

**Contract No. HY/2012/08
Tuen Mun - Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel
Section**

*Fifth Monthly Environmental Monitoring & Audit
(EM&A) Report*

11 April 2014

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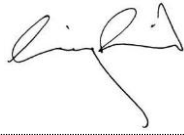



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*Fifth Monthly Environmental Monitoring & Audit
(EM&A) Report*

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		Certified by: 			
		Mr Jovy Tam ET Leader			
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This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.		Distribution			
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11 April 2014

AECOM
Supervising Officer Representative's Office
Room 201, 2nd Floor,
River Trade Terminal Office Building,
201 Lung Mun Road, Tuen Mun, Hong Kong

By Fax (2450 3099) and By Post

Attention: Messrs. Edwin Ching / Andy Westmorelan

Dear Sir,

**Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities,
and Tuen Mun-Chek Lap Kok Link – Investigation**

**Contract No. HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Monthly EM&A Report for March 2014 (EP-354/2009/B)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (for March 2014) certified by the ET Leader (ET's ref.: "0212330_5th Monthly EM&A_20140409.doc" dated 11 April 2014) and provided to us via email on 11 April 2014.

We are pleased to inform you that we have no adverse comments on the captioned monthly EM&A Report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/B.

Thank you for your kind attention. Please do not hesitate to contact the undersigned or the ENPO Leader Mr. Y H Hui should you have any queries.

Yours sincerely,



Tony Cheng
Independent Environmental Checker
Tuen Mun – Chek Lap Kok Link

c.c. HyD – Mr. Stephen Chan (By Fax: 3188 6614)
HyD – Mr. Matthew Fung (By Fax: 3188 6614)
AECOM – Mr. Conrad Ng (By Fax: 3922 9797)
ERM – Mr. Jovy Tam (By Fax: 2723 5660)
Dragages – Mr. C.F. Kwong (By Fax: 2670 2798)

Internal: DY, YH, PL, ENPO Site

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EXECUTIVE SUMMARY

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. ENVIRON Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Another application for variation of environmental permit (VEP) (*EP-354/2009/B*) was granted on 28 January 2014.

The construction phase of the Project commenced on 1 November 2013 and will tentatively be completed by the end of 2018. The impact monitoring of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.

This is the Fifth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 March 2014 for the *Contract No. HY/2012/08 Northern Connection Sub-sea Tunnel Section* (the “Project”) in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Marine-based Works

- Dredging at Portion N-C;
- Filling at Portion N-A;
- Construction of Vertical Seawall and Sloping Seawall at Portion N-B; and,
- Marine Sheet Piling for Box Culvert extension at Portion N-A.

Land-based Works

- WA 18 Site office construction;
- CLP Substation structure works in Portion N6; and,
- CLP Substation E&M works in Portion N6.

A summary of monitoring and audit activities conducted in the reporting period is listed below:

24-hour TSP Monitoring	5 sessions
1-hour TSP Monitoring	5 sessions
Impact Water Quality Monitoring	13 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental Site Inspection	4 sessions

Daily marine mammal exclusion zone monitoring was undertaken during the period of dredging works. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* was recorded in March 2014 during the exclusion zone monitoring.

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

Two Action Level exceedances for 1-hr TSP were recorded from the air quality monitoring in this reporting period. The exceedances were considered to be due to the sporadic events from cumulative anthropogenic activities in this area of Hong Kong and the construction works under this Project were unlikely to be the major cause of the recorded exceedances upon further investigation.

Breaches of Action and Limit Levels for Water Quality

One Action Level exceedance and one Limit Level exceedance for depth-averaged SS were recorded in the water quality monitoring of this reporting month.

Dolphin Monitoring

During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations. Due to monthly variation in dolphin occurrence within the study area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected related to the construction activities of the TM-CLKL Northern Connection Sub-sea Section in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

Environmental Complaints, Non-compliance & Summons

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the construction of this Contract was recorded in this reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

Reporting Change

There was no reporting change required in the reporting period.

Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of April 2014 include the following:

Marine-based Works

- Dredging;
- Filling;
- Vertical Seawall construction;
- Sloping Seawall construction;
- Marine Sheet Piling for Box Culvert extension; and
- Predrilling for Box Culvert Foundation.

Land-based Works

- CLP Substation underground utilities works; and
- CLP Substation Superstructure.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of April 2014 are expected to be mainly associated with dust, marine water quality, marine ecology and waste management.

1.1

BACKGROUND

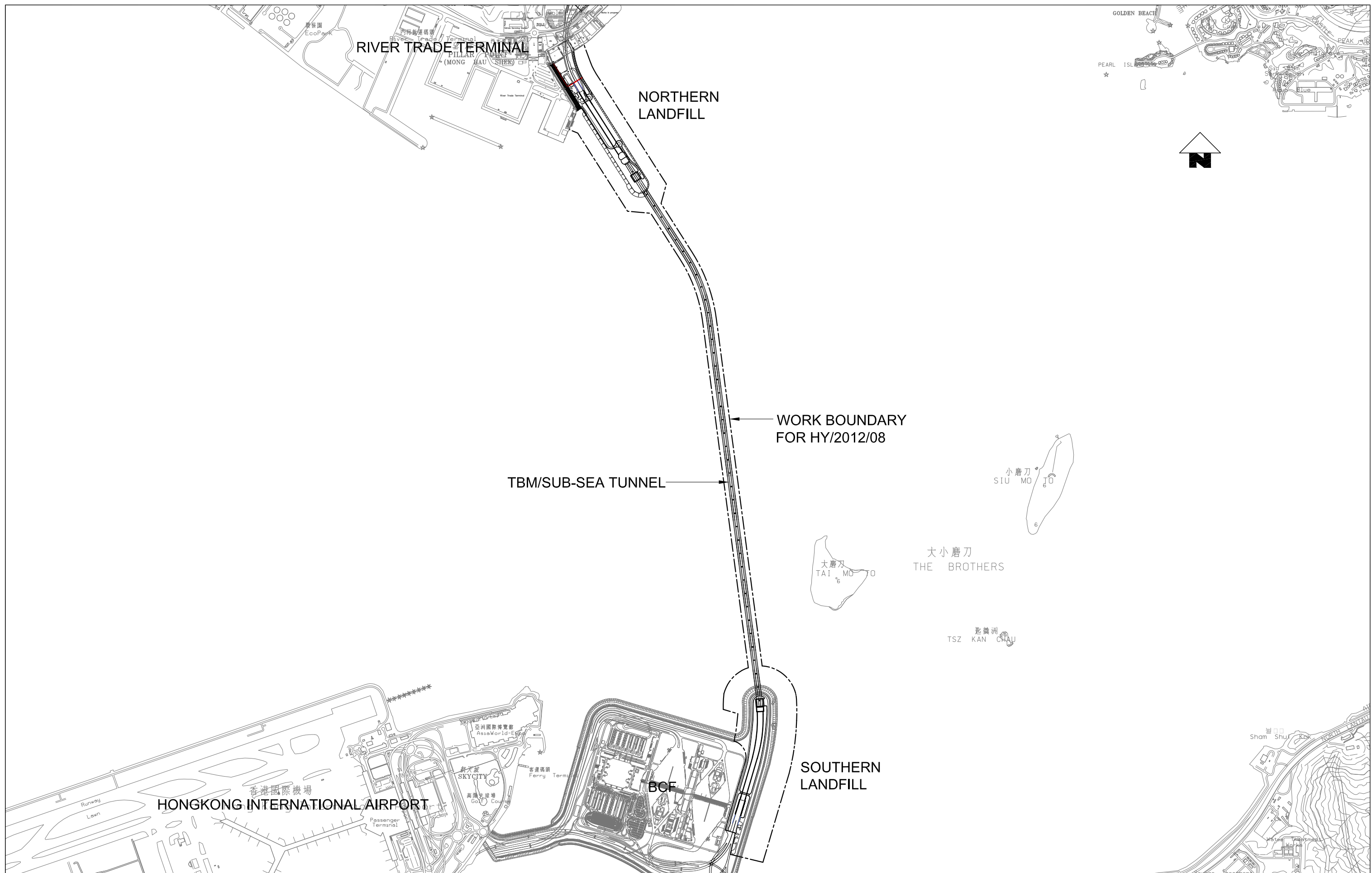
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM)*. The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-145/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009A) was issued on 8 December 2010. Another application for VEP (EP-354/2009/B) was granted on 28 January 2014.


Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). ENVIRON Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

Layout of the Contract components is presented in *Figure 1.1*.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed by 2018. The impact monitoring phase of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.



Designed By	PKV
Drawn By	DAI
Approved By	SPo
Date	11SEP2013
Rev.	Description
A	FIRST ISSUE
	11SEP13
	PKV
	Checked

Main Contractor


 A member of the Bouygues Construction group
 Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Client

 路政署
HIGHWAYS DEPARTMENT

Contractor's Designer

 Ove Arup & Partners
 Hong Kong Limited

Project
 Contract No. HY/2012/08
 Tuen Mun - Chek Lap Kok Link -
 Northern Connection Sub-Sea Tunnel Section
 Drawing Title
Figure 1.1

Drawing no.	TMCLKL8-DBJ-GEN-DWG-00174
Scale	1:25000 @ A3
CADD Ref.	TMCLKL8-DBJ-GEN-DWG-00174-DFT-A
Issue Status	DFT (DRAFT)
Revision	A

1.2 SCOPE OF REPORT

This is the Fifth Monthly EM&A Report under the *Contract No. HY/2012/08 Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section*. This report presents a summary of the environmental monitoring and audit works in March 2014.

1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

Table 1.1 *Contact Information of Key Personnel*

Party	Position	Name	Telephone	Fax
SOR (AECOM Asia Company Limited)	Chief Resident	Edwin Ching	2450 3111	2450 3099
	Engineer	Andrew Westmoreland	2450 3511	2450 3099
ENPO / IEC (ENVIRON Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2888	3465 2899
	IEC	Tony Cheng	3465 2888	3465 2899
Contractor (Dragages – Bouygues Joint Venture)	Environmental Manager	C.F. Kwong	2293 7322	2670 2798
	Environmental Officer	Bryan Lee	2293 7323	2670 2798
	24-hour complaint hotline	Rachel Lam	2293 7342	
ET (ERM-HK)	ET Leader	Jovy Tam	2271 3113	2723 5660

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of this Contract was commenced on 1 November 2013. The three-month rolling construction programme is shown in *Appendix B*.

As per DBJV's information, details of major construction works carried out in this reporting period are summarized in *Table 1.2*.

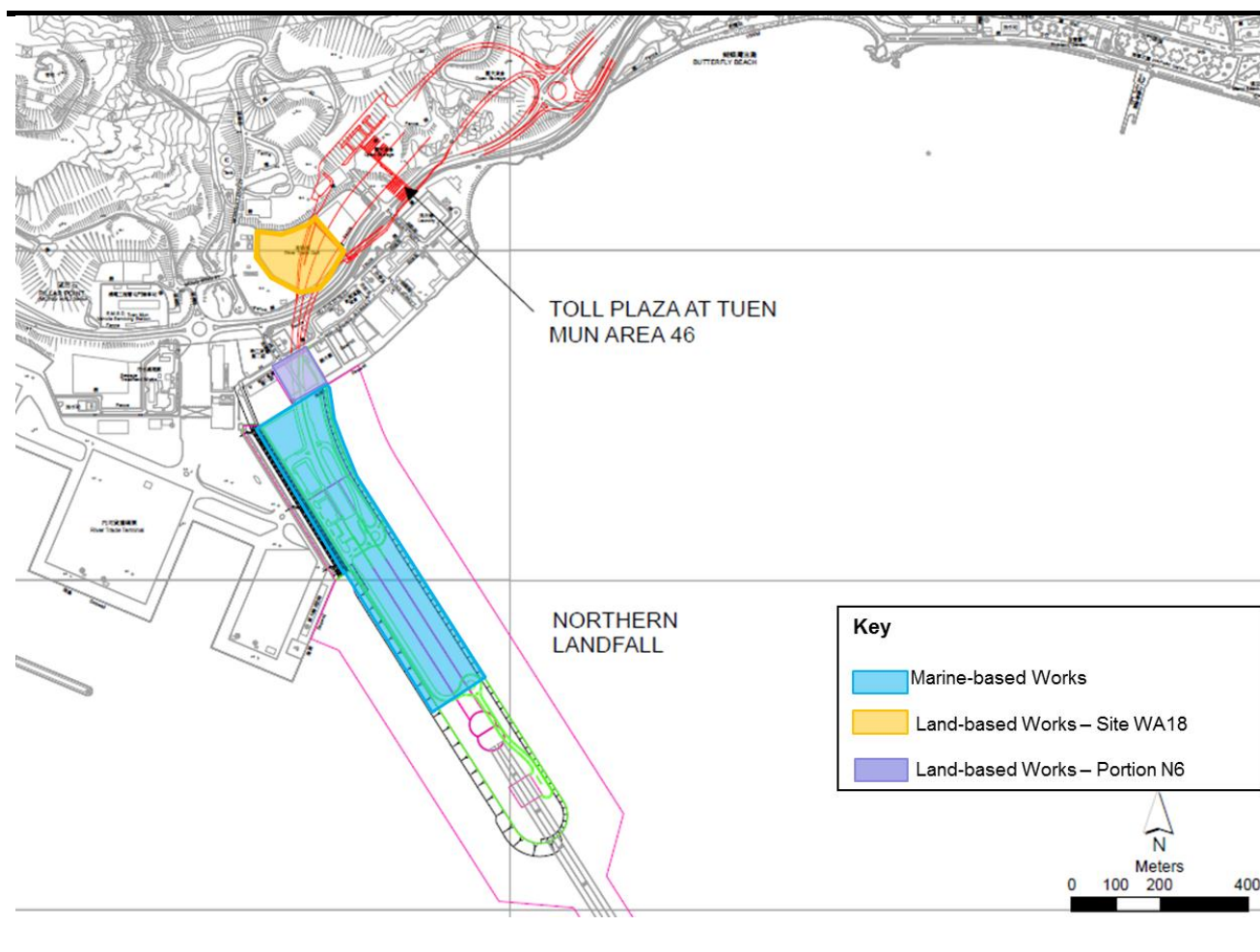
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.3*.

The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

Table 1.2 *Summary of Construction Activities Undertaken during the Reporting Period*

Construction Activities Undertaken	
<i>Marine-based Works</i>	
•	Dredging at Portion N-C;
•	Filling at Portion N-A;
•	Construction of Vertical Seawall and Sloping Seawall at Portion N-B; and,
•	Marine Sheet Piling for Box Culvert extension at Portion N-A.
<i>Land-based Works</i>	
Site WA 18	
•	Site office construction
Portion N6	
•	CLP Substation structure works
•	CLP Substation E&M works

Figure 1.2 *Locations of Construction Activities – March 2014*



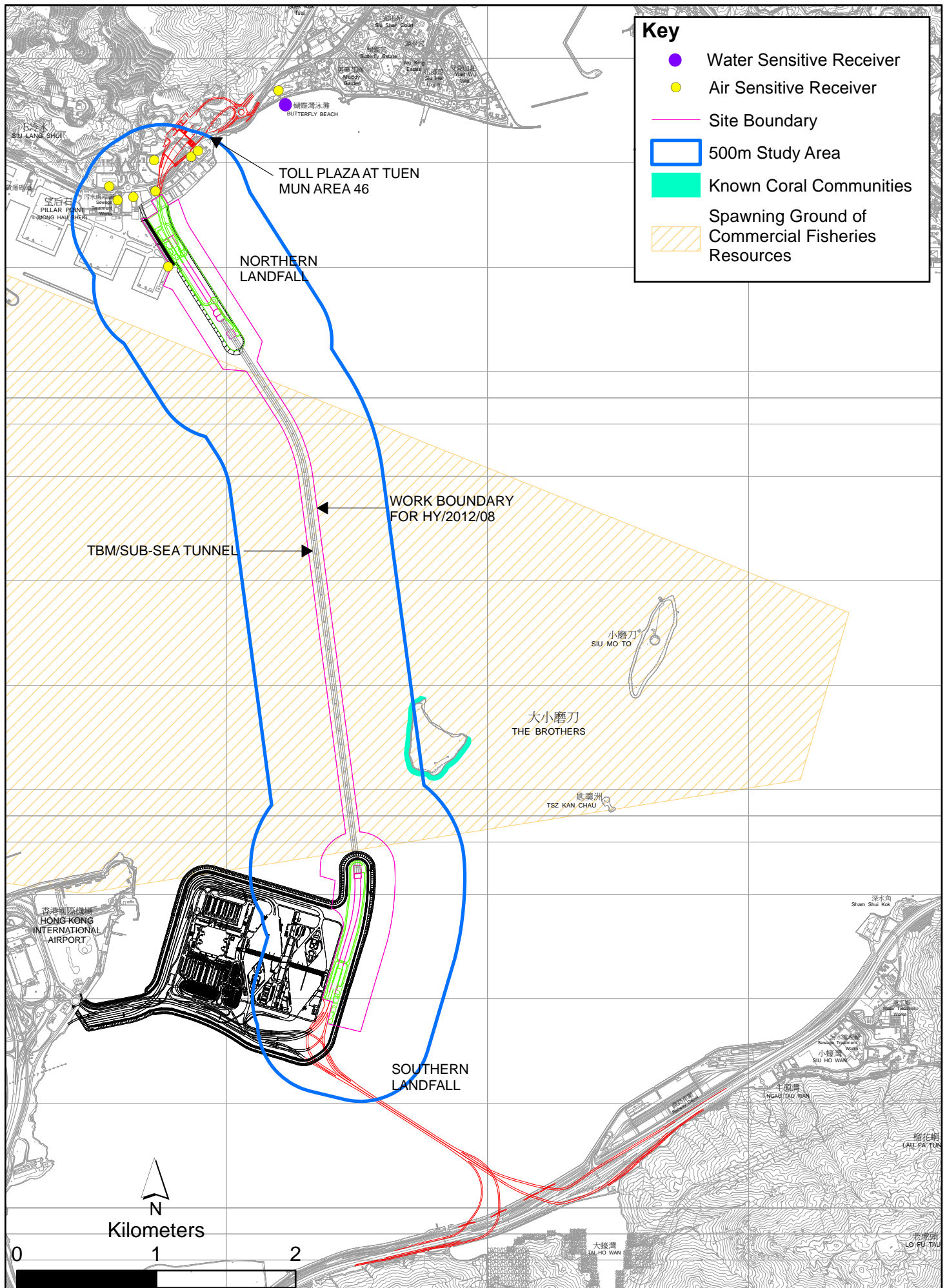


Figure 1.3

Environmental Sensitive Receivers in the vicinity of
 Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link -
 Northern Connection Sub-Sea Tunnel Section

Environmental
 Resources
 Management



The EM&A programme required environmental monitoring for air quality, water quality and marine ecology as well as environmental site inspections for air quality, noise, water quality, waste management, marine ecology and landscape and visual impacts. The EM&A requirements and related findings for each component are summarized in the following sections

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected.

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 6, 12, 18, 24 and 28 March 2014 at the five (5) air quality monitoring stations in accordance with the requirements stipulated in the Updated EM&A Manual (*Figure 2.1; Table 2.1*). Wind anemometer was installed at the rooftop of ASR5 for logging wind speed and wind direction. Details of the equipment deployed are provided in *Table 2.2*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Table 2.1 *Locations of Impact Air Quality Monitoring Stations and Monitoring Dates in this Reporting Period*

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	6, 12, 18, 24 and 28 March 2014	Tuen Mun Fireboat Station	Office	<ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times per day every 6 days 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour every 6 days
ASR5		Pillar Point Fire Station	Office	
AQMS1		Previous River Trade Golf	Bare ground	
ASR6		Butterfly Beach Laundry	Office	
ASR10		Butterfly Beach Park	Recreational uses	

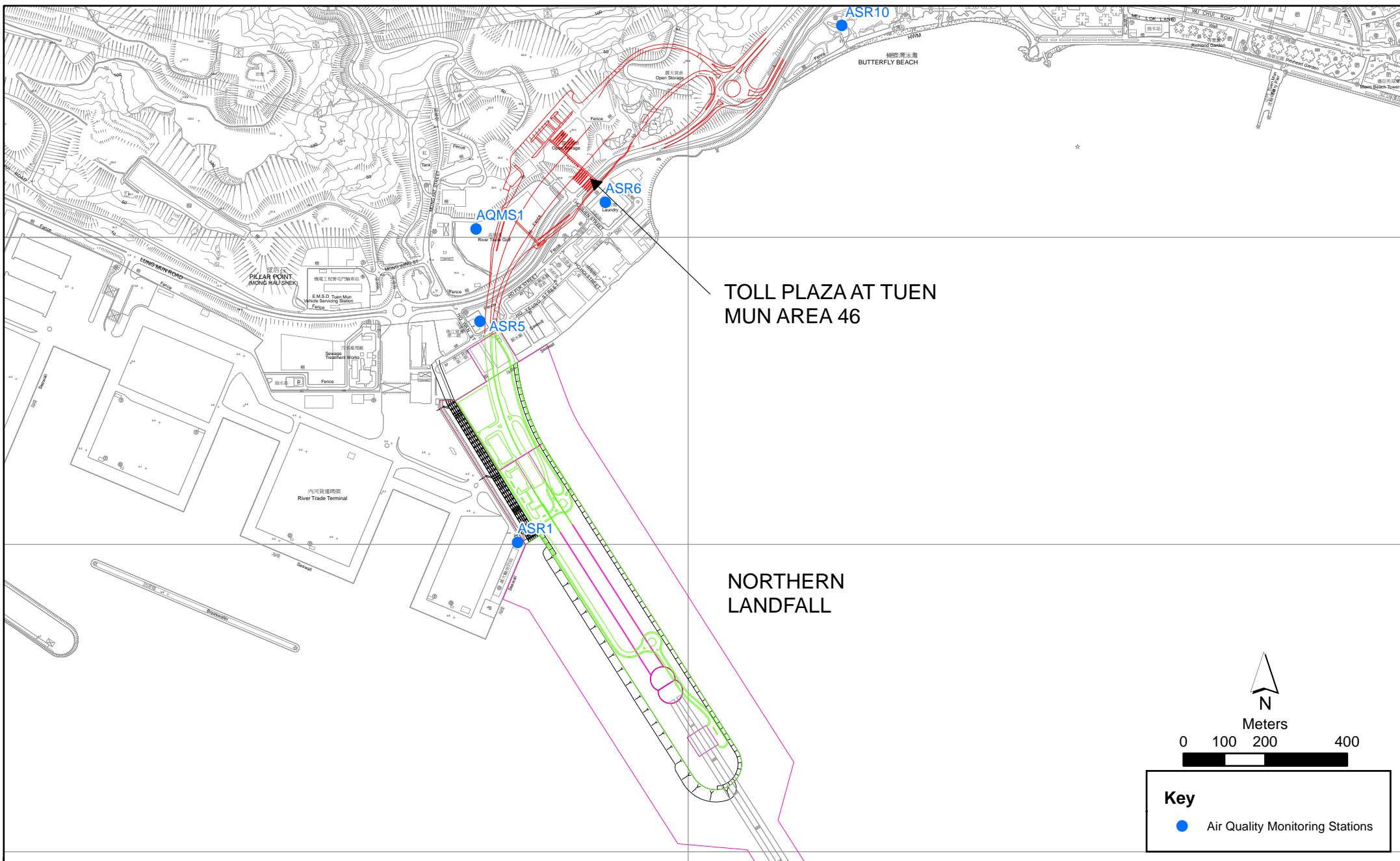


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring

Table 2.2 Air Quality Monitoring Equipment

Equipment	Brand and Model
High Volume Sampler (1-hour TSP and 24-hour TSP)	Tisch Environmental Mass Flow Controlled Total Suspended Particulate (TSP) High Volume Sampler (Model No. TE-5170)
Wind Anemometer	MetPak, WindSonic (Wind Direction: WE570; Wind Speed Sensor: WE550)

2.1.2 Action & Limit Levels

The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

2.1.3 Monitoring Schedule for the Reporting Month

The schedule for air quality monitoring in March 2014 is provided in *Appendix F*.

2.1.4 Results and Observations

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3* and *2.4*, respectively. Detailed impact air quality monitoring results and graphical presentations are presented in *Appendix G*.

Table 2.3 Summary of 1-hour TSP Monitoring Results in this Reporting Period

Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	190	103 - 391	331	500
ASR5	254	156 - 402	340	500
AQMS1	182	102 - 299	335	500
ASR6	170	105 - 318	338	500
ASR10	123	71 - 176	337	500

Table 2.4 Summary of 24-hour TSP Monitoring Results in this Reporting Period

Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	99	59 - 129	213	260
ASR5	101	84 - 113	238	260
AQMS1	86	69 - 105	213	260
ASR6	83	55 - 107	238	260
ASR10	73	53 - 102	214	260

The weather condition during the monitoring period varied from sunny to cloudy. The major dust sources in the reporting period include construction activities under the Contract as well as nearby traffic emissions.

A total of five monitoring events were undertaken in which two Action Level exceedances of 1-hr TSP and no exceedance of 24-hr TSP were recorded in this reporting month.

Meteorological information collected at the ASR5, including wind speed and wind direction, is provided in *Appendix H*.

2.2 WATER QUALITY MONITORING

2.2.1 Monitoring Requirements & Equipment

In accordance with the Updated EM&A Manual, impact water quality monitoring was carried out three days per week during the construction period at nine (9) water quality monitoring stations (*Figure 2.2; Table 2.5*).

Table 2.5 *Locations of Water Quality Monitoring Stations and the Corresponding Monitoring Requirements*

Station ID	Type	Coordinates		*Parameters, unit	Depth	Frequency
		Easting	Northing			
IS12	Impact Station	813218	823681	• Temperature(°C)	3 water depths: 1m	Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract.
IS13	Impact Station	813667	824325	• pH(pH unit)	below sea surface,	
IS14	Impact Station	812592	824172	• Turbidity (NTU)	mid-depth and 1m	
IS15	Impact Station	813356	825008	• Water depth (m)	above sea bed. If	
CS4	Control / Far Field Station	810025	824004	• Salinity (ppt)	the water depth is	
CS6	Control / Far Field Station	817028	823992	• DO (mg/L and % of saturation)	less than 3m, mid-depth sampling only. If water	
SR8	Sensitive receiver (Gazettal beaches in Tuen Mun)	816306	825715	• SS (mg/L)	depth less than 6m, mid-depth may be omitted.	
SR9	Sensitive receiver (Butterfly Beach)	813601	825858			
SR10A	Sensitive receiver (Ma Wan FCZ)	823741	823495			

*Notes:

In addition to the parameters presented monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby were also recorded.

Table 2.6 summarizes the equipment used in the impact water quality monitoring programme. Copies of the calibration certificates are attached in *Appendix E*.

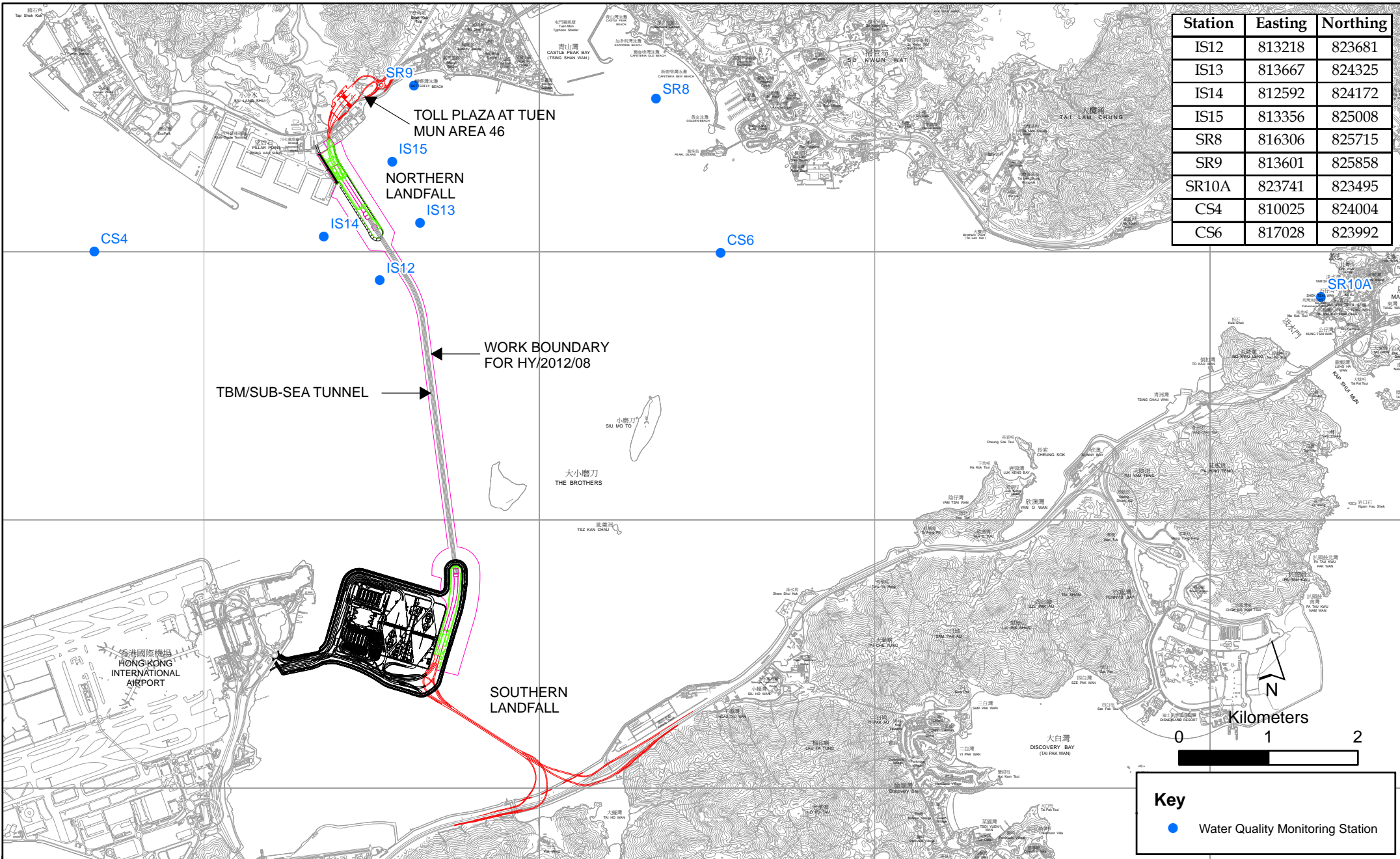


Figure 2.2

Water Quality Monitoring Station

Table 2.6 Water Quality Monitoring Equipment

Equipment	Model	Qty.
Water Sampler	Kahlsico Water-Bottle Model 135DW 150	1
Dissolved Oxygen Meter	YSI Pro 2030	1
pH Meter	HANNA HI 8314	1
Turbidity Meter	HACH 2100Q	1
Monitoring Position	“Magellan” Handheld GPS Model eXplorist GC	4
Equipment	DGPS Kodon KGP913MK2 ⁽¹⁾	1

2.2.2 Action & Limit Levels

The Action and Limit levels of water quality impact monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

2.2.3 Monitoring Schedule for the Reporting Month

The schedule for water quality monitoring in March 2014 is provided in *Appendix F*.

2.2.4 Results and Observations

During this reporting period, major marine works included dredging at Portion N-C and reclamation filling at Portion N-A. A closed grab dredger was used and silt curtains (cage-type and single floating type) were deployed during dredging works. The level of dredging activities was within the working rate described in the EP and the approved EIA Report. In addition, reclamation filling was undertaken between the 200 m of leading seawalls using filling materials specified in the EP and the approved EIA Report with a single layer silt curtain being deployed as a precautionary measure to reduce dispersion of suspended solids.

Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Detailed impacts water quality monitoring and graphical presentations are presented in *Appendix I*. It is useful to note that some adverse weather conditions, including Rainstorm Warning and Thunderstorm Warning, were reported during the monitoring period. In addition, heavy marine traffic (not associated with the Project) was commonly observed nearby the Project site and its vicinity. Both weather condition and marine traffic may affect monitoring results.

In this reporting period, a total of thirteen monitoring events were undertaken in which one Action Level exceedance and one Limit Level exceedance for depth-averaged SS were recorded.

2.3 DOLPHIN MONITORING

2.3.1 Monitoring Requirements

Impact dolphin monitoring is required to be conducted by a qualified dolphin specialist team to evaluate whether there have been any effects on the

dolphins. In order to fulfil the EM&A requirements and make good use of available resources, the on-going impact line transect dolphin monitoring data collected by HyD's *Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge. Hong Kong Link Road - Section between Scenic Hill and Hong Kong Boundary Crossing Facilities* on the monthly basis is adopted to avoid duplicates of survey effort.

2.3.2 *Monitoring Equipment*

Table 2.7 summarises the equipment used for the impact dolphin monitoring.

Table 2.7 *Dolphin Monitoring Equipment*

Equipment	Model
Global Positioning System (GPS)	Garmin 18X-PC
Camera	Geo One Phottix Nikon D90 300m 2.8D fixed focus Nikon D90 20-300m zoom lens
Laser Binoculars	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

2.3.3 *Monitoring Parameter, Frequencies & Duration*

Dolphin monitoring should cover all transect lines in Northeast Lantau (NEL) and the Northwest Lantau (NWL) survey areas twice per month throughout the entire construction period. The monitoring data should be compatible with, and should be made available for, long-term studies of small cetacean ecology in Hong Kong. In order to provide a suitable long-term dataset for comparison, identical methodology and line transects employed in baseline dolphin monitoring was followed in the impact dolphin monitoring.

2.3.4 *Monitoring Location*

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 2.3*. The co-ordinates of all transect lines are shown in *Table 2.8* below.

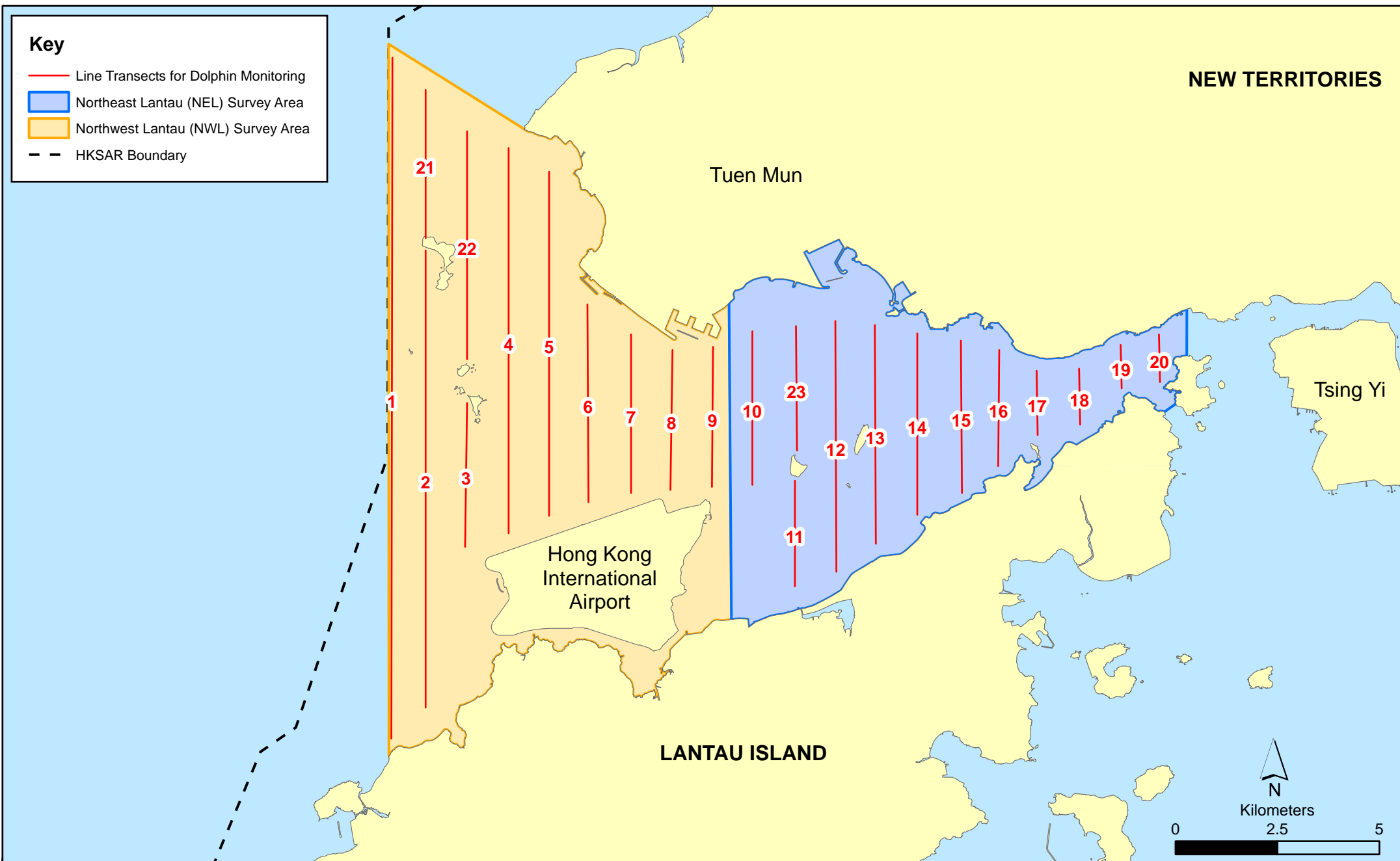


Figure 2.3

Layout of Transect Lines of Dolphin Monitoring in Northwest and Northeast Lantau Areas

Table 2.8 Impact Dolphin Monitoring Line Transect Co-ordinates

Line No.		Easting	Northing	Line No.		Easting	Northing
1	Start Point	804671	814577	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805475	815457	14	Start Point	817537	820220
2	End Point	805477	826654	14	End Point	817537	824613
3	Start Point	806464	819435	15	Start Point	818568	820735
3	End Point	806464	822911	15	End Point	818568	824433
4	Start Point	807518	819771	16	Start Point	819532	821420
4	End Point	807518	829230	16	End Point	819532	824209
5	Start Point	808504	820220	17	Start Point	820451	822125
5	End Point	808504	828602	17	End Point	820451	823671
6	Start Point	809490	820466	18	Start Point	821504	822371
6	End Point	809490	825352	18	End Point	821504	823761
7	Start Point	810499	820690	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	820847	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	820892	21	Start Point	805476	827081
9	End Point	812516	824254	21	End Point	805476	830562
10	Start Point	813525	820872	22	Start Point	806464	824033
10	End Point	813525	824657	22	End Point	806464	829598
11	Start Point	814556	818449	23	Start Point	814559	821739
11	End Point	814556	820992	23	End Point	814559	824768
12	Start Point	815542	818807				
12	End Point	815542	824882				

2.3.5 Action & Limit Levels

The Action and Limit levels of impact dolphin monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

2.3.6 *Monitoring Schedule for the Reporting Month*

Dolphin monitoring was carried out on 5, 11, 17 and 25 March 2014. The dolphin monitoring schedule for the reporting month is shown in *Appendix F*.

2.3.7 *Results & Observations*

A total of 296.83 km of survey effort was collected, with 89.0% of the total survey effort being conducted under favourable weather conditions (ie Beaufort Sea State 3 or below with good visibility) in March 2014. Amongst the two areas, 117.30 km and 179.53 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 211.71 km and 85.12 km, respectively. The survey efforts are summarized in *Appendix J*.

A total of 14 groups of 43 Chinese White Dolphin sightings were recorded during the two sets of surveys in March 2014. All sightings were made in NWL during the two sets of surveys in March 2014, with no dolphin being sighted in NEL. All except two sightings were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel.

One of these 14 sightings was made in the vicinity of the TM-CLKL Northern Landfall. The distribution of dolphin sightings during the reporting month is shown in *Figure 2.4*.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below with good visibility) in March 2014 with the results present in *Tables 2.9 and 2.10*.

Table 2.9 *Individual Survey Event Encounter Rates*

		Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)	Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)
		Primary Lines Only	Primary Lines Only
NEL	Set 1: Mar 5 th /11 th	0.0	0.0
	Set 2: Mar 17 th /25 th	0.0	0.0
NWL	Set 1: Mar 5 th /11 th	6.4	23.6
	Set 2: Mar 17 th /25 th	13.2	24.8

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in March 2014 in Northeast (NEL) and Northwest Lantau (NWL)

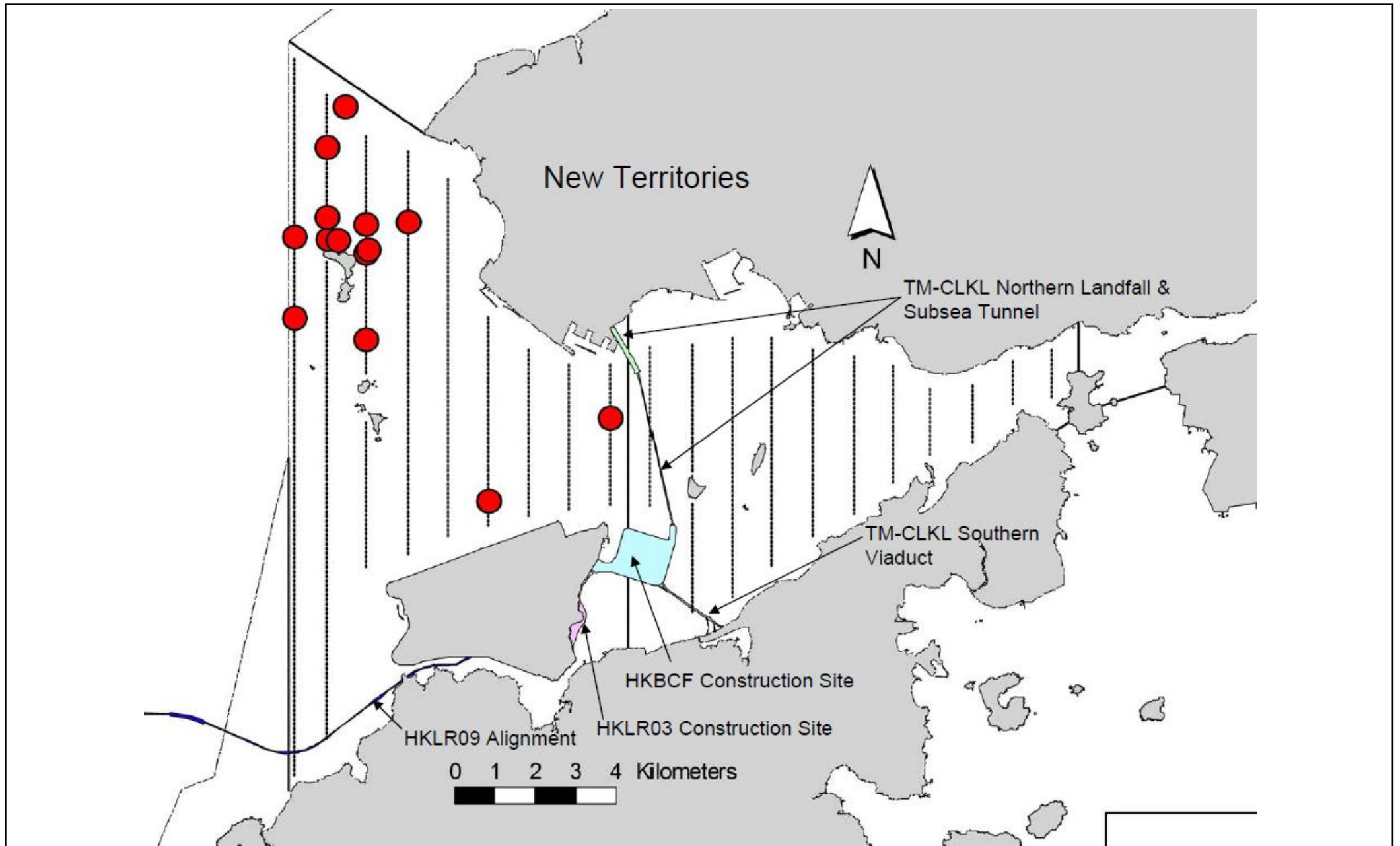


Figure 2.4

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
 The distribution of dolphin sightings during the reporting period
 (Source: Adopted from HKLR03 Monitoring Survey in March 2014)

DATE: 06/03/2013

Environmental
 Resources
 Management



Table 2.10 Monthly Average Encounter Rates

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	Both Primary and Secondary Lines	Primary Lines Only	Both Primary and Secondary Lines
Northeast Lantau	0.0	0.0	0.0	0.0
Northwest Lantau	10.4	8.6	24.3	19.9

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in March 2014 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau.

The average group size of Chinese White Dolphins in March 2014 was 3.07 individuals per group. Most dolphin groups were composed of only 1 - 3 animals with only one larger group of thirteen animals being sighted.

No unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations during the dolphin monitoring in this reporting month.

Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected related to the construction activities of this Project in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

2.3.8 Marine Mammal Exclusion Zone Monitoring

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* was recorded in March 2014 during the exclusion zone monitoring.

2.4 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, four (4) site inspections were carried out on 4, 11, 19 and 26 March 2014.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.11*.

Table 2.11 Specific Observations and Recommendations during the Weekly Site Inspection in this Reporting Month

Inspection Date	Observations	Remarks
4 March 2014	<p>Dredging Barge - GD2</p> <ul style="list-style-type: none"> Sediment outflow was observed outside the cage-type silt curtain. Acoustic decoupling measures should be implemented for all generators. <p>Hopper Barge - Wing Go</p> <ul style="list-style-type: none"> Excess sandy materials should be regularly cleaned from desks and exposed fittings of the barge. <p>Storage Area - WA23</p> <ul style="list-style-type: none"> Sandy materials should be regularly cleared to avoid runoff. 	<p>Dredging Barge - GD2</p> <ul style="list-style-type: none"> The Contractor was reminded to regularly maintain the cage-type silt curtain to prevent sediment outflow. The Contractor was reminded to check for all generators if the acoustic decoupling measures have been implemented for all generators. <p>Hopper Barge - Wing Go</p> <ul style="list-style-type: none"> The Contractor was reminded to regularly clear excess sandy materials from desks and exposed fittings of the barge. <p>Storage Area - WA23</p> <ul style="list-style-type: none"> The Contractor was reminded to clear the sandy materials more often to avoid runoff.
11 March 2014	<p>Dredging Barge - GD12</p> <ul style="list-style-type: none"> Acoustic decoupling measures should be implemented for all generators. <p>Dredging Barge - GD2</p> <ul style="list-style-type: none"> Acoustic decoupling measures should be placed underneath all generators. Oily water and surface runoff was observed on the deck. Cage-type silt curtain should be maintained regularly throughout the dredging works 	<p>Dredging Barge - GD12</p> <ul style="list-style-type: none"> The Contractor was reminded to place the proper isolation material underneath all generators. <p>Dredging Barge - GD2</p> <ul style="list-style-type: none"> The Contractor was reminded to place the proper isolation material underneath all generators. The Contractor was reminded to clean up the oily water as chemical waste immediately and to check for oil spill regularly. The Contractor was reminded to fix the cage-type silt curtain before commencement of dredging works.
19 March 2014	<p>Barges - CA11 and GD2</p> <ul style="list-style-type: none"> Excess material should be regularly cleaned from side decks of the barge. Cage-type silt curtain should be maintained regularly throughout the dredging works. <p>Portion N6</p> <ul style="list-style-type: none"> C&D waste materials sorting area should be set up properly. 	<p>Barges - CA11 and GD2</p> <ul style="list-style-type: none"> The Contractor was reminded to do regular cleaning of excess materials on the side decks of the barge. The Contractor was reminded to perform regular maintenance on the cage-type silt curtain. <p>Portion N6</p> <ul style="list-style-type: none"> The Contractor was reminded to set up a proper C&D waste materials sorting area.

Inspection Date	Observations	Remarks
26 March 2014	<p>Portions N-A & N-B</p> <ul style="list-style-type: none"> The Contractor was reminded to tie the floating type silt curtain. <p>Portion N6</p> <ul style="list-style-type: none"> Stagnant water was observed. Water spraying should be applied during ground breaking works to control dust. 	<p>Portions N-A & N-B</p> <ul style="list-style-type: none"> The Contractor was reminded to regularly check and maintain the floating type silt curtain. <p>Portion N6</p> <ul style="list-style-type: none"> The Contractor was reminded to clear the stagnant water. The Contractor was reminded to apply water spraying during ground breaking works and provide adequate water spraying throughout the day to avoid dust generation.

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

2.5 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period include mainly construction wastes (inert and non-inert), imported fill and marine sediments (Category L and Category M). Reference has been made to the waste flow table prepared by the Contractor (*Appendix M*). The quantities of different types of wastes are summarized in *Table 2.12*.

Table 2.12 Quantities of Different Waste Generated in the Reporting Month

Month/Year	Inert Construction Waste ^(a) (tonnes)	Imported Fill (tonnes)	Inert Construction Waste Re-used (tonnes)	Non-inert Construction Waste ^(b) (tonnes)	Recyclable Materials ^(c) (kg)	Chemical Wastes (kg)	Marine Sediment (m ³)	
							Category L	Category M (M _p & M _f)
March 2014	105	248,811	0	36	0	0	37,300	40,450

Notes:

- (a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.
- (b) Non-inert construction wastes include general refuse disposed at landfill.
- (c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in

accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

2.6 *ENVIRONMENTAL LICENSES AND PERMITS*

The status of environmental licensing and permit is summarized in *Table 2.13* below.

Table 2.13 Summary of Environmental Licensing and Permit Status

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/B	28 January 2014	Throughout the Contract	HyD	Application for VEP on 20 January 2014 to replace EP-354/2009/A
Construction Dust Notification	363510	19 August 2013	Throughout the Contract	DBJV	-
Chemical Waste Registration	5213-422-D2516-01	10 September 2013	Throughout the Contract	DBJV	-
Construction Waste Disposal Account	7018108	19 August 2013	Throughout the Contract	DBJV	Waste disposal in Contract No. HY/2012/08
Waste Water Discharge License	WT00017707-2013	18 November 2013	30 November 2018	DBJV	For site WA18
Waste Water Discharge License	WT00018433-2014	6 March 2014	31 March 2019	DBJV	For site Portion N6
Construction Noise Permit	GW-RW0095-14	10 February 2014	9 August 2014	DBJV	For Dredging and Reclamation Works
Construction Noise Permit	GW-RW0822-13	14 November 2013	10 May 2014	DBJV	For site WA18
Construction Noise Permit	GW-RS0814-13	15 November 2013	10 May 2014	DBJV	For site WA23
Construction Noise Permit	GW-RW0077-14	17 February 2014	16 August 2014	DBJV	For Portion N6
Construction Noise Permit	GW-RW0223-14	29 March 2014	28 September 2014	DBJV	For Portion N6
Construction Noise Permit	GW-RW0234-14	29 March 2014	28 September 2014	DBJV	For Pillar Point
Marine Dumping Permit	EP/MD/14-072	1 November 2013	30 April 2014	DBJV	For Type 1
Marine Dumping Permit	EP/MD/14-140	1 March 2014	31 March 2014	DBJV	For Type 1 (Dedicated site) and Type 2

Notes:

HyD = Highways Department

DBJV = Dragages - Bouygues Joint Venture

VEP = Variation of Environmental Permit

2.7 ***IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES***

In response to the site audit findings, the Contractors carried out all corrective actions.

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures relevant to this Contract were implemented properly.

2.8 ***SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT***

Two Action level exceedances of 1-hr TSP and no exceedances of 24-hr TSP for air quality were recorded during the reporting month. Further to the investigation, the recorded exceedances for air quality monitoring were considered to be sporadic event from the cumulative anthropogenic activities (eg traffic emissions from Lung Mun Road and River Trade Terminal) in this area of Hong Kong, thus the Project works were unlikely to be the major cause of the recorded exceedances. The investigation findings are detailed in *Appendix L*.

One Action Level exceedance and one Limit Level exceedance for depth-averaged SS were recorded in the water quality monitoring of this reporting month. The investigation findings will be presented in the next monthly report.

2.9 ***SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS***

The Environmental Complaint Handling Procedure is provided in *Figure 2.5*.

No complaints, notification of summons and prosecution were received in the reporting period.

Statistics on complaints, notifications of summons and successful prosecutions are summarized in *Appendix L*.

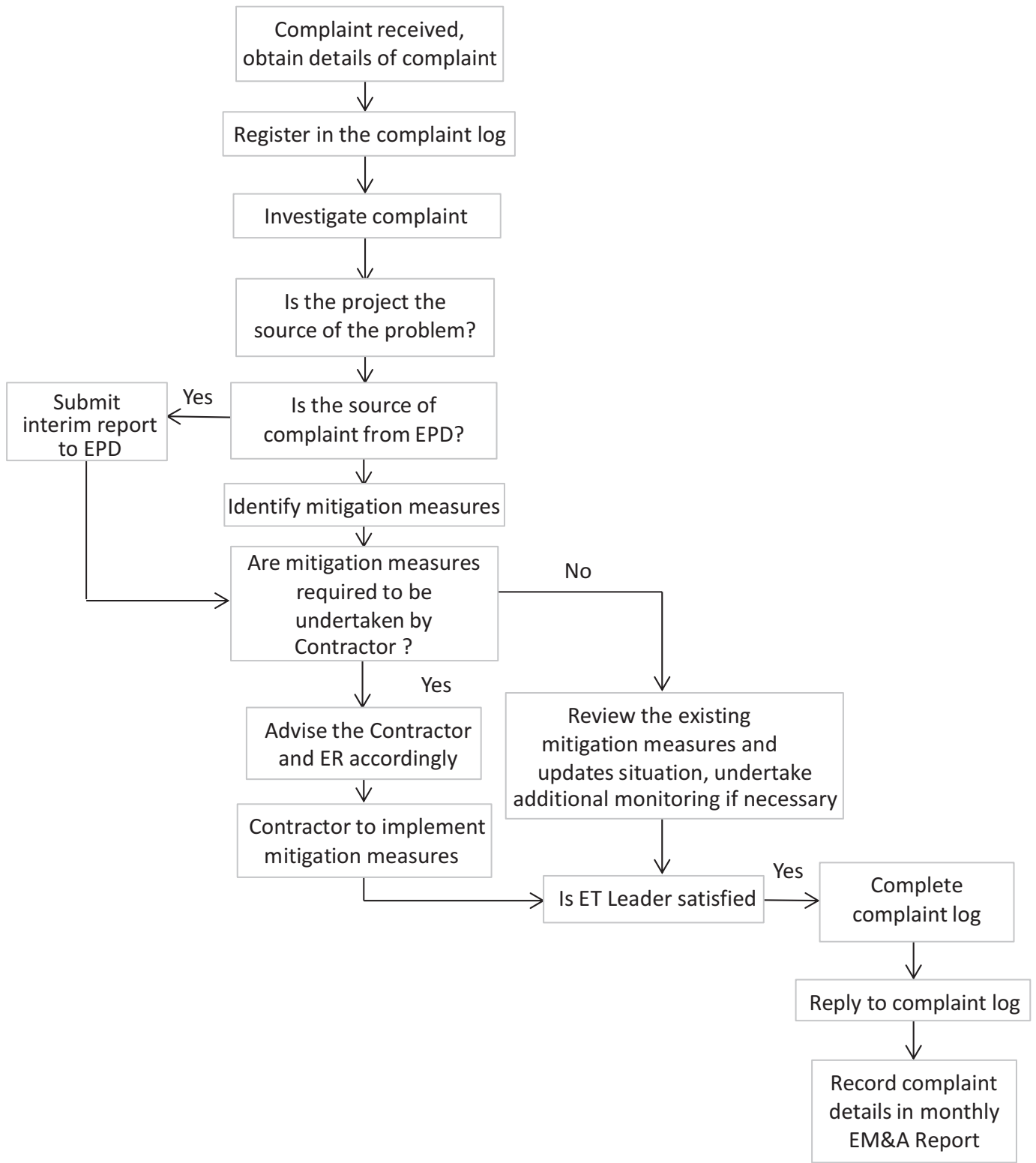


Figure 2.5

Environmental Complaint Handling Procedure

3 FUTURE KEY ISSUES

3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Project in April 2014 are summarized in *Table 3.1*.

Table 3.1 Construction Works to Be Undertaken in the Coming Month

Works to be undertaken
<i>Marine-based Works</i>
<ul style="list-style-type: none">• Dredging• Filling• Vertical Seawall construction• Sloping Seawall construction• Marine Sheet Piling for Box Culvert extension• Predrilling for Box culvert Foundation
<i>Land-based Works</i>
Portion N6
<ul style="list-style-type: none">• CLP Substation underground utilities works• CLP Substation Superstructure

3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of April 2014 are mainly associated with dust, marine water quality, marine ecology and waste management issues.

3.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedule for environmental monitoring in April 2014 is provided in *Appendix F*.

4.1 CONCLUSIONS

This Fifth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 March 2014, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/B.

Air quality (including 1-hour TSP and 24-hour TSP), water quality and dolphin monitoring were carried out in this reporting month. One (1) Action Level exceedance and one (1) Limit Level exceedance for depth-averaged SS were recorded in the water quality monitoring of this reporting month. Two (2) Action Level exceedances of 1-hr TSP and no exceedances of 24-hr TSP for air quality monitoring were recorded in the reporting month. Investigation findings suggested that the Project works were not the major cause of the recorded exceedances for air quality monitoring. Nevertheless, the Contractor was reminded to ensure all dust mitigation measures are implemented at the construction site and the proper deployment of silt curtains during the period of marine works under this Contract.

A total of 14 groups of 43 Chinese White Dolphin sightings were recorded during the two sets of surveys in March 2014. All sightings were made in NWL during the two sets of surveys in March, with no dolphin being sighted in NEL. All except two sightings were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. No unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations during the dolphin monitoring in this reporting month.

Environmental site inspection was carried out four (4) times in March 2014. Recommendations on remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

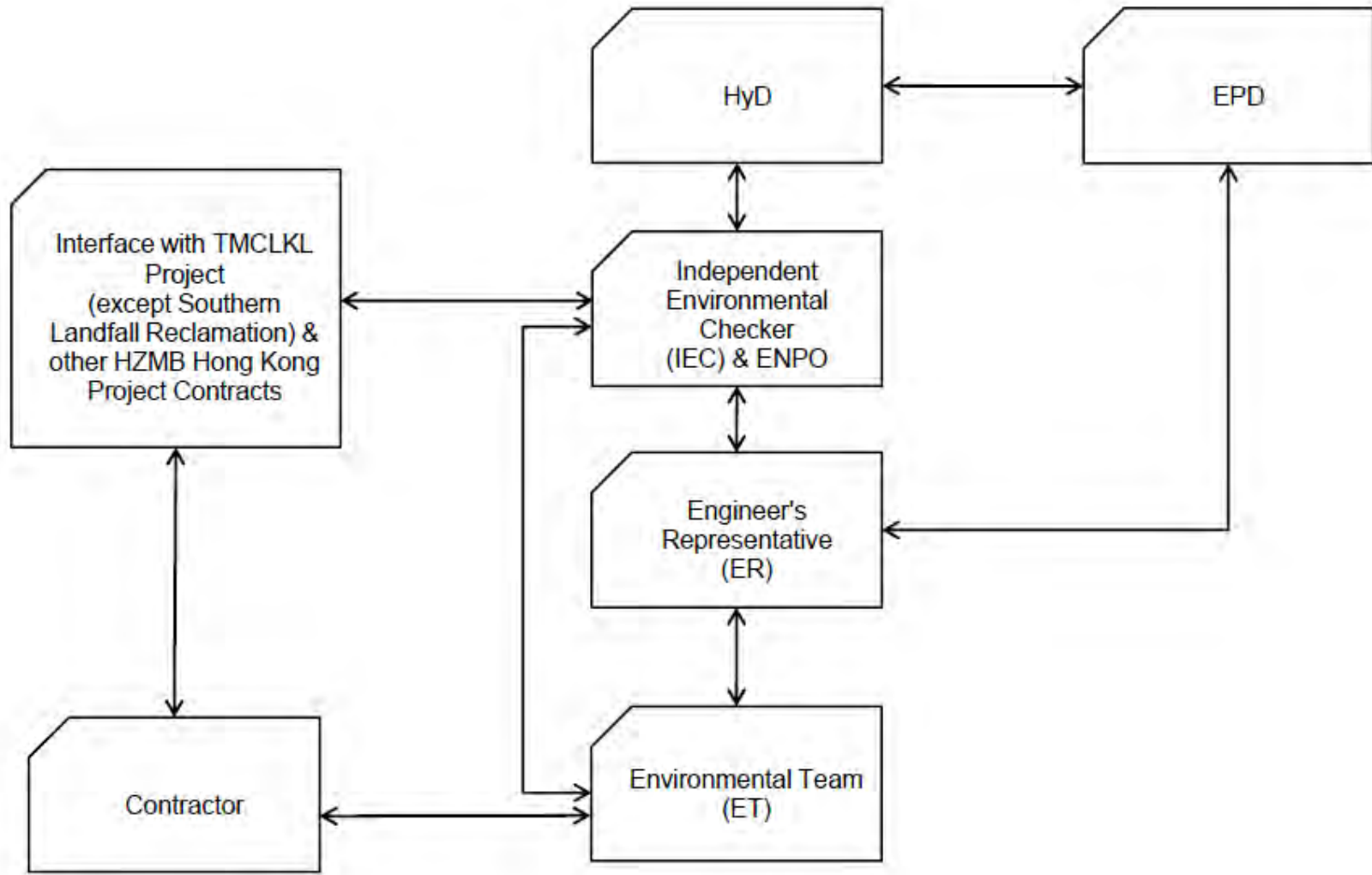
No non-compliance event was recorded during the reporting period.

No complaint and summons/ prosecution was received during the reporting period.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A

Project Organization for Environmental Works



↔ Line of Communication

Appendix B

Three-Month Rolling Construction Programme

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
4.8.1	3.8	An effective watering programme of twice daily watering with complete coverage, is estimated to reduce by 50%. This is recommended for all areas in order to reduce dust levels to a minimum;	All areas / throughout construction period	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		↔
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓

Legend: D=Design, C=Construction, O=Operation

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Contract No. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK
 Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		any earthworks excavation activity on the site.							
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK
 Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
Marine Works (Sequence A)									
6.10 Figure 6.2a Appendix D6a	Annex A	Construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. The protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2a and detailed in Appendix D6a. The part of the works where such measures can be undertaken for the majority of the time includes the following locations: - TM-CLKL northern reclamation;	All areas/ prior to dredging and backfilling works	Contractor	TM-EIAO		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK
 Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	a maximum of 50% public fill to be used for all seawall filling below +2.5mPD for TM-CLKL southern and northern landfalls.	TM-CLKL seawall filling	Contractor	TM-EIAO		Y		✓
6.10	-	a maximum of 30% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL southern landfall	TM-CLKL southern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.10	-	a maximum of 100% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL northern landfall	TM-CLKL northern landfall reclamation filling	Contractor	TM-EIAO		Y		✓
6.10	-	Use of cage type silt curtains round all	All areas dredging works	Contractor	TM-EIAO		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK
 Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		grab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works.							
	Figure 1.1 of Annex C	A layer of floating type silt curtain will be applied when dredging and reclamation works are being undertaken at Portion N-a as shown in Figure 1.1 of Annex C of the EM&A Manual.	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓
6.10	-	Trailer suction hopper dredgers shall not allow mud to overflow.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	The use of Lean Material Overboard (LMOB) systems shall be prohibited.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK
 Northern Connection Sub-sea Tunnel Section

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10 Figure 6.2b Appendix D6b	Annex A	<p>For other parts of the reclamation works construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. It should be noted that the protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2b and detailed in Appendices D6b. The part of the works where such measures can be undertaken for the majority of the time includes the following locations:</p> <ul style="list-style-type: none"> - TM-CLKL northern reclamation; - Reclamation filling for Portion D of HKBCF; Reclamation filling for FSD berth of HKBCF; and - Reclamation dredging and filling for Portion 1 of HKLR; 	TM-CLKL northern landfall, Portion D of HKBCF and HKLR	Contractor	TM-EIAO		Y		✓

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						D	C	O	
6.10	-	The filling material for the other parts of the works are the same as Sequence A;	All other areas/backfilling works	Contractor	TM-EIAO		Y		N/A
6.10	5.7	Cage type silt curtain (with steel enclosure) shall be used for grab dredgers working in the site of HKBCF and TM- CLKL southern reclamation. Cage type silt curtains will be applied round all grab dredgers at other works area	HKBCF, HKLR and TM-CLKL grab dredging	Contractor	TM-EIAO		Y		✓
6.10	Annex A	A layer of floating type silt curtain will be applied around all works as defined in Appendix D6b	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓
6.10	-	TM-CLKL northern landfall: - Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access;							
General Marine Works									
6.10	-	Use of TMB for the construction of the submarine tunnel.	Tunnel works / Construction phase	Contractor	TM-EIAO		Y		N/A
6.10	-	Export dredged spoils from NWWCZ.	All areas as much as possible / dredging activities	Contractor	DASO Permit conditions		Y		N/A
6.10	-	Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25%	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.10	-	Where sand fill is proposed for filling	All areas/ backfilling works	Contractor	TM-EIAO		Y		N.A

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		below +2.5mPD, the fine content in the sand fill will be controlled to 5%.							
6.10	-	Mechanical grabs shall be designed and maintained to avoid spillage and should seal tightly while being lifted.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Barges and hopper dredgers shall have tight fitting seals to their bottom openings to prevent leakage of material.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		↔
6.10	-	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.10	-	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.10	-	The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	5.2	Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the	All areas/ throughout construction period	Contractor	TM-EIAO		Y		↔

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		contractor.							
6.10	-	The daily maximum production rates shall not exceed those assumed in the water quality assessment.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	The dredging and filling works shall be scheduled to spread the works evenly over a working day.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
Land Works									
6.10	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Sewage effluent and discharges from on-site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Storm drainage shall be directed to storm	All areas/ throughout	Contractor	TM-EIAO		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	construction period						
6.10	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		or debris into any drainage system.							
6.10	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and	All areas/ throughout construction period	Contractor	TM-EIAO		Y		↔

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		cleaned up immediately.							
6.10	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		✓
6.10	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	✓
6.10	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓

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Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementat ion Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		working practice.							
Water Quality Monitoring									
6.10	Section 5	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen. Nutrients and metal parameters shall also be measured for Mf sediment operations (only HKBCF and HKLR required handling of Mf sediment) during baseline, backfilling and post construction period. One year operation phase water quality monitoring at designated stations	Designated monitoring stations as defined in EM&A Manual, Section 5/ Before, through-out marine construction period, post construction and monthly operational phase water quality monitoring for a year.	Contractor	EM&A Manual		Y	Y	✓

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Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/Detailed Design/ during construction works/post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	✓
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All dredging and reclamation areas/Detailed Design/during all reclamation and dredging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600m ² in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/ TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	✓

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Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for dredging and reclamation works	All areas/ Detailed Design/during dredging and reclamation works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.5	Audit coral translocation success	Post translocation	Contractor	TMEIA		Y		✓

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Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		✓
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Construction activities should be restricted to the proposed works boundary	All areas / Throughout construction period	Contractor	TMEIA		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage (DM2)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓

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Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		✓
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures	Contract Mobilisation	Contractor	TMEIA		Y		✓

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Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		including waste reduction, reuse and recycling							
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The surplus surcharge should be transferred to a fill bank	Reclamation areas / after surcharge works	Contractor	TMEIA		Y		N/A
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			✓
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	Dredged marine mud shall be disposed of in a gazetted marine disposal ground under the requirements of the Dumping at Seas Ordinance.	Reclamation areas / throughout dredging works	Contractor	TMEIA		Y		✓
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should	All areas / throughout construction period	Contractor	TMEIA		Y		↔

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		be considered for segregation and storage activities.							
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows: <i>f</i> suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; <i>f</i> Having a capacity of <450L unless the specifications have been approved by the EPD; and <i>f</i> Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. <i>f</i> Clearly labelled and used solely for the storage of chemical wastes; <i>f</i> Enclosed with at least 3 sides; <i>f</i> Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20%	All areas / throughout construction period	Contractor	TMEIA		Y		<>

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		by volume of the chemical waste stored in the area, whichever is greatest; <i>f</i> Adequate ventilation; <i>f</i> Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and <i>f</i> Incompatible materials are adequately separated.							
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention	All areas / throughout construction period	Contractor	TMEIA		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.							
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	Site Offices/ throughout construction period	Contractor	TMEIA		Y		✓
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	All areas / throughout construction period	Contractor	EM&A Manual		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Contract No. HY/2012/08
TUEN MUN – CHEK LAP KOK LINK
Northern Connection Sub-sea Tunnel

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Cultural Heritage

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Remark:

- ✓ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Contractor
- Δ Deficiency of Mitigation Measures but rectified by Contractor
- N/A Not Applicable in Reporting Period

Appendix D

Summary of Action and Limit Levels

Table D1 *Action and Limit Levels for 1-hour and 24-hour TSP*

Parameters	Action	Limit
24 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 213 ASR5 = 238 AQMS1 = 213 AQMS2 / ASR6 = 238 ASR10 = 214	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 331 ASR5 = 340 AQMS1 = 335 AQMS2 / ASR6 = 338 ASR10 = 337	500

Table D2 *Action and Limit Levels for Water Quality Monitoring*

Parameter	Action Level#	Limit Level#
DO in mg/L ^(a)	<u>Surface and Middle</u> 5.0 mg/L	<u>Surface and Middle</u> 4.2 mg/L
	<u>Bottom</u> 4.7 mg/L	<u>Bottom</u> 3.6 mg/L
Turbidity in NTU (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 27.5 NTU	130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., 47.0 NTU
SS in mg/L (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 23.5 mg/L	130% of upstream control station at the same tide of the same day and 10mg/L for WSD Seawater Intakes at Tuen Mun and 99%-ile of baseline data, i.e., 34.4 mg/L

Notes:

Baseline data: data from HKZMB Baseline Water Quality Monitoring between 6 and 31 October 2011.

- (a) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (b) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths
- (c) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
- (d) All figures given in the table are used for reference only, and EPD may amend the figures whenever it is considered as necessary
- (e) The 1%-ile of baseline data for surface and middle DO is 4.2 mg/L, whilst for bottom DO is 3.6 mg/L.

Table D3 *Action and Limit Levels for Impact Dolphin Monitoring*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 70% of baseline & ANI < 70% of baseline	STG < 70% of baseline & ANI < 70% of baseline
Limit Level	[STG < 40% of baseline & ANI < 40% of baseline] and STG < 40% of baseline & ANI < 40% of baseline	

Notes:

1. STG means quarterly encounter rate of number of dolphin sightings, which is **6.00 in NEL** and **9.85 in NWL** during the baseline monitoring period
2. ANI means quarterly encounter rate of total number of dolphins, which is **22.19 in NEL** and **44.66 in NWL** during the baseline monitoring period
3. For North Lantau Social Cluster, AL will be trigger if NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

Table D4 *Derived Value of Action Level (AL) and Limit Level (LL)*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 4.2 & ANI < 15.5	STG < 6.9 & ANI < 31.3
Limit Level	[STG < 2.4 & ANI < 8.9] and [STG < 3.9 & ANI < 17.9]	

Appendix E

Copies of Calibration
Certificates for Air Quality
and Water Quality
Monitoring

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 1
 Calibrated by : P.F.Yeung
 Date : 10/02/2014

Sampler

Model : TE-5170
 Serial Number : S/N 0146

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 12 Mar 2013
 Slope (m) : 2.05818
 Intercept (b) : 0.01929
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
 Ta(K) : 292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	13.0	3.717	1.797	53	54.64
2	13 holes	10.2	3.293	1.590	46	47.43
3	10 holes	7.4	2.805	1.353	40	41.24
4	7 holes	4.9	2.282	1.099	31	31.96
5	5 holes	3.0	1.786	0.858	24	24.74

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.788 Intercept(b): -2.582 Correlation Coefficient(r): 0.9990

Checked by: Magnum Fan

Date: 15/02/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 5
 Calibrated by : P.F. Yeung
 Date : 10/02/2014

Sampler

Model : TE-5170
 Serial Number : S/N 0816

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 12 Mar 2013
 Slope (m) : 2.05818
 Intercept (b) : 0.01929
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
 Ta(K) : 282

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.2	3.601	1.740	54	55.67
2 13 holes	9.8	3.228	1.559	49	50.52
3 10 holes	7.5	2.824	1.362	43	44.33
4 7 holes	4.8	2.259	1.088	35	36.09
5 5 holes	2.9	1.756	0.844	27	27.84

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.009 Intercept(b): 1.999 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 15/02/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 6
 Calibrated by : P.F.Yeung
 Date : 10/02/2014

Sampler

Model : TE-5170
 Serial Number : S/N 3957

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 12 Mar 2013
 Slope (m) : 2.05818
 Intercept (b) : 0.01929
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
 Ta(K) : 282

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.6	3.660	1.769	57	58.77
2 13 holes	9.9	3.244	1.567	50	51.55
3 10 holes	7.2	2.767	1.335	42	43.30
4 7 holes	4.7	2.235	1.077	34	35.05
5 5 holes	2.8	1.725	0.829	25	25.78

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 34.790 Intercept(b): -2.864 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan

Date: 15/02/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR10A
 Calibrated by : P.F. Yeung
 Date : 10/02/2014

Sampler

Model : TE-5170
 Serial Number : S/N 8162

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 12 Mar 2013
 Slope (m) : 2.05818
 Intercept (b) : 0.01929
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
 Ta(K) : 282

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.6	3.660	1.769	57	58.77
2	13 holes	10.5	3.341	1.614	52	53.61
3	10 holes	7.6	2.842	1.372	45	46.40
4	7 holes	4.8	2.259	1.088	36	37.12
5	5 holes	3.0	1.786	0.858	28	28.87

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.526 Intercept(b): 1.364 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 15/02/14

High-Volume TSP Sampler
5-Point Calibration Record

Location : AQM1
 Calibrated by : P.F. Yeung
 Date : 10/02/2014

Sampler

Model : TE-5170
 Serial Number : S/N 1253

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 12 Mar 2013
 Slope (m) : 2.05818
 Intercept (b) : 0.01929
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1019
 Ta(K) : 282

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.5	3.645	1.762	54	55.67
2	13 holes	10.1	3.277	1.583	48	49.49
3	10 holes	7.5	2.824	1.362	42	43.30
4	7 holes	4.7	2.235	1.077	33	34.02
5	5 holes	3.0	1.786	0.858	26	26.81

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.647 Intercept(b): 0.1797 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan

Date: 15/02/2014

WATER

Certification of Quality

This product has been tested in accordance with procedures established through Global Water Instrumentation's Quality Management System. This product meets or exceeds its manufacturing acceptance criteria.

ITEM DESCRIPTION:	Wind Direction
MODEL NAME/ NUMBER:	WE570
PART NUMBER:	ED0000
SENSOR RANGE:	0-360 °
SENSOR OUTPUT:	4.01-20.03 mA
ACCURACY:	1% of full scale
POWER REQUIRED	10-36 VDC
SERIAL NUMBER:	1337005143
CABLE LENGTH:	25 ft
CERTIFICATES:	CE Compliant

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Water Level

Water Flow

Water Samplers

Water Quality

Weather

Remote Monitoring

Control

Technician: *Wright, Jess*

Date: 9/12/2013

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WATER

Certification of Quality

This product has been tested in accordance with procedures established through Global Water Instrumentation's Quality Management System. This product meets or exceeds its manufacturing acceptance criteria.

ITEM DESCRIPTION:	Wind Speed Sensor
MODEL NAME/ NUMBER:	WE550
PART NUMBER:	EC0000
SENSOR RANGE:	0-110 MPH
SENSOR OUTPUT:	4.00-19.91 mA
ACCURACY:	.2 MPH over the range 11 to 55 MPH
POWER REQUIRED	10-36 VDC
SERIAL NUMBER:	1337005099
CABLE LENGTH:	25 ft
CERTIFICATES:	CE Compliant

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Water Flow

Water Samplers

Water Quality

Weather

Remote Monitoring

Control

Technician: *Wright, Jess*

Date: 9/10/2013

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Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/010 Manufacturer : HACH
Model No. : 2100Q Serial No. : 11110 C 014260
Date of Calibration : 07/01/2014 Due Date : 06/04/2014

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	19.2	-4.08
100	104	3.92
800	793	-0.88

(*) Difference = (Measured Value – Theoretical Value) / Theoretical Value

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use. Measurements are traceable to national standards.

Prepared by : 

Checked by : 



Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/008/005</u>	Manufacturer : <u>YSI</u>
Model No. : <u>Pro 2030</u>	Serial No. : <u>12A 100353</u>
Date of Calibration : <u>29/01/2014</u>	Calibration Due Date : <u>28/04/2014</u>

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008

Ref. No. of Water Bath : ---

		Temperature (°C)		
Reference Thermometer reading	Measured	20.2	Corrected	19.8
DO Meter reading	Measured	19.7	Difference	0.1

Standardization of sodium thiosulphate ($Na_2S_2O_3$) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/8	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/001/24
		Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)		0.00	10.50
Final Vol. of $Na_2S_2O_3$ (ml)		10.50	20.95
Vol. of $Na_2S_2O_3$ used (ml)		10.50	10.45
Normality of $Na_2S_2O_3$ solution (N)		0.02381	0.02392
Average Normality (N) of $Na_2S_2O_3$ solution (N)		0.02387	
Acceptance criteria, Deviation		Less than $\pm 0.001N$	

Calculation: Normality of $Na_2S_2O_3$, $N = 0.25 / ml Na_2S_2O_3$ used

Lineality Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Trial						
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.90	23.50	0.00	8.20	13.20
Final Vol. of $Na_2S_2O_3$ (ml)	11.90	23.50	31.90	8.20	13.20	17.90
Vol. (V) of $Na_2S_2O_3$ used (ml)	11.90	11.60	8.40	8.20	5.00	4.70
Dissolved Oxygen (DO), mg/L	7.63	7.43	5.38	5.25	3.20	3.01
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: $DO (mg/L) = V \times N \times 8000/298$

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.65	7.41	7.53	7.63	7.43	7.53	0.00
5	5.38	5.21	5.30	5.38	5.25	5.32	0.38
10	3.22	3.09	3.16	3.20	3.01	3.11	1.59
Linear regression coefficient				0.9998			



Internal Calibration Report of Dissolved Oxygen Meter

Zero Point Checking

DO meter reading, mg/L	0.00
------------------------	------

Salinity Checking

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/15	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/15
-----------------------------	--------------------	-----------------------------	--------------------

Determination of dissolved oxygen content by Winkler Titration **

Salinity (ppt)	10		30	
	1	2	1	2
Trial				
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	12.30	24.40	35.80
Final Vol. of Na ₂ S ₂ O ₃ (ml)	12.30	24.40	35.80	47.00
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	12.30	12.10	11.40	11.20
Dissolved Oxygen (DO), mg/L	7.88	7.75	7.31	7.18
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: $DO (mg/L) = V \times N \times 8000/298$

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.88	7.65	7.77	7.88	7.75	7.82	0.64
30	7.23	7.14	7.19	7.31	7.18	7.25	0.83

Acceptance Criteria

- (1) Differenc between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
- (2) Linear regression coefficient : >0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

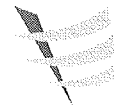
The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

Delete as appropriate

Calibrated by

:

Approved by :



Performance Check of Salinity Meter

Equipment Ref. No. : ET/EW/008/005 Manufacturer : YSI
Model No. : Pro 2030 Serial No. : 12A 100353
Date of Calibration : 29/01/2014 Due Date : 28/04/2014

Ref. No. of Salinity Standard used (30ppt)

S/001/5


Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	30.9	3.00

Acceptance Criteria

Difference : <10 %

The salinity meter complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use. Measurements are traceable to national standards.

Checked by : 

Approved by : 



Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/003 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 674469
 Date of Calibration : 10/02/2014 Calibration Due Date : 09/03/2014

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/17
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.80 pH (S) = 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.081}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.001}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.87}$
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{-0.012}$

Noise

Noise, $\Delta\text{pH}_n = \text{difference between max and min reading} : \underline{0.00}$

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
 Temperature record from the reference thermometer (T_R): 20.0 °C
 Temperature record from the ATC (T_{ATC}): 19.9 °C
 Temperature Difference, $|T_R - T_{ATC}|$: 0.1 °C

Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error ΔpH_j	≤ 0.05
Shift on Stirring ΔpH_s	≤ 0.02
Noise ΔpH_n	≤ 0.02
Verification of ATC Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies * / does not comply * with the specified requirements and is deemed acceptable * / unacceptable * for use. Measurements are traceable to national standards.

* Delete as appropriate

Calibrated by :

Checked by :



Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/003 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 674469
 Date of Calibration : 10/03/2014 Calibration Due Date : 09/04/2014

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/17
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.79 $\text{pH (S)} = \underline{6.881}$
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.091}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.011}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.90}$
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.008}$

Noise

Noise, $\Delta\text{pH}_n =$ difference between max and min reading : 0.00

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008 °C
 Temperature record from the reference thermometer (T_R): 20.0 °C
 Temperature record from the ATC (T_{ATC}): 19.9 °C
 Temperature Difference, $|T_R - T_{ATC}|$: 0.1 °C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpH_j	≤ 0.05
Shift on Stirring	ΔpH_s	≤ 0.02
Noise	ΔpH_n	≤ 0.02
Verification of ATC	Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies * / does not comply * with the specified requirements and is deemed acceptable * / unacceptable * for use. Measurements are traceable to national standards.

* Delete as appropriate

Calibrated by : Checked by :

Appendix F

EM&A Monitoring Schedules

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Air Quality Impact Monitoring Schedule - March 2014**

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Mar
02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar
				1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>		
09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
			1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>			
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
		1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>				
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
	1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>				1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>	
30-Mar	31-Mar					

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Air Quality Impact Monitoring Schedule - April 2014**

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Apr	02-Apr	03-Apr	04-Apr	05-Apr
				1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>		
06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr	12-Apr
			1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>			
13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr
		1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>			1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>	
20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr
				1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>		
27-Apr	28-Apr	29-Apr	30-Apr			
			1-hour TSP - 3 times 24-hour TSP - 1 time <i>Impact AQM</i>			

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

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section
Impact Marine Water Quality Monitoring (WQM) Schedule (Mar 14)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Mar
02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar
	WQM Mid-Flood 8:27 (06:42 - 10:12) Mid-Ebb 14:26 (12:41 - 16:11)		WQM Mid-Flood 9:21 (07:36 - 11:06) Mid-Ebb 15:45 (14:00 - 17:30)		WQM Mid-Flood 10:20 (08:35 - 12:05) Mid-Ebb 17:23 (15:38 - 19:08)	
09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
	WQM Mid-Flood 8:34 (06:49 - 10:19) Mid-Ebb 21:00 (19:15 - 22:45)		WQM Mid-Ebb 10:57 (09:12 - 12:42) Mid-Flood 16:04 (14:19 - 17:49)		WQM Mid-Ebb 11:58 (10:13 - 13:43) Mid-Flood 17:40 (15:55 - 19:25)	
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
	WQM Mid-Ebb 13:23 (11:38 - 15:08) Mid-Flood 19:33 (17:48 - 21:18)		WQM Mid-Flood 8:18 (06:33 - 10:03) Mid-Ebb 14:29 (12:44 - 16:14)		WQM Mid-Flood 9:18 (07:34 - 11:04) Mid-Ebb 15:47 (14:02 - 17:32)	
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
	WQM Mid-Flood 11:24 (09:39 - 13:09) Mid-Ebb 18:53 (17:08 - 20:38)		WQM Mid-Ebb 9:47 (08:02 - 11:32) Mid-Flood 14:44 (12:59 - 16:29)		WQM Mid-Ebb 11:29 (09:44 - 13:14) Mid-Flood 17:03 (15:18 - 18:48)	
30-Mar	31-Mar					
	WQM Mid-Ebb 13:24 (11:39 - 15:09) Mid-Flood 19:38 (17:53 - 21:23)					

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section
Tentative Impact Marine Water Quality Monitoring (WQM) Schedule (April 14)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Apr	02-Apr	03-Apr	04-Apr	05-Apr
			WQM Mid-Flood 8:11 (06:59 - 10:29) Mid-Ebb 14:40 (12:55 - 16:25)		WQM Mid-Flood 9:08 (07:23 - 10:53) Mid-Ebb 16:00 (14:15 - 17:45)	
06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr	12-Apr
	WQM Mid-Flood 10:18 (08:33 - 12:03) Mid-Ebb 18:35 (16:30 - 20:20)		WQM Mid-Ebb 9:29 (08:30 - 10:30) Mid-Flood 13:53 (12:08 - 15:38)		WQM Mid-Ebb 11:00 (09:15 - 12:45) Mid-Flood 16:40 (14:55 - 18:25)	
13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr
	WQM Mid-Ebb 12:29 (10:44 - 14:14) Mid-Flood 18:47 (17:02 - 20:32)		WQM Mid-Ebb 13:35 (11:50 - 15:20) Mid-Flood 20:08 (18:23 - 21:53)		WQM Mid-Flood 8:16 (06:31 - 10:01) Mid-Ebb 14:52 (13:07 - 16:37)	
20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr
	WQM Mid-Flood 10:15 (08:30 - 12:00) Mid-Ebb 17:26 (15:41 - 19:11)		WQM Mid-Ebb 8:16 (06:31 - 10:01) Mid-Flood 13:07 (11:22 - 14:52)		WQM Mid-Ebb 10:25 (08:40 - 12:10) Mid-Flood 15:57 (14:12 - 17:42)	
27-Apr	28-Apr	29-Apr	30-Apr	01-May	02-May	03-May
	WQM Mid-Ebb 12:27 (10:42 - 14:12) Mid-Flood 18:47 (17:02 - 20:32)		WQM Mid-Ebb 13:44 (11:59 - 15:29) Mid-Flood 20:25 (18:40 - 22:10)			

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Impact Dolphin Monitoring Survey Schedule - March 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Mar
02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar
			Impact Dolphin Monitoring			
09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
		Impact Dolphin Monitoring				
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
	Impact Dolphin Monitoring					
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
		Impact Dolphin Monitoring				
30-Mar	31-Mar					

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - April 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Apr	02-Apr	03-Apr	04-Apr	05-Apr
					Impact Dolphin Monitoring	
06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr	12-Apr
13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr
	Impact Dolphin Monitoring			Impact Dolphin Monitoring		
20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr
		Impact Dolphin Monitoring				
27-Apr	28-Apr	29-Apr	30-Apr			

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

Appendix G

Impact Air Quality Monitoring Results

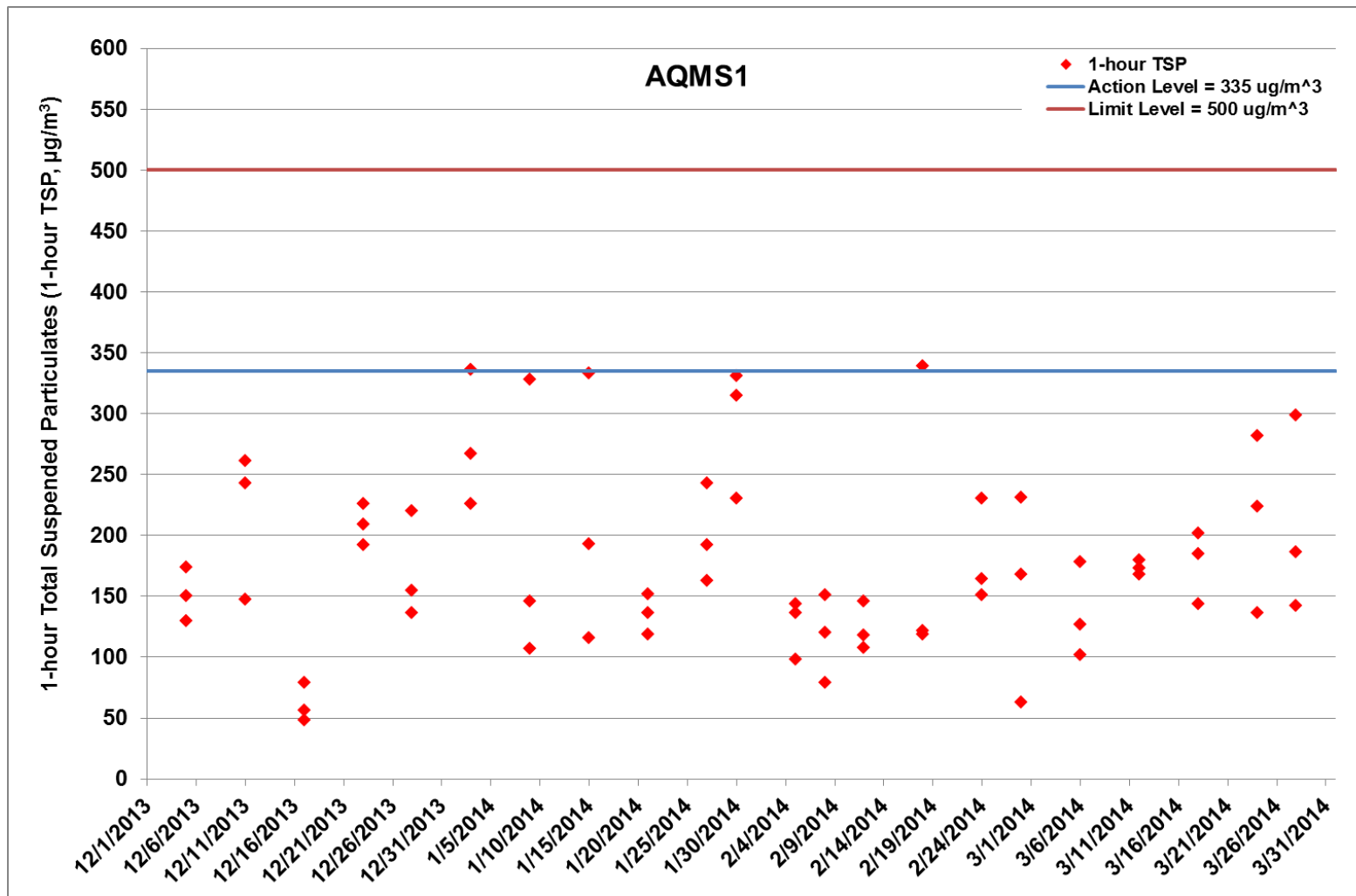


Figure G.1 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



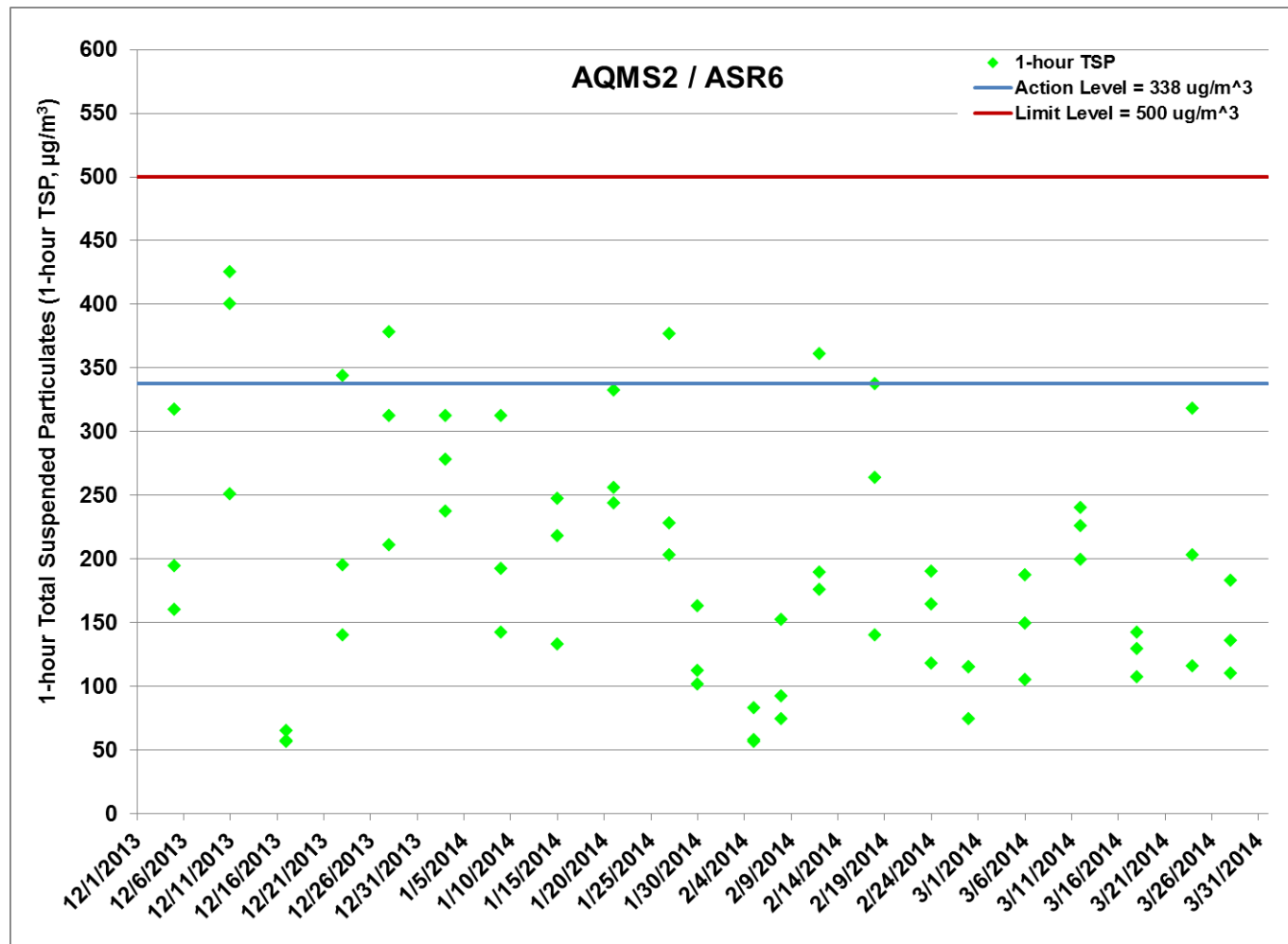


Figure G.2 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS2/ ASR6 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



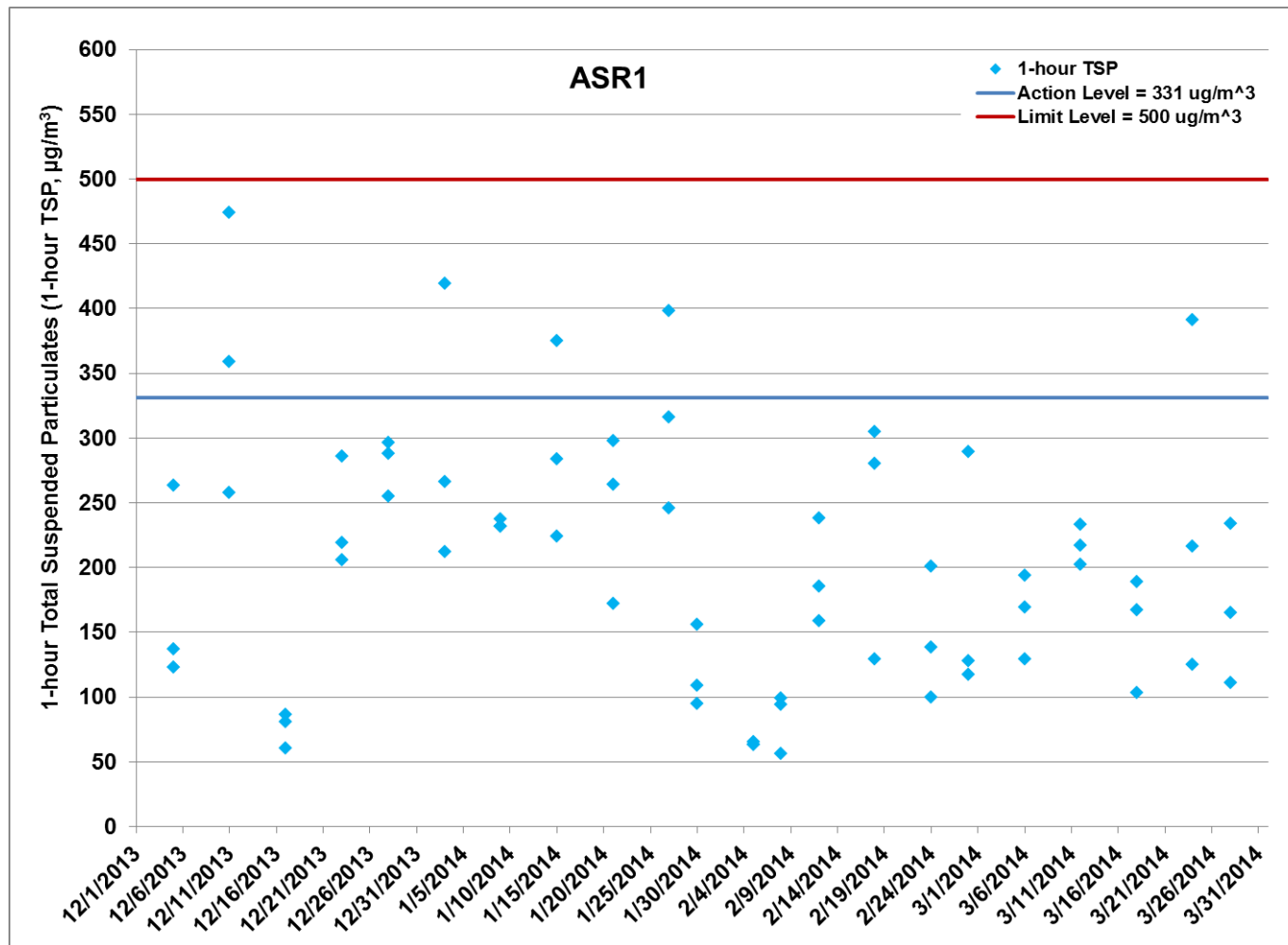


Figure G.3 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



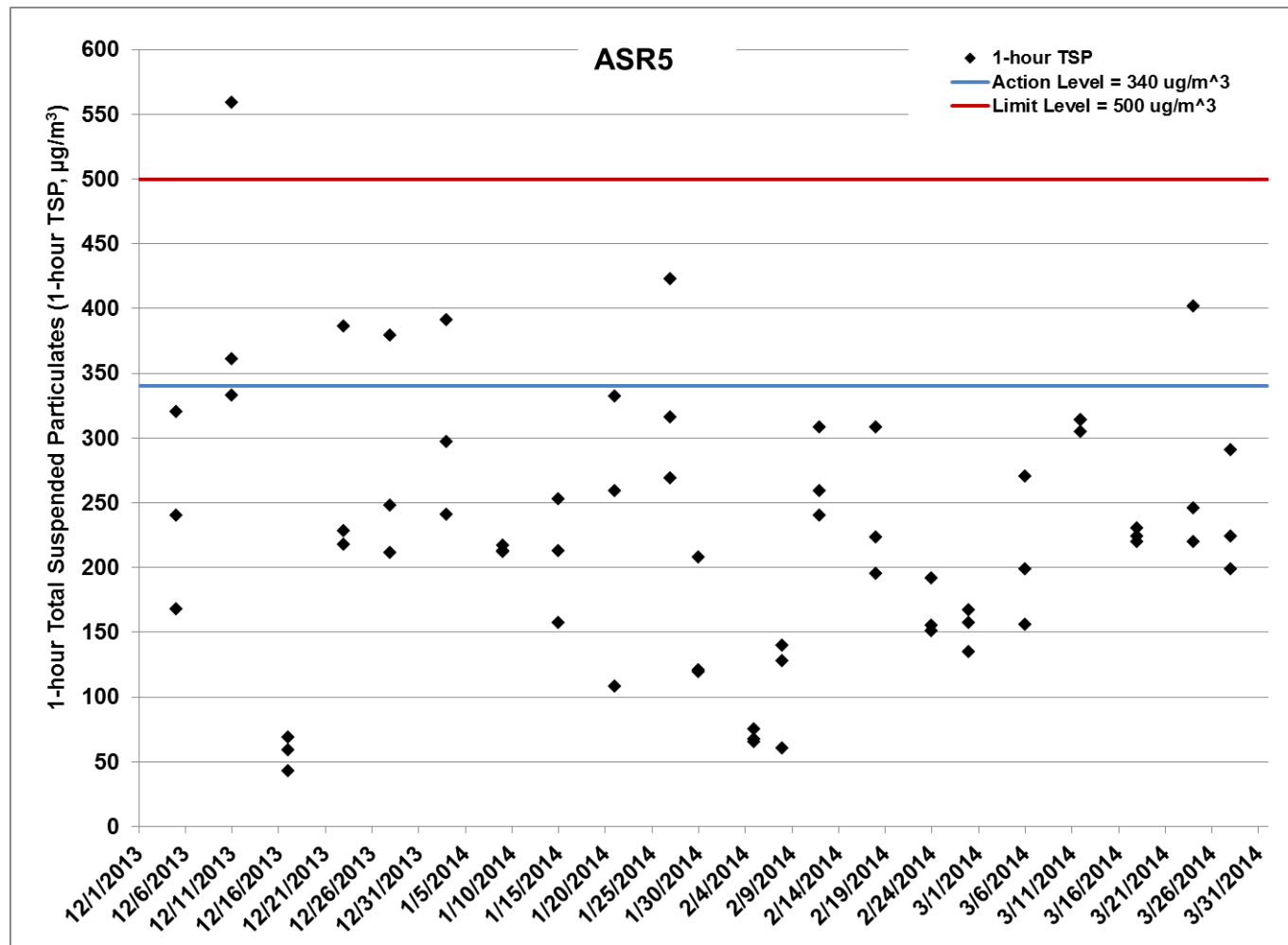


Figure G.4 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



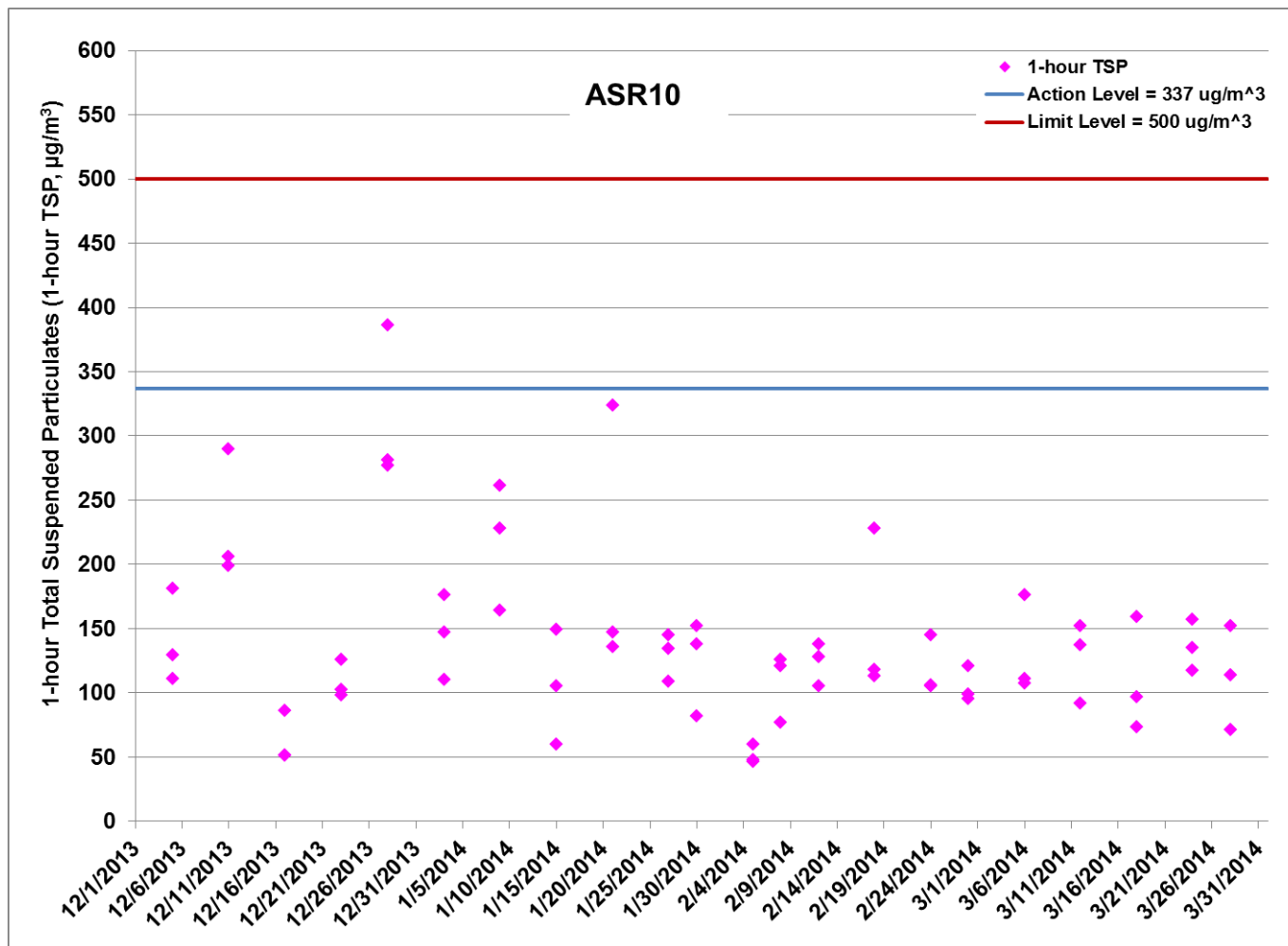


Figure G.5 Impact Monitoring - 1-hour Total Suspended Particulates (µg/m³) at ASR10 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



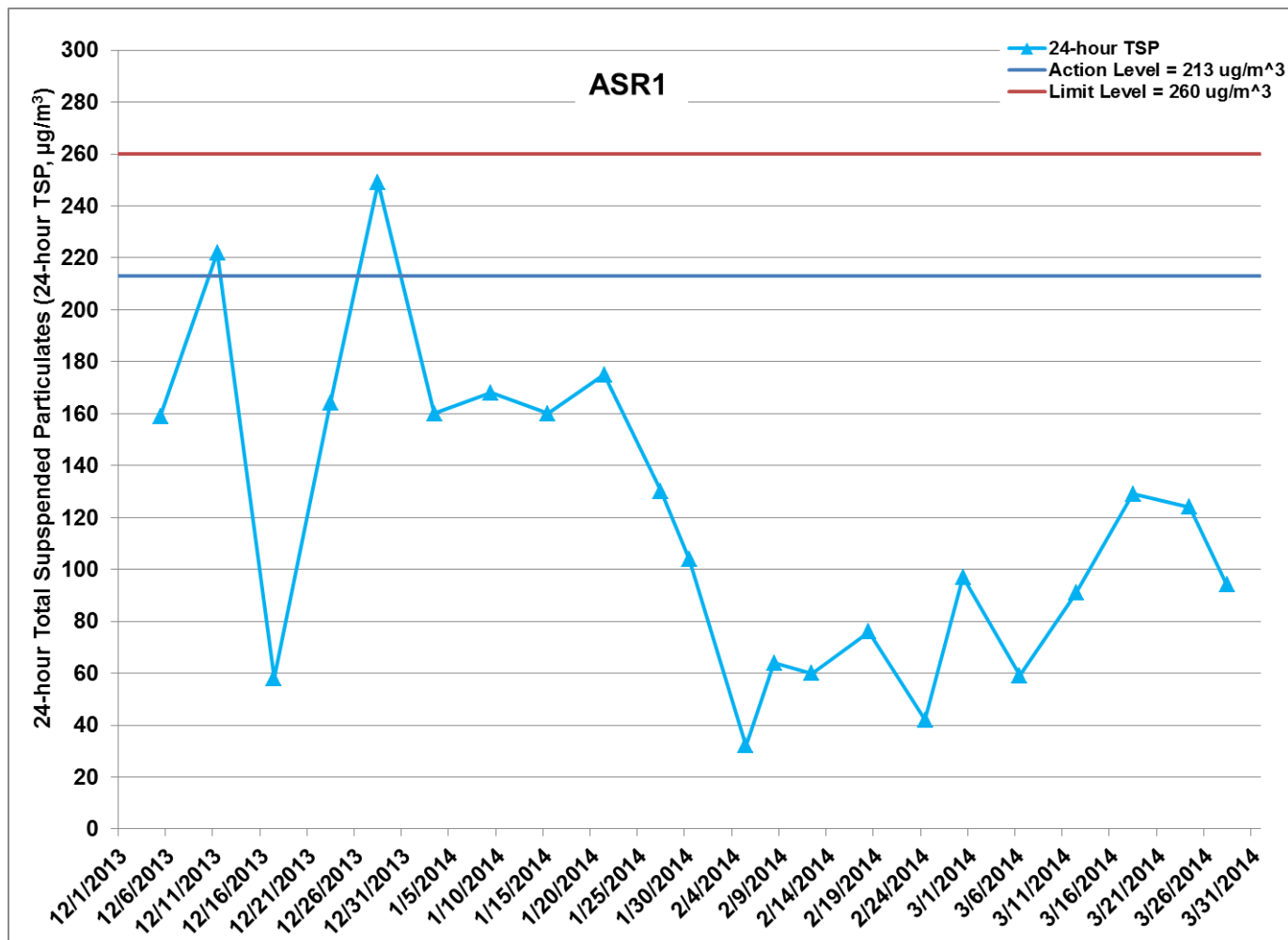


Figure G.6 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



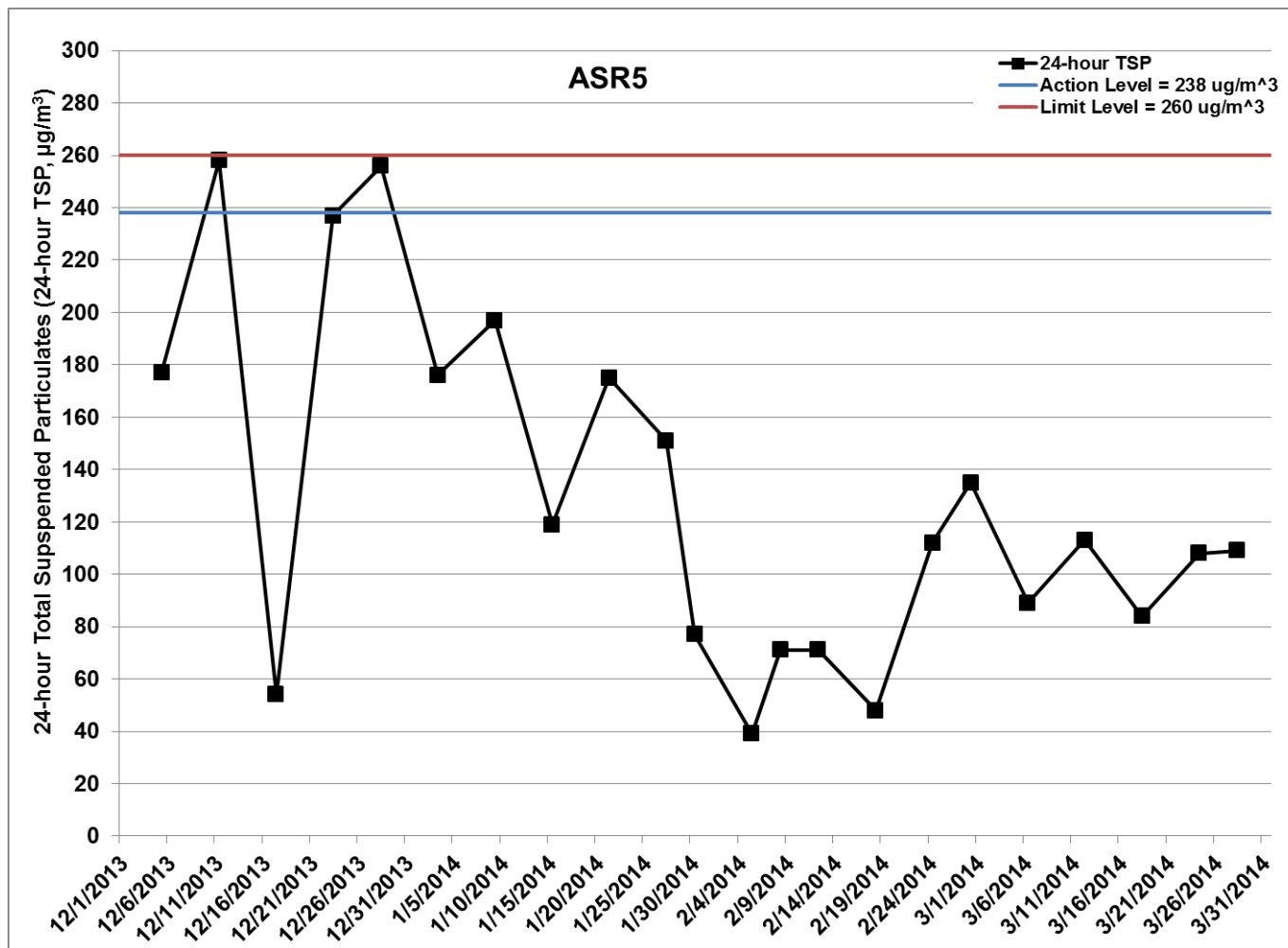


Figure G.7 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



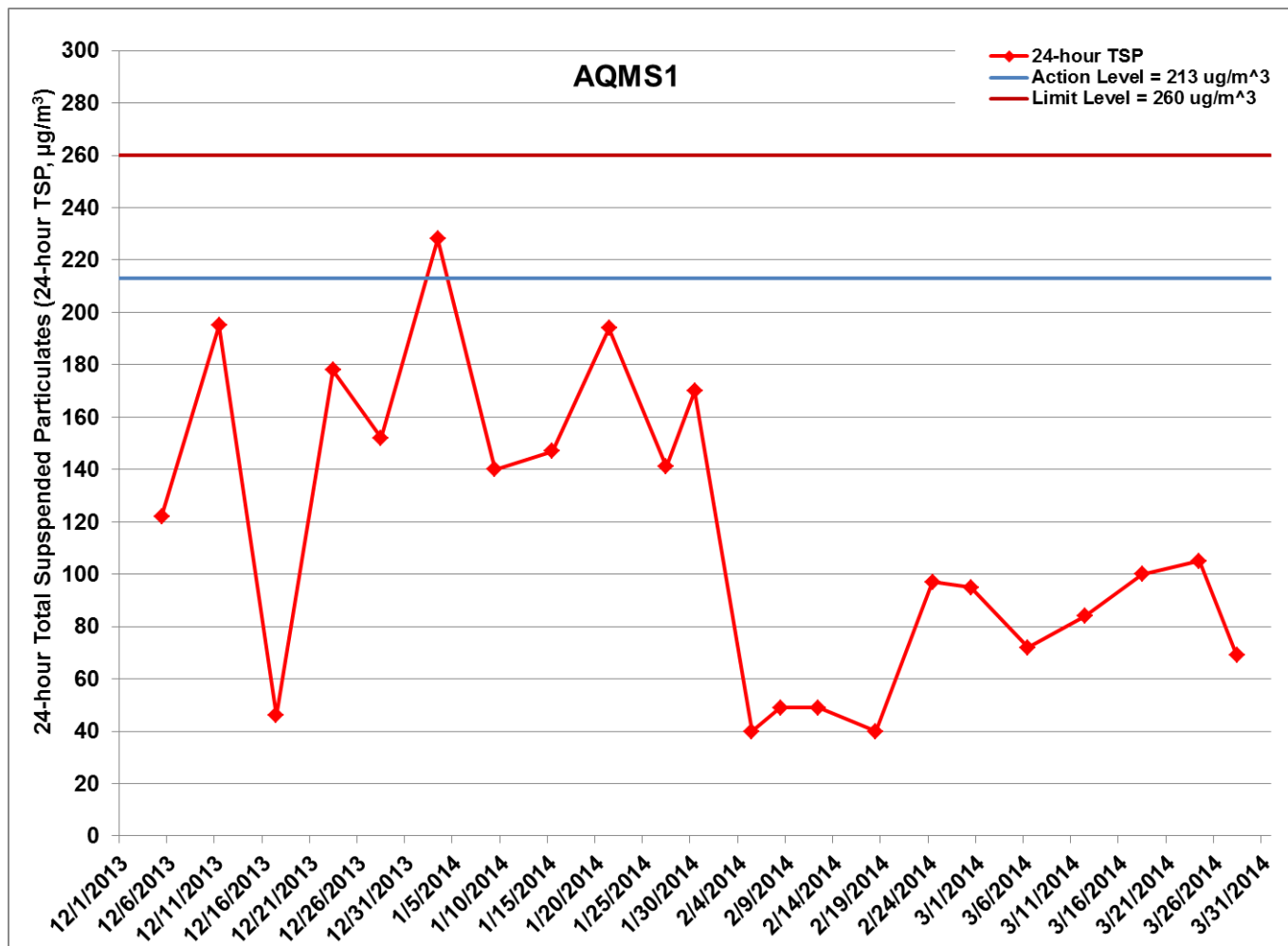


Figure G.8 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



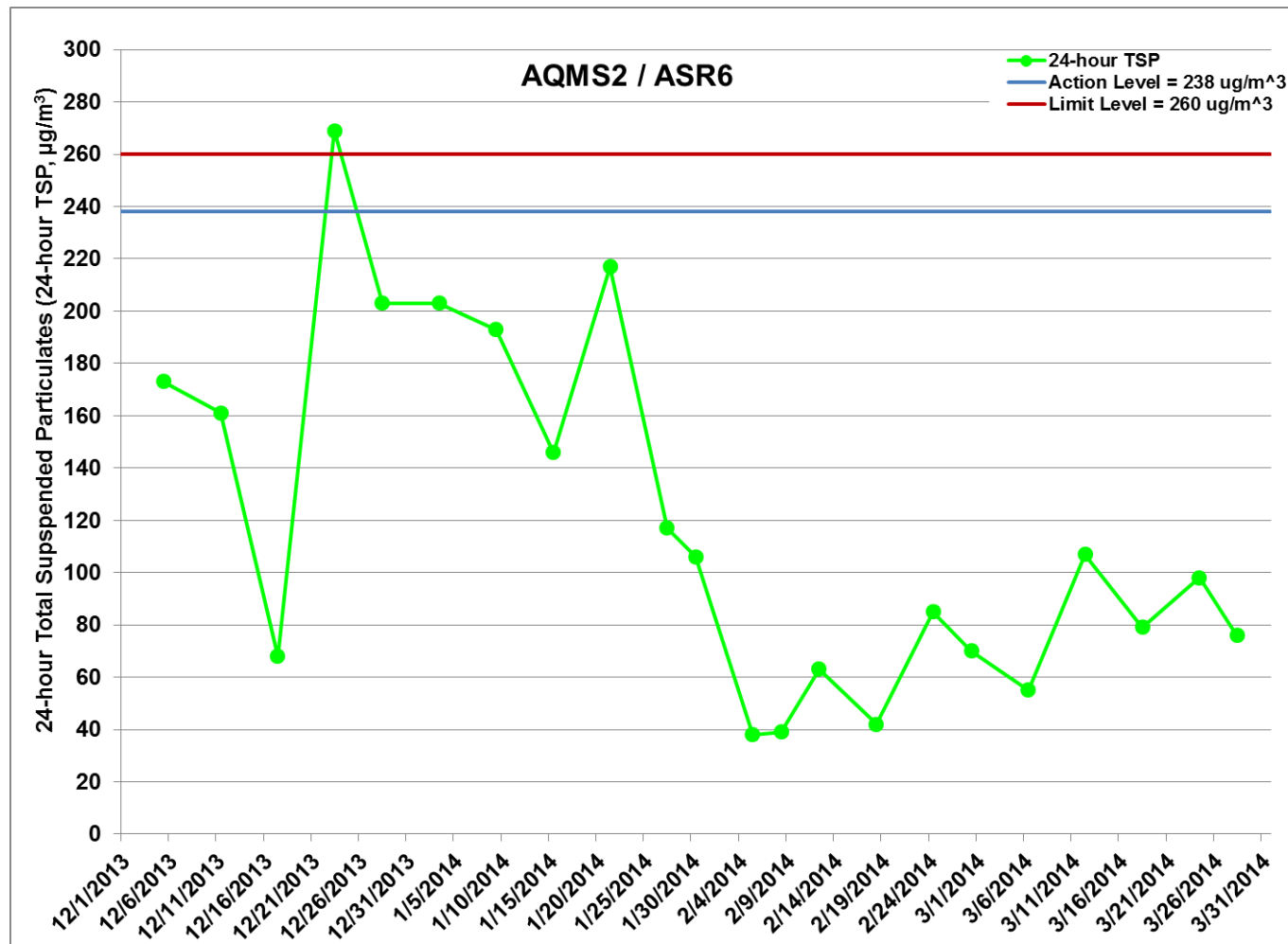


Figure G.9 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS2/ ASR6 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



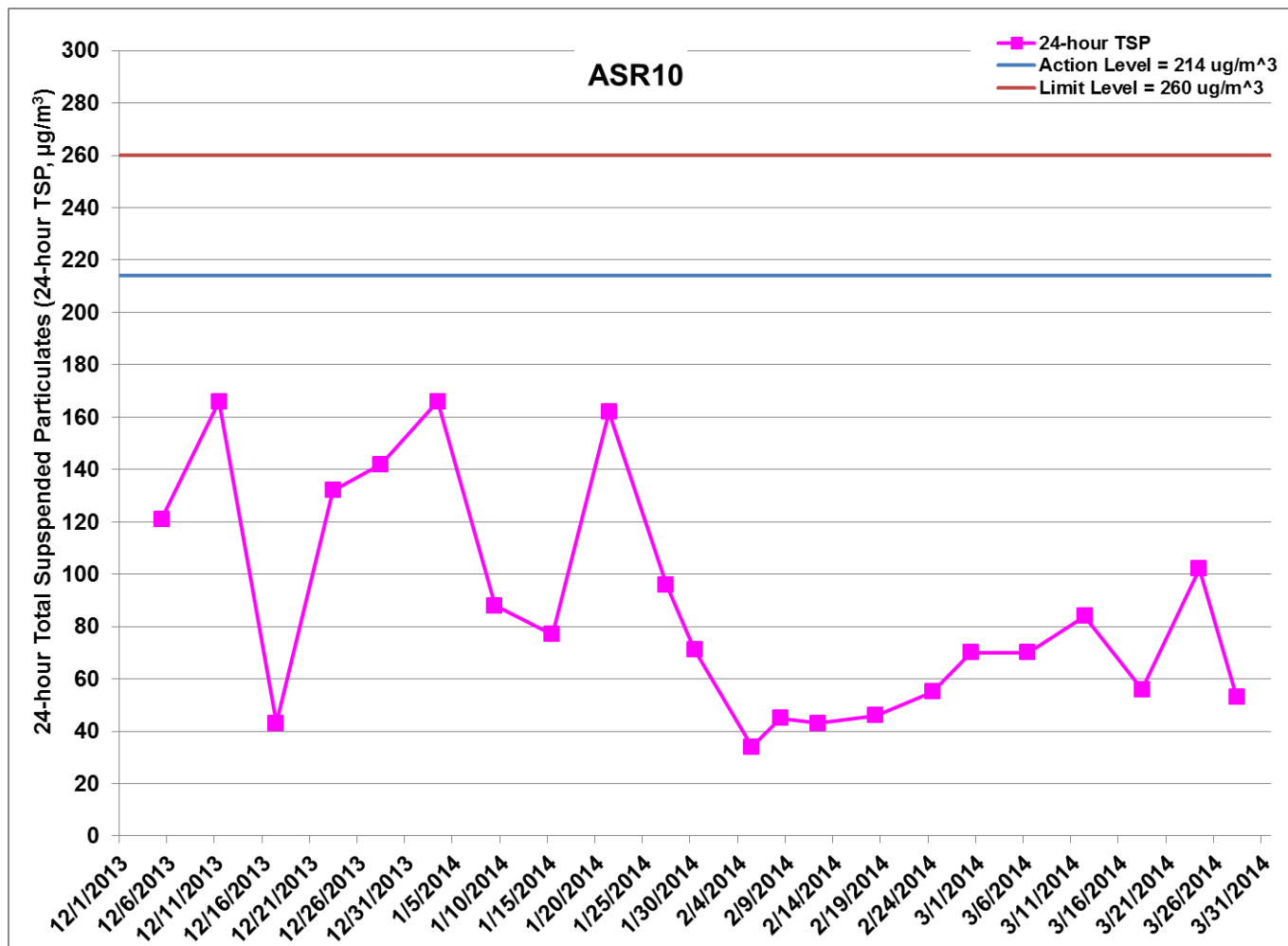


Figure G.10 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR10 between 1 December 2013 and 31 March 2014 during impact monitoring period.

Ref: 0212330_Impact AQM graphs_Mar 2014_REV JY.xlsx



Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-03-06	AQMS1	Cloudy	15:18	1-hour TSP	102	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	AQMS1	Cloudy	14:16	1-hour TSP	127	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	AQMS1	Cloudy	13:14	1-hour TSP	178	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR6	Cloudy	14:44	1-hour TSP	149	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR6	Cloudy	13:42	1-hour TSP	105	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR6	Cloudy	12:40	1-hour TSP	187	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR1	Cloudy	15:06	1-hour TSP	194	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR1	Cloudy	14:04	1-hour TSP	129	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR1	Cloudy	13:02	1-hour TSP	169	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR10	Cloudy	14:34	1-hour TSP	107	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR10	Cloudy	13:32	1-hour TSP	111	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR10	Cloudy	12:30	1-hour TSP	176	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR5	Cloudy	14:55	1-hour TSP	270	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR5	Cloudy	13:53	1-hour TSP	156	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR5	Cloudy	12:51	1-hour TSP	199	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	AQMS1	Cloudy	16:20	24-hour TSP	72	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR6	Cloudy	15:46	24-hour TSP	55	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR1	Cloudy	16:08	24-hour TSP	59	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR10	Cloudy	15:36	24-hour TSP	70	ug/m ³
TMCLKL	HY/2012/08	2014-03-06	ASR5	Cloudy	15:57	24-hour TSP	89	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	AQMS1	Cloudy	13:03	1-hour TSP	173	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	AQMS1	Cloudy	14:05	1-hour TSP	180	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	AQMS1	Cloudy	15:07	1-hour TSP	168	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR6	Cloudy	12:30	1-hour TSP	240	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR6	Cloudy	13:32	1-hour TSP	226	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR6	Cloudy	14:34	1-hour TSP	199	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR1	Cloudy	12:53	1-hour TSP	217	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR1	Cloudy	13:55	1-hour TSP	233	ug/m ³

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-03-12	ASR1	Cloudy	14:57	1-hour TSP	202	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR10	Cloudy	12:20	1-hour TSP	92	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR10	Cloudy	13:22	1-hour TSP	152	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR10	Cloudy	14:24	1-hour TSP	137	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR5	Cloudy	12:41	1-hour TSP	314	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR5	Cloudy	13:43	1-hour TSP	305	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR5	Cloudy	14:45	1-hour TSP	314	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	AQMS1	Cloudy	16:09	24-hour TSP	84	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR6	Cloudy	15:36	24-hour TSP	107	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR1	Cloudy	15:59	24-hour TSP	91	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR10	Cloudy	15:26	24-hour TSP	84	ug/m ³
TMCLKL	HY/2012/08	2014-03-12	ASR5	Cloudy	15:47	24-hour TSP	113	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	AQMS1	Sunny	13:18	1-hour TSP	202	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	AQMS1	Sunny	14:20	1-hour TSP	144	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	AQMS1	Sunny	15:22	1-hour TSP	185	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR6	Sunny	12:45	1-hour TSP	142	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR6	Sunny	13:47	1-hour TSP	129	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR6	Sunny	14:49	1-hour TSP	107	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR1	Sunny	13:07	1-hour TSP	189	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR1	Sunny	14:09	1-hour TSP	167	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR1	Sunny	15:11	1-hour TSP	103	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR10	Sunny	12:35	1-hour TSP	159	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR10	Sunny	13:37	1-hour TSP	97	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR10	Sunny	14:39	1-hour TSP	73	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR5	Sunny	12:55	1-hour TSP	224	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR5	Sunny	13:57	1-hour TSP	230	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR5	Sunny	14:59	1-hour TSP	220	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	AQMS1	Sunny	16:24	24-hour TSP	100	ug/m ³

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-03-18	ASR6	Sunny	15:51	24-hour TSP	79	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR1	Sunny	16:13	24-hour TSP	129	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR10	Sunny	14:39	24-hour TSP	56	ug/m ³
TMCLKL	HY/2012/08	2014-03-18	ASR5	Sunny	16:01	24-hour TSP	84	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	AQMS1	Sunny	13:34	1-hour TSP	136	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	AQMS1	Sunny	14:36	1-hour TSP	224	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	AQMS1	Sunny	15:38	1-hour TSP	282	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR6	Sunny	13:00	1-hour TSP	116	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR6	Sunny	14:02	1-hour TSP	318	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR6	Sunny	15:04	1-hour TSP	203	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR1	Sunny	13:22	1-hour TSP	125	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR1	Sunny	14:24	1-hour TSP	216	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR1	Sunny	15:26	1-hour TSP	391	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR10	Sunny	12:50	1-hour TSP	135	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR10	Sunny	13:52	1-hour TSP	157	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR10	Sunny	14:54	1-hour TSP	117	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR5	Sunny	13:11	1-hour TSP	246	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR5	Sunny	14:13	1-hour TSP	402	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR5	Sunny	15:15	1-hour TSP	220	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	AQMS1	Sunny	16:40	24-hour TSP	105	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR6	Sunny	16:06	24-hour TSP	98	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR1	Sunny	16:28	24-hour TSP	124	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR10	Sunny	15:56	24-hour TSP	102	ug/m ³
TMCLKL	HY/2012/08	2014-03-24	ASR5	Sunny	16:17	24-hour TSP	108	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	AQMS1	Sunny	13:29	1-hour TSP	142	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	AQMS1	Sunny	14:31	1-hour TSP	299	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	AQMS1	Sunny	15:33	1-hour TSP	186	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	ASR6	Sunny	12:55	1-hour TSP	110	ug/m ³

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-03-28	ASR6	Sunny	13:57	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR6	Sunny	14:59	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR1	Sunny	13:17	1-hour TSP	165	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR1	Sunny	14:19	1-hour TSP	234	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR1	Sunny	15:21	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR10	Sunny	12:45	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR10	Sunny	13:47	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR10	Sunny	14:49	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR5	Sunny	13:06	1-hour TSP	199	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR5	Sunny	14:08	1-hour TSP	224	ug/m3
TMCLKL	HY/2012/08	2014-03-28	ASR5	Sunny	15:10	1-hour TSP	291	ug/m3
TMCLKL	HY/2012/08	2014-03-28	AQMS1	Sunny	16:35	24-hour TSP	69	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	ASR6	Sunny	16:01	24-hour TSP	76	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	ASR1	Sunny	16:23	24-hour TSP	94	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	ASR10	Sunny	15:51	24-hour TSP	53	ug/m ³
TMCLKL	HY/2012/08	2014-03-28	ASR5	Sunny	16:12	24-hour TSP	109	ug/m ³

Appendix H

Meteorological Data

Meteorological Data for Impact Monitoring in the reporting period			
Date	Time (24hrs)	Average of Wind Direction (degree)	Average of Wind Speed (m/s)
06-03-2014	0:00	102	4.28
06-03-2014	1:00	102	4.34
06-03-2014	2:00	102	4.49
06-03-2014	3:00	103	5.06
06-03-2014	4:00	101	4.08
06-03-2014	5:00	102	4.17
06-03-2014	6:00	102	5.71
06-03-2014	7:00	103	5.95
06-03-2014	8:00	93	4.10
06-03-2014	9:00	99	3.98
06-03-2014	10:00	104	5.33
06-03-2014	11:00	102	5.48
06-03-2014	12:00	94	4.04
06-03-2014	13:00	99	3.43
06-03-2014	14:00	97	3.44
06-03-2014	15:00	103	4.14
06-03-2014	16:00	102	3.87
06-03-2014	17:00	103	4.33
06-03-2014	18:00	103	3.87
06-03-2014	19:00	103	3.75
06-03-2014	20:00	104	3.56
06-03-2014	21:00	102	3.90
06-03-2014	22:00	102	4.24
06-03-2014	23:00	103	3.98
12-03-2014	0:00	118	3.88
12-03-2014	1:00	110	3.16
12-03-2014	2:00	110	2.96
12-03-2014	3:00	107	2.88
12-03-2014	4:00	107	2.89
12-03-2014	5:00	106	3.14
12-03-2014	6:00	89	2.00
12-03-2014	7:00	85	1.55
12-03-2014	8:00	77	1.85
12-03-2014	9:00	94	1.88
12-03-2014	10:00	79	1.59
12-03-2014	11:00	84	1.41
12-03-2014	12:00	88	1.52
12-03-2014	13:00	90	1.54
12-03-2014	14:00	101	1.50
12-03-2014	15:00	91	1.45
12-03-2014	16:00	95	1.13
12-03-2014	17:00	106	1.09
12-03-2014	18:00	91	0.93
12-03-2014	19:00	186	0.54
12-03-2014	20:00	182	0.45
12-03-2014	21:00	134	0.87
12-03-2014	22:00	113	0.84
12-03-2014	23:00	161	0.73

Meteorological Data for Impact Monitoring in the reporting period			
Date	Time (24hrs)	Average of Wind Direction (degree)	Average of Wind Speed (m/s)
18-03-2014	0:00	90	0.84
18-03-2014	1:00	87	1.07
18-03-2014	2:00	93	0.79
18-03-2014	3:00	151	0.42
18-03-2014	4:00	161	0.32
18-03-2014	5:00	114	0.45
18-03-2014	6:00	171	0.34
18-03-2014	7:00	172	0.40
18-03-2014	8:00	135	0.52
18-03-2014	9:00	115	0.93
18-03-2014	10:00	85	1.59
18-03-2014	11:00	91	1.57
18-03-2014	12:00	104	2.19
18-03-2014	13:00	97	1.86
18-03-2014	14:00	94	1.73
18-03-2014	15:00	102	1.34
18-03-2014	16:00	82	1.44
18-03-2014	17:00	88	1.55
18-03-2014	18:00	78	1.72
18-03-2014	19:00	80	1.69
18-03-2014	20:00	93	1.75
18-03-2014	21:00	87	0.99
18-03-2014	22:00	91	0.87
18-03-2014	23:00	99	0.82
24-03-2014	0:00	101	3.15
24-03-2014	1:00	109	2.89
24-03-2014	2:00	108	2.91
24-03-2014	3:00	106	2.53
24-03-2014	4:00	108	3.22
24-03-2014	5:00	110	3.01
24-03-2014	6:00	110	3.26
24-03-2014	7:00	100	2.68
24-03-2014	8:00	114	2.54
24-03-2014	9:00	123	1.78
24-03-2014	10:00	125	1.45
24-03-2014	11:00	114	2.04
24-03-2014	12:00	130	1.46
24-03-2014	13:00	191	0.99
24-03-2014	14:00	213	0.82
24-03-2014	15:00	180	0.91
24-03-2014	16:00	106	1.21
24-03-2014	17:00	102	1.63
24-03-2014	18:00	86	1.42
24-03-2014	19:00	105	1.35
24-03-2014	20:00	92	1.49
24-03-2014	21:00	105	2.01
24-03-2014	22:00	102	1.87
24-03-2014	23:00	103	2.41

Meteorological Data for Impact Monitoring in the reporting period			
Date	Time (24hrs)	Average of Wind Direction (degree)	Average of Wind Speed (m/s)
28-03-2014	0:00	80	1.88
28-03-2014	1:00	89	2.00
28-03-2014	2:00	92	1.76
28-03-2014	3:00	97	2.41
28-03-2014	4:00	102	2.07
28-03-2014	5:00	98	2.58
28-03-2014	6:00	101	2.76
28-03-2014	7:00	94	2.64
28-03-2014	8:00	103	3.06
28-03-2014	9:00	111	3.10
28-03-2014	10:00	98	2.46
28-03-2014	11:00	103	3.18
28-03-2014	12:00	93	2.45
28-03-2014	13:00	103	2.54
28-03-2014	14:00	101	2.49
28-03-2014	15:00	109	2.65
28-03-2014	16:00	101	2.13
28-03-2014	17:00	112	2.99
28-03-2014	18:00	106	2.13
28-03-2014	19:00	86	1.54
28-03-2014	20:00	84	1.24
28-03-2014	21:00	87	1.05
28-03-2014	22:00	97	1.17
28-03-2014	23:00	95	0.91

Appendix I

Impact Water Quality Monitoring Results

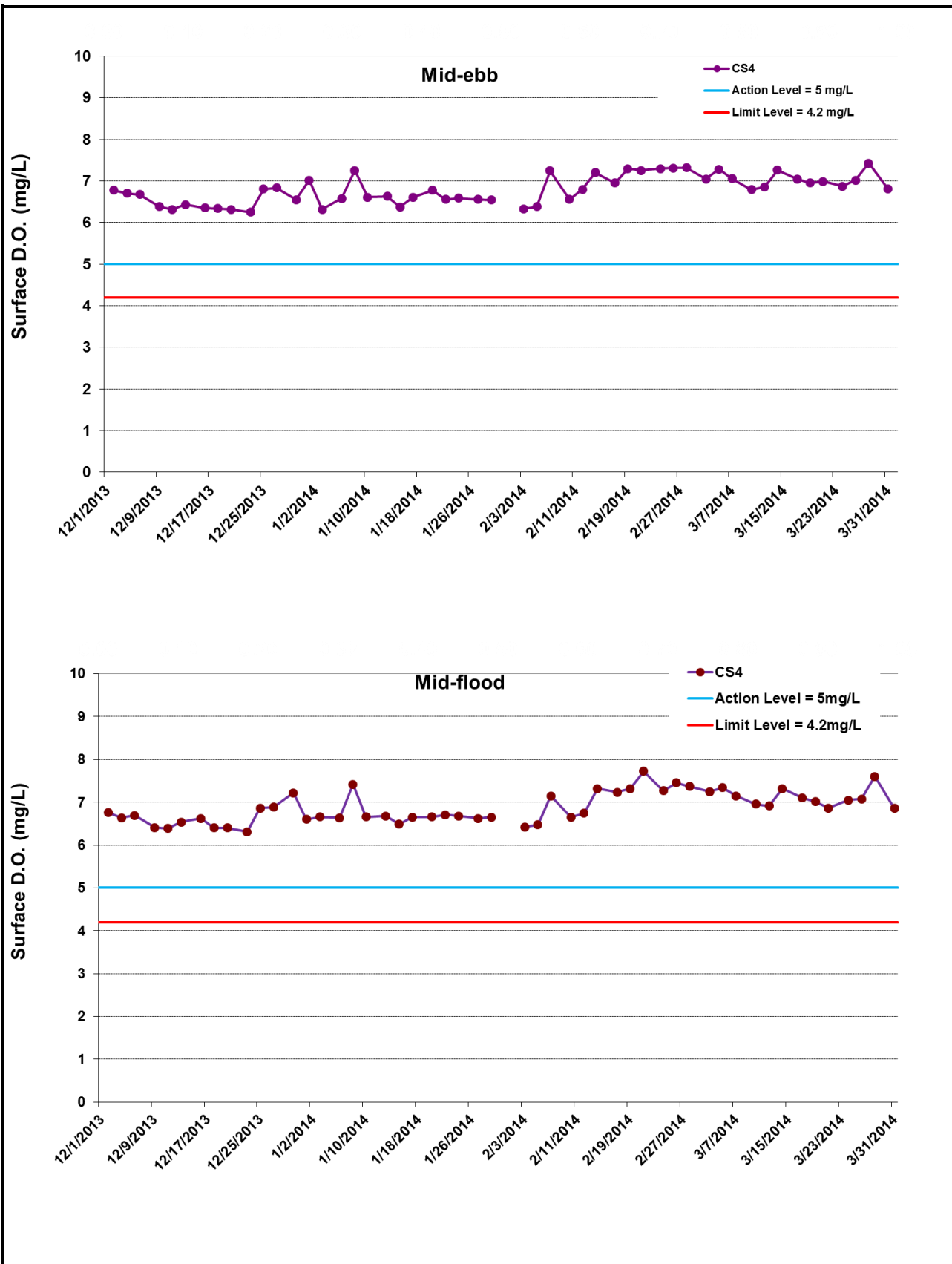


Figure I1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at CS4. Note no dredging/ filling works was undertaken on 31 January 2014.



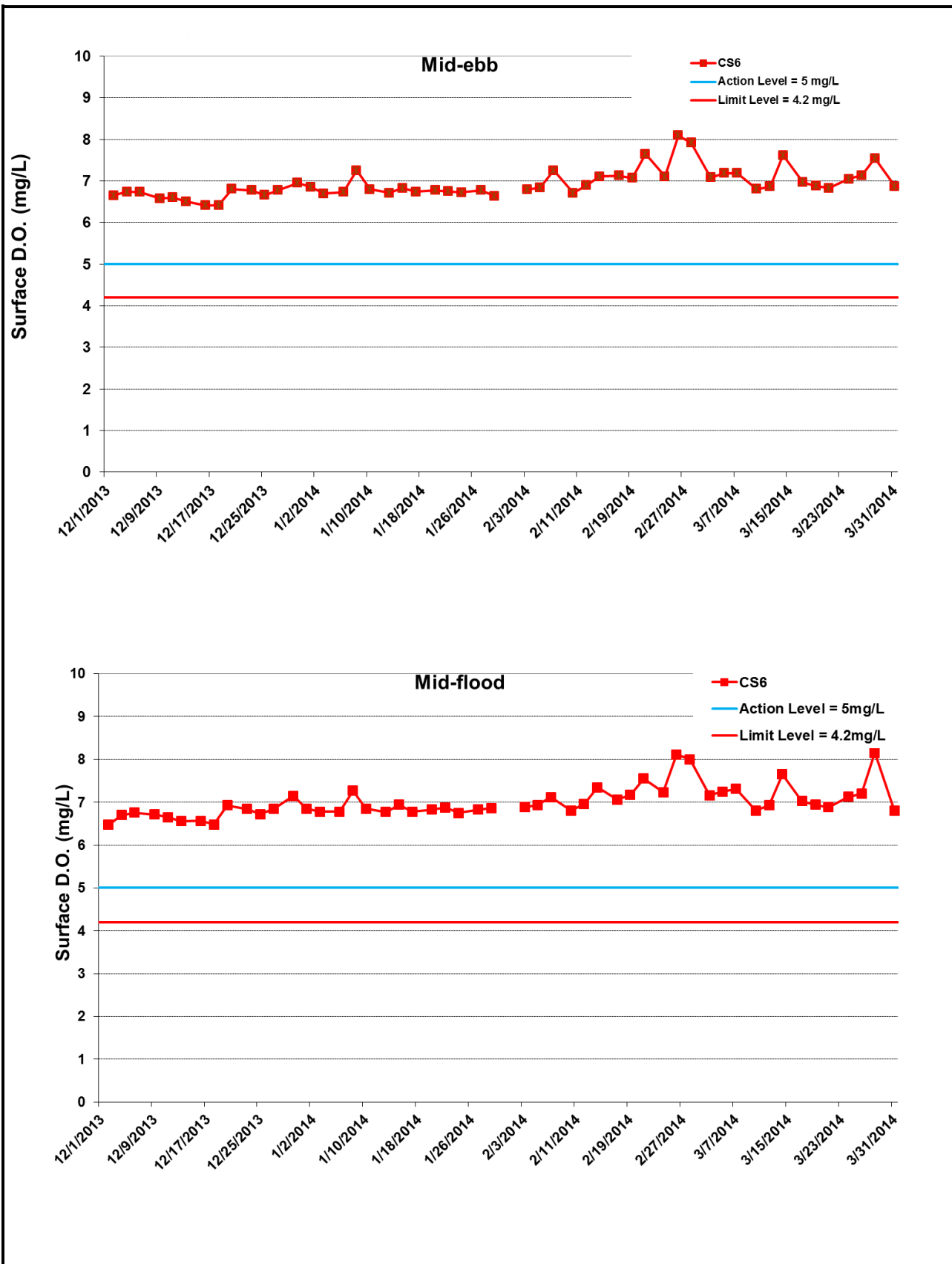


Figure I2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at CS6. Note no dredging/ filling works was undertaken on 31 January 2014.



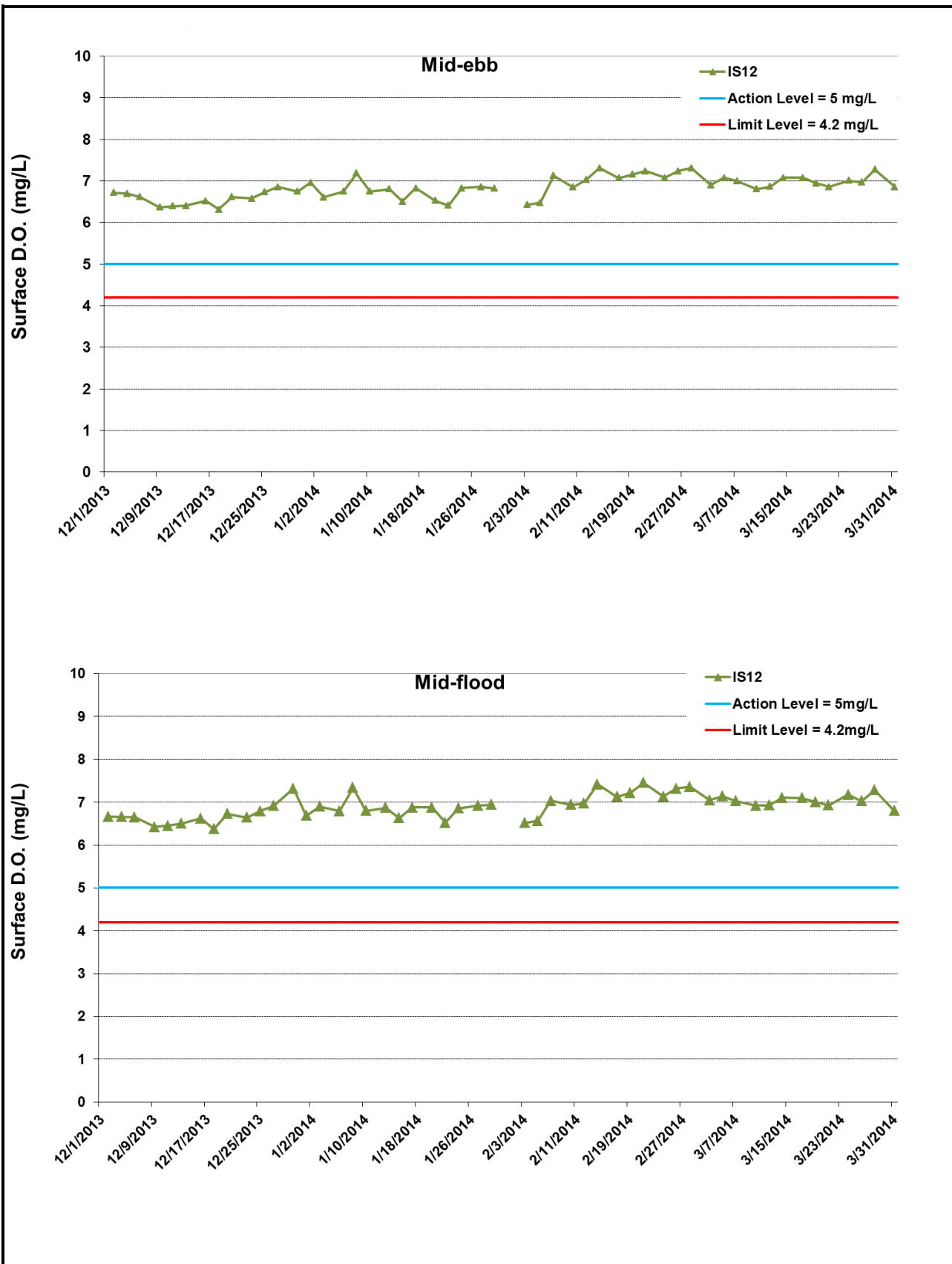


Figure I3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at IS12. Note no dredging/ filling works was undertaken on 31 January 2014.



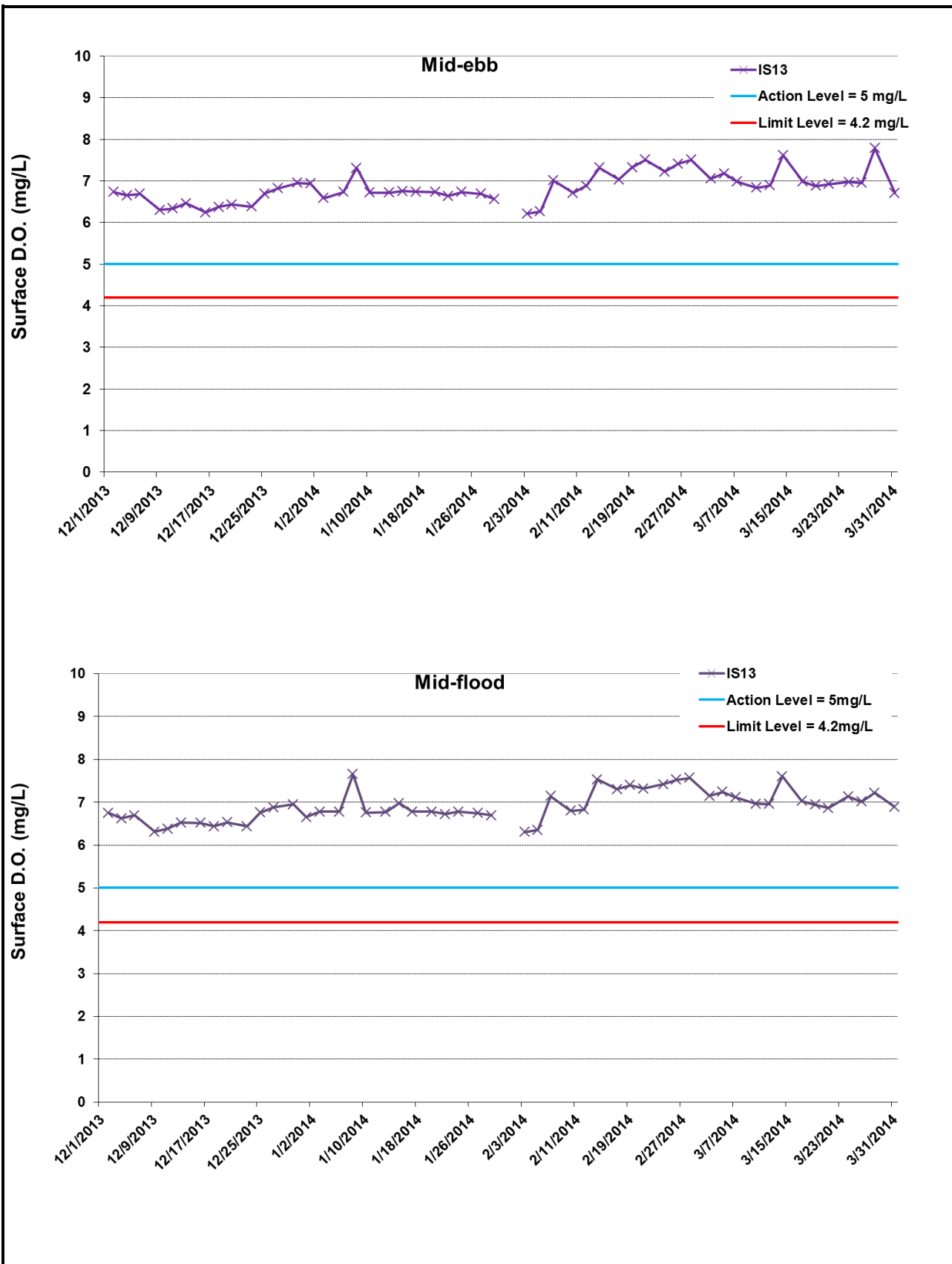


Figure I4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at IS13. Note no dredging/ filling works was undertaken on 31 January 2014.



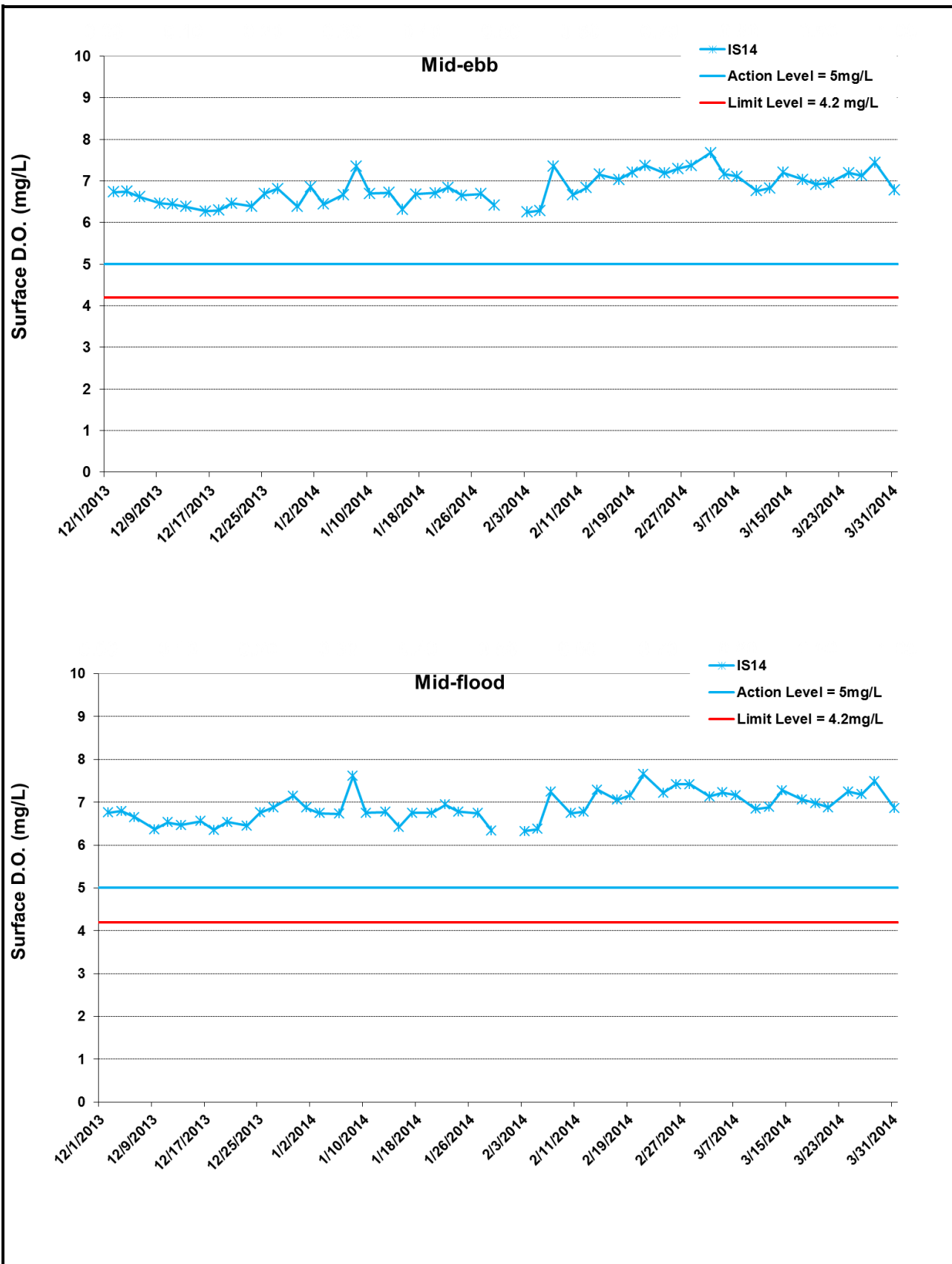


Figure I5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at IS14. Note no dredging/ filling works was undertaken on 31 January 2014.



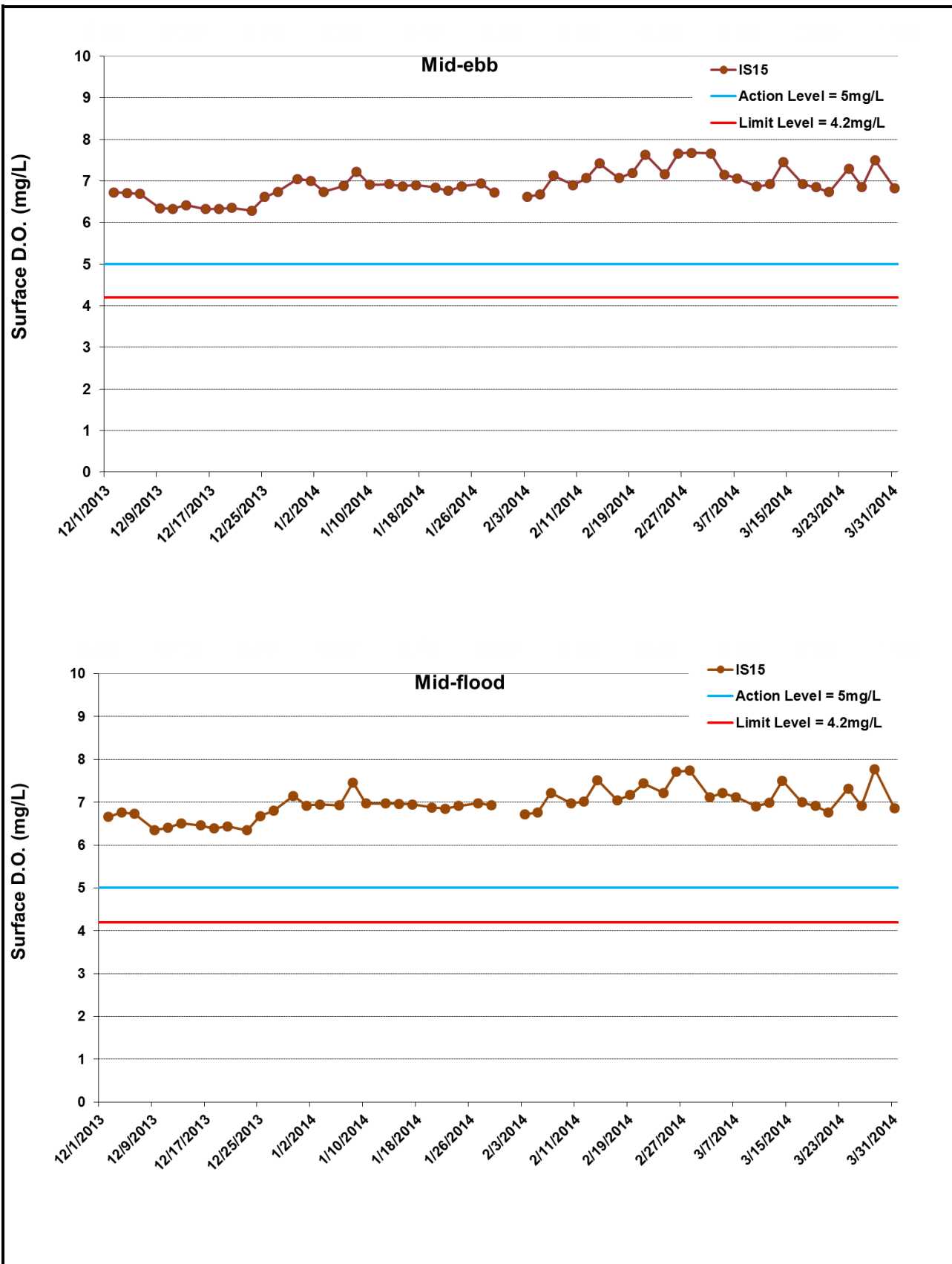
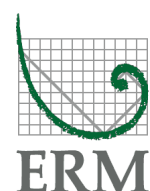


Figure I6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at IS15. Note no dredging/ filling works was undertaken on 31 January 2014.



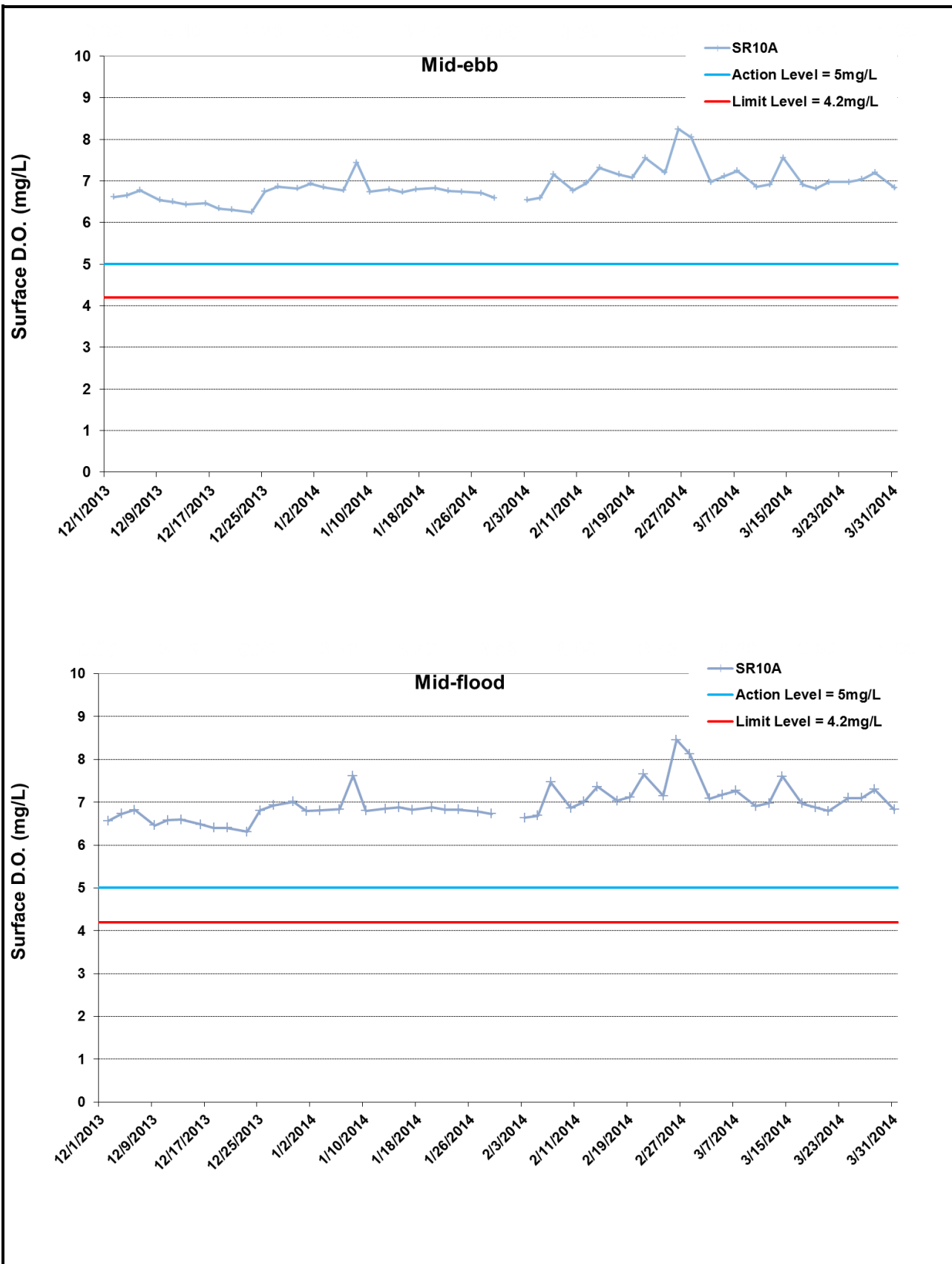


Figure I7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at SR10A. Note no dredging/ filling works was undertaken on 31 January 2014.



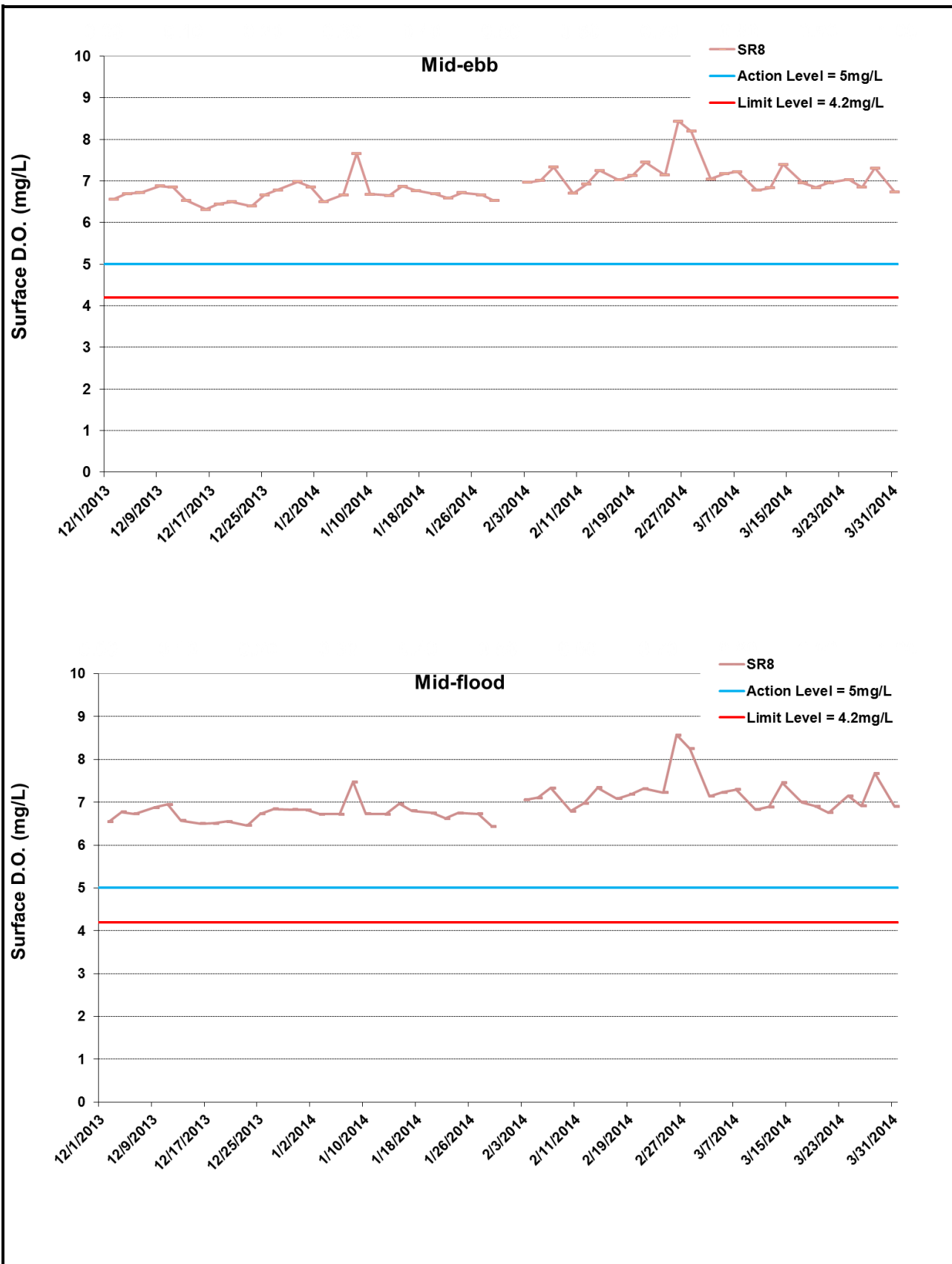


Figure I8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at SR8. Note no dredging/ filling works was undertaken on 31 January 2014.



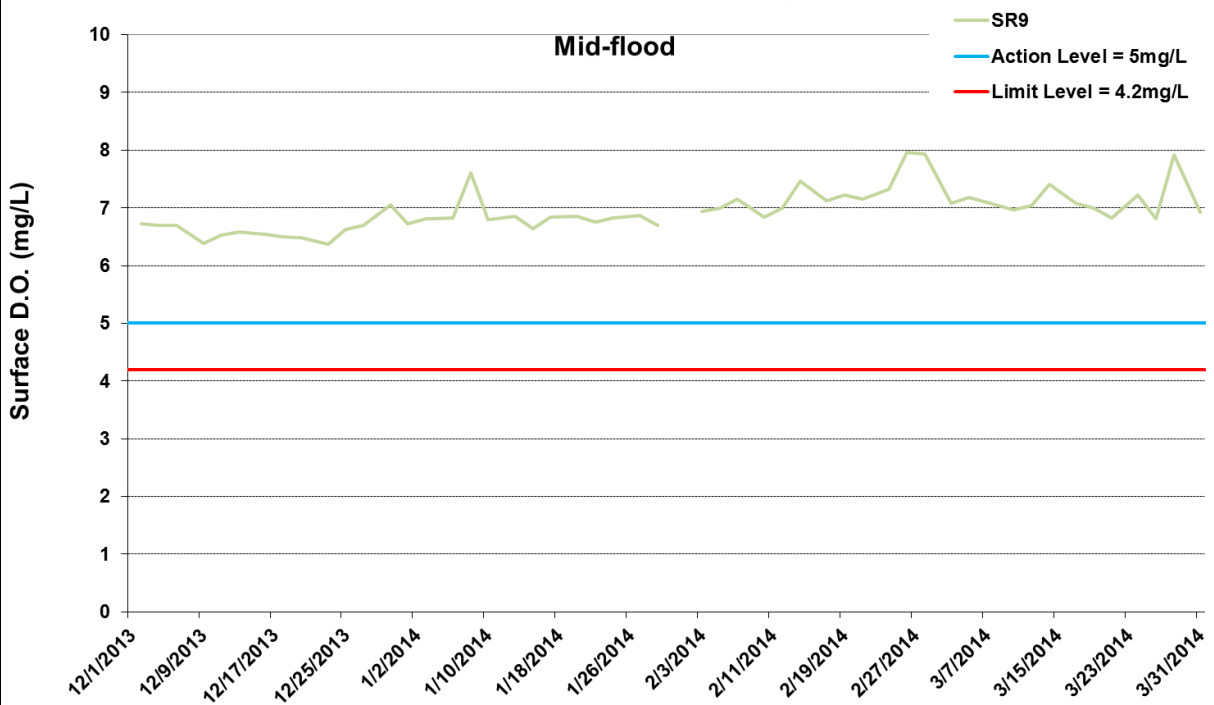
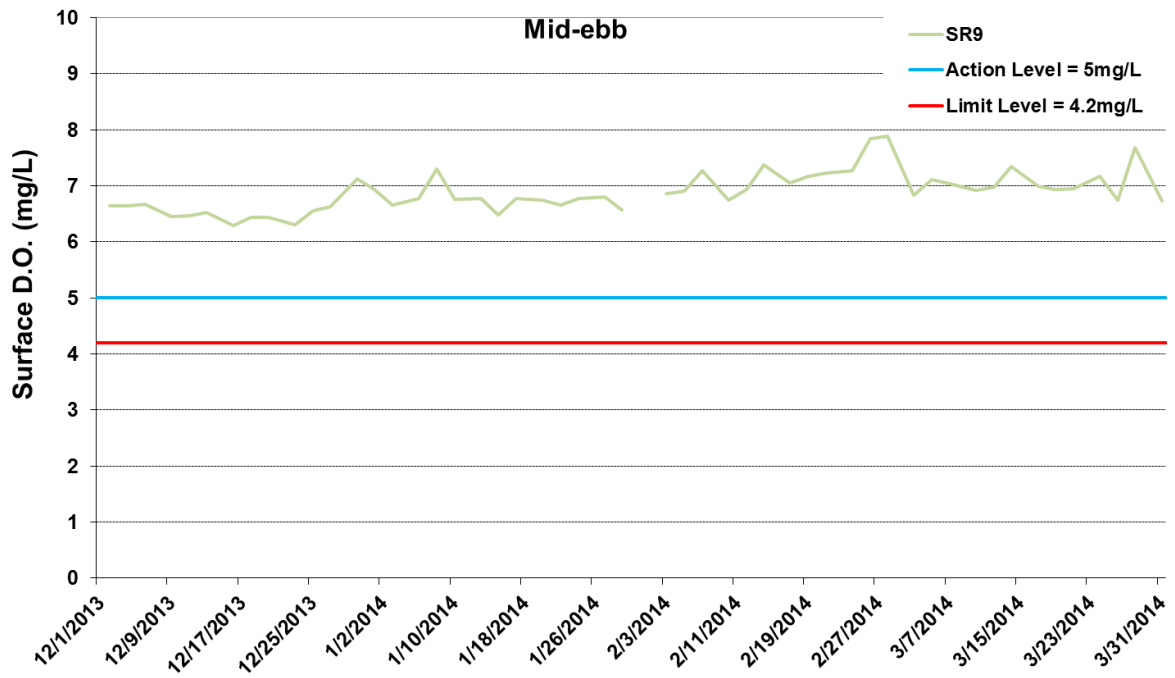
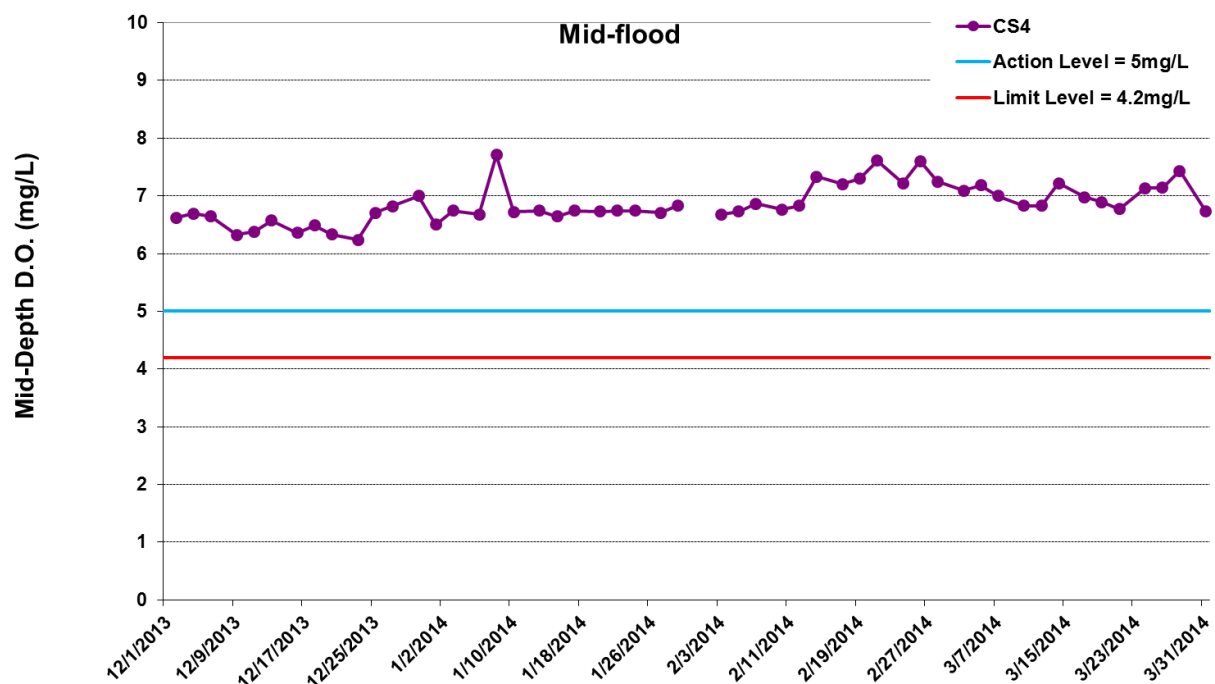
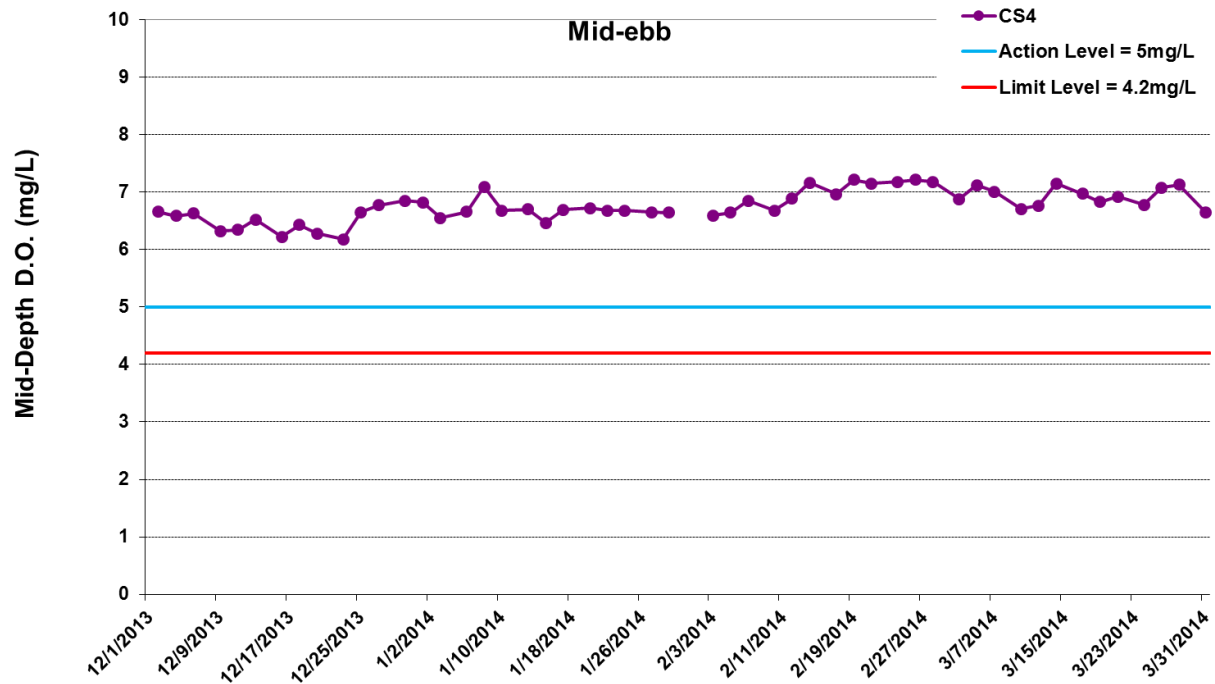


Figure I9 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 December 2013 and 31 March 2014 at SR9. Note no dredging/ filling works was undertaken on 31 January 2014.

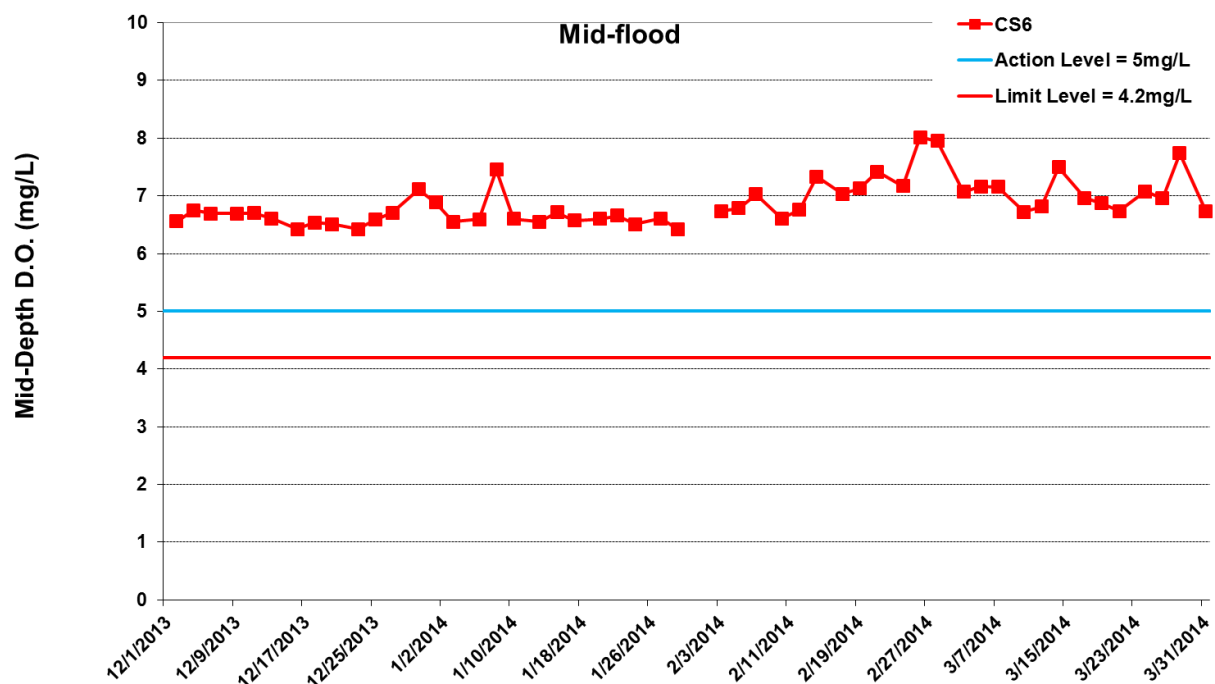
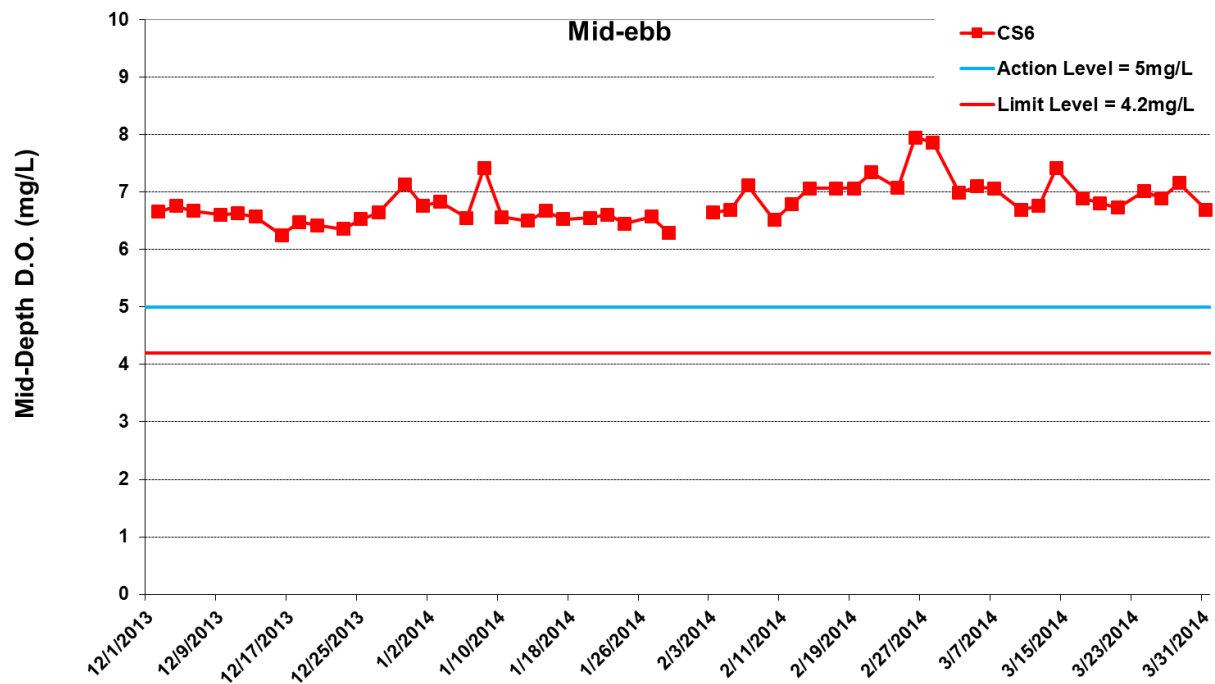




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at the CS4. Note no dredging/ filling works was undertaken on 31 January 2014.

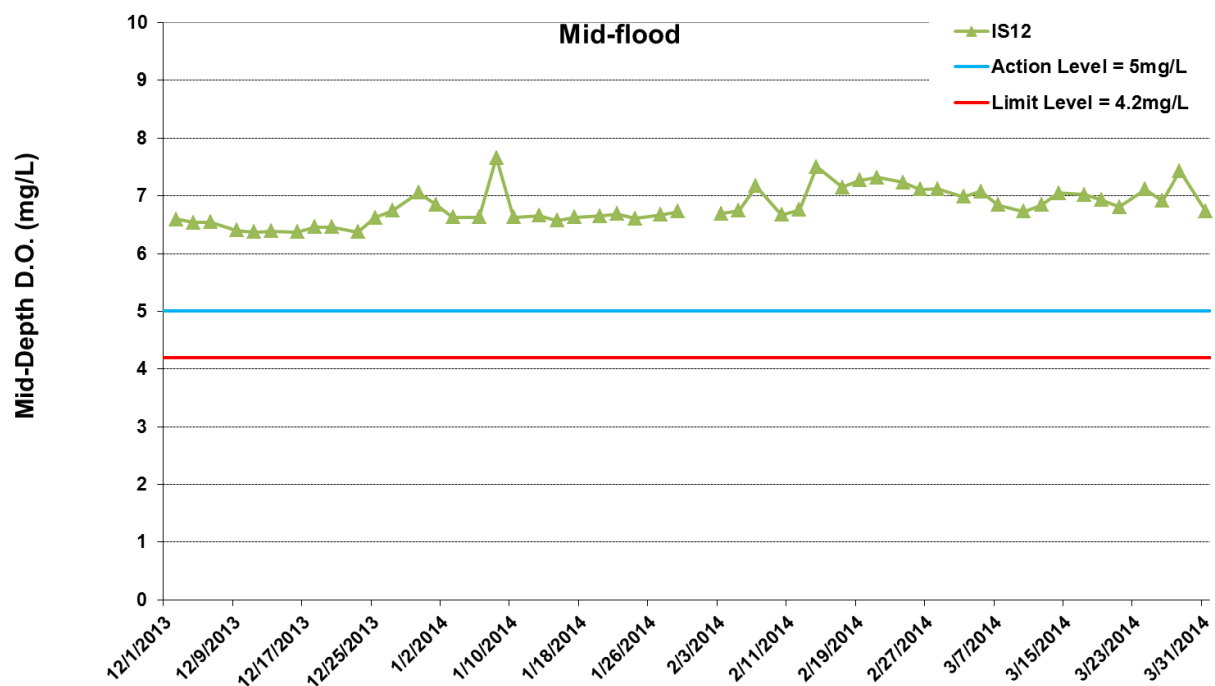
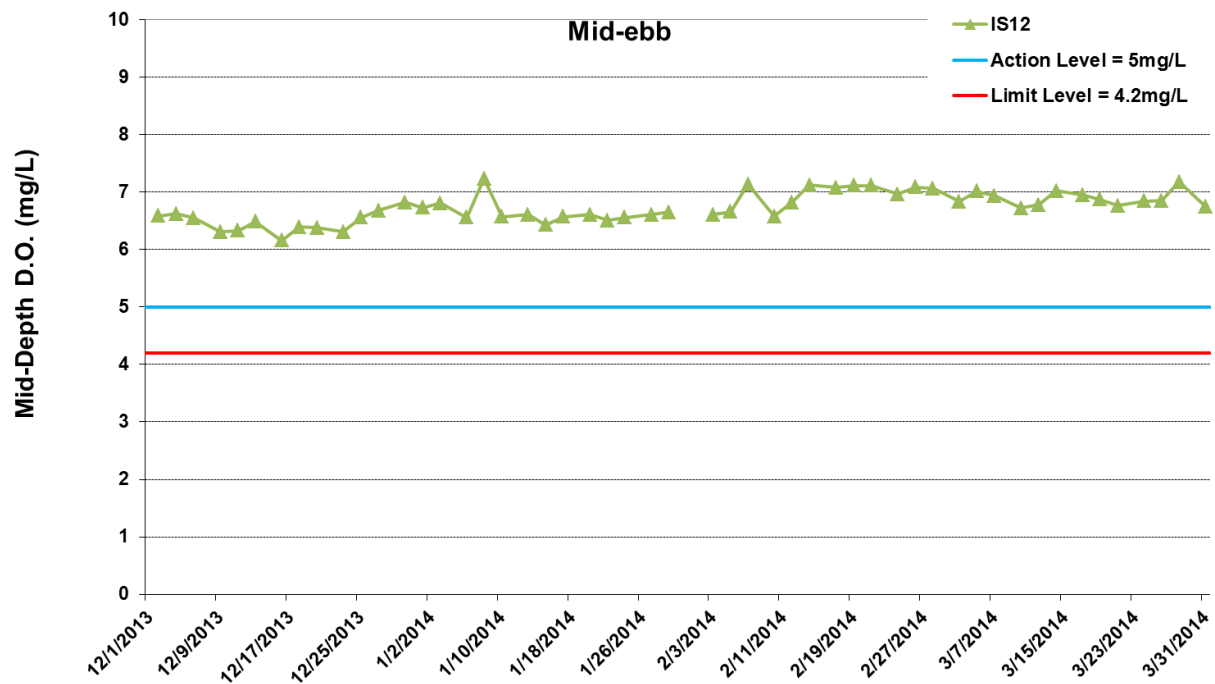




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at CS6. Note no dredging/ filling works was undertaken on 31 January 2014.

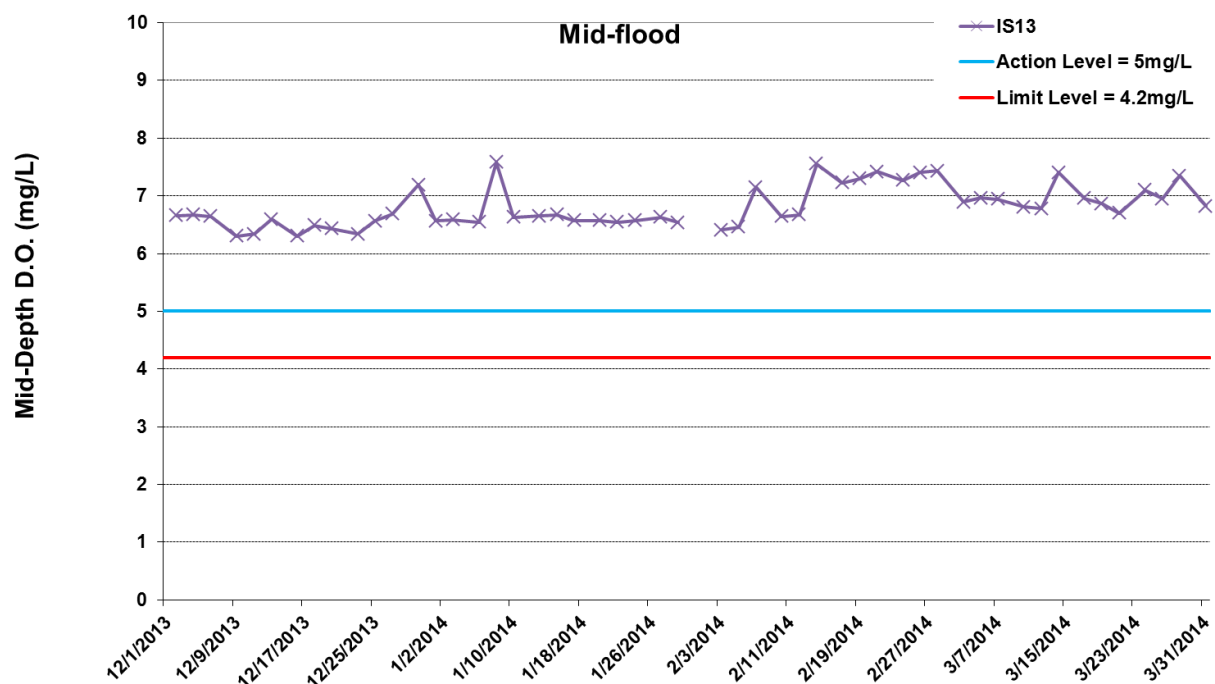
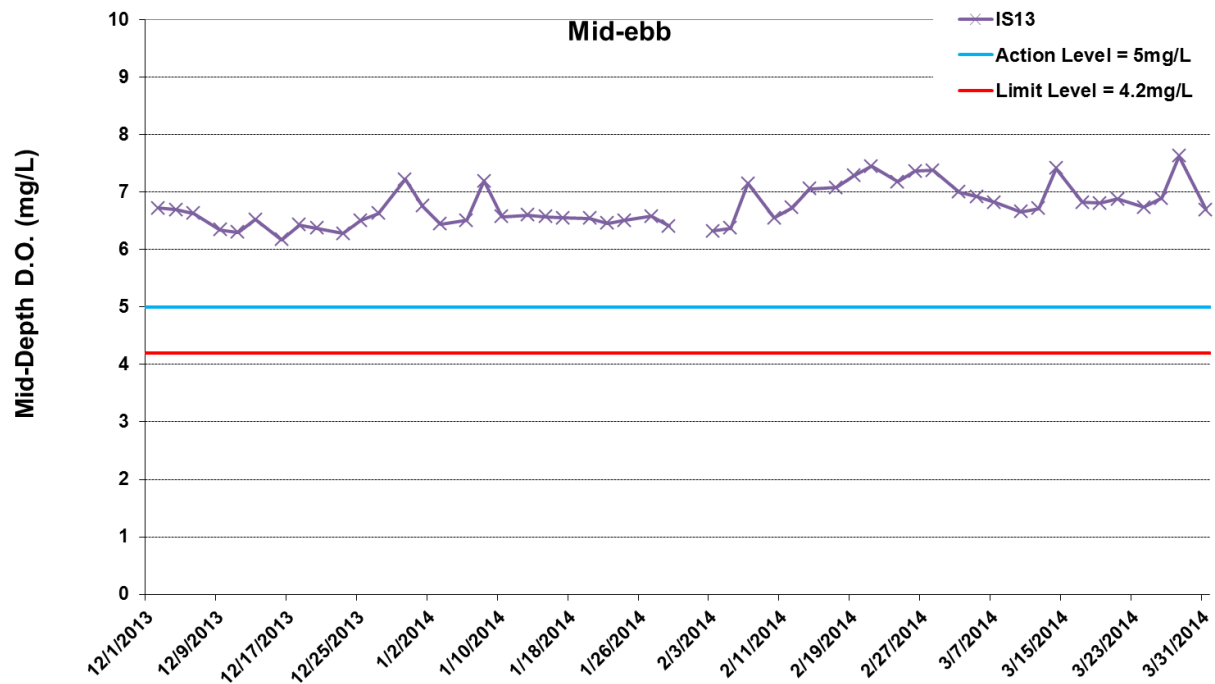




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at IS12. Note no dredging/ filling works was undertaken on 31 January 2014.

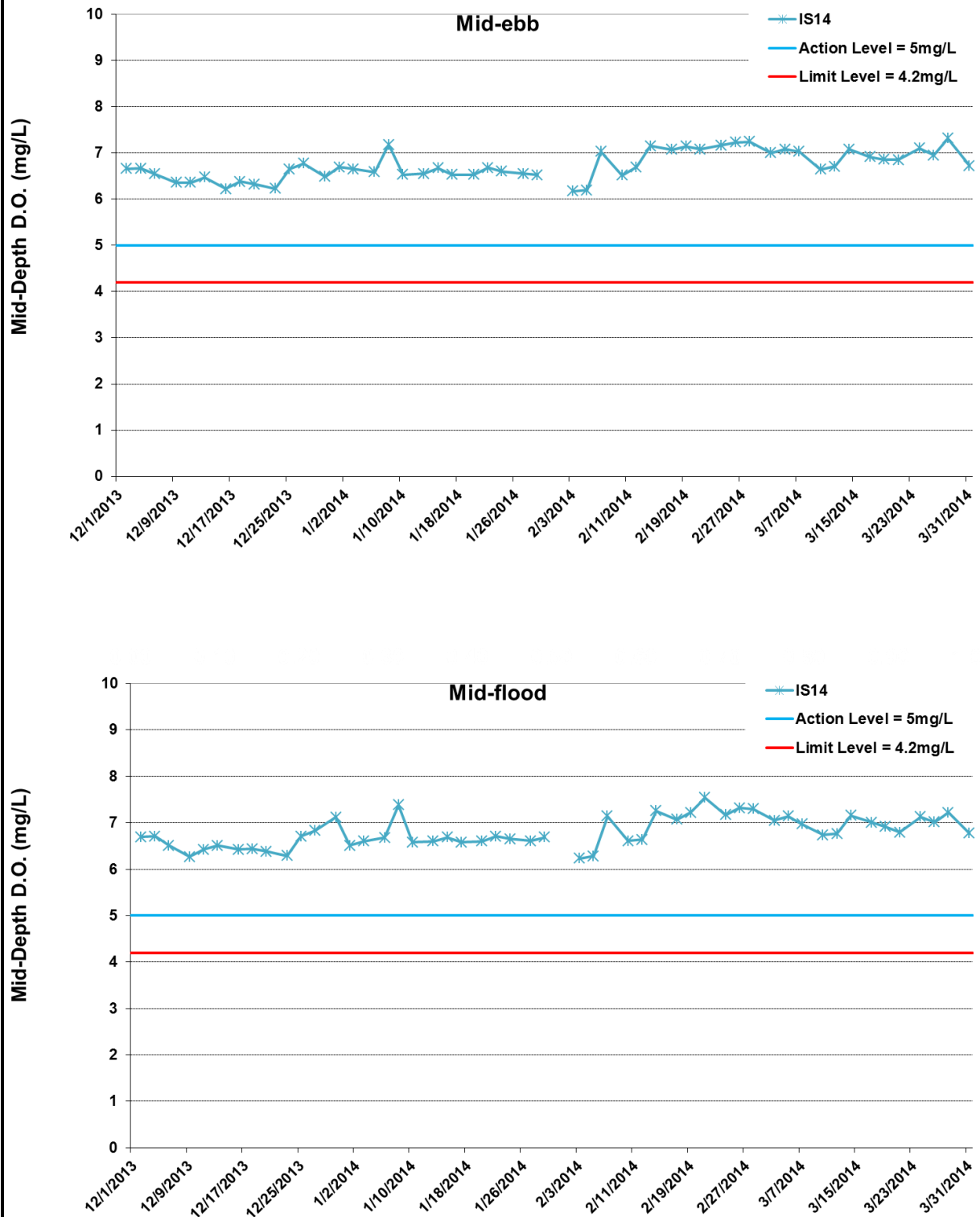




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I13 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at IS13. Note no dredging/ filling works was undertaken on 31 January 2014.

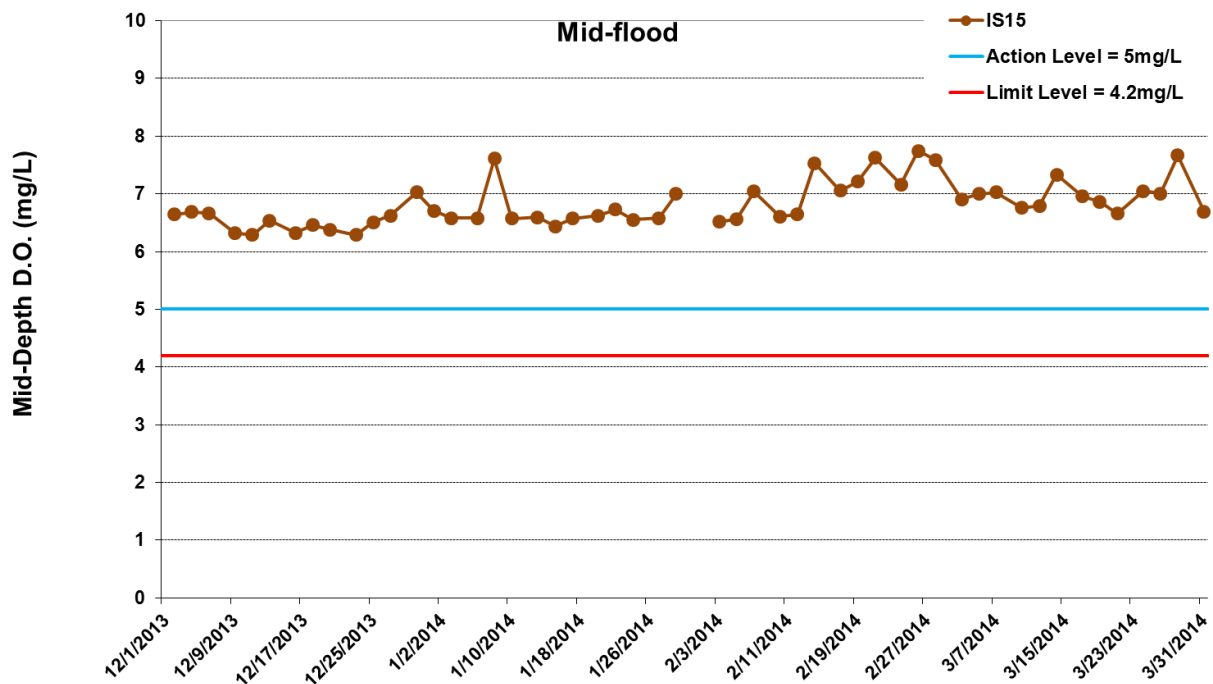
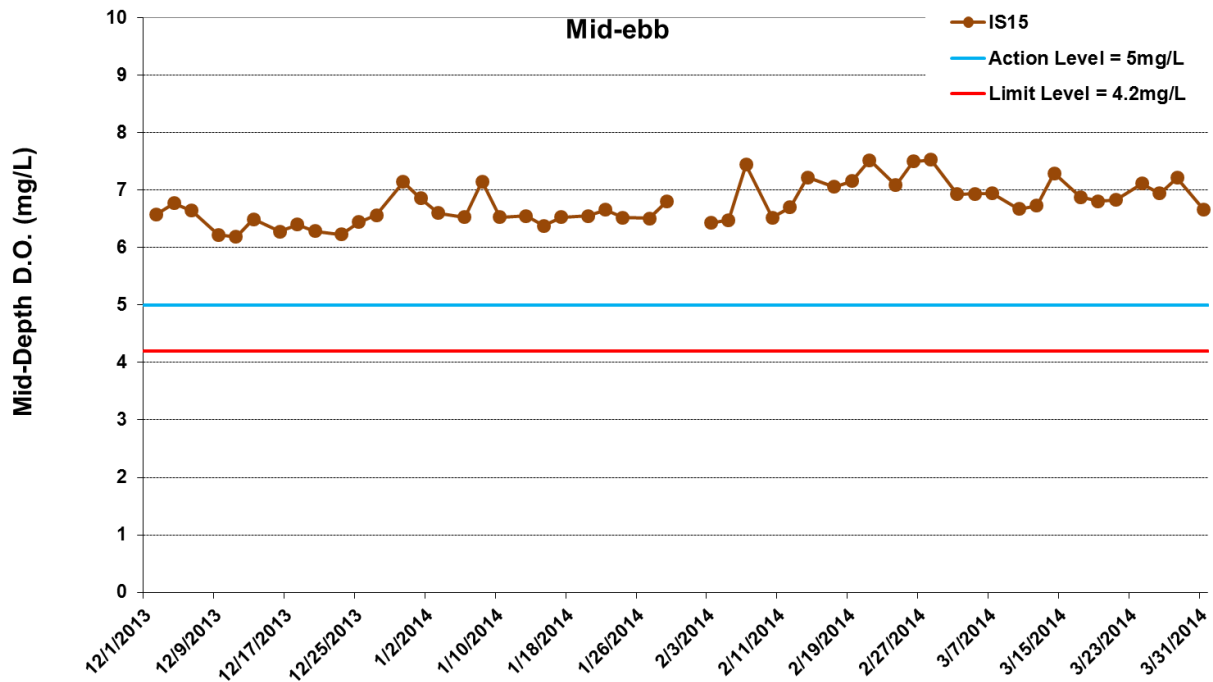




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I14 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at IS14. Note no dredging/ filling works was undertaken on 31 January 2014.

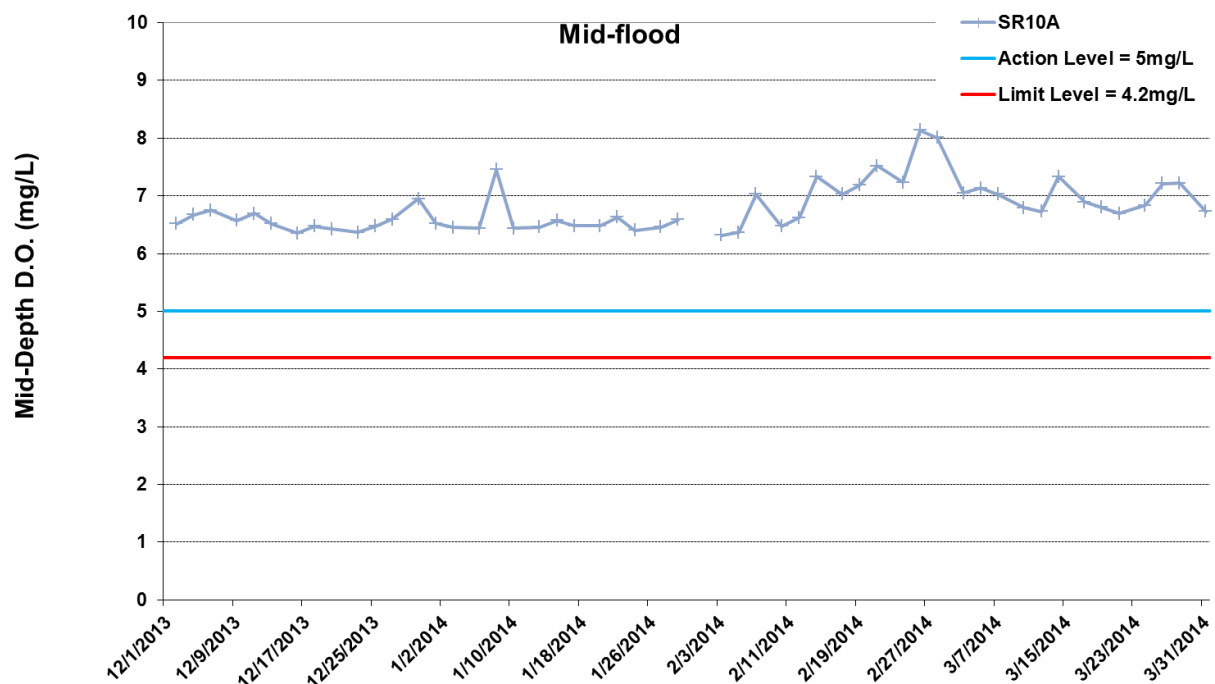
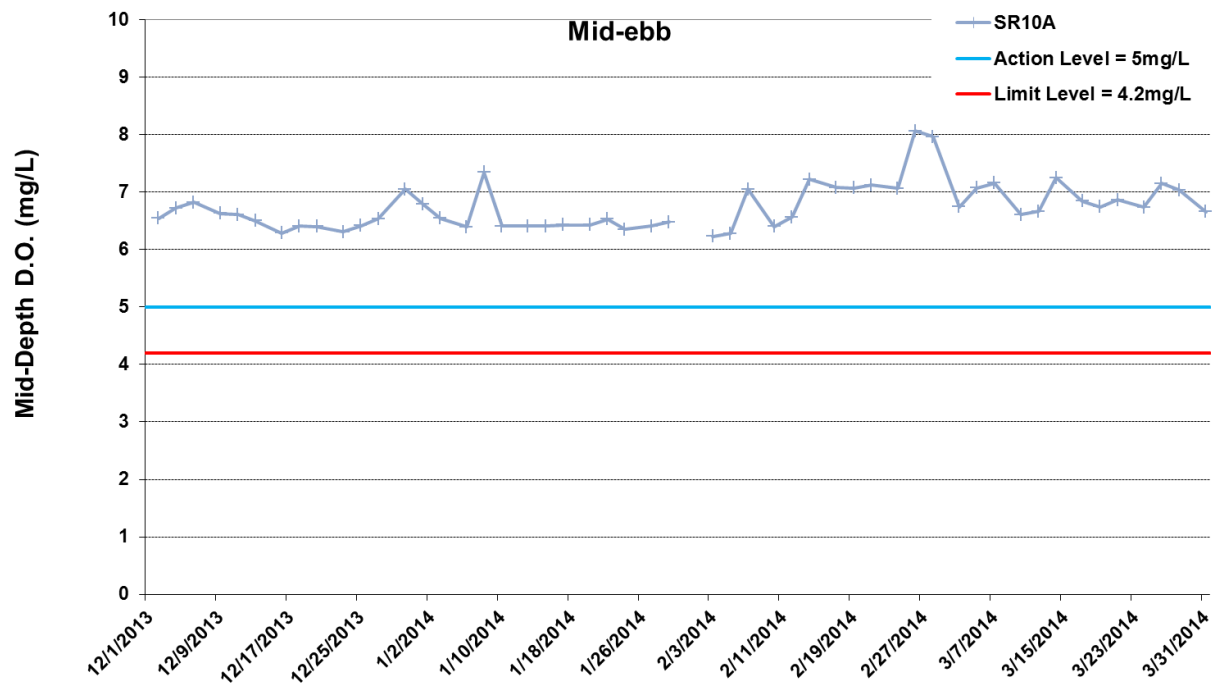




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at IS15. Note no dredging/ filling works was undertaken on 31 January 2014.





*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I16 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 December 2013 and 31 March 2014 at SR10A. Note no dredging/ filling works was undertaken on 31 January 2014.



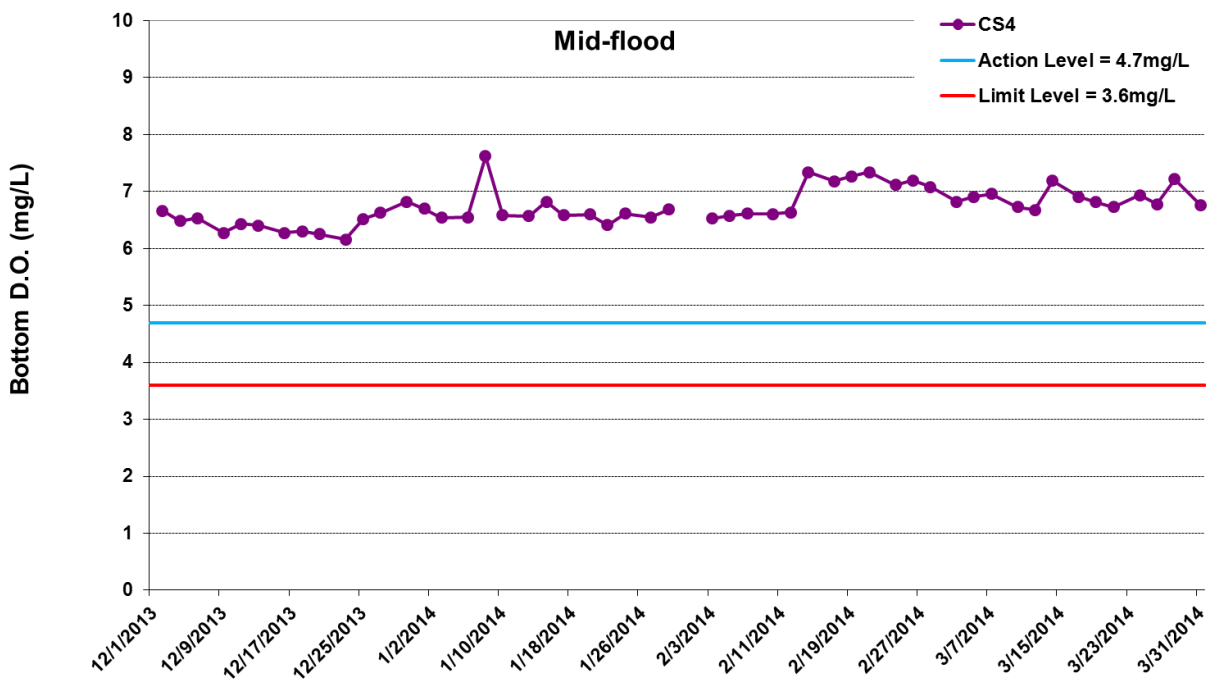
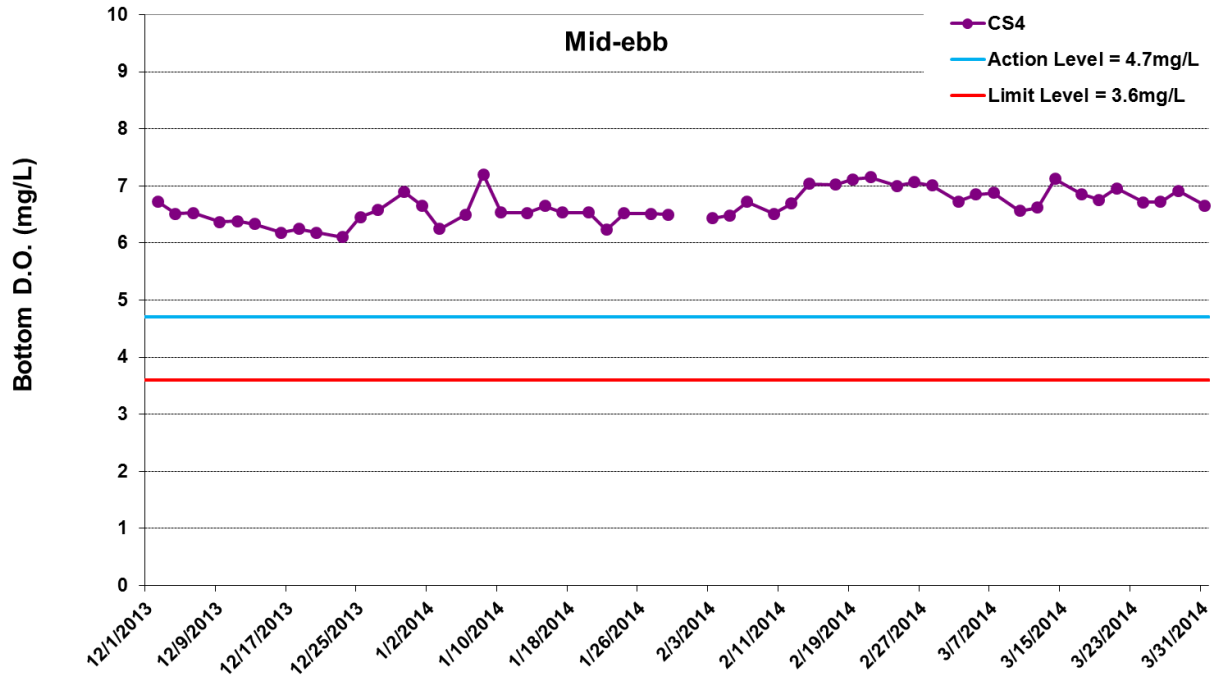


Figure I17 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at CS4. Note no dredging/ filling works was undertaken on 31 January 2014.



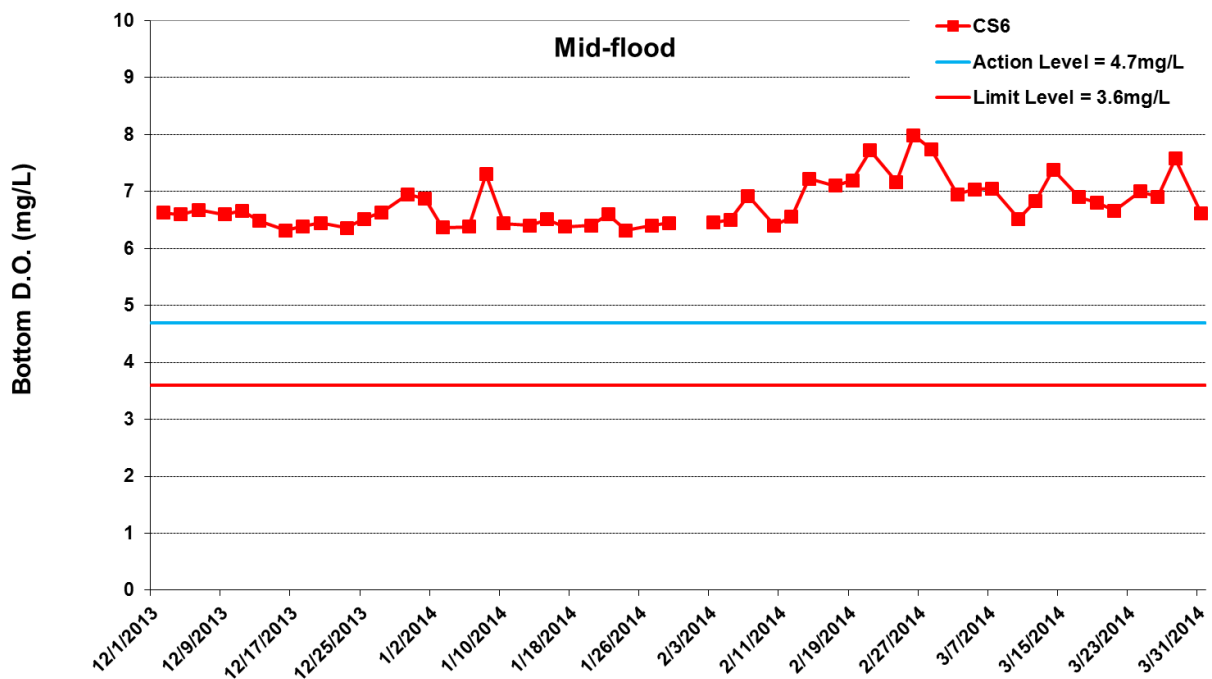
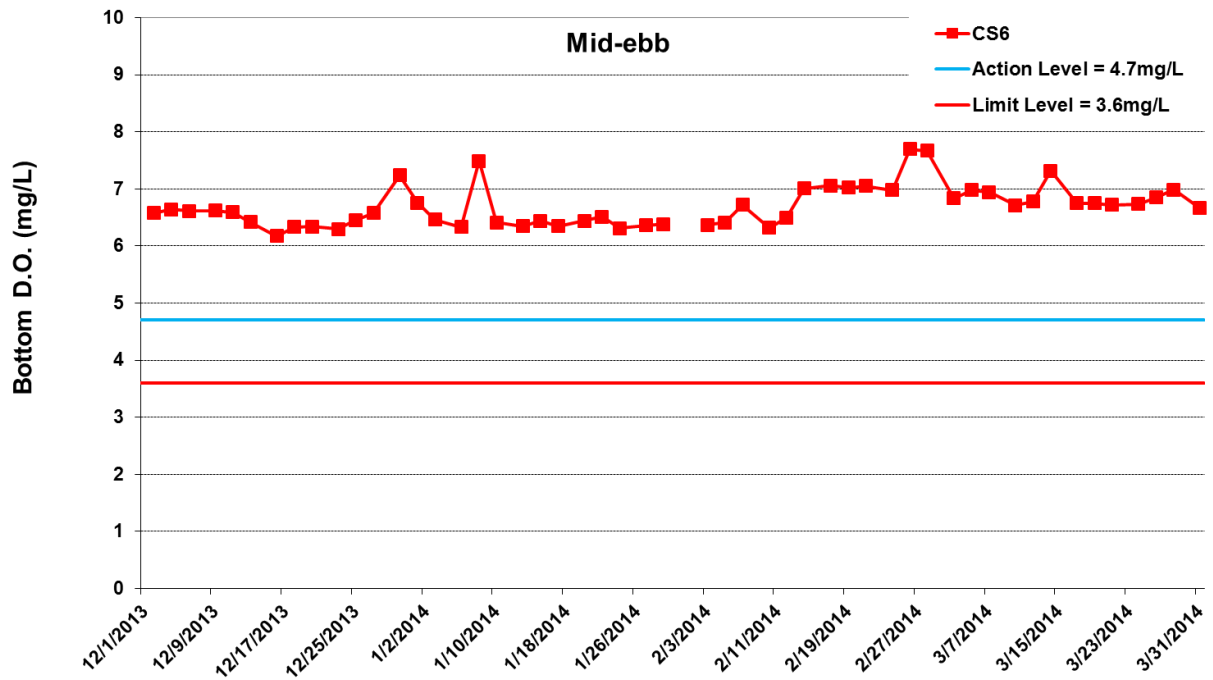


Figure I18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at CS6. Note no dredging/ filling works was undertaken on 31 January 2014.



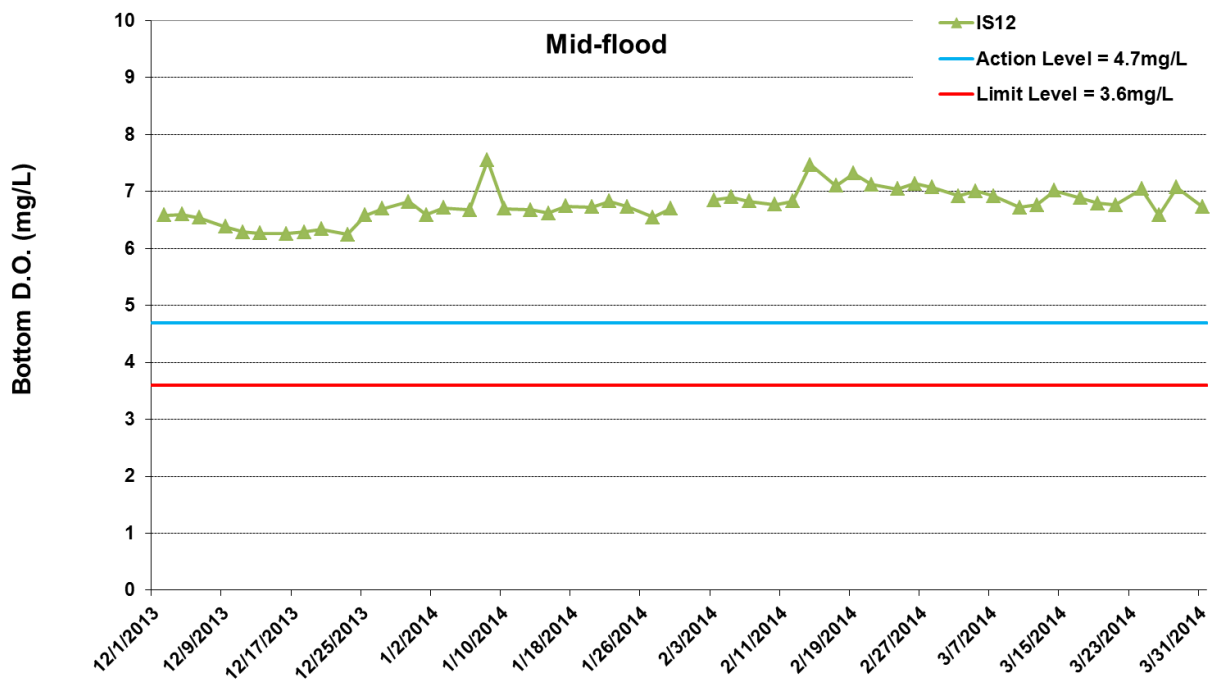
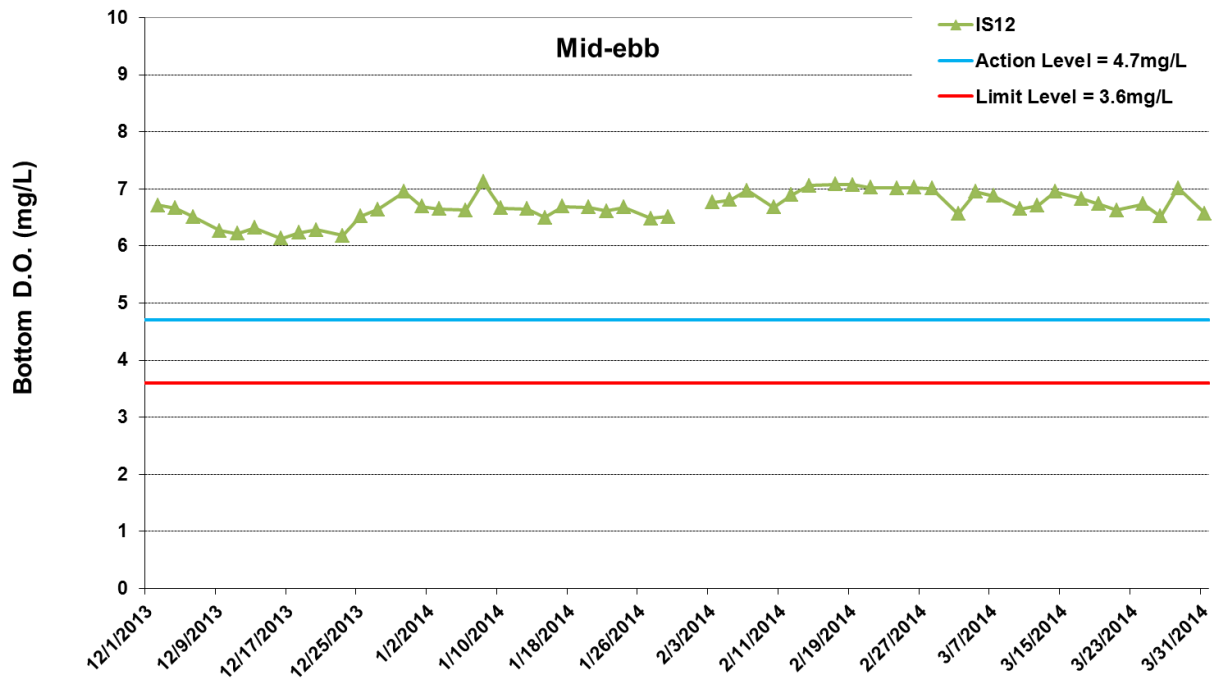


Figure I19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at IS12. Note no dredging/ filling works was undertaken on 31 January 2014.



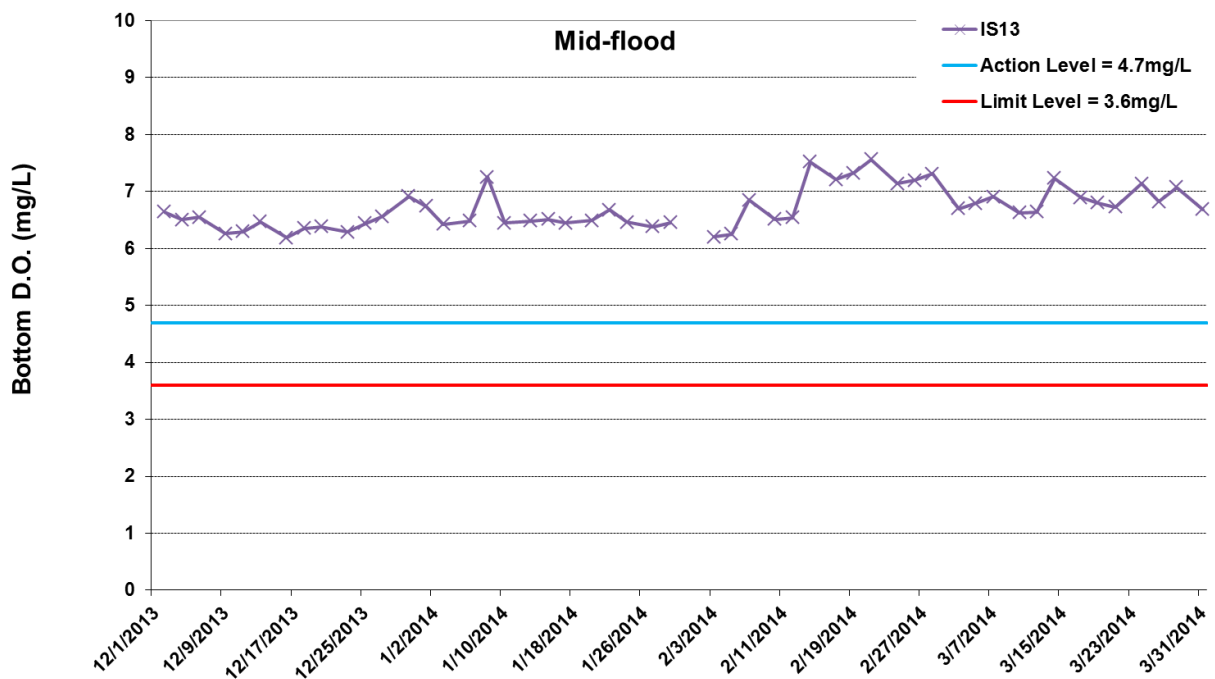
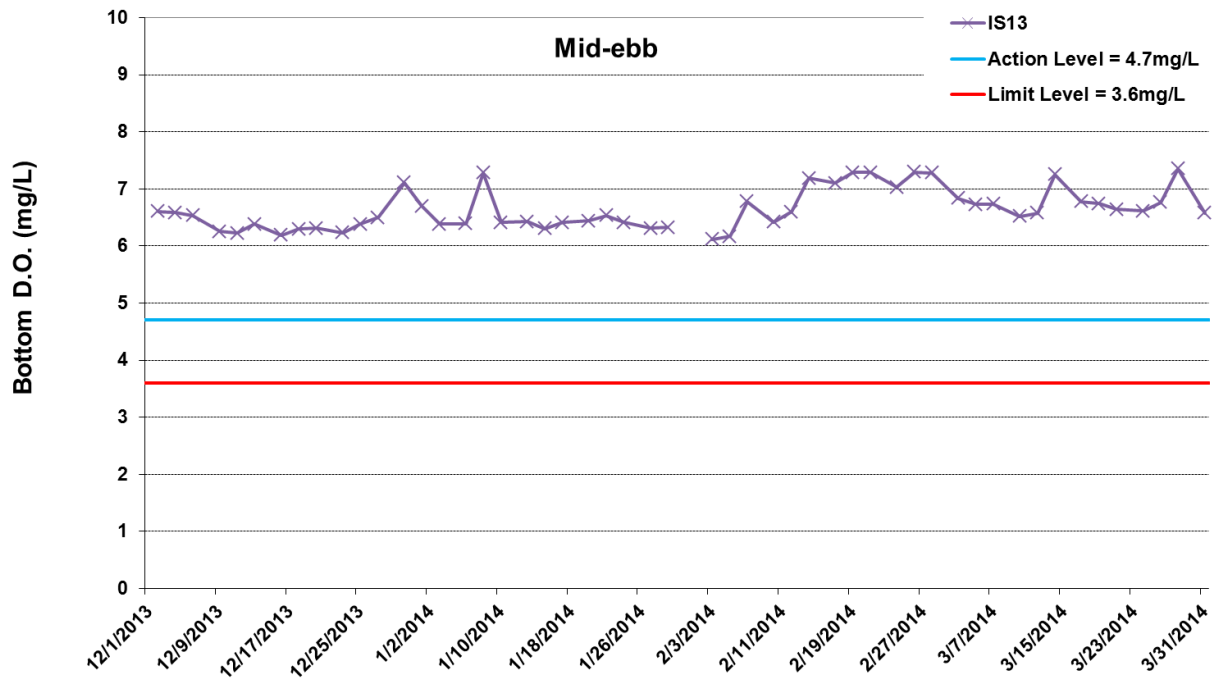


Figure I20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at IS13. Note no dredging/ filling works was undertaken on 31 January 2014.



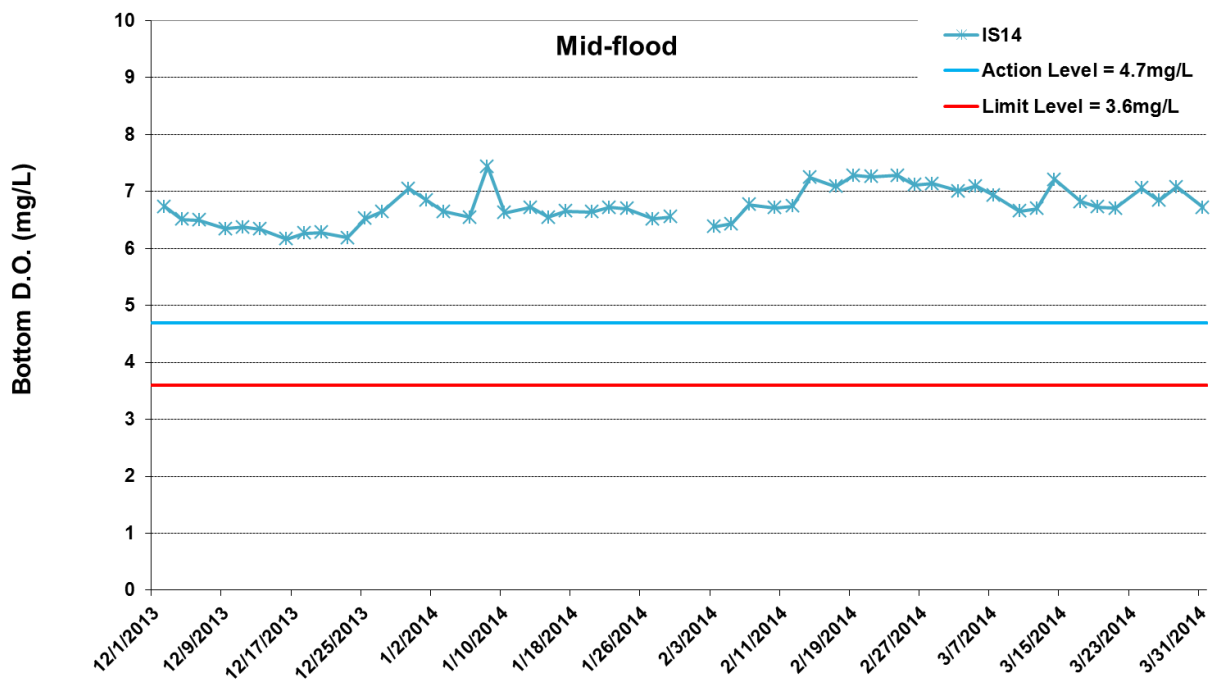
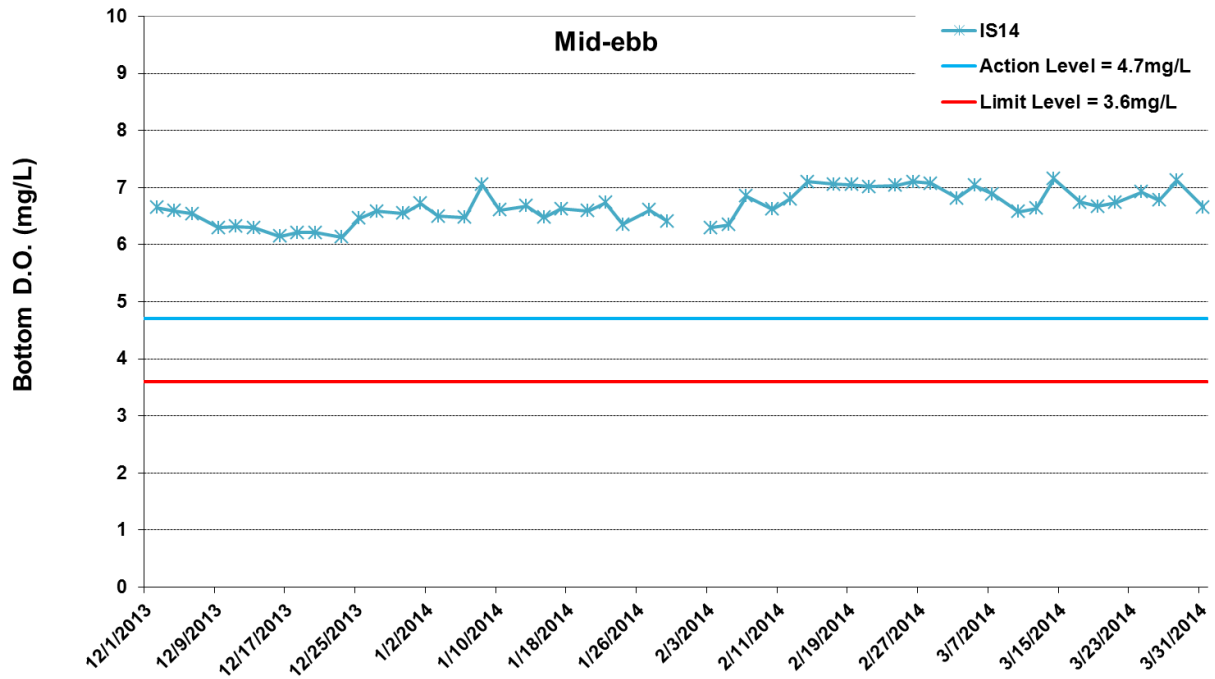


Figure I21 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at IS14. Note no dredging/ filling works was undertaken on 31 January 2014.



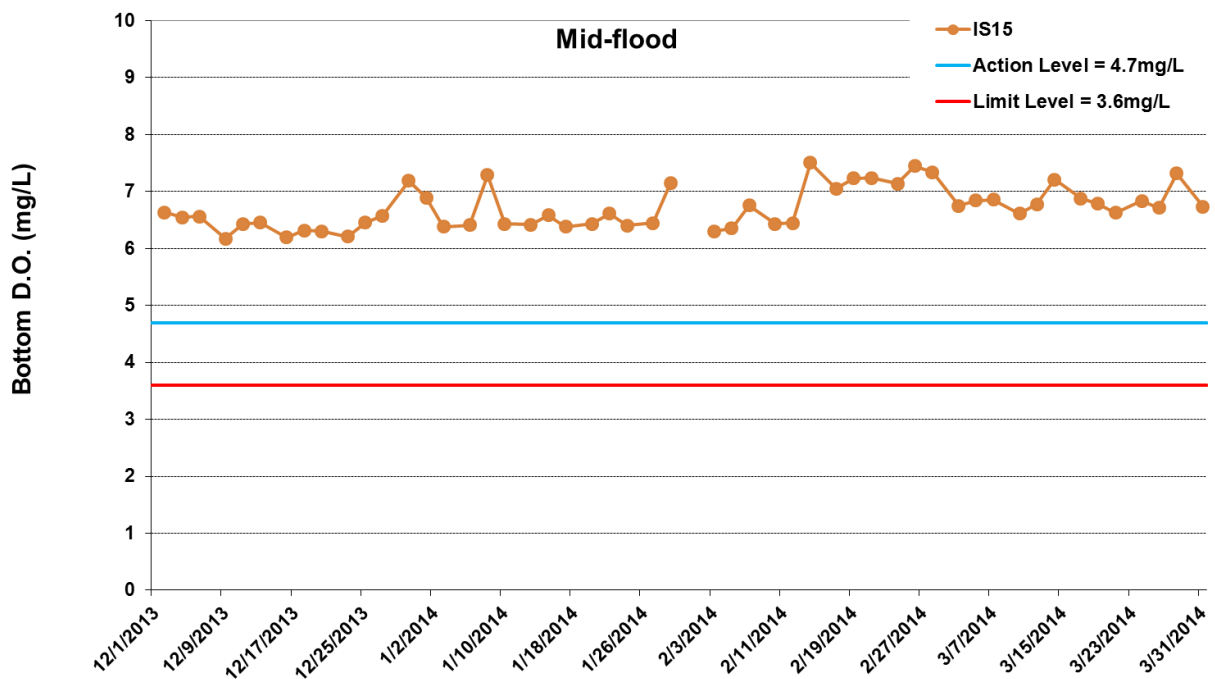
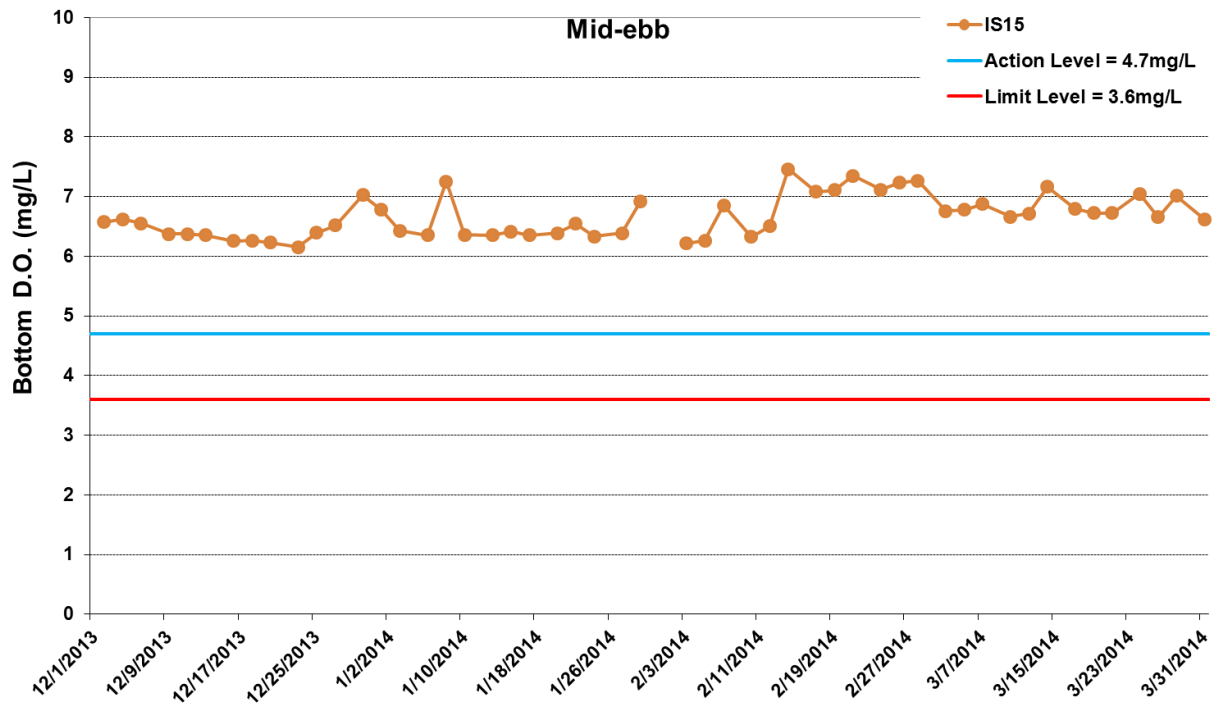


Figure I22 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at IS15. Note no dredging/ filling works was undertaken on 31 January 2014.



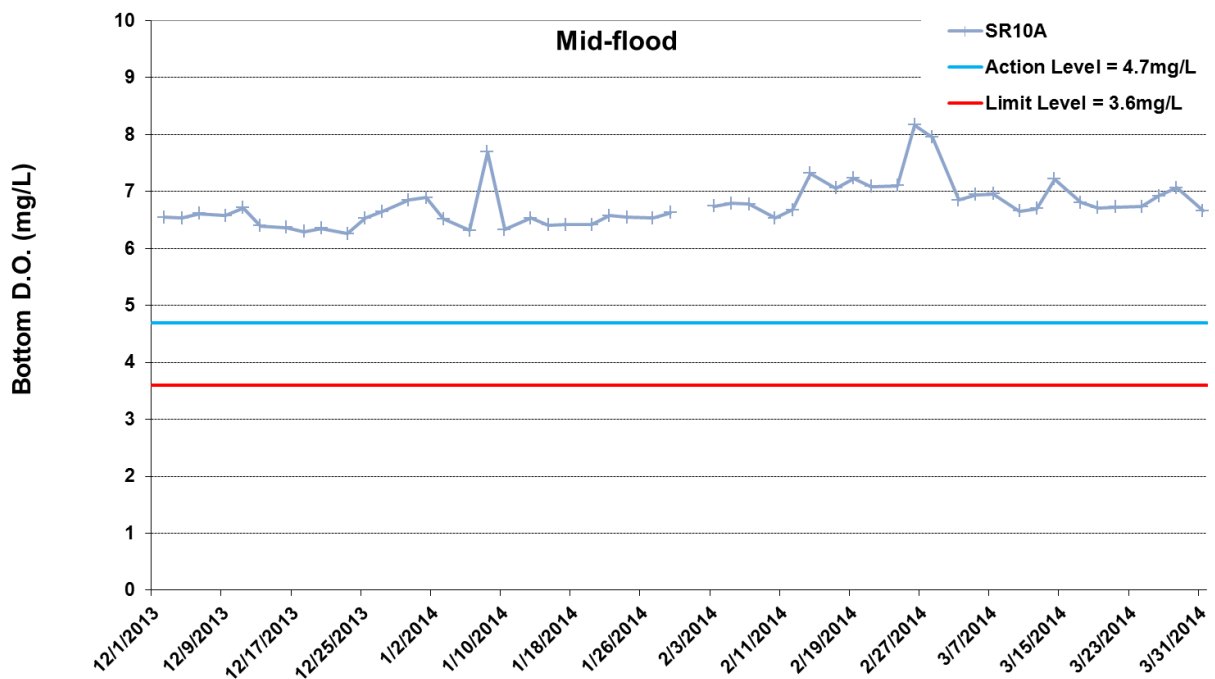
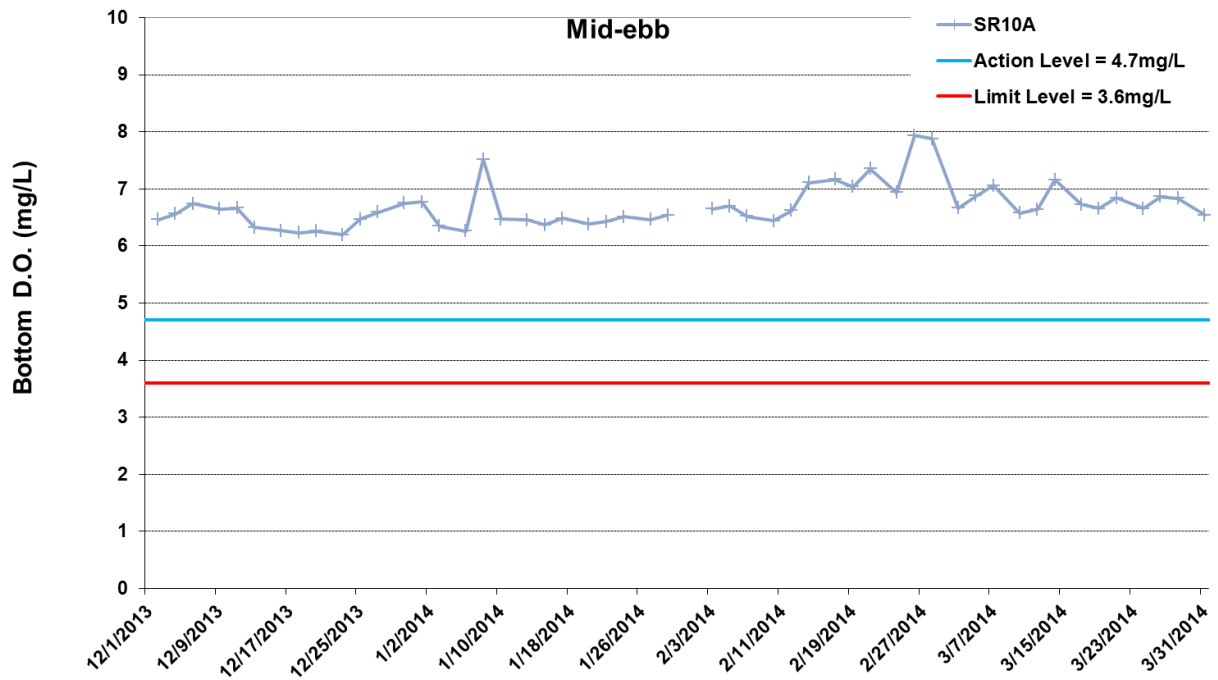


Figure I23 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at SR10A. Note no dredging/ filling works was undertaken on 31 January 2014.



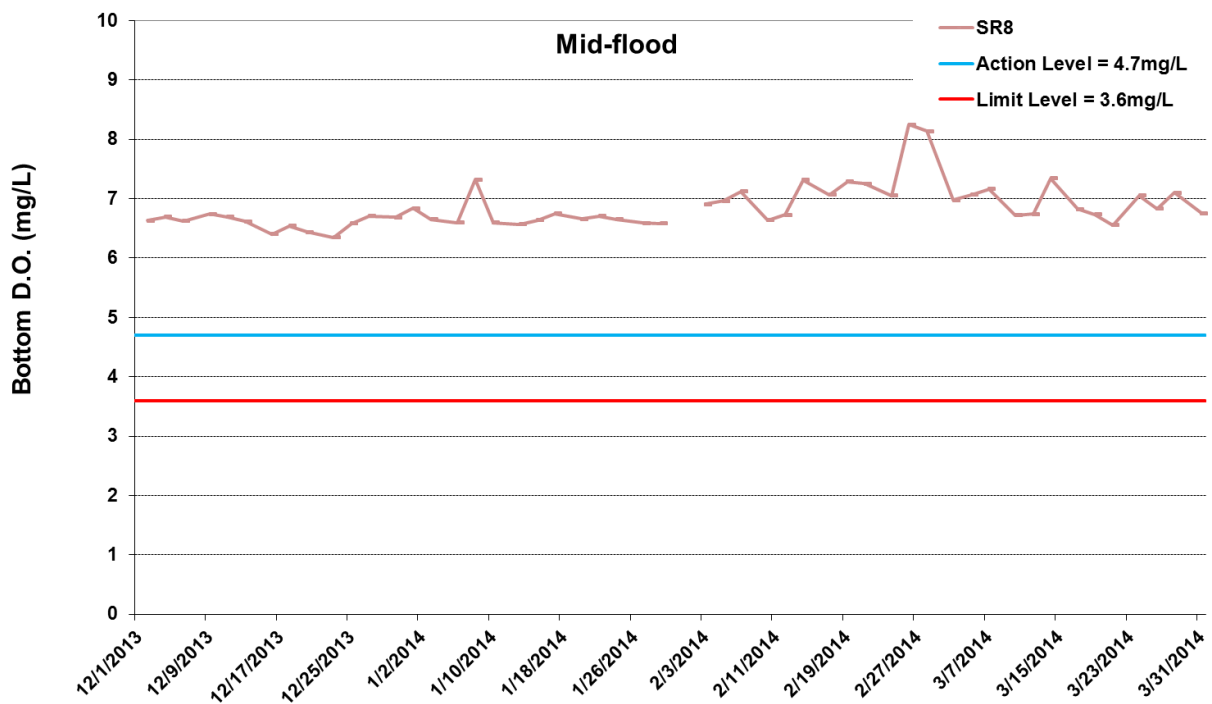
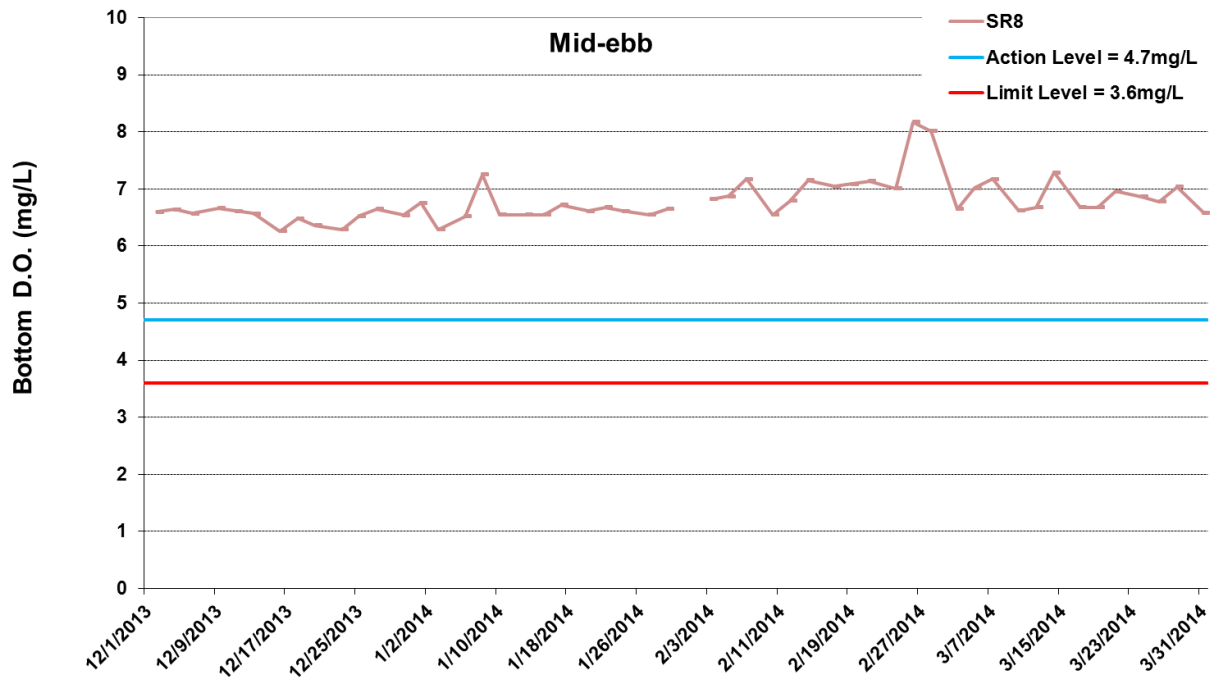


Figure I24 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at SR8. Note no dredging/ filling works was undertaken on 31 January 2014.



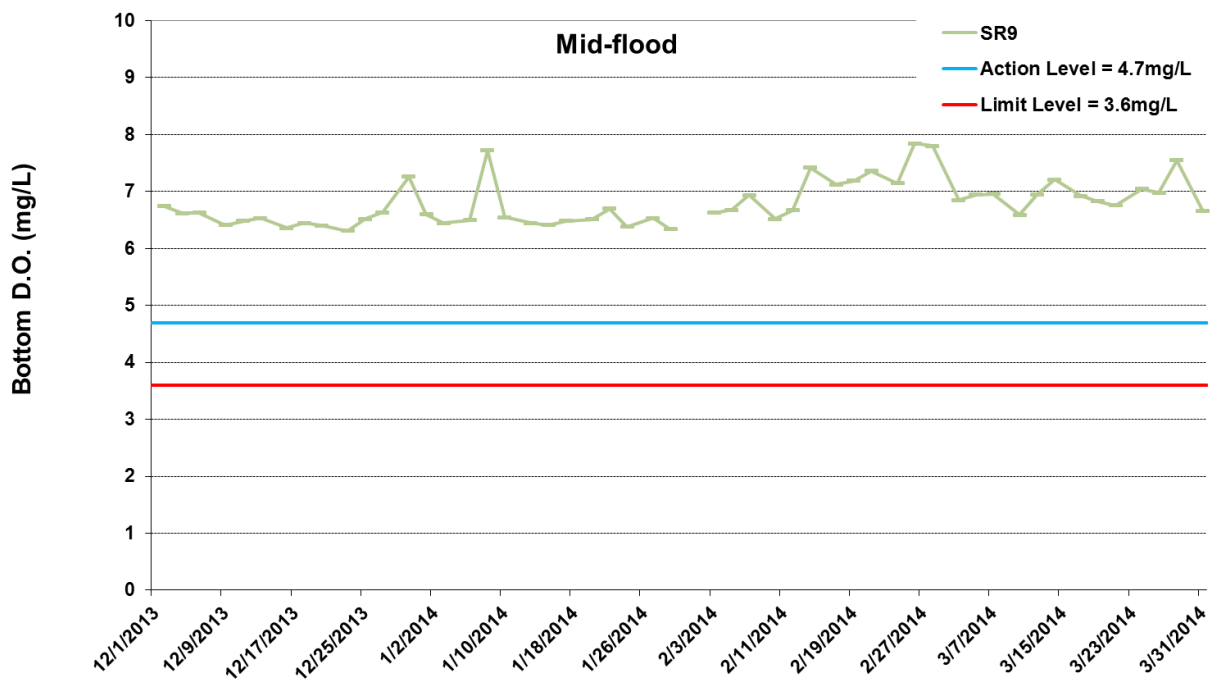
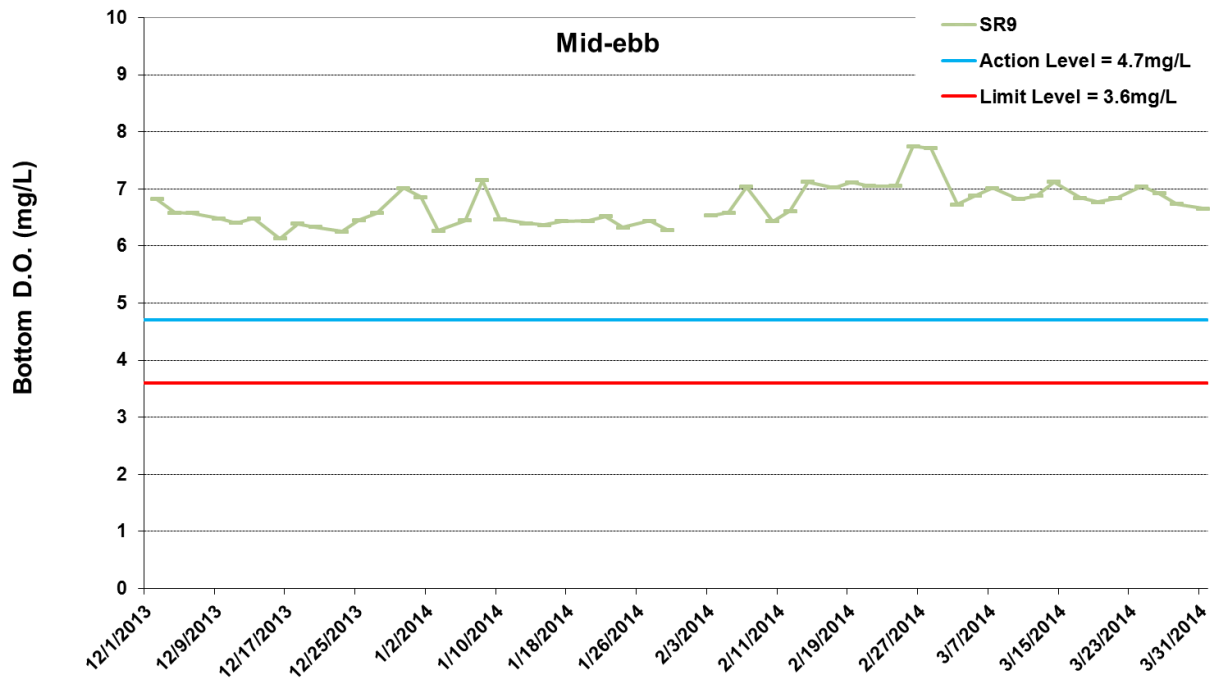


Figure I25 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 December 2013 and 31 March 2014 at SR9. Note no dredging/ filling works was undertaken on 31 January 2014.



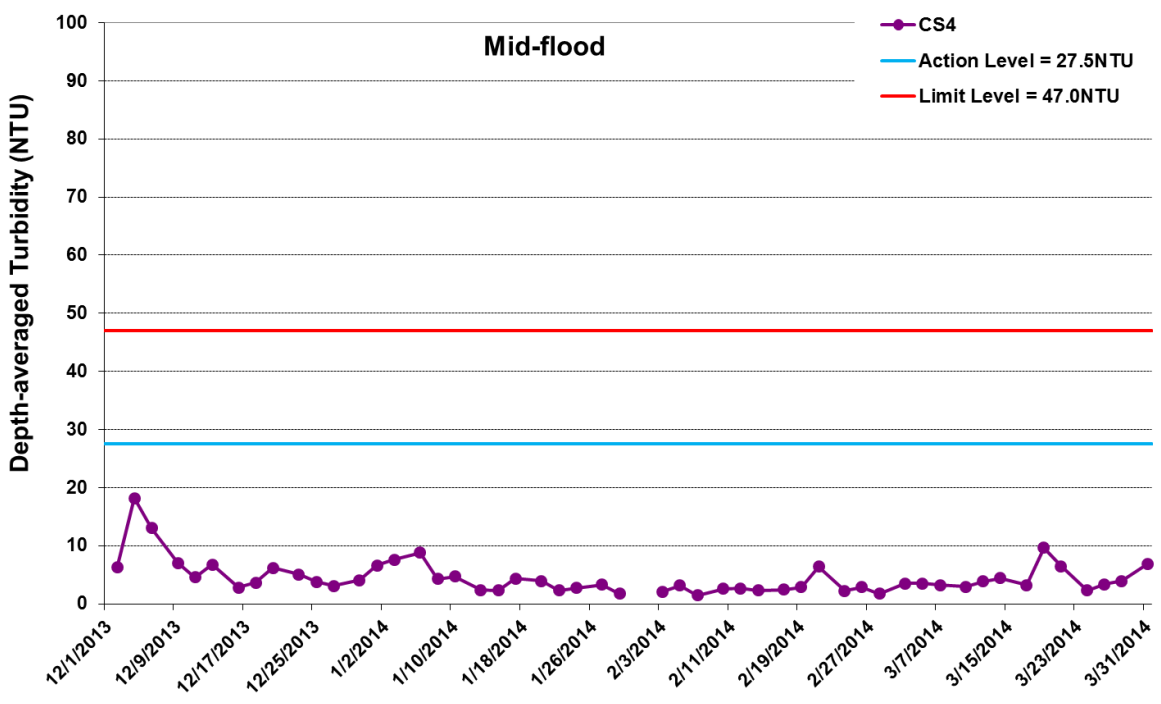
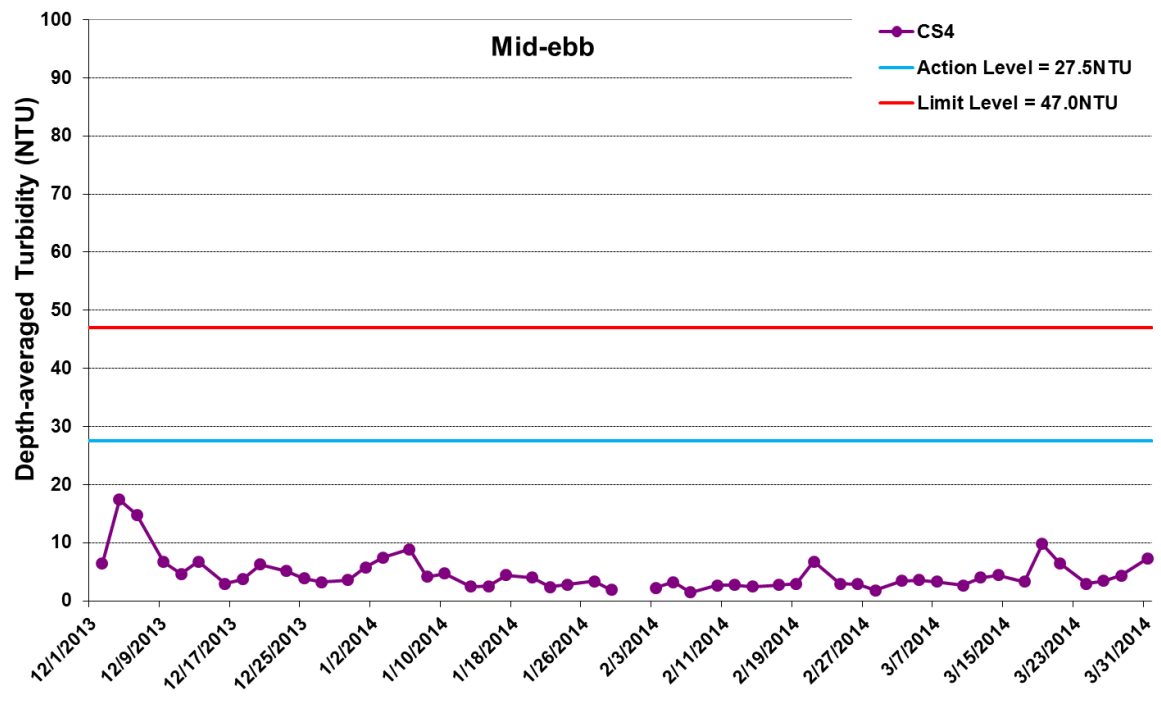


Figure I26 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at CS4. Note no dredging/ filling works was undertaken on 31 January 2014.



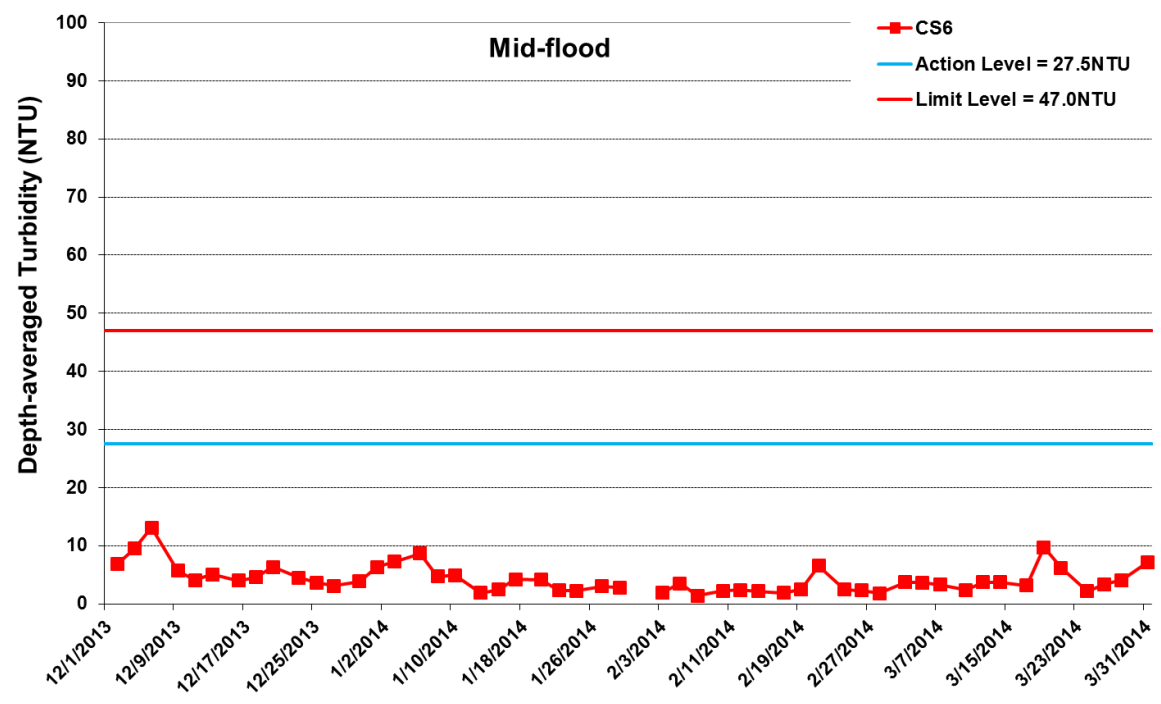
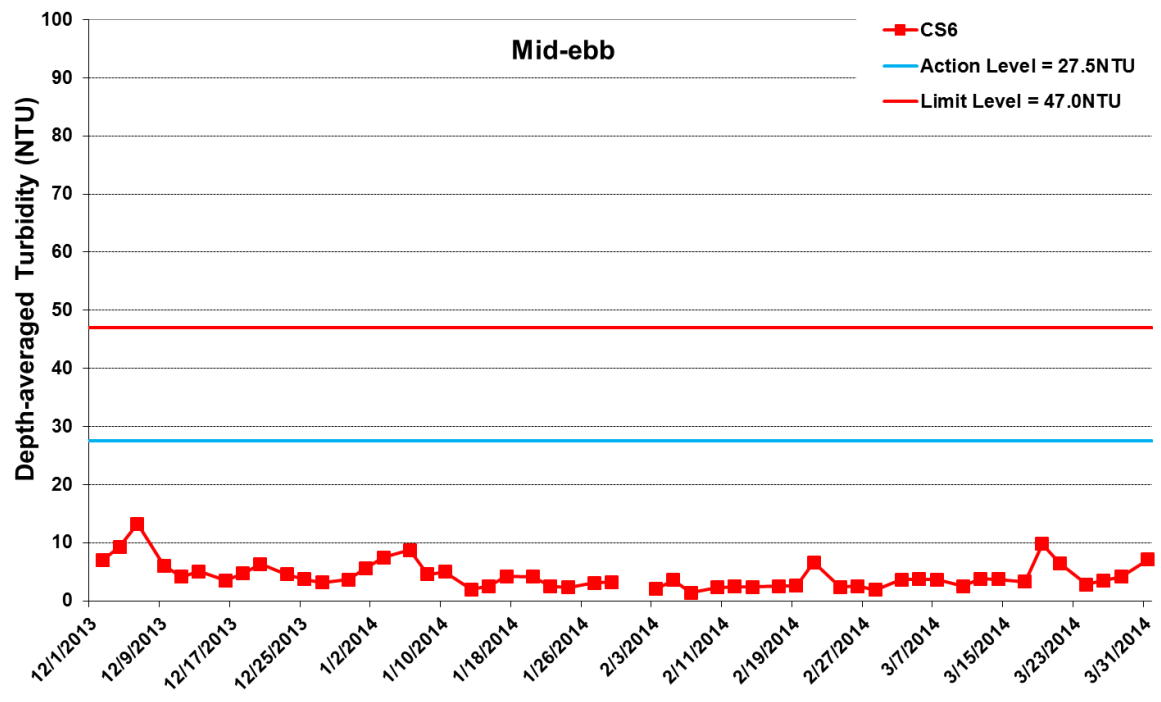


Figure I27 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at CS6. Note no dredging/ filling works was undertaken on 31 January 2014.



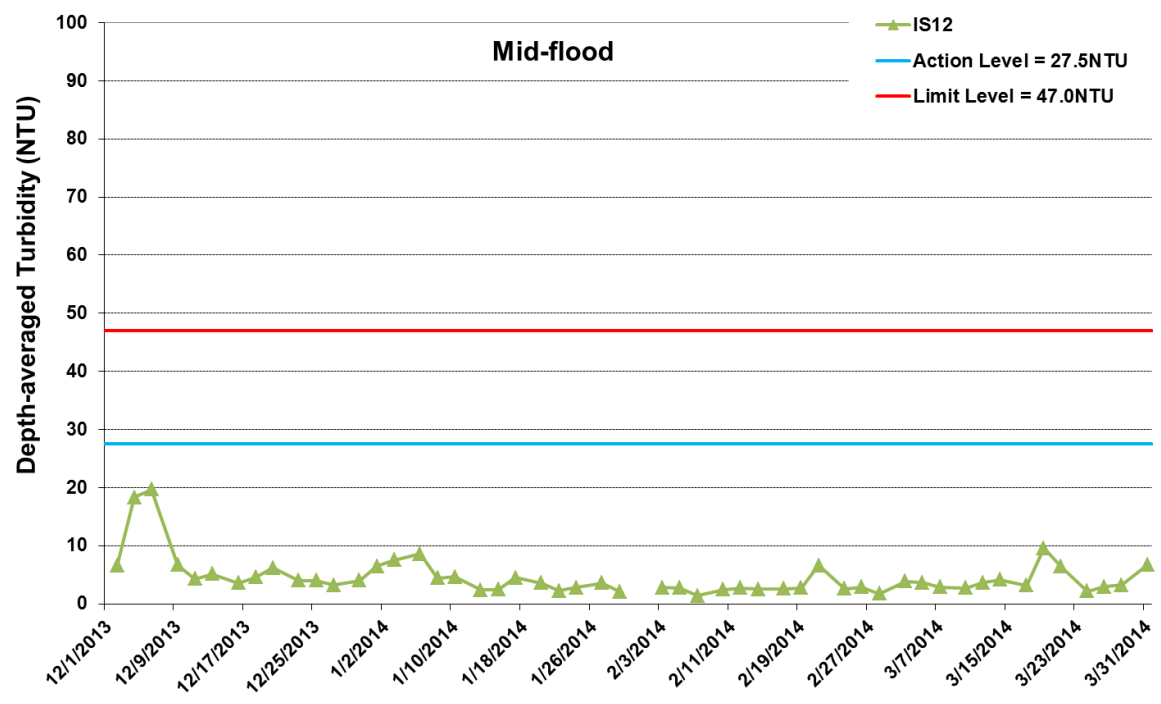
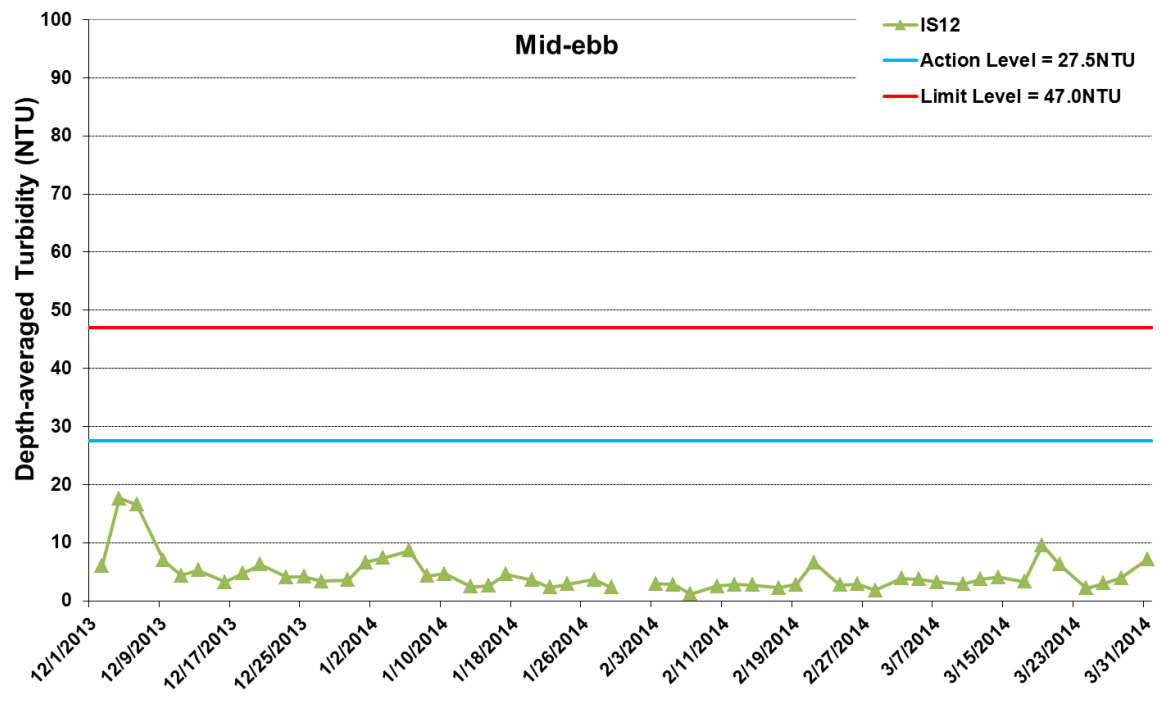


Figure I28 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at IS12. Note no dredging/ filling works was undertaken on 31 January 2014.



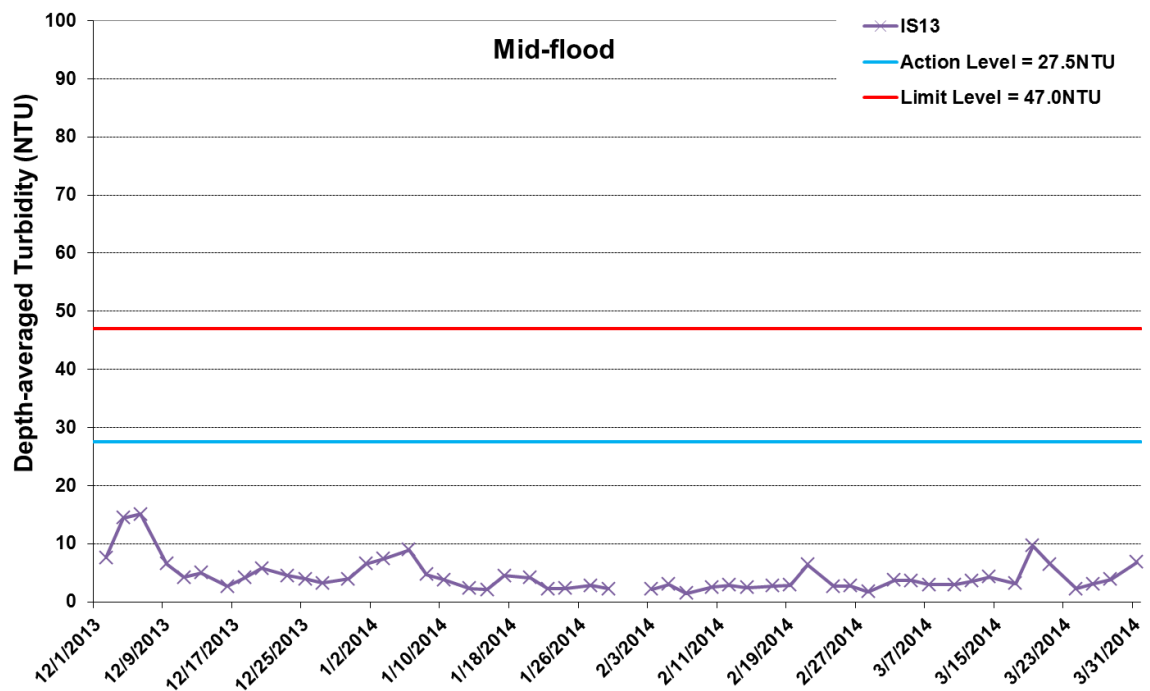
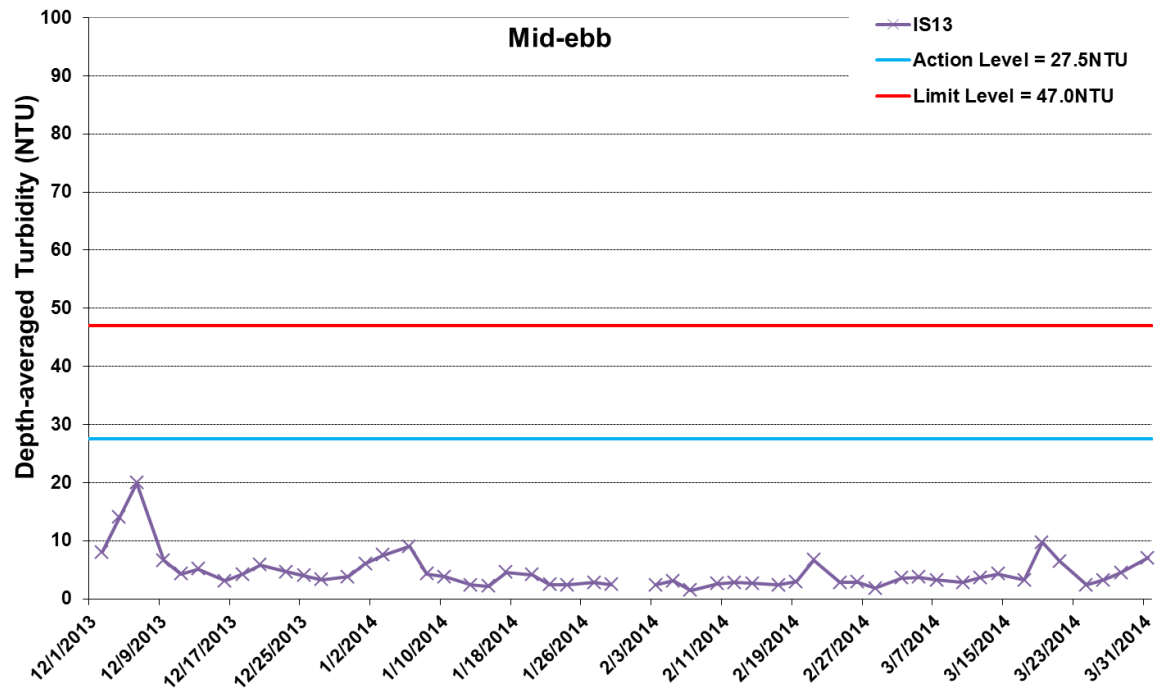


Figure I29 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at IS13. Note no dredging/ filling works was undertaken on 31 January 2014.



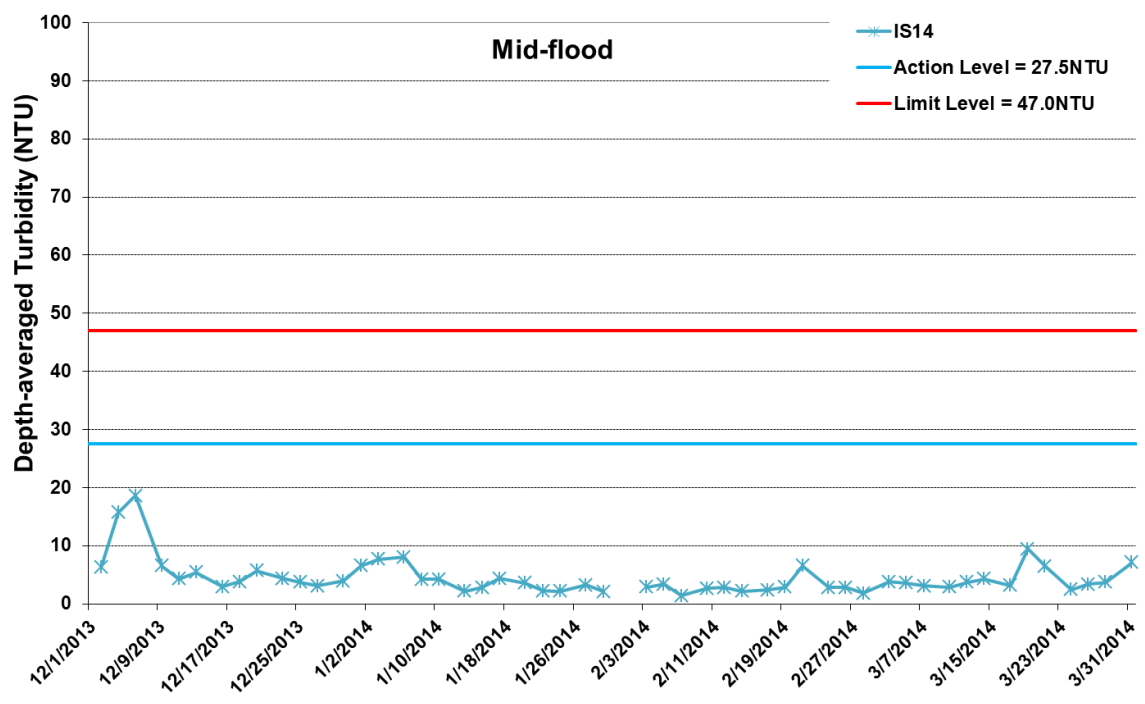
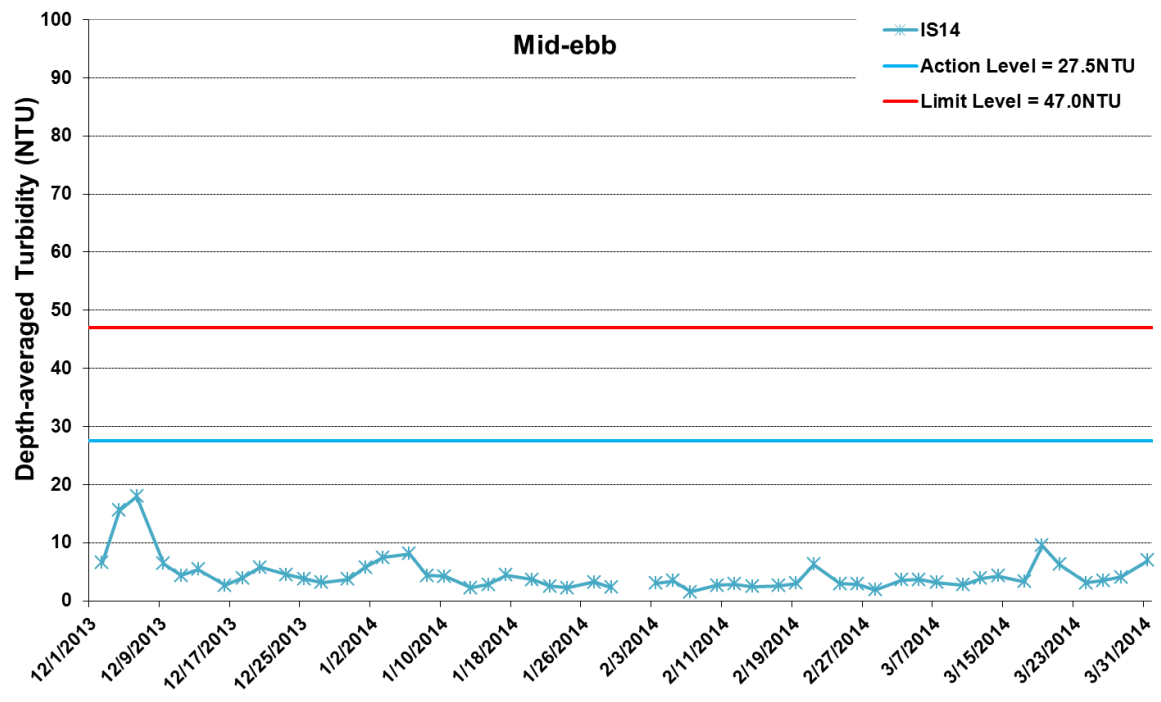


Figure I30 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at IS14. Note no dredging/ filling works was undertaken on 31 January 2014.



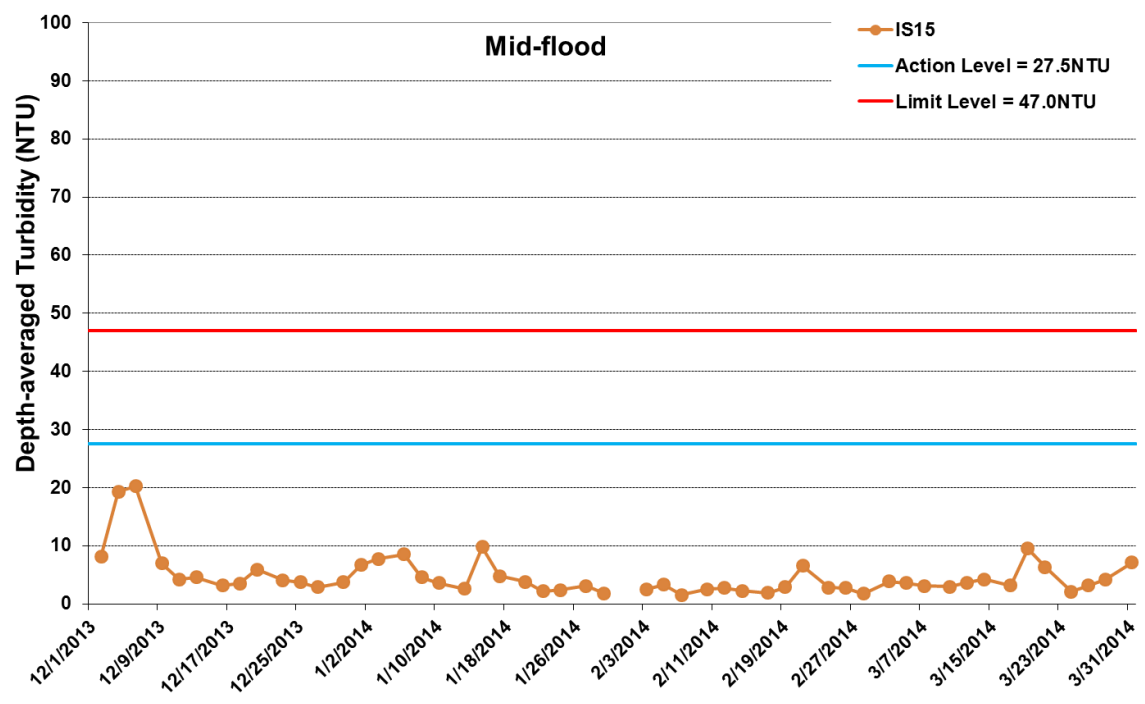
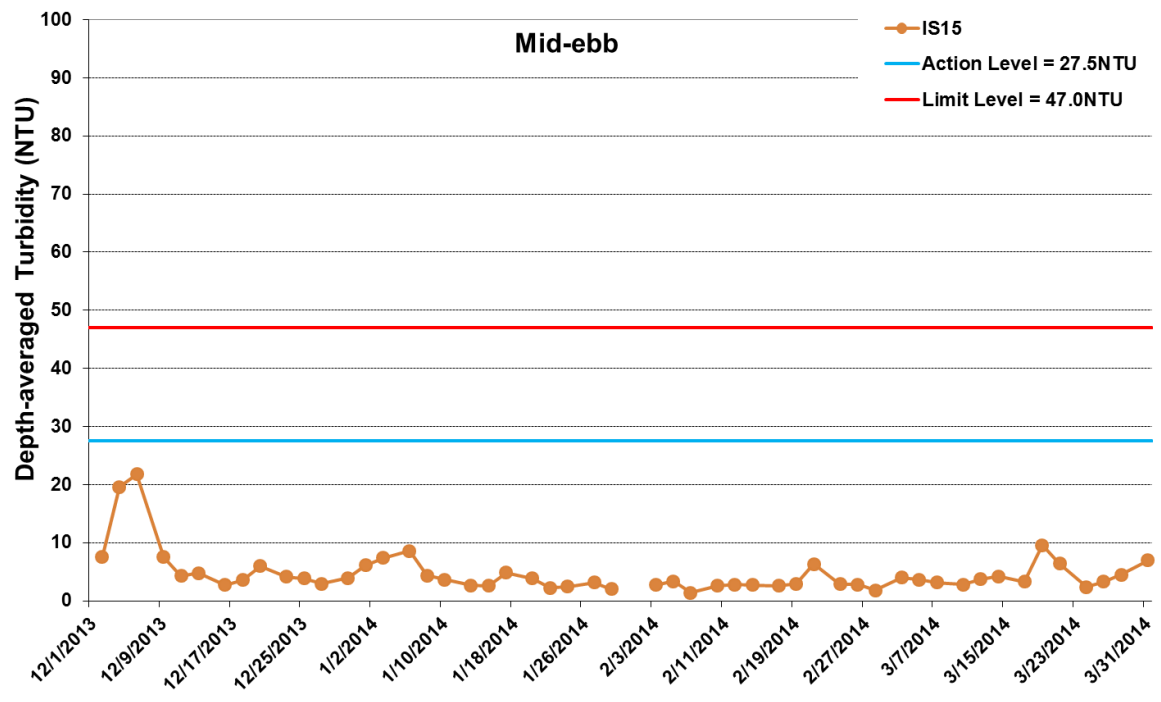


Figure I31 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at IS15. Note no dredging/ filling works was undertaken on 31 January 2014.



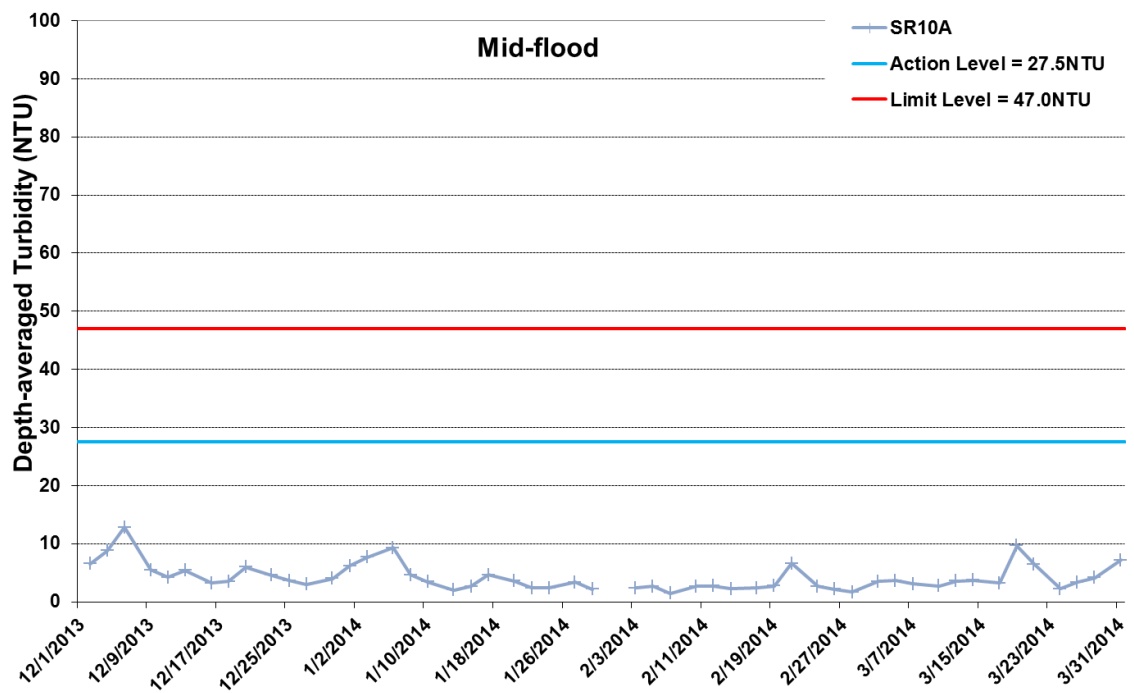
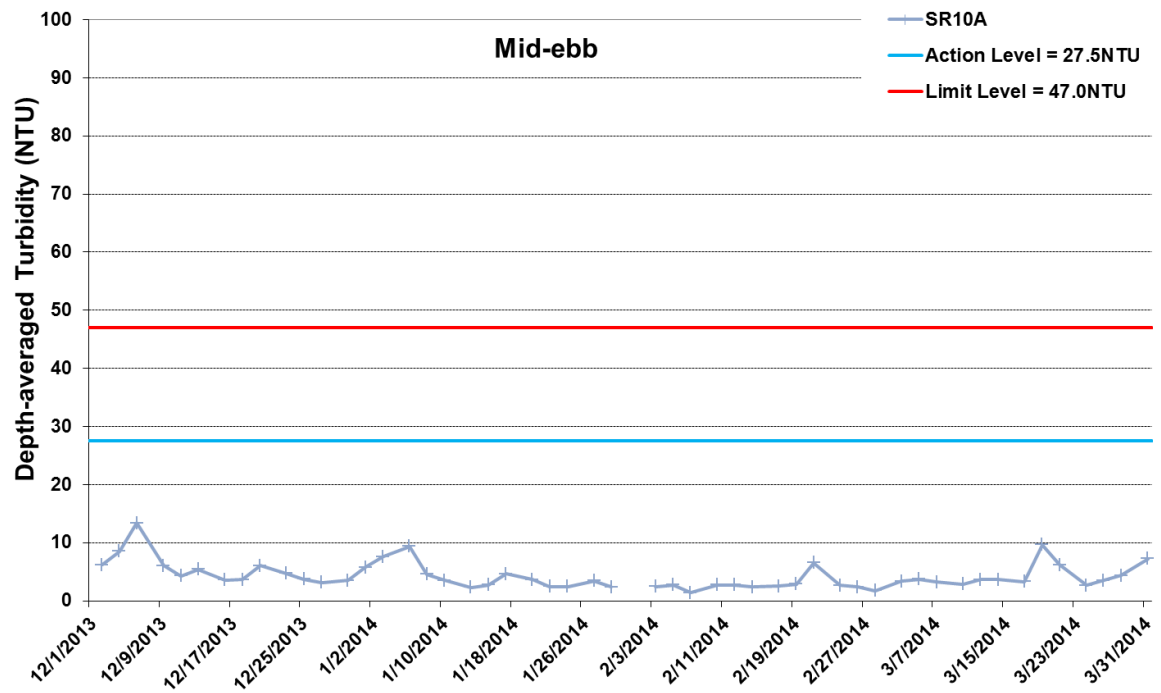


Figure I32 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at SR10A. Note no dredging/ filling works was undertaken on 31 January 2014.



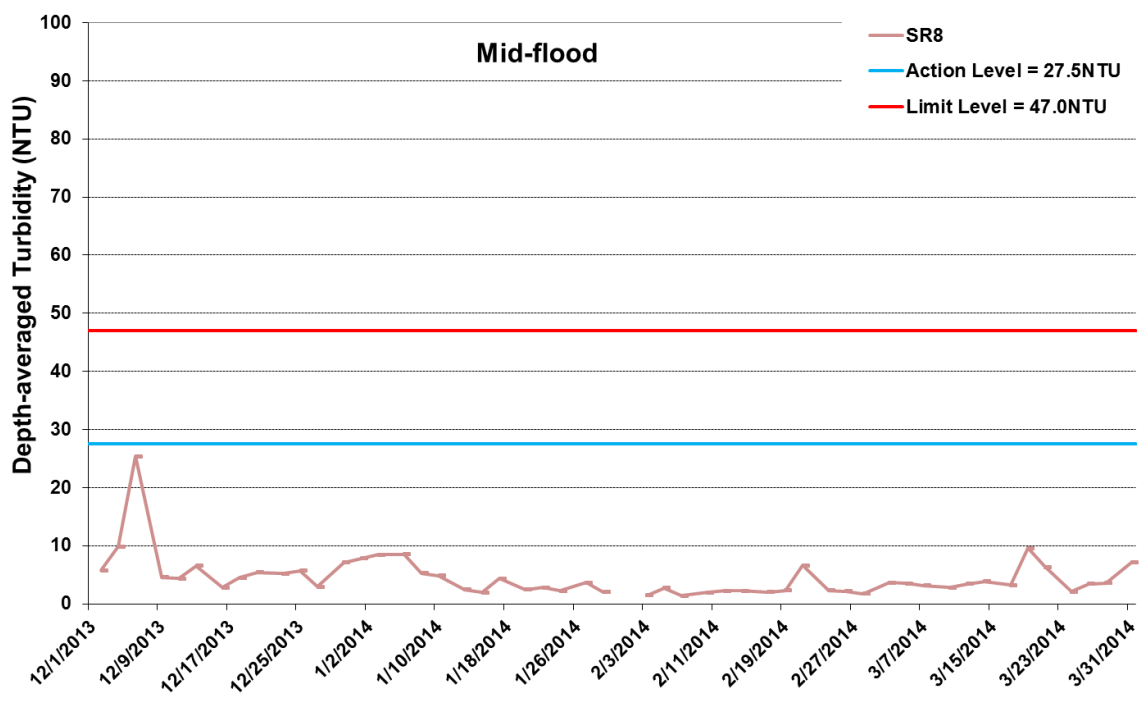
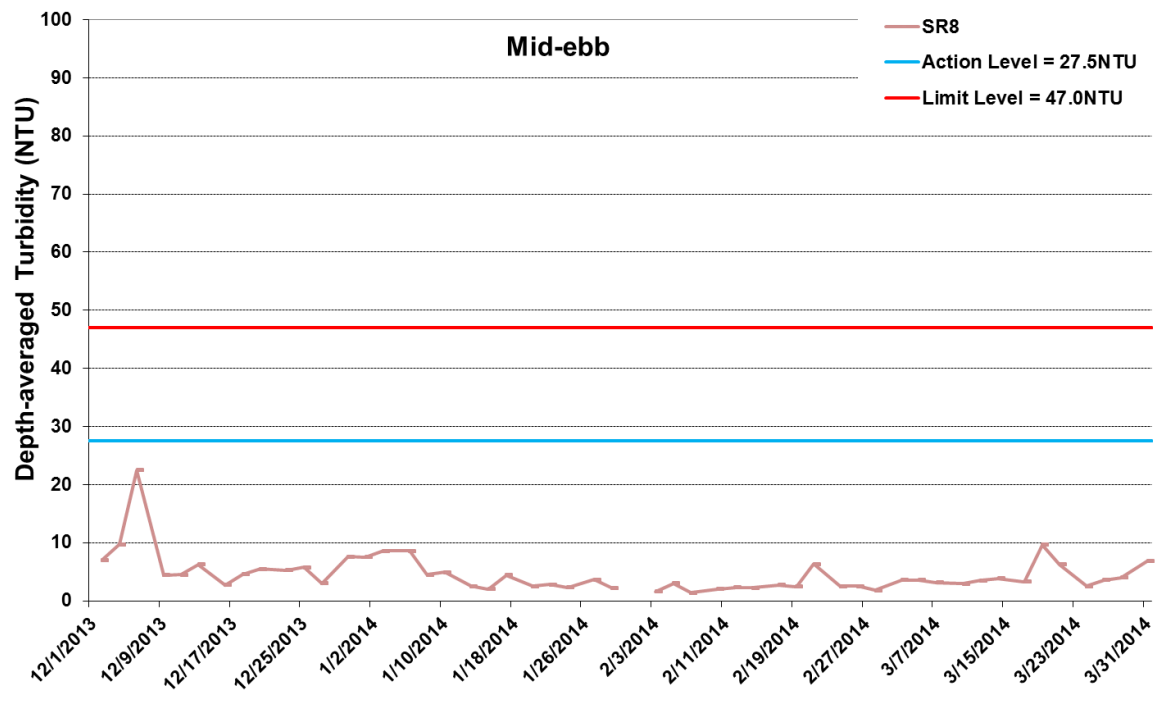


Figure I33 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at SR8. Note no dredging/ filling works was undertaken on 31 January 2014.



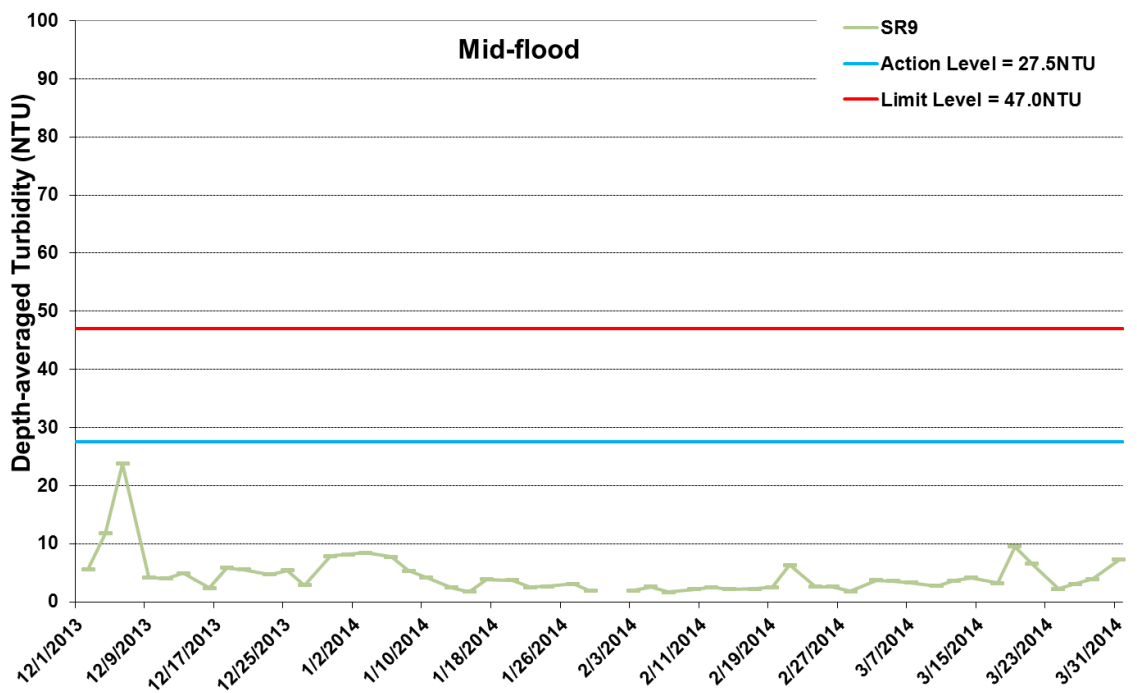
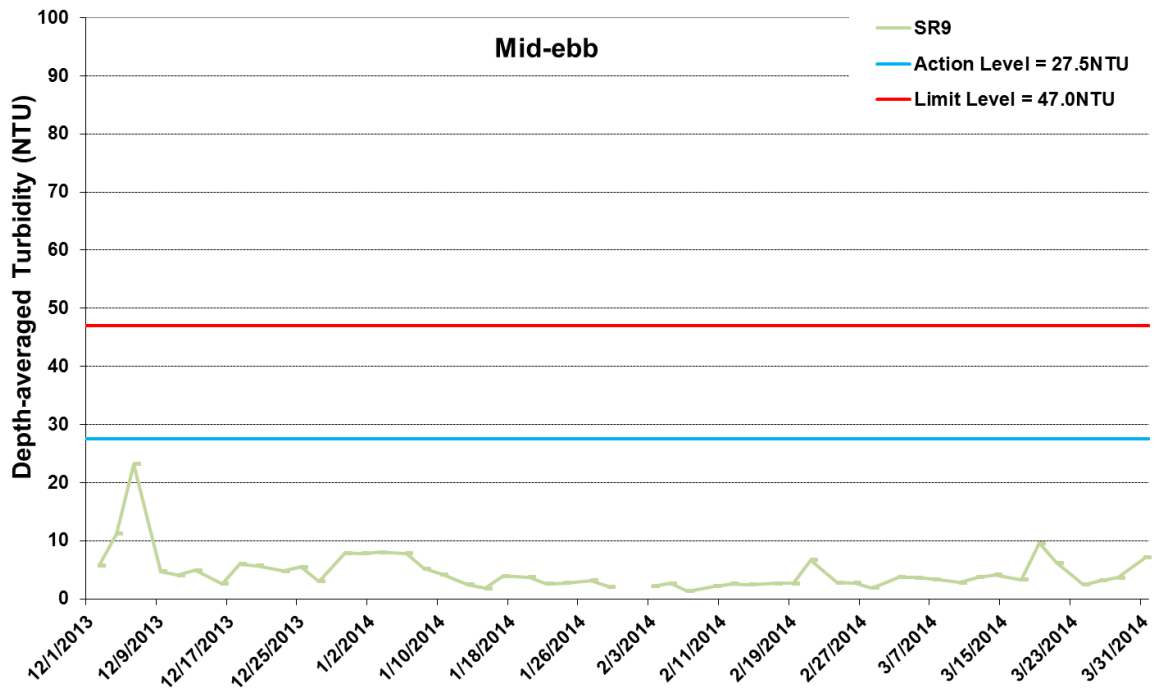


Figure I34 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 December 2013 and 31 March 2014 at SR9. Note no dredging/ filling works was undertaken on 31 January 2014.



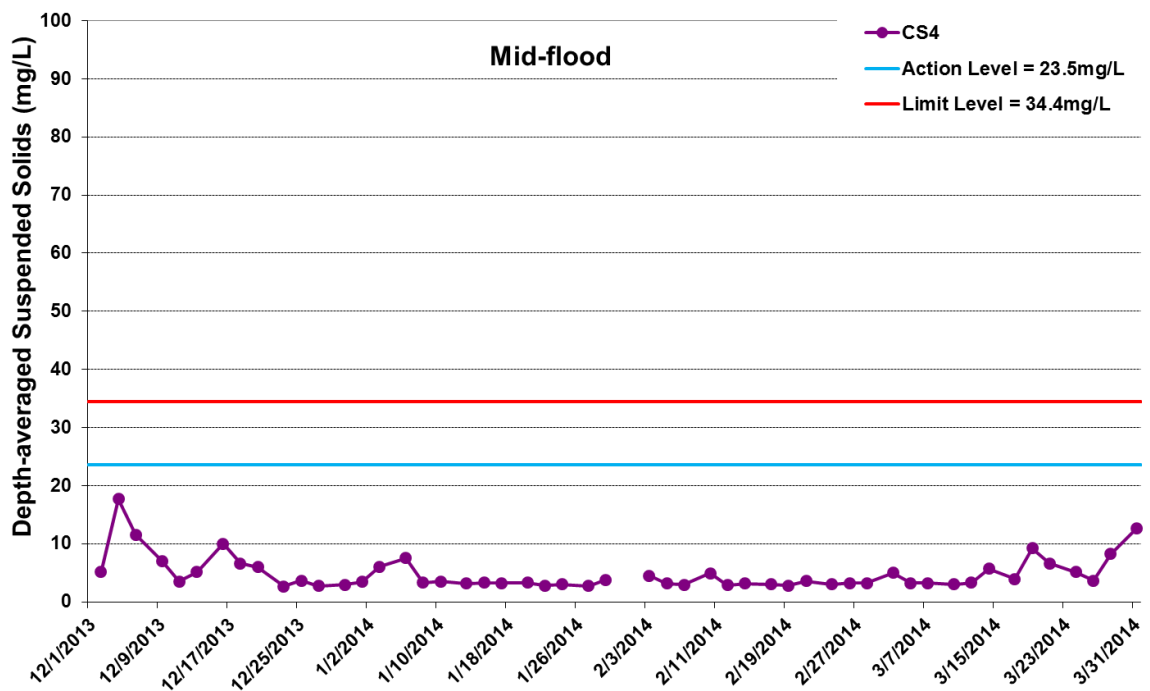
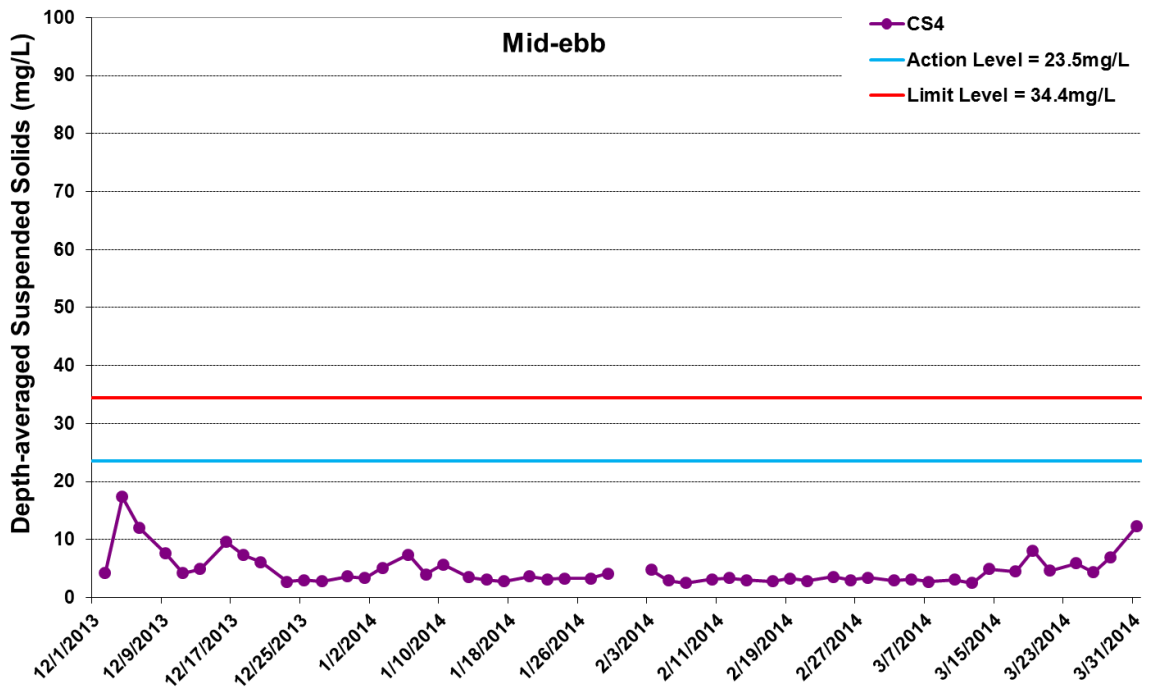


Figure I35 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at CS4. Note no dredging/ filling works was undertaken on 31 January 2014.



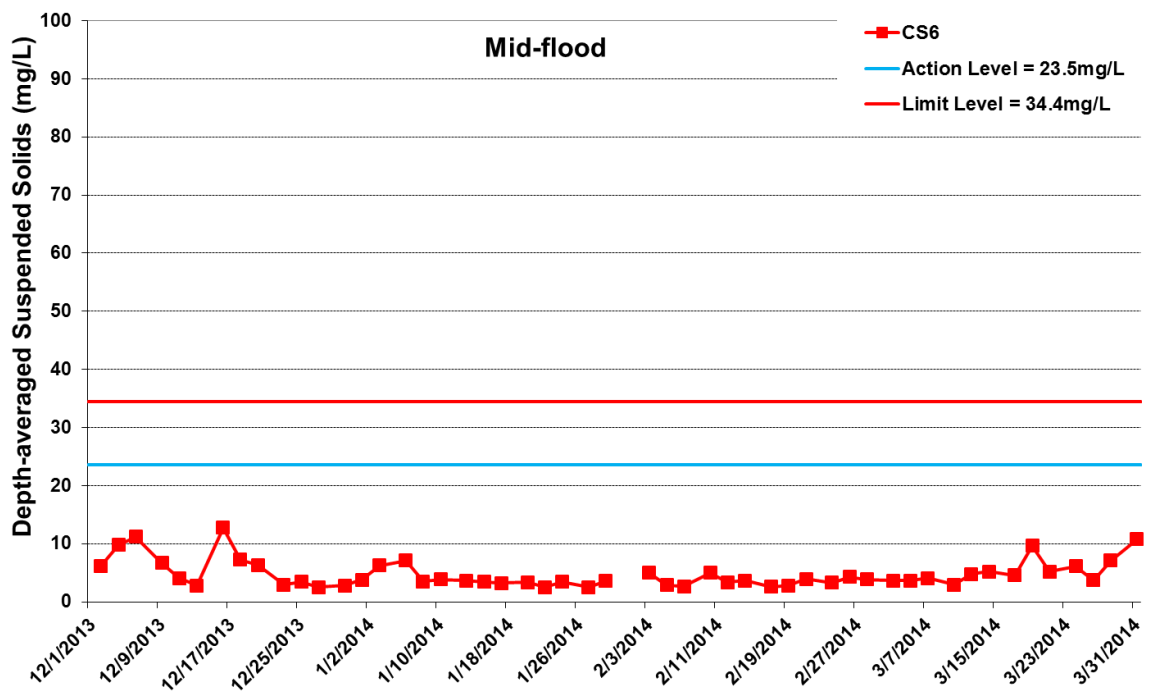
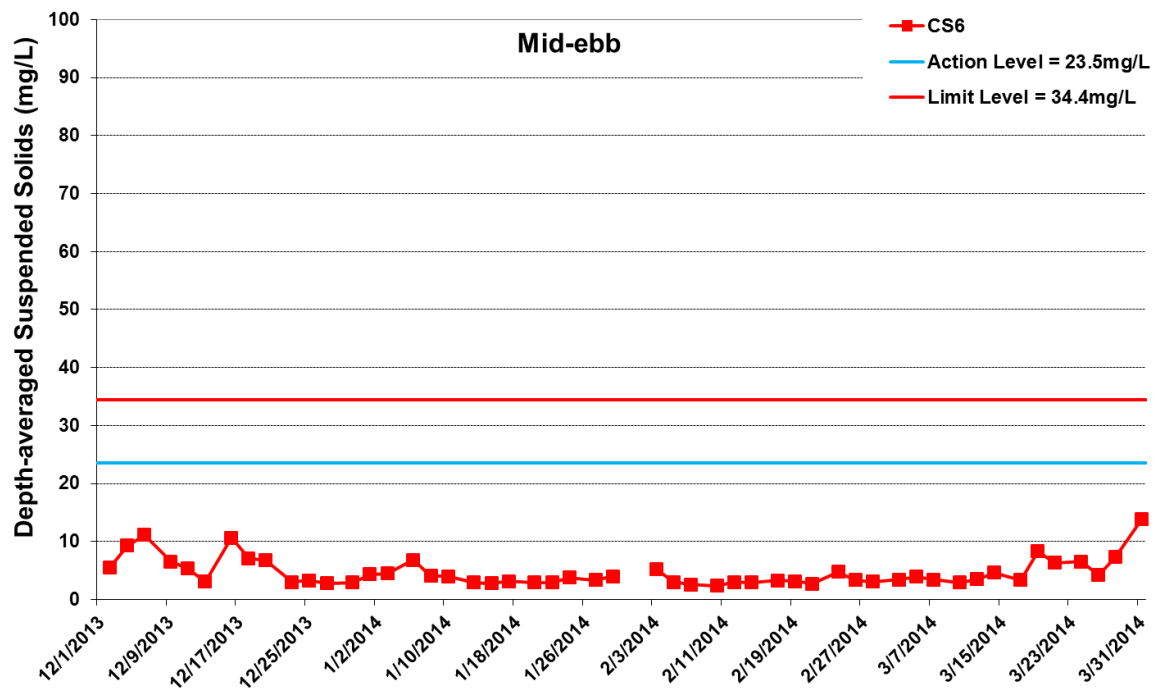


Figure I36 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at CS6. Note no dredging/ filling works was undertaken on 31 January 2014.



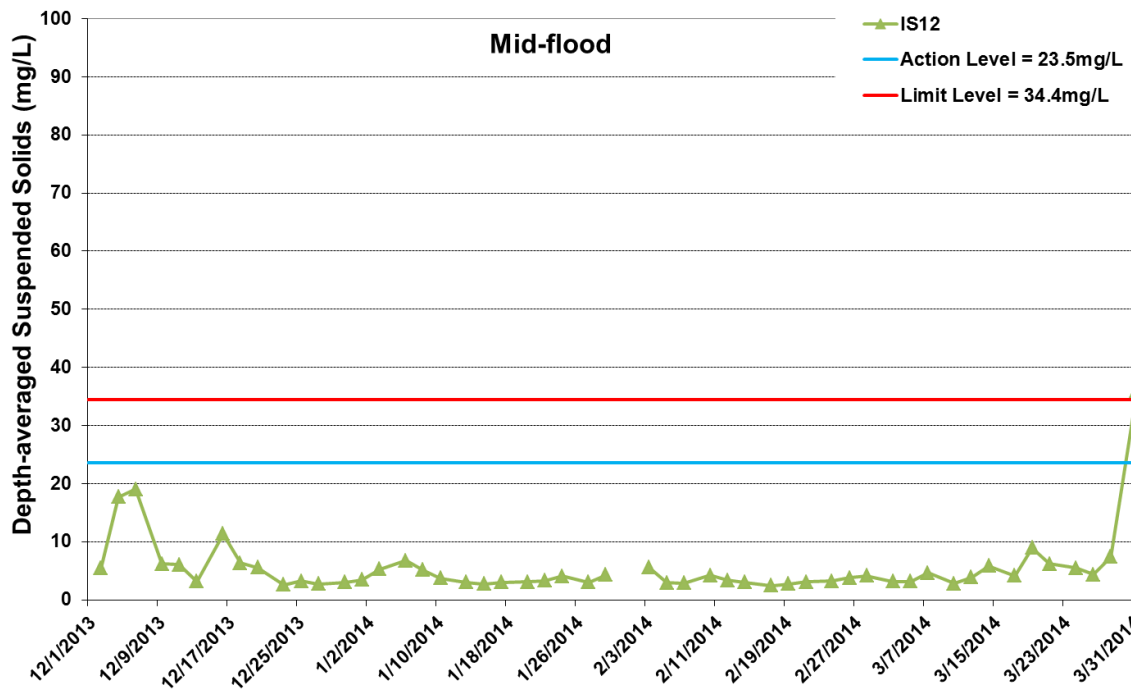
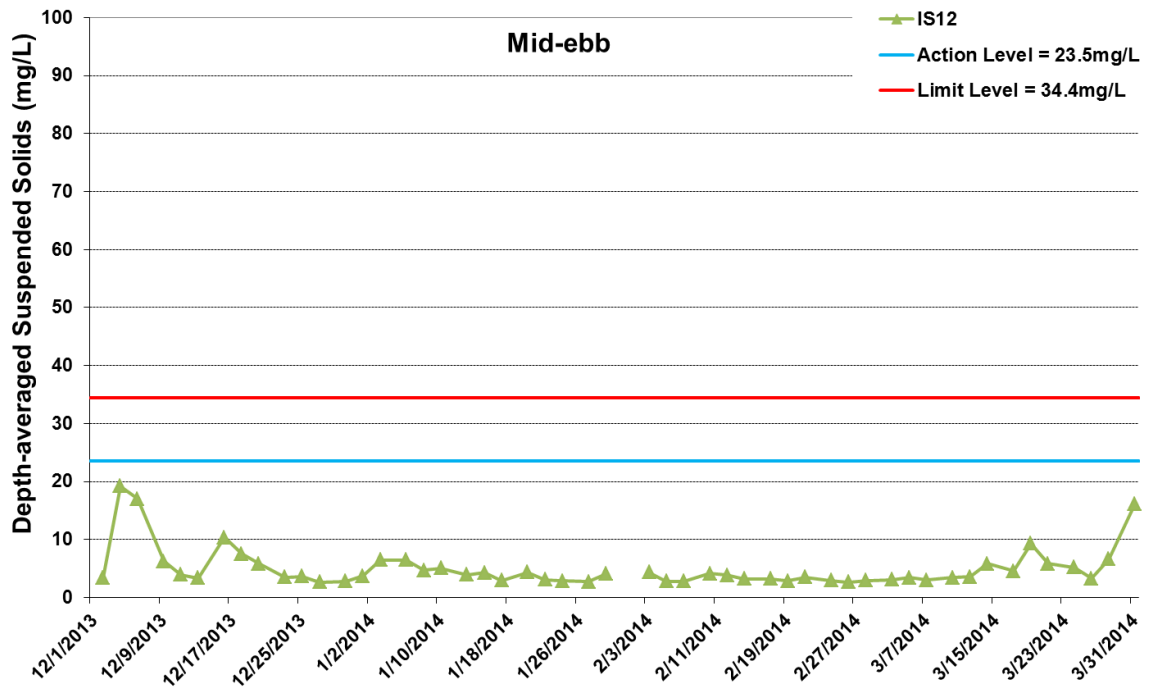


Figure I37 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at IS12. Note no dredging/ filling works was undertaken on 31 January 2014.



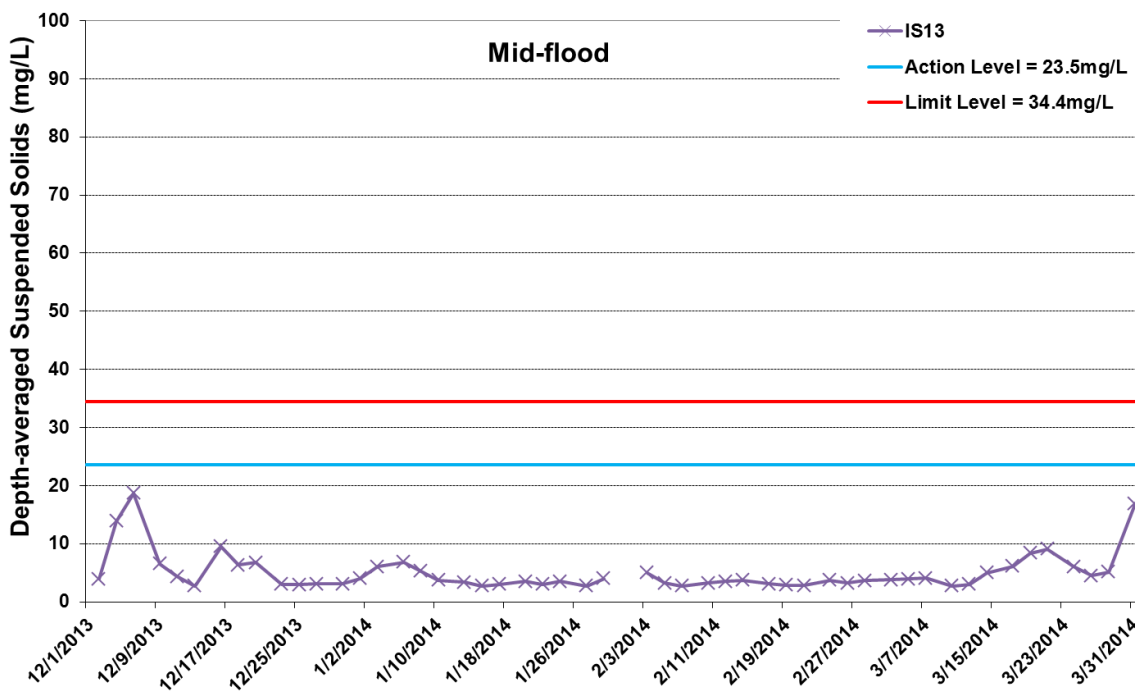
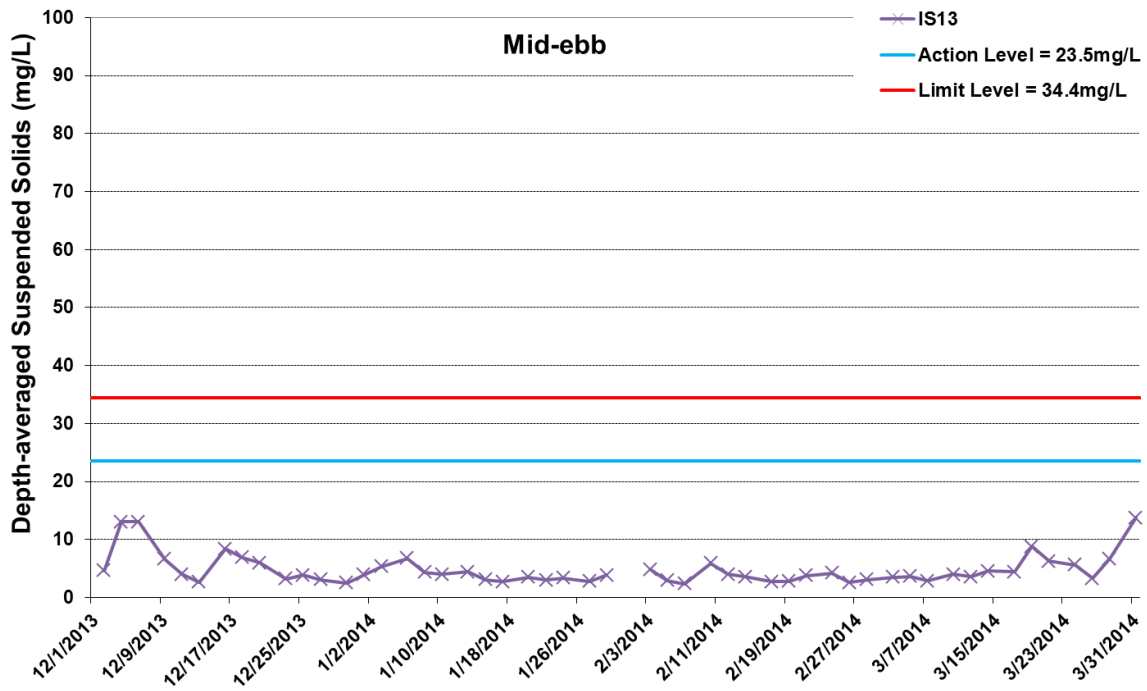


Figure I38 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at IS13. Note no dredging/ filling works was undertaken on 31 January 2014.



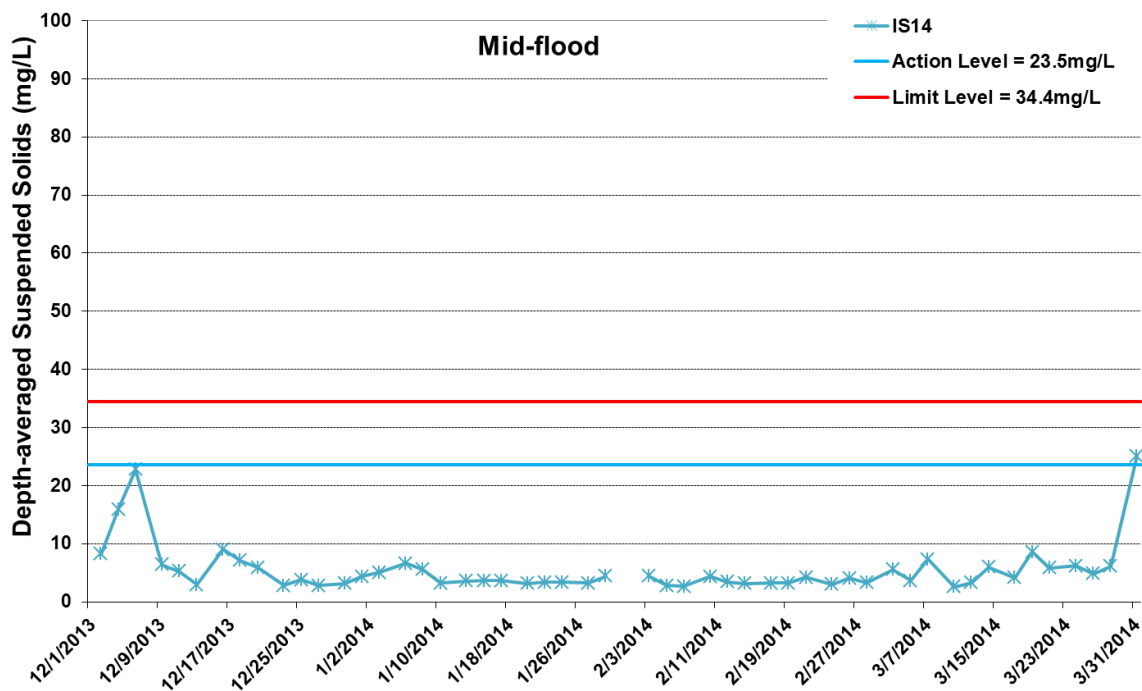
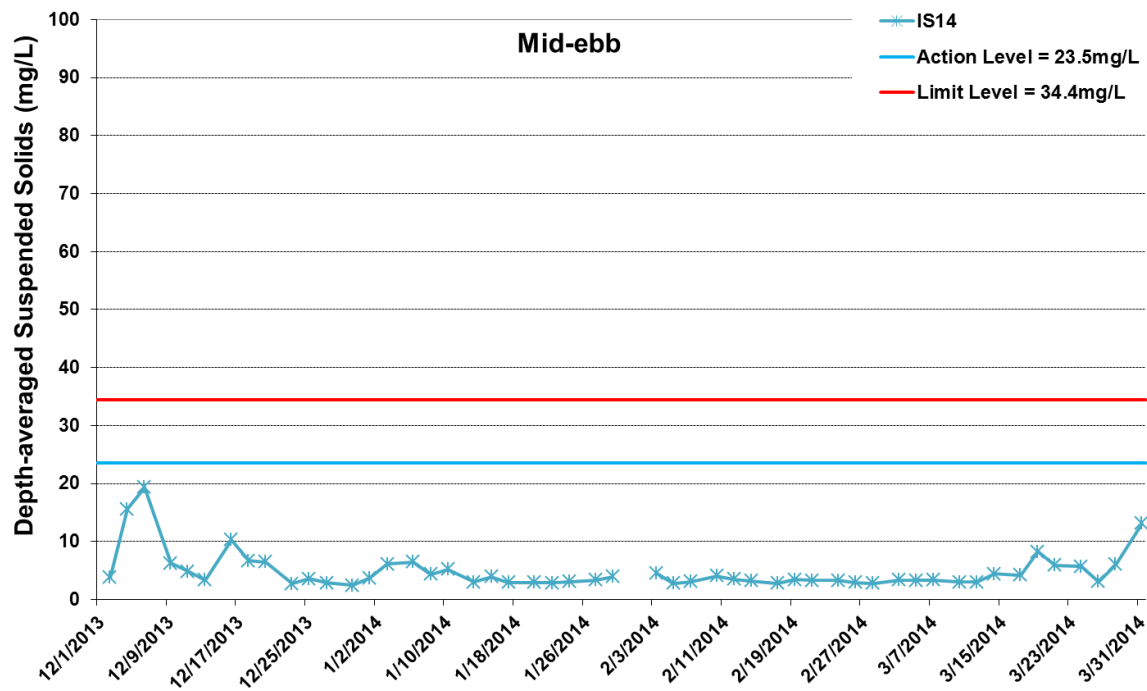


Figure I39 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at IS14. Note no dredging/ filling works was undertaken on 31 January 2014.



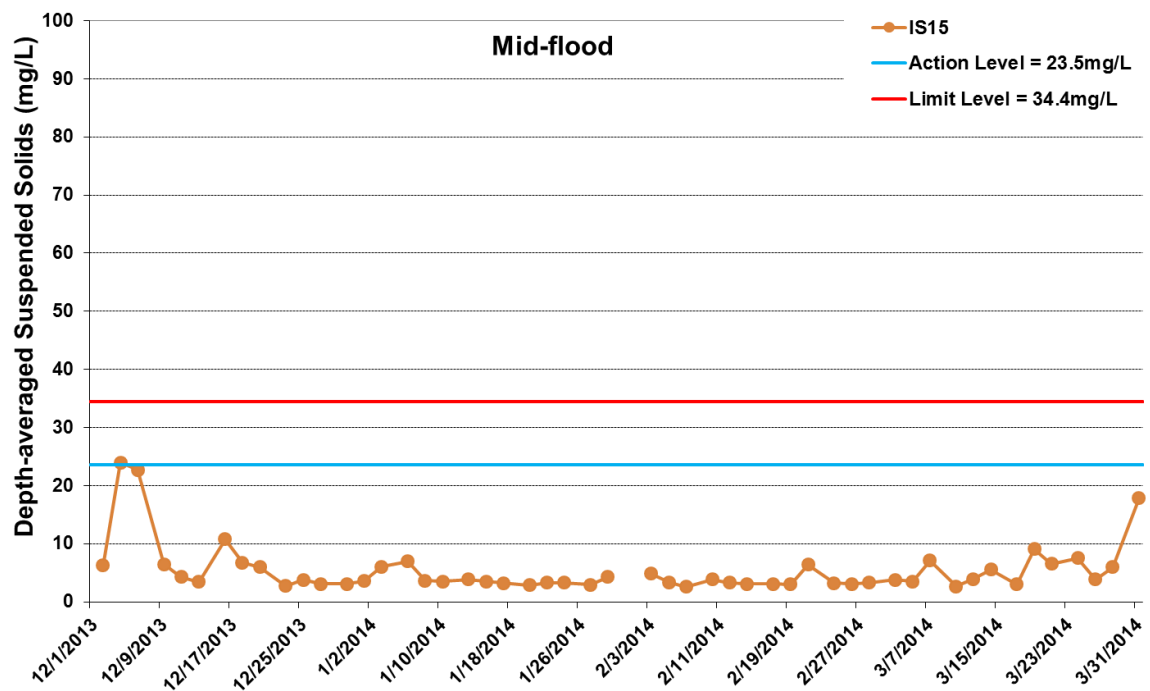
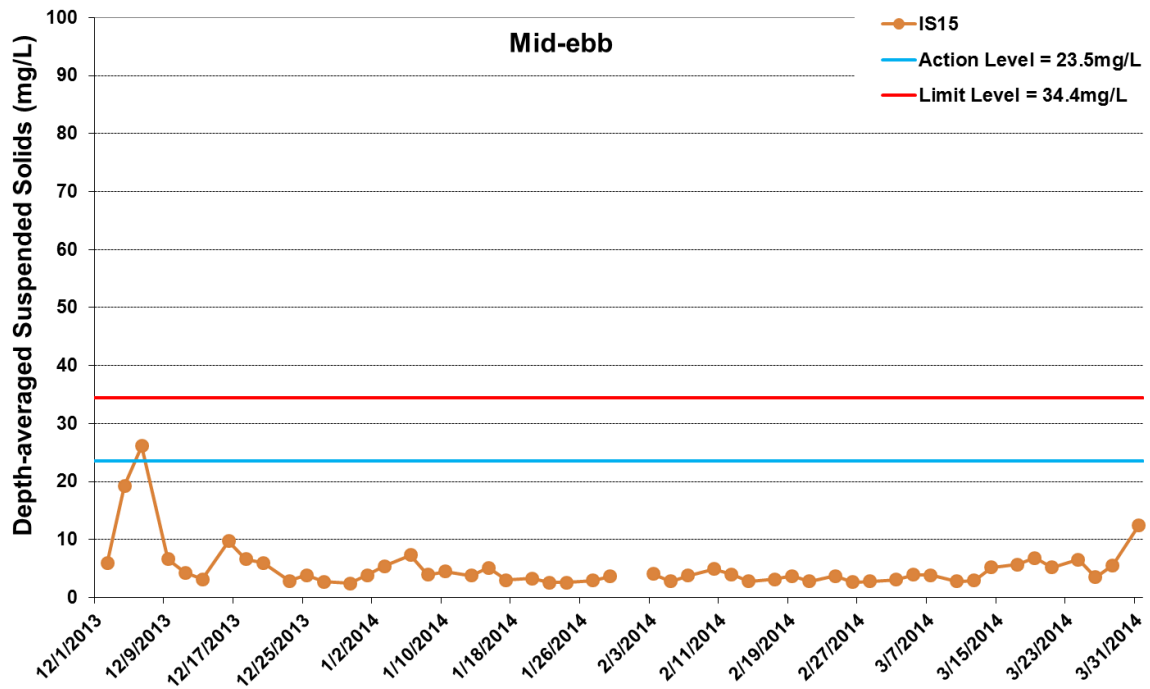


Figure I40 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at IS15. Note no dredging/ filling works was undertaken on 31 January 2014.



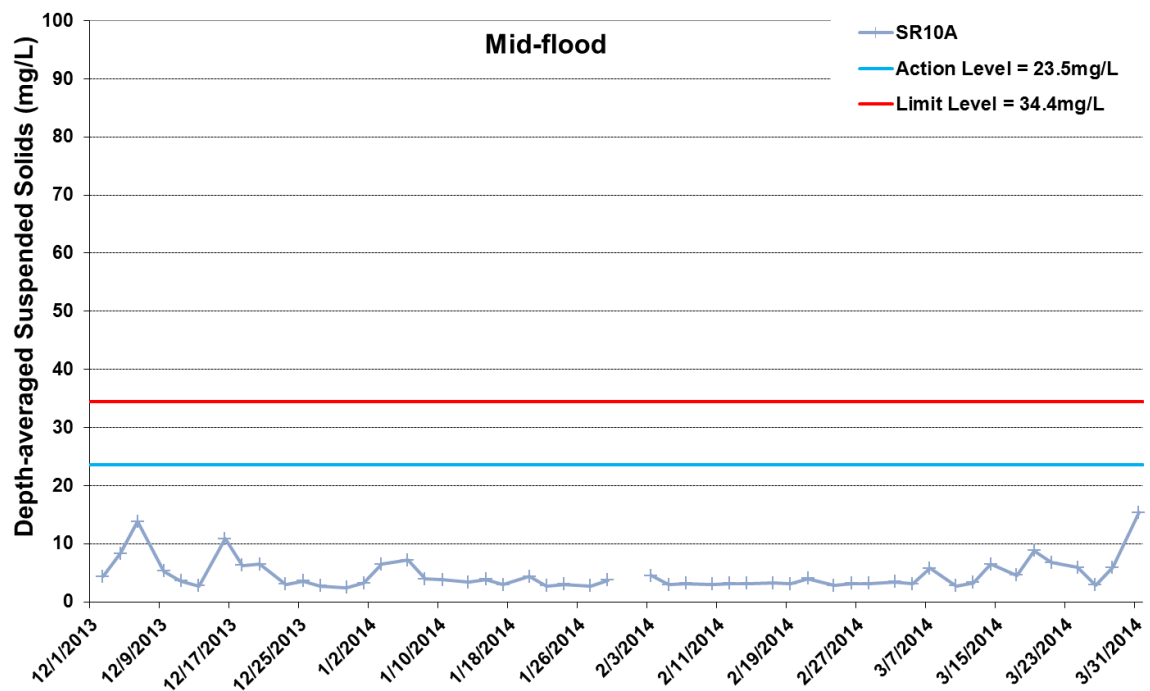
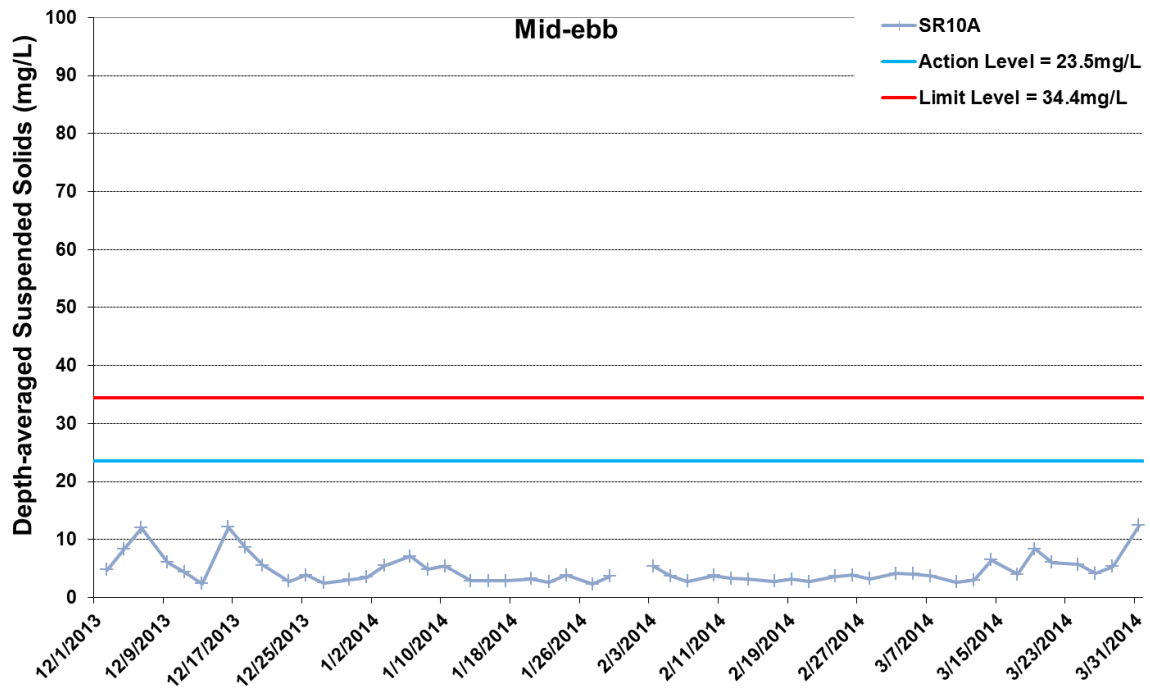


Figure I41 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at SR10A. Note no dredging/ filling works was undertaken on 31 January 2014.



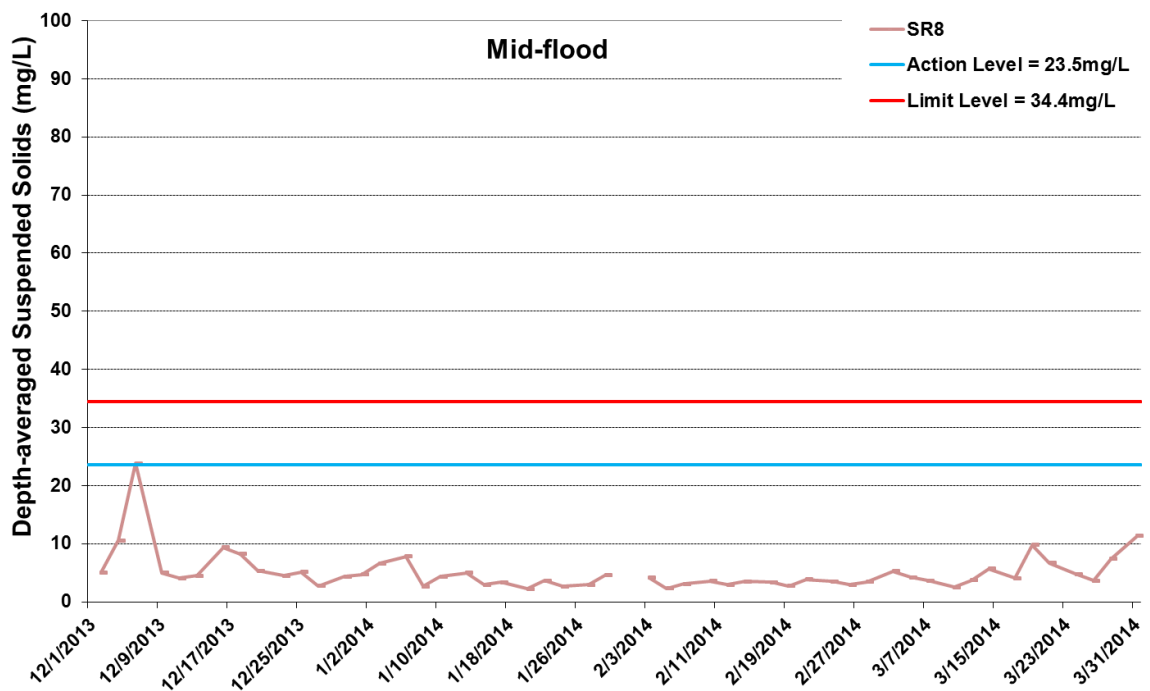
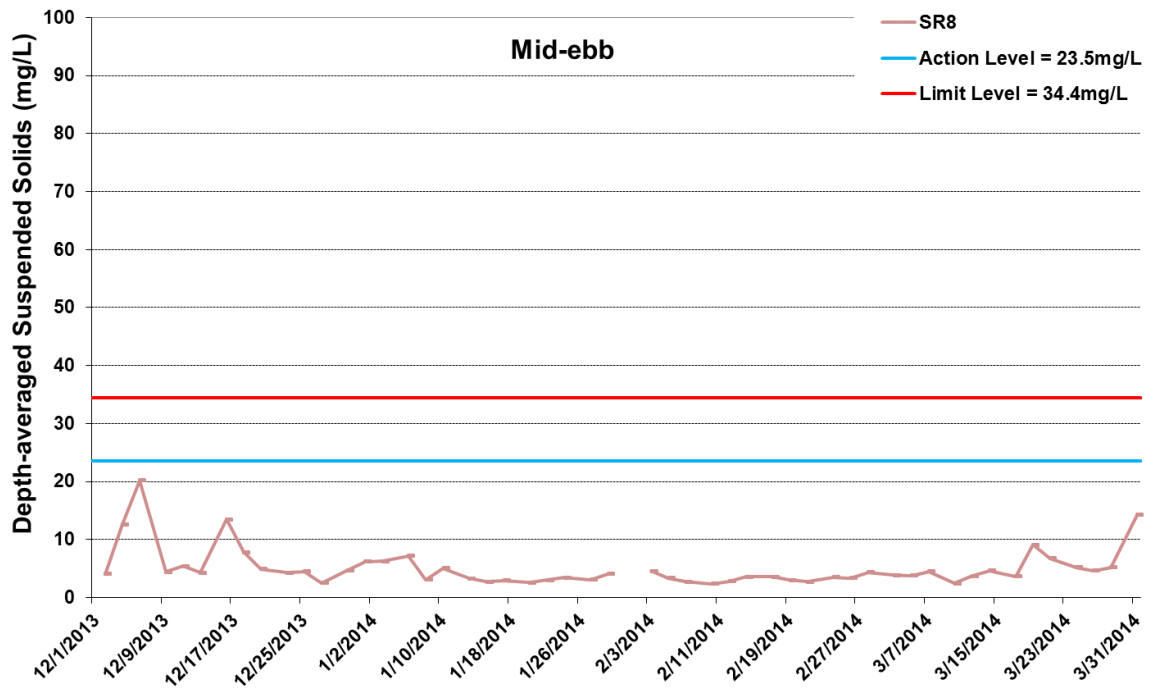


Figure I42 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at SR8. Note no dredging/ filling works was undertaken on 31 January 2014.



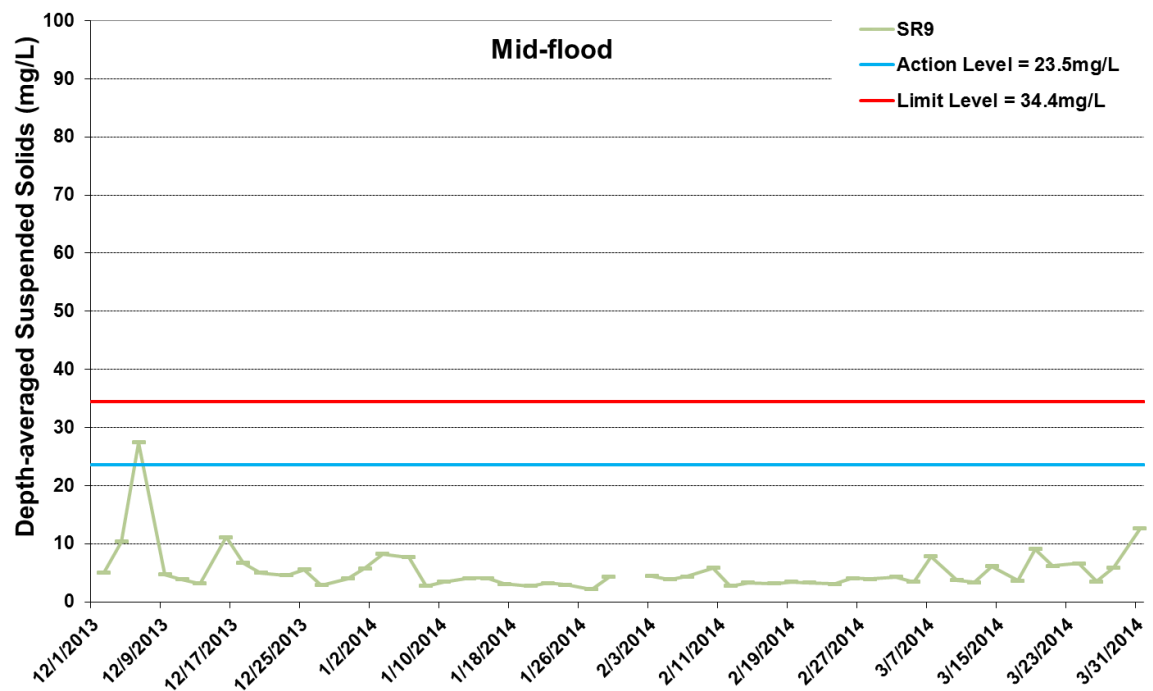
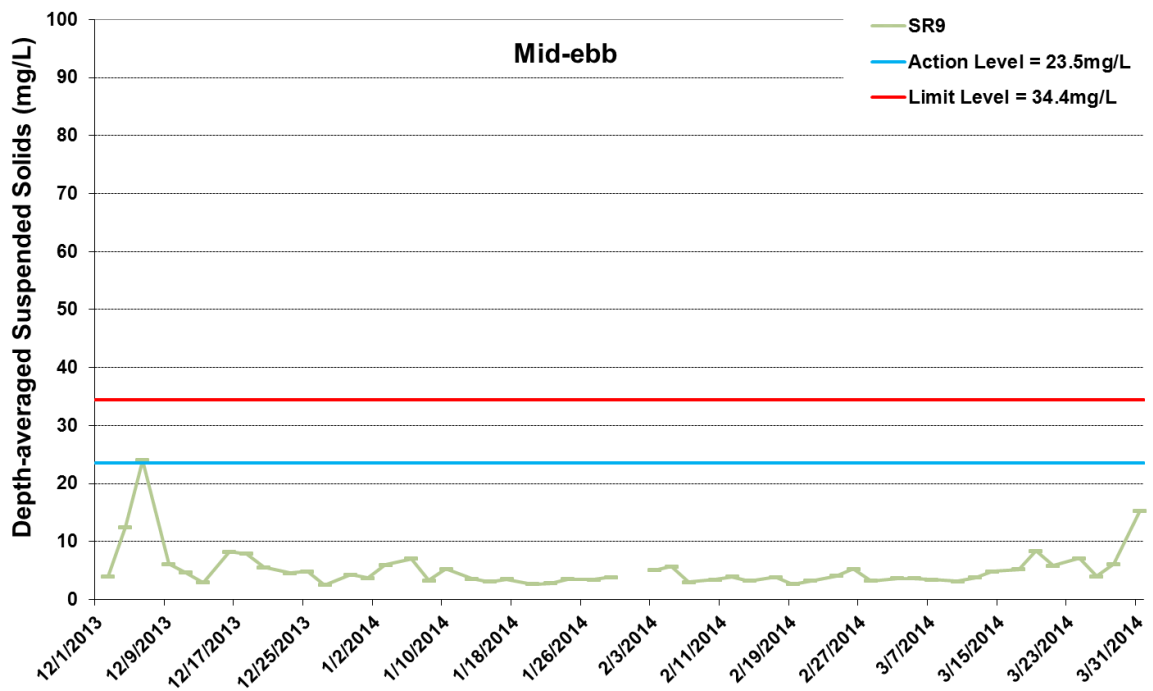


Figure I43 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 December 2013 and 31 March 2014 at SR9. Note no dredging/ filling works was undertaken on 31 January 2014.



Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Surface	1	1	1	10:23	17.7	7.83	28.9	7.23	3.14	4.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Surface	1	1	2	10:23	17.7	7.84	28.8	7.27	3.16	6
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Middle	11.5	2	1	10:23	17.6	7.79	29	7.1	3.57	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Middle	11.5	2	2	10:23	17.7	7.8	29	7.08	3.59	6.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Bottom	22	3	1	10:23	17.6	7.74	29.1	6.84	3.89	3.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS4	Bottom	22	3	2	10:23	17.6	7.76	29.1	6.8	3.81	5
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	1	12:41	17.8	7.84	29.2	7.05	3.25	2.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	2	12:41	17.8	7.85	29.2	7.04	3.26	2.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Middle	11.4	2	1	12:41	17.7	7.86	29.2	6.88	3.42	2.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Middle	11.4	2	2	12:41	17.7	7.87	29.2	6.87	3.43	4
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Bottom	21.8	3	1	12:41	17.6	7.88	29.3	6.72	3.59	3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS4	Bottom	21.8	3	2	12:41	17.6	7.87	29.3	6.73	3.6	3.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Surface	1	1	1	08:45	17.8	7.91	28.9	7.17	3.46	3.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Surface	1	1	2	08:45	17.8	7.92	28.9	7.15	3.5	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Middle	6.5	2	1	08:45	17.7	7.98	29	7.08	3.68	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Middle	6.5	2	2	08:45	17.8	7.99	29	7.06	3.7	3.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Bottom	12	3	1	08:45	17.7	7.73	29.1	6.93	3.97	3.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	CS6	Bottom	12	3	2	08:45	17.7	7.74	29.1	6.97	3.99	4.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	1	15:53	17.8	7.88	29.1	7.09	3.56	3.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	2	15:53	17.8	7.89	29.1	7.08	3.57	3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.4	2	1	15:53	17.7	7.91	29.1	6.98	3.66	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.4	2	2	15:53	17.7	7.9	29.1	6.99	3.67	3.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Bottom	11.8	3	1	15:53	17.7	7.89	29.2	6.83	3.72	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	CS6	Bottom	11.8	3	2	15:53	17.6	7.87	29.2	6.84	3.73	3.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Surface	1	1	1	09:51	17.8	7.84	28.9	7.03	3.67	2.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Surface	1	1	2	09:51	17.8	7.8	28.9	7.07	3.7	3.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Middle	7.6	2	1	09:51	17.7	7.72	29	6.98	3.79	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Middle	7.6	2	2	09:51	17.6	7.78	29	6.99	3.78	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Bottom	14.2	3	1	09:51	17.5	7.6	29.1	6.9	4.03	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS12	Bottom	14.2	3	2	09:51	17.5	7.64	29.1	6.94	4.01	2.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	1	13:33	17.7	7.88	29.2	6.89	3.73	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	2	13:33	17.8	7.89	29.2	6.91	3.72	2.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.5	2	1	13:33	17.7	7.86	29.3	6.83	3.84	2.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.5	2	2	13:33	17.7	7.88	29.3	6.84	3.85	4
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Bottom	14	3	1	13:33	17.7	7.88	29.3	6.56	3.89	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS12	Bottom	14	3	2	13:33	17.7	7.89	29.3	6.57	3.91	3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Surface	1	1	1	09:40	17.7	7.68	28.8	7.19	3.24	2.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Surface	1	1	2	09:40	17.7	7.66	28.9	7.11	3.29	4.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Middle	6	2	1	09:40	17.7	7.82	29	6.88	3.93	2.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Middle	6	2	2	09:40	17.6	7.83	29	6.9	3.97	3.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Bottom	11	3	1	09:40	17.6	7.78	29.1	6.69	3.94	4.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS13	Bottom	11	3	2	09:40	17.6	7.79	29.1	6.71	3.96	4.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	1	13:56	17.8	7.91	29.2	7.06	3.39	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	2	13:56	17.8	7.92	29.2	7.05	3.41	3.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Middle	5.9	2	1	13:56	17.7	7.93	29.3	7.01	3.57	2.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Middle	5.9	2	2	13:56	17.7	7.94	29.3	6.99	3.58	4.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Bottom	10.7	3	1	13:56	17.6	7.91	29.3	6.83	3.67	4.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS13	Bottom	10.7	3	2	13:56	17.6	7.92	29.3	6.84	3.68	4
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Surface	1	1	1	10:02	17.8	7.9	28.9	7.14	3.36	4.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Surface	1	1	2	10:02	17.7	7.92	28.9	7.13	3.4	4.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Middle	8	2	1	10:02	17.7	7.88	29	7.02	3.82	4.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Middle	8	2	2	10:02	17.6	7.85	29	7.08	3.86	5.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Bottom	15	3	1	10:02	17.6	7.74	29.1	7.01	4.12	6.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS14	Bottom	15	3	2	10:02	17.6	7.72	29	7	4.1	7.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	1	13:10	17.7	7.91	29.2	7.67	3.45	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	2	13:10	17.7	7.92	29.2	7.68	3.44	3.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Middle	7.9	2	1	13:10	17.7	7.93	29.2	7.01	3.56	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Middle	7.9	2	2	13:10	17.7	7.9	29.2	6.99	3.57	3.8

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Bottom	14.8	3	1	13:10	17.6	7.9	29.2	6.81	3.71	3.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS14	Bottom	14.8	3	2	13:10	17.6	7.91	29.3	6.82	3.72	3.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Surface	1	1	1	09:29	17.7	7.79	28.9	7.13	3.68	2.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Surface	1	1	2	09:29	17.8	7.81	28.9	7.11	3.69	5.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Middle	6.1	2	1	09:29	17.7	7.92	28.9	6.91	3.88	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Middle	6.1	2	2	09:29	17.7	7.94	29	6.9	3.86	3.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Bottom	11.2	3	1	09:29	17.7	7.72	29.1	6.72	4.07	3.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	IS15	Bottom	11.2	3	2	09:29	17.6	7.78	29.1	6.78	4.09	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	1	14:20	17.8	7.86	29.2	7.67	3.89	2.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	2	14:20	17.8	7.87	29.2	7.66	3.91	2.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Middle	6	2	1	14:20	17.7	7.88	29.1	6.92	3.99	2.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Middle	6	2	2	14:20	17.7	7.88	29.2	6.93	4.01	2.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Bottom	11	3	1	14:20	17.7	7.89	29.2	6.75	4.08	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	IS15	Bottom	11	3	2	14:20	17.6	7.9	29.2	6.77	4.09	4.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Surface	1	1	1	08:56	17.7	7.75	28.8	7.08	3.16	4.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Surface	1	1	2	08:56	17.8	7.78	28.9	7.09	3.17	2
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Middle	7.1	2	1	08:56	17.7	7.82	29	7.02	3.36	4.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Middle	7.1	2	2	08:56	17.7	7.8	29	7.08	3.38	3.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Bottom	13.2	3	1	08:56	17.6	7.71	29.1	6.84	3.88	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR10A	Bottom	13.2	3	2	08:56	17.6	7.72	29.1	6.86	3.9	3.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	1	15:30	17.8	7.91	29.2	6.98	3.22	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	2	15:30	17.8	7.92	29.2	6.97	3.24	2.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7	2	1	15:30	17.8	7.9	29.1	6.73	3.33	4.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7	2	2	15:30	17.8	7.91	29.2	6.75	3.34	4.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	13	3	1	15:30	17.7	7.89	29.3	6.66	3.51	5.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	13	3	2	15:30	17.7	7.88	29.3	6.67	3.52	4.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Surface	1	1	1	09:07	17.7	7.69	28.9	7.1	3.27	4.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Surface	1	1	2	09:07	17.7	7.7	28.9	7.18	3.3	4.5
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Middle		2	1	09:07						
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Middle		2	2	09:07						
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Bottom	4.4	3	1	09:07	17.6	7.82	29	6.97	3.96	6.3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR8	Bottom	4.4	3	2	09:07	17.6	7.83	29.1	6.99	3.9	5.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	1	15:06	17.8	7.88	29.1	7.04	3.44	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	2	15:06	17.8	7.87	29.1	7.05	3.43	3.8
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	1	15:06						
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	2	15:06						
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	1	15:06	17.7	7.9	29.2	6.65	3.68	4.2
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	2	15:06	17.7	7.91	29.2	6.64	3.71	3.7
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Surface	1	1	1	09:18	17.7	7.93	29	7.07	3.5	3.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Surface	1	1	2	09:18	17.7	7.94	28.9	7.1	3.47	3
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Middle		2	1	09:18						
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Middle		2	2	09:18						
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Bottom	4.4	3	1	09:18	17.6	7.77	29.1	6.84	3.95	5.9
TMCLKL	HY/2012/08	2014-03-03	Mid-Flood	Cloudy	Calm	SR9	Bottom	4.4	3	2	09:18	17.6	7.79	29.1	6.86	3.97	4.6
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	1	14:43	17.8	7.88	29.2	6.83	3.68	3
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	2	14:43	17.8	7.87	29.2	6.84	3.67	3.4
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	1	14:43						
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	2	14:43						
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.2	3	1	14:43	17.7	7.88	29.2	6.73	3.72	4.1
TMCLKL	HY/2012/08	2014-03-03	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.2	3	2	14:43	17.8	7.88	29.2	6.72	3.74	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	10:51	17.6	7.92	28.8	7.32	3.2	4.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	10:51	17.7	7.93	28.9	7.36	3.17	2.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	1	10:51	17.8	7.88	28.9	7.19	3.49	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	2	10:51	17.7	7.89	29	7.17	3.41	2.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	1	10:51	17.8	7.83	29.1	6.93	3.79	3.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	2	10:51	17.9	7.85	29.2	6.89	3.86	2.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	14:00	17.7	7.98	28.9	7.26	3.27	2.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	08:40	17.8	7.99	29	7.3	3.24	3.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.4	2	1	08:40	17.8	7.94	29.1	7.13	3.56	2.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.4	2	2	08:40	17.8	7.95	29	7.11	3.48	4.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.8	3	1	08:40	17.9	7.89	29.1	6.87	3.86	2.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.8	3	2	08:40	17.8	7.91	29.2	6.83	3.93	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:23	17.7	7.84	28.7	7.26	3.47	2.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:23	17.6	7.88	28.8	7.24	3.52	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.7	2	1	08:23	17.7	7.81	29	7.17	3.6	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.7	2	2	08:23	17.8	7.85	28.9	7.15	3.66	4.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.4	3	1	08:23	17.8	7.73	29	7.02	3.81	3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.4	3	2	08:23	17.7	7.71	29.1	7.06	3.84	3.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	17:12	17.8	7.9	28.9	7.2	3.54	3.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	17:12	17.7	7.89	28.8	7.18	3.59	4.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.4	2	1	17:12	17.8	7.87	29.1	7.11	3.67	2.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.4	2	2	17:12	17.8	7.91	29	7.09	3.73	4.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.8	3	1	17:12	17.8	7.79	29.1	6.96	3.88	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.8	3	2	17:12	17.9	7.77	29.2	7	3.91	4.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	10:09	17.6	7.93	28.8	7.12	3.33	3.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	10:09	17.5	7.89	28.7	7.16	3.41	2.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.8	2	1	10:09	17.7	7.81	28.9	7.07	3.68	2.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.8	2	2	10:09	17.7	7.87	28.9	7.08	3.72	2.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.6	3	1	10:09	17.7	7.69	29.1	6.99	3.81	4.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.6	3	2	10:09	17.6	7.73	29	7.03	3.83	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	14:48	17.7	7.99	28.8	7.06	3.39	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	14:48	17.7	7.95	28.7	7.1	3.48	3.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.6	2	1	14:48	17.8	7.87	28.8	7.01	3.75	2.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.6	2	2	14:48	17.7	7.93	28.9	7.02	3.79	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.2	3	1	14:48	17.8	7.75	29.1	6.93	3.88	3.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.2	3	2	14:48	17.9	7.79	29	6.97	3.9	3.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:51	17.6	7.77	28.7	7.28	3.28	3.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:51	17.5	7.75	28.8	7.2	3.3	4.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	09:51	17.6	7.91	28.9	6.94	3.78	3.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	09:51	17.7	7.92	28.8	6.99	3.82	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	09:51	17.7	7.87	28.9	6.78	3.88	3.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	09:51	17.6	7.88	29	6.8	3.81	3.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	15:12	17.6	7.83	28.8	7.22	3.35	3.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	15:12	17.7	7.81	28.9	7.14	3.23	3.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6	2	1	15:12	17.7	7.97	29	6.91	3.85	3.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6	2	2	15:12	17.8	7.98	28.9	6.93	3.89	4.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11	3	1	15:12	17.9	7.93	29.1	6.72	3.95	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11	3	2	15:12	17.8	7.94	29	6.74	3.88	2.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:26	17.7	7.99	28.8	7.23	3.21	3.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:26	17.6	8.01	28.8	7.22	3.18	4.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	1	10:26	17.7	7.97	28.8	7.11	3.59	3.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	2	10:26	17.8	7.94	28.9	7.17	3.66	4.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.4	3	1	10:26	17.8	7.83	29	7.1	3.9	3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.4	3	2	10:26	17.7	7.81	29.1	7.09	3.87	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	14:24	17.7	8.05	28.9	7.17	3.28	2.8
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	14:24	17.8	8.07	28.8	7.16	3.25	2.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.9	2	1	14:24	17.9	8.03	29	7.05	3.65	4.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.9	2	2	14:24	17.8	8	28.9	7.11	3.72	3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.8	3	1	14:24	17.9	7.89	29.1	7.04	3.96	4.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.8	3	2	14:24	17.9	7.87	29.1	7.03	3.93	3.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:33	17.5	7.88	28.7	7.22	3.3	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:33	17.6	7.9	28.8	7.2	3.34	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.3	2	1	09:33	17.7	8.01	28.8	7	3.6	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.3	2	2	09:33	17.6	8.02	28.9	6.99	3.58	3.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.6	3	1	09:33	17.7	7.81	29	6.81	3.77	4.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.6	3	2	09:33	17.8	7.87	28.9	6.87	3.86	2.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	15:36	17.7	7.94	28.8	7.16	3.37	4.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	15:36	17.6	7.96	28.9	7.14	3.41	3.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6.1	2	1	15:36	17.8	8.07	28.9	6.94	3.67	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6.1	2	2	15:36	17.8	8.08	28.8	6.93	3.65	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.2	3	1	15:36	17.8	7.87	29	6.75	3.84	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.2	3	2	15:36	17.7	7.93	29.1	6.81	3.93	4.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:40	17.6	7.84	28.8	7.17	3.25	3.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:40	17.7	7.87	28.7	7.18	3.29	2.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	1	08:40	17.7	7.91	28.8	7.11	3.69	3.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	2	08:40	17.6	7.89	28.9	7.15	3.74	2.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	1	08:40	17.7	7.8	29	6.93	3.83	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	2	08:40	17.8	7.81	29	6.95	3.88	3.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:48	17.7	7.9	28.8	7.11	3.32	5.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:48	17.8	7.93	28.9	7.12	3.36	3.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	1	16:48	17.8	7.97	29.1	7.05	3.76	4.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	2	16:48	17.9	7.96	29	7.09	3.81	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	1	16:48	17.9	7.86	29.1	6.87	3.9	4.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	2	16:48	17.8	7.87	29.1	6.89	3.95	2.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:58	17.6	7.78	28.7	7.19	3.32	3.2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:58	17.5	7.79	28.8	7.27	3.29	5.5
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:58						
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:58						
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	1	08:58	17.7	7.91	29	7.06	3.77	4.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	2	08:58	17.7	7.92	28.9	7.08	3.72	3.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	16:24	17.7	7.84	28.7	7.13	3.39	3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	16:24	17.6	7.85	28.8	7.21	3.36	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	16:24						
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	16:24						
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	16:24	17.8	7.97	28.9	7	3.84	3.9
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	16:24	17.8	7.98	29	7.03	3.79	4.4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:16	17.6	8.02	28.9	7.16	3.41	4
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:16	17.5	8.03	28.8	7.19	3.38	2
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:16						
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:16						
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	09:16	17.7	7.86	28.9	6.93	3.69	4.1
TMCLKL	HY/2012/08	2014-03-05	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	09:16	17.6	7.88	29	6.95	3.76	3.6
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	16:00	17.6	8.08	28.8	7.1	3.48	4.3
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	16:00	17.7	8.09	28.7	7.13	3.45	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	16:00						
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	16:00						
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.8	3	1	16:00	17.8	7.92	29	6.87	3.76	3.7
TMCLKL	HY/2012/08	2014-03-05	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.8	3	2	16:00	17.9	7.94	28.9	6.89	3.83	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	11:45	17.4	7.91	28.9	7.13	3.09	4.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	11:45	17.4	7.91	28.9	7.16	3.04	3.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	1	11:45	17.5	7.9	29	7.01	3.32	3.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	2	11:45	17.5	7.91	29	6.99	3.37	2.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	1	11:45	17.5	7.91	29	6.98	3.25	3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	2	11:45	17.4	7.91	29	6.94	3.21	3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	15:38	17.5	7.91	29	7.05	3.18	2.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	15:38	17.5	7.92	29	7.06	3.19	4.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.6	2	1	15:38	17.5	7.88	29.1	7	3.27	2.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.6	2	2	15:38	17.5	7.87	29.1	7.01	3.28	2.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	22.2	3	1	15:38	17.6	7.89	29.1	6.87	3.37	3.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	22.2	3	2	15:38	17.6	7.9	29.1	6.88	3.38	2.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:35	17.4	7.87	28.8	7.33	3.44	2.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:35	17.4	7.86	28.8	7.29	3.48	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	1	08:35	17.4	7.86	28.9	7.17	3.21	3.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	2	08:35	17.5	7.87	28.9	7.14	3.17	4.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	08:35	17.5	7.88	29	7.03	3.17	5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	08:35	17.5	7.87	29	7.07	3.22	6.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	18:50	17.5	7.88	28.9	7.19	3.56	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	18:50	17.5	7.89	28.9	7.18	3.57	3.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	1	18:50	17.5	7.86	29	7.05	3.61	4.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	2	18:50	17.5	7.88	29	7.06	3.62	2.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	1	18:50	17.5	7.88	29	6.94	3.73	4.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	2	18:50	17.6	7.87	29	6.95	3.75	2.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	10:52	17.4	7.9	28.9	7.05	3.06	4.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	10:52	17.4	7.9	28.8	7.01	3.02	4.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	1	10:52	17.4	7.91	29	6.86	2.43	3.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	2	10:52	17.4	7.91	28.9	6.82	2.48	3.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	1	10:52	17.5	7.91	29	6.9	3.13	5.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	2	10:52	17.4	7.91	29.1	6.94	3.18	6.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	16:30	17.4	7.85	29.1	7.01	3.11	4.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	16:30	17.5	7.86	29.1	6.99	3.12	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	1	16:30	17.5	7.83	29.1	6.93	3.22	2.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	2	16:30	17.5	7.84	29.1	6.94	3.21	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	1	16:30	17.5	7.87	29.2	6.88	3.29	2
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	2	16:30	17.6	7.88	29.2	6.87	3.28	2.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	10:31	17.4	7.89	28.8	7.09	3.04	3.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	10:31	17.4	7.88	28.7	7.13	3.01	4.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	10:31	17.4	7.9	29	6.96	2.81	3.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	10:31	17.4	7.9	29	6.93	2.85	3.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	10:31	17.5	7.9	29	6.9	3.06	5.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	10:31	17.5	7.91	29.1	6.92	3.01	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	16:54	17.4	7.79	28.9	6.98	3.16	3.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	16:54	17.4	7.81	28.9	6.99	3.15	2.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	1	16:54	17.4	7.83	29	6.83	3.21	2.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	2	16:54	17.4	7.81	29	6.81	3.22	2.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	17.5	3	1	16:54	17.5	7.83	29.1	6.73	3.33	3.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	17.5	3	2	16:54	17.5	7.82	29.1	6.74	3.32	2.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	11:14	17.4	7.91	28.8	7.17	2.97	6.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	11:14	17.4	7.91	28.8	7.15	2.94	4.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	1	11:14	17.4	7.91	29	6.99	3.24	8.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	2	11:14	17.3	7.91	29	6.95	3.2	8.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	1	11:14	17.5	7.91	29.1	6.92	3.11	8.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	2	11:14	17.5	7.91	29	6.95	3.17	7.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	16:07	17.5	7.84	29	7.1	3.04	3.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	16:07	17.5	7.85	29	7.12	3.05	3.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.2	2	1	16:07	17.5	7.87	29.1	7.02	3.12	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.2	2	2	16:07	17.5	7.86	29.1	7.03	3.13	2.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.3	3	1	16:07	17.6	7.85	29.1	6.89	3.18	3.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.3	3	2	16:07	17.6	7.84	29.1	6.88	3.19	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	10:12	17.4	7.9	28.9	7.14	2.94	7.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	10:12	17.4	7.9	28.9	7.1	2.9	7.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.4	2	1	10:12	17.5	7.9	29	7.01	2.87	6.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.4	2	2	10:12	17.5	7.91	29	7.04	2.9	6.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.8	3	1	10:12	17.5	7.91	29.1	6.88	3.33	7.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.8	3	2	10:12	17.4	7.91	29.1	6.84	3.28	6.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	17:17	17.4	7.85	29	7.06	3.05	3.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	17:17	17.4	7.86	29	7.07	3.04	4.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6.3	2	1	17:17	17.5	7.88	29.1	6.95	3.16	2.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6.3	2	2	17:17	17.5	7.89	29.1	6.94	3.15	3.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.6	3	1	17:17	17.5	7.88	29.1	6.88	3.23	3.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.6	3	2	17:17	17.5	7.88	29.1	6.87	3.24	5.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	09:08	17.3	7.88	28.7	7.29	2.96	5.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	09:08	17.4	7.88	28.7	7.24	2.91	5.2

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	1	09:08	17.5	7.89	28.7	7.05	3.11	6.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	2	09:08	17.5	7.89	28.7	7.01	3.15	4.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	1	09:08	17.4	7.88	28.9	6.94	3.04	6.1
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	2	09:08	17.5	7.89	28.9	6.97	3.08	7.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	18:27	17.4	7.85	29	7.25	3.07	3.7
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	18:27	17.4	7.86	29	7.24	3.08	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.2	2	1	18:27	17.5	7.88	29.1	7.15	3.17	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.2	2	2	18:27	17.5	7.89	29.1	7.16	3.19	3.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.3	3	1	18:27	17.5	7.88	29	7.05	3.29	2.6
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.3	3	2	18:27	17.5	7.86	29.1	7.07	3.31	4.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	09:37	17.4	7.89	28.8	7.31	3.01	3.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	09:37	17.4	7.89	28.8	7.28	3.03	4.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	09:37						
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	09:37						
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	09:37	17.4	7.9	28.9	7.18	3.2	3.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	09:37	17.4	7.91	28.9	7.14	3.24	3.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	18:04	17.4	7.91	29	7.22	3.12	1.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	18:04	17.4	7.9	29	7.23	3.13	1.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	18:04						
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	18:04						
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.7	3	1	18:04	17.4	7.89	29.1	7.18	3.17	7.9
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.7	3	2	18:04	17.5	7.9	29	7.17	3.18	7.3
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:57	17.4	7.9	28.9	7.11	3.25	3.2
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:57	17.4	7.9	28.9	7.08	3.21	4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:57						
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:57						
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	09:57	17.4	7.9	28.9	6.94	3.37	12.4
TMCLKL	HY/2012/08	2014-03-07	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	09:57	17.4	7.9	29	6.97	3.32	11.5
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	17:40	17.5	7.83	29.1	7.03	3.31	3.8
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	17:40	17.5	7.83	29.1	7.04	3.3	3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	17:40						
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	17:40						
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	17:40	17.5	7.85	29.1	7.01	3.38	3
TMCLKL	HY/2012/08	2014-03-07	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	17:40	17.5	7.84	29.1	7.02	3.37	4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	09:58	17.3	7.92	30.1	6.97	3.02	2.5
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	09:58	17.2	7.91	30.1	6.94	3.05	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	1	09:58	17.4	7.93	30.4	6.81	2.92	3.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	2	09:58	17.4	7.93	30.4	6.84	2.94	4.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	1	09:58	17.4	7.93	30.4	6.75	2.71	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	2	09:58	17.3	7.93	30.4	6.71	2.74	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	19:15	17.1	7.87	30.1	6.81	2.61	4.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	19:15	17.2	7.86	30.1	6.78	2.65	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.3	2	1	19:15	17.2	7.88	30.3	6.72	2.39	2.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.3	2	2	19:15	17.2	7.89	30.3	6.69	2.42	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.6	3	1	19:15	17.3	7.89	30.4	6.58	2.81	3.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.6	3	2	19:15	17.3	7.88	30.3	6.54	2.87	3.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	07:25	17.2	7.87	30	6.82	2.23	3.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	07:25	17.2	7.86	30	6.79	2.26	3.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	1	07:25	17.3	7.86	30.3	6.74	2.44	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	2	07:25	17.3	7.86	30.3	6.7	2.4	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	07:25	17.3	7.85	30.3	6.53	2.52	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	07:25	17.3	7.84	30.3	6.5	2.49	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	21:06	17	7.9	30.1	6.82	2.37	3.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	21:06	17	7.91	30.1	6.79	2.31	3.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.3	2	1	21:06	17.1	7.91	30.3	6.71	2.62	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.3	2	2	21:06	17.2	7.91	30.3	6.68	2.57	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.6	3	1	21:06	17.2	7.92	30.3	6.73	2.59	3.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.6	3	2	21:06	17.1	7.91	30.3	6.7	2.55	2.9

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	09:18	17.2	7.91	30.1	6.9	2.92	3.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	09:18	17.2	7.91	30.1	6.94	2.95	2.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	1	09:18	17.3	7.92	30.3	6.71	2.85	3.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	2	09:18	17.3	7.92	30.3	6.74	2.88	2.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	1	09:18	17.3	7.92	30.4	6.74	2.37	2.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	2	09:18	17.3	7.92	30.4	6.7	2.35	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	19:58	17	7.86	30.2	6.82	2.87	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	19:58	17	7.86	30.2	6.79	2.92	3.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.3	2	1	19:58	17.1	7.87	30.3	6.74	2.72	4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.3	2	2	19:58	17.2	7.86	30.3	6.7	2.67	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.6	3	1	19:58	17.2	7.88	30.4	6.66	2.94	3.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.6	3	2	19:58	17.3	7.89	30.3	6.63	2.9	4.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:01	17.2	7.92	30.1	6.95	2.58	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:01	17.2	7.92	30.1	6.97	2.55	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.3	2	1	09:01	17.3	7.92	30.4	6.82	3.01	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.3	2	2	09:01	17.2	7.92	30.4	6.79	3.05	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.6	3	1	09:01	17.4	7.93	30.4	6.64	3.17	3.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.6	3	2	09:01	17.3	7.93	30.4	6.61	3.19	2.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	20:13	17.1	7.89	30.1	6.82	2.82	3.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	20:13	17.1	7.89	30.1	6.85	2.88	3.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	1	20:13	17.3	7.88	30.3	6.67	2.62	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	2	20:13	17.3	7.87	30.2	6.64	2.58	3.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	1	20:13	17.3	7.89	30.4	6.5	2.88	4.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	2	20:13	17.3	7.89	30.4	6.54	2.85	6.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	09:35	17.2	7.92	30.1	6.86	2.61	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	09:35	17.2	7.92	30.1	6.83	2.67	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	1	09:35	17.3	7.92	30.4	6.72	2.94	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	2	09:35	17.3	7.92	30.4	6.75	2.9	3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	1	09:35	17.4	7.93	30.4	6.67	2.9	2.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	2	09:35	17.4	7.93	30.4	6.64	2.93	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	19:41	17	7.87	30.2	6.75	2.58	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	19:41	17.1	7.87	30.1	6.78	2.57	2.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	1	19:41	17.2	7.89	30.4	6.63	2.9	3.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	2	19:41	17.2	7.88	30.4	6.66	2.94	3.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	1	19:41	17.3	7.89	30.3	6.59	2.72	3.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	2	19:41	17.3	7.89	30.2	6.56	2.68	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	08:45	17.2	7.91	30.1	6.92	2.92	2.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	08:45	17.2	7.91	30.1	6.89	2.95	3.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.6	2	1	08:45	17.3	7.91	30.3	6.77	3.05	3.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.6	2	2	08:45	17.3	7.92	30.3	6.74	3.09	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	12.2	3	1	08:45	17.3	7.92	30.4	6.6	2.88	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	12.2	3	2	08:45	17.3	7.93	30.4	6.63	2.85	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	20:28	17	7.89	30.2	6.88	2.47	2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	20:28	17.1	7.89	30.2	6.85	2.41	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	1	20:28	17.2	7.89	30.2	6.69	2.95	3
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	2	20:28	17.1	7.89	30.1	6.65	2.98	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.6	3	1	20:28	17.2	7.9	30.3	6.64	2.97	4.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11.6	3	2	20:28	17.2	7.91	30.3	6.68	2.9	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	07:50	17.2	7.88	30	6.92	2.74	3.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	07:50	17.1	7.88	30.1	6.89	2.7	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.4	2	1	07:50	17.3	7.89	30.2	6.81	2.88	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.4	2	2	07:50	17.3	7.89	30.2	6.78	2.85	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.8	3	1	07:50	17.3	7.88	30.3	6.64	2.57	3.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.8	3	2	07:50	17.2	7.87	30.3	6.67	2.62	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	20:54	17	7.9	30.1	6.87	2.72	2.5
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	20:54	17	7.91	30.1	6.84	2.75	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	1	20:54	17.2	7.92	30.2	6.62	2.88	2.6
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	2	20:54	17.2	7.92	30.2	6.59	2.82	2.6

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	1	20:54	17.2	7.92	30.3	6.59	3.05	2.9
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	2	20:54	17.3	7.91	30.3	6.56	3.09	2.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:15	17.2	7.89	30	6.85	2.61	2.3
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:15	17.1	7.89	30.1	6.81	2.67	2.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:15						
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:15						
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	08:15	17.2	7.89	30.2	6.7	2.93	2.2
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	08:15	17.2	7.89	30.3	6.74	2.9	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	20:54	17	7.89	30.2	6.79	2.9	2.5
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	20:54	17.1	7.88	30.2	6.76	2.95	2
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	20:54						
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	20:54						
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	20:54	17.1	7.9	30.3	6.6	2.92	2.5
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	20:54	17.1	7.9	30.2	6.64	2.86	2.8
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	08:30	17.2	7.9	30	6.99	2.54	4.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	08:30	17.2	7.91	30	6.95	2.5	3.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	08:30						
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	08:30						
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	08:30	17.2	7.91	30.3	6.61	2.91	3.5
TMCLKL	HY/2012/08	2014-03-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	08:30	17.2	7.92	30.2	6.57	2.93	3.7
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	20:42	17	7.88	30.2	6.94	2.52	3.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	20:42	17	7.88	30.2	6.9	2.59	4.4
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	20:42						
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	20:42						
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	20:42	17.1	7.89	30.2	6.8	3.01	2.1
TMCLKL	HY/2012/08	2014-03-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	20:42	17.1	7.89	30.2	6.84	3.07	2.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	17:33	17.1	7.98	30.1	6.93	3.35	2.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	17:33	17.2	7.97	30	6.9	3.43	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.2	2	1	17:33	17.2	7.99	30.2	6.84	3.82	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.2	2	2	17:33	17.3	8	30.1	6.81	3.79	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.4	3	1	17:33	17.4	8	30.3	6.7	4.5	4.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.4	3	2	17:33	17.3	7.99	30.2	6.66	4.39	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	09:12	17	7.92	30	6.87	3.44	2.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	09:12	17.1	7.91	29.9	6.84	3.52	2.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	1	09:12	17.1	7.93	30.1	6.78	3.91	2.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	2	09:12	17	7.94	30	6.75	3.88	2.5
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	1	09:12	17.2	7.94	30.2	6.64	4.59	2.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	2	09:12	17.3	7.93	30.3	6.6	4.48	2.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	14:19	17.2	8.02	30.1	6.94	3.41	4.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	14:19	17.1	8.03	30	6.91	3.47	4.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.2	2	1	14:19	17.3	8.03	30.2	6.83	3.6	4.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.2	2	2	14:19	17.4	8.04	30.3	6.8	3.66	5.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	11.4	3	1	14:19	17.4	8.04	30.3	6.85	4.02	4.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	11.4	3	2	14:19	17.3	8.05	30.4	6.82	4.04	5
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	12:25	17.1	7.96	30	6.88	3.48	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	12:25	17.1	7.97	30	6.85	3.5	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.4	2	1	12:25	17.2	7.97	30.1	6.77	3.77	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.4	2	2	12:25	17.1	7.98	30	6.74	3.79	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.2	3	1	12:25	17.3	7.98	30.2	6.79	4.05	4.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.2	3	2	12:25	17.4	7.99	30.3	6.76	4.01	3.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	16:43	17.2	7.98	30.1	6.94	3.13	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	16:43	17.1	7.97	30.2	6.91	3.22	3.5
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	1	16:43	17.3	7.99	30.3	6.86	3.68	4.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	2	16:43	17.2	8	30.2	6.82	3.7	3.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	1	16:43	17.3	8	30.3	6.78	4	4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	2	16:43	17.4	8.01	30.4	6.75	4.03	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	10:00	17.1	7.92	30.1	6.88	3.22	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	10:00	17.1	7.91	30	6.85	3.31	3.2

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.4	2	1	10:00	17.1	7.93	30.2	6.8	3.77	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.4	2	2	10:00	17.2	7.94	30.3	6.76	3.79	3.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	10:00	17.2	7.94	30.3	6.72	4.09	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	10:00	17.1	7.95	30.3	6.69	4.12	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	16:19	17.2	8.01	30.1	6.94	3.22	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	16:19	17.1	8	30	6.97	3.2	2.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.9	2	1	16:19	17.2	8	30.1	6.79	3.57	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.9	2	2	16:19	17.3	7.99	30.2	6.76	3.56	2.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.8	3	1	16:19	17.4	8.01	30.3	6.62	3.92	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.8	3	2	16:19	17.3	8.02	30.4	6.66	3.9	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	10:24	17	7.95	30	6.88	3.31	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	10:24	17.1	7.94	30	6.91	3.29	3.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	1	10:24	17.2	7.94	30.1	6.73	3.66	2.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	2	10:24	17.1	7.93	30	6.7	3.65	3.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	1	10:24	17.3	7.95	30.2	6.56	4.01	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	2	10:24	17.3	7.96	30.3	6.6	3.99	3.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	17:07	17.1	7.99	30.1	6.87	3.3	2
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	17:07	17.2	8	30	6.9	3.32	2.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	1	17:07	17.2	8.01	30.1	6.75	3.71	2.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	2	17:07	17.3	8	30.2	6.78	3.75	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.6	3	1	17:07	17.4	8.01	30.3	6.71	4.13	4.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.6	3	2	17:07	17.4	8.02	30.2	6.68	4.22	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	09:36	17.1	7.93	30	6.81	3.39	2.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	09:36	17	7.94	30.1	6.84	3.41	2.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.7	2	1	09:36	17.2	7.95	30.2	6.69	3.8	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.7	2	2	09:36	17.1	7.94	30.1	6.72	3.84	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.4	3	1	09:36	17.3	7.95	30.3	6.65	4.22	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.4	3	2	09:36	17.2	7.97	30.2	6.62	4.31	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	15:15	17.1	8.01	30.1	7	3.31	2.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	15:15	17.2	8.02	30.2	6.97	3.4	3.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6	2	1	15:15	17.2	8.01	30.2	6.81	3.49	3.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6	2	2	15:15	17.3	8	30.3	6.77	3.53	3.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11	3	1	15:15	17.3	8.02	30.4	6.76	4	5.5
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11	3	2	15:15	17.3	8.03	30.3	6.8	3.94	4.5
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	10:48	17.1	7.95	30.1	6.94	3.4	2.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	10:48	17	7.96	30	6.91	3.49	2.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.9	2	1	10:48	17.2	7.95	30.2	6.75	3.58	3.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.9	2	2	10:48	17.3	7.94	30.1	6.71	3.62	2.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.8	3	1	10:48	17.3	7.96	30.3	6.7	4.09	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.8	3	2	10:48	17.2	7.97	30.3	6.74	4.03	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	14:43	17.1	8.02	30.1	6.99	3.3	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	14:43	17.2	8.03	30.2	6.96	3.37	2.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.6	2	1	14:43	17.3	8.04	30.2	6.74	3.51	3.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.6	2	2	14:43	17.2	8.05	30.3	6.71	3.47	3.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.2	3	1	14:43	17.3	8.04	30.4	6.72	3.85	3.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.2	3	2	14:43	17.4	8.03	30.3	6.68	3.89	3.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	12:00	17.1	7.96	30	6.93	3.39	2.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	12:00	17	7.97	30.1	6.9	3.47	2.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.9	2	1	12:00	17.1	7.98	30.1	6.68	3.63	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.9	2	2	12:00	17	7.99	30.2	6.65	3.55	2.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.8	3	1	12:00	17.2	7.98	30.2	6.66	3.86	3.8
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.8	3	2	12:00	17.3	7.97	30.3	6.62	3.93	3.5
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	15:07	17.1	8.01	30.1	6.91	3.13	3.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	15:07	17	8	30.2	6.88	3.17	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	15:07						
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	15:07						
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	15:07	17.2	8.01	30.3	6.72	3.71	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	15:07	17.3	8.02	30.2	6.76	3.68	4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	11:36	17	7.95	30.1	6.85	3.22	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	11:36	16.9	7.94	30	6.82	3.26	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	11:36						
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	11:36						
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	1	11:36	17.2	7.96	30.1	6.66	3.8	3.3
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	2	11:36	17.1	7.95	30.2	6.7	3.77	4.7
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	15:31	17.1	8	30.2	7.06	3.46	2.9
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	15:31	17.2	8.01	30.1	7.02	3.55	3.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	15:31						
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	15:31						
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	3.8	3	1	15:31	17.3	8.01	30.3	6.92	3.69	3
TMCLKL	HY/2012/08	2014-03-12	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	3.8	3	2	15:31	17.4	8.02	30.2	6.96	3.72	4.2
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	11:12	17.1	7.94	30.1	7	3.5	4.1
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	11:12	17.1	7.95	30.1	6.96	3.64	3.6
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	11:12						
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	11:12						
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	1	11:12	17.2	7.95	30.2	6.86	3.81	3.4
TMCLKL	HY/2012/08	2014-03-12	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	2	11:12	17.1	7.96	30.1	6.9	3.78	4.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	19:09	17.2	7.72	25.2	7.32	4.04	5.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	19:09	17.2	7.71	25.1	7.31	4.05	5.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.6	2	1	19:09	17.3	7.81	25.1	7.21	4.34	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.6	2	2	19:09	17.2	7.8	25	7.22	4.37	4.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.1	3	1	19:09	17.1	7.9	25.2	7.18	4.81	7.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.1	3	2	19:09	17.1	7.87	25.2	7.19	4.85	6.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	10:43	17.6	7.74	25	7.25	4.01	6.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	10:43	17.5	7.75	25	7.27	4.09	5.9
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11	2	1	10:43	17.5	7.84	25	7.18	4.32	4.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11	2	2	10:43	17.5	7.85	25.1	7.12	4.38	4.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21	3	1	10:43	17.4	7.91	25.2	7.11	4.8	3.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21	3	2	10:43	17.4	7.93	25.2	7.13	4.84	4.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	15:55	17.1	7.59	25.4	7.64	3.8	5.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	15:55	17.3	7.57	25.4	7.67	3.79	5.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	15:55	17.4	7.71	25.6	7.5	3.92	5.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	15:55	17.3	7.72	25.5	7.49	3.91	6.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	1	15:55	17.5	7.8	25.6	7.37	3.44	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	2	15:55	17.6	7.82	25.5	7.4	3.43	4.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	13:30	17.6	7.76	25	7.6	3.82	4
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	13:30	17.6	7.74	25.1	7.64	3.8	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	1	13:30	17.5	7.81	25.2	7.42	3.94	4.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	2	13:30	17.6	7.83	25.2	7.4	3.91	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	13:30	17.5	7.88	25.3	7.34	3.47	4.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	13:30	17.5	7.89	25.3	7.3	3.43	4.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	18:15	17.4	7.8	25	7.11	3.94	5.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	18:15	17.3	7.79	24.9	7.1	3.96	5.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.9	2	1	18:15	17.2	7.88	25.1	7.05	4.1	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.9	2	2	18:15	17.2	7.86	25.2	7.04	4.12	5.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.8	3	1	18:15	17.3	7.9	25.3	7.02	4.23	6.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.8	3	2	18:15	17.2	7.92	25.2	7.01	4.22	7.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	11:21	17.6	7.86	25	7.09	3.92	5.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	11:21	17.5	7.87	25	7.07	3.98	5.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	1	11:21	17.5	7.9	25.1	7.03	4.09	7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	2	11:21	17.5	7.91	25.1	7.01	4.11	5.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	1	11:21	17.4	7.94	25.3	6.99	4.24	6.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	2	11:21	17.4	7.95	25.3	6.91	4.2	5.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	17:50	17.4	7.7	25.1	7.61	4.14	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	17:50	17.3	7.71	25.1	7.6	4.16	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.1	2	1	17:50	17.3	7.73	25.2	7.41	4.31	4.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.1	2	2	17:50	17.2	7.72	25.1	7.4	4.3	5.8

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.1	3	1	17:50	17.3	7.82	25.3	7.24	4.37	5.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.1	3	2	17:50	17.1	7.8	25.2	7.22	4.36	4.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	11:40	17.6	7.7	25.1	7.64	4.13	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	11:40	17.5	7.72	25.1	7.6	4.17	4.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.6	2	1	11:40	17.5	7.74	25.2	7.4	4.28	3.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.6	2	2	11:40	17.5	7.76	25.2	7.42	4.3	4.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.2	3	1	11:40	17.4	7.81	25.2	7.23	4.34	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.2	3	2	11:40	17.5	7.83	25.3	7.27	4.36	4.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	18:40	17.3	7.82	25.2	7.3	4.14	6.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	18:40	17.3	7.81	25.1	7.25	4.13	6.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	1	18:40	17.2	7.89	25.2	7.16	4.25	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	2	18:40	17.2	7.87	25.3	7.15	4.26	4.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	16.2	3	1	18:40	17.3	7.92	25.3	7.2	4.44	6.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	16.2	3	2	18:40	17.2	7.91	25.3	7.22	4.45	6.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	11:02	17.5	7.84	25	7.19	4.11	4.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	11:02	17.5	7.86	25	7.21	4.13	4.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	1	11:02	17.5	7.9	25.1	7.07	4.24	4.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	2	11:02	17.4	7.94	25.2	7.09	4.26	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	1	11:02	17.4	7.95	25.2	7.14	4.43	3.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	2	11:02	17.4	7.96	25.2	7.16	4.47	4.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	17:30	17.4	7.7	25.1	7.5	3.91	6
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	17:30	17.3	7.71	25.2	7.51	3.94	4.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.5	2	1	17:30	17.2	7.8	25.1	7.32	4.17	6.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.5	2	2	17:30	17.1	7.79	25.2	7.34	4.16	4.9
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.9	3	1	17:30	17.3	7.89	25.2	7.2	4.43	5.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.9	3	2	17:30	17	7.88	25.3	7.22	4.44	6.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	11:59	17.6	7.74	25.1	7.42	3.92	3.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	11:59	17.5	7.76	25.1	7.48	3.98	5.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	1	11:59	17.5	7.82	25.2	7.28	4.14	6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	2	11:59	17.5	7.83	25.2	7.3	4.16	5.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	1	11:59	17.4	7.88	25.3	7.15	4.42	4.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	2	11:59	17.3	7.9	25.3	7.18	4.48	5.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:19	17.4	7.7	25.2	7.61	3.53	6.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:19	17.3	7.71	25.1	7.6	3.54	7.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.4	2	1	16:19	17.2	7.89	25.3	7.32	3.63	6.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.4	2	2	16:19	17.3	7.9	25.4	7.35	3.62	6.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.7	3	1	16:19	17.3	7.91	25.4	7.2	3.88	6.9
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.7	3	2	16:19	17.3	7.9	25.4	7.24	3.89	5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	13:13	17.5	7.72	25.1	7.54	3.53	6.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	13:13	17.5	7.73	25.1	7.58	3.5	6.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.8	2	1	13:13	17.4	7.92	25.3	7.29	3.62	6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.8	2	2	13:13	17.4	7.98	25.4	7.21	3.6	6.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.6	3	1	13:13	17.4	7.92	25.4	7.14	3.84	6.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.6	3	2	13:13	17.4	7.93	25.4	7.18	3.86	7.1
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	16:44	17.3	7.68	25.2	7.43	3.71	5.2
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	16:44	17.2	7.67	25.1	7.47	3.72	5.4
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	16:44						
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	16:44						
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.9	3	1	16:44	17.1	7.65	25.2	7.33	3.94	6.3
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.9	3	2	16:44	17	7.64	25.1	7.36	3.95	5.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	12:56	17.5	7.7	25	7.39	3.74	3.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	12:56	17.5	7.74	25	7.41	3.72	4
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	12:56						
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	12:56						
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	1	12:56	17.5	7.68	25.1	7.28	3.97	5.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	2	12:56	17.4	7.7	25.2	7.29	3.93	4.9
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	17:07	17.5	7.76	25.2	7.39	4.06	5.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	17:07	17.4	7.71	25	7.42	4.04	4.9

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	17:07						
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	17:07						
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.8	3	1	17:07	17.3	7.79	25.1	7.2	4.24	6.5
TMCLKL	HY/2012/08	2014-03-14	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.8	3	2	17:07	17.2	7.78	25.3	7.22	4.25	7.6
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	12:18	17.7	7.79	25.1	7.39	4.07	3.7
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	12:18	17.7	7.71	25.1	7.31	4.03	4.8
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	12:18						
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	12:18						
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	1	12:18	17.6	7.8	25.2	7.1	4.23	5
TMCLKL	HY/2012/08	2014-03-14	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	2	12:18	17.6	7.82	25.2	7.14	4.27	5.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	21:00	17.9	7.79	25.2	7.09	3.13	3.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	21:00	17.8	7.8	25.3	7.12	3.15	4.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.1	2	1	21:00	17.9	7.89	25.4	7.01	3.18	4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.1	2	2	21:00	18	7.9	25.3	6.95	3.2	3.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.2	3	1	21:00	18	7.96	25.5	6.92	3.25	3.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.2	3	2	21:00	17.9	7.98	25.4	6.89	3.27	4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	11:38	17.8	7.77	25.2	7.06	3.22	4.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	11:38	17.8	7.79	25.3	7.04	3.24	5
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11	2	1	11:38	17.8	7.82	25.3	6.96	3.27	3.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11	2	2	11:38	17.9	7.8	25.4	6.98	3.29	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21	3	1	11:38	18	7.87	25.5	6.87	3.34	5.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21	3	2	11:38	18.1	7.89	25.4	6.85	3.36	3.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	17:48	17.9	7.81	25.2	7.01	3.12	5.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	17:48	18	7.79	25.1	7.05	3.14	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	1	17:48	17.9	7.86	25.3	6.95	3.18	3.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	2	17:48	17.8	7.88	25.2	6.97	3.2	4.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	1	17:48	17.9	7.93	25.3	6.88	3.17	3.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	2	17:48	17.9	7.94	25.4	6.92	3.15	5.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	14:49	17.8	7.73	25.2	6.96	3.21	3.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	14:49	17.8	7.75	25.2	6.98	3.23	2.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	7	2	1	14:49	17.9	7.67	25.3	6.9	3.27	4.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	7	2	2	14:49	17.9	7.69	25.2	6.88	3.29	2.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.9	3	1	14:49	17.9	7.8	25.4	6.74	3.26	3.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.9	3	2	14:49	18	7.82	25.4	6.76	3.24	4.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	20:12	17.8	7.91	25.2	7.11	3.11	3.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	20:12	17.8	7.92	25.3	7.08	3.13	4.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	1	20:12	17.8	7.95	25.4	7.01	3.16	3
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.6	2	2	20:12	17.9	7.96	25.3	7.03	3.18	3.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	1	20:12	17.9	7.99	25.4	6.87	3.2	4.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.2	3	2	20:12	18	8	25.5	6.9	3.22	6.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	12:18	18	7.74	25.2	7.07	3.2	5.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	12:18	17.9	7.76	25.2	7.09	3.22	5.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	1	12:18	17.9	7.83	25.3	6.94	3.25	4.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	2	12:18	17.9	7.85	25.4	6.96	3.27	4.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	1	12:18	17.8	7.89	25.3	6.82	3.29	4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	2	12:18	17.9	7.91	25.4	6.84	3.31	4.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	19:48	17.9	7.75	25.2	7.04	3.18	5.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	19:48	17.8	7.77	25.2	7.02	3.2	5.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.7	2	1	19:48	17.9	7.79	25.2	6.97	3.12	4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.7	2	2	19:48	18	7.81	25.2	6.94	3.14	6.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.4	3	1	19:48	18.1	7.86	25.3	6.88	3.08	7.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.4	3	2	19:48	18	7.88	25.4	6.9	3.1	8.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	12:38	17.8	7.76	25.1	6.99	3.27	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	12:38	17.7	7.79	25.2	6.97	3.29	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.6	2	1	12:38	17.9	7.81	25.3	6.83	3.21	3.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.6	2	2	12:38	17.9	7.83	25.2	6.81	3.23	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.1	3	1	12:38	18	7.9	25.4	6.77	3.17	5.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.1	3	2	12:38	18.1	7.92	25.3	6.79	3.19	5.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	20:36	17.9	7.89	25.2	7.06	3.18	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	20:36	17.9	7.91	25.2	7.07	3.16	4.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	1	20:36	17.9	7.95	25.3	6.99	3.13	3.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.2	2	2	20:36	17.8	7.99	25.2	7.02	3.11	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.4	3	1	20:36	18	8	25.3	6.81	3.18	4.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.4	3	2	20:36	18.1	8.01	25.4	6.83	3.2	4.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	11:58	17.7	7.84	25.2	7.02	3.27	4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	11:58	17.8	7.83	25.3	7.04	3.25	2.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	1	11:58	17.8	7.76	25.3	6.92	3.22	4.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	2	11:58	17.9	7.78	25.3	6.9	3.2	2.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.1	3	1	11:58	17.9	7.92	25.4	6.73	3.27	5.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.1	3	2	11:58	18	7.94	25.4	6.75	3.29	5.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	19:24	17.8	7.79	25.1	7.01	3.12	2.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	19:24	17.9	7.81	25.2	6.99	3.15	2.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	1	19:24	17.9	7.87	25.3	6.95	3.18	3.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	2	19:24	18	7.88	25.2	6.96	3.2	2.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	1	19:24	18	7.93	25.3	6.89	3.16	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	2	19:24	17.9	7.95	25.4	6.86	3.18	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	12:58	17.7	7.82	25.1	6.93	3.21	4.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	12:58	17.7	7.84	25.1	6.91	3.24	4.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	1	12:58	17.8	7.74	25.2	6.87	3.27	5.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	2	12:58	17.9	7.76	25.3	6.89	3.29	6.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	1	12:58	18	7.94	25.4	6.81	3.25	6.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	2	12:58	17.9	7.96	25.3	6.79	3.27	5.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	18:12	17.9	7.77	25.2	6.96	3.15	3.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	18:12	17.8	7.78	25.2	6.98	3.17	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.9	2	1	18:12	17.9	7.91	25.3	6.9	3.2	4.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.9	2	2	18:12	17.9	7.93	25.4	6.88	3.22	3.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.8	3	1	18:12	17.9	7.97	25.4	6.79	3.27	4.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.8	3	2	18:12	18	7.98	25.3	6.82	3.29	5.8
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	14:12	17.8	7.82	25.2	6.92	3.24	4.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	14:12	17.9	7.84	25.3	6.9	3.26	3.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.8	2	1	14:12	17.9	7.76	25.4	6.83	3.29	3.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.8	2	2	14:12	18	7.78	25.4	6.85	3.31	4.7
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.6	3	1	14:12	18	7.69	25.3	6.72	3.36	3.5
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.6	3	2	14:12	17.9	7.71	25.4	6.74	3.38	4.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	18:36	17.9	7.75	25.2	7	3.24	3
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	18:36	17.9	7.79	25.1	6.99	3.22	2.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	18:36						
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	18:36						
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	5.2	3	1	18:36	17.9	7.73	25.3	6.81	3.18	4.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	5.2	3	2	18:36	17.8	7.75	25.2	6.84	3.2	5.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	13:35	17.9	7.74	25.2	6.94	3.33	2.4
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	13:35	17.8	7.76	25.2	6.96	3.31	2.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	13:35						
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	13:35						
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	1	13:35	17.8	7.81	25.3	6.67	3.27	5.6
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	2	13:35	17.7	7.83	25.3	6.69	3.29	4.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	19:00	17.8	7.84	25.1	7.08	3.19	3.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	19:00	17.7	7.86	25	7.09	3.21	3.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	19:00						
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	19:00						
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	3.8	3	1	19:00	17.9	7.85	25.3	6.9	3.23	4.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	3.8	3	2	19:00	18	7.87	25.2	6.94	3.25	3.2
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	13:18	17.7	7.73	25	7	3.28	4.3
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	13:18	17.8	7.75	25.1	6.98	3.3	5.1
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	13:18						
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	13:18						

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	1	13:18	17.9	7.81	25.2	6.83	3.32	5.9
TMCLKL	HY/2012/08	2014-03-17	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	2	13:18	17.9	7.83	25.3	6.85	3.34	5.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	09:52	17.7	7.7	25.1	7	9.96	9.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	09:52	17.8	7.71	25.2	7.03	9.98	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.3	2	1	09:52	17.8	7.8	25.4	6.92	9.75	9.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.3	2	2	09:52	17.8	7.81	25.3	6.86	9.71	10.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.6	3	1	09:52	17.8	7.87	25.4	6.83	9.31	7.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.6	3	2	09:52	17.9	7.89	25.3	6.8	9.22	8.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	12:44	17.8	7.76	25.2	6.94	10.1	8
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	12:44	17.8	7.77	25.1	6.97	10.4	8.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	1	12:44	17.8	7.86	25.4	6.86	9.81	7.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	2	12:44	17.9	7.87	25.3	6.8	9.77	7.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	1	12:44	17.9	7.93	25.4	6.77	9.37	8.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	2	12:44	17.8	7.95	25.5	6.74	9.28	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:08	17.8	7.72	25.2	6.96	9.89	9.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:08	17.7	7.7	25.1	6.92	9.96	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	1	08:08	17.8	7.77	25.4	6.86	9.79	9.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	2	08:08	17.9	7.79	25.3	6.88	9.81	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	1	08:08	17.9	7.84	25.4	6.79	9.3	10.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	2	08:08	17.9	7.85	25.5	6.83	9.33	10
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	16:04	17.9	7.78	25.3	6.9	9.95	7.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	16:04	17.9	7.76	25.2	6.86	10.2	7.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	1	16:04	17.9	7.83	25.4	6.8	9.85	8.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	2	16:04	17.8	7.85	25.4	6.82	9.87	8.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	16:04	18	7.9	25.5	6.73	9.36	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	16:04	17.9	7.91	25.4	6.77	9.39	8.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	09:26	17.7	7.82	25.1	7.02	9.78	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	09:26	17.6	7.83	25.2	6.99	9.82	8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	1	09:26	17.8	7.86	25.3	6.92	9.6	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	2	09:26	17.7	7.87	25.2	6.94	9.59	9.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	1	09:26	17.8	7.9	25.4	6.78	9.18	9.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	2	09:26	17.7	7.91	25.4	6.81	9.22	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	13:32	17.8	7.88	25.3	6.96	9.84	9.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	13:32	17.7	7.89	25.2	6.93	9.88	8.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.4	2	1	13:32	17.8	7.92	25.4	6.86	9.66	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.4	2	2	13:32	17.9	7.93	25.3	6.88	9.65	10.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.8	3	1	13:32	17.9	7.96	25.4	6.72	9.24	8.7
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.8	3	2	13:32	18	7.97	25.5	6.75	9.28	9.7
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:13	17.8	7.66	25.2	6.95	9.89	7.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:13	17.7	7.68	25.1	6.93	9.8	7.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.8	2	1	09:13	17.8	7.7	25.3	6.88	9.6	10
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.8	2	2	09:13	17.9	7.72	25.2	6.85	9.64	8.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.6	3	1	09:13	18	7.77	25.4	6.79	9.47	8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.6	3	2	09:13	17.9	7.79	25.3	6.81	9.41	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	14:02	17.8	7.72	25.3	6.89	9.85	9.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	14:02	17.8	7.74	25.3	6.87	9.86	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	1	14:02	17.8	7.76	25.4	6.82	9.66	8.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	2	14:02	17.9	7.78	25.3	6.79	9.7	8.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	1	14:02	17.9	7.83	25.4	6.73	9.53	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	2	14:02	17.9	7.85	25.5	6.75	9.47	8.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	09:39	17.8	7.8	25.1	6.97	9.66	7.7
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	09:39	17.7	7.82	25.1	6.98	9.69	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	1	09:39	17.8	7.86	25.2	6.9	9.4	9.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	2	09:39	17.9	7.9	25.1	6.93	9.43	9.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	1	09:39	18	7.89	25.3	6.72	9.21	8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	2	09:39	17.9	7.92	25.4	6.74	9.23	8.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	13:08	17.8	7.86	25.1	6.91	9.72	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	13:08	17.9	7.88	25.2	6.92	9.75	8.9

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	1	13:08	17.8	7.92	25.3	6.84	9.46	8.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	2	13:08	17.9	7.96	25.2	6.87	9.49	7.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	1	13:08	17.9	7.95	25.3	6.66	9.27	8.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	2	13:08	18	7.98	25.4	6.68	9.29	7.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:00	17.7	7.7	25.1	6.92	9.88	7.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:00	17.8	7.72	25	6.9	9.84	9.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.2	2	1	09:00	17.8	7.78	25.2	6.86	9.5	8.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.2	2	2	09:00	17.9	7.79	25.1	6.87	9.4	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.4	3	1	09:00	17.9	7.84	25.3	6.8	9.11	10.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.4	3	2	09:00	17.8	7.86	25.2	6.77	9.19	9.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	14:26	17.9	7.76	25.1	6.86	9.94	5.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	14:26	17.8	7.78	25.2	6.84	9.9	5.7
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	1	14:26	17.9	7.84	25.4	6.8	9.56	6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	2	14:26	17.9	7.85	25.4	6.81	9.46	7.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.6	3	1	14:26	18	7.9	25.5	6.74	9.17	8
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.6	3	2	14:26	17.9	7.92	25.4	6.71	9.25	7.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:21	17.8	7.68	25.1	6.87	9.91	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:21	17.7	7.69	25	6.89	9.94	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.8	2	1	08:21	17.8	7.82	25.2	6.81	9.76	9.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.8	2	2	08:21	17.7	7.84	25.1	6.79	9.69	8.5
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.6	3	1	08:21	17.9	7.88	25.3	6.7	9.18	9.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	12.6	3	2	08:21	17.8	7.89	25.4	6.73	9.2	8.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	15:40	17.9	7.74	25.2	6.81	9.87	8.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	15:40	17.8	7.75	25.1	6.83	10	6.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.6	2	1	15:40	17.9	7.88	25.3	6.75	9.82	9.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.6	2	2	15:40	18	7.9	25.2	6.73	9.75	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.2	3	1	15:40	18	7.94	25.4	6.64	9.24	7.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	12.2	3	2	15:40	17.5	7.95	25.3	6.67	9.26	9.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:34	17.7	7.66	25	6.91	9.8	9
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:34	17.8	7.7	25.1	6.9	9.73	9.7
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:34						
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:34						
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	3.8	3	1	08:34	17.8	7.64	25.3	6.72	9.35	10
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	3.8	3	2	08:34	17.8	7.66	25.2	6.75	9.39	10.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	15:16	17.9	7.72	25.1	6.85	9.86	9.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	15:16	17.9	7.76	25.2	6.84	9.79	8.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	15:16						
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	15:16						
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	3.4	3	1	15:16	17.9	7.7	25.4	6.66	9.41	9.9
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	3.4	3	2	15:16	18	7.72	25.3	6.69	9.45	9.2
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	08:47	17.7	7.75	25.1	6.99	9.71	8.6
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	08:47	17.6	7.67	25.1	7	9.72	8.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	08:47						
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	08:47						
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.2	3	1	08:47	17.8	7.76	25.2	6.81	9.29	10
TMCLKL	HY/2012/08	2014-03-19	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.2	3	2	08:47	17.7	7.78	25.1	6.85	9.3	9.4
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	14:50	17.8	7.81	25.2	6.93	9.77	7.8
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	14:50	17.8	7.73	25.1	6.94	9.78	8.3
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	14:50						
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	14:50						
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	1	14:50	17.9	7.82	25.3	6.75	9.35	9.1
TMCLKL	HY/2012/08	2014-03-19	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.6	3	2	14:50	17.8	7.84	25.4	6.79	9.36	8.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	10:40	18.2	7.86	24	6.88	6.34	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	10:40	18.2	7.85	24	6.84	6.3	7.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	1	10:40	18.3	7.87	24.1	6.79	6.62	6.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.7	2	2	10:40	18.3	7.87	24	6.75	6.58	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	1	10:40	18.3	7.88	24.2	6.75	6.49	6.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	22.4	3	2	10:40	18.3	7.87	24.3	6.71	6.42	6.4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	14:02	18.2	7.94	23.8	6.98	6.46	3.5
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	14:02	18.2	7.93	23.8	7	6.49	4.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.4	2	1	14:02	18.2	7.72	24	6.91	6.59	5.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.4	2	2	14:02	18.2	7.7	23.9	6.93	6.54	4.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.8	3	1	14:02	18.1	7.86	24	6.97	6.25	5.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.8	3	2	14:02	18.1	7.88	24	6.95	6.21	3.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:05	18.2	7.8	23.8	6.9	6.27	4.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:05	18.2	7.79	23.9	6.87	6.25	6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	1	08:05	18.2	7.81	24.1	6.72	5.98	4.5
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.9	2	2	08:05	18.2	7.82	24.2	6.75	5.95	6.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	08:05	18.2	7.82	24.3	6.64	6.39	5.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	08:05	18.2	7.82	24.3	6.68	6.36	4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	17:00	18.2	7.89	23.8	6.86	6.29	4.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	17:00	18.2	7.84	23.8	6.8	6.24	5.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.6	2	1	17:00	18.2	7.87	23.9	6.74	6.47	6.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.6	2	2	17:00	18.2	7.81	23.9	6.71	6.41	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.2	3	1	17:00	18.1	7.9	23.9	6.7	6.64	7.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.2	3	2	17:00	18.1	7.94	23.9	6.74	6.68	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	09:52	18.2	7.84	24	6.95	6.14	6.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	09:52	18.2	7.84	24	6.91	6.18	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	1	09:52	18.3	7.86	24.2	6.82	6.38	5.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.7	2	2	09:52	18.3	7.85	24.2	6.79	6.35	6.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	1	09:52	18.3	7.87	24.3	6.75	6.6	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.4	3	2	09:52	18.2	7.87	24.2	6.78	6.64	5.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	14:44	18.2	7.85	23.9	6.88	6.41	5.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	14:44	18.3	7.86	23.9	6.84	6.44	5.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	1	14:44	18.2	7.9	24	6.79	6.08	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.5	2	2	14:44	18.2	7.91	24	6.74	6.1	4.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	1	14:44	18.1	7.83	24	6.62	6.29	7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14	3	2	14:44	18.1	7.84	24	6.63	6.21	5.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:35	18.2	7.86	24	6.88	5.81	9.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:35	18.2	7.86	24	6.84	5.87	8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	09:35	18.2	7.87	24.2	6.72	6.76	9.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	09:35	18.3	7.86	24.1	6.68	6.71	10.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	09:35	18.3	7.87	24.2	6.75	6.8	9
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	09:35	18.3	7.87	24.2	6.71	6.75	8.5
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	15:05	18.2	7.82	24	6.9	6.43	4.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	15:05	18.1	7.83	24	6.94	6.49	5.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	1	15:05	18.1	7.92	24.1	6.86	6.81	6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	2	15:05	18.1	7.99	24.1	6.89	6.83	4.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.2	3	1	15:05	18.1	7.93	24.1	6.67	6.1	9.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.2	3	2	15:05	18.1	7.96	24.1	6.61	6.18	7.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:10	18.2	7.85	24	6.9	6.08	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:10	18.2	7.85	23.9	6.86	6.05	5.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.4	2	1	10:10	18.2	7.87	24.2	6.81	6.59	6.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.4	2	2	10:10	18.3	7.86	24.1	6.78	6.56	5.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.8	3	1	10:10	18.3	7.88	24.3	6.72	6.73	5.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.8	3	2	10:10	18.3	7.87	24.3	6.69	6.7	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	14:23	18.2	7.86	23.9	6.93	6.46	5.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	14:23	18.2	7.8	23.8	6.97	6.4	4.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	1	14:23	18.2	7.91	24	6.82	6.04	5.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.1	2	2	14:23	18.2	7.93	24	6.88	6.01	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	1	14:23	18.1	7.9	24.1	6.76	6.2	6.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.2	3	2	14:23	18.1	7.91	24.1	6.71	6.24	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:18	18.2	7.85	24	6.79	6.23	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:18	18.2	7.85	23.9	6.74	6.29	5.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.4	2	1	09:18	18.3	7.86	24.1	6.68	6.59	7.5
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.4	2	2	09:18	18.3	7.85	24.1	6.64	6.55	6.6

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.8	3	1	09:18	18.3	7.86	24.1	6.65	6.23	7
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.8	3	2	09:18	18.2	7.86	24.2	6.61	6.19	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	15:26	18.2	7.95	24	6.75	6.29	5.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	00:00	18.2	7.91	24	6.71	6.24	4.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	1	15:26	18.1	7.9	24.1	6.86	6.67	4.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	2	15:26	18.1	7.93	24.1	6.8	6.61	4.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	1	15:26	18.1	7.87	24.1	6.74	6.34	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	2	15:26	18.1	7.81	24.1	6.71	6.38	5.8
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:29	18.2	7.83	23.9	6.81	6.4	6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:29	18.2	7.83	23.9	6.78	6.45	6.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	1	08:29	18.2	7.82	24	6.71	6.37	6.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	2	08:29	18.2	7.83	24.1	6.68	6.31	6.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	1	08:29	18.2	7.83	24.2	6.74	6.52	6.5
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	2	08:29	18.1	7.83	24.2	6.72	6.54	7.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:29	18.2	7.76	23.8	6.96	6.33	6.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:29	18.2	7.79	23.9	6.99	6.39	5.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7	2	1	16:29	18.1	7.86	23.8	6.89	6.06	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7	2	2	16:29	18.1	7.88	23.9	6.84	6	6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13	3	1	16:29	18.1	7.84	23.9	6.87	6.14	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13	3	2	16:29	18.1	7.8	23.9	6.81	6.11	5.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:52	18.2	7.84	23.8	6.77	6.26	5.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:52	18.1	7.84	23.9	6.75	6.23	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:52						
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:52						
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	08:52	18.2	7.84	24.1	6.53	6.43	8.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	08:52	18.3	7.84	24.1	6.58	6.47	7.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	16:08	18.2	7.92	23.8	6.94	6	6.6
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	16:08	18.2	7.98	23.8	6.98	6.04	6.9
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	16:08						
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	16:08						
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	16:08	18.1	7.99	23.9	6.93	6.46	6.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	16:08	18.1	7.91	23.9	6.99	6.49	7
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:05	18.2	7.85	23.9	6.84	6.48	5.4
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:05	18.1	7.84	23.9	6.8	6.44	5.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:05						
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:05						
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	09:05	18.2	7.85	24	6.77	6.6	6.7
TMCLKL	HY/2012/08	2014-03-21	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	09:05	18.2	7.85	24.1	6.74	6.68	7.3
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	15:47	18.3	7.88	23.8	6.96	6.07	6.2
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	15:47	18.3	7.87	23.9	6.93	6.1	5.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	15:47						
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	15:47						
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	1	15:47	18.1	7.89	24	6.84	6.26	6.1
TMCLKL	HY/2012/08	2014-03-21	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	2	15:47	18.1	7.84	24	6.83	6.24	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Surface	1	1	1	12:51	19.6	7.78	26.2	7.04	2.12	4.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Surface	1	1	2	12:51	19.6	7.79	26.2	7.05	2.13	5.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Middle	11.3	2	1	12:51	19.5	7.81	26.3	7.13	2.34	4.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Middle	11.3	2	2	12:51	19.5	7.83	26.3	7.14	2.35	5.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Bottom	21.5	3	1	12:51	19.4	7.79	26.3	6.93	2.41	4.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS4	Bottom	21.5	3	2	12:51	19.4	7.78	26.3	6.94	2.42	5.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Surface	1	1	1	17:08	19.7	7.83	26.4	6.87	2.67	4.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Surface	1	1	2	17:08	19.7	7.84	26.5	6.88	2.68	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Middle	11.2	2	1	17:08	19.6	7.85	26.5	6.77	2.93	6.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Middle	11.2	2	2	17:08	19.6	7.86	26.5	6.78	2.94	5.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Bottom	21.3	3	1	17:08	19.5	7.81	26.6	6.71	3.09	6.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS4	Bottom	21.3	3	2	17:08	19.5	7.82	26.6	6.72	3.11	5.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Surface	1	1	1	10:10	19.6	7.74	26.2	7.12	1.87	5.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Surface	1	1	2	10:10	19.6	7.75	26.3	7.13	1.89	6

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Middle	7	2	1	10:10	19.5	7.79	26.3	7.07	2.13	6.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Middle	7	2	2	10:10	19.5	7.78	26.3	7.08	2.14	5.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Bottom	12.9	3	1	10:10	19.5	7.81	26.3	7.01	2.37	6.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	CS6	Bottom	12.9	3	2	10:10	19.4	7.82	26.4	6.99	2.38	6.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Surface	1	1	1	19:12	19.7	7.73	26.3	7.04	2.37	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Surface	1	1	2	19:12	19.7	7.74	26.4	7.05	2.38	4.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Middle	6.8	2	1	19:12	19.6	7.72	26.4	7.01	2.9	6.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Middle	6.8	2	2	19:12	19.6	7.73	26.4	7.02	2.91	7.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Bottom	12.6	3	1	19:12	19.6	7.78	26.5	6.73	3.08	7.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	CS6	Bottom	12.6	3	2	19:12	19.6	7.76	26.5	6.74	3.07	7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Surface	1	1	1	12:05	19.6	7.8	26.2	7.17	2.07	5.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Surface	1	1	2	12:05	19.6	7.81	26.2	7.18	2.08	4.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Middle	7.4	2	1	12:05	19.5	7.79	26.3	7.11	2.18	5.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Middle	7.4	2	2	12:05	19.5	7.78	26.3	7.12	2.19	5.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Bottom	13.8	3	1	12:05	19.4	7.75	26.3	7.04	2.23	6.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS12	Bottom	13.8	3	2	12:05	19.4	7.76	26.3	7.05	2.26	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Surface	1	1	1	18:02	19.7	7.74	26.3	7.01	2.02	4.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Surface	1	1	2	18:02	19.7	7.73	26.3	7.02	2.03	4.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Middle	7.3	2	1	18:02	19.6	7.73	26.4	6.83	2.09	6.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Middle	7.3	2	2	18:02	19.6	7.74	26.5	6.86	2.11	4.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Bottom	13.5	3	1	18:02	19.5	7.79	26.5	6.73	2.34	5.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS12	Bottom	13.5	3	2	18:02	19.5	7.78	26.5	6.74	2.35	5.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Surface	1	1	1	11:42	19.6	7.79	26.2	7.13	2.11	6.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Surface	1	1	2	11:42	19.6	7.81	26.2	7.14	2.13	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Middle	5.9	2	1	11:42	19.5	7.78	26.2	7.09	2.21	6.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Middle	5.9	2	2	11:42	19.5	7.79	26.2	7.11	2.22	6.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Bottom	10.8	3	1	11:42	19.4	7.81	26.3	7.13	2.43	5.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS13	Bottom	10.8	3	2	11:42	19.4	7.82	26.3	7.14	2.44	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Surface	1	1	1	19:35	19.7	7.72	26.3	6.98	2.03	3.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Surface	1	1	2	19:35	19.7	7.73	26.3	6.97	2.04	4.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Middle	5.8	2	1	19:35	19.6	7.78	26.4	6.73	2.41	6.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Middle	5.8	2	2	19:35	19.6	7.79	26.4	6.74	2.42	5.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Bottom	10.6	3	1	19:35	19.5	7.8	26.4	6.61	2.59	6.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS13	Bottom	10.6	3	2	19:35	19.5	7.81	26.5	6.62	2.61	6.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Surface	1	1	1	12:28	19.7	7.84	26.3	7.25	2.35	5.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Surface	1	1	2	12:28	19.7	7.85	26.3	7.25	2.36	5.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Middle	8.1	2	1	12:28	19.6	7.79	26.2	7.12	2.41	5.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Middle	8.1	2	2	12:28	19.6	7.79	26.2	7.13	2.42	6.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Bottom	15.2	3	1	12:28	19.5	7.81	26.3	7.05	2.58	7.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS14	Bottom	15.2	3	2	12:28	19.5	7.82	26.3	7.06	2.61	7
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Surface	1	1	1	17:38	19.6	7.81	26.4	7.19	2.9	4.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Surface	1	1	2	17:38	19.6	7.82	26.4	7.2	2.91	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Middle	8	2	1	17:38	19.5	7.82	26.4	7.11	3.11	5.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Middle	8	2	2	17:38	19.5	7.83	26.4	7.09	3.12	6.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Bottom	15	3	1	17:38	19.5	7.85	26.5	6.93	3.21	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS14	Bottom	15	3	2	17:38	19.5	7.86	26.5	6.92	3.22	6.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Surface	1	1	1	11:18	19.6	7.75	26.3	7.31	1.92	7.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Surface	1	1	2	11:18	19.6	7.76	26.3	7.32	1.93	7.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Middle	6.1	2	1	11:18	19.5	7.71	26.4	7.04	2.04	7.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Middle	6.1	2	2	11:18	19.5	7.72	26.4	7.05	2.05	6.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Bottom	11.2	3	1	11:18	19.4	7.73	26.4	6.83	2.17	7.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	IS15	Bottom	11.2	3	2	11:18	19.4	7.74	26.4	6.84	2.18	8.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Surface	1	1	1	19:58	19.7	7.73	26.3	7.29	2.21	6.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Surface	1	1	2	19:58	19.7	7.72	26.3	7.31	2.22	6.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Middle	6	2	1	19:58	19.6	7.76	26.4	7.11	2.27	5.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Middle	6	2	2	19:58	19.6	7.77	26.4	7.12	2.28	5.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Bottom	11	3	1	19:58	19.6	7.74	26.4	7.04	2.59	6.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	IS15	Bottom	11	3	2	19:58	19.6	7.75	26.4	7.05	2.57	8.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	1	10:30	19.6	7.83	26.3	7.09	1.97	5.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	2	10:30	19.6	7.84	26.3	7.11	1.98	4.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Middle	7.6	2	1	10:30	19.5	7.88	26.4	6.83	2.21	4.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Middle	7.6	2	2	10:30	19.5	7.87	26.4	6.84	2.22	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Bottom	14.2	3	1	10:30	19.4	7.81	26.3	6.73	2.38	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR10A	Bottom	14.2	3	2	10:30	19.4	7.82	26.4	6.74	2.39	8.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Surface	1	1	1	18:48	19.7	7.81	26.4	6.98	2.57	4.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Surface	1	1	2	18:48	19.7	7.82	26.4	6.97	2.58	5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Middle	7.5	2	1	18:48	19.6	7.91	26.4	6.73	2.69	5.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Middle	7.5	2	2	18:48	19.6	7.92	26.4	6.74	2.67	5.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Bottom	14	3	1	18:48	19.5	7.89	26.5	6.65	2.74	6.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR10A	Bottom	14	3	2	18:48	19.5	7.9	26.5	6.66	2.75	6.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Surface	1	1	1	10:45	19.6	7.76	26.2	7.14	2.04	5.3
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Surface	1	1	2	10:45	19.6	7.77	26.2	7.15	2.05	4.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Middle		2	1	10:45						
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Middle		2	2	10:45						
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Bottom	4.6	3	1	10:45	19.5	7.72	26.3	7.05	2.17	3.8
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR8	Bottom	4.6	3	2	10:45	19.5	7.73	26.3	7.06	2.2	5.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Surface	1	1	1	18:25	19.7	7.74	26.3	7.03	2.37	4.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Surface	1	1	2	18:25	19.7	7.75	26.3	7.04	2.38	4.9
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Middle		2	1	18:25						
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Middle		2	2	18:25						
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Bottom	4.4	3	1	18:25	19.5	7.71	26.4	6.87	2.57	6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR8	Bottom	4.4	3	2	18:25	19.5	7.72	26.4	6.86	2.59	5.2
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Surface	1	1	1	10:55	19.7	7.83	26.2	7.21	2.11	6.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Surface	1	1	2	10:55	19.7	7.84	26.2	7.22	2.12	6.1
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Middle		2	1	10:55						
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Middle		2	2	10:55						
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Bottom	4.6	3	1	10:55	19.6	7.88	26.3	7.04	2.37	6.5
TMCLKL	HY/2012/08	2014-03-24	Mid-Flood	Fine	Calm	SR9	Bottom	4.6	3	2	10:55	19.6	7.89	26.3	7.05	2.41	7.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Surface	1	1	1	20:21	19.7	7.79	26.3	7.17	2.39	5.7
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Surface	1	1	2	20:21	19.7	7.79	26.3	7.16	2.41	5.4
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Middle		2	1	20:21						
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Middle		2	2	20:21						
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Bottom	4.6	3	1	20:21	19.6	7.74	26.4	7.04	2.51	8.6
TMCLKL	HY/2012/08	2014-03-24	Mid-Ebb	Fine	Calm	SR9	Bottom	4.6	3	2	20:21	19.6	7.75	26.4	7.05	2.52	8.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	16:11	19.8	7.93	28.4	7.07	3.03	3.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	16:11	19.7	7.96	28.5	7.09	3.05	4.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.3	2	1	16:11	19.7	7.84	28.6	7.15	3.31	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Middle	11.3	2	2	16:11	19.6	7.86	28.5	7.13	3.38	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.6	3	1	16:11	19.5	7.89	28.7	6.77	3.67	3
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	21.6	3	2	16:11	19.4	7.91	28.8	6.79	3.7	3.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	08:20	19.7	7.88	28.4	7.01	3.12	3.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	08:20	19.6	7.9	28.4	7.03	3.14	3.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	1	08:20	19.6	7.79	28.5	7.09	3.4	4.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	11.1	2	2	08:20	19.6	7.81	28.5	7.07	3.47	4.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	1	08:20	19.5	7.84	28.6	6.71	3.79	5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	21.2	3	2	08:20	19.4	7.86	28.7	6.73	3.79	5.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	12:59	19.6	7.99	28.5	7.19	3.01	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	12:59	19.5	7.98	28.4	7.2	3.09	3.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.8	2	1	12:59	19.5	7.96	28.5	6.95	3.41	4.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.8	2	2	12:59	19.4	7.98	28.6	6.96	3.45	3.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.6	3	1	12:59	19.4	7.88	28.6	6.89	3.63	4.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.6	3	2	12:59	19.5	7.87	28.7	6.93	3.69	2.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	11:12	19.6	7.94	28.4	7.13	3.1	4.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	11:12	19.6	7.93	28.5	7.14	3.18	4.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.6	2	1	11:12	19.5	7.91	28.5	6.89	3.5	3.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.6	2	2	11:12	19.5	7.93	28.5	6.9	3.54	4.9

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.2	3	1	11:12	19.3	7.83	28.6	6.83	3.72	3.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.2	3	2	11:12	19.4	7.82	28.7	6.87	3.78	5.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	15:23	19.7	7.82	28.5	7.02	2.79	3.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	15:23	19.8	7.87	28.4	7.04	2.81	2.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Middle	8.1	2	1	15:23	19.7	7.91	28.6	6.9	2.85	2.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Middle	8.1	2	2	15:23	19.6	7.87	28.6	6.92	2.87	3.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	15.2	3	1	15:23	19.6	7.78	28.6	6.56	3.02	7.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	15.2	3	2	15:23	19.5	7.82	28.7	6.6	3.04	5.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	09:02	19.7	7.77	28.4	6.96	2.88	2.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	09:02	19.7	7.73	28.4	6.98	2.9	3.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.9	2	1	09:02	19.6	7.86	28.5	6.84	2.94	3.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.9	2	2	09:02	19.6	7.82	28.5	6.86	2.96	3
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.8	3	1	09:02	19.5	7.73	28.6	6.5	3.11	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.8	3	2	09:02	19.6	7.77	28.6	6.54	3.13	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	14:59	19.7	7.87	28.5	6.98	3.06	3.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	14:59	19.6	7.93	28.4	7.04	3.02	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	14:59	19.6	7.81	28.7	6.94	3.2	4.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	14:59	19.5	7.84	28.6	6.96	3.02	5.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	14:59	19.4	8.02	28.8	6.8	3.1	4.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	14:59	19.5	7.96	28.7	6.84	3.08	5.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	09:22	19.6	7.82	28.4	6.92	3.15	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	09:22	19.6	7.88	28.4	6.98	3.11	2.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	1	09:22	19.5	7.76	28.5	6.88	3.29	3.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	2	09:22	19.5	7.78	28.5	6.9	3.31	3.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	1	09:22	19.4	7.97	28.6	6.74	3.19	4.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	2	09:22	19.3	7.91	28.7	6.78	3.17	2.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	15:47	19.8	7.96	28.4	7.21	3.25	5.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	15:47	19.7	8.04	28.5	7.16	3.27	5.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.7	2	1	15:47	19.6	8.01	28.6	7.03	3.48	5.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.7	2	2	15:47	19.5	7.99	28.7	6.99	3.5	3.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	16.4	3	1	15:47	19.4	7.97	28.7	6.83	3.38	4.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	16.4	3	2	15:47	19.5	7.95	28.6	6.85	3.34	4.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	08:41	19.7	7.9	28.3	7.15	3.34	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	08:41	19.7	7.98	28.4	7.1	3.36	3
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.5	2	1	08:41	19.5	7.96	28.5	6.97	3.57	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.5	2	2	08:41	19.6	7.94	28.6	6.93	3.59	2
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	16	3	1	08:41	19.5	7.92	28.6	6.77	3.47	2.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	16	3	2	08:41	19.4	7.9	28.6	6.79	3.43	2.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	14:35	19.8	7.84	28.5	6.89	3.17	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	14:35	19.7	7.85	28.4	6.93	3.21	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	1	14:35	19.7	7.89	28.6	6.98	3.08	4.3
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	2	14:35	19.6	7.92	28.5	7.03	3.04	3.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	1	14:35	19.5	7.86	28.6	6.71	3.2	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	2	14:35	19.4	7.9	28.7	6.72	3.28	4.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	09:42	19.7	7.79	28.4	6.83	3.26	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	09:42	19.7	7.8	28.3	6.87	3.3	2.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	1	09:42	19.5	7.83	28.5	6.92	3.17	3.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	2	09:42	19.4	7.87	28.5	6.97	3.13	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	1	09:42	19.4	7.8	28.6	6.65	3.29	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	2	09:42	19.4	7.84	28.6	6.66	3.37	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	13:23	19.7	8.04	28.4	7.06	3.2	3.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	13:23	19.6	8.03	28.5	7.14	3.12	2.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	1	13:23	19.5	7.98	28.6	7.23	3.59	2.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.3	2	2	13:23	19.5	7.96	28.5	7.19	3.61	2.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	1	13:23	19.4	8.01	28.7	6.91	3.38	2.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	13.6	3	2	13:23	19.3	8.02	28.6	6.94	3.4	3.6
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	10:42	19.6	7.99	28.3	7	3.29	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	10:42	19.7	7.98	28.4	7.08	3.21	4.3

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	1	10:42	19.5	7.93	28.5	7.17	3.68	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.1	2	2	10:42	19.6	7.91	28.4	7.13	3.7	4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	1	10:42	19.4	7.96	28.6	6.85	3.47	4.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	13.2	3	2	10:42	19.4	7.97	28.6	6.88	3.49	4.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	13:47	19.7	7.87	28.4	6.89	3.32	4.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	13:47	19.8	7.88	28.5	6.93	3.34	3.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	13:47						
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	13:47						
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	13:47	19.5	7.85	28.6	6.82	3.52	3.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	13:47	19.4	7.89	28.5	6.85	3.6	3.4
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	10:22	19.7	7.82	28.4	6.83	3.41	3.9
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	10:22	19.7	7.83	28.4	6.87	3.43	5.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	10:22						
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	10:22						
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	10:22	19.4	7.8	28.5	6.76	3.61	3.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	10:22	19.4	7.84	28.6	6.79	3.69	5.7
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	14:11	19.6	7.88	28.4	6.78	2.91	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	14:11	19.7	7.89	28.5	6.83	2.99	2.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	14:11						
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	14:11						
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	14:11	19.4	7.95	28.7	6.96	3.2	4.1
TMCLKL	HY/2012/08	2014-03-26	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	14:11	19.5	7.97	28.6	7	3.12	3.5
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	10:02	19.6	7.83	28.4	6.73	3	3.2
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	10:02	19.6	7.84	28.4	6.77	3.08	3.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	10:02						
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	10:02						
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	1	10:02	19.4	7.9	28.6	6.9	3.29	4.8
TMCLKL	HY/2012/08	2014-03-26	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	2	10:02	19.4	7.92	28.5	6.94	3.21	4.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Surface	1	1	1	18:31	20.3	7.73	27.1	7.59	3.67	7.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Surface	1	1	2	18:31	20.3	7.72	27.1	7.61	3.68	7.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Middle	11.2	2	1	18:31	20.2	7.76	27.2	7.43	3.97	7.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Middle	11.2	2	2	18:31	20.2	7.78	27.2	7.44	3.96	8.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Bottom	21.4	3	1	18:31	20.1	7.72	27.3	7.21	4.13	8.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS4	Bottom	21.4	3	2	18:31	20.1	7.73	27.3	7.22	4.14	9.8
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	1	10:00	20.2	7.77	27.3	7.43	4.03	5.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	2	10:00	20.3	7.78	27.3	7.42	4.02	6.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Middle	11.1	2	1	10:00	20.2	7.74	27.4	7.13	4.29	7.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Middle	11.1	2	2	10:00	20.2	7.75	27.4	7.12	4.27	8
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Bottom	21.2	3	1	10:00	20.1	7.73	27.5	6.91	4.73	7.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS4	Bottom	21.2	3	2	10:00	20.1	7.74	27.5	6.92	4.74	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Surface	1	1	1	15:18	20.3	7.78	27.1	8.15	3.83	7.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Surface	1	1	2	15:18	20.3	7.79	27.1	8.16	3.82	7.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Middle	6.9	2	1	15:18	20.3	7.77	27.2	7.73	4.07	5.8
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Middle	6.9	2	2	15:18	20.3	7.76	27.2	7.74	4.08	6.8
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Bottom	12.8	3	1	15:18	20.2	7.77	27.3	7.59	4.37	7.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	CS6	Bottom	12.8	3	2	15:18	20.2	7.76	27.3	7.57	4.38	7.8
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	1	12:58	20.2	7.75	27.3	7.54	3.75	7.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	2	12:58	20.2	7.76	27.3	7.55	3.76	7.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.8	2	1	12:58	20.2	7.74	27.5	7.15	4.12	6.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.8	2	2	12:58	20.2	7.74	27.5	7.16	4.13	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Bottom	12.5	3	1	12:58	20.2	7.76	27.4	6.98	4.49	7.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	CS6	Bottom	12.5	3	2	12:58	20.1	7.75	27.4	6.99	4.51	7.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Surface	1	1	1	17:45	20.3	7.75	27.1	7.29	3.03	7.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Surface	1	1	2	17:45	20.3	7.76	27.1	7.28	3.04	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Middle	7.3	2	1	17:45	20.2	7.77	27.2	7.43	3.27	6.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Middle	7.3	2	2	17:45	20.2	7.81	27.2	7.44	3.28	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Bottom	13.6	3	1	17:45	20.2	7.73	27.3	7.07	3.37	8.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS12	Bottom	13.6	3	2	17:45	20.2	7.74	27.3	7.08	3.38	7.6

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	1	10:46	20.2	7.73	27.3	7.27	3.49	4.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	2	10:46	20.2	7.74	27.3	7.28	3.51	5.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.2	2	1	10:46	20.2	7.76	27.4	7.17	3.97	7.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.2	2	2	10:46	20.2	7.77	27.4	7.18	3.98	5.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Bottom	13.4	3	1	10:46	20.1	7.72	27.5	7.01	4.17	8.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS12	Bottom	13.4	3	2	10:46	20.2	7.73	27.5	7.02	4.19	7.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Surface	1	1	1	17:22	20.3	7.81	27.2	7.21	3.67	5.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Surface	1	1	2	17:22	20.3	7.82	27.1	7.22	3.66	5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Middle	5.9	2	1	17:22	20.3	7.85	27.3	7.34	3.83	3.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Middle	5.9	2	2	17:22	20.3	7.86	27.3	7.35	3.84	4.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Bottom	10.8	3	1	17:22	20.2	7.81	27.3	7.07	4.11	6.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS13	Bottom	10.8	3	2	17:22	20.2	7.82	27.3	7.08	4.13	5.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	1	11:08	20.2	7.78	27.3	7.78	4.07	5.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	2	11:08	20.2	7.79	27.3	7.79	4.08	5.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Middle	5.8	2	1	11:08	20.2	7.72	27.4	7.63	4.43	8
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Middle	5.8	2	2	11:08	20.2	7.73	27.4	7.62	4.42	8.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Bottom	10.5	3	1	11:08	20.1	7.77	27.5	7.37	4.87	6.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS13	Bottom	10.5	3	2	11:08	20.1	7.78	27.5	7.34	4.88	6.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Surface	1	1	1	18:08	20.3	7.74	27.2	7.47	3.43	6.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Surface	1	1	2	18:08	20.3	7.76	27.2	7.51	3.44	5.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Middle	8.2	2	1	18:08	20.2	7.74	27.1	7.21	3.67	7.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Middle	8.2	2	2	18:08	20.2	7.75	27.2	7.22	3.66	6.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Bottom	15.4	3	1	18:08	20.2	7.76	27.3	7.08	4.01	5.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS14	Bottom	15.4	3	2	18:08	20.2	7.77	27.3	7.08	4.02	5.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	1	10:25	20.3	7.75	27.3	7.44	3.67	6.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	2	10:25	20.3	7.76	27.3	7.45	3.66	6.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Middle	8.1	2	1	10:25	20.2	7.77	27.4	7.31	4.07	5.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Middle	8.1	2	2	10:25	20.2	7.78	27.4	7.32	4.08	7.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Bottom	15.2	3	1	10:25	20.2	7.72	27.5	7.13	4.37	5.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS14	Bottom	15.2	3	2	10:25	20.2	7.73	27.5	7.12	4.38	5.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Surface	1	1	1	16:59	20.3	7.76	27.2	7.77	4.03	5.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Surface	1	1	2	16:59	20.3	7.76	27.2	7.78	4.02	5.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Middle	6.1	2	1	16:59	20.3	7.75	27.2	7.67	4.19	5.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Middle	6.1	2	2	16:59	20.3	7.74	27.3	7.66	4.21	6.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Bottom	11.2	3	1	16:59	20.2	7.78	27.4	7.31	4.43	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	IS15	Bottom	11.2	3	2	16:59	20.2	7.79	27.4	7.32	4.44	6.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	1	11:30	20.2	7.72	27.3	7.49	3.99	4.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	2	11:30	20.2	7.73	27.3	7.51	3.97	5.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Middle	6	2	1	11:30	20.2	7.74	27.4	7.21	4.57	5.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Middle	6	2	2	11:30	20.2	7.75	27.4	7.22	4.56	4.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Bottom	11	3	1	11:30	20.1	7.77	27.5	7.01	4.99	7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	IS15	Bottom	11	3	2	11:30	20.1	7.78	27.5	7.02	4.96	7.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Surface	1	1	1	15:47	20.3	7.71	27.2	7.29	3.97	6.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Surface	1	1	2	15:47	20.3	7.72	27.2	7.31	3.98	5.2
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Middle	7.6	2	1	15:47	20.3	7.78	27.2	7.21	4.11	6.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Middle	7.6	2	2	15:47	20.3	7.79	27.3	7.22	4.12	5.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Bottom	14.2	3	1	15:47	20.2	7.81	27.4	7.06	4.29	6.8
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR10A	Bottom	14.2	3	2	15:47	20.2	7.82	27.4	7.07	4.28	5.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	1	12:36	20.2	7.78	27.3	7.19	3.64	6.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	2	12:36	20.2	7.79	27.3	7.21	3.65	5.7
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7.5	2	1	12:36	20.2	7.8	27.4	7.03	4.43	5.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7.5	2	2	12:36	20.2	7.81	27.4	7.04	4.44	4.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	14	3	1	12:36	20.1	7.79	27.4	6.83	4.97	4.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	14	3	2	12:36	20.1	7.77	27.5	6.84	4.99	4.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Surface	1	1	1	16:11	20.3	7.74	27.4	7.67	3.43	8.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Surface	1	1	2	16:11	20.3	7.75	27.4	7.68	3.44	7.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Middle		2	1	16:11						
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Middle		2	2	16:11						

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Bottom	4.4	3	1	16:11	20.2	7.76	27.4	7.11	3.67	6.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR8	Bottom	4.4	3	2	16:11	20.2	7.77	27.4	7.09	3.68	7.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	1	12:14	20.2	7.78	27.3	7.31	3.83	4.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	2	12:14	20.2	7.79	27.3	7.32	3.84	4.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	1	12:14						
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	2	12:14						
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	1	12:14	20.2	7.81	27.3	7.04	4.11	6.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	2	12:14	20.2	7.82	27.3	7.03	4.12	5.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Surface	1	1	1	16:35	20.3	7.71	27.3	7.91	3.83	6.3
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Surface	1	1	2	16:35	20.3	7.72	27.3	7.92	3.84	5.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Middle		2	1	16:35						
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Middle		2	2	16:35						
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Bottom	4.6	3	1	16:35	20.3	7.81	27.4	7.56	4.03	5.9
TMCLKL	HY/2012/08	2014-03-28	Mid-Flood	Cloudy	Calm	SR9	Bottom	4.6	3	2	16:35	20.3	7.82	27.4	7.54	4.02	6.1
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	1	11:52	20.2	7.71	27.3	7.67	3.67	6.5
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	2	11:52	20.2	7.7	27.3	7.68	3.66	6.6
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	1	11:52						
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	2	11:52						
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.4	3	1	11:52	20.2	7.72	27.3	6.73	3.55	6.4
TMCLKL	HY/2012/08	2014-03-28	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.4	3	2	11:52	20.2	7.73	27.3	6.74	3.54	5
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Surface	1	1	1	21:03	20.1	7.83	22.5	6.84	6.81	12.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Surface	1	1	2	21:03	20.1	7.83	22.4	6.87	6.9	12.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Middle	11.6	2	1	21:03	20	7.83	23.1	6.75	6.75	12.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Middle	11.6	2	2	21:03	20	7.83	23.1	6.71	6.82	13.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Bottom	22.2	3	1	21:03	20	7.84	23.1	6.77	6.96	12.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS4	Bottom	22.2	3	2	21:03	20	7.84	23.1	6.74	6.91	13.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Surface	1	1	1	11:39	20.1	7.79	22.3	6.82	7.07	12
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Surface	1	1	2	11:39	20.1	7.78	22.3	6.79	7.14	11.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Middle	11.2	2	1	11:39	20	7.77	23.1	6.63	7.43	11.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Middle	11.2	2	2	11:39	20	7.76	23.1	6.66	7.4	13.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Bottom	21.4	3	1	11:39	20	7.79	23.1	6.67	7.52	13.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS4	Bottom	21.4	3	2	11:39	20	7.8	23.1	6.64	7.47	12.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Surface	1	1	1	17:53	20.3	7.8	22.5	6.83	7.34	11.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Surface	1	1	2	17:53	20.3	7.81	22.5	6.78	7.3	10.7
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Middle	6.9	2	1	17:53	20.1	7.79	23	6.74	7.12	10.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Middle	6.9	2	2	17:53	20.1	7.79	23	6.71	7.15	10.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Bottom	12.8	3	1	17:53	20	7.8	23.1	6.6	7.04	10.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	CS6	Bottom	12.8	3	2	17:53	20.1	7.8	23.1	6.63	7.08	10.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Surface	1	1	1	14:10	20.2	7.81	22.4	6.89	7.01	11.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Surface	1	1	2	14:10	20.2	7.81	22.4	6.86	7.04	12.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Middle	6.6	2	1	14:10	20.1	7.81	23	6.71	7.21	13.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Middle	6.6	2	2	14:10	20.1	7.82	23.1	6.68	7.17	14.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Bottom	12.2	3	1	14:10	20	7.82	23.1	6.68	7.17	15.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	CS6	Bottom	12.2	3	2	14:10	20	7.82	23.1	6.64	7.11	15.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Surface	1	1	1	20:05	20.1	7.84	22.5	6.82	6.9	34.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Surface	1	1	2	20:05	20.1	7.84	22.5	6.78	6.96	35.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Middle	7.7	2	1	20:05	20	7.84	23	6.75	6.67	34.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Middle	7.7	2	2	20:05	20	7.84	23	6.71	6.64	35.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Bottom	14.4	3	1	20:05	20	7.83	23	6.71	6.74	38.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS12	Bottom	14.4	3	2	20:05	20	7.82	23.1	6.74	6.69	37.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Surface	1	1	1	12:25	20.1	7.8	22.4	6.88	7.37	15.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Surface	1	1	2	12:25	20.1	7.81	22.4	6.84	7.34	15.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Middle	7.3	2	1	12:25	20	7.8	23.1	6.76	6.92	15.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Middle	7.3	2	2	12:25	20	7.8	23.1	6.72	6.89	16
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Bottom	13.6	3	1	12:25	20	7.81	23.2	6.59	7.29	16.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS12	Bottom	13.6	3	2	12:25	20	7.8	23.1	6.55	7.26	17.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Surface	1	1	1	19:44	20.2	7.81	22.4	6.91	6.96	14.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Surface	1	1	2	19:44	20.1	7.81	22.4	6.88	6.92	13.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Middle	6.1	2	1	19:44	20.1	7.82	23.1	6.8	6.84	16.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Middle	6.1	2	2	19:44	20	7.82	23.1	6.84	6.79	17.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Bottom	11.2	3	1	19:44	20	7.82	23.1	6.7	6.66	19.7
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS13	Bottom	11.2	3	2	19:44	20	7.81	23.1	6.67	6.71	19.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Surface	1	1	1	12:45	20.2	7.81	22.4	6.74	6.94	12.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Surface	1	1	2	12:45	20.2	7.81	22.4	6.69	6.9	13.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Middle	5.7	2	1	12:45	20.1	7.81	23.1	6.7	7.09	15
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Middle	5.7	2	2	12:45	20.1	7.81	23.1	6.68	7.05	13.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Bottom	10.4	3	1	12:45	20	7.81	23.1	6.59	7.18	14
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS13	Bottom	10.4	3	2	12:45	20	7.81	23	6.56	7.15	13.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Surface	1	1	1	20:27	20.1	7.83	22.5	6.87	7.01	22.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Surface	1	1	2	20:27	20	7.83	22.5	6.85	7.05	22.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Middle	8.4	2	1	20:27	20.1	7.83	23.1	6.79	7.23	23.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Middle	8.4	2	2	20:27	20	7.83	23.1	6.75	7.2	23.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Bottom	15.8	3	1	20:27	20	7.84	23.1	6.74	6.99	29.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS14	Bottom	15.8	3	2	20:27	20	7.84	23.1	6.7	6.95	28.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Surface	1	1	1	12:05	20.1	7.78	22.4	6.79	6.98	11.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Surface	1	1	2	12:05	20.1	7.78	22.4	6.77	6.92	12
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Middle	8.1	2	1	12:05	20	7.81	23.1	6.7	6.74	14.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Middle	8.1	2	2	12:05	20.1	7.8	23.1	6.74	6.69	14.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Bottom	15.2	3	1	12:05	20	7.82	23.1	6.64	7.06	13.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS14	Bottom	15.2	3	2	12:05	20	7.81	23.1	6.67	7.14	13.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Surface	1	1	1	19:25	20.2	7.8	22.5	6.88	7.05	16.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Surface	1	1	2	19:25	20.2	7.81	22.5	6.84	7.1	17.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Middle	6.4	2	1	19:25	20.1	7.82	23	6.72	7.09	18.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Middle	6.4	2	2	19:25	20.1	7.82	23.1	6.67	7.04	18
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Bottom	11.8	3	1	19:25	20.1	7.81	23.1	6.75	7.18	18.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	IS15	Bottom	11.8	3	2	19:25	20.1	7.82	23.1	6.72	7.11	17.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Surface	1	1	1	12:04	20.2	7.8	22.4	6.8	6.74	13
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Surface	1	1	2	12:04	20.1	7.8	22.4	6.84	6.77	12.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Middle	6.1	2	1	12:04	20.1	7.81	23.1	6.67	6.82	12.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Middle	6.1	2	2	12:04	20.1	7.81	23.1	6.64	6.79	12.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Bottom	11.2	3	1	12:04	20.1	7.82	23.1	6.6	7.21	12.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	IS15	Bottom	11.2	3	2	12:04	20	7.82	23.1	6.64	7.17	12.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Surface	1	1	1	18:25	20.2	7.81	22.5	6.85	6.95	13.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Surface	1	1	2	18:25	20.3	7.81	22.5	6.81	6.92	14.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Middle	7.6	2	1	18:25	20.1	7.82	23.1	6.75	7.47	15.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Middle	7.6	2	2	18:25	20.1	7.82	23.1	6.71	7.41	14.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Bottom	14.2	3	1	18:25	20	7.8	23.2	6.68	7.21	17.7
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR10A	Bottom	14.2	3	2	18:25	20	7.8	23.1	6.64	7.17	16.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Surface	1	1	1	14:46	20.2	7.8	22.3	6.82	6.94	10.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Surface	1	1	2	14:46	20.1	7.8	22.4	6.85	6.9	11.9
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Middle	7.3	2	1	14:46	20.1	7.81	23.1	6.64	7.24	10
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Middle	7.3	2	2	14:46	20.1	7.81	23.1	6.67	7.2	12
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Bottom	13.6	3	1	14:46	20	7.81	23.1	6.56	7.5	15.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR10A	Bottom	13.6	3	2	14:46	20	7.8	23.1	6.52	7.55	14.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Surface	1	1	1	18:55	20	7.79	22.4	6.92	7.09	10.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Surface	1	1	2	18:55	20.1	7.79	22.5	6.89	7.06	10.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Middle		2	1	18:55						
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Middle		2	2	18:55						
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Bottom	4.8	3	1	18:55	20	7.8	23	6.77	7.22	12.1
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR8	Bottom	4.8	3	2	18:55	20	7.81	23	6.74	7.19	11.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Surface	1	1	1	13:38	20.2	7.81	22.4	6.75	6.88	13.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Surface	1	1	2	13:38	20.1	7.81	22.4	6.71	6.81	14.4
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Middle		2	1	13:38						
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Middle		2	2	13:38						
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Bottom	4.2	3	1	13:38	20.1	7.82	23.1	6.6	6.99	14.8
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR8	Bottom	4.2	3	2	13:38	20.1	7.82	23	6.57	6.92	14.4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Surface	1	1	1	19:10	20.1	7.83	22.5	6.94	7.11	10
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Surface	1	1	2	19:10	20.2	7.82	22.5	6.9	7.08	8.6
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Middle		2	1	19:10						
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Middle		2	2	19:10						
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Bottom	4.8	3	1	19:10	20.1	7.82	23	6.67	7.33	15.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Flood	Rainy	Small Wave	SR9	Bottom	4.8	3	2	19:10	20.1	7.82	23	6.64	7.29	16.3
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Surface	1	1	1	13:23	20.2	7.79	22.4	6.75	6.87	12.5
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Surface	1	1	2	13:23	20.2	7.79	22.4	6.71	6.81	13.2
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Middle		2	1	13:23						
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Middle		2	2	13:23						
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Bottom	4.4	3	1	13:23	20.1	7.8	23	6.64	7.34	17
TMCLKL	HY/2012/08	2014-03-31	Mid-Ebb	Rainy	Small Wave	SR9	Bottom	4.4	3	2	13:23	20.1	7.8	23	6.67	7.3	18.4

Appendix J

Impact Dolphin Monitoring Survey

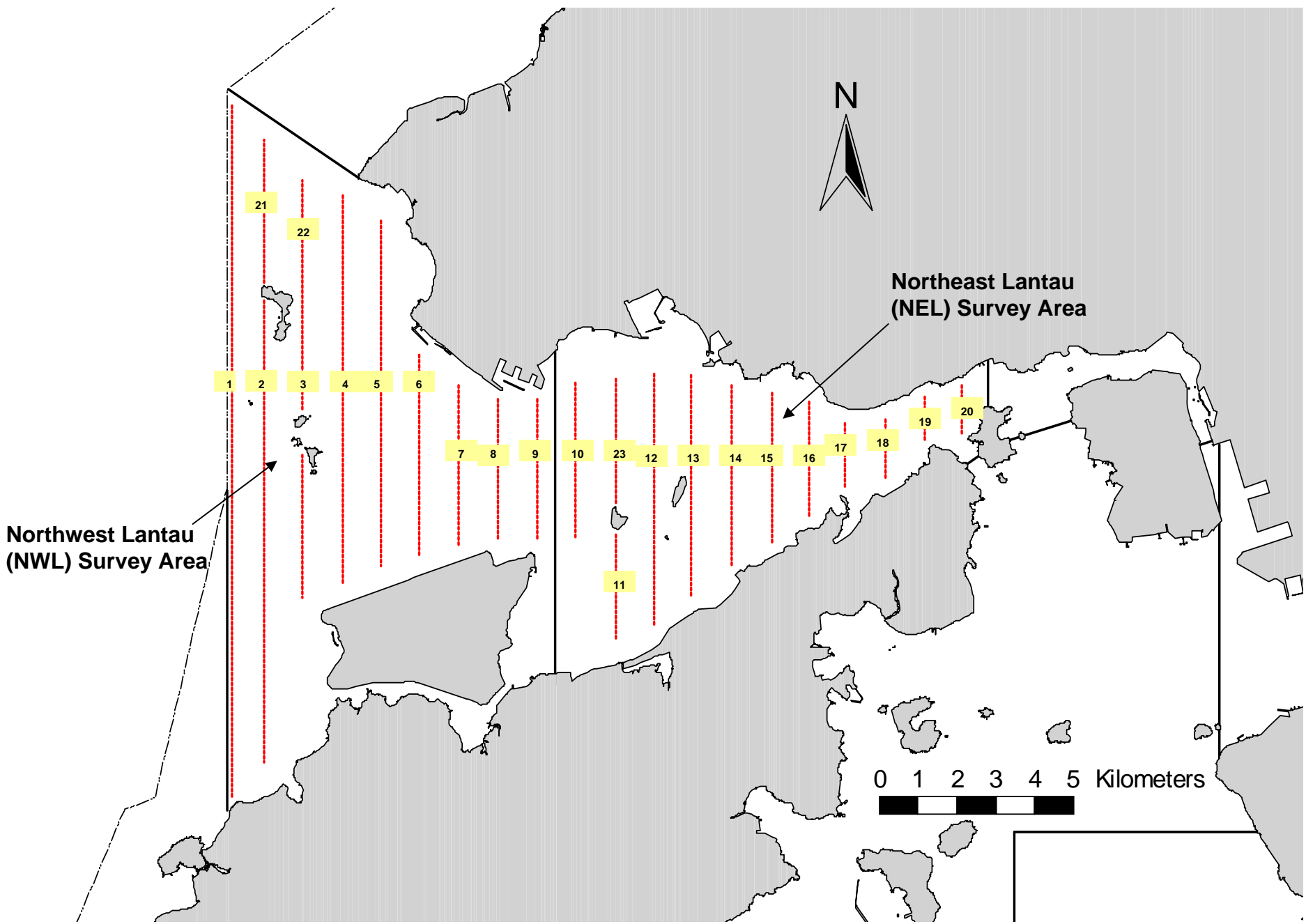


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

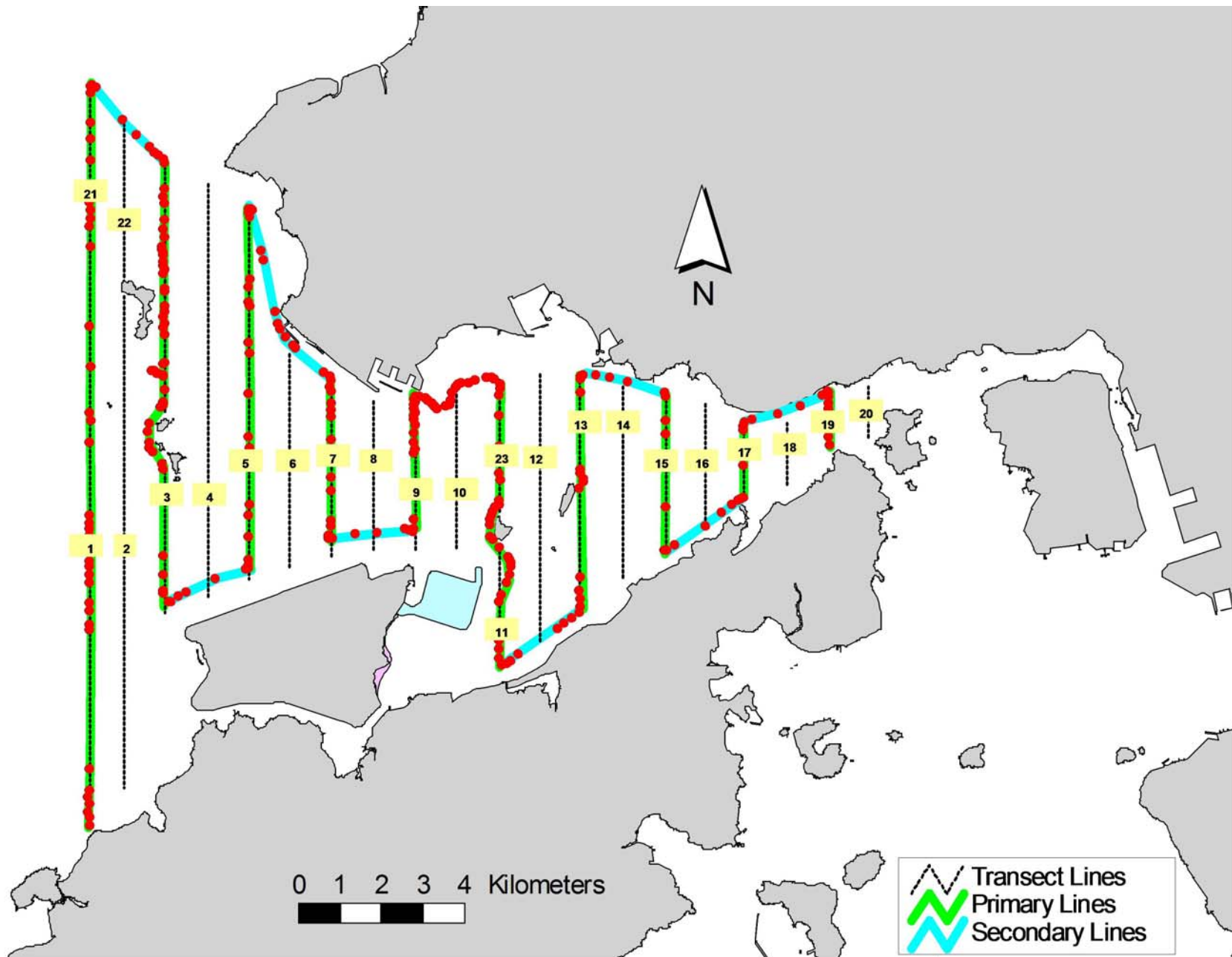


Figure 3. Survey Route on March 11th, 2014 (from HKLR03 project)

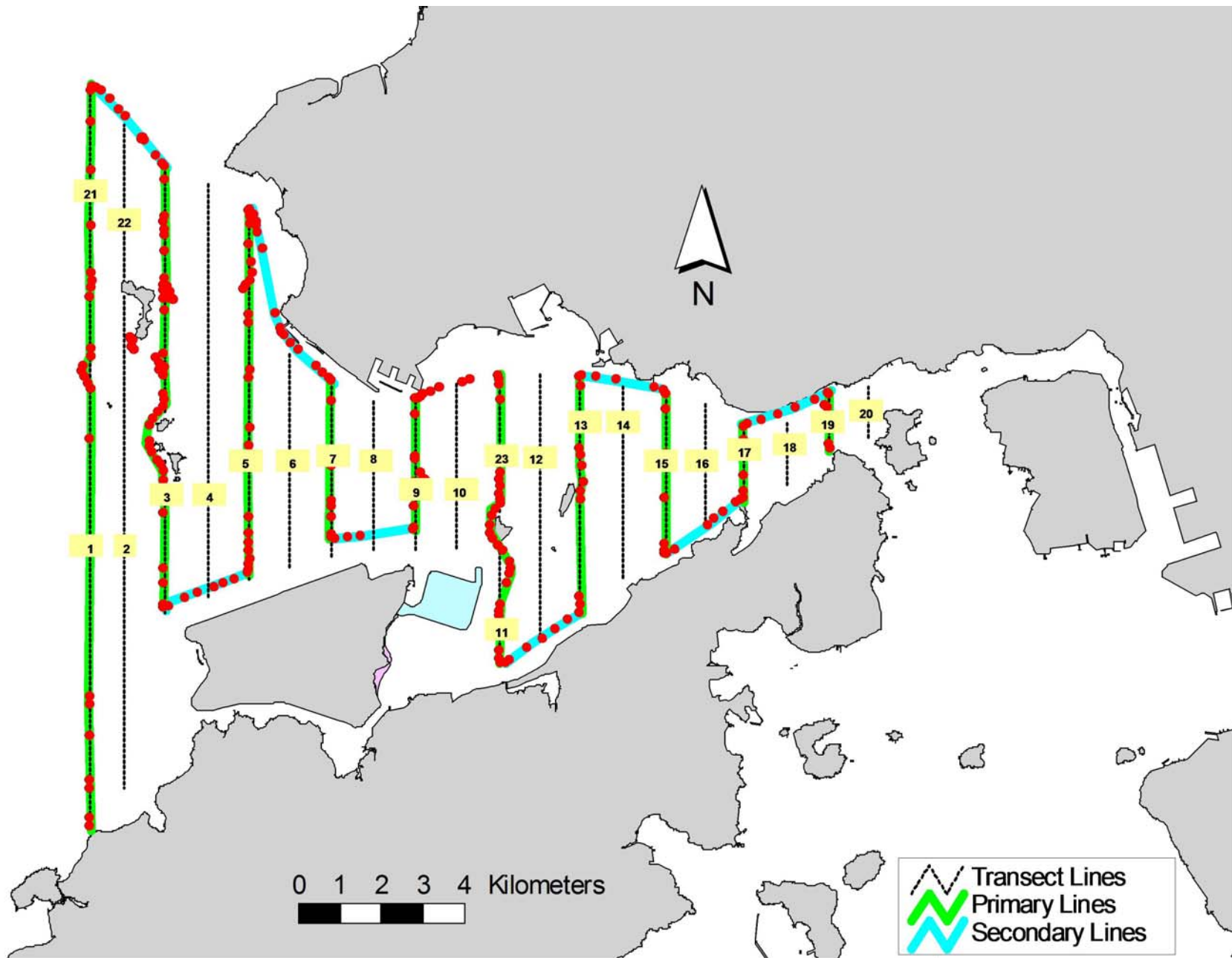


Figure 4. Survey Route on March 17th, 2014 (from HKLR03 project)

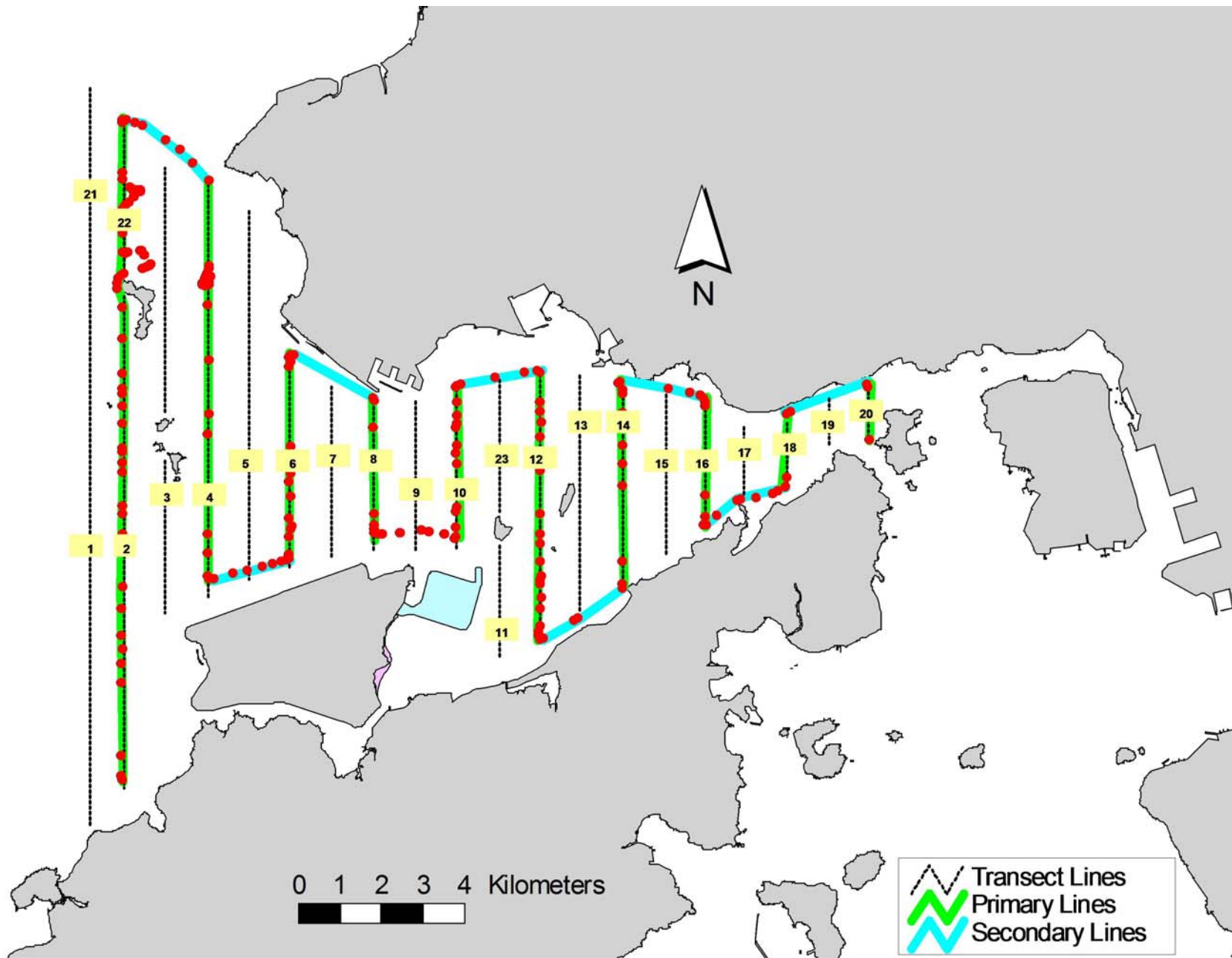


Figure 5. Survey Route on March 25th, 2014 (from HKLR03 project)

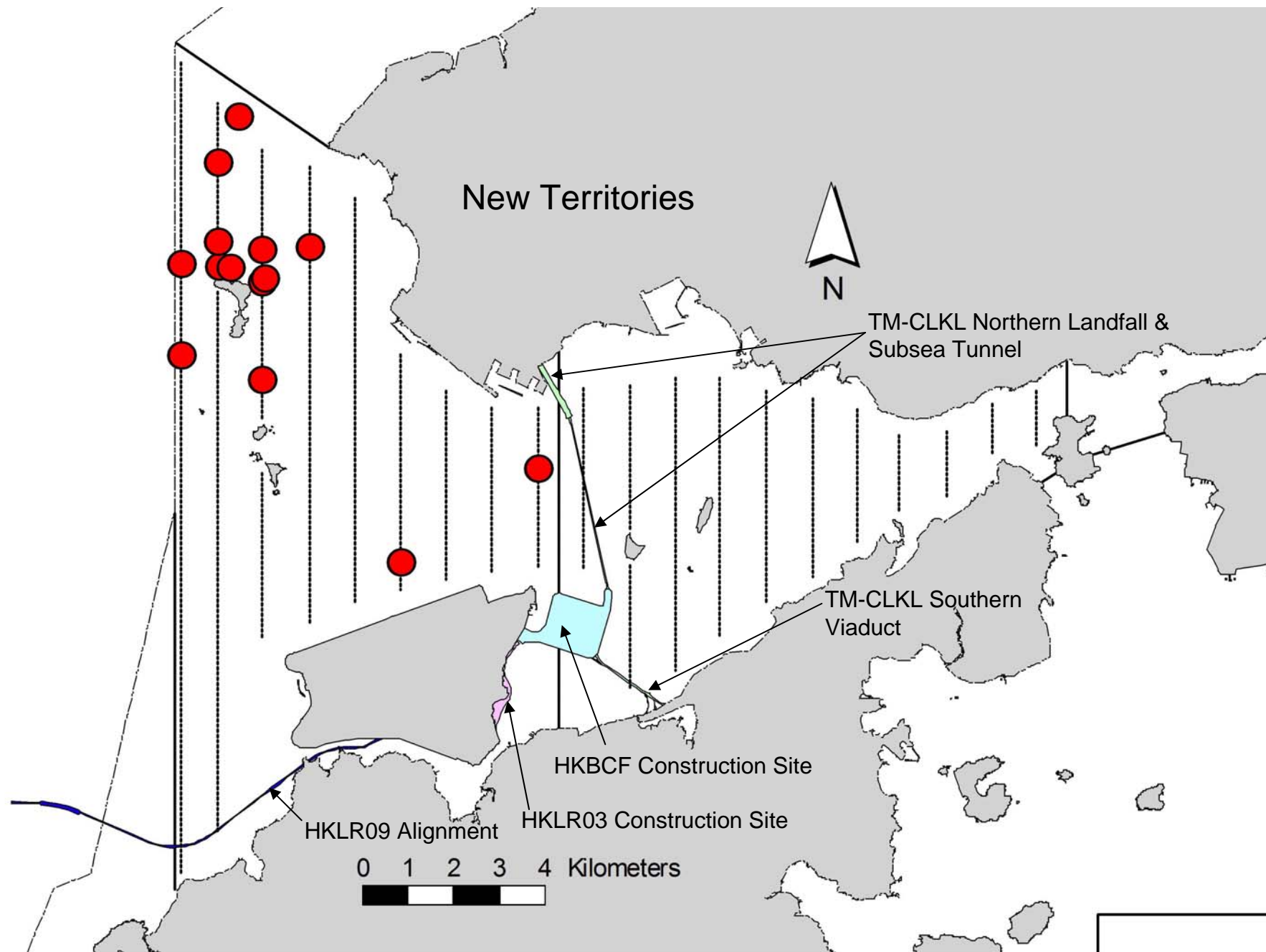


Figure 6. Distribution of Chinese White Dolphin Sightings During March 2014 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (March 2014)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
5-Mar-14	NW LANTAU	1	3.88	SPRING	STANDARD31516	HKLR	P
5-Mar-14	NW LANTAU	2	20.76	SPRING	STANDARD31516	HKLR	P
5-Mar-14	NW LANTAU	3	5.93	SPRING	STANDARD31516	HKLR	P
5-Mar-14	NW LANTAU	2	5.25	SPRING	STANDARD31516	HKLR	S
5-Mar-14	NW LANTAU	3	1.96	SPRING	STANDARD31516	HKLR	S
5-Mar-14	NE LANTAU	2	17.99	SPRING	STANDARD31516	HKLR	P
5-Mar-14	NE LANTAU	3	1.69	SPRING	STANDARD31516	HKLR	P
5-Mar-14	NE LANTAU	2	11.02	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NE LANTAU	2	1.40	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NE LANTAU	3	11.82	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NE LANTAU	4	2.90	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NE LANTAU	2	6.16	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NE LANTAU	3	4.12	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NE LANTAU	4	1.40	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NW LANTAU	1	1.70	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NW LANTAU	2	5.31	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NW LANTAU	3	9.08	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NW LANTAU	4	18.01	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NW LANTAU	5	6.14	SPRING	STANDARD31516	HKLR	P
11-Mar-14	NW LANTAU	2	6.91	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NW LANTAU	3	1.40	SPRING	STANDARD31516	HKLR	S
11-Mar-14	NW LANTAU	4	4.25	SPRING	STANDARD31516	HKLR	S
17-Mar-14	NW LANTAU	0	4.79	SPRING	STANDARD31516	HKLR	P
17-Mar-14	NW LANTAU	1	25.40	SPRING	STANDARD31516	HKLR	P
17-Mar-14	NW LANTAU	2	8.51	SPRING	STANDARD31516	HKLR	P
17-Mar-14	NW LANTAU	0	2.51	SPRING	STANDARD31516	HKLR	S
17-Mar-14	NW LANTAU	1	7.24	SPRING	STANDARD31516	HKLR	S
17-Mar-14	NW LANTAU	2	3.21	SPRING	STANDARD31516	HKLR	S
17-Mar-14	NE LANTAU	1	14.20	SPRING	STANDARD31516	HKLR	P
17-Mar-14	NE LANTAU	2	2.36	SPRING	STANDARD31516	HKLR	P
17-Mar-14	NE LANTAU	1	9.07	SPRING	STANDARD31516	HKLR	S
17-Mar-14	NE LANTAU	2	2.17	SPRING	STANDARD31516	HKLR	S
25-Mar-14	NE LANTAU	1	13.41	SPRING	STANDARD31516	HKLR	P
25-Mar-14	NE LANTAU	2	6.67	SPRING	STANDARD31516	HKLR	P
25-Mar-14	NE LANTAU	1	6.73	SPRING	STANDARD31516	HKLR	S
25-Mar-14	NE LANTAU	2	4.19	SPRING	STANDARD31516	HKLR	S
25-Mar-14	NW LANTAU	1	7.45	SPRING	STANDARD31516	HKLR	P
25-Mar-14	NW LANTAU	2	22.31	SPRING	STANDARD31516	HKLR	P
25-Mar-14	NW LANTAU	1	0.96	SPRING	STANDARD31516	HKLR	S
25-Mar-14	NW LANTAU	2	6.58	SPRING	STANDARD31516	HKLR	S

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (March 2014)

(Abbreviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Line)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
05-Mar-14	1	1053	3	NW LANTAU	2	64	ON	HKLR	827173	805499	SPRING	NONE	P
05-Mar-14	2	1126	13	NW LANTAU	2	ND	OFF	HKLR	827150	805736	SPRING	NONE	
05-Mar-14	3	1323	6	NW LANTAU	2	28	ON	HKLR	827568	807488	SPRING	NONE	P
11-Mar-14	1	1518	2	NW LANTAU	3	86	ON	HKLR	827525	806437	SPRING	NONE	P
17-Mar-14	1	1159	2	NW LANTAU	2	151	ON	HKLR	822985	812516	SPRING	NONE	P
17-Mar-14	2	1411	5	NW LANTAU	1	277	ON	HKLR	824834	806452	SPRING	NONE	P
17-Mar-14	3	1439	1	NW LANTAU	1	36	ON	HKLR	826839	806456	SPRING	NONE	P
17-Mar-14	4	1509	2	NW LANTAU	2	72	ON	HKLR	830273	805938	SPRING	NONE	S
17-Mar-14	5	1541	1	NW LANTAU	1	194	ON	HKLR	827219	804675	SPRING	NONE	P
17-Mar-14	6	1551	1	NW LANTAU	1	125	ON	HKLR	825325	804672	SPRING	NONE	P
25-Mar-14	1	1249	1	NW LANTAU	2	131	ON	HKLR	821041	809495	SPRING	NONE	P
25-Mar-14	2	1452	2	NW LANTAU	2	72	ON	HKLR	826927	806498	SPRING	NONE	P
25-Mar-14	3	1535	3	NW LANTAU	2	299	ON	HKLR	829321	805462	SPRING	NONE	P
25-Mar-14	4	1549	1	NW LANTAU	2	349	ON	HKLR	827693	805469	SPRING	NONE	P

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in March 2014

ID#	DATE	STG#	AREA
CH98	25/03/14	3	NW LANTAU
EL01	17/03/14	1	NW LANTAU
NL24	05/03/14	3	NW LANTAU
NL46	05/03/14	2	NW LANTAU
NL48	11/03/14	1	NW LANTAU
	25/03/14	4	NW LANTAU
NL49	05/03/14	2	NW LANTAU
NL104	05/03/14	2	NW LANTAU
	05/03/14	3	NW LANTAU
NL136	11/03/14	1	NW LANTAU
	17/03/14	2	NW LANTAU
	25/03/14	3	NW LANTAU
NL165	05/03/14	2	NW LANTAU
NL191	25/03/14	1	NW LANTAU
NL213	25/03/14	3	NW LANTAU
NL220	05/03/14	3	NW LANTAU
NL233	05/03/14	1	NW LANTAU
NL236	05/03/14	2	NW LANTAU
NL261	05/03/14	3	NW LANTAU
	17/03/14	1	NW LANTAU
NL262	05/03/14	3	NW LANTAU
NL272	05/03/14	2	NW LANTAU
NL284	17/03/14	2	NW LANTAU
NL295	05/03/14	2	NW LANTAU
NL296	05/03/14	1	NW LANTAU
	05/03/14	2	NW LANTAU
NL307	17/03/14	2	NW LANTAU
WL04	05/03/14	2	NW LANTAU
WL05	05/03/14	2	NW LANTAU
WL11	05/03/14	2	NW LANTAU
WL179	17/03/14	2	NW LANTAU
WL199	05/03/14	2	NW LANTAU

NL233_20140305_1



NL296_20140305_1



NL46_20140305_2



NL49_20140305_2



NL104_20140305_2



NL165_20140305_2



NL236_20140305_2



NL272_20140305_2



NL295_20140305_2



Appendix IV. Photographs of Identified Individual Dolphins in March 2014 (HKLR03)

NL296_20140305_2



WL04_20140305_2



WL05_20140305_2



WL11_20140305_2



WL199_20140305_2



NL24_20140305_3



NL104_20140305_3



NL220_20140305_3



NL261_20140305_3



NL262_20140305_3



EL01_20140317_1



NL48_20140311_1



NL136_20140311_1



NL261_20140317_1



NL136_20140317_2



NL284_20140317_2



NL307_20140317_2



WL17_20140317_2



NL191_20140325_1



CH98_20140325_3



NL136_20140325_3



NL213_20140325_3



NL48_20140325_4



Appendix IV. (cont'd)

Appendix K

Event and Action Plan

Event and Action Plan for Impact Air Monitoring

	Action			
	ET (a)	IEC (a)	SOR (a)	Contractor(s)
Action Level Exceedance				
	<ol style="list-style-type: none"> 1. Identify the source. 2. Repeat measurement to confirm finding. If two consecutive measurements exceed Action Level, the exceedance is then confirmed. 3. Inform the IEC and the SOR. 4. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented. 5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. 6. Discuss with the IEC and the Contractor on remedial actions required. 7. If exceedance continues, arrange meeting with the IEC and the SOR. 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate 3. If the exceedance is confirmed to be Project related, submit proposals for remedial actions to IEC within 3 working days of notification 4. Implement the agreed proposals 5. Amend proposal if appropriate

	Action			
	ET (a)	IEC (a)	SOR (a)	Contractor(s)
Limit Level Exceedance				
	<ol style="list-style-type: none"> 1. Identify the source. 2. Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed. 3. Inform the IEC, the SOR, the DEP and the Contractor. 4. Investigate the cause of exceedance and check Contractor’s working procedures to determine possible mitigation to be implemented. 5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. 6. Carry out analysis of the Contractor’s working procedures to determine possible mitigation to be implemented. 7. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 8. Assess effectiveness of the Contractor’s remedial actions and keep the IEC, the DEP and the SOR informed of the results. 9. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor’s working method. 3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. If the exceedance is confirmed to be Project related after investigation, in consultation with the IEC, agree with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. If the exceedance is confirmed to be Project related after investigation, submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Amend proposal if appropriate. 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.

Note: (a) ET – Environmental Team; IEC – Independent Environmental Checker; SOR – Supervising Officer’s Representative

Event & Action Plan for Impact Water Quality Monitoring

Event	ET Leader	IEC	SOR	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> Repeat <i>in situ</i> measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor and SOR; Check monitoring data, all plant, equipment and Contractor's working methods. 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working methods. 	<ol style="list-style-type: none"> Confirm receipt of notification of non-compliance in writing; Notify Contractor. 	<ol style="list-style-type: none"> Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, Contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Action level; 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; Supervise the implementation of mitigation measures. 	<ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> Inform the Supervising Officer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working methods; Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in 	<ol style="list-style-type: none"> Inform the SOR and confirm notification of the

Event	ET Leader	IEC	SOR	Contractor
	<ol style="list-style-type: none"> 2. Identify source(s) of impact; 3. Inform IEC, Contractor, SOR and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, SOR and Contractor; 	<ol style="list-style-type: none"> 1. Contractor's working method; 2. Discuss with ET and Contractor on possible remedial actions; 3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly. 	<ol style="list-style-type: none"> 1. writing; 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Request Contractor to review the working methods. 	<ol style="list-style-type: none"> 1. non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment and consider changes of working methods; 4. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR.
Limit level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> 1. Repeat measurement on next day of exceedance to confirm findings; 2. Identify source(s) of impact; 3. Inform IEC, contractor, SOR and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, SOR and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days; 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor's working method; 2. Discuss with ET and Contractor on possible remedial actions; 3. Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly; 4. Supervise the implementation of mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Ensure mitigation measures are properly implemented; 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; 3. Implement the agreed mitigation measures; 4. Resubmit proposals of mitigation measures if problem still not under control; 5. As directed by the Supervising Officer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level.

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer's Representative

Event / Action Plan for Impact Dolphin Monitoring

EVENT	ACTION			
	ET	IEC	SOR	Contractor
Action Level	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor; 5. Check monitoring data. 6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and finding with the ET and the Contractor. 	<ol style="list-style-type: none"> 1. Discuss monitoring with the IEC and any other measures proposed by the ET; 2. If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented. 	<ol style="list-style-type: none"> 1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR; 3. Implement the agreed measures.
Limit Level	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor; 3. Attend the meeting to discuss with ET, SOR and 	<ol style="list-style-type: none"> 1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 2. If SOR is satisfied with the 	<ol style="list-style-type: none"> 1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Attend the meeting to discuss with ET, IEC and SOR the necessity of additional dolphin monitoring and any other

EVENT	ACTION			
	ET	IEC	SOR	Contractor
	<ol style="list-style-type: none"> 3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 7. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary. 	<p>Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</p> <ol style="list-style-type: none"> 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise SOR of the results and findings accordingly. 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise SOR the results and findings accordingly. 	<p>proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, SOR to signify the agreement in writing on such proposals and any other mitigation measures.</p> <ol style="list-style-type: none"> 3. Supervise the implementation of additional monitoring and/or any other mitigation measures. 	<p>potential mitigation measures.</p> <ol style="list-style-type: none"> 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary. 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer’s Representative

Appendix L

Cumulative Statistics on
Exceedances, Complaints,
Notifications of Summons
and Successful Prosecutions

Table L1 *Cumulative Statistics on Exceedances*

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since project commencement
1-hr TSP	Action	2	23
	Limit	0	2
24-hr TSP	Action	0	5
	Limit	0	1
Water Quality	Action	1	6
	Limit	1	1
Impact Dolphin Monitoring	Action	0	1
	Limit	0	0

Table L2 *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (Mar 2014)	0	0	0
Total No. received since project commencement	0	0	0

Email
message

Environmental
Resources
Management

To ENVIRON - Hong Kong, Limited (ENPO)

From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2012/08 Tuen Mun-Chek Lap
Kok Link-Northern Connection Sub-sea Tunnel
Section

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 2 April 2014

16/F DCH Commercial Centre,
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jovy.tam@erm.com



ERM

Dear Sir or Madam,

Please find attached the Notification of Exceedance (NOE) of the following
Log no.:

0212330_24March2014_1hrTSP_Station ASR1
0212330_24March2014_1hrTSP_Station ASR5

A total of two Action Level Exceedances were recorded on 24 March 2014.

Regards,

A handwritten signature in black ink, appearing to be 'Jovy Tam'.

Mr Jovy Tam
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK –
 NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

Air Quality Impact Monitoring
 Notification of Exceedance

Log No.	0212330_24March2014_1hrTSP_Station ASR1 0212330_24March2014_1hrTSP_Station ASR5 [Total No. of Exceedances = 2]	
Date	24 March 2014 (Measured) 1 April 2014 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5, ASR6, ASR10 and AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	260
Measured Levels	Action Level Exceedance for 1-hr TSP is observed at ASR1 ($391 \mu\text{g}/\text{m}^3$) during 1526 - 1626 hrs. Action Level Exceedance for 1-hr TSP is observed at ASR5 ($402 \mu\text{g}/\text{m}^3$) during 1413 - 1513 hrs.	
Works Undertaken (at the time of monitoring event)	On 24 March 2014, marine dredging works were carried out by one dredger Crown Asia 1 at Area B; seawall constructions at Area C, D; filling at Area E and sheet piling at Area F. At the time of monitoring during 1413 to 1626 hrs, land-based works were undertaken at Portion N6 for the CLP station concrete works.	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance(s) are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> Considering the relatively higher levels of 1-hour TSP between 1400 and 1630 hrs at most monitoring stations, it is probably unlikely that the level of land-based construction works under this Contract can cause increase in 1-hour TSP of this magnitude and scale. It is considered that the observed exceedances for 1-hour TSP at ASR1 and ASR5 may represent sporadic event associated with traffic emissions and anthropogenic activities during afternoon rush hour at Lung Mun Road and River Trade Terminal. According to the construction information provided by the Contractor, the majority of construction works on 24 March 2014 were marine-based with the dredging works being undertaken by one dredger (Crown Asia 1) at Portion N-C, whilst only minor land-based construction works, the concrete works of CLP power station, at Portion N6. All land-based constructions at Portion N6 were considered to have minor effect on dust generation. Whilst exceedances of Action Level were observed at ASR1 and ASR5, the average 1-hr TSP level at the monitoring stations ($ASR1 = 244 \mu\text{g}/\text{m}^3$; $ASR5 = 289 \mu\text{g}/\text{m}^3$) on 24 March 2014 were in compliance with the Action and Limit Levels. The 1-hr TSP at ASR5 returned to level below the Action/Limit Levels on the same day. Same level and extent of construction works were carried out at the same works area on 18th March while no exceedance was recorded. As stated in the EIA report (Section 4.2.3), the background TSP level of Tuen Mun is higher than the other region of Hong Kong, thus the exceedances may be also contributed cumulatively by the other construction works / traffic within the Tuen Mun Area rather than causing by the construction works of the Project. 	

Actions Taken/ To Be Taken	The Contractor was reminded to ensure all dust mitigating measures are provided at Portion N6. The ET will monitor for future trends in exceedances.
Remarks	The monitoring results and the locations of air quality monitoring stations are attached.

Appendix M

Waste Flow Table

Name of Department: HyD

Contract No. / Works Order No.: HY/2012/08

Monthly Summary Waste Flow Table for March 2014 [to be submitted not later than the 15th day of each month following reporting month]

(All quantities shall be rounded off to 3 decimal places.)

Month	Actual Quantities of <u>Inert</u> Construction Waste Generated Monthly				
	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)
Jan	9.012	0.000	0.000	0.000	9.012
Feb	0.000	0.000	0.000	0.000	0.000
Mar	0.105	0.000	0.000	0.000	0.105
Apr					
May					
Jun					
Sub-total					
Jul					
Aug					
Sep					
Oct					
Nov					
Dec					
Total	12.835	0.000	0.000	0.000	12.835

Month	Actual Quantities of <u>Inert</u> Construction Waste Generated Monthly						
	Imported Fill to WA 23 & Reclamation Area (Rockfill 400)	Imported Fill to WA 23 & Reclamation Area (Rockfill 200)	Imported Fill to WA 23 & Reclamation Area (Rockfill Type A)	Imported Fill to Reclamation Area (Public Fill)	Imported Fill to Barging Point	Marine Disposal (Cat. L)	Marine Disposal (Cat. M _P & M _F)
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 m ³)	(in '000 m ³)
Jan	177.300	4.050	8.544	0.000	124.412	34.000	12.500
Feb	132.652	13.902	5.371	0.000	81.296	18.500	24.500
Mar	45.617	6.836	18.608	113.789	63.961	37.300	40.450
Apr							
May							
Jun							
Sub-total							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Total	567.110	24.788	51.983	113.789	315.141	151.400	95.650

Month	Actual Quantities of <u>Non-inert</u> Construction Waste Generated Monthly								
	Metals		Paper/ cardboard packaging		Plastics (see Note 3)		Chemical Waste		Others, e.g. General Refuse disposed at Landfill
	(in '000kg)		(in '000kg)		(in '000kg)		(in '000kg)		(in '000ton)
	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated
Jan	0.000	0.000	0.130	0.130	0.000	0.000	0.000	0.000	0.045
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.028
Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Apr									
May									
Jun									
Sub-total									
Jul									
Aug									
Sep									
Oct									
Nov									
Dec									
Total	0.000	0.000	0.510	0.510	0.000	0.000	0.020	0.020	0.281

Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*							
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill	Imported Fill	Marine Disposal (Cat. L)	Marine Disposal (Cat. M)
(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 m ³)	(in '000 m ³)
5.000	0.000	0.000	0.000	5.000	180.000	5.000	40.000

Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*				
Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	General Refuse disposed of at Landfill
(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
0.000	0.050	0.000	0.000	0.100

- Notes:
- (1) The performance targets are given in the **ER Appendix 8J Clause 14** and the EM & A Manual(s).
 - (2) The waste flow table shall also include C&D materials to be imported for use at the Site.
 - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
 - (4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (**ER Part 8 Clause 8.8.5 (d) (ii)** refers).