28.0	28.1	8.0 8.0	8.0	30.7 30.7	30.7	110.3 110.2	110.3	7.3 7.3	7.3	7.3	4.2 4.3	4.3	4.8	8.5	5.7
				Middle	-	-	-	-	-	-	-	-	-	-	-						
				Bottom	4.8	24.0 24.0	24.0	7.8 7.7	7.8	32.4 32.4	32.4	97.5 96.5	97.0	6.8 6.8	6.8		6.8	5.2 5.1		5.2	
9-Jun-14	Cloudy	Calm	16:13	Surface	1	29.1 29.1	29.1	8.0 8.0	8.0	30.6 30.6	30.6	124.0 126.3	125.2	8.0 8.2	8.1	8.1	1.2 1.2	1.2	1.1	6.8	7.5
				Middle	-	-	-	-	-	-	-	-	-	-	-						
				Bottom	4.8	26.7 26.7	26.7	7.8 7.8	7.8	31.7 31.7	31.7	134.4 128.4	131.4	9.0 8.6	8.8		8.8	1.0 1.0		1.0	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at W2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	14:45	Surface	1	27.0	27.0	7.9	7.9	30.3	30.3	68.4	69.0	7.3	7.4	7.4	4.0	4.0	3.8	5.5	7.7
				Middle	3.5	24.6	24.6	7.7	7.7	31.3	31.3	68.8	66.5	7.5	7.4		3.7	3.7		4.3	
				Bottom	6	24.0	24.0	7.6	7.6	31.5	31.5	53.0	53.1	6.8	6.8		3.6	3.6		13.3	
6-Jun-14	Cloudy	Calm	16:01	Surface	1	25.4	25.5	7.8	7.8	31.6	31.6	109.2	109.0	7.5	7.5	7.7	2.9	2.9	3.1	6.4	8.4
				Middle	3.5	24.2	24.2	7.8	7.8	32.3	32.3	112.8	112.0	7.9	7.9		2.6	2.6		10.9	
				Bottom	6	23.7	23.7	7.8	7.8	32.5	32.5	108.2	107.5	7.6	7.6		3.8	3.8		7.8	
9-Jun-14	Cloudy	Calm	09:08	Surface	1	28.3	28.3	7.9	7.9	29.9	29.9	112.2	113.7	7.4	7.5	7.4	2.2	2.0	1.5	5.0	7.4
				Middle	3.5	25.6	25.6	7.5	7.5	32.0	32.0	106.8	106.7	7.3	7.3		1.1	1.1		6.3	
				Bottom	6	24.0	24.0	7.3	7.3	32.7	32.7	96.4	96.3	6.7	6.7		1.3	1.3		11.0	

Water Quality Monitoring Results at W2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:04	Surface	1	27.7	27.7	7.9	7.9	30.2	30.2	106.1	106.2	7.5	7.6	7.4	4.5	4.5	3.9	9.9	9.8
				Middle	3.5	24.6	24.6	7.7	7.7	31.4	31.4	82.2	82.3	7.1	7.1		3.2	3.2		8.9	
				Bottom	6	23.9	23.9	7.6	7.6	31.5	31.5	70.1	67.5	6.8	6.7		4.0	3.9		10.6	
6-Jun-14	Cloudy	Calm	10:18	Surface	1	29.1	29.1	7.9	7.9	30.4	30.4	119.1	123.1	7.7	7.9	7.8	2.8	2.9	5.2	6.2	6.5
				Middle	3.5	24.1	24.1	7.5	7.5	32.0	32.0	110.3	107.3	7.7	7.6		5.5	5.5		6.7	
				Bottom	6	23.7	23.7	7.5	7.5	32.3	32.3	119.9	120.2	8.4	8.5		7.1	7.0		6.7	
9-Jun-14	Cloudy	Calm	15:59	Surface	1	29.0	29.0	7.7	7.7	30.4	30.4	160.9	160.9	10.5	10.5	10.6	1.2	1.2	1.2	6.1	8.5
				Middle	3.5	26.6	26.5	7.4	7.4	31.8	31.9	166.0	150.9	11.2	10.7		1.0	1.1		10.1	
				Bottom	6	24.0	24.0	7.0	7.0	32.8	32.8	95.8	95.8	6.7	6.7		1.4	1.4		9.3	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at W3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	14:56	Surface	1	27.3	27.3	7.8	7.8	30.3	30.3	77.9	77.9	7.9	7.9	7.8	2.8	2.8	3.3	14.8	9.0
				Middle	4	24.3	24.3	7.6	7.6	31.5	31.5	71.2	71.3	7.7	7.7		2.7	2.7		5.1	
				Bottom	7	23.7	23.7	7.5	7.5	31.8	31.8	56.5	56.5	6.7	6.7	6.7	6.7	4.5		4.5	
6-Jun-14	Cloudy	Calm	16:15	Surface	1	25.5	25.5	7.9	7.9	31.6	31.6	118.0	118.4	8.1	8.1	8.0	3.2	3.2	4.3	9.0	9.5
				Middle	3.5	24.1	24.1	7.8	7.8	32.3	32.3	112.8	112.2	7.9	7.9		4.8	4.8		11.7	
				Bottom	6	23.7	23.7	7.8	7.8	32.7	32.7	108.0	107.5	7.6	7.6	7.6	7.6	4.9		4.9	
9-Jun-14	Cloudy	Calm	09:16	Surface	1	28.3	28.3	8.0	8.0	30.0	30.0	117.4	118.1	7.7	7.8	7.6	1.3	1.3	1.6	5.4	5.3
				Middle	4	25.5	25.5	7.6	7.6	32.0	32.0	107.4	106.5	7.3	7.3		0.8	0.8		3.8	
				Bottom	7	23.9	24.0	7.4	7.4	32.7	32.7	95.8	96.8	6.7	6.8	6.8	6.8	2.6		2.6	

Water Quality Monitoring Results at W3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*
3-Jun-14	Sunny	Calm	07:15	Surface	1	27.3	27.3	7.8	7.8	30.3	30.3	75.4	75.2	8.0	8.0	7.8	3.3	3.2	3.2	6.7	7.5
				Middle	4	24.6	24.6	7.7	7.7	31.6	31.6	64.3	64.3	7.5	7.5		2.7	2.7		4.3	
				Bottom	7	24.1	24.1	7.6	7.6	31.6	31.7	56.1	56.2	6.9	6.9	6.9	6.9	3.6		3.7	
6-Jun-14	Cloudy	Calm	10:35	Surface	1	28.2	28.2	8.0	8.0	30.6	30.7	115.4	117.5	7.6	7.8	7.5	3.5	3.6	4.5	5.8	7.0
				Middle	4	24.1	24.2	7.7	7.7	32.3	32.3	102.8	102.3	7.2	7.2		4.2	4.3		4.2	
				Bottom	7	23.8	23.8	7.7	7.7	32.6	32.6	100.2	100.1	7.0	7.0	7.0	7.0	5.5		5.5	
9-Jun-14	Cloudy	Calm	16:07	Surface	1	27.8	27.8	7.8	7.8	31.2	31.2	125.6	128.6	8.3	8.5	9.0	1.2	1.2	1.4	8.8	9.4
				Middle	4	25.3	25.3	7.5	7.5	32.7	32.7	137.4	137.5	9.4	9.4		1.2	1.2		11.7	
				Bottom	7	23.1	23.1	7.2	7.2	33.6	33.6	96.8	96.8	6.8	6.8	6.8	6.8	1.6		1.7	

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at W4 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	14:41	Surface	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	2.6	-	8.8
				Middle	1.4	26.5	26.5	7.6	7.6	30.8	30.9	94.2	94.2	8.0	8.0	2.6		2.6	8.8			
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	
6-Jun-14	Cloudy	Calm	15:56	Surface	-	-	-	-	-	-	-	-	-	-	-	7.2	-	-	2.8	-	9.8	
				Middle	1.2	24.8	24.8	7.6	7.6	31.6	31.7	103.1	103.4	7.1	7.2		2.7	2.8		9.8		
				Bottom	-	-	-	-	-	-	-	-	-	-	-		-	-		-		-
9-Jun-14	Cloudy	Calm	09:05	Surface	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-	1.2	-	5.0	
				Middle	1.3	28.4	28.4	7.9	7.9	29.3	29.5	115.5	114.8	7.6	7.6		1.2	1.2		5.0		
				Bottom	-	-	-	-	-	-	-	-	-	-	-		-	-		-		-

Water Quality Monitoring Results at W4 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	DA*	
3-Jun-14	Sunny	Calm	07:00	Surface	-	-	-	-	-	-	-	-	-	-	-	-	7.9	-	-	2.6	-	6.2
				Middle	1.2	26.6	26.6	7.7	7.7	31.0	31.0	88.6	92.0	7.8	7.9	2.5		2.6	6.2			
				Bottom	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	
6-Jun-14	Cloudy	Calm	10:13	Surface	-	-	-	-	-	-	-	-	-	-	-	8.9	-	-	4.0	-	8.0	
				Middle	1.3	28.3	28.3	7.8	7.8	30.1	30.2	135.2	133.2	8.9	8.9		3.9	4.0		8.0		
				Bottom	-	-	-	-	-	-	-	-	-	-	-		-	-		-		-
9-Jun-14	Cloudy	Calm	15:57	Surface	-	-	-	-	-	-	-	-	-	-	-	9.0	-	-	1.1	-	8.2	
				Middle	1.4	29.2	29.2	7.7	7.7	29.1	29.3	134.8	141.0	8.8	9.0		1.1	1.1		8.2		
				Bottom	-	-	-	-	-	-	-	-	-	-	-		-	-		-		-

Remarks: *DA: Depth-Averaged

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

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at F4 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	18	17	6	4	<1	<1	19	19
	Middle	17		3		<1		19	
	Bottom	17		4		<1		20	
6-Jun-14	Surface	20	20	3	3	<1	<1	16	17
	Middle	16		3		<1		18	
	Bottom	23		4		<1		18	
9-Jun-14	Surface	21	22	7	5	<1	<1	19	20
	Middle	24		3		<1		22	
	Bottom	21		4		<1		20	

Metal Results at F4 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	15	17	2	4	<1	<1	18	20
	Middle	21		5		<1		21	
	Bottom	16		4		<1		21	
6-Jun-14	Surface	17	17	4	5	<1	<1	21	18
	Middle	17		5		<1		19	
	Bottom	17		6		<1		16	
9-Jun-14	Surface	20	21	9	6	<1	<1	15	17
	Middle	20		3		<1		23	
	Bottom	24		7		<1		15	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at F5 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	19	16	4	3	<1	<1	21	21
	Middle	15		3		<1		20	
	Bottom	14		3		<1		21	
6-Jun-14	Surface	16	18	5	5	<1	<1	23	20
	Middle	18		3		<1		19	
	Bottom	19		5		<1		18	
9-Jun-14	Surface	18	20	4	3	<1	<1	20	20
	Middle	22		3		<1		20	
	Bottom	22		3		<1		19	

Metal Results at F5 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	22	18	3	3	<1	<1	19	20
	Middle	14		5		<1		19	
	Bottom	18		2		<1		21	
6-Jun-14	Surface	20	19	2	3	<1	<1	16	17
	Middle	20		4		<1		17	
	Bottom	17		2		<1		17	
9-Jun-14	Surface	22	20	3	5	<1	<1	16	19
	Middle	18		4		<1		15	
	Bottom	21		8		<1		25	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at F6 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	14	17	7	5	<1	<1	19	19
	Middle	19		2		<1		19	
	Bottom	19		5		<1		20	
6-Jun-14	Surface	18	20	5	4	<1	<1	17	19
	Middle	24		3		<1		19	
	Bottom	19		4		<1		21	
9-Jun-14	Surface	21	21	5	5	<1	<1	16	16
	Middle	22		6		<1		15	
	Bottom	22		3		<1		16	

Metal Results at F6 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	18	17	5	5	<1	<1	21	20
	Middle	14		7		<1		18	
	Bottom	19		4		<1		21	
6-Jun-14	Surface	17	17	2	3	<1	<1	17	19
	Middle	16		2		<1		20	
	Bottom	17		5		<1		20	
9-Jun-14	Surface	21	21	4	4	<1	<1	14	16
	Middle	23		3		<1		17	
	Bottom	20		5		<1		17	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at F7 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	18	18	3	4	<1	<1	20	20
	Middle	20		4		<1		19	
	Bottom	16		7		<1		20	
6-Jun-14	Surface	19	19	5	6	<1	<1	20	18
	Middle	22		8		<1		19	
	Bottom	17		6		<1		16	
9-Jun-14	Surface	21	20	5	5	<1	<1	19	18
	Middle	21		4		<1		20	
	Bottom	20		5		<1		15	

Metal Results at F7 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	14	16	7	4	<1	<1	18	18
	Middle	17		4		<1		18	
	Bottom	17		2		<1		19	
6-Jun-14	Surface	24	22	2	3	<1	<1	21	20
	Middle	25		3		<1		19	
	Bottom	17		3		<1		22	
9-Jun-14	Surface	20	22	6	6	<1	<1	24	19
	Middle	20		7		<1		15	
	Bottom	25		6		<1		16	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at F8 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	17	18	4	4	<1	<1	18	19
	Middle	-		-		-			
	Bottom	18		4		<1		20	
6-Jun-14	Surface	24	22	4	5	<1	<1	21	20
	Middle	21		4		<1		18	
	Bottom	22		8		<1		21	
9-Jun-14	Surface	19	21	2	3	<1	<1	19	18
	Middle	-		-		-			
	Bottom	22		5		<1		18	

Metal Results at F8 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	21	19	6	4	<1	<1	18	20
	Middle	-		-		-			
	Bottom	18		3		<1		22	
6-Jun-14	Surface	20	20	2	4	<1	<1	22	19
	Middle	19		2		<1		16	
	Bottom	22		7		<1		19	
9-Jun-14	Surface	19	19	4	4	<1	<1	16	15
	Middle	-		-		-			
	Bottom	20		5		<1		15	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at G2 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	17	17	3	5	<1	<1	19	20
	Middle	17		7		<1		21	
	Bottom	18		6		<1		21	
6-Jun-14	Surface	17	21	2	5	<1	<1	24	20
	Middle	22		7		<1		17	
	Bottom	22		5		<1		19	
9-Jun-14	Surface	19	20	4	5	<1	<1	16	19
	Middle	22		3		<1		18	
	Bottom	20		7		<1		23	

Metal Results at G2 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	15	17	4	3	<1	<1	18	20
	Middle	15		3		<1		20	
	Bottom	21		3		<1		21	
6-Jun-14	Surface	17	18	7	4	<1	<1	17	20
	Middle	21		2		<1		24	
	Bottom	16		2		<1		20	
9-Jun-14	Surface	20	20	6	5	<1	<1	15	16
	Middle	18		5		<1		19	
	Bottom	20		4		<1		15	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at G3 - Mid-Ebb Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	17	17	6	5	<1	<1	19	20
	Middle	19		4		<1		21	
	Bottom	16		6		<1		20	
6-Jun-14	Surface	21	21	2	4	<1	<1	16	18
	Middle	24		5		<1		21	
	Bottom	18		5		<1		17	
9-Jun-14	Surface	21	20	6	4	<1	<1	18	19
	Middle	20		3		<1		20	
	Bottom	19		3		<1		19	

Metal Results at G3 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	14	16	8	6	<1	<1	18	19
	Middle	15		6		<1		19	
	Bottom	19		6		<1		21	
6-Jun-14	Surface	20	20	2	5	<1	<1	18	20
	Middle	21		5		<1		21	
	Bottom	18		8		<1		21	
9-Jun-14	Surface	21	20	3	5	<1	<1	16	18
	Middle	21		4		<1		15	
	Bottom	20		9		<1		23	

Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone

Metal Results at G4 - Mid-Ebb Tide

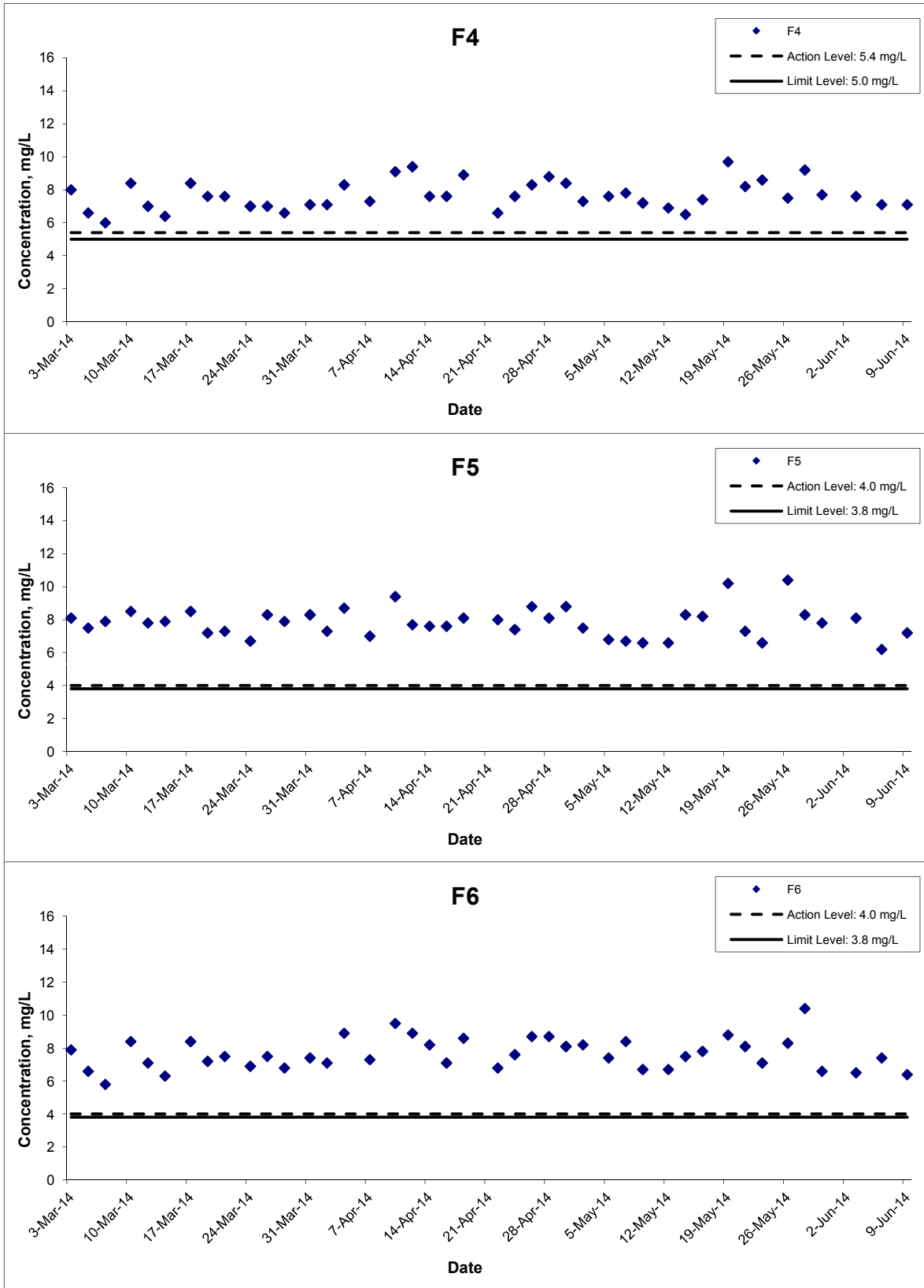
Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	16	18	4	5	<1	<1	19	20
	Middle	-		-		-			
	Bottom	20		6		<1		21	
6-Jun-14	Surface	20	20	7	6	<1	<1	17	18
	Middle	-		-		-			
	Bottom	20		5		<1		20	
9-Jun-14	Surface	19	19	9	6	<1	<1	14	20
	Middle	-		-		-			
	Bottom	20		4		<1		26	

Metal Results at G4 - Mid-Flood Tide

Date	Depth	Arsenic (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average
3-Jun-14	Surface	15	17	6	5	<1	<1	20	20
	Middle	-		-		-			
	Bottom	19		3		<1		21	
6-Jun-14	Surface	18	20	5	4	<1	<1	20	18
	Middle	-		-		-			
	Bottom	21		3		<1		17	
9-Jun-14	Surface	22	21	2	3	<1	<1	18	19
	Middle	-		-		-			
	Bottom	20		3		<1		21	

**APPENDIX N
GRAPHICAL PRESENTATION OF
WATER QUALITY MONITORING
RESULTS**

Dissolved Oxygen (Surface) at Mid-Ebb Tide



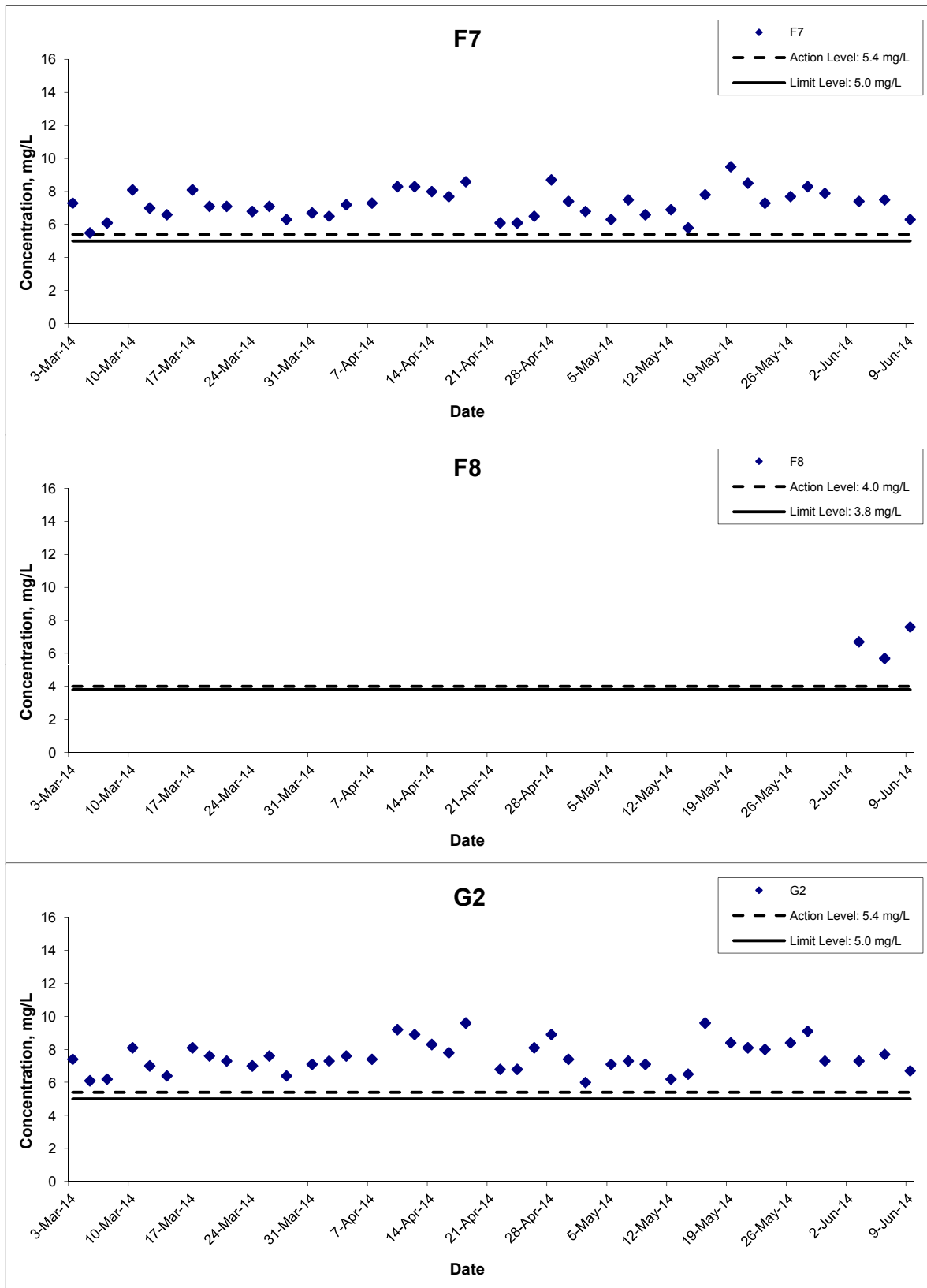
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Dissolved Oxygen (Surface) at Mid-Ebb Tide



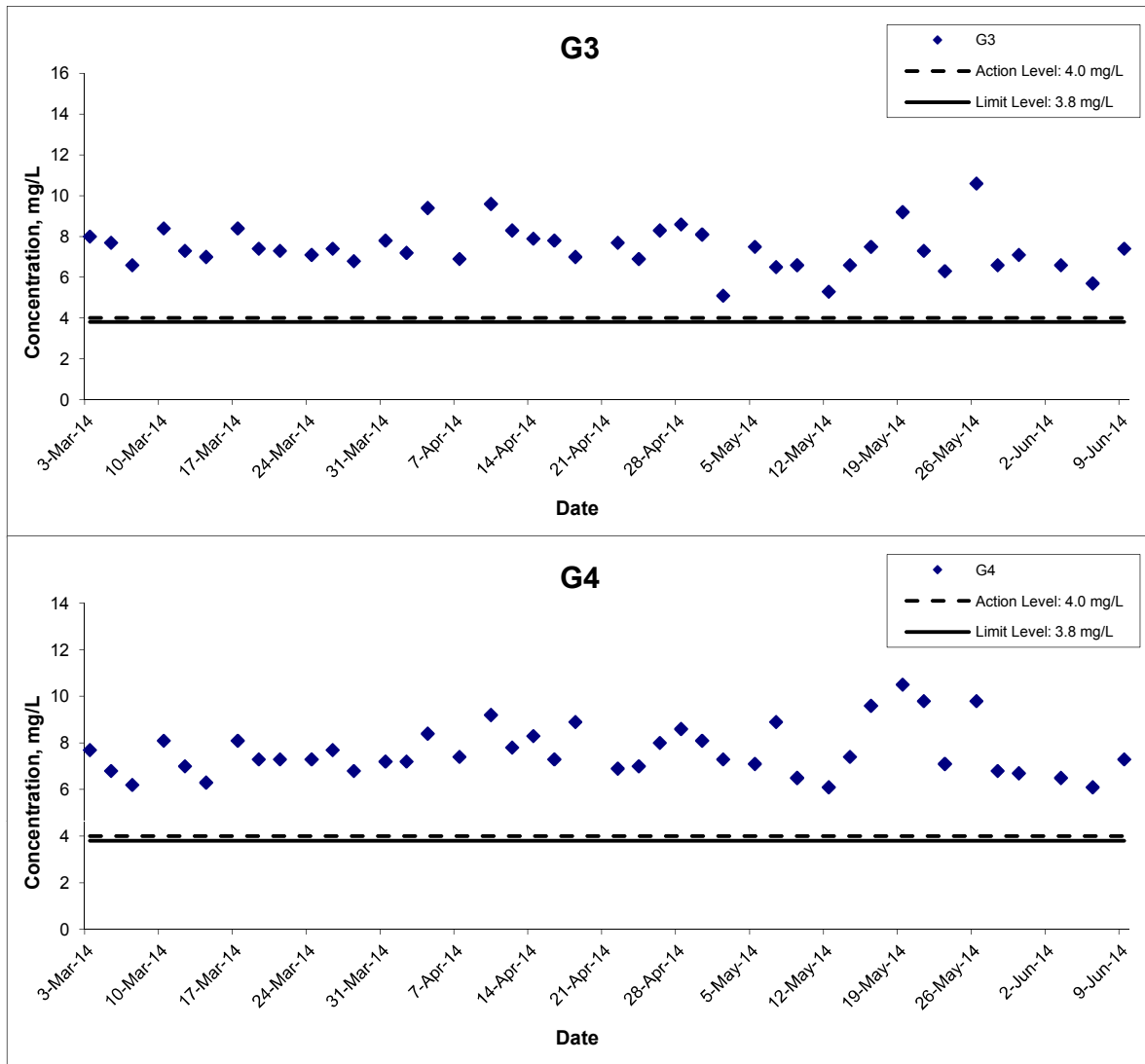
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Surface) at Mid-Ebb Tide



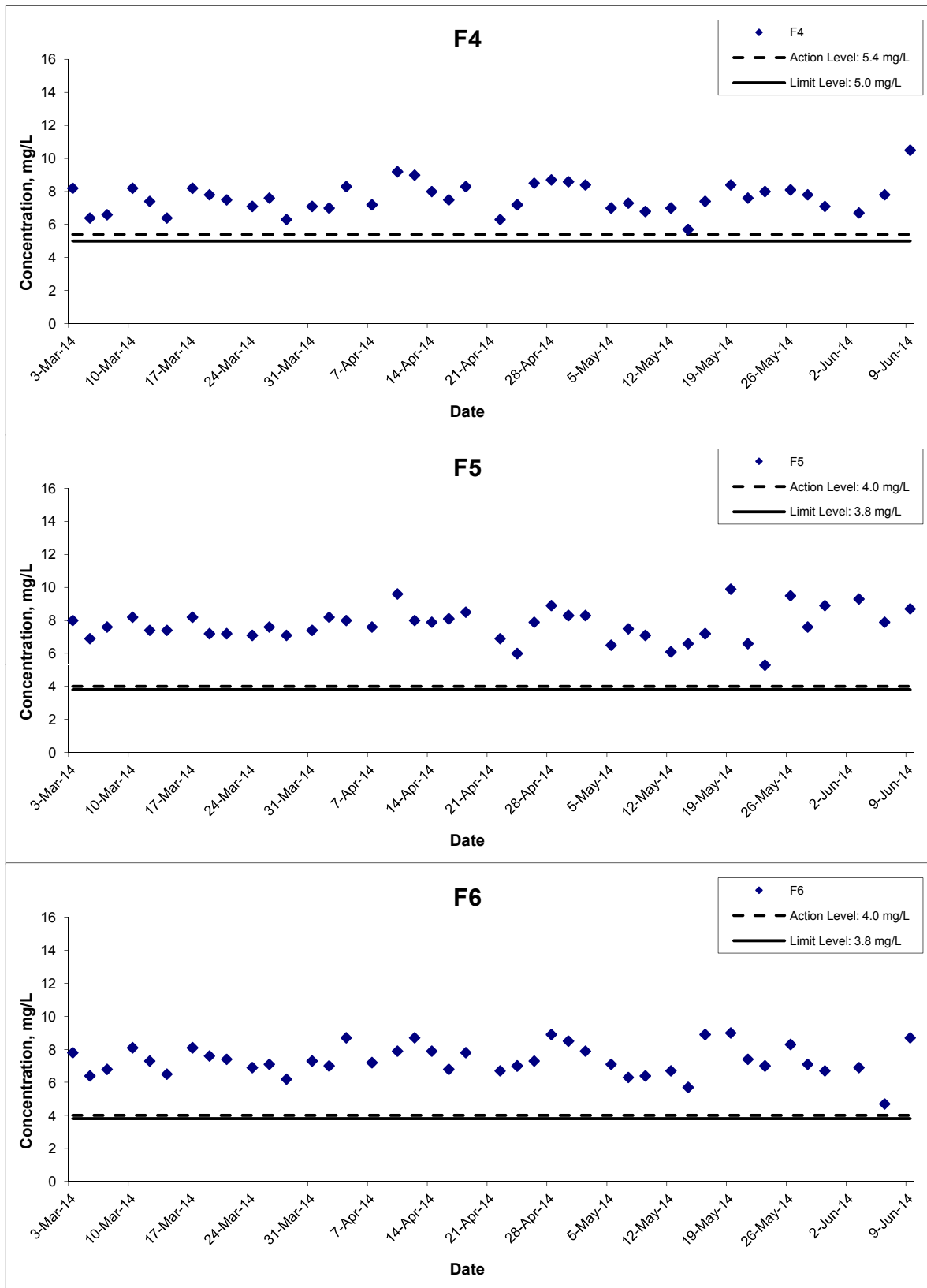
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Surface) at Mid-Flood Tide



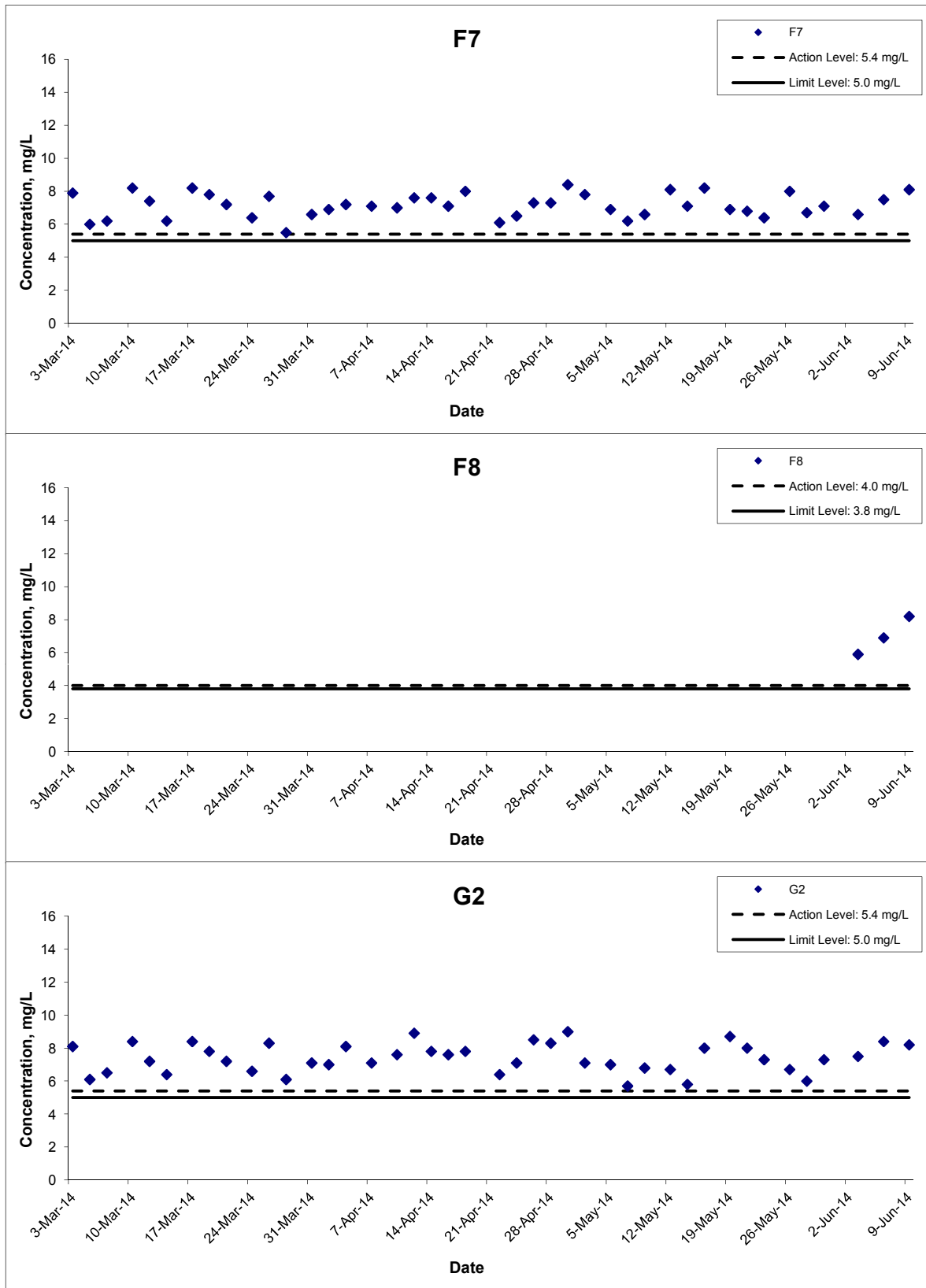
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Dissolved Oxygen (Surface) at Mid-Flood Tide



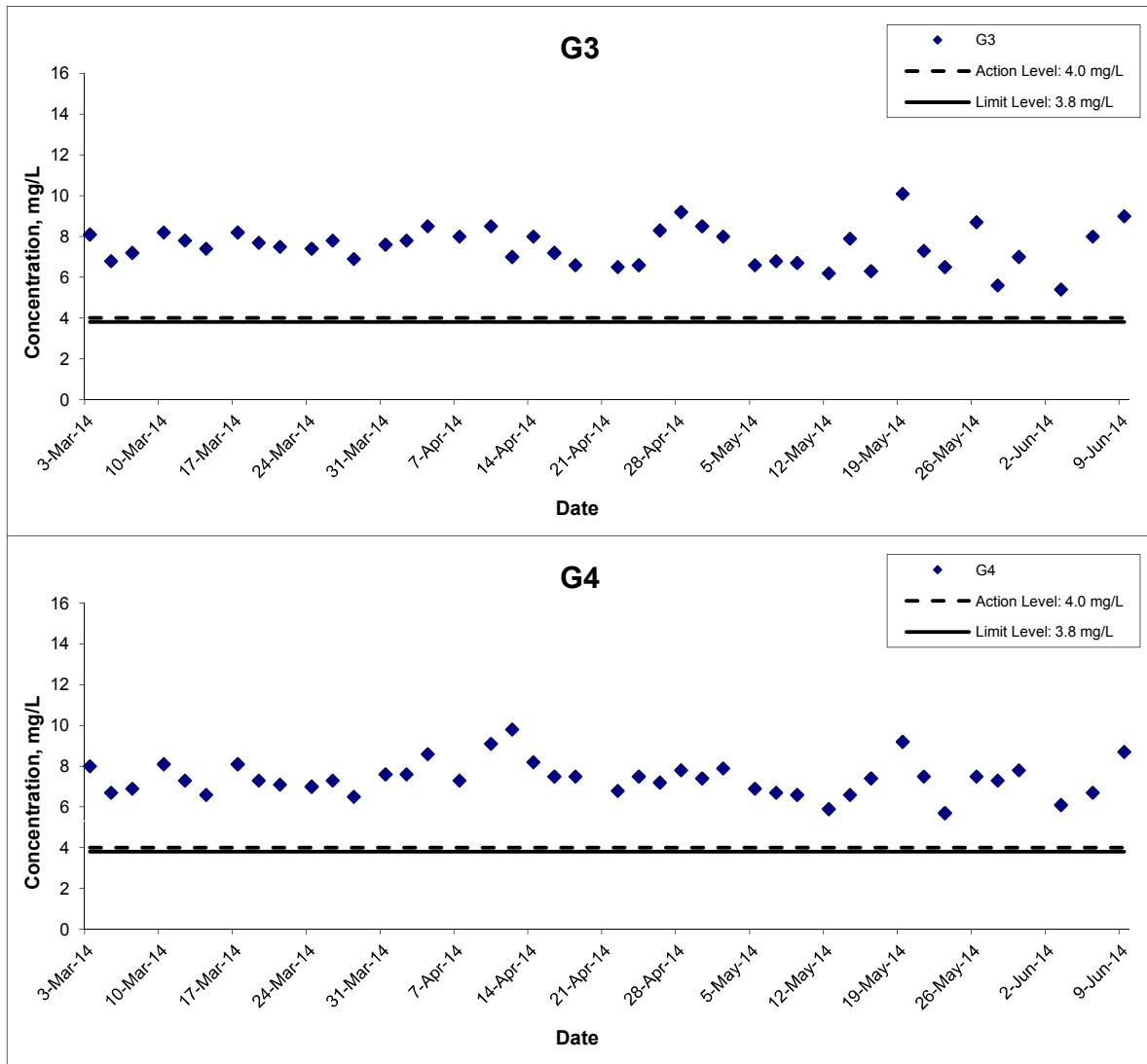
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 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

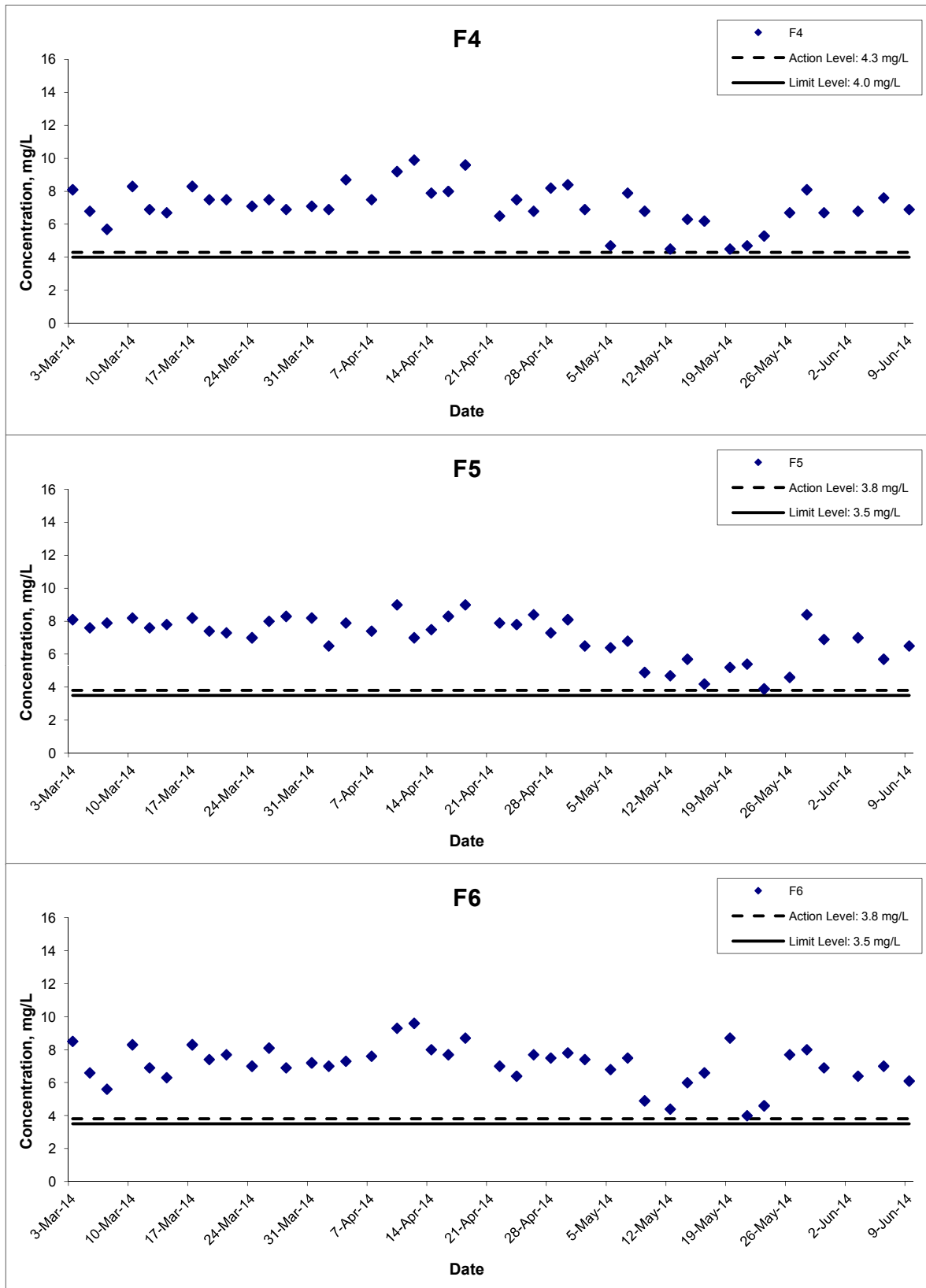


Dissolved Oxygen (Surface) at Mid-Flood Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

Dissolved Oxygen (Middle) at Mid-Ebb Tide



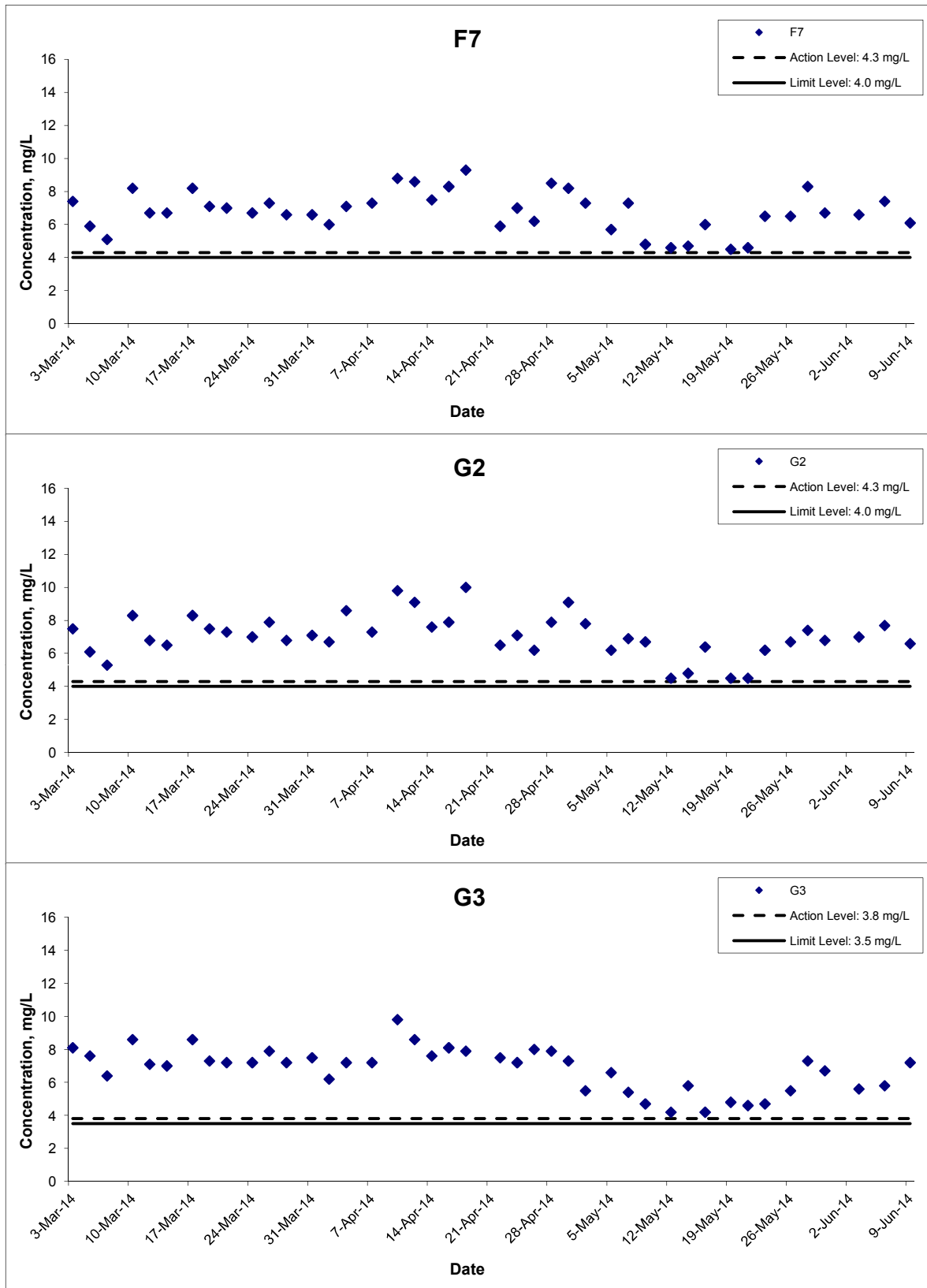
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Middle) at Mid-Ebb Tide



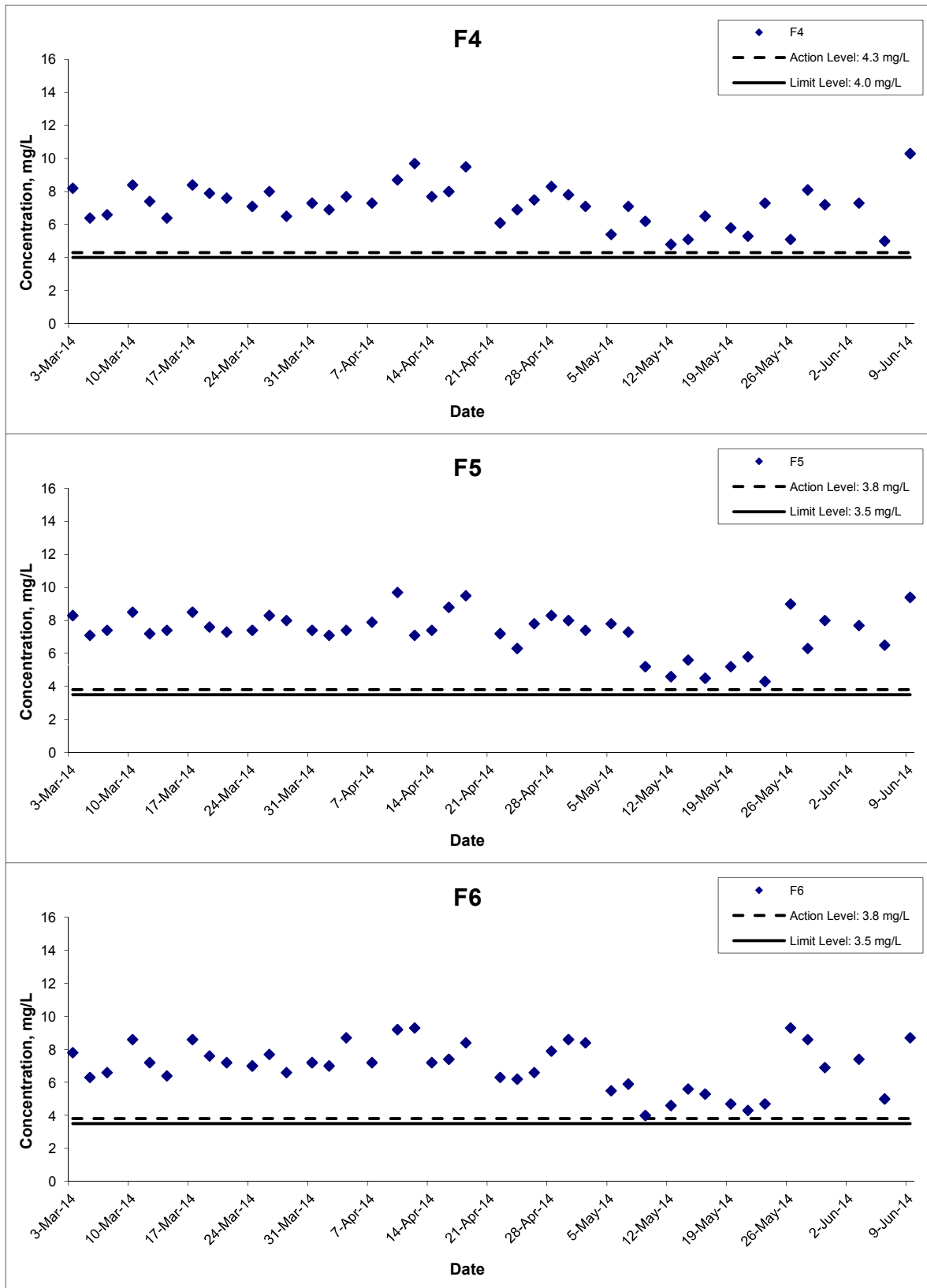
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 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Middle) at Mid-Flood Tide



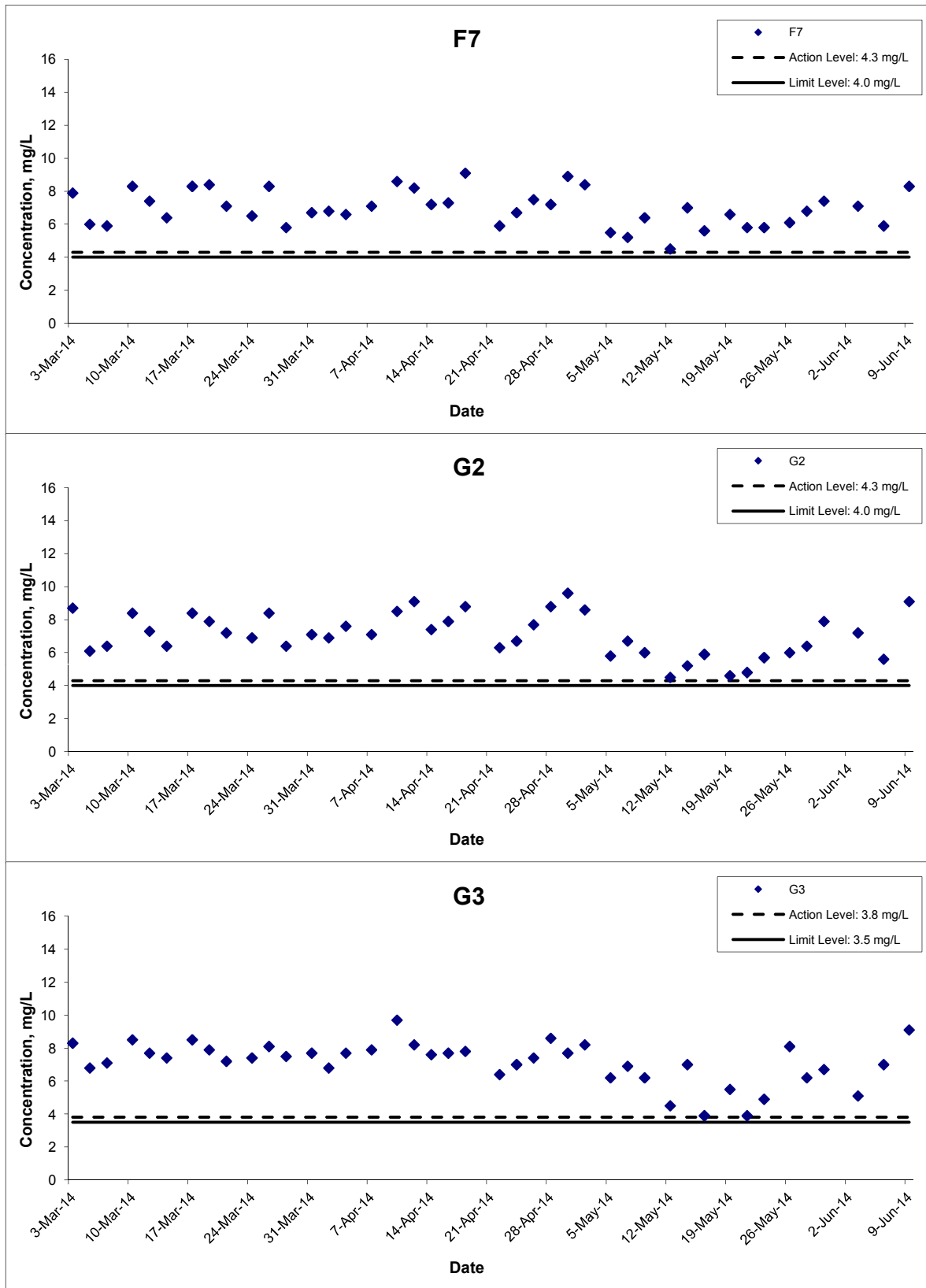
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Middle) at Mid-Flood Tide



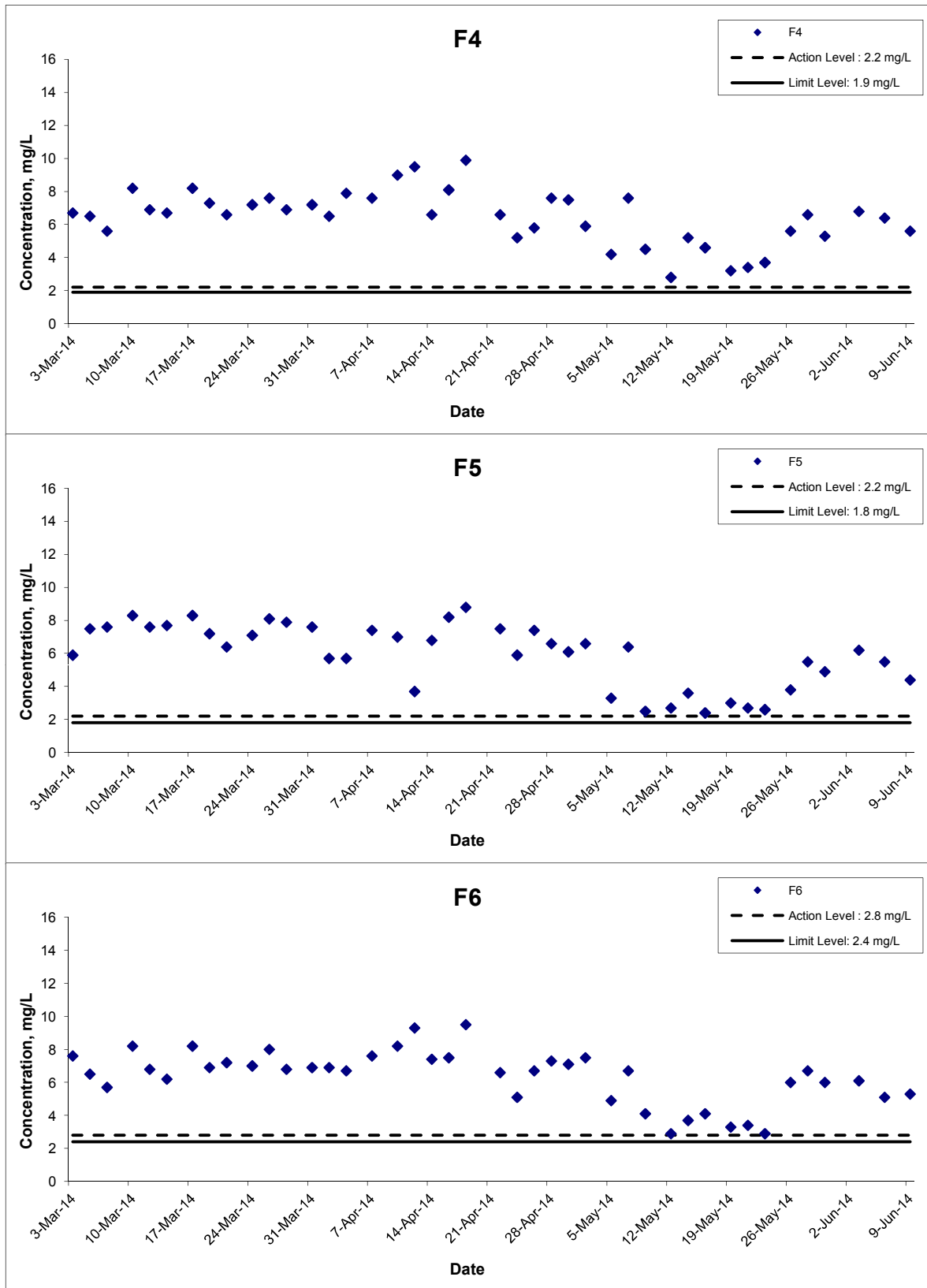
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Bottom) at Mid-Ebb Tide



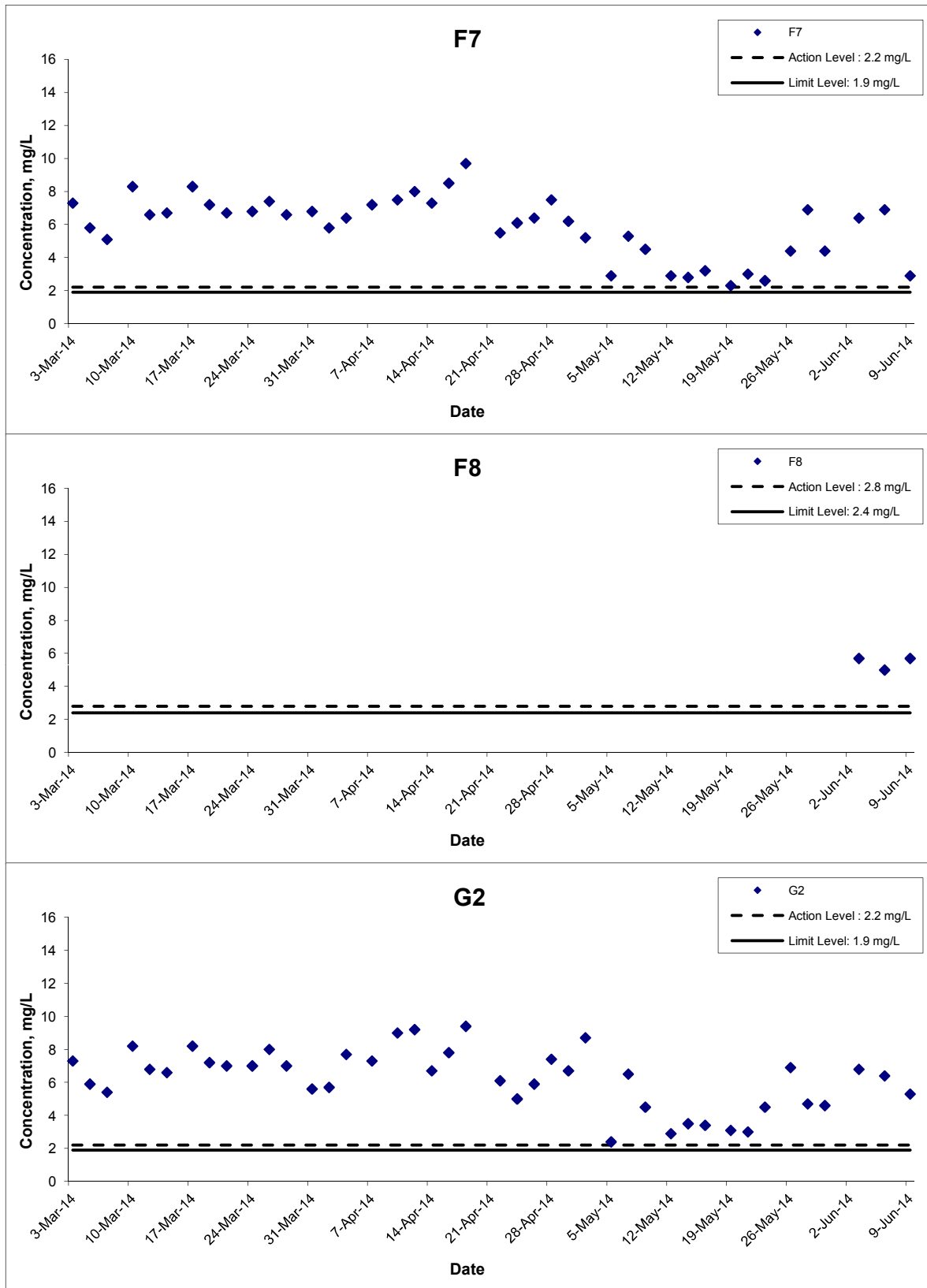
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 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Dissolved Oxygen (Bottom) at Mid-Ebb Tide



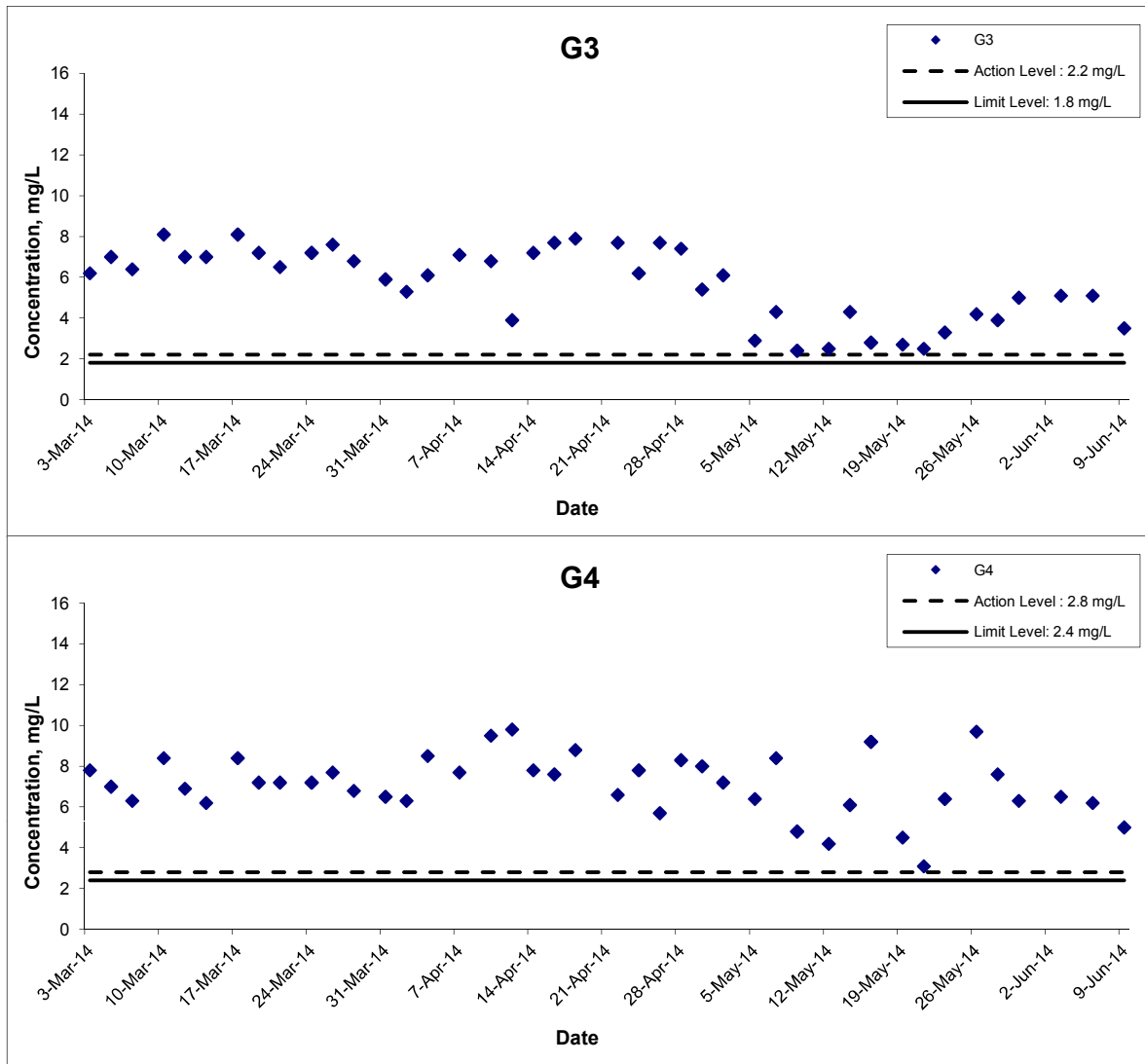
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

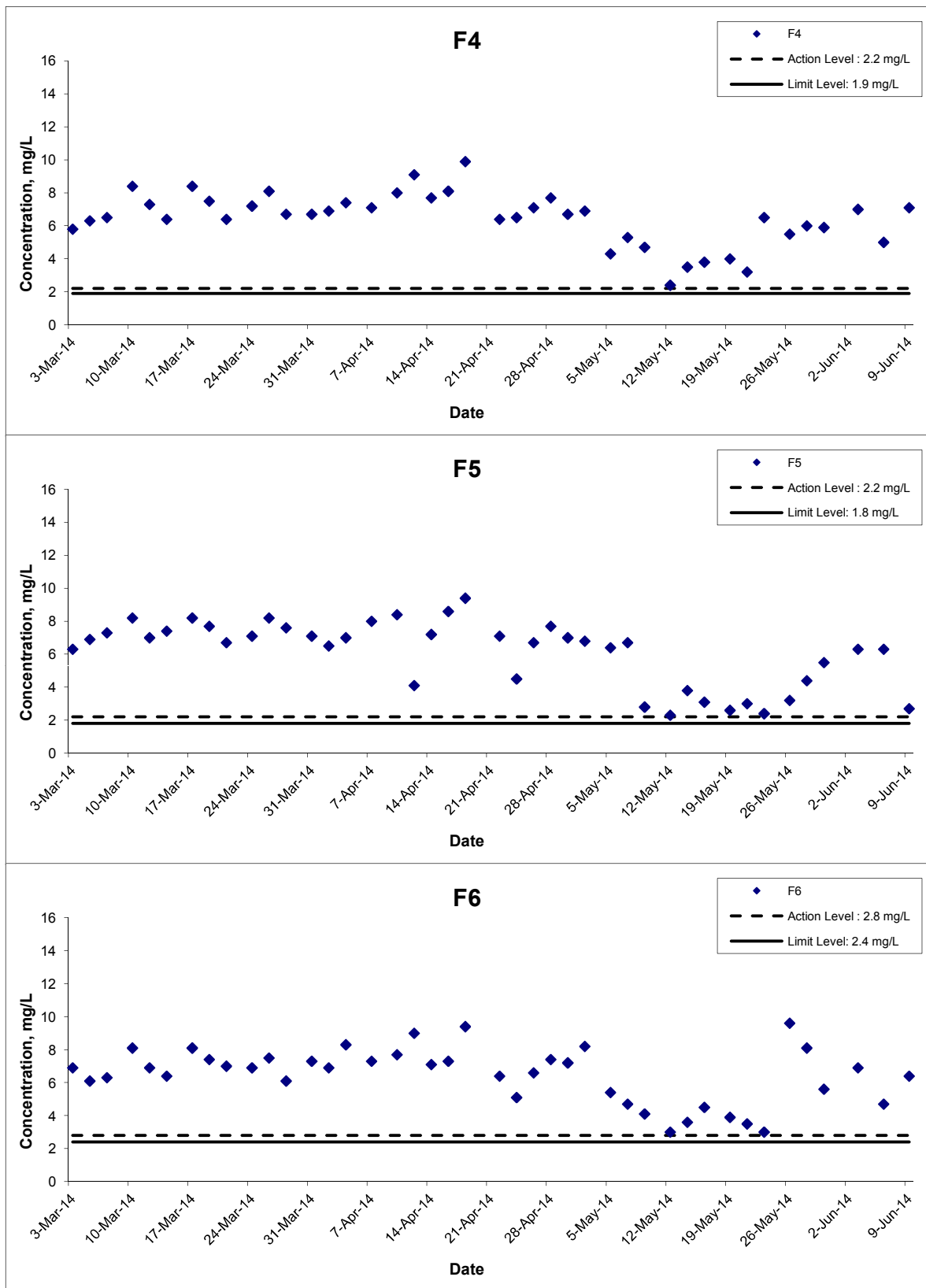


Dissolved Oxygen (Bottom) at Mid-Ebb Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

Dissolved Oxygen (Bottom) at Mid-Flood Tide



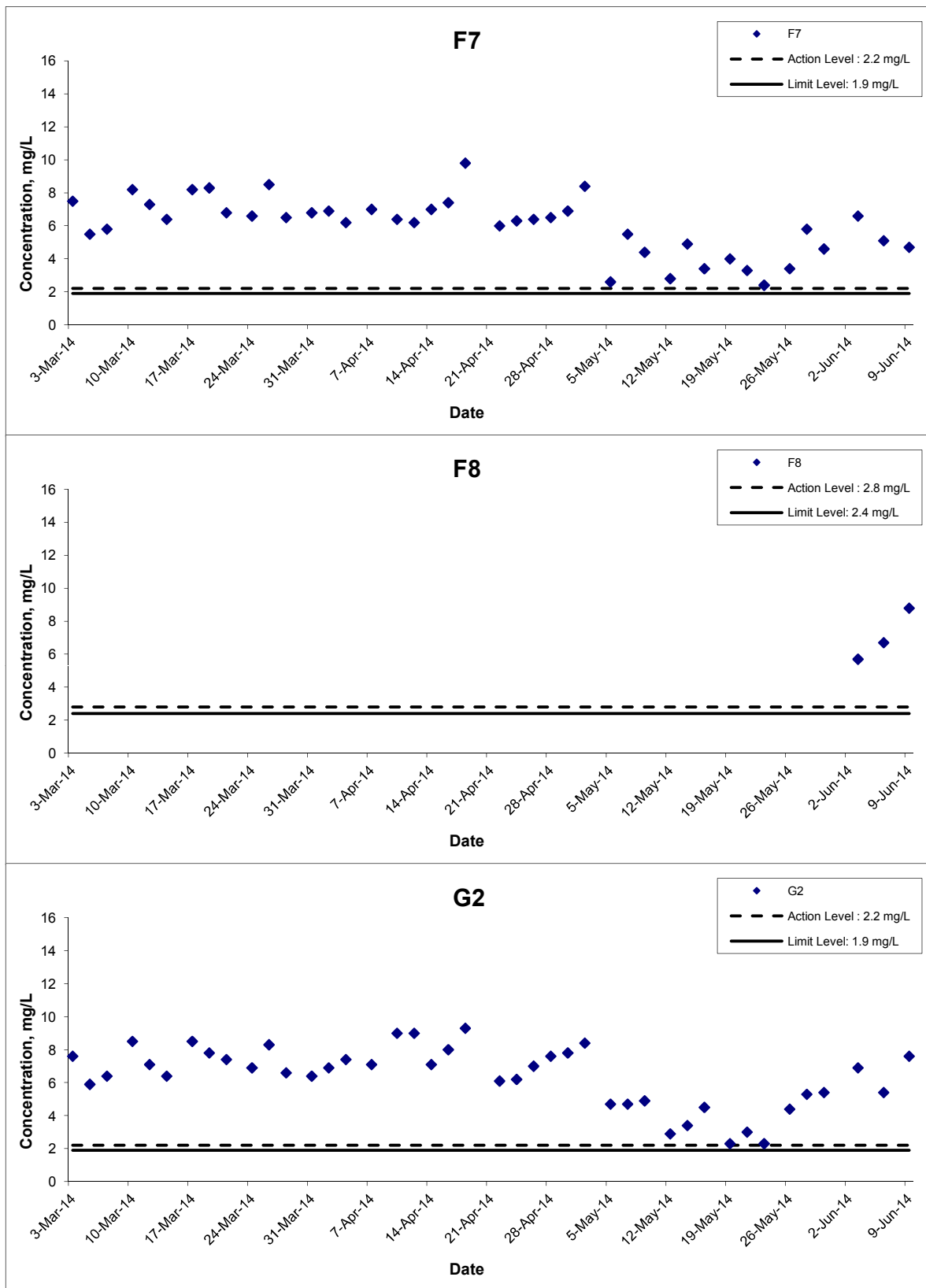
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Dissolved Oxygen (Bottom) at Mid-Flood Tide



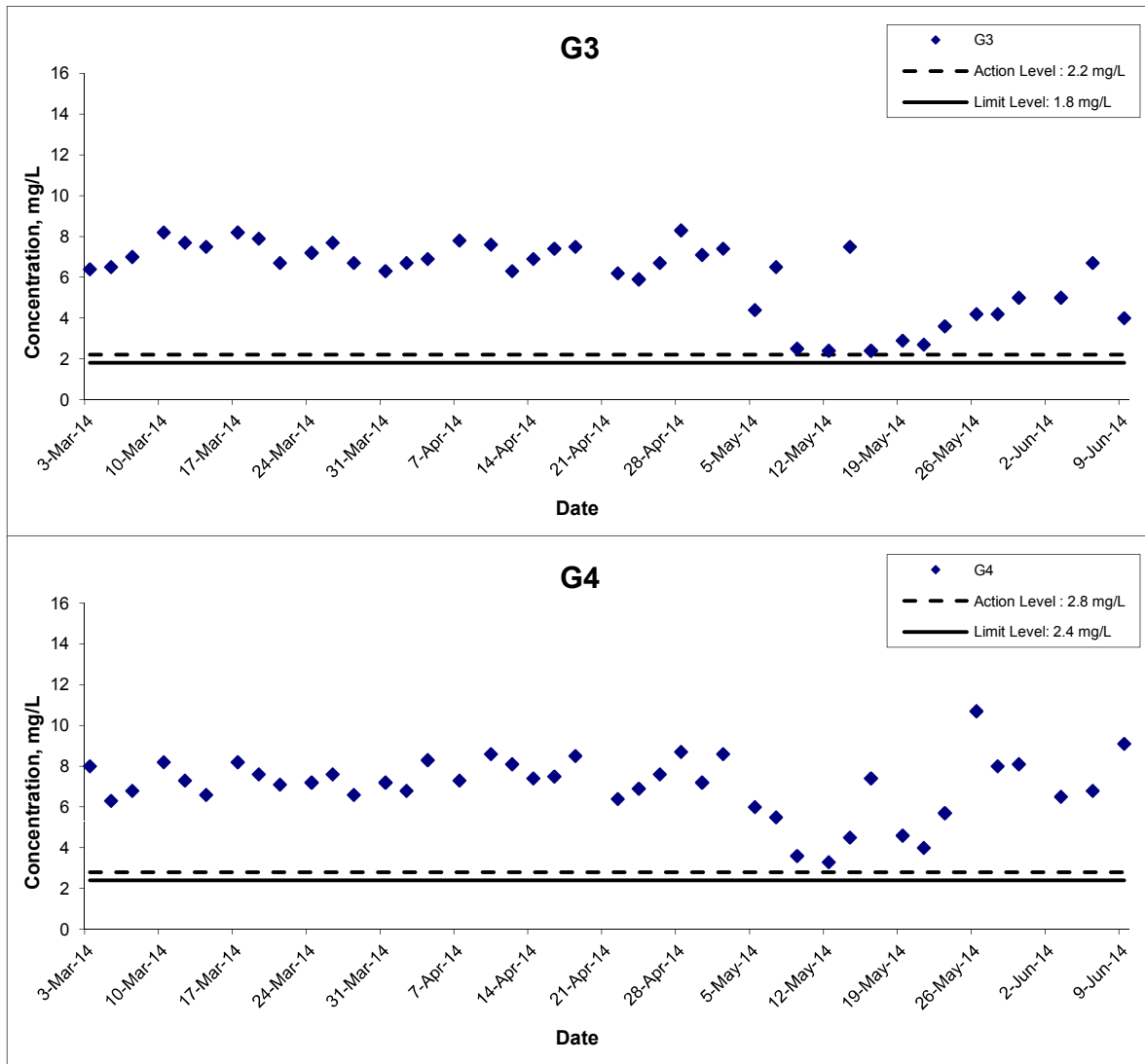
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Dissolved Oxygen (Bottom) at Mid-Flood Tide



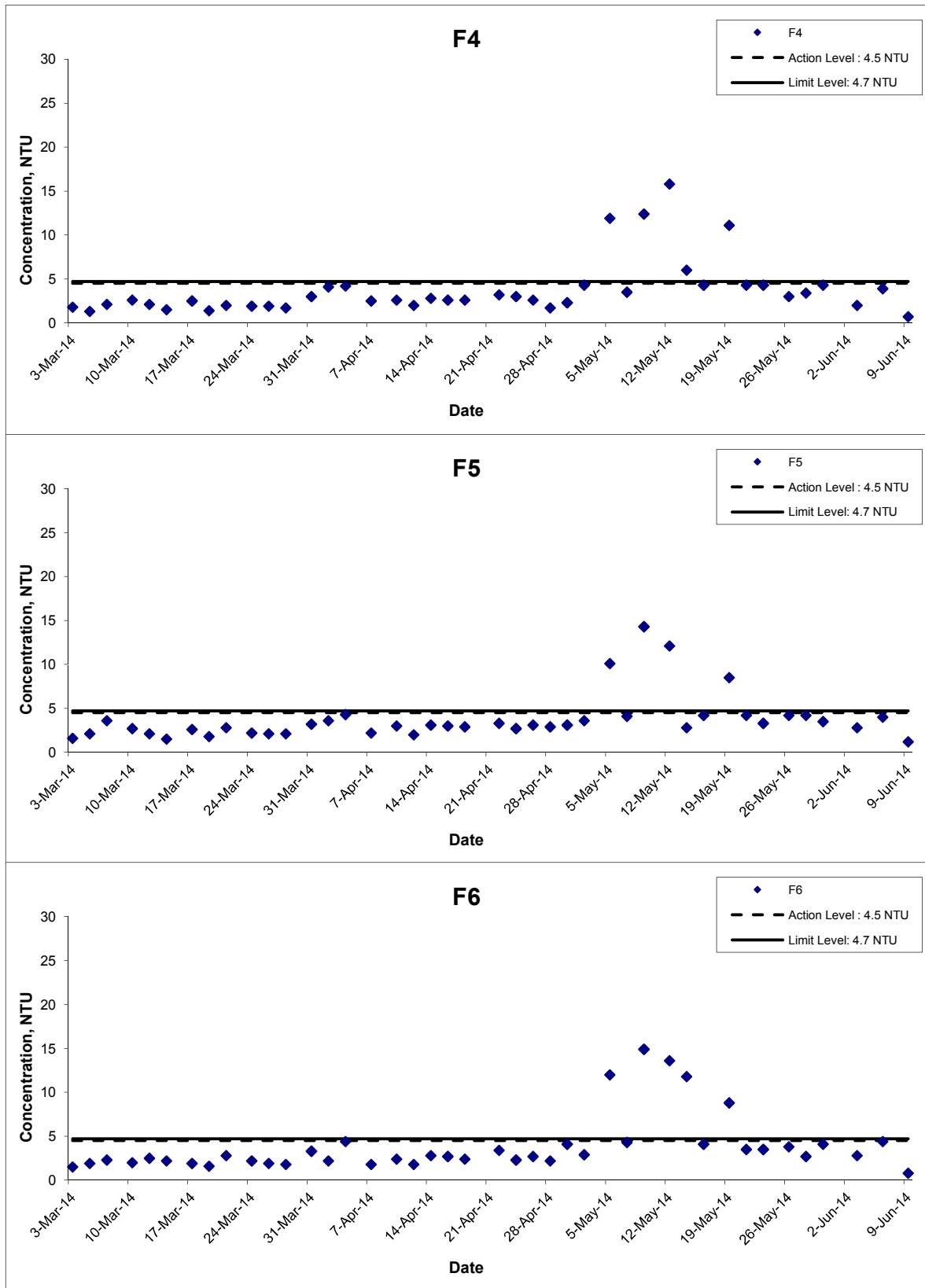
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Turbidity (Depth-averaged) at Mid-Ebb Tide



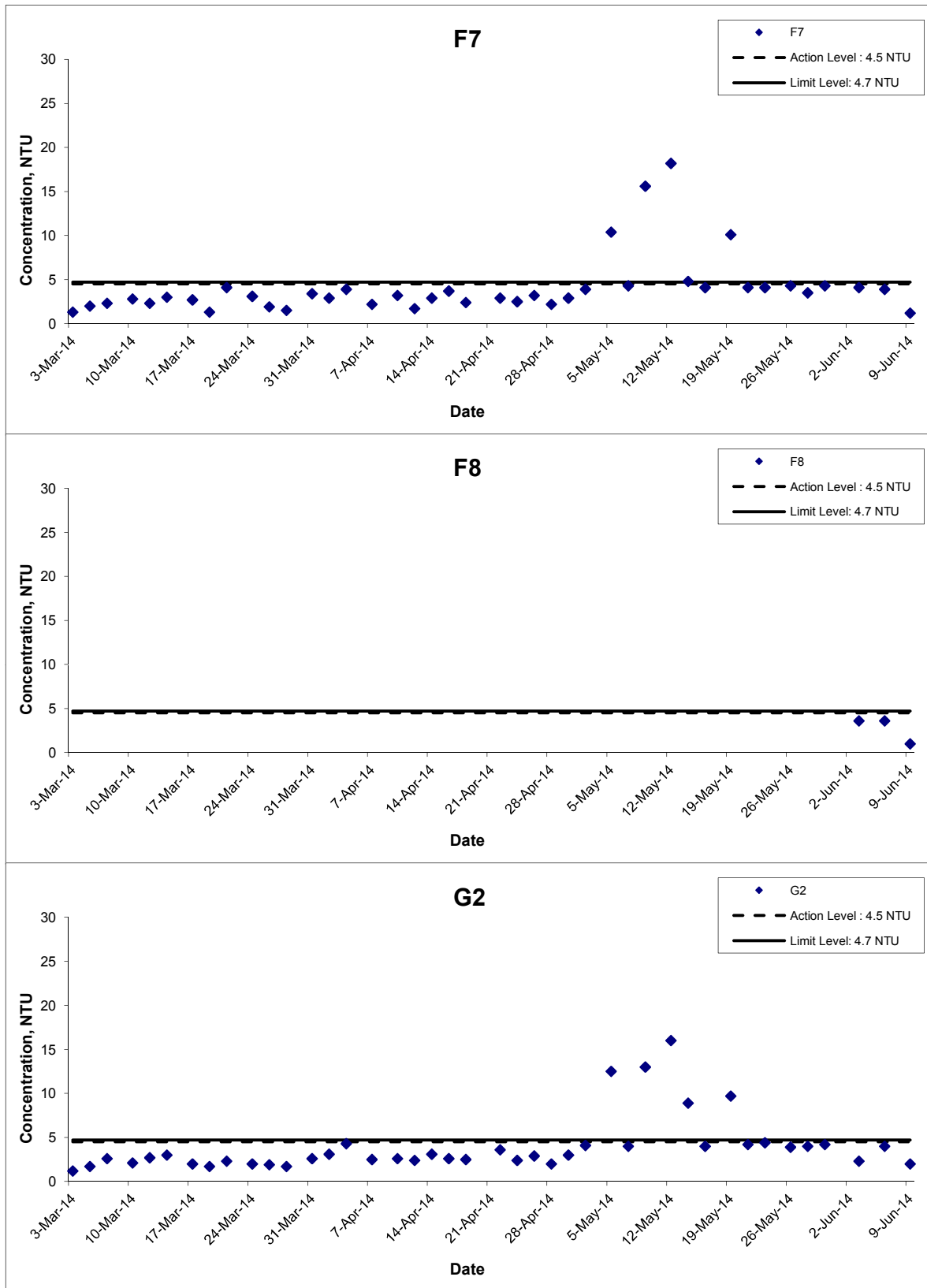
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Turbidity (Depth-averaged) at Mid-Ebb Tide



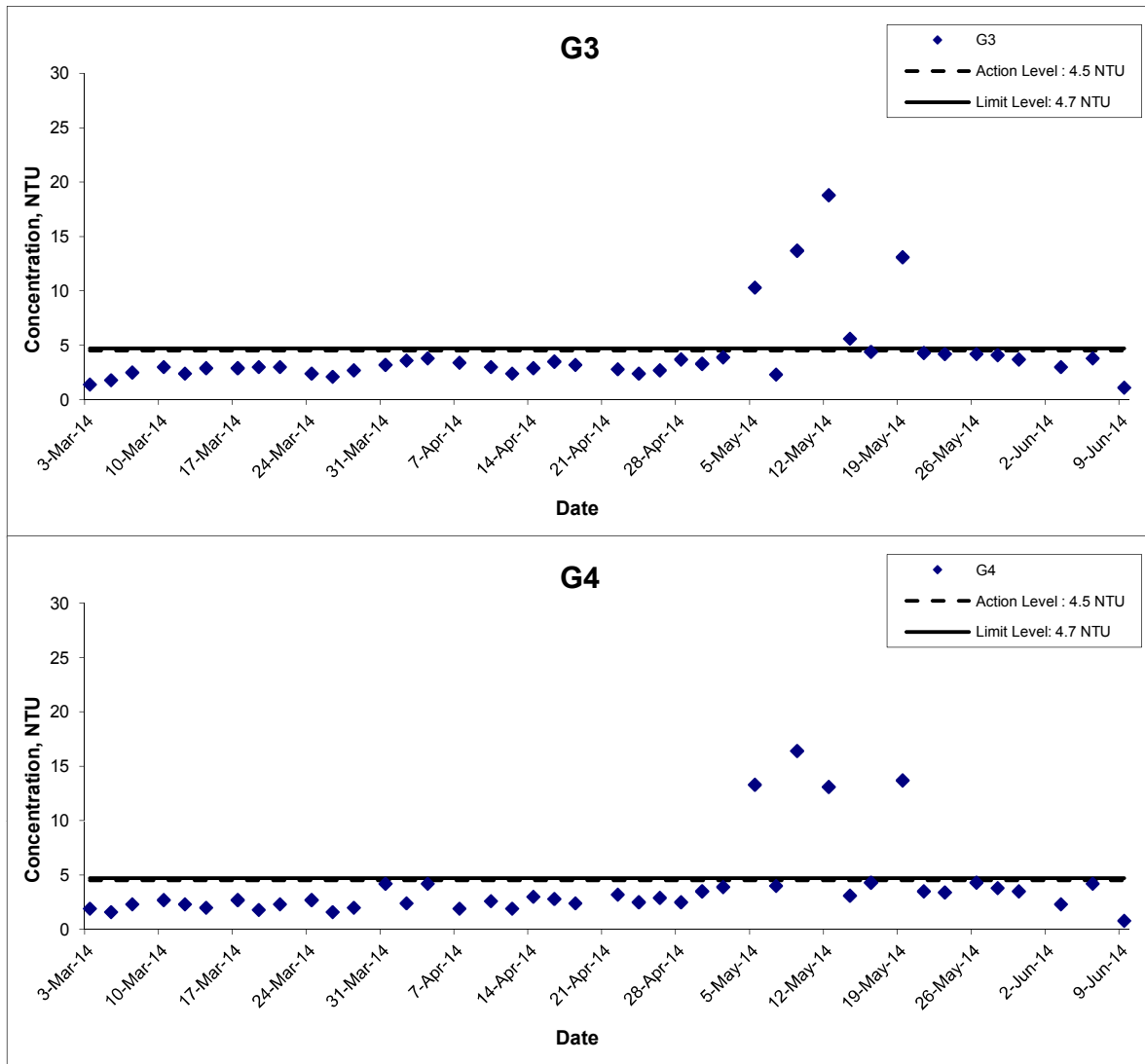
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N

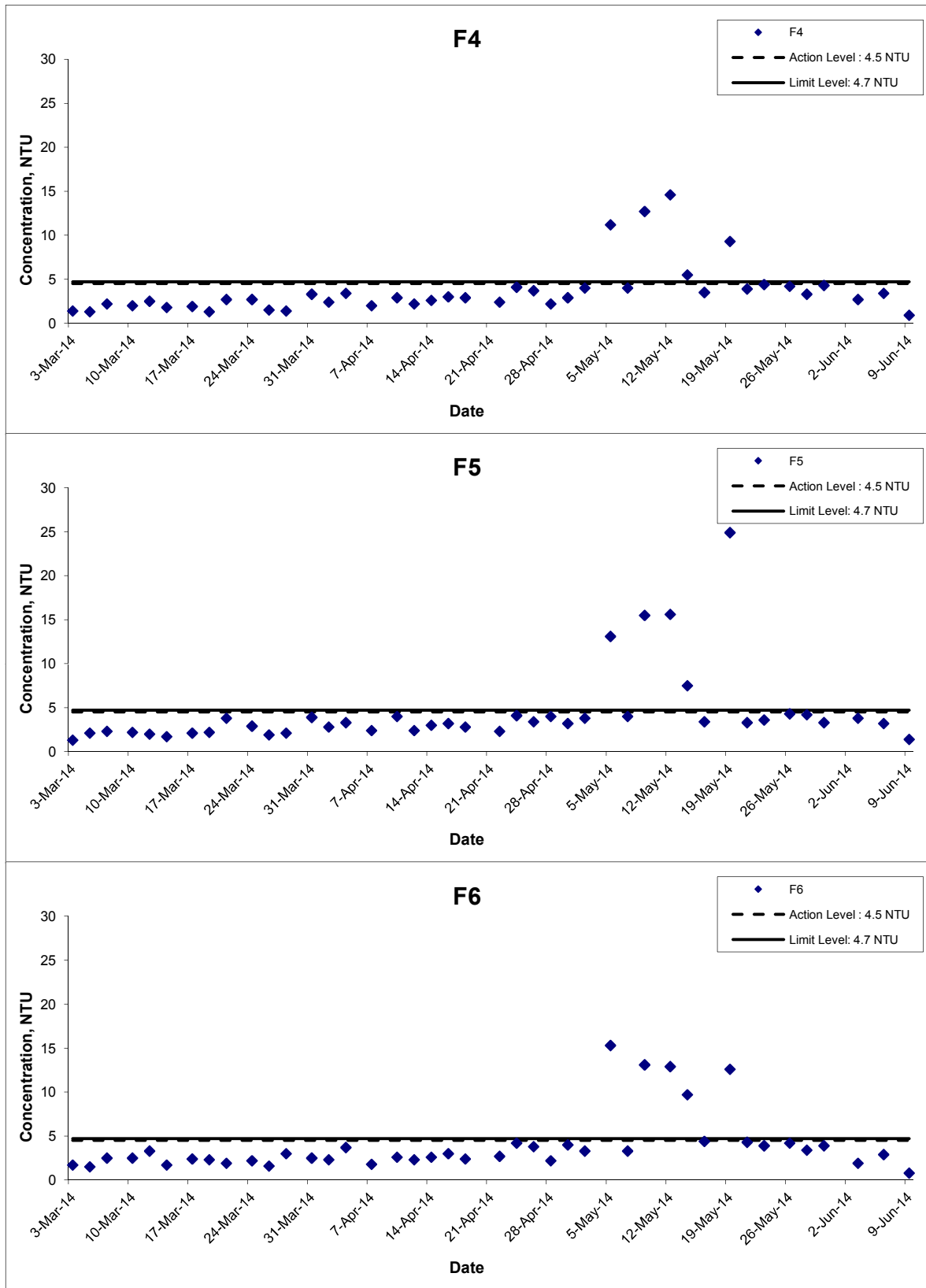


Turbidity (Depth-averaged) at Mid-Ebb Tide



Title Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. MA13027	CINOTECH
	Date Jun 14	Appendix N	

Turbidity (Depth-averaged) at Mid-Flood Tide



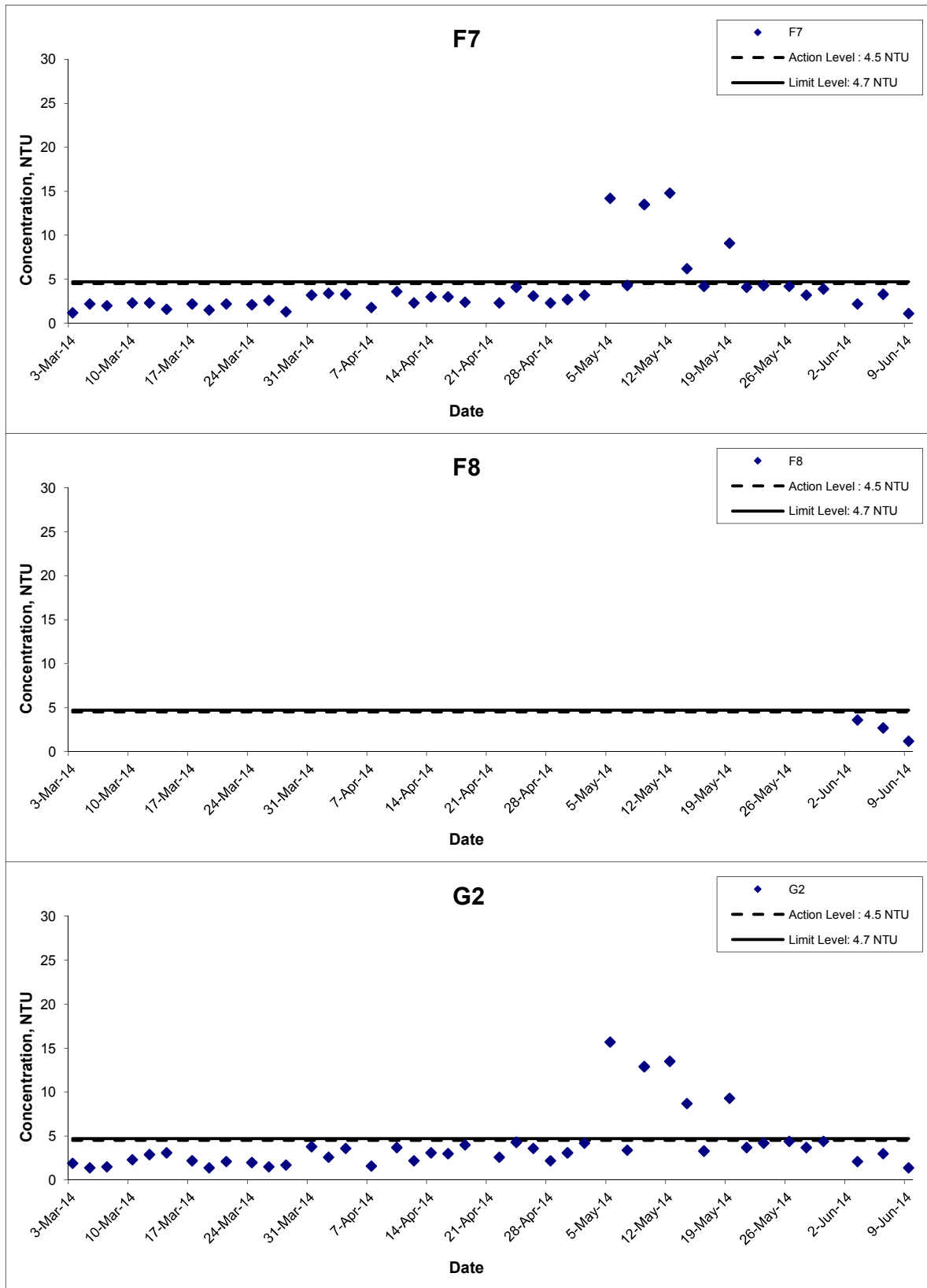
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Turbidity (Depth-averaged) at Mid-Flood Tide



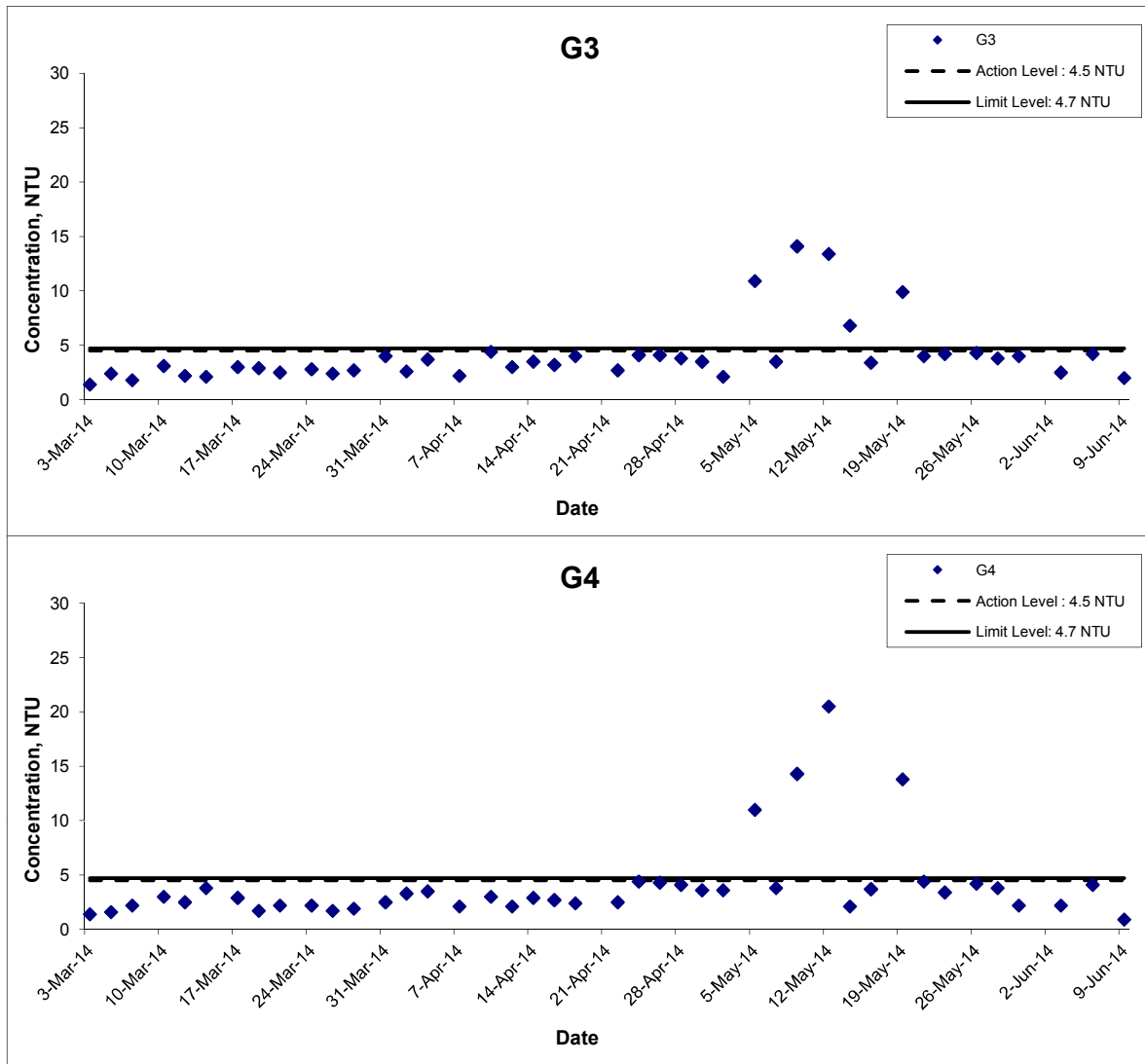
Title Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Graphical Presentation of Water Quality Monitoring Results

Scale N.T.S
Date Jun 14

Project No. MA13027
Appendix N

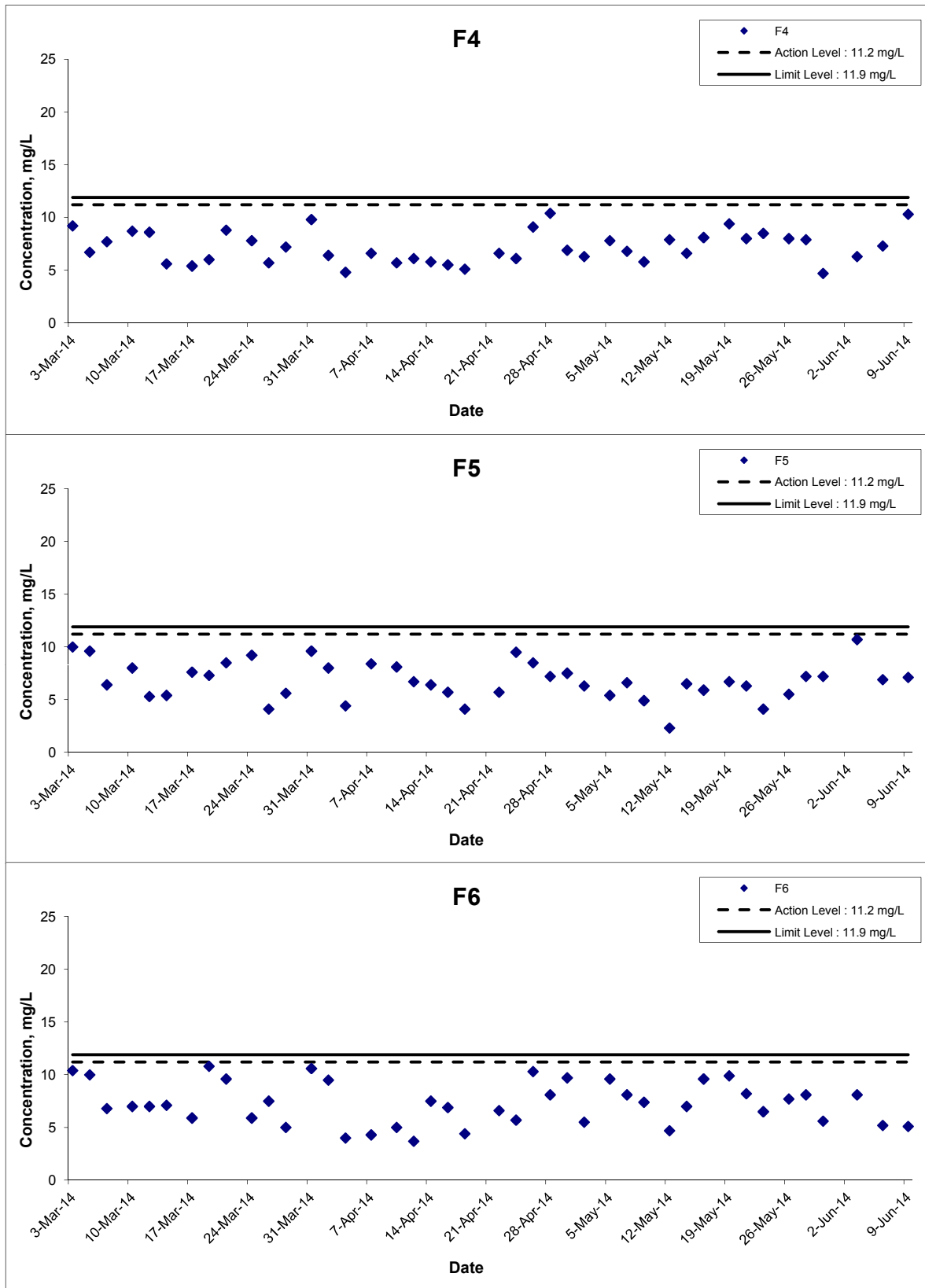


Turbidity (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

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



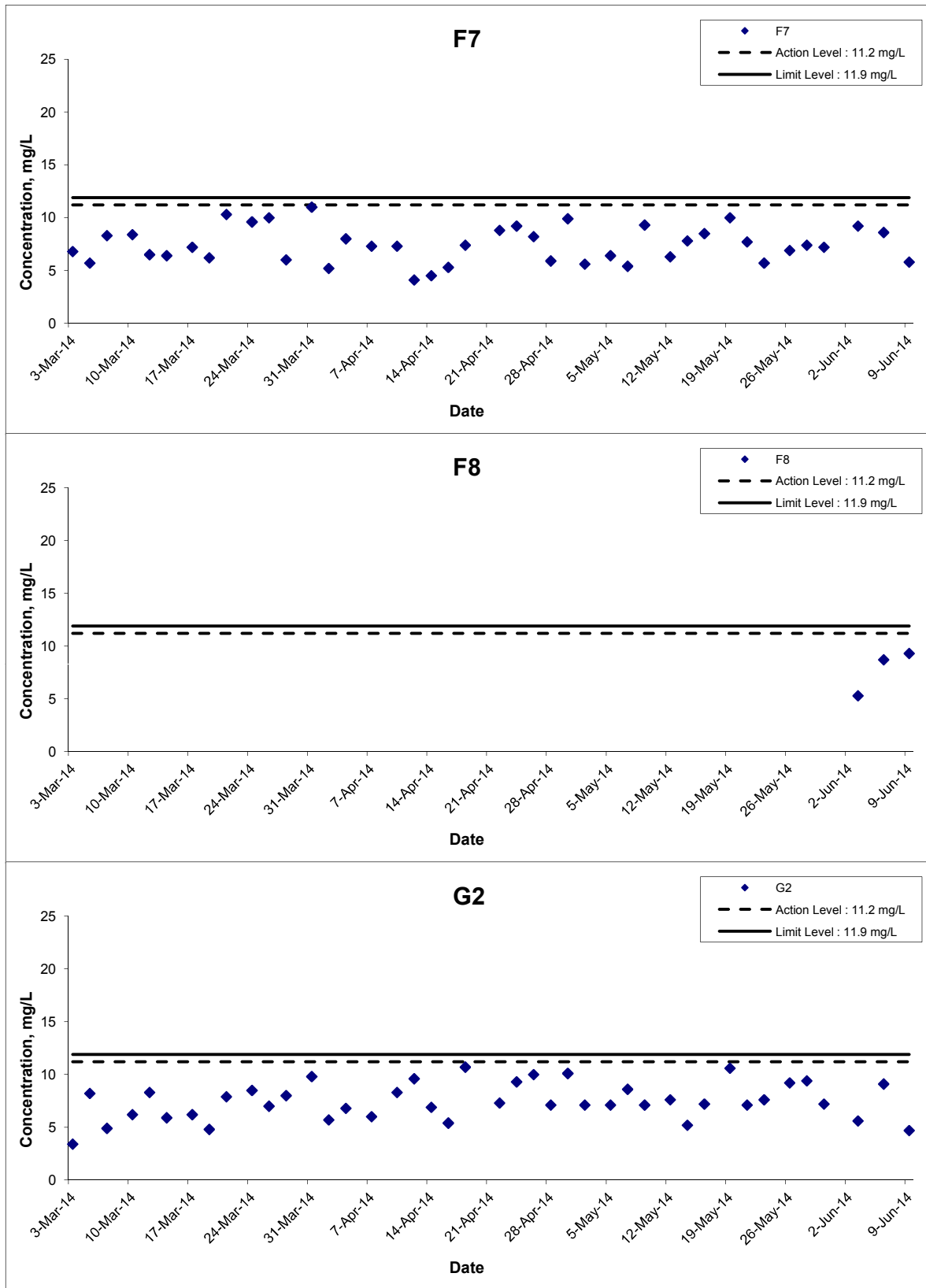
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



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



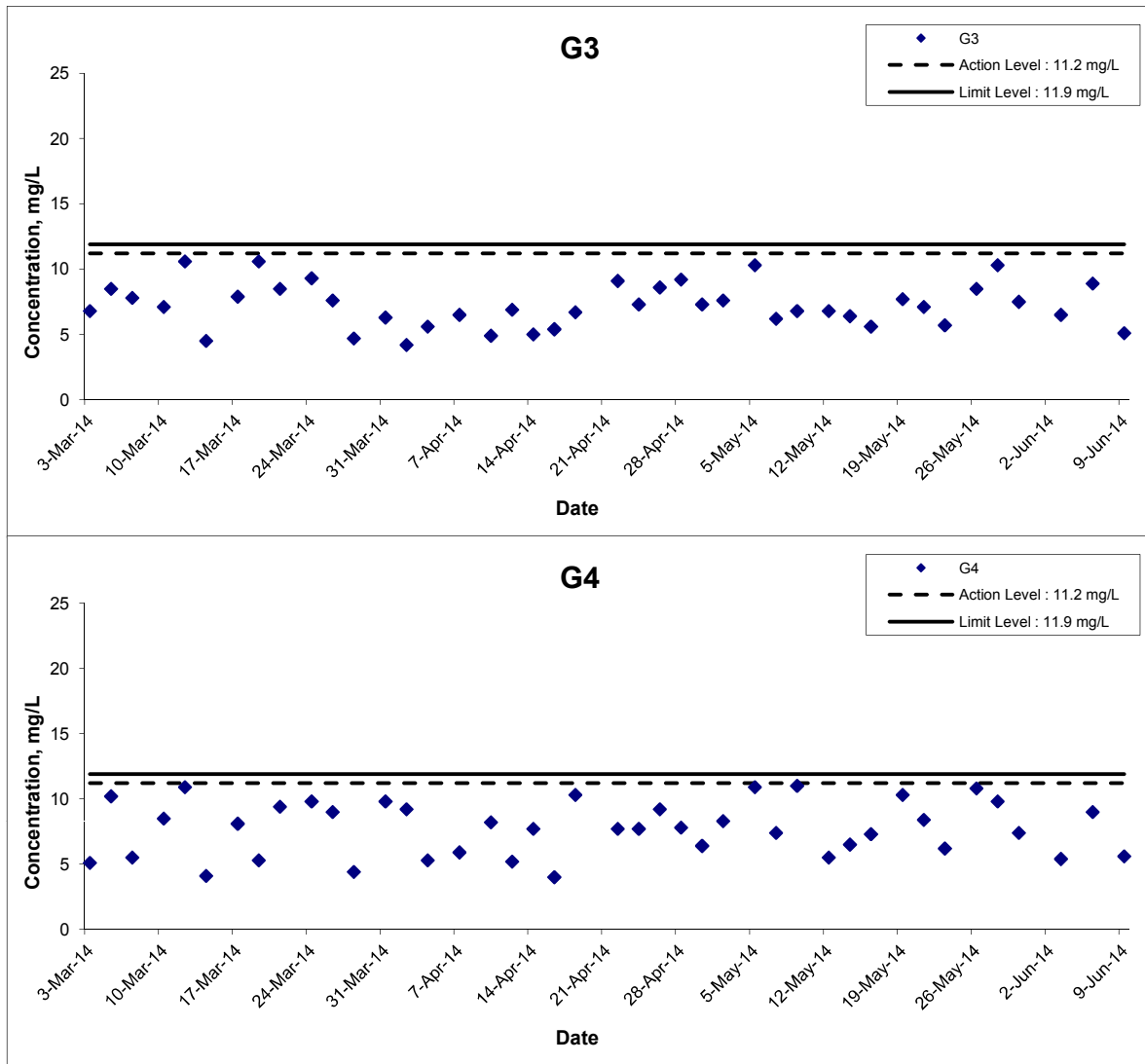
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

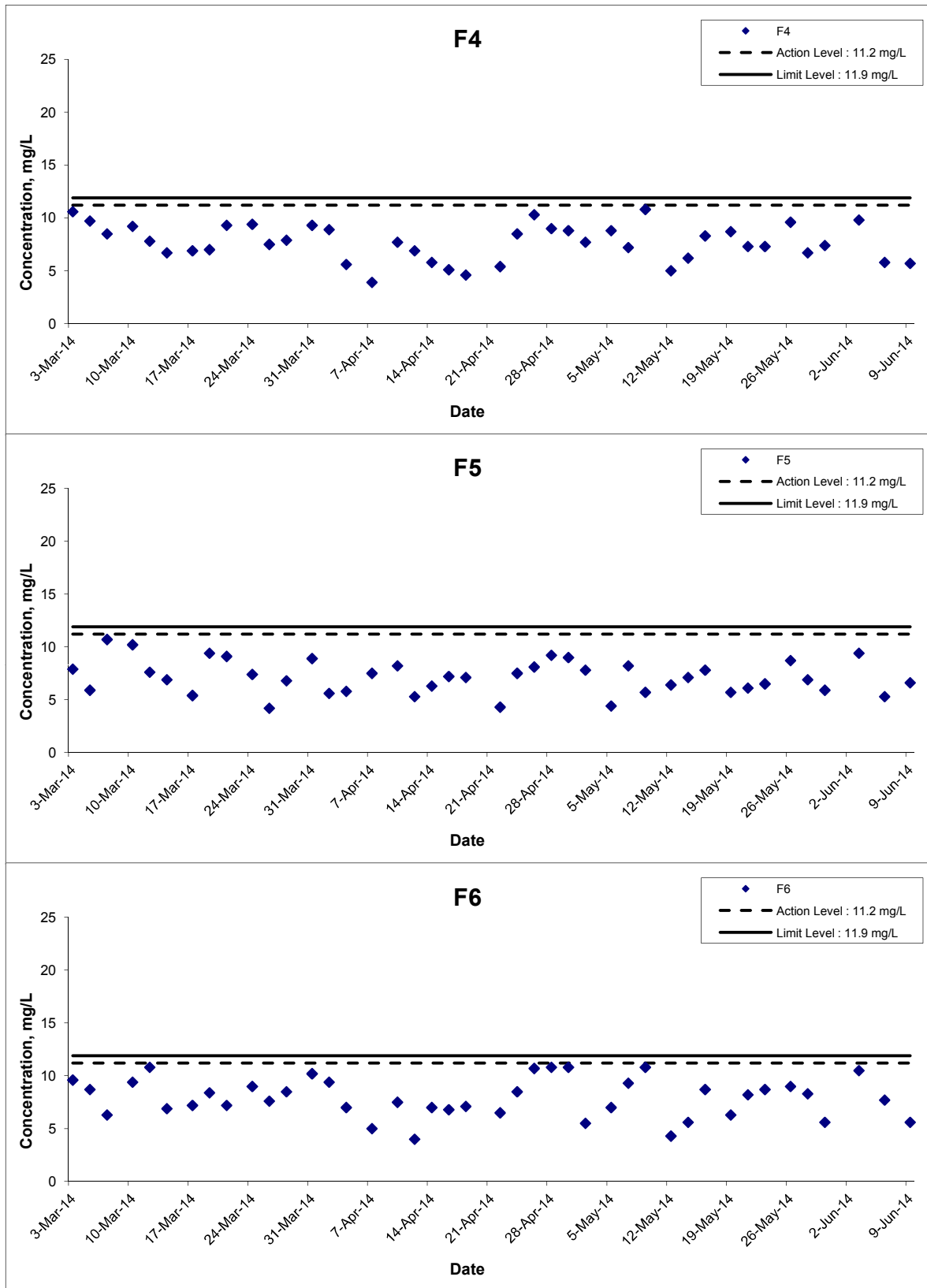


Suspended Solids (Depth-averaged) at Mid-Ebb Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

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



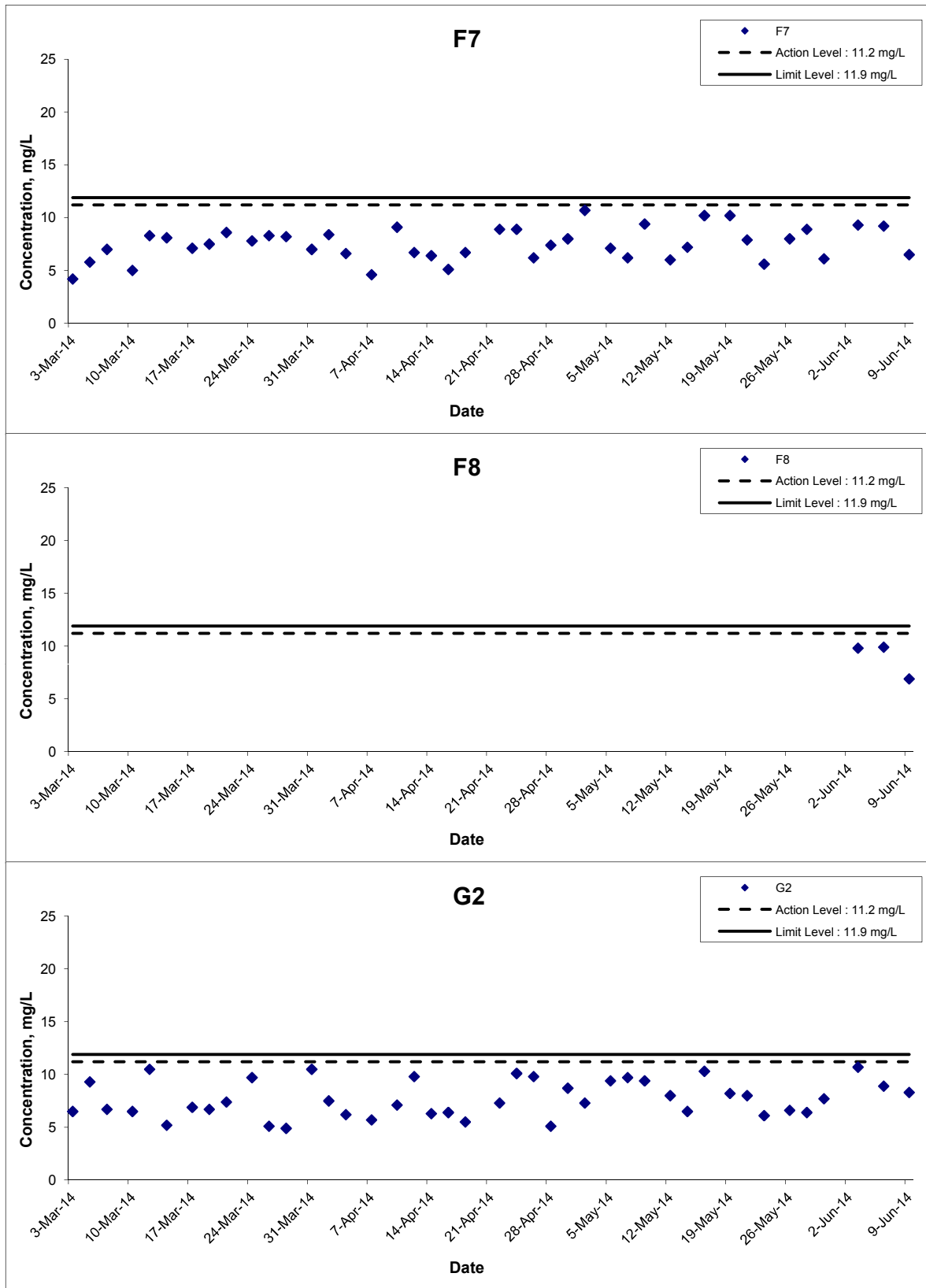
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



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



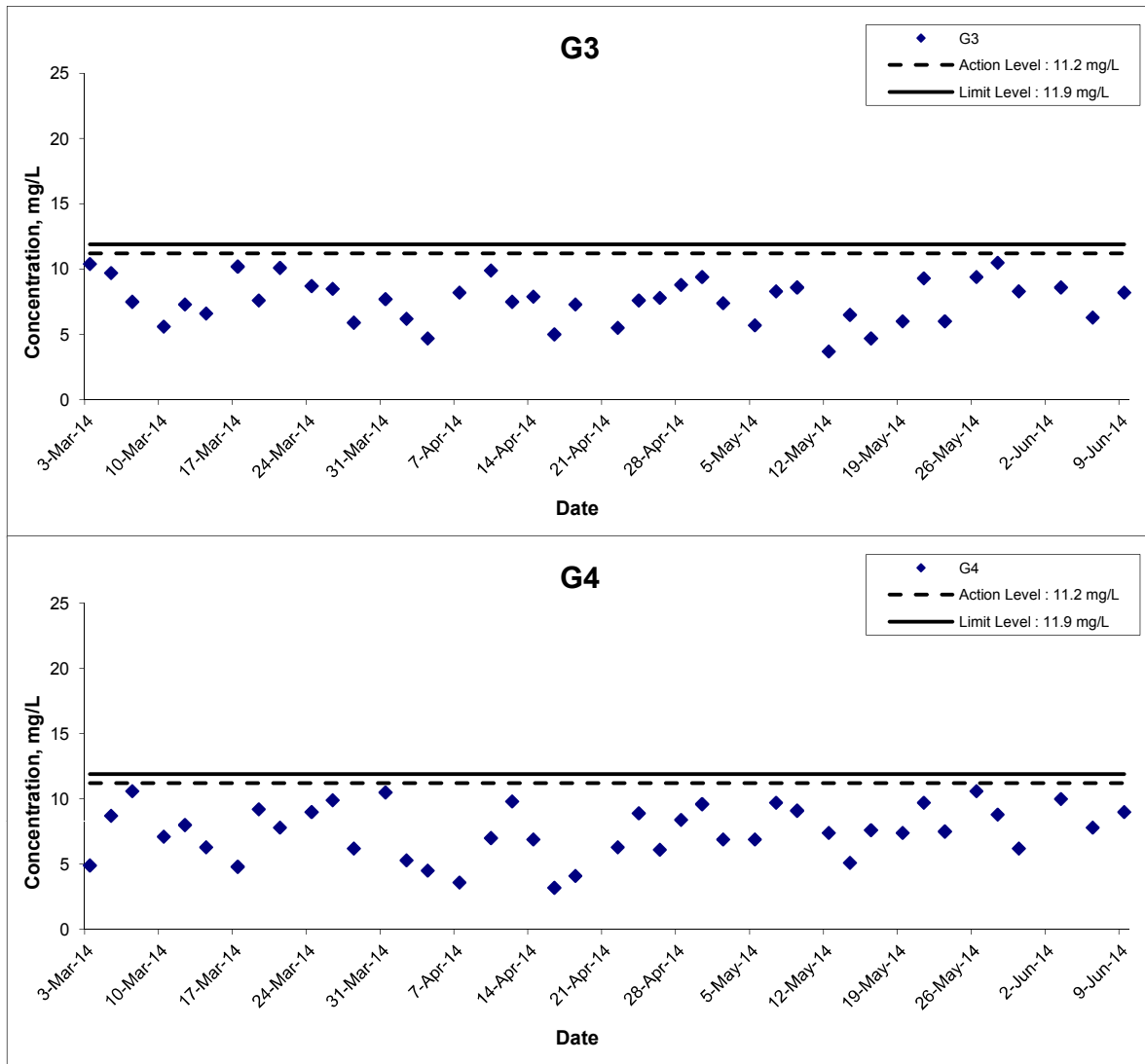
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

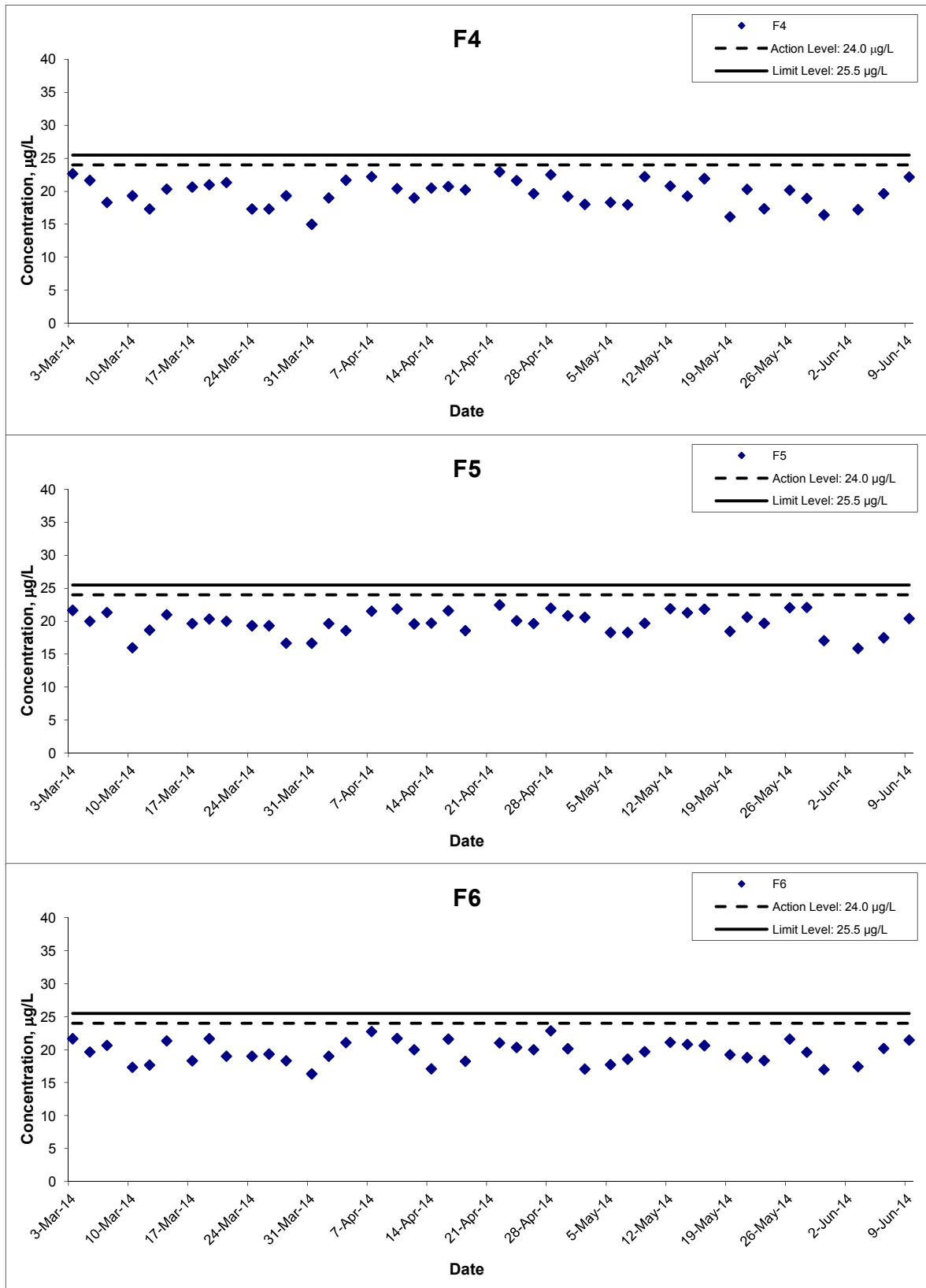


Suspended Solids (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

Arsenic (Depth-averaged) at Mid-Ebb Tide



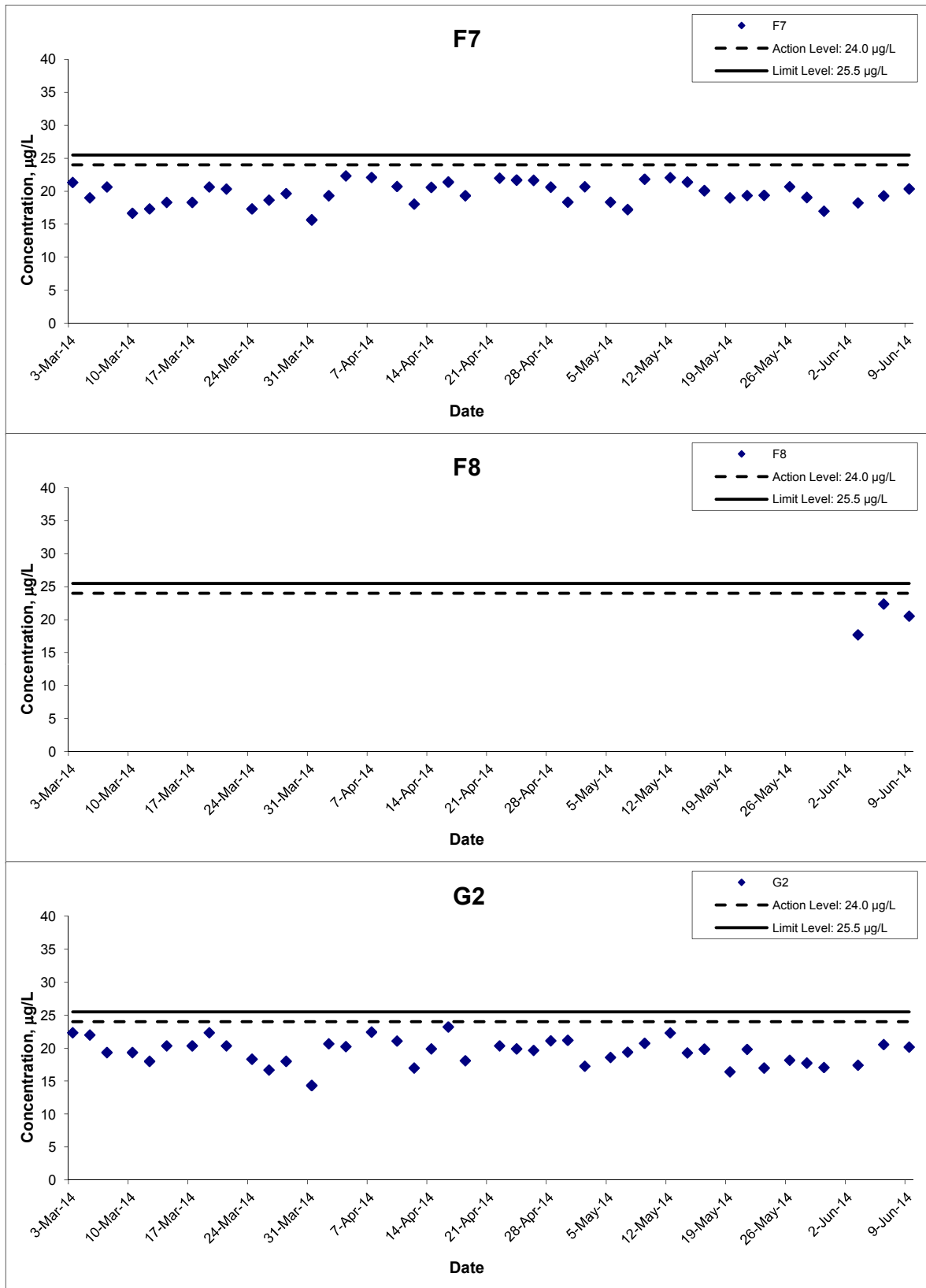
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Arsenic (Depth-averaged) at Mid-Ebb Tide



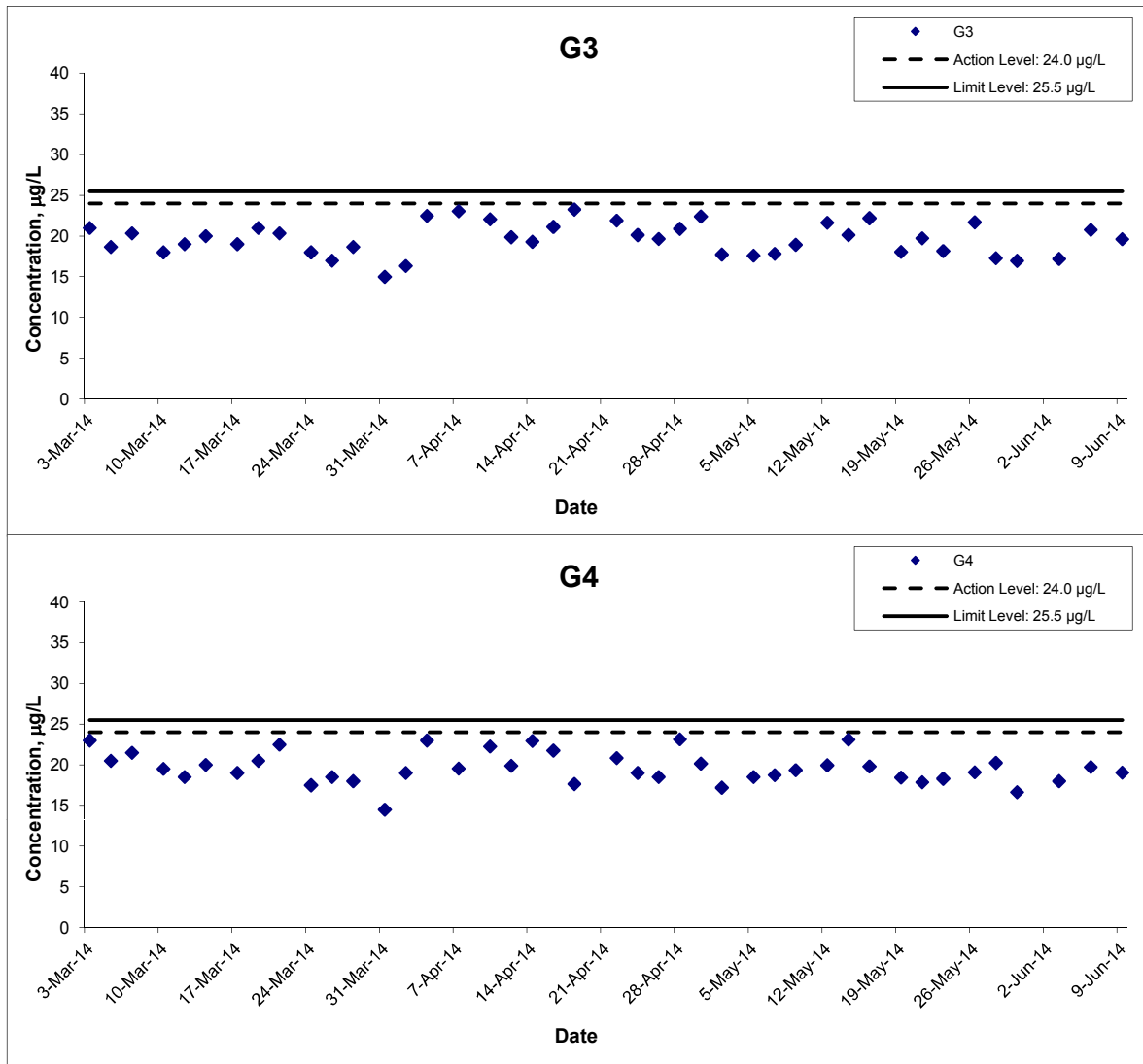
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

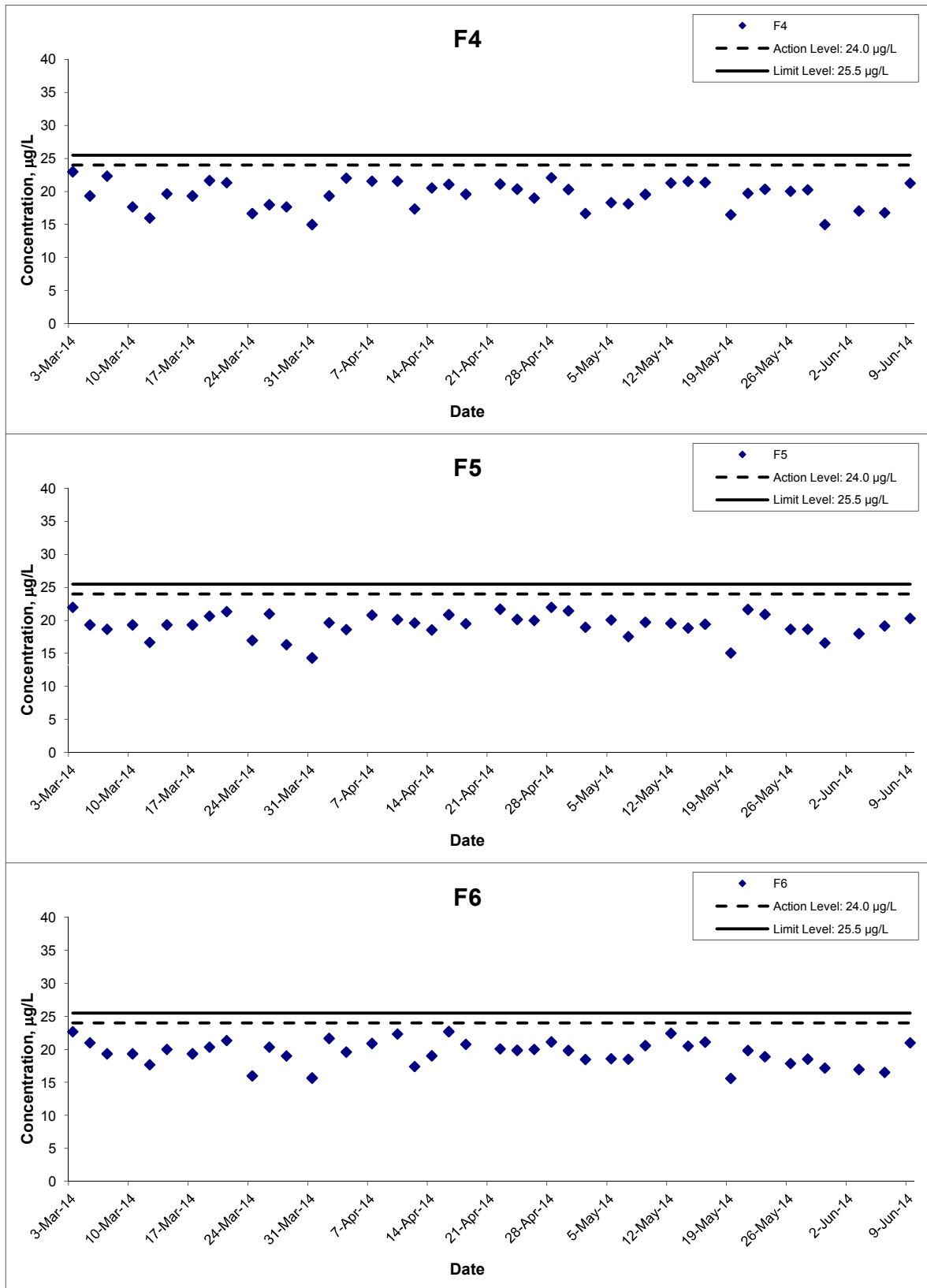


Arsenic (Depth-averaged) at Mid-Ebb Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

Arsenic (Depth-averaged) at Mid-Flood Tide



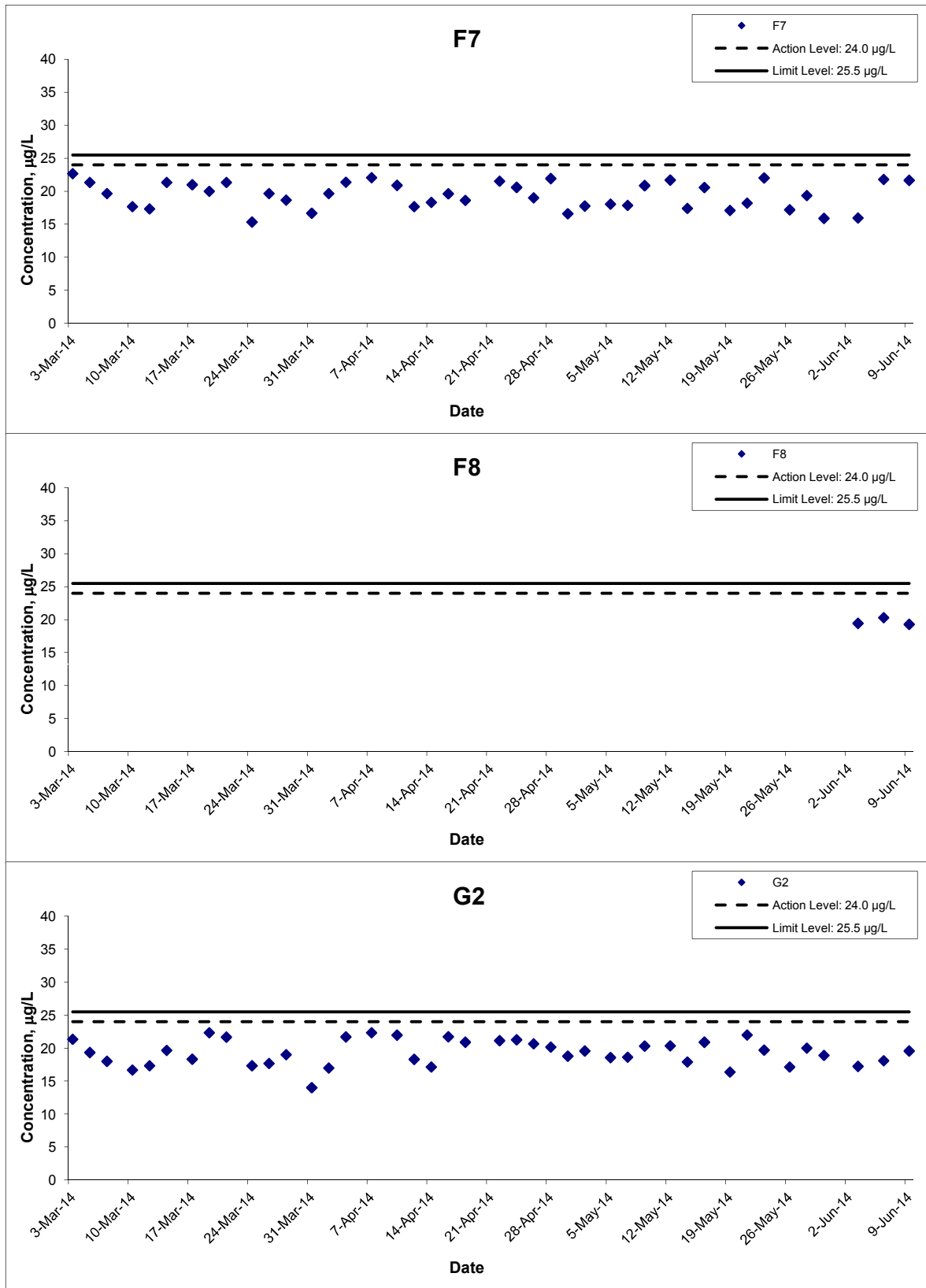
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Arsenic (Depth-averaged) at Mid-Flood Tide



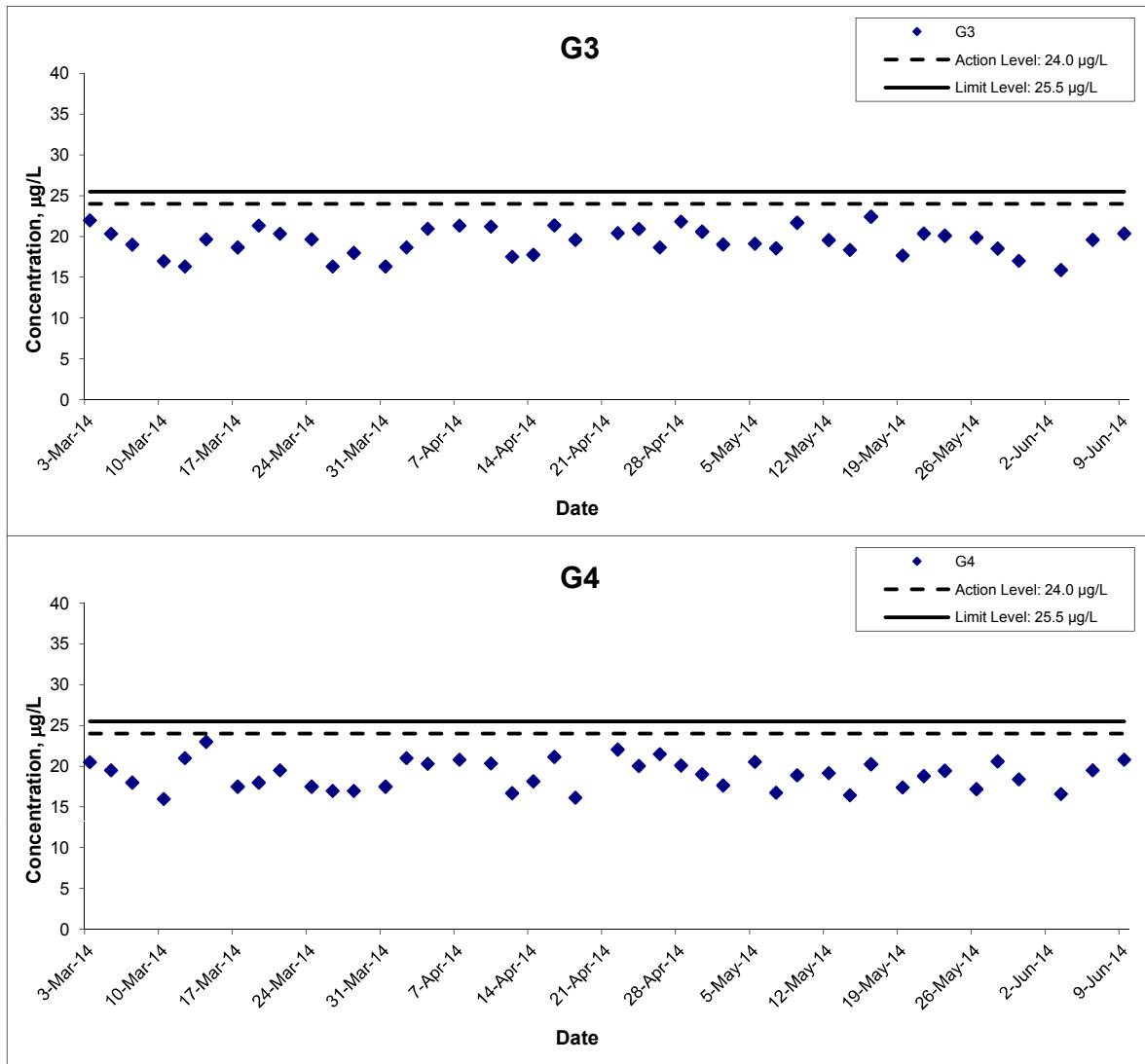
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Arsenic (Depth-averaged) at Mid-Flood Tide



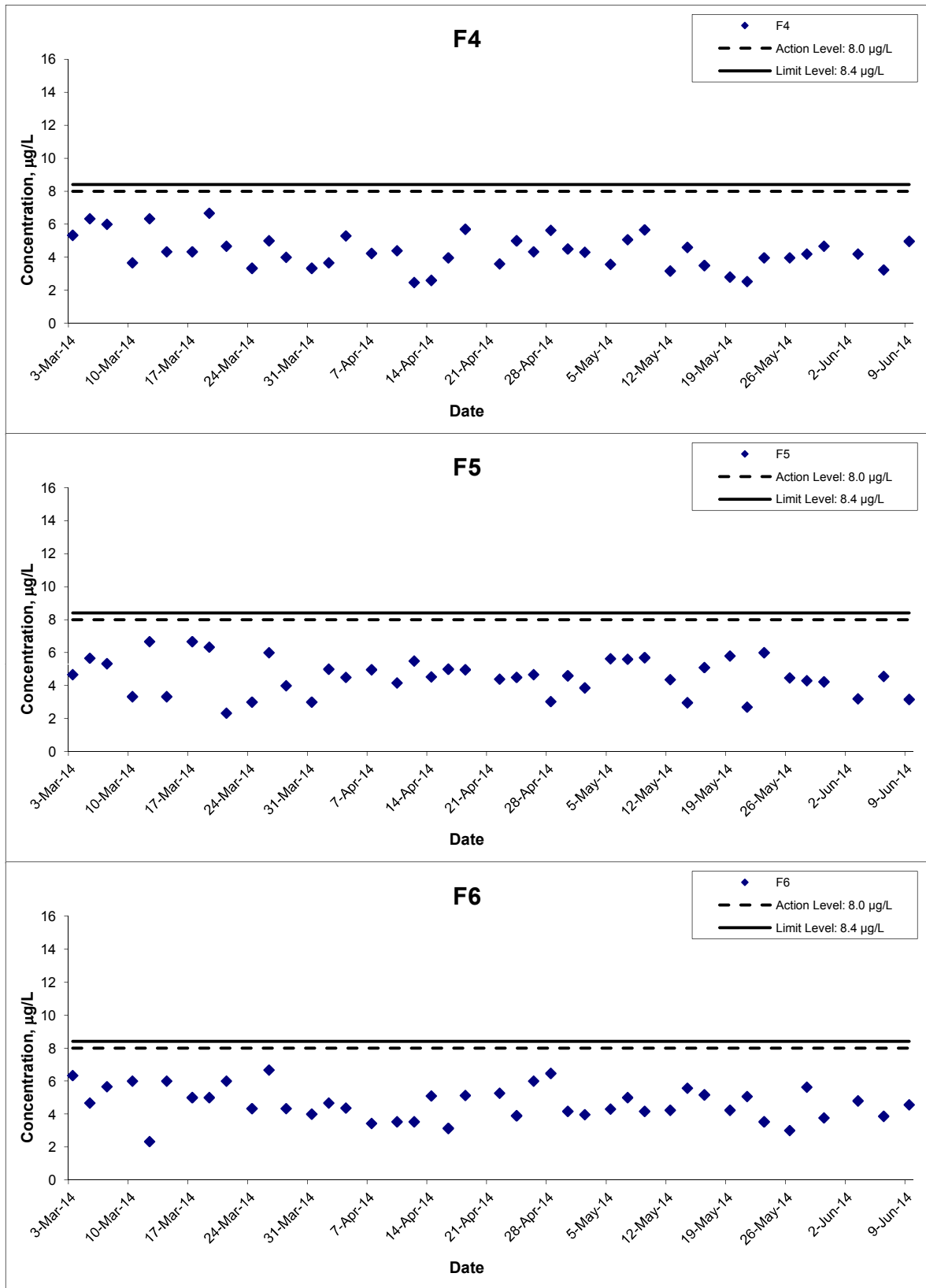
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Copper (Depth-averaged) at Mid-Ebb Tide



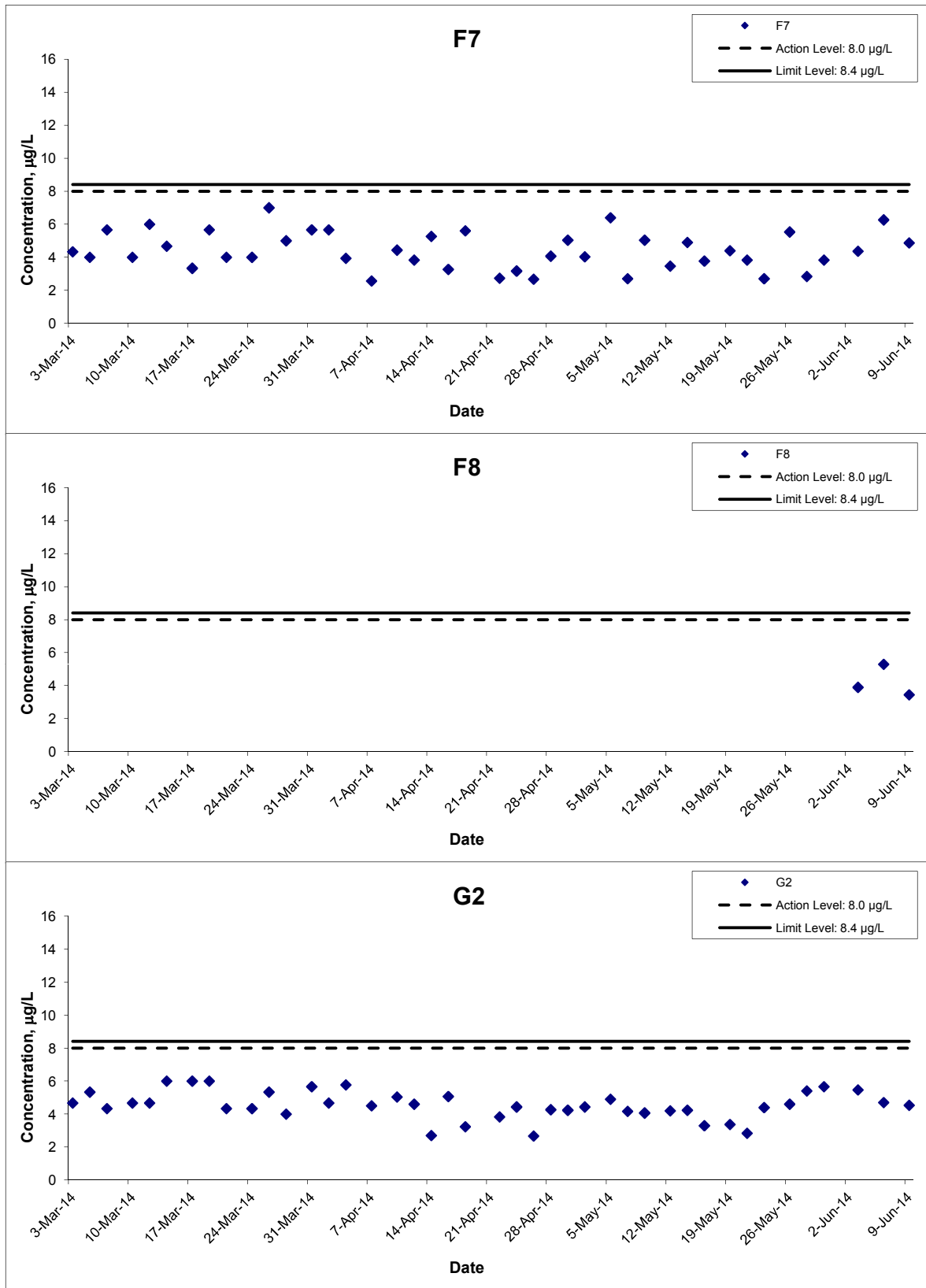
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Copper (Depth-averaged) at Mid-Ebb Tide



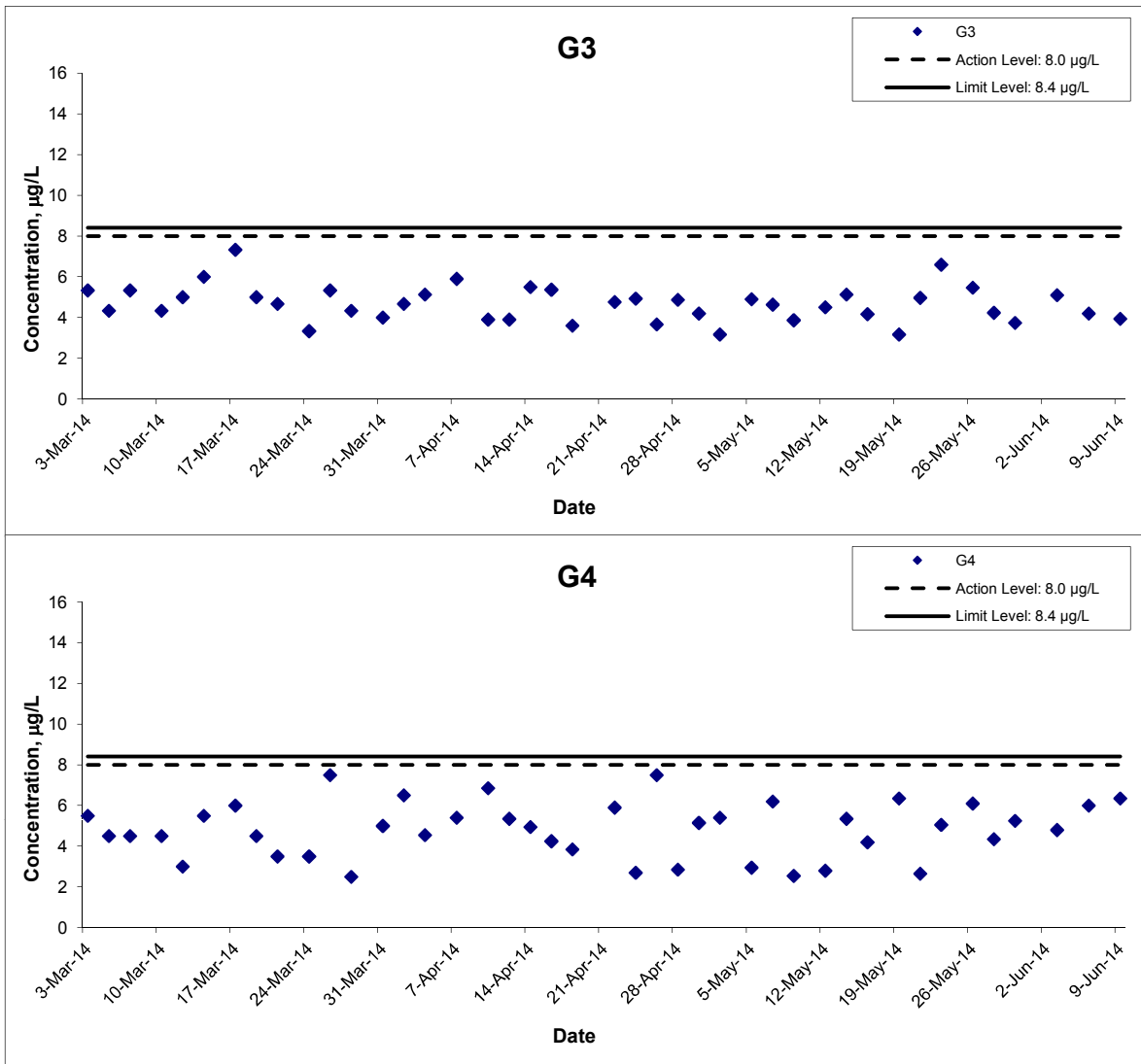
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Copper (Depth-averaged) at Mid-Ebb Tide



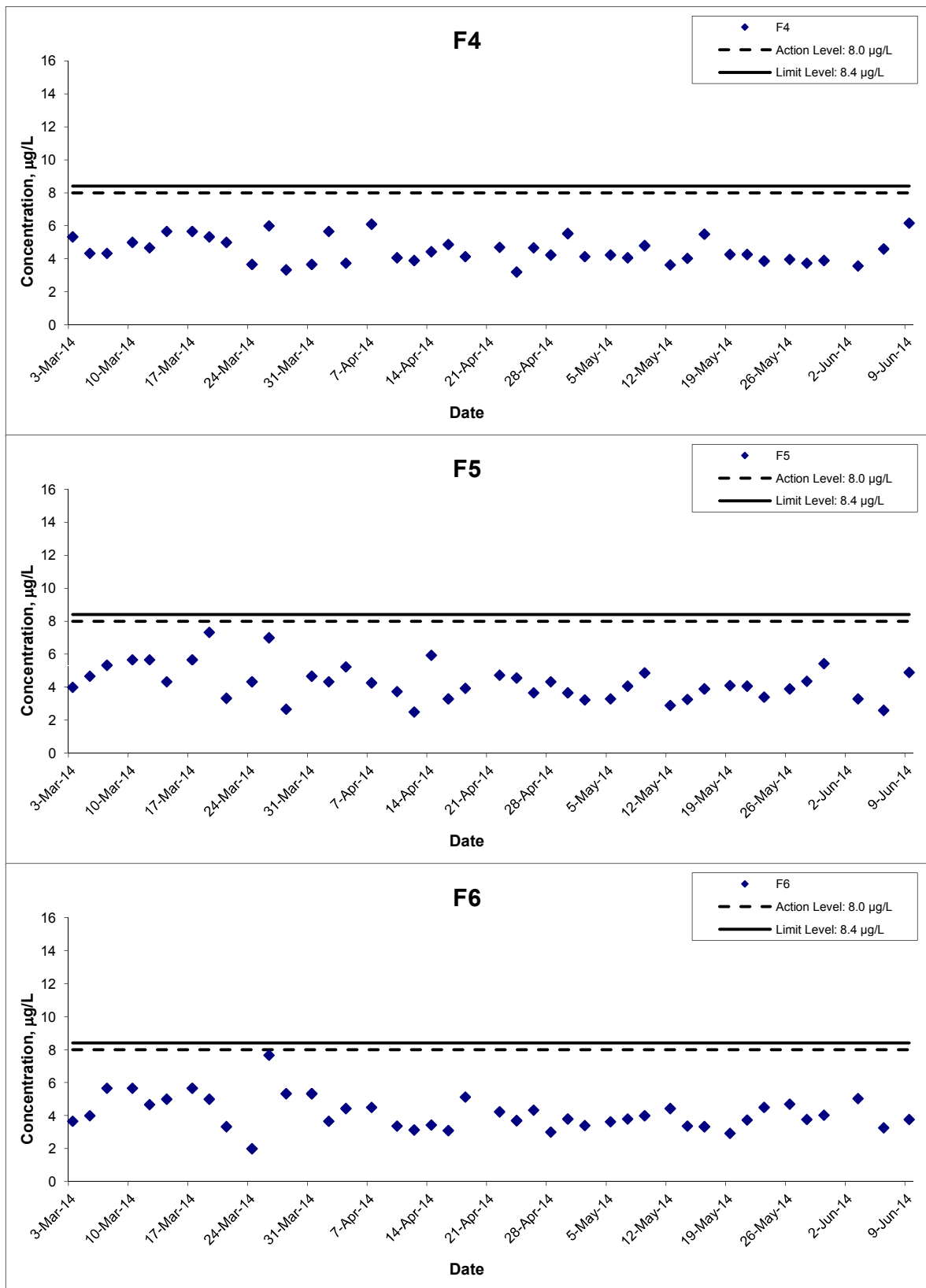
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Copper (Depth-averaged) at Mid-Flood Tide



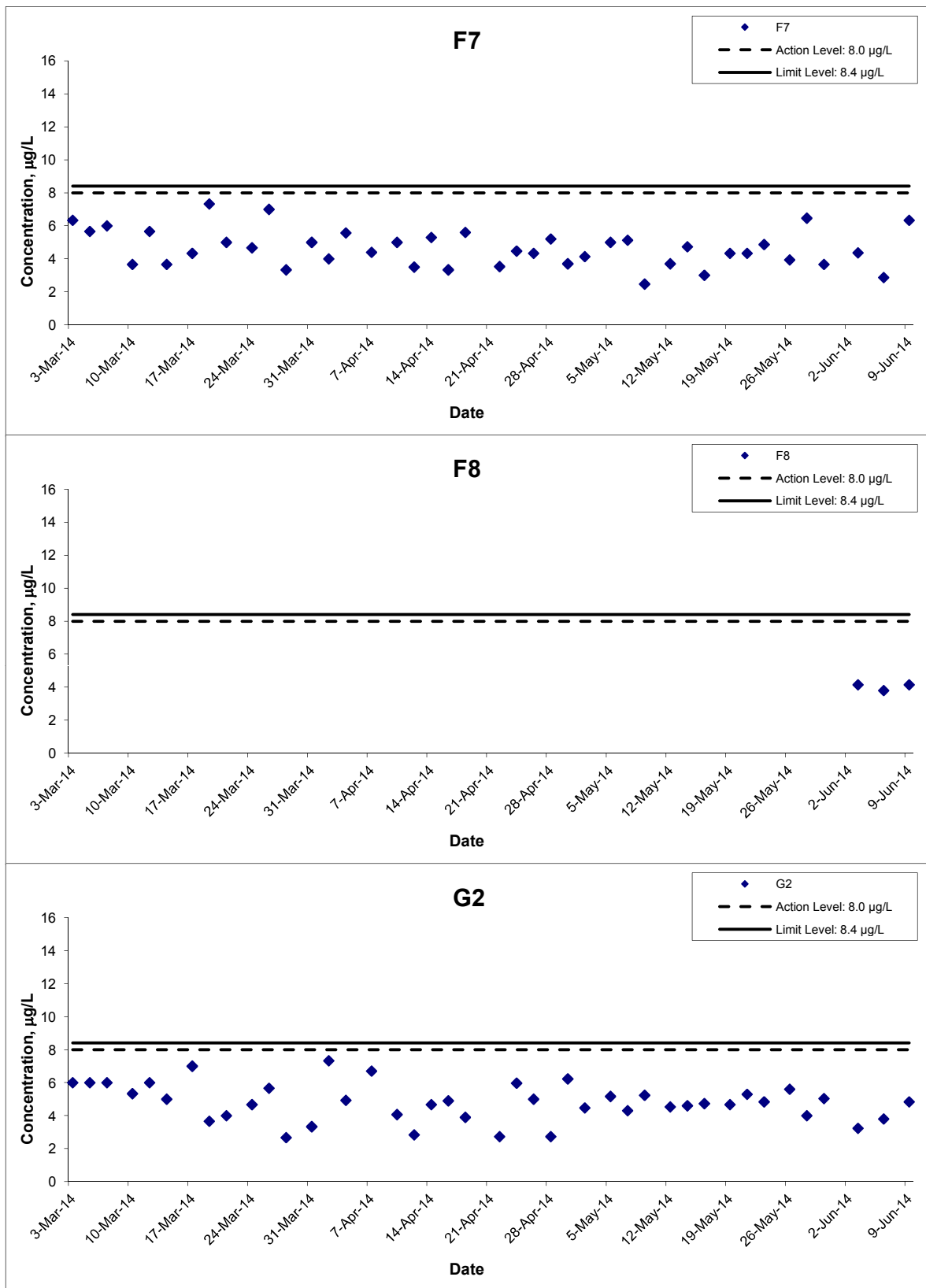
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Copper (Depth-averaged) at Mid-Flood Tide



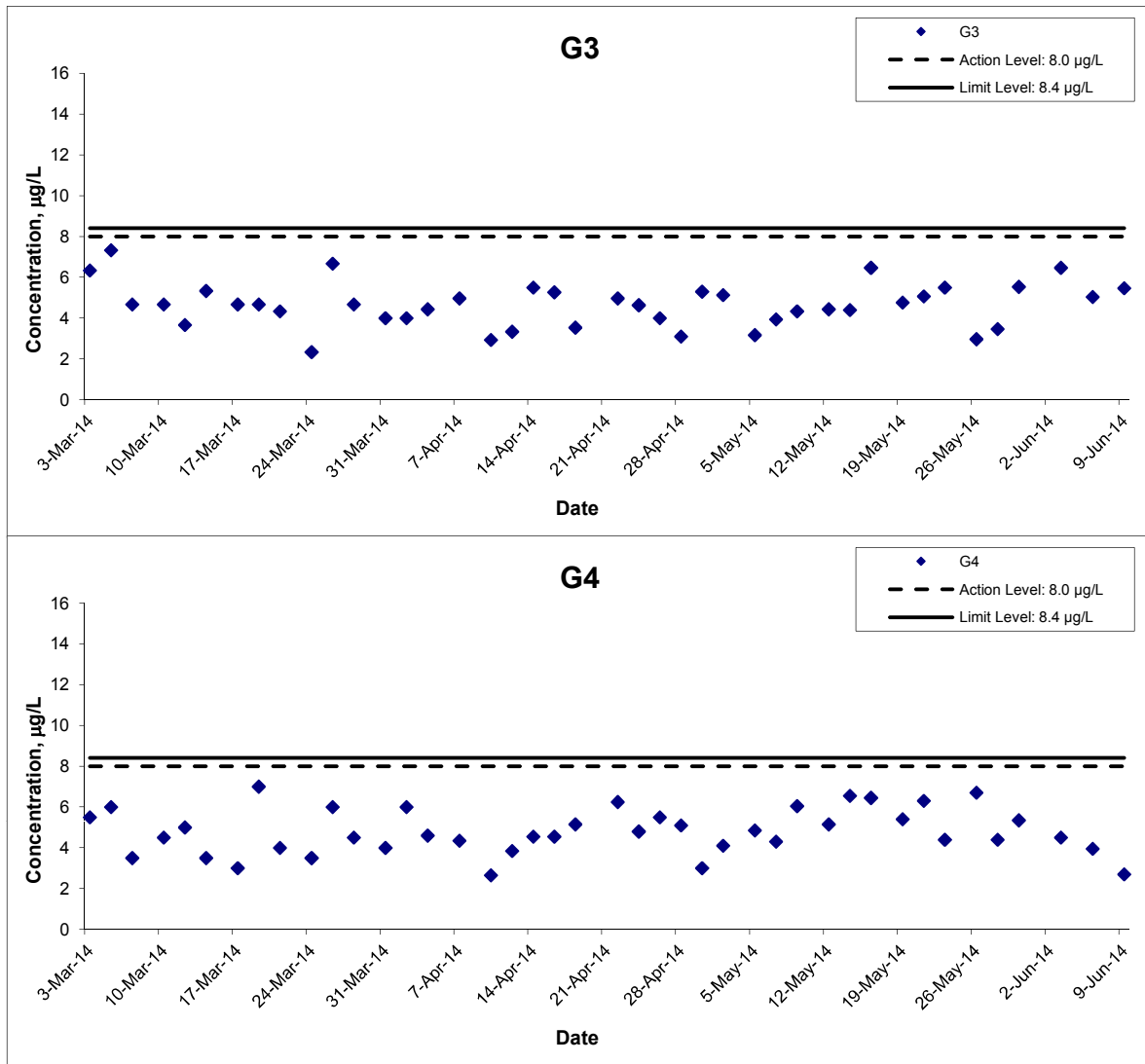
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

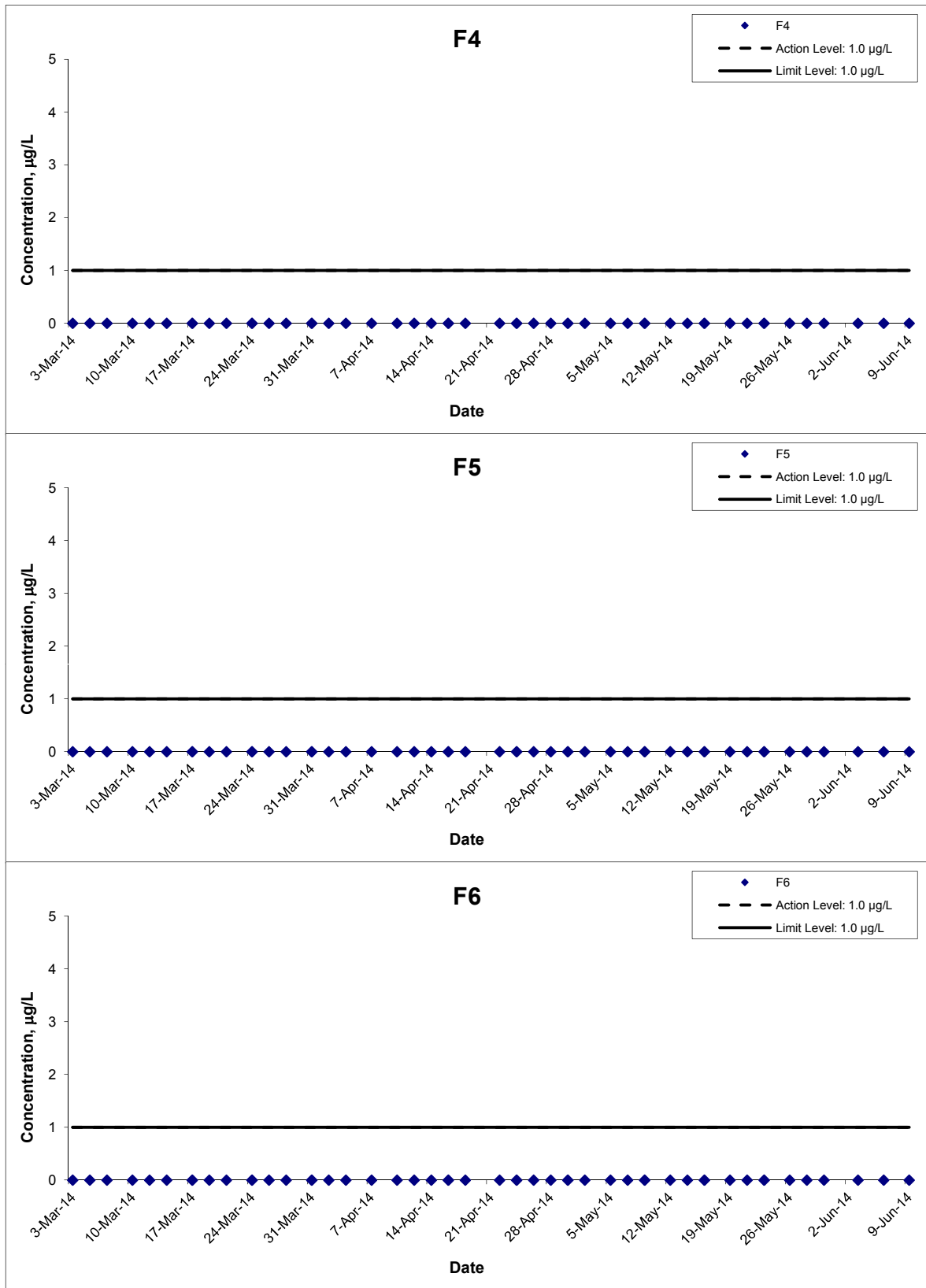


Copper (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

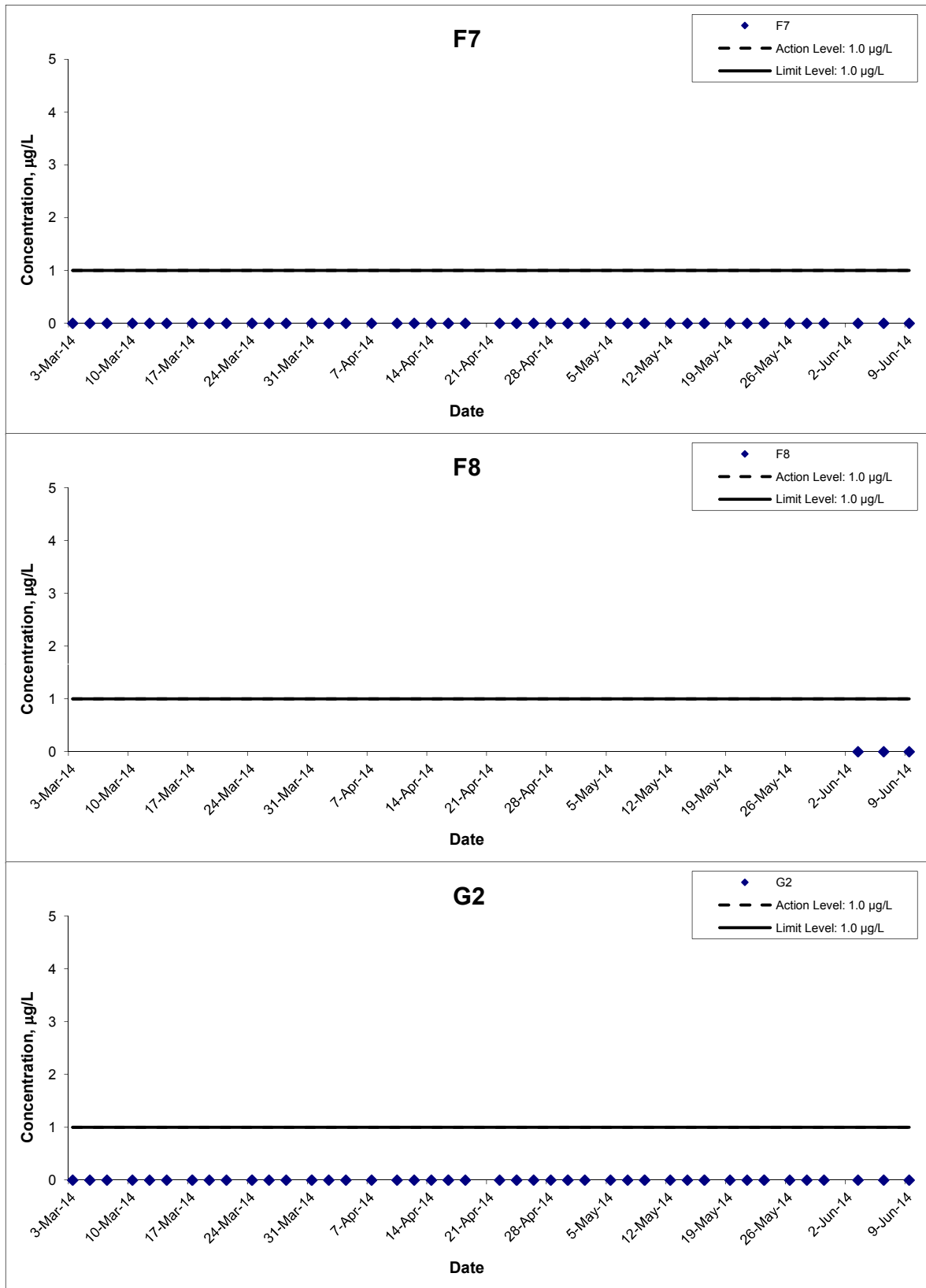
Lead (Depth-averaged) at Mid-Ebb Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale	N.T.S	Project No.	MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date	Jun 14	Appendix	N	

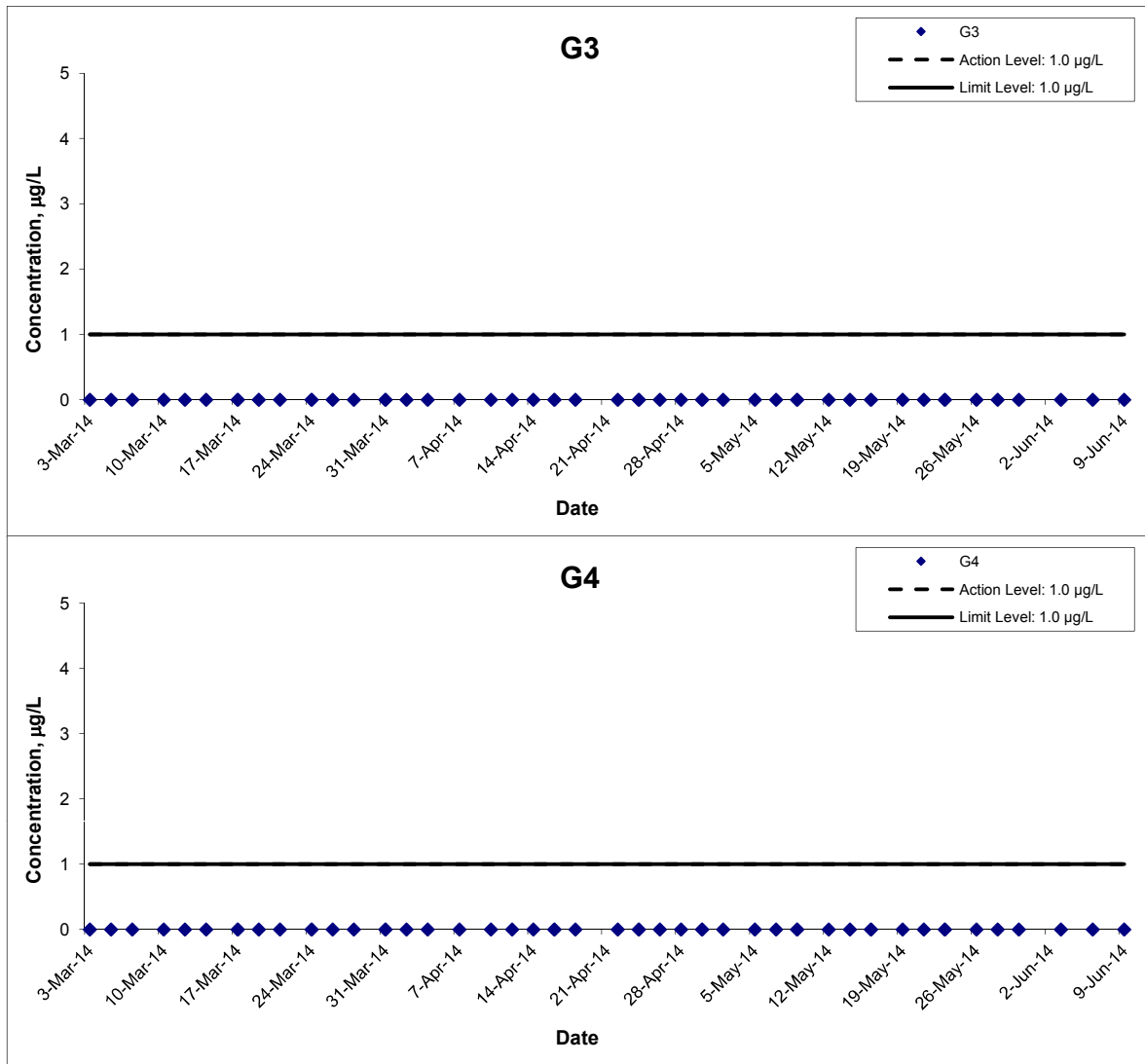
Lead (Depth-averaged) at Mid-Ebb Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

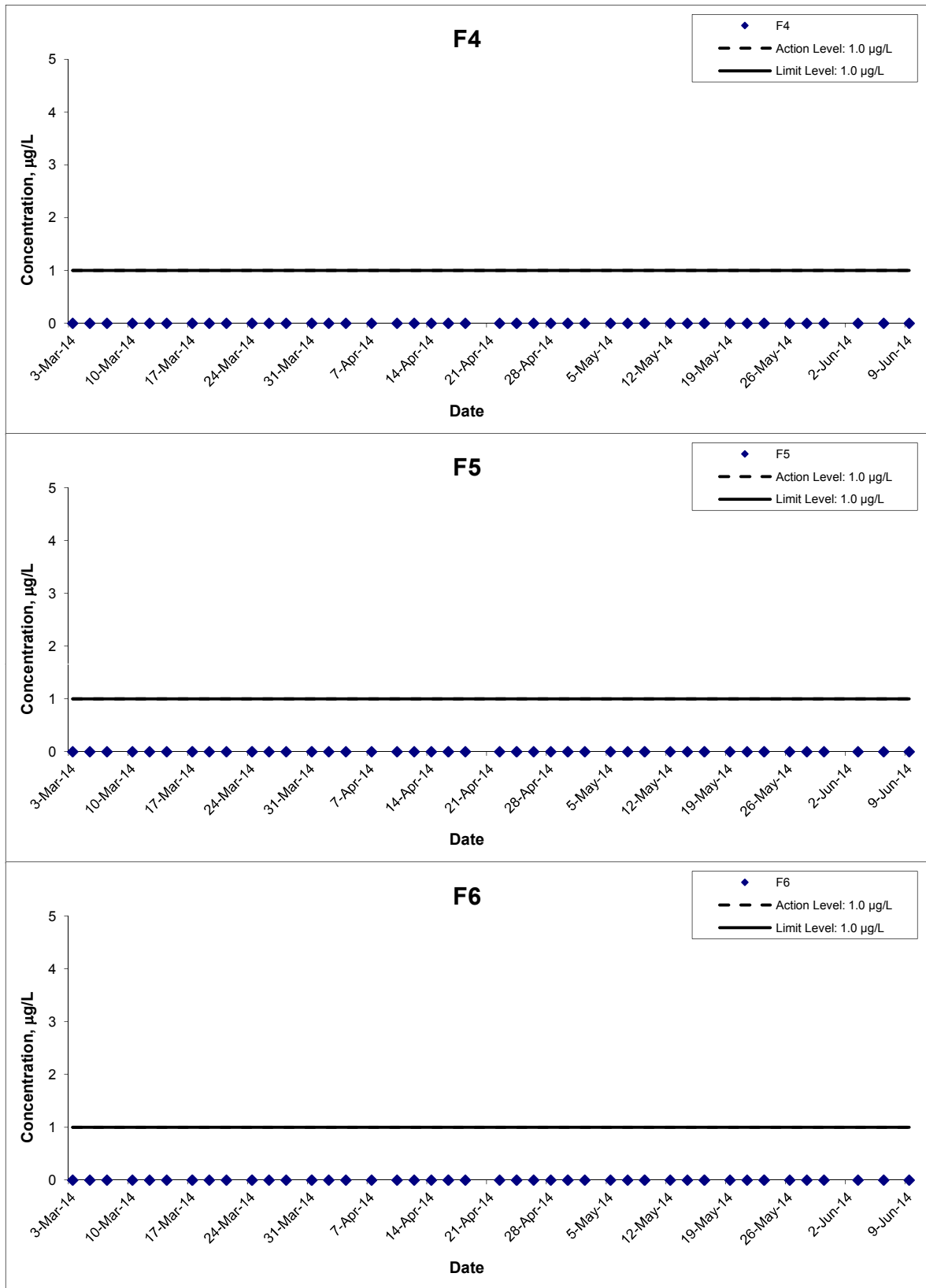
Lead (Depth-averaged) at Mid-Ebb Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. MA13027	CINOTECH
	Date Jun 14	Appendix N	

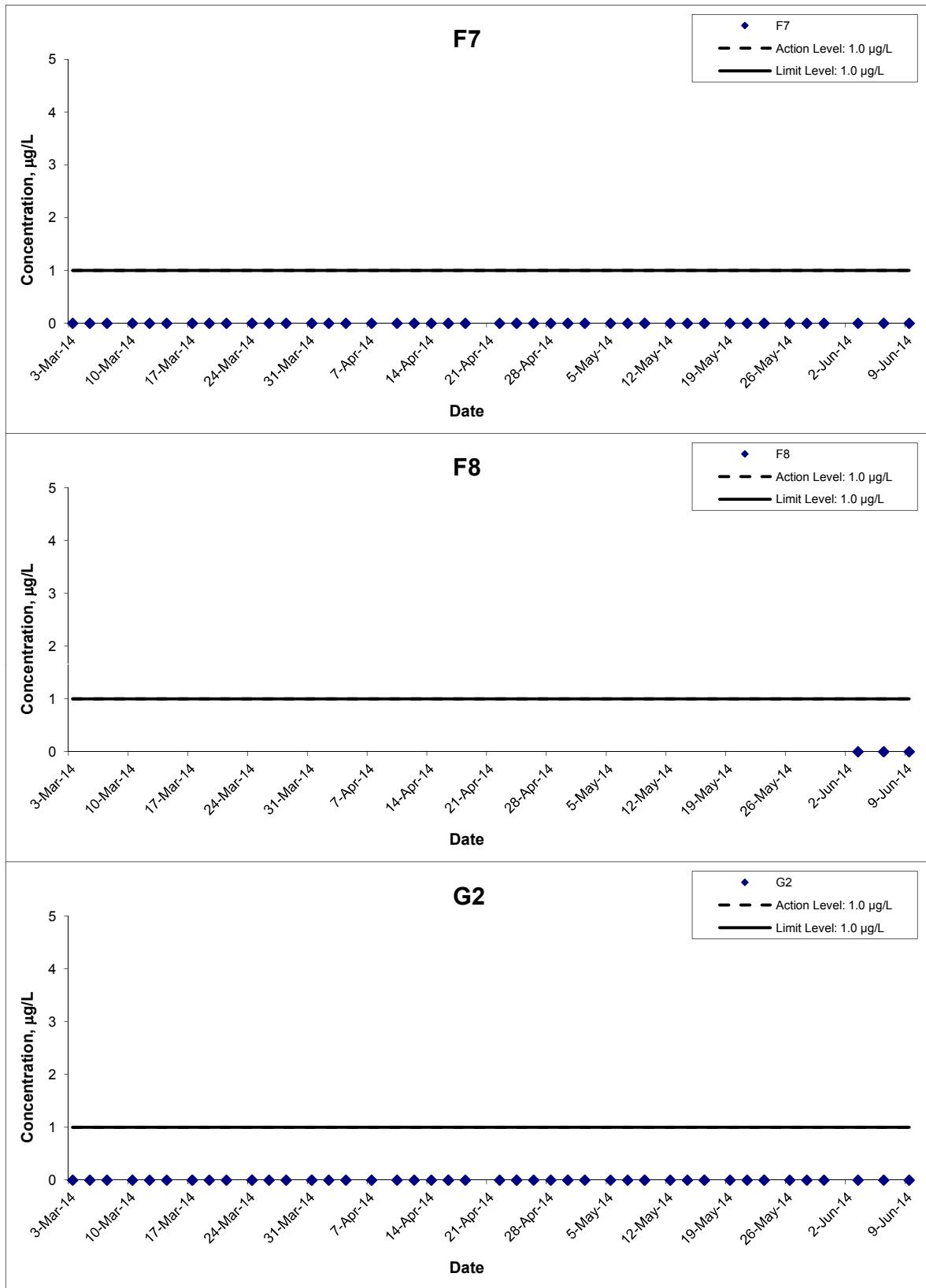
Lead (Depth-averaged) at Mid-Flood Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale	N.T.S	Project No.	MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date	Jun 14	Appendix	N	

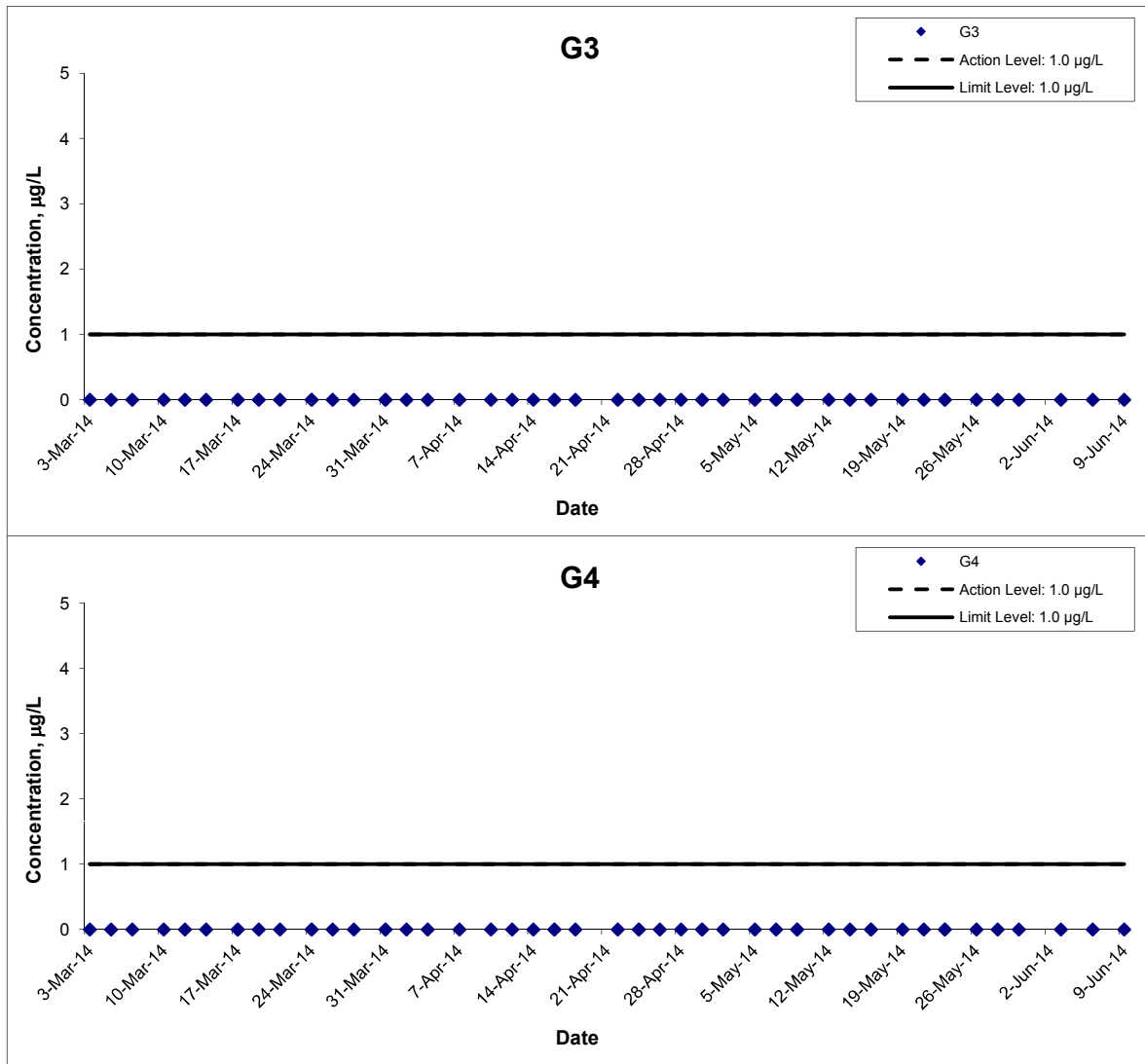
Lead (Depth-averaged) at Mid-Flood Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale	N.T.S	Project No.	MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date	Jun 14	Appendix	N	

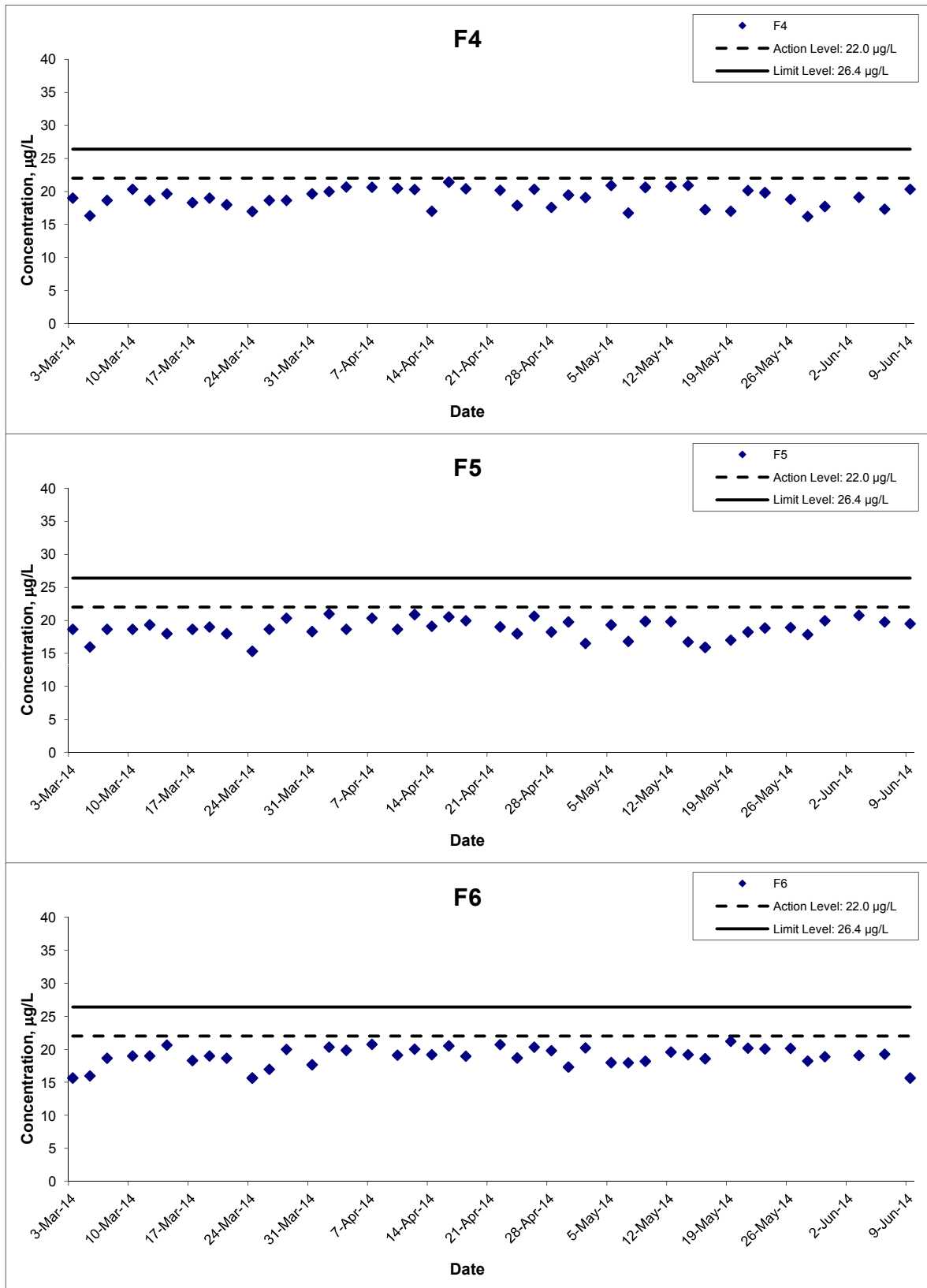
Lead (Depth-averaged) at Mid-Flood Tide



Remarks: The graphical point at zero concentration is presented as <1µg/L

Title Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. MA13027	CINOTECH
	Date Jun 14	Appendix N	

Zinc (Depth-averaged) at Mid-Ebb Tide



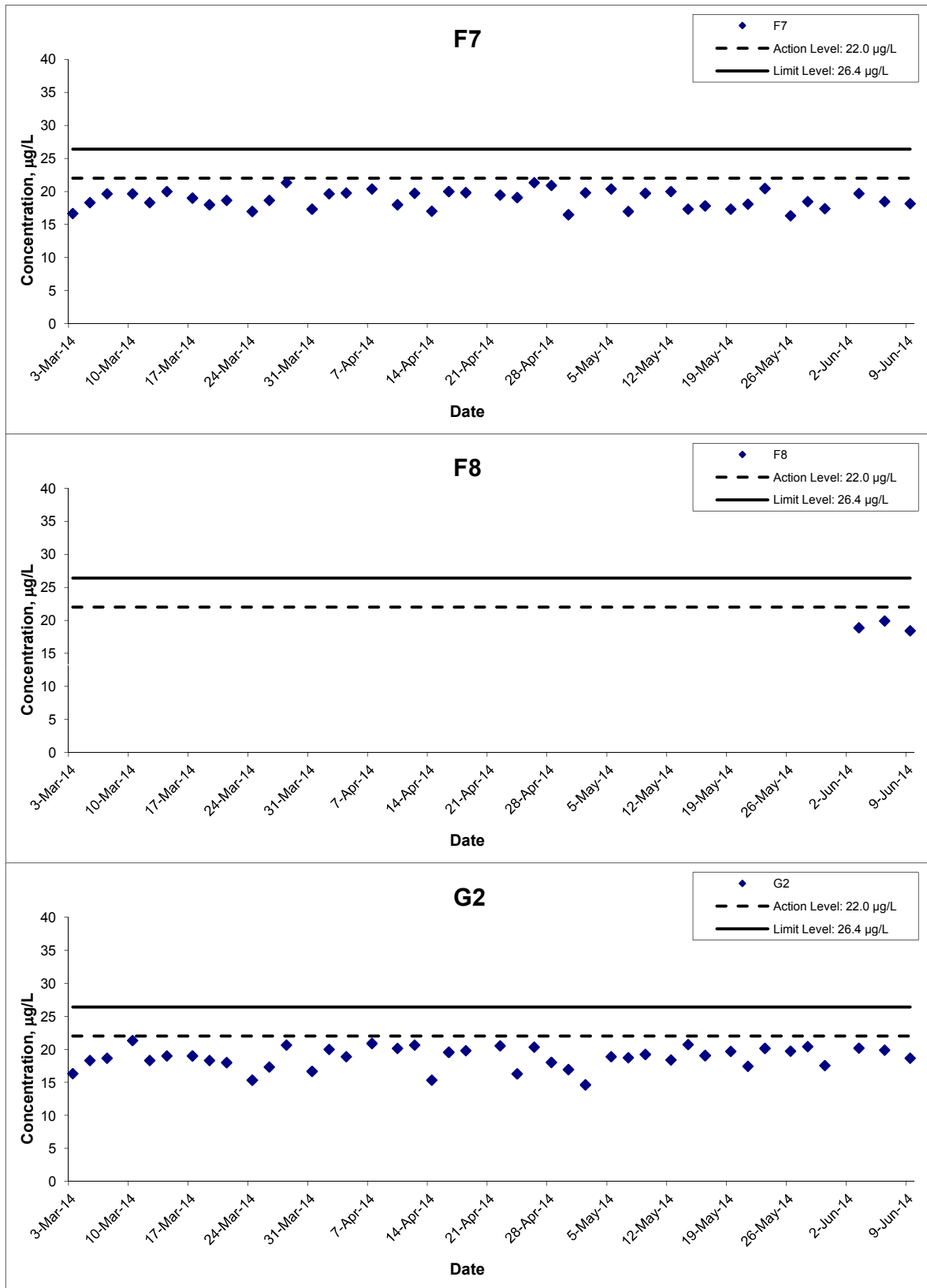
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Zinc (Depth-averaged) at Mid-Ebb Tide



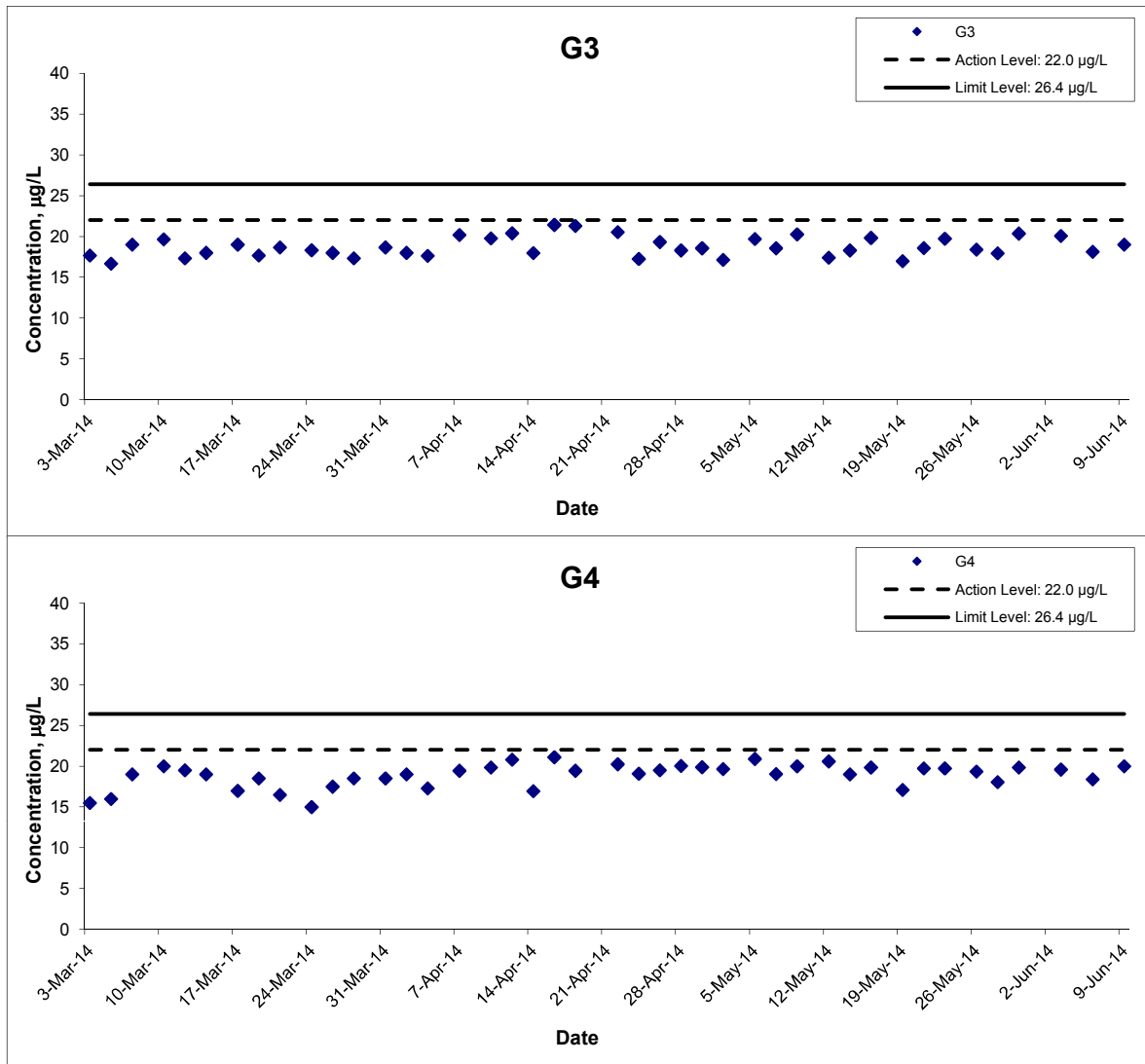
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N

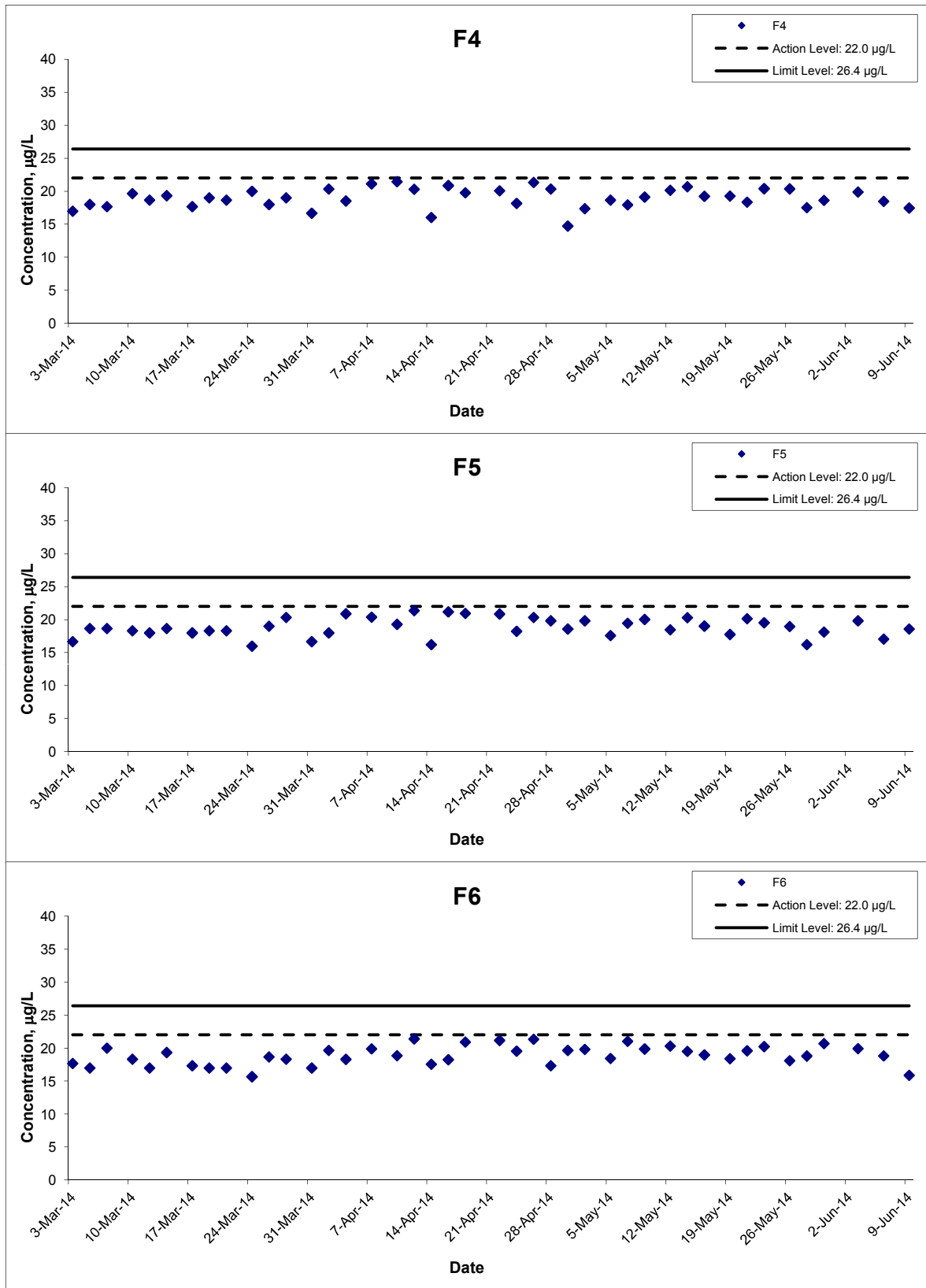


Zinc (Depth-averaged) at Mid-Ebb Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale	N.T.S	Project No.	MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date	Jun 14	Appendix	N	

Zinc (Depth-averaged) at Mid-Flood Tide



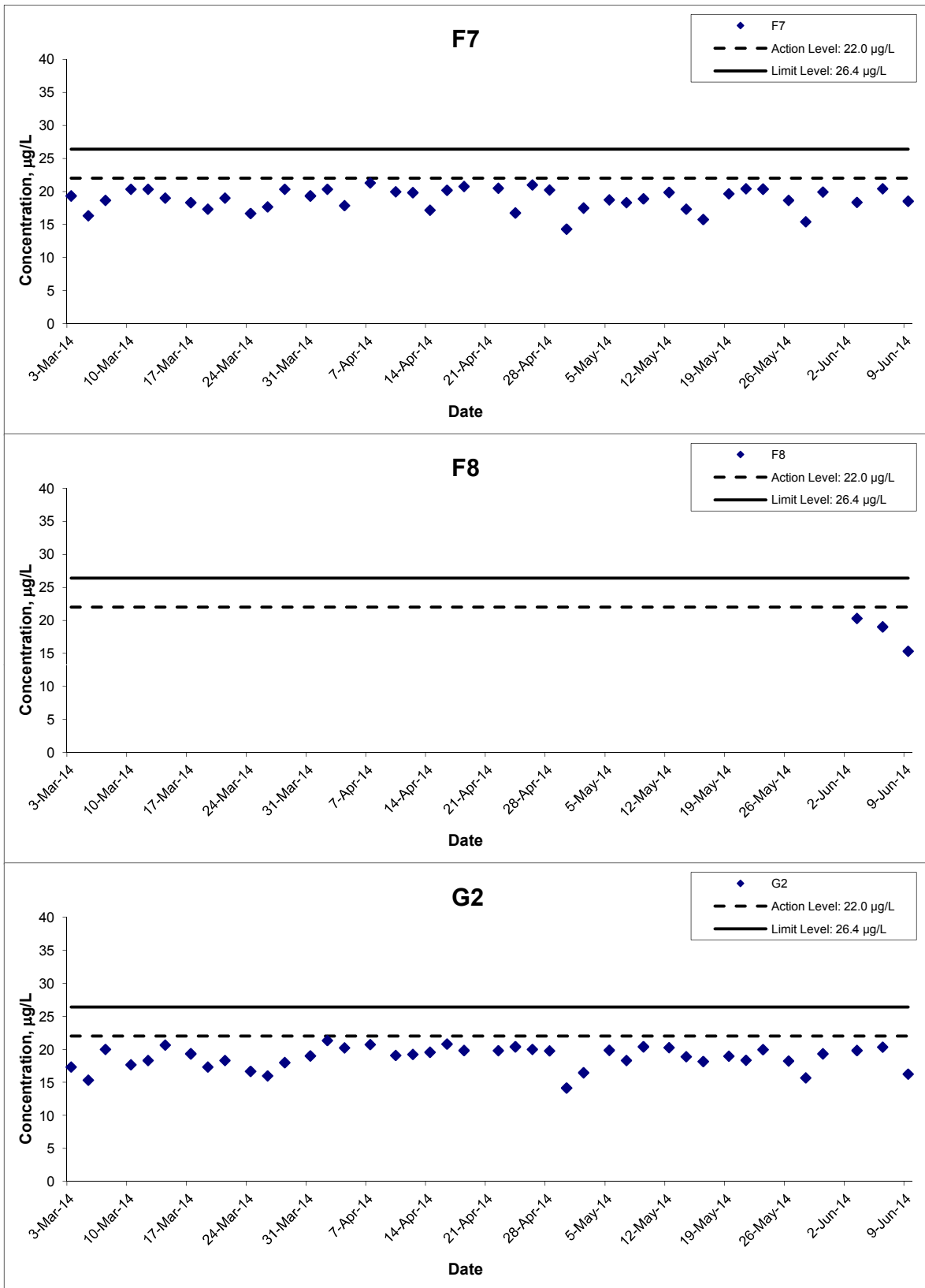
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
Date
 Jun 14

Project No.
 MA13027
Appendix
 N



Zinc (Depth-averaged) at Mid-Flood Tide



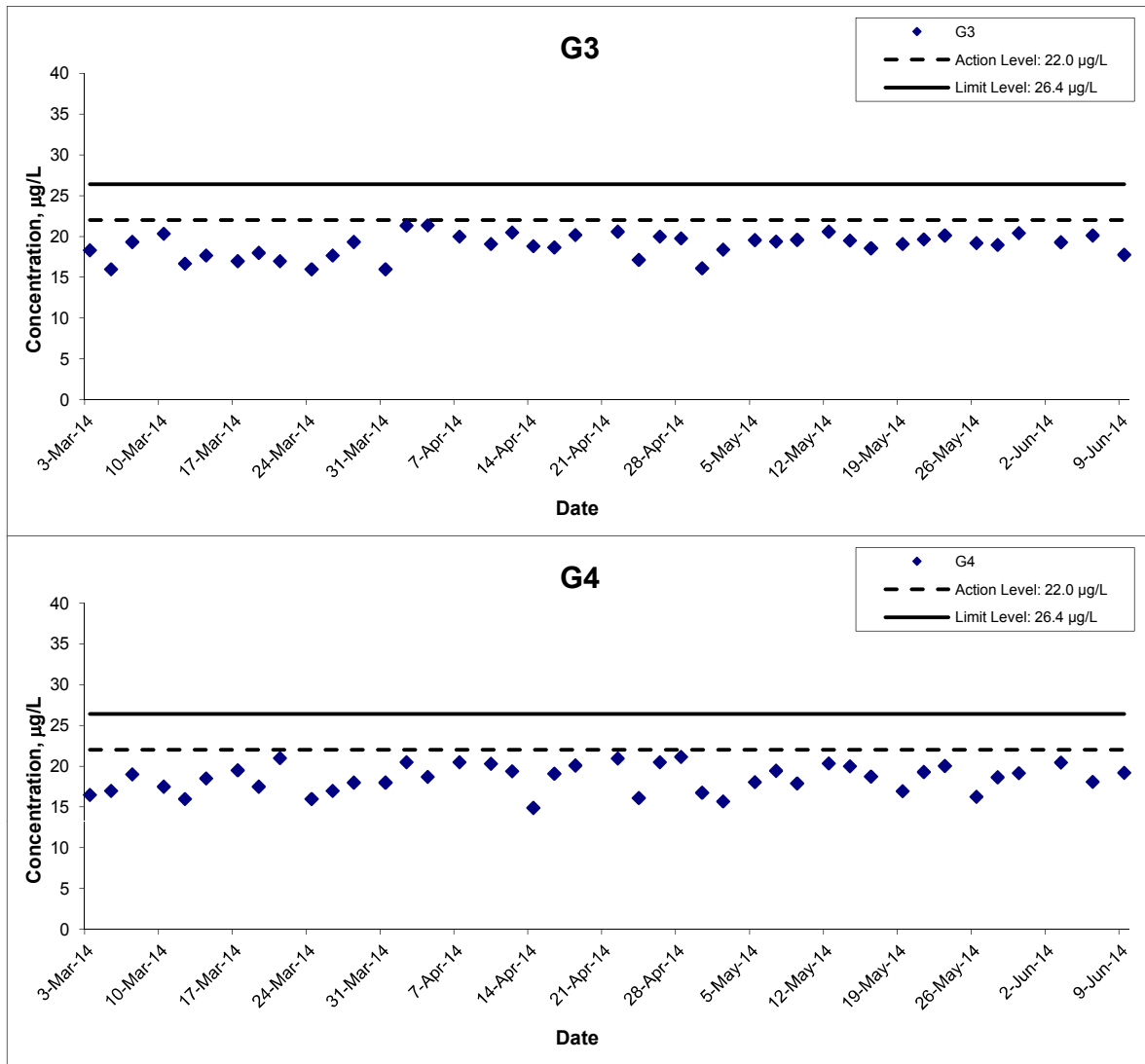
Title
 Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
 Graphical Presentation of Water Quality Monitoring Results

Scale
 N.T.S
 Date
 Jun 14

Project No.
 MA13027
 Appendix
 N



Zinc (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2012/01 - Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone	Scale N.T.S	Project No. MA13027	CINOTECH
	Graphical Presentation of Water Quality Monitoring Results	Date Jun 14	Appendix N	

**APPENDIX O
LABORATORY TESTING REPORT
FOR WATER QUALITY**

TEST REPORT

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

Laboratory No.:	20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

ATTN: Miss Mei Ling Tang

Page: 1 of 4

Sample Description : 44 liquid samples as received by customer said to be marine water
Project No. : MA13027
Project Name : Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Custody No. : MA13027/140603
Sampling Date : 2014-06-03

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L
2	Arsenic (As)	In-house method SOP076 (ICP-MS)	1 µg/L
2	Copper (Cu)		1 µg/L
4	Lead (Pb)		1 µg/L
5	Zinc (Zn)		2 µg/L

Remark: 1) * Limit of Reporting is reported as Detection Limit

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


PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

Page: 2 of 4

Results:

Sample ID	F4	F4	F4	F5	F5	F5
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20390-1	20390-2	20390-3	20390-4	20390-5	20390-6
Suspended Solids (SS), mg/L	6.2	5.5	7.2	15.0	9.2	7.8
Arsenic (As), µg/L	18	17	17	19	15	14
Copper (Cu), µg/L	6	3	4	4	3	3
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	19	19	20	21	20	21

Sample ID	F6	F6	F6	F7	F7	F7
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20390-7	20390-8	20390-9	20390-10	20390-11	20390-12
Suspended Solids (SS), mg/L	6.4	8.0	10.0	8.0	3.9	15.6
Arsenic (As), µg/L	14	19	19	18	20	16
Copper (Cu), µg/L	7	2	5	3	4	7
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	19	19	20	20	19	20

Sample ID	F8	F8	G2	G2	G2	G3
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20390-13	20390-15	20390-16	20390-17	20390-18	20390-19
Suspended Solids (SS), mg/L	4.0	6.6	5.9	7.2	3.8	6.3
Arsenic (As), µg/L	17	18	17	17	18	17
Copper (Cu), µg/L	4	4	3	7	6	6
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	18	20	19	21	21	19

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

Page: 3 of 4

Results:

Sample ID	G3	G3	G4	G4	F4	F4
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Sample Number	20390-20	20390-21	20390-22	20390-24	20390-37	20390-38
Suspended Solids (SS), mg/L	6.5	6.6	5.7	5.1	5.6	9.3
Arsenic (As), µg/L	19	16	16	20	15	21
Copper (Cu), µg/L	4	6	4	6	2	5
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	21	20	19	21	18	21

Sample ID	F4	F5	F5	F5	F6	F6
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20390-39	20390-40	20390-41	20390-42	20390-43	20390-44
Suspended Solids (SS), mg/L	14.4	13.8	7.5	6.8	13.3	8.7
Arsenic (As), µg/L	16	22	14	18	18	14
Copper (Cu), µg/L	4	3	5	2	5	7
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	21	19	19	21	21	18

Sample ID	F6	F7	F7	F7	F8	F8
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20390-45	20390-46	20390-47	20390-48	20390-49	20390-51
Suspended Solids (SS), mg/L	9.4	11.4	9.2	7.3	8.0	11.6
Arsenic (As), µg/L	19	14	17	17	21	18
Copper (Cu), µg/L	4	7	4	2	6	3
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	21	18	18	19	18	22

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

Page: 4 of 4

Results:

Sample ID	G2	G2	G2	G3	G3	G3
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20390-52	20390-53	20390-54	20390-55	20390-56	20390-57
Suspended Solids (SS), mg/L	9.3	8.2	14.6	8.6	6.1	11.2
Arsenic (As), µg/L	15	15	21	14	15	19
Copper (Cu), µg/L	4	3	3	8	6	6
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	18	20	21	18	19	21

Sample ID	G4	G4
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Sample Number	20390-58	20390-60
Suspended Solids (SS), mg/L	8.1	11.9
Arsenic (As), µg/L	15	19
Copper (Cu), µg/L	6	3
Lead (Pb), µg/L	<1	<1
Zinc (Zn), µg/L	20	21

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

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

TEST REPORT

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

Laboratory No.:	20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10

ATTN: Miss Mei Ling Tang

Page: 1 of 4

Sample Description : 46 liquid samples as received by customer said to be marine water
Project No. : MA13027
Project Name : Contract No. CV/2012/01
 Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Custody No. : MA13027/140606
Sampling Date : 2014-06-06

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L
2	Arsenic (As)	In-house method SOP076 (ICP-MS)	1 µg/L
2	Copper (Cu)		1 µg/L
4	Lead (Pb)		1 µg/L
5	Zinc (Zn)		2 µg/L

Remark: 1) * Limit of Reporting is reported as Detection Limit

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


PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10

Page: 2 of 4

Results:

Sample ID	F4	F4	F4	F5	F5	F5
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20417-1	20417-2	20417-3	20417-4	20417-5	20417-6
Suspended Solids (SS), mg/L	8.9	4.8	8.2	4.6	6.6	9.6
Arsenic (As), µg/L	20	16	23	16	18	19
Copper (Cu), µg/L	3	3	4	5	3	5
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	16	18	18	23	19	18

Sample ID	F6	F6	F6	F7	F7	F7
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20417-7	20417-8	20417-9	20417-10	20417-11	20417-12
Suspended Solids (SS), mg/L	6.9	3.6	5.1	11.0	6.3	8.4
Arsenic (As), µg/L	18	24	19	19	22	17
Copper (Cu), µg/L	5	3	4	5	8	6
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	17	19	21	20	19	16

Sample ID	F8	F8	F8	G2	G2	G2
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20417-13	20417-14	20417-15	20417-16	20417-17	20417-18
Suspended Solids (SS), mg/L	9.3	8.3	8.4	7.1	12.3	7.8
Arsenic (As), µg/L	24	21	22	17	22	22
Copper (Cu), µg/L	4	4	8	2	7	5
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	21	18	21	24	17	19

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10

Page: 3 of 4

Results:

Sample ID	G3	G3	G3	G4	G4	F4
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Sample Number	20417-19	20417-20	20417-21	20417-22	20417-24	20417-37
Suspended Solids (SS), mg/L	6.5	9.5	10.8	8.3	9.6	5.8
Arsenic (As), µg/L	21	24	18	20	20	17
Copper (Cu), µg/L	2	5	5	7	5	4
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	16	21	17	17	20	21

Sample ID	F4	F4	F5	F5	F5	F6
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20417-38	20417-39	20417-40	20417-41	20417-42	20417-43
Suspended Solids (SS), mg/L	4.3	7.2	5.3	5.9	4.7	7.1
Arsenic (As), µg/L	17	17	20	20	17	17
Copper (Cu), µg/L	5	6	2	4	2	2
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	19	16	16	17	17	17

Sample ID	F6	F6	F7	F7	F7	F8
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20417-44	20417-45	20417-46	20417-47	20417-48	20417-49
Suspended Solids (SS), mg/L	8.7	7.4	12.9	5.7	8.9	9.3
Arsenic (As), µg/L	16	17	24	25	17	20
Copper (Cu), µg/L	2	5	2	3	3	2
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	20	20	21	19	22	22

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10
Page:	4 of 4

Results:

Sample ID	F8	F8	G2	G2	G2	G3
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20417-50	20417-51	20417-52	20417-53	20417-54	20417-55
Suspended Solids (SS), mg/L	13.6	6.7	8.4	7.6	10.7	3.7
Arsenic (As), µg/L	19	22	17	21	16	20
Copper (Cu), µg/L	2	7	7	2	2	2
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	16	19	17	24	20	18

Sample ID	G3	G3	G4	G4
Sampling Depth	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20417-56	20417-57	20417-58	20417-60
Suspended Solids (SS), mg/L	7.8	7.4	6.6	8.9
Arsenic (As), µg/L	21	18	18	21
Copper (Cu), µg/L	5	8	5	3
Lead (Pb), µg/L	<1	<1	<1	<1
Zinc (Zn), µg/L	21	21	20	17

Remarks: 1) <= less than

2) S = Surface, M = Middle, B = Bottom

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

TEST REPORT

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

Laboratory No.:	20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

ATTN: Miss Mei Ling Tang

Page: 1 of 4


Sample Description : 44 liquid samples as received by customer said to be marine water
Project No. : MA13027
Project Name : Contract No. CV/2012/01
Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
Custody No. : MA13027/140609
Sampling Date : 2014-06-09

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L
2	Arsenic (As)	In-house method SOP076 (ICP-MS)	1 µg/L
2	Copper (Cu)		1 µg/L
4	Lead (Pb)		1 µg/L
5	Zinc (Zn)		2 µg/L

Remark: 1) * Limit of Reporting is reported as Detection Limit

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


PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

Page: 2 of 4

Results:

Sample ID	F4	F4	F4	F5	F5	F5
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20428-1	20428-2	20428-3	20428-4	20428-5	20428-6
Suspended Solids (SS), mg/L	13.3	8.4	9.2	9.8	7.1	4.4
Arsenic (As), µg/L	21	24	21	18	22	22
Copper (Cu), µg/L	7	3	4	4	3	3
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	19	22	20	20	20	19

Sample ID	F6	F6	F6	F7	F7	F7
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20428-7	20428-8	20428-9	20428-10	20428-11	20428-12
Suspended Solids (SS), mg/L	4.9	5.4	5.0	4.6	5.9	7.0
Arsenic (As), µg/L	21	22	22	21	21	20
Copper (Cu), µg/L	5	6	3	5	4	5
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	16	15	16	19	20	15

Sample ID	F8	F8	G2	G2	G2	G3
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Sample Number	20428-13	20428-15	20428-16	20428-17	20428-18	20428-19
Suspended Solids (SS), mg/L	11.6	7.0	5.1	3.8	5.2	5.2
Arsenic (As), µg/L	19	22	19	22	20	21
Copper (Cu), µg/L	2	5	4	3	7	6
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	19	18	16	18	23	18

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

Page: 3 of 4

Results:

Sample ID	G3	G3	G4	G4	F4	F4
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Sample Number	20428-20	20428-21	20428-22	20428-24	20428-37	20428-38
Suspended Solids (SS), mg/L	4.5	5.7	5.6	5.5	6.0	6.0
Arsenic (As), µg/L	20	19	19	20	20	20
Copper (Cu), µg/L	3	3	9	4	9	3
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	20	19	14	26	15	23

Sample ID	F4	F5	F5	F5	F6	F6
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20428-39	20428-40	20428-41	20428-42	20428-43	20428-44
Suspended Solids (SS), mg/L	5.0	3.7	10.1	6.0	6.3	5.8
Arsenic (As), µg/L	24	22	18	21	21	23
Copper (Cu), µg/L	7	3	4	8	4	3
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	15	16	15	25	14	17

Sample ID	F6	F7	F7	F7	F8	F8
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20428-45	20428-46	20428-47	20428-48	20428-49	20428-51
Suspended Solids (SS), mg/L	4.8	5.1	6.5	7.8	6.2	7.5
Arsenic (As), µg/L	20	20	20	25	19	20
Copper (Cu), µg/L	5	6	7	6	4	5
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	17	24	15	16	16	15

Remarks: 1) < = less than

2) S = Surface, M = Middle, B = Bottom

TEST REPORT

Laboratory No.:	20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

Page: 4 of 4

Results:

Sample ID	G2	G2	G2	G3	G3	G3
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Sample Number	20428-52	20428-53	20428-54	20428-55	20428-56	20428-57
Suspended Solids (SS), mg/L	7.4	8.2	9.2	8.4	8.0	8.3
Arsenic (As), µg/L	20	18	20	21	21	20
Copper (Cu), µg/L	6	5	4	3	4	9
Lead (Pb), µg/L	<1	<1	<1	<1	<1	<1
Zinc (Zn), µg/L	15	19	15	16	15	23

Sample ID	G4	G4
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Sample Number	20428-58	20428-60
Suspended Solids (SS), mg/L	10.9	7.1
Arsenic (As), µg/L	22	20
Copper (Cu), µg/L	2	3
Lead (Pb), µg/L	<1	<1
Zinc (Zn), µg/L	18	21

Remarks: 1) <= less than

2) S = Surface, M = Middle, B = Bottom

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

**APPENDIX P
QUALITY CONTROL REPORT FOR
WATER QUALITY MONITORING**

TEST REPORT

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

Laboratory No.:	QC20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

ATTN: Miss Mei Ling Tang

Page: 1 of 2

QC report:
Method Blank

Parameter	MB 1	MB 2	MB 3	Acceptance
Suspended Solids (SS), mg/L	<0.5	<0.5	<0.5	<0.5
Arsenic (As), µg/L	<0.2	<0.2	<0.2	<0.2
Copper (Cu), µg/L	<0.2	<0.2	<0.2	<0.2
Lead (Pb), µg/L	<0.2	<0.2	<0.2	<0.2
Zinc (Zn), µg/L	<0.4	<0.4	<0.4	<0.4

Method QC

Parameter	MQC1	MQC2	MQC3	Acceptance
Suspended Solids (SS), %	95	96	96	80-120%
Arsenic (As), %	89	102	100	80-120%
Copper (Cu), %	97	90	102	80-120%
Lead (Pb), %	95	96	91	80-120%
Zinc (Zn), %	94	100	90	80-120%

Sample Spike

Parameter	20390-1 spk	20390-22 spk	20390-56 spk	Acceptance
Suspended Solids (SS)	N/A	N/A	N/A	N/A
Arsenic (As), %	90	97	95	80-120%
Copper (Cu), %	90	92	91	80-120%
Lead (Pb), %	93	92	96	80-120%
Zinc (Zn), %	93	88	87	80-120%

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20390

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	QC20390
Date of Issue:	2014-06-05
Date Received:	2014-06-03
Date Tested:	2014-06-03
Date Completed:	2014-06-05

Page: 2 of 2

Sample Duplicate

Parameter	20390-21 chk	20390-55 chk	20390-60 chk	Acceptance
Suspended Solids (SS), %	5	3	3	RPD \leq 20%
Arsenic (As), %	4	4	4	RPD \leq 20%
Copper (Cu), %	3	4	3	RPD \leq 20%
Lead (Pb), %	N/A	N/A	N/A	RPD \leq 20%
Zinc (Zn), %	3	4	5	RPD \leq 20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20390

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

TEST REPORT

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

Laboratory No.:	QC20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10

ATTN: Miss Mei Ling Tang
QC report:
Method Blank

Page: 1 of 2

Parameter	MB 1	MB 2	MB 3	Acceptance
Suspended Solids (SS), mg/L	<0.5	<0.5	<0.5	<0.5
Arsenic (As), µg/L	<0.2	<0.2	<0.2	<0.2
Copper (Cu), µg/L	<0.2	<0.2	<0.2	<0.2
Lead (Pb), µg/L	<0.2	<0.2	<0.2	<0.2
Zinc (Zn), µg/L	<0.4	<0.4	<0.4	<0.4

Method QC

Parameter	MQC1	MQC2	MQC3	Acceptance
Suspended Solids (SS), %	103	99	100	80-120%
Arsenic (As), %	100	94	94	80-120%
Copper (Cu), %	89	101	101	80-120%
Lead (Pb), %	98	97	88	80-120%
Zinc (Zn), %	96	88	95	80-120%

Sample Spike

Parameter	20417-1 spk	20417-21 spk	20417-54 spk	Acceptance
Suspended Solids (SS)	N/A	N/A	N/A	N/A
Arsenic (As), %	96	87	95	80-120%
Copper (Cu), %	95	98	91	80-120%
Lead (Pb), %	94	94	89	80-120%
Zinc (Zn), %	98	91	100	80-120%

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20417

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	QC20417
Date of Issue:	2014-06-10
Date Received:	2014-06-06
Date Tested:	2014-06-06
Date Completed:	2014-06-10

Page: 2 of 2

Sample Duplicate

Parameter	20417-20 chk	20417-53 chk	20417-60 chk	Acceptance
Suspended Solids (SS), %	3	4	1	RPD \leq 20%
Arsenic (As), %	3	5	3	RPD \leq 20%
Copper (Cu), %	5	7	6	RPD \leq 20%
Lead (Pb), %	N/A	N/A	N/A	RPD \leq 20%
Zinc (Zn), %	6	4	3	RPD \leq 20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20417

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

TEST REPORT

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

Laboratory No.:	QC20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

ATTN: Miss Mei Ling Tang
QC report:
Method Blank

Page: 1 of 2

Parameter	MB 1	MB 2	MB 3	Acceptance
Suspended Solids (SS), mg/L	<0.5	<0.5	<0.5	<0.5
Arsenic (As), µg/L	<0.2	<0.2	<0.2	<0.2
Copper (Cu), µg/L	<0.2	<0.2	<0.2	<0.2
Lead (Pb), µg/L	<0.2	<0.2	<0.2	<0.2
Zinc (Zn), µg/L	<0.4	<0.4	<0.4	<0.4

Method QC

Parameter	MQC1	MQC2	MQC3	Acceptance
Suspended Solids (SS), %	99	99	103	80-120%
Arsenic (As), %	98	95	95	80-120%
Copper (Cu), %	102	101	101	80-120%
Lead (Pb), %	93	101	97	80-120%
Zinc (Zn), %	106	98	100	80-120%

Sample Spike

Parameter	20428-1 spk	20428-22 spk	20428-56 spk	Acceptance
Suspended Solids (SS)	N/A	N/A	N/A	N/A
Arsenic (As), %	93	99	93	80-120%
Copper (Cu), %	98	94	94	80-120%
Lead (Pb), %	96	94	92	80-120%
Zinc (Zn), %	94	101	95	80-120%

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20428

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
Laboratory Manager

TEST REPORT

Laboratory No.:	QC20428
Date of Issue:	2014-06-11
Date Received:	2014-06-09
Date Tested:	2014-06-09
Date Completed:	2014-06-11

Page: 2 of 2

Sample Duplicate

Parameter	20428-21 chk	20428-55 chk	20428-60 chk	Acceptance
Suspended Solids (SS), %	1	4	3	RPD \leq 20%
Arsenic (As), %	4	4	5	RPD \leq 20%
Copper (Cu), %	4	3	6	RPD \leq 20%
Lead (Pb), %	N/A	N/A	N/A	RPD \leq 20%
Zinc (Zn), %	4	4	5	RPD \leq 20%

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 20428

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

**APPENDIX Q
WASTE GENERATION IN THE
REPORTING MONTH**

Name of Department: ~~ArchSD/CEDD/DSD/EMSD/HyD/WSD~~Contract No.: CV/2012/01

P.1 of 2

(Notes: The following Waste Flow Table should be used for contracts either not included under the Pay for Safety and Environment Scheme or exempted from the full requirement for environmental management)

Waste Flow Table

Quarter ending	Actual Quantities of Inert C&D Materials Generated Quarterly						Actual Quantities of C&D Wastes Generated Quarterly				
	Total Quantity Generated	Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in'000 kg)	(in'000 kg)	(in'000 kg)	(in'000 kg)	(in'000m ³)
May-13	0	0	0	0	0	0	0	0	0	0	0
June-13	0	0	0	0	0	0	0	0	0	0	0
July-13	0	0	0	0	0	0	0	0	0	0	0
Aug-13	0	0	0	0	0	0	0	0	0	0	0
Sept-13	0	0	0	0	0	0	0	0	0	0	0
Oct-13	0	0	0	0	0	0	0	0	0	0	0
Nov-13	0	0	0	0	0	0	0	0	0	0	0
Dec-13	0	0	0	0	0	0	0	0	0	0	0
Jan-14	0	0	0	0	0	0	0	0	0	0	0
Feb-14	0	0	0	0	0	0	0	0	0	0	0
Mar-14	0	0	0	0	0	0	0	0	0	0	0
Total											

- Notes:
- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
 - (3) Broken concrete for recycling into aggregates.

Name of Department: ~~ArchSD~~/CEDD/DSD/EMSD/HyD/WSDContract No.: CV/2012/01

P.2 of 2

(Notes: The following Waste Flow Table should be used for contracts either not included under the Pay for Safety and Environment Scheme or exempted from the full requirement for environmental management)

Waste Flow Table

Quarter ending	Actual Quantities of Inert C&D Materials Generated Quarterly						Actual Quantities of C&D Wastes Generated Quarterly				
	Total Quantity Generated	Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in'000 kg)	(in'000 kg)	(in'000 kg)	(in'000 kg)	(in'000m ³)
April-14	0	0	0	0	0	0	0	0	0	0	0
May-14	0	0	0	0	0	0	0	0	0	0	0
June-14	0	0	0	0	0	0	0	0	0	0	0
July-14											
Aug-14											
Sept-14											
Oct-14											
Nov-14											
Dec-14											
Total	0	0	0	0	0	0	0	0	0	0	0

- Notes:
- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
 - (3) Broken concrete for recycling into aggregates.

Contract No.:

CV/2012/01

Project Title:

Sediment Removal at Yim Tin (East) Fish Culture Zone

Dumping Report Summary

Month/Year	Permit No.:	No. of Barge Load	Cumulative Barge Load	Dumping Quantity	Cumulative Dumping Quantity
02-09-2013 ~ 01-10-2013	EP/MD/14-032	0	0	0	0
09-12-2013 ~ 08-01-2014	EP/MD/14-081	4	4	2400	2400
09-01-2014 ~ 08-02-2014	EP/MD/14-115	50	54	30000	32400
09-02-2014 ~ 08-03-2014	EP/MD/14-132	32	86	19200	51600
09-03-2014 ~ 08-04-2014	EP/MD/14-145	65	151	39000	90600
09-04-2014 ~ 08-05-2014	EP/MD/14-159	71	222	42600	133200
09-05-2014 ~ 08-06-2014	EP/MD/15-014	74(up to 01/06)	296(up to 01/06)	44400(up to 01/06)	177600(up to 01/06)

Contract No.: CV/2012/01

Project Title: Sediment Removal at Yim Tin (East) Fish Culture Zone

Dumping Report Summary

March_14	Quantity	April_14	Quantity	May_14	Quantity	June_14	Quantity
1	1800	1	1800	1	1200	1	0
2	2400	2	0	2	1800	2	0
3	0	3	3000	3	0	3	0
4	1800	4	0	4	0	4	0
5	600	5	1800	5	3000	5	0
6	0	6	1200	6	0	6	0
7	0	7	0	7	0	7	0
8	0	8	1200	8	1800	8	0
9	2400	9	2400	9	600	9	0
10	0	10	1800	10	2400	10	0
11	0	11	2400	11	2400	11	0
12	1200	12	1200	12	1800	12	0
13	1800	13	3000	13	3600	13	0
14	1200	14	600	14	4200	14	0
15	1800	15	0	15	3600	15	0
16	1200	16	2400	16	3000	16	0
17	1800	17	1200	17	3000	17	0
18	1800	18	2400	18	3000	18	0
19	1200	19	1200	19	3000	19	0
20	0	20	1200	20	2400	20	0
21	0	21	600	21	3600	21	0
22	0	22	600	22	3600	22	0
23	0	23	1800	23	1200	23	0
24	1800	24	0	24	2400	24	0
25	1800	25	0	25	0	25	0
26	2400	26	1800	26	0	26	0
27	2400	27	2400	27	0	27	0
28	3000	28	1800	28	0	28	0
29	3000	29	3000	29	0	29	0
30	1200	30	3000	30	0	30	0
31	0			31	600		
Total	36600		43800		52200		0



Fax


表格 B - 沉積物每月傾倒報告
Form B - Monthly Sediment Dumping Report

1. 合約名稱及編號 Contract Title & No. : CV/2012/01-Sediment Removal at Yim Tin Tsai (East) Fish Culture Zone
2. 海上傾倒許可證編號 Marine Dumping Permit No. : EP/MD/ 14 - 159
3. 挖泥地點 Location of Dredging Site : Yim Tin Tsai (East) Fish Culture Zone
4. 傾倒地地點 Dumping ground: *
- 沙洲東 East of Sha Chau
- 長洲南 South of Cheung Chau
- 果洲群島東 East of Ninepin Group
- 東龍島東 East Tung Lung Chau
- 大嶼山北 North Lantau
- 大小磨刀北 North Brothers
- 青衣南 South Tsing Yi
- 其他 (請註明) Others (Pls. specify)
South of the Brothers
- 傾倒沉積物方法類別 Sediment Disposal Option *
- 第一類 - 開放式海洋棄置
Type 1 - Open Sea Disposal
- 第一類 - 開放式海洋棄置 (指定地點)
Type 1 - Open Sea Disposal (Dedicated Site)
- 第二類 - 密閉式海洋棄置
Type 2 - Confined Marine Disposal
- 第三類 - 特別棄置處理
Type 3 - Special Treatment Disposal
- 非污染沉積物
Uncontaminated Sediment
- 污染沉積物
Contaminated Sediment
- 其他 (請註明)
Others (Pls. specify)
Category M and/or Category H Dredged and/or
Category L / Excavated Sediment Requiring Type 2 -
Confined Marine Disposal

數量 Quantity:

月份 / 年份 Month / Year	傾倒(鬆散時)數量 (立方米) Dumped (bulk) Quantity (m ³)	累積傾倒(鬆散時)數量 (立方米) Cumulative Dumped (bulk) Quantity (m ³)
		0 up to 18-12-2013
09-12-2013 to 08-01-2014	2400	2400 refer to EP/MD/14-081
09-01-2014 to 08-02-2014	30000	32400 refer to EP/MD/14-115
09-02-2014 to 08-03-2014	19200	51600 refer to EP/MD/14-132
09-03-2014 to 08-04-2014	39000	90600 refer to EP/MD/14-145
09-04-2014 to 08-05-2014	42600	133200 refer to EP/MD/14-159
09-05-2014 to 08-06-2014	44400	177600 refer to EP/MD/15-014

注意: 如無傾倒沉積物, 仍須填報本表格 Note: Nil return is required

承辦商監督人: Contractor's Supervisor: <u>[Signature]</u>	公司印章: Company Chop: 
姓名 (正楷): Name in Block Letters: <u>Li chi Kwong</u>	承辦商名稱: Contractor's Name: <u>Zhen Hwa Engineering Company Ltd.</u>
職位: Post: <u>Site Agent</u>	
日期: Date: <u>10-06-2014</u>	

(* 請在適用處加 3。 Please 3 as appropriate.)



Fax-

表格 A - 沉積物每日傾倒報告
Form A - Daily Sediment Dumping Report

1. 合約名稱及編號 Contract Title & No. : CV/2012/01-Sediment Removal at Yim Tin (East) Fish Culture Zone
2. 海上傾倒許可證編號 Marine Dumping Permit No. : EP/MD/15 - 014
3. 挖泥地點 Location of Dredging Site : Yim Tin (East) Fish Culture Zone
4. 傾倒地地點 Dumping Ground : South of the Brothers Contaminated Mud Disposal
5. 日期 Date : 1/6/2014 - 8/6/2014 Site-CMP
6. 傾倒沉積物方法類別 Sediment Disposal Option * :
- 第一類 - 開放式海洋棄置
Type 1 - Open Sea Disposal
 - 第一類 - 開放式海洋棄置 (指定地點)
Type 1 - Open Sea Disposal (Dedicated Site)
 - 第二類 - 密閉式海洋棄置
Type 2 - Confined Marine Disposal
 - 第三類 - 特別棄置處理
Type 3 - Special Treatment Disposal
 - 非污染沉積物
Uncontaminated Sediment
 - 污染沉積物
Contaminated Sediment
 - 其他 (請註明)
Others (Pls. specify)
Category M and/or Category H Dredged and/or Category L/Excavated Sediment Requiring Type 2 - Confined Marine Disposal

傾倒沉積物的船隻牌照號碼 Licence No. of Sediment Dumping Vessel	啓航時間 Departure Time	傾倒時間 Dumping Time	傾倒(鬆散時)數量 (立方米) Dumped (bulk) Quantity (m ³)
Nil			

注意: 如無傾倒沉積物, 仍須填報本表格 Note: Nil return is required

茲聲明就本人所知及相信, 上述資料全部屬實, 正確無誤。
I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief.

承辦商監督人: Li Chi Kwong 經駐工地工程師查核: Wong Ho Man

姓名 (正楷): Li Chi Kwong 姓名 (正楷): Wong Ho Man

承辦商名稱: Zhen Hua Engineering Company Ltd. 工程監督公司名稱: CEDD

日期: 10-06-2014 日期: 10-6-2014

註: 上述資料不可作為任何付款基礎
Note: The above information does not constitute any basis for payment purpose.

(* 請在適用處加 3。 Please 3 as appropriate.)