

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

*Forty-first Monthly Environmental Monitoring &
Audit (EM&A) Report*

18 April 2017

Environmental Resources Management
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Ref.: HYDHZMBEEM00_0_5265L.17

18 April 2017

AECOM
Supervising Officer Representative's Office
No.8 Mong Fat Street, Tuen Mun,
New Territories, Hong Kong

By Fax (2293 6300) and By Post

Attention: Messrs. Andy Westmoreland / Roger Man

Dear Sirs,

**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**

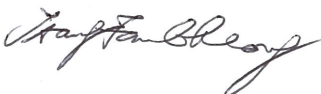
**Contract No. HY/2012/08 TM-CLKL Northern Connection Sub-sea
Tunnel Section
41st Monthly EM&A Report for March 2017 (EP-354/2009/D)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (March 2017) (ET's ref.: "0212330_41st Monthly EM&A_20170418.doc" dated 18 April 2017) certified by the ET Leader and provided to us via e-mail on 18 April 2017.

Please be informed that we have no adverse comments on the captioned Report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

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

Yours sincerely,



F. C. Tsang
Independent Environmental Checker
Tuen Mun – Chek Lap Kok Link

c.c. HyD – Mr. Stephen Chan (By Fax: 3188 6614)
HyD – Mr. Vico Cheung (By Fax: 3188 6614)
AECOM – Mr. Conrad Ng (By Fax: 3922 9797)
ERM – Mr. Jovy Tam (By Fax: 2723 5660)
Dragages – Bouygues JV - Mr. C. F. Kwong (By Fax: 2293 7499)

Internal: DY, YH, ENPO Site

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Contract No. HY/2012/08





Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

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Forty-first Monthly Environmental Monitoring & Audit (EM&A) Report

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| | | | | | |
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| Client: DBJV | | Project No: 0212330 | | | |
| Summary: This document presents the Forty-first Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section. | | Date: 18 April 2017 | | | |
| | | Approved by:  | | | |
| | | Mr Craig Reid Partner | | | |
| | | Certified by:  | | | |
| | | Mr Jovy Tam ET Leader | | | |
| | | | | | |
| | 41 st Monthly EM&A Report | VAR | JT | CAR | 18/04/17 |
| Revision | Description | By | Checked | Approved | Date |
| <p>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.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p> | | <p>Distribution</p> <p><input type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p> | | | |
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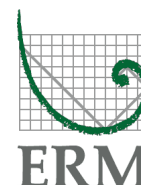


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EXECUTIVE SUMMARY

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*. Ramboll Environ Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

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 Forty-first Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 March 2017 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:

Land-based Works

- Box Culvert Extension at Works Area – Portion N-A;
- Construction of North Ventilation Building – Portion N-C;
- Construction of Cross Passage Tympanum – TBM tunnel;
- Cross Passage Lining Installation – TBM Tunnel;
- Excavation of Sub-sea Tunnel – TBM tunnel;
- Corbel Construction – TBM Tunnel;
- Sub-sea Tunnel Gallery Installation – TBM tunnel;
- Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction – Portion S-A.

Marine-based Works

- Construction of Vertical Seawall at Portion N-A; and
- Band drains and Filling works at Portion N-A

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

| | |
|-------------------------------------|-------------|
| 24-hour TSP Monitoring | 11 sessions |
| 1-hour TSP Monitoring | 11 sessions |
| Water Quality Monitoring | 13 sessions |
| Impact Dolphin Monitoring | 2 sessions |
| Joint Environmental Site Inspection | 5 sessions |

Implementation of Marine Mammal Exclusion Zone

Daily marine mammal exclusion zone was in effect during the period of dredging, reclamation or marine sheet piling works in open waters under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when dredging, reclamation or marine sheet piling works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in March 2017 during the exclusion zone monitoring.

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

No Action Level or Limit Level of air quality exceedances were recorded in the air quality monitoring of this reporting month.

Breaches of Action and Limit Levels for Water Quality

No Action Level or Limit Level of water quality exceedances were recorded in the water quality monitoring of this reporting month.

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.

One (1) environmental complaint case regarding muddy water discharge at the site area near Ho Yeung Street was referred by EPD on 14 February 2017. The complaint investigation report is provided in Appendix L.

One (1) environmental complaint case regarding noise nuisance and water pollution at the site near HKBCF of HZMB was referred by IEC on 28 March 2017. The environmental complaint case is under investigation. The complete investigation findings will be provided in the Forty-second Monthly EM&A Report.

No environmental summons was received in this reporting period.

Summary of Marine Travel Route record

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the marine travel route record of this Contract was recorded in January, February and March.

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 2017 include the following:

Marine-based Works

- Construction of Vertical Seawall at Portion N-A; and
- Filling works at Portion N-A

Land-based Works

- Box Culvert Extension at Works Area – Portion N-A;
- Construction of North Ventilation Building – Portion N-C;
- Construction of Cross Passage Tympanum – TBM tunnel;
- Cross Passage Lining Installation – TBM Tunnel;
- Excavation of Sub-sea Tunnel – TBM tunnel;
- Corbel Construction – TBM Tunnel;
- Sub-sea Tunnel Gallery Installation – TBM tunnel;
- CSM Ground Treatment and Bulk excavation – Portion S-A.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of April 2017 are mainly associated with dust, marine water quality, marine ecology and waste management issues.

1.1

BACKGROUND

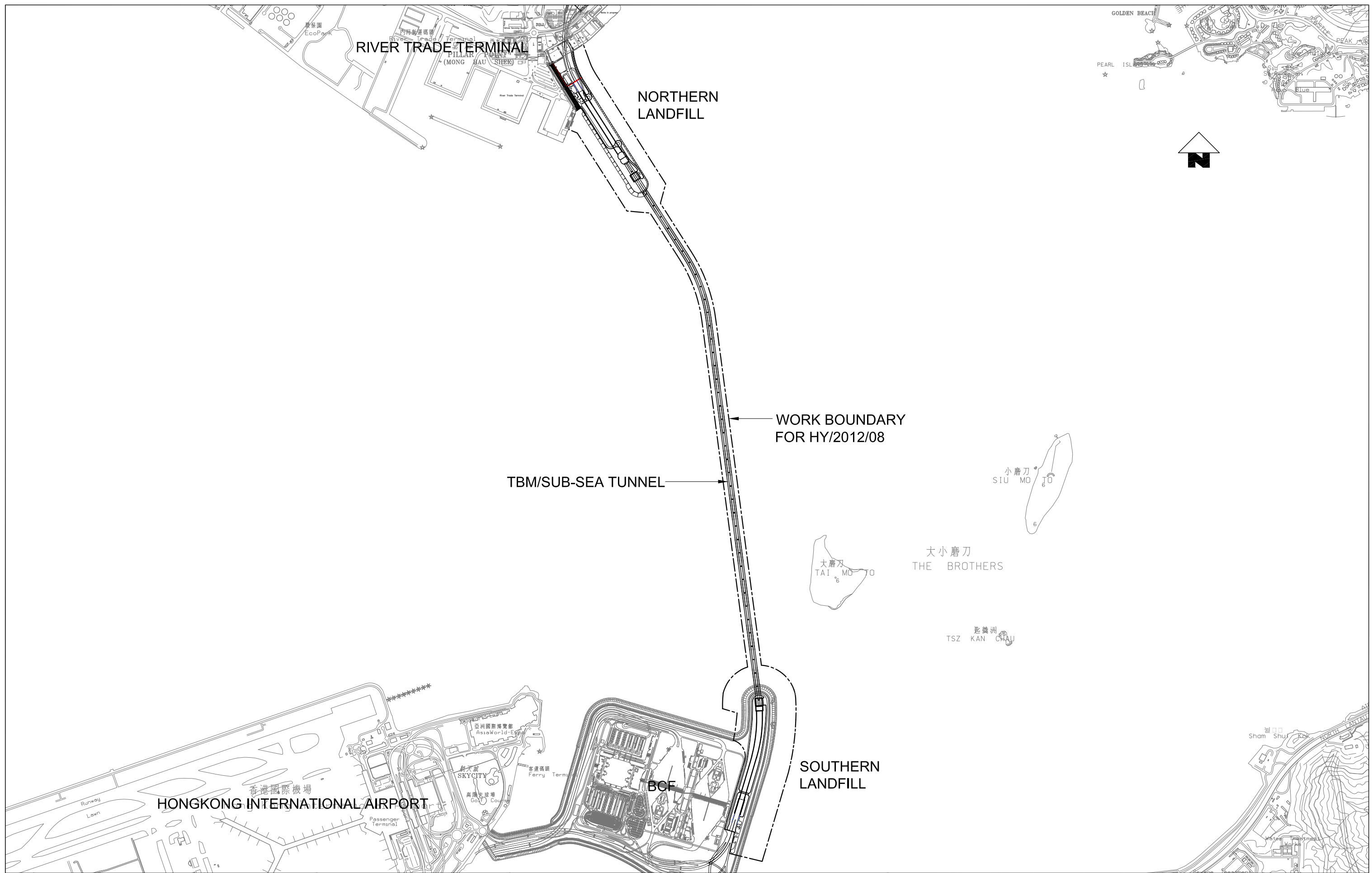
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated 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-146/2009), 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-354/2009/A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.



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). Ramboll 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 |   Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營 |
|-----------------|--|

| | |
|--------|---|
| Client |  路政署 HIGHWAYS DEPARTMENT |
|--------|---|

| | |
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| 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 |

| | |
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| Scale | 1:25000 @ A3 |
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| Issue Status | DFT (DRAFT) |
| Revision | A |

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1.2 SCOPE OF REPORT

This is the Forty-first 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 2017.

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 |
|---|---------------------------|---------------------|------------------|------------|
| Highways Department | Engr 16/HZMB | Kenneth Lee | 2762 4996 | 3188 6614 |
| SOR (AECOM Asia Company Limited) | Chief Resident Engineer | Roger Man | 2293 6388 | 2293 6300 |
| | | Andrew Westmoreland | 2293 6360 | 2293 6300 |
| ENPO / IEC (Ramboll Environ Hong Kong Ltd.) | ENPO Leader | Y.H. Hui | 3465 2850 | 3465 2899 |
| | IEC | Dr. F.C. Tsang | 3465 2851 | 3465 2899 |
| Contractor (Dragages – Bouygues Joint Venture) | Environmental Manager | C.F. Kwong | 2293 7322 | 2293 7499 |
| | Environmental Officer | Bryan Lee | 2293 7323 | 2293 7499 |
| | Environmental Officer | David Ho | 6628 8684 | 2293 7499 |
| | 24-hour complaint hotline | Rachel Lam | 2293 7330 | |
| ET (ERM-HK) | ET Leader | Jovy Tam | 2271 3113 | 2723 5660 |

SUMMARY OF CONSTRUCTION WORKS

The construction phase of this Contract was commenced on 1 November 2013. The 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*.

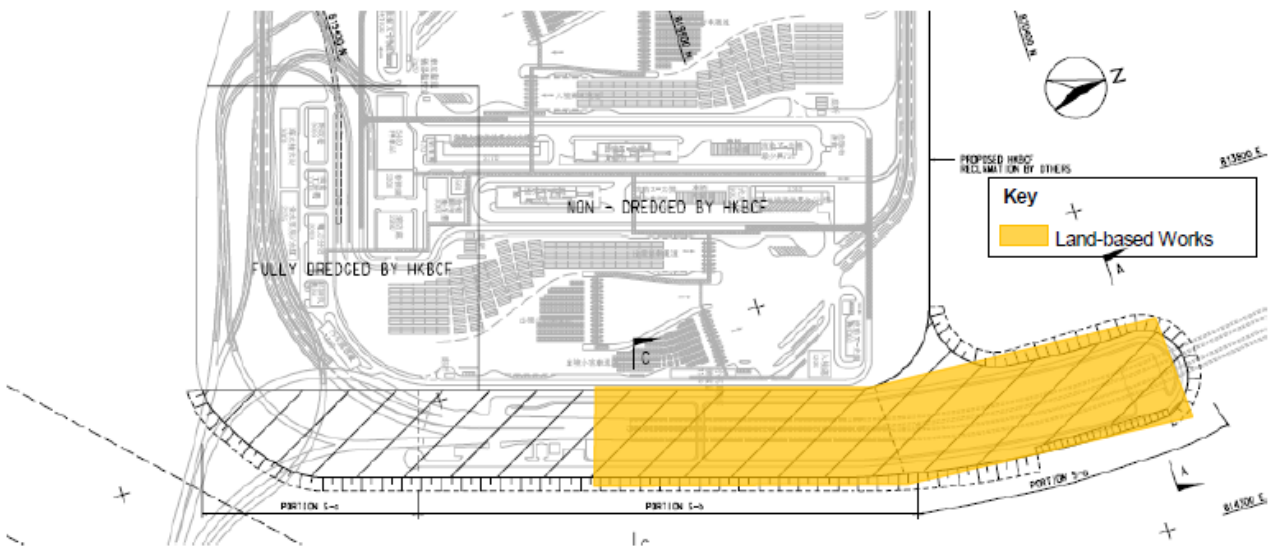
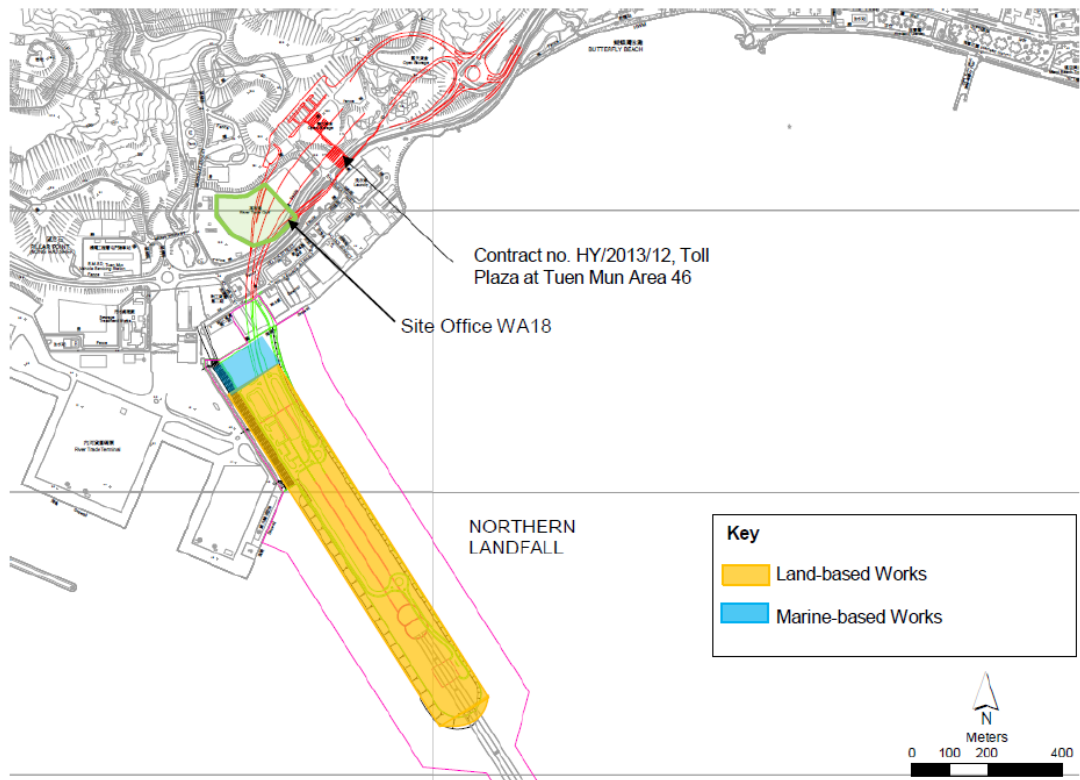
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.3*.

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>Land-based Works</i> |
| <ul style="list-style-type: none"> • Box Culvert Extension at Works Area – Portion N-A; • Construction of North Ventilation Building – Portion N-C; • Construction of Cross Passage Tympanum – TBM tunnel; • Cross Passage Lining Installation – TBM Tunnel; • Excavation of Sub-sea Tunnel – TBM tunnel; • Corbel Construction – TBM Tunnel; • Sub-sea Tunnel Gallery Installation – TBM tunnel; • Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction – Portion S-A. |
| <i>Marine-based Works</i> |
| <ul style="list-style-type: none"> • Construction of Vertical Seawall at Portion N-A; and • Band drains and Filling works at Portion N-A |

Figure 1.2 Locations of Construction Activities – March 2017



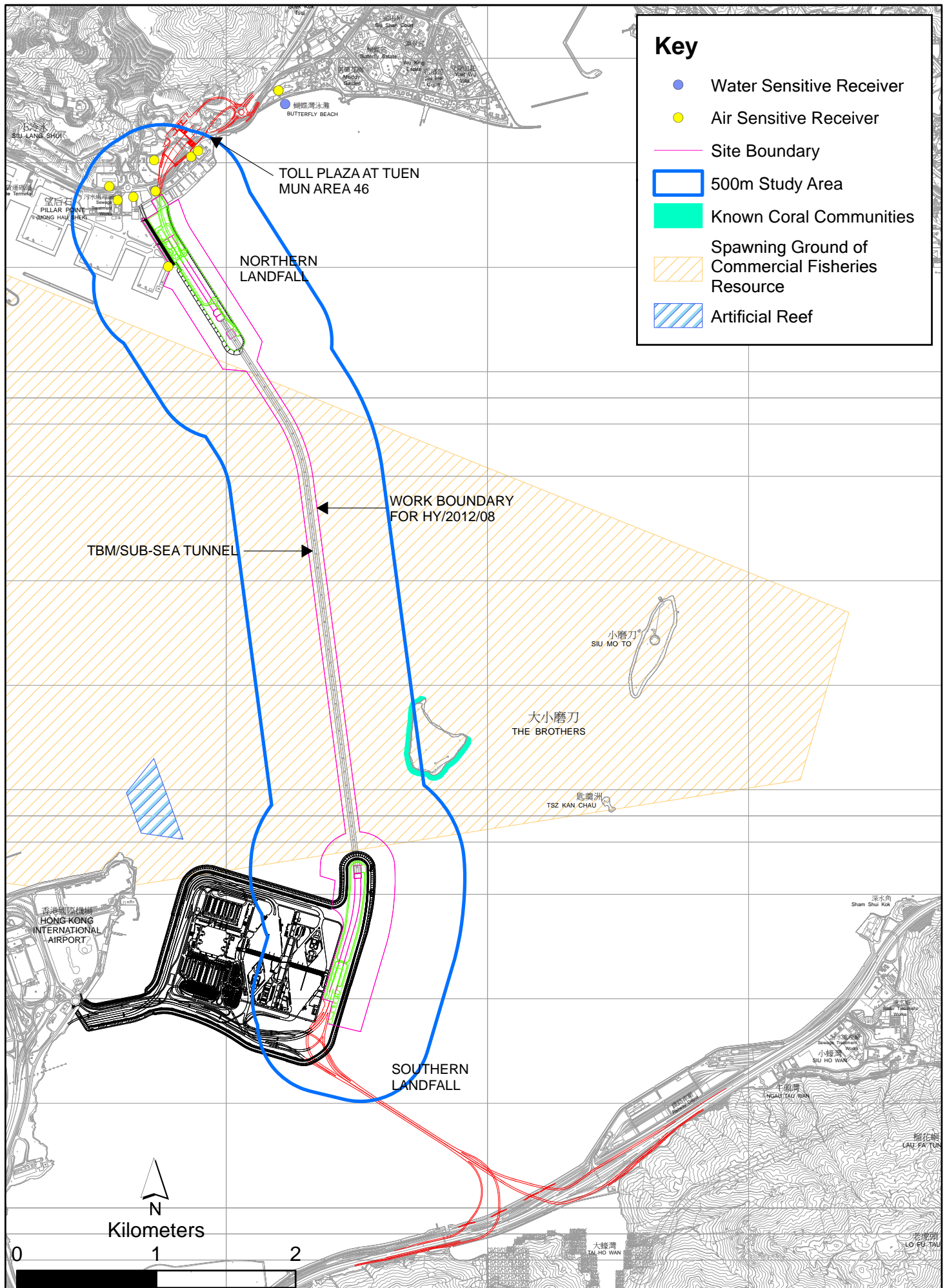


Figure 1.3 Environmental Sensitive Receivers in the vicinity of Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

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Date: 15/4/2014

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. 1-hr and 24-hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft commenced on 24 October 2014.

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 1, 4, 7, 10, 13, 16, 19, 22, 25, 28 and 31 March 2017 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 meter 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 | 1, 4, 7, 10, 13, 16, 19, 22, 25, 28 and 31 March 2017 | Tuen Mun Fireboat Station | Office | TSP monitoring <ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 6 days |
| ASR5 | | Pillar Point Fire Station | Office | <ul style="list-style-type: none"> 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 6 days |
| AQMS1 | | Previous River Trade Golf | Bare ground | Enhanced TSP monitoring (commenced on 24 October 2014) |
| ASR6 | | Butterfly Beach Laundry | Office | <ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 3 days |
| ASR10 | | Butterfly Beach Park | Recreational uses | <ul style="list-style-type: none"> 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 3 days |

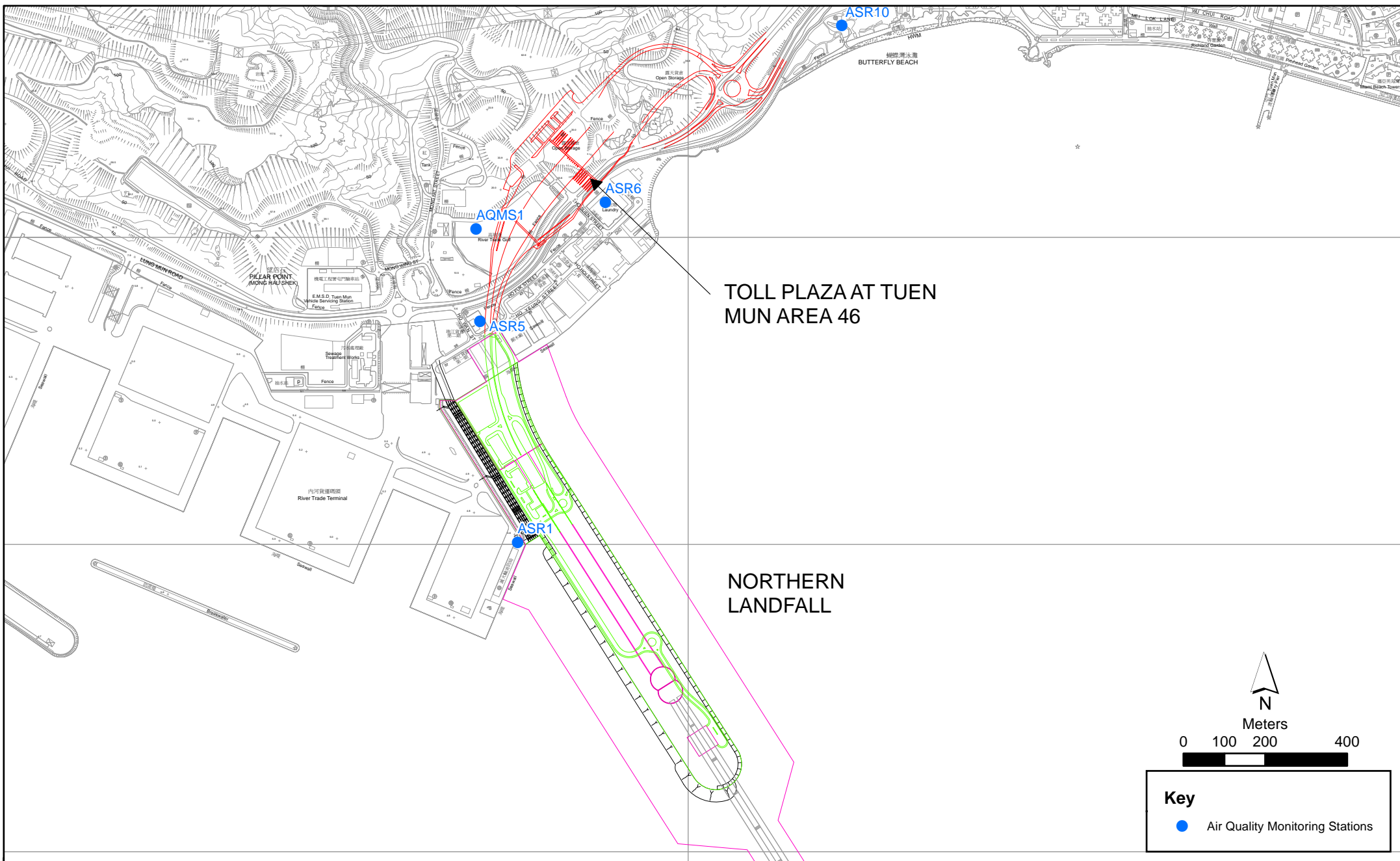


Figure 2.1

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 Meter | Davis (Model: Vantage Pro 2 (S/N: AS160104014) |
| Wind Anemometer for calibration | Lutron (Model No. AM-4201) |

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 2017 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 (µg/m³) | Range (µg/m³) | Action Level (µg/m³) | Limit Level (µg/m³) |
|----------------|-----------------------------------|---------------------------------|--|---------------------------------------|
| ASR1 | 154 | 54 - 242 | 331 | 500 |
| ASR5 | 177 | 50 - 284 | 340 | 500 |
| AQMS1 | 121 | 42 - 240 | 335 | 500 |
| ASR6 | 145 | 51 - 218 | 338 | 500 |
| ASR10 | 77 | 38 - 136 | 337 | 500 |

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

| Station | Average (µg/m³) | Range (µg/m³) | Action Level (µg/m³) | Limit Level (µg/m³) |
|----------------|-----------------------------------|---------------------------------|--|---------------------------------------|
| ASR1 | 92 | 63 - 128 | 213 | 260 |
| ASR5 | 98 | 58 - 126 | 238 | 260 |
| AQMS1 | 75 | 44 - 107 | 213 | 260 |
| ASR6 | 87 | 49 - 102 | 238 | 260 |
| ASR10 | 58 | 45 - 75 | 214 | 260 |

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

A total of 11 monitoring events were undertaken in which no Action or Limit Level exceedances of 1-hr TSP were recorded in this reporting month. No Action or Limit Level exceedances for 24-hr TSP were record.

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 | 810025 | 824004 | • Salinity (ppt) | the water depth is | |
| | Field Station | | | • DO (mg/L and | less than 3m, mid- | |
| CS6 | Control / Far | 817028 | 823992 | % of | depth sampling | |
| | Field Station | | | saturation) | 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*.

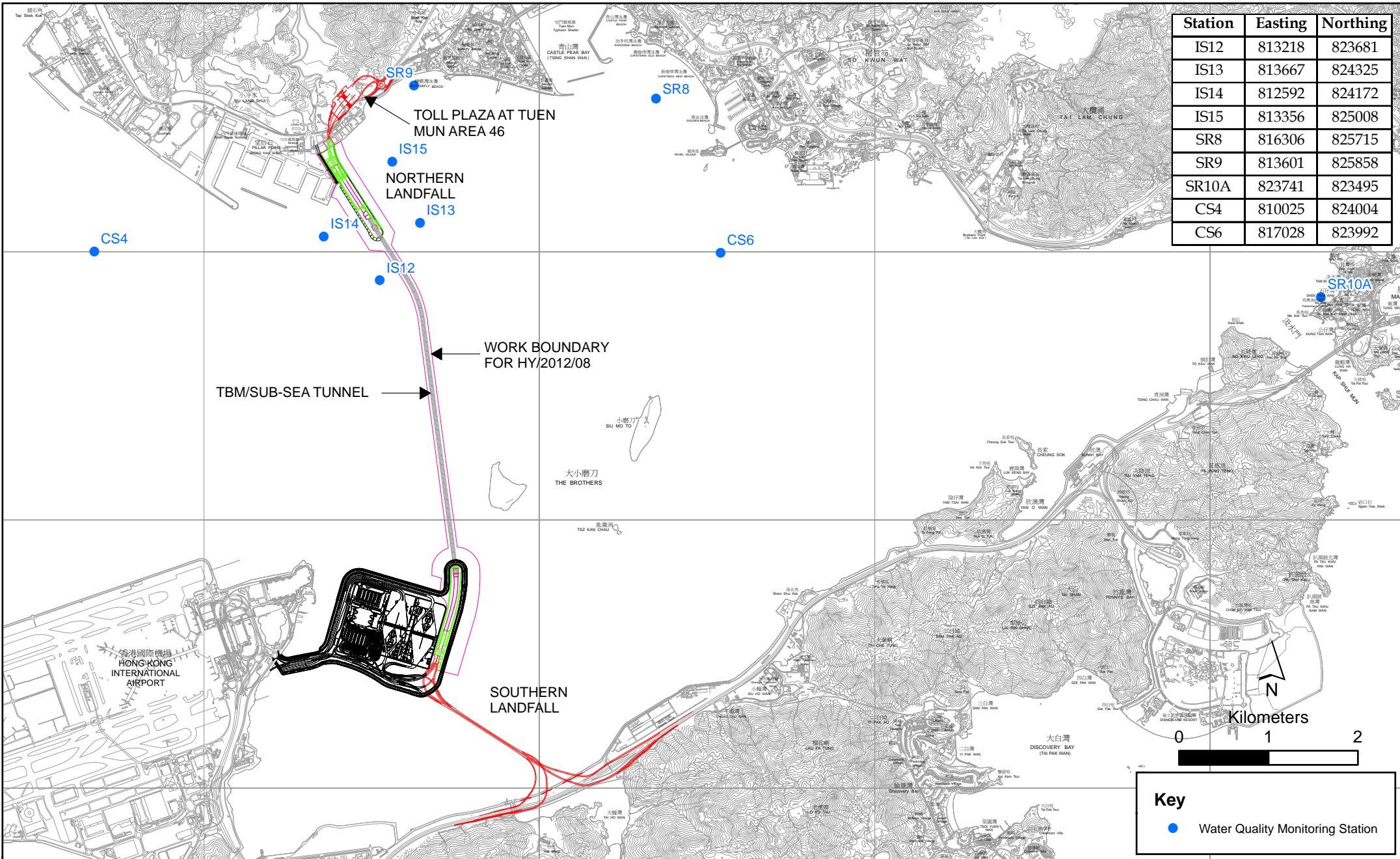


Figure 2.2

Water Quality Monitoring Station

Table 2.6 *Water Quality Monitoring Equipment*

| Equipment | Model |
|------------------------|---|
| Water Sampler | Kahlsico Water-Bottle Model 135DW 150 |
| Dissolved Oxygen Meter | YSI Pro 2030 |
| pH Meter | HANNA HI 9125 |
| Turbidity Meter | HACH 2100Q |
| Monitoring Position | “Magellan” Handheld GPS Model explorer GC |
| Equipment | DGPS Kodon KGP913MK2 ⁽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 2017 is provided in *Appendix F*.

2.2.4 *Results and Observations*

Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Results and graphical presentations of impact water quality monitoring are presented in *Appendix I*.

Since marine works for Phase 2 reclamation commenced on 27 December 2016, impact water quality monitoring resumed on 27 December 2016. In this reporting period, a total of thirteen (13) monitoring events were undertaken in which no Action Level or Limit Levels of exceedances for impact water quality monitoring was 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 Geo One Phottix |
| Camera | Nikon D90 300m 2.8D fixed focus Nikon D90 20-300m zoom lens |
| Laser Binocular | 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.

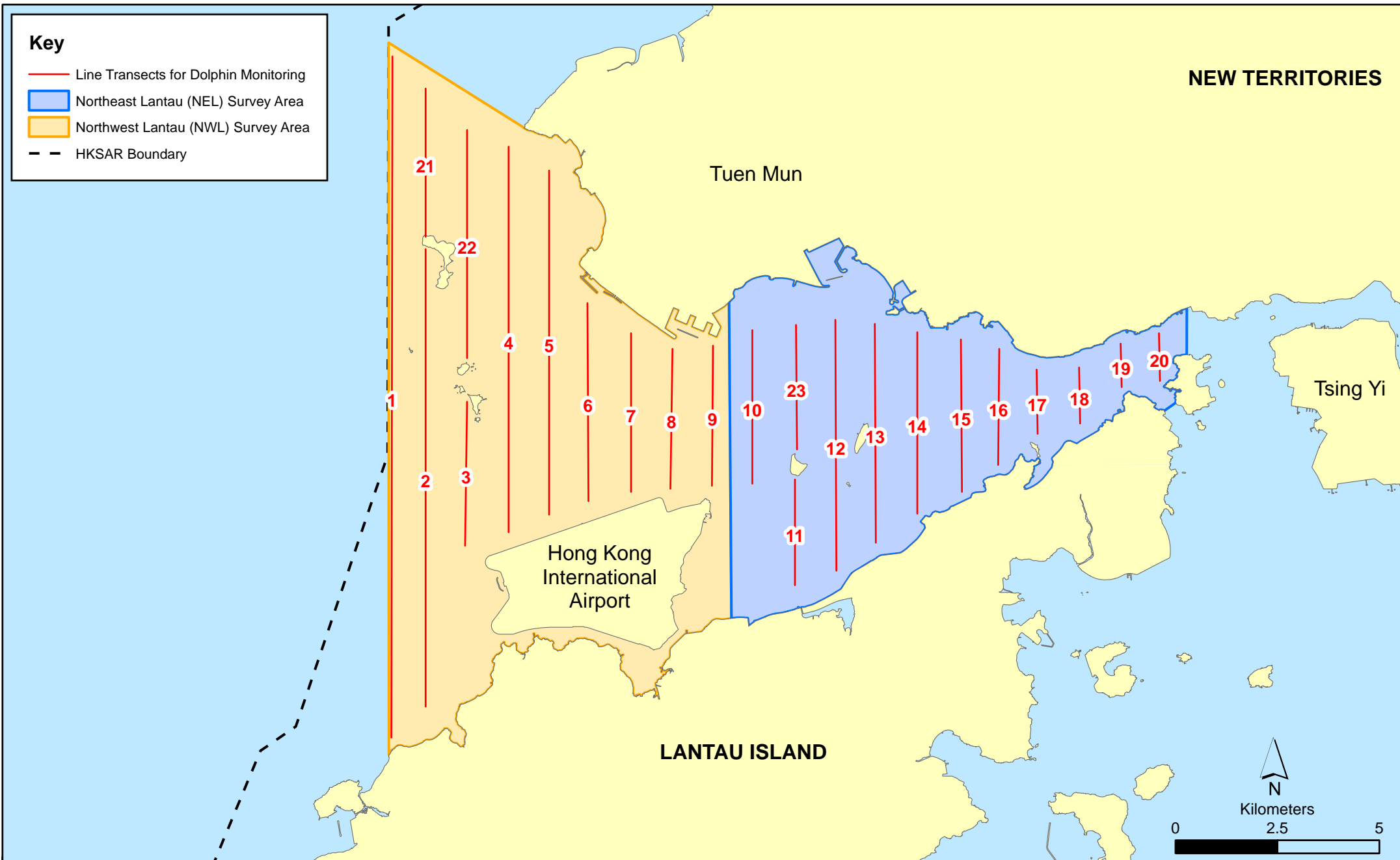


Figure 2.3

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 | 815456 | 13 | Start Point | 816506 | 819480 |
| 1 | End Point | 804671 | 831404 | 13 | End Point | 816506 | 824859 |
| 2 | Start Point | 805475 | 815913 | 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 | 820880 | 19 | Start Point | 822513 | 823268 |
| 7 | End Point | 810499 | 824613 | 19 | End Point | 822513 | 824321 |
| 8 | Start Point | 811508 | 821123 | 20 | Start Point | 823477 | 823402 |
| 8 | End Point | 811508 | 824254 | 20 | End Point | 823477 | 824613 |
| 9 | Start Point | 812516 | 821303 | 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 | 818853 | 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 2, 7, 16 and 28 of March 2017. The dolphin monitoring schedule for the reporting month is shown in *Appendix F*.

2.3.7 *Results & Observations*

A total of 283.50 km of survey effort was collected, with 82.9% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) in March 2017. Among the two areas, 119.20 km and 164.30 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 204.80 km and 78.70 km respectively. The survey efforts are summarized in *Appendix J*.

A total of two groups of 20 Chinese White Dolphins sightings were recorded on one survey in March 2017. All two dolphin sightings were made in NWL, while none was sighted in NEL. Both dolphin sightings were made during on-effort search, while one of the two on-effort sightings were made on primary lines. One of the two dolphin groups was associated with an operating fishing vessel at the east of Sha Chau.

None of the dolphin sightings was made in the proximity of the TM-CLKL alignment. 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) in March 2017 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: March 2 nd / 7 th | 0.0 | 0.0 |
| | Set 2: March 16 th / 28 th | 0.0 | 0.0 |
| NWL | Set 1: March 2 nd / 7 th | 0.0 | 0.0 |
| | Set 2: March 16 th / 28 th | 2.0 | 24.4 |

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in March 2017 in Northeast (NEL) and Northwest Lantau (NWL)

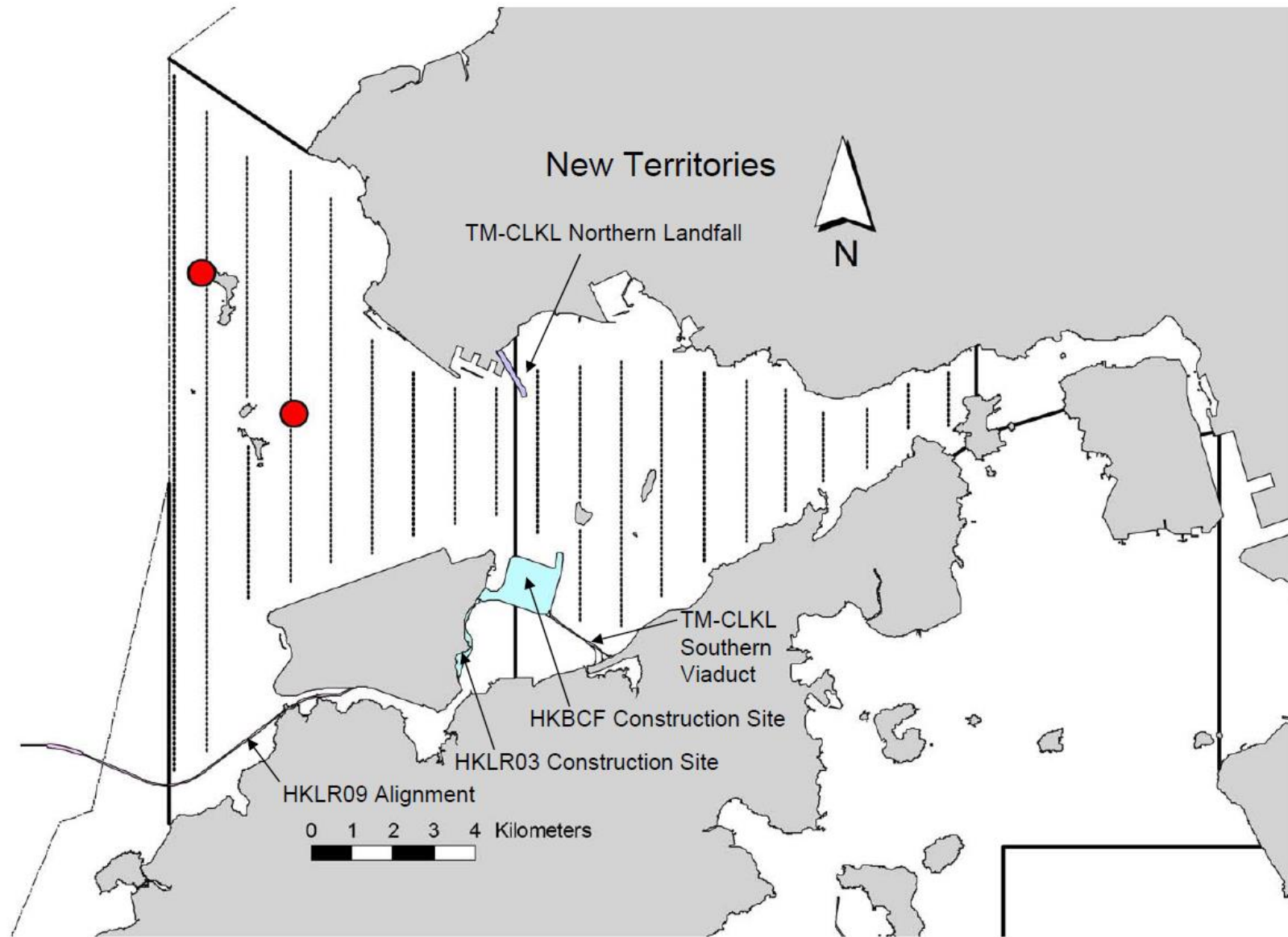


Figure 2.4

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 2017)

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 | 1.0 | 1.5 | 11.6 | 15.1 |

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in March 2017 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau.

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 in relation 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 Implementation of Marine Mammal Exclusion Zone

Daily marine mammal exclusion zone was in effect during the period of dredging, reclamation or marine sheet piling works in open waters under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when dredging, reclamation or marine sheet piling works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in March 2017 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, five (5) site inspections were carried out on 1, 8, 15, 22 and 29 March 2017.

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 | Recommendations/ Remarks |
|------------------------|---|---|
| 1 March 2017 | <p>Works Area – Portion N-A</p> <ul style="list-style-type: none"> • Drip tray and chemical labels should be provided to the chemicals. <p>Works Area - Portion S-B</p> <ul style="list-style-type: none"> • Accumulated waste at the pedestrian walkway should be removed. • Muddy surface runoff should be avoided. | <p>Works Area – Portion N-A</p> <ul style="list-style-type: none"> • The Contractor was reminded to provide drip tray and chemical labels to the chemicals. <p>Works Area - Portion S-B</p> <ul style="list-style-type: none"> • The Contractor was reminded to remove the accumulated waste at the pedestrian walkway. • The Contractor was reminded to avoid muddy surface runoff. |
| 8 March 2017 | <p>Works Area - Portion N-A</p> <ul style="list-style-type: none"> • Drip tray and chemical labels should be provided to the chemicals. • Broken chemical containers should be removed. <p>Works Area - Portion N-C</p> <ul style="list-style-type: none"> • Muddy substances at the haul road should be removed. <p>Works Area - Portion S-C</p> <ul style="list-style-type: none"> • The Contractor was reminded to provide drip tray to the chemicals containers. • Drip tray should be provided to the chemicals containers. | <p>Works Area - Portion N-A</p> <ul style="list-style-type: none"> • The Contractor was reminded to provide drip tray and chemical labels to the chemicals. • The Contractor was reminded to remove the broken chemical containers. <p>Works Area - Portion N-C</p> <ul style="list-style-type: none"> • The Contractor was reminded to remove the muddy substances at the haul road. <p>Works Area - Portion S-C</p> <ul style="list-style-type: none"> • Drip tray should be provided to the chemicals containers. • The Contractor was reminded to provide drip tray to the chemicals containers. |
| 15 March 2017 | <p>Works Area – TBM tunnel</p> <ul style="list-style-type: none"> • Drip tray should be provided to the chemicals containers. • Cement bags should be covered with tarpaulin sheets. • The grouting facilities should be enclosed on top and 3 sides by tarpaulin sheets. <p>Works Area – Portion S-C</p> <ul style="list-style-type: none"> • Drip tray should be provided to the chemicals containers. | <p>Works Area – TBM tunnel</p> <ul style="list-style-type: none"> • The Contractor was reminded to provide drip tray to the chemicals. • The Contractor was reminded to cover the cement bags with tarpaulin sheets. • The Contractor was reminded to enclose the grouting facilities on top and 3 sides by tarpaulin sheets. <p>Works Area – Portion S-C</p> <ul style="list-style-type: none"> • The Contractor was reminded to provide drip tray to the chemicals containers. |

| Inspection Date | Observations | Recommendations/ Remarks |
|-----------------|---|--|
| 22 March 2017 | Works Area - Portion N-C <ul style="list-style-type: none"> Accumulated rubbish should be removed. Works Area - Portion N-A <ul style="list-style-type: none"> Muddy water should be properly treated before discharge. Works Area - Portion S-C <ul style="list-style-type: none"> Drip tray should be provided to the chemicals containers. The rock breaker should be wrapped to prevent spread of dust. | Works Area - Portion N-C <ul style="list-style-type: none"> The Contractor was reminded to remove the accumulated rubbish. Works Area - Portion N-A <ul style="list-style-type: none"> The Contractor was reminded to treat the muddy water properly before discharge. Works Area - Portion S-C <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray to the chemicals containers. The Contractor was reminded to wrap the rock breaker to prevent spread of dust. |
| 29 March 2017 | Works Area - Portion N-C <ul style="list-style-type: none"> Empty cement bags should be removed. Accumulated rubbish should be removed. | Works Area - Portion N-C <ul style="list-style-type: none"> The Contractor was reminded to remove the empty cement bags. The Contractor was reminded to remove the accumulated rubbish. |

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 included mainly construction wastes (inert and non-inert) and chemical waste. 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 2017 | 7,508 | 0 | 0 | 286 | 0 | 6100 | 0 | 0 |

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/D | 13 March 2015 | Throughout the Contract | HyD | Application for VEP on 3 March 2015 to supersede EP-354/2009/C |
| Construction Dust Notification | 363510 | 19 August 2013 | Throughout the Contract | DBJV | Northern Landfall |
| Construction Dust Notification | 403620 | 10 June 2016 | Throughout the Contract | DBJV | Southern Landfall |
| Chemical Waste Registration | 5213-422-D2516-01 | 10 September 2013 | Throughout the Contract | DBJV | Northern Landfall |
| Chemical Waste Registration | 5213-422-D2516-02 | 18 January 2017 | Throughout the Contract | DBJV | Northern Landfall |
| Chemical Waste Registration | 5213-951-D2591-01 | 25 May 2016 | Throughout the Contract | DBJV | Southern Landfall |
| Construction Waste Disposal Account | 7018108 | 28 August 2013 | Throughout the Contract | DBJV | Waste disposal in Contract No. HY/2012/08 |
| Construction Waste Disposal Account | 7021715 | 12 January 2017 | 12 April 2017 | DBJV | Vessel disposal |
| Waste Water Discharge License | WT00017707-2013 | 18 November 2013 | 30 November 2018 | DBJV | For site WA18 |
| Waste Water Discharge License | WT00019248-2014 | 5 June 2014 | 30 June 2019 | DBJV | For site Portion N6 and Reclamation Area E |
| Waste Water Discharge License | WT00025944-2016 | 15 December 2016 | 31 December 2021 | DBJV | Southern Landfall |
| Marine Dumping Permit | EP/MD/17-103 | 16 December 2016 | 13 June 2017 | DBJV | Northern Landfall |
| Construction Noise Permit | GW-RW0644-16 | 30 November 2016 | 29 May 2017 | DBJV | For Urmston Road in front of Pillar Point |
| Construction Noise Permit | GW-RW0666-16 | 13 December 2016 | 12 June 2017 | DBJV | For site WA23A+B |
| Construction Noise Permit | GW-RW0143-17 | 29 March 2017 | 28 September 2017 | DBJV | For Portion N6 |

| License/ Permit | License or Permit No. | Date of Issue | Date of Expiry | License/ Permit Holder | Remarks |
|---------------------------|-----------------------|------------------|----------------|------------------------|-----------------------|
| Construction Noise Permit | GW-RS0121-17 | 25 February 2017 | 24 August 2017 | DBJV | For Southern Landfall |

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*

No Action Level or Limit Level exceedances were recorded in the air quality monitoring of this reporting month.

Cumulative statistics are provided in *Appendix L*.

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

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

One (1) environmental complaint case regarding noise nuisance and water pollution at the site near HKBCF of HZMB was referred by IEC on 28 March 2017. The environmental complaint case is under investigation. The complete investigation findings will be provided in the Forty-second Monthly EM&A Report.

No 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*.

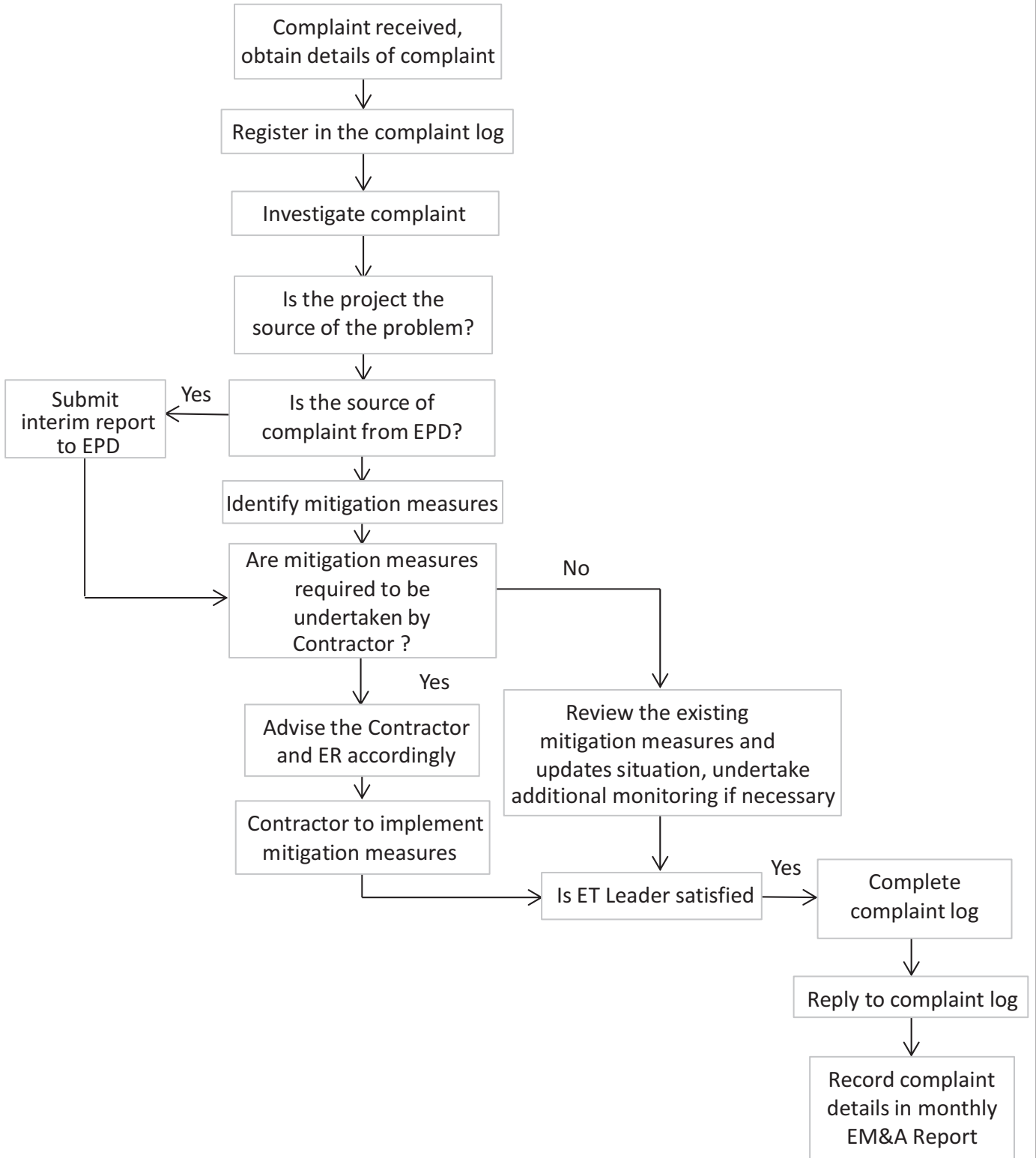


Figure 2.5

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 2017 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">• Construction of Vertical Seawall at Portion N-A; and• Filling works at Portion N-A |
| <i>Land-based Works</i> |
| <ul style="list-style-type: none">• Box Culvert Extension at Works Area – Portion N-A;• Construction of North Ventilation Building – Portion N-C;• Construction of Cross Passage Tympanum – TBM tunnel;• Cross Passage Lining Installation – TBM Tunnel;• Excavation of Sub-sea Tunnel – TBM tunnel;• Corbel Construction – TBM Tunnel;• Sub-sea Tunnel Gallery Installation – TBM tunnel;• CSM Ground Treatment and Bulk excavation – Portion S-A.• |

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 2017 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 2017 is provided in *Appendix F*.

4.1 CONCLUSIONS

This Forty-first Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 March 2017, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP), marine water quality and dolphin monitoring were carried out in this reporting month. No Action Level or Limit Level exceedances were recorded in the air quality monitoring of this reporting month.

No Action Level or Limit Level exceedances were recorded in the water quality monitoring of this reporting month.

A total of two groups of 20 Chinese White Dolphins sightings were recorded on one survey in March 2017. All two dolphin sightings were made in NWL, while none was sighted in NEL. Both dolphin sightings were made during on-effort search, while one of the two on-effort sightings were made on primary lines. One of the two dolphin groups was associated with an operating fishing vessel at the east of Sha Chau.

Environmental site inspection was carried out five (5) times in March 2017. 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.

One (1) environmental complaint case regarding muddy water discharge at the site area near Ho Yeung Street was referred by EPD on 14 February 2017. The complaint investigation report is provided in Appendix L.

One (1) environmental complaint case regarding noise nuisance and water pollution at the site near HKBCF of HZMB was referred by IEC on 28 March 2017. The environmental complaint case is under investigation. The complete investigation findings will be provided in the Forty-second Monthly EM&A Report.

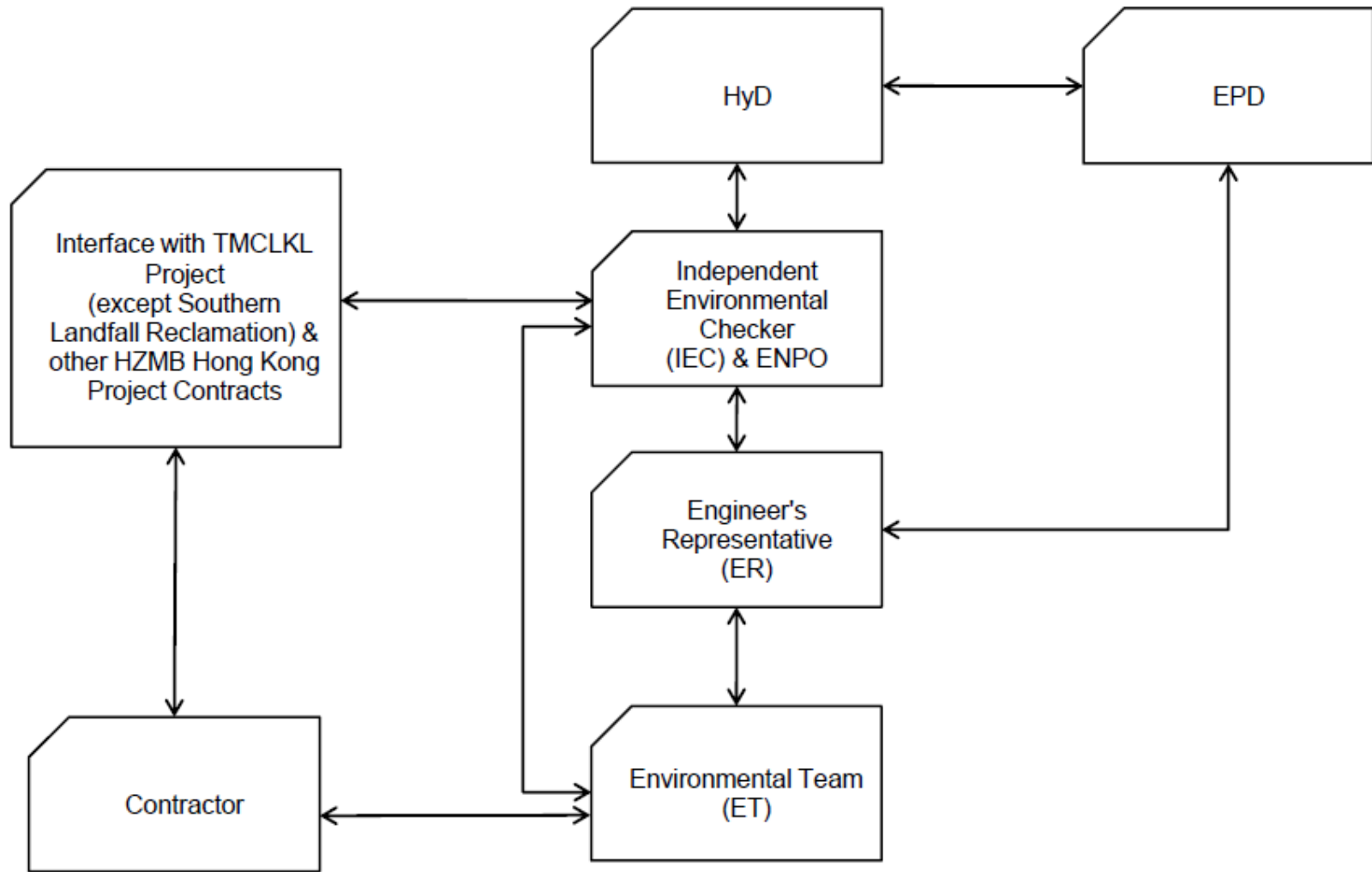
No summons/ prosecution was received during the reporting period.

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the marine travel route record of this Contract was recorded in January, February and March.

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

Construction Programme

| Activity Name | 2016 | | | | | | | | | 2017 | | | | | | | | |
|---|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|-----|-----|-----|
| | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | | | | |
| | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| TMCLK - Northern Connection Sub-Sea Tunnel Section | | | | | | | | | | | | | | | | | | |
| Contract Dates | | | | | | | | | | | | | | | | | | |
| Commencement and Completion Dates | | | | | | | | | | | | | | | | | | |
| KD01 - Achievement of Stage 1 - Nth TBM & C&C for E&MS/TCSS | | | | | | | | | | | | | | | | | | |
| Site Possession Date | | | | | | | | | | | | | | | | | | |
| Portions: X1,(N10,11,13 & 14) - Sth Landfall | | | | | | | | | | | | | | | | | | |
| Portions: N1 to N4 & N12 | | | | | | | | | | | | | | | | | | |
| General Submissions | | | | | | | | | | | | | | | | | | |
| Environmental | | | | | | | | | | | | | | | | | | |
| Environmental Permit Submissions | | | | | | | | | | | | | | | | | | |
| Supplementary WMP of C&C Tunnel at Sth.Landfall | | | | | | | | | | | | | | | | | | |
| Supplementary WMP of C&C Tunnel at Sth.Landfall | | | | | | | | | | | | | | | | | | |
| Sediment Quality Report/Dumping Permit | | | | | | | | | | | | | | | | | | |
| Southern Landfall | | | | | | | | | | | | | | | | | | |
| Southern landfall - Commencement of Shaft & C&C Tunnel Dwall | | | | | | | | | | | | | | | | | | |
| Southern Landfall - Commencement of Retrieval Shaft Excavation | | | | | | | | | | | | | | | | | | |
| Sediment Sampling & Testing Plan (SSTP) - if required | | | | | | | | | | | | | | | | | | |
| Complete SSTP and Obtain EPD's approval | | | | | | | | | | | | | | | | | | |
| Sediment Quality Report (SQR) - if required | | | | | | | | | | | | | | | | | | |
| Advance Ground Investigation works for Sediment sampling | | | | | | | | | | | | | | | | | | |
| Sediment Sample Testing & Report preparation | | | | | | | | | | | | | | | | | | |
| Dumping Permit for Load Dumping (Loading Permit) - if required | | | | | | | | | | | | | | | | | | |
| Finalize the application document and submit to EPD - for Dwall | | | | | | | | | | | | | | | | | | |
| Notify the results and issue Loading Permit for Local & Cross Boundary Crossing - for Dwall | | | | | | | | | | | | | | | | | | |
| PAYMENT MILESTONE | | | | | | | | | | | | | | | | | | |
| Design and Design Checking of the Works | | | | | | | | | | | | | | | | | | |
| MS 2.5 Submit AIP for seawall modification works at Southern Landfall | | | | | | | | | | | | | | | | | | |
| MS 2.6 Approve AIP for seawall modification works at Southern Landfall by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| MS 2.44 Approve DDA for South Ventilation Building by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| MS 2.52 Approve DDA for Facilities Provision for TCSS by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| MS 2.60 Approve DDA for Drainage, Sewerage, Waterworks and Utilities at Northern Landfall by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| MS 2.69 Submit draft Operation and Maintenance Manual for all Tunnels and Cross Passgases | | | | | | | | | | | | | | | | | | |
| MS 2.70 Accept Operation and Maintenance Manual for all Tunnels and Cross Passgases by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| MS 2.71 Submit draft Operation and Maintenance Manual for all works except Tunnels and Cross Passgases | | | | | | | | | | | | | | | | | | |
| MS 2.72 Accept Operation and Maintenance Manual for all works except Tunnels and Cross Passgases by the Supervising Officer | | | | | | | | | | | | | | | | | | |
| Tunnel Boring Machine (TBM) and Back-up Equipment for TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.1.6 Removal of TBM for Southbound Tunnel from Site after the completion of TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.1.12 Removal of TBM for Northbound Tunnel from Site after the completion of TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.1.25 Demolition of Slurry Treatment Plant on completion | | | | | | | | | | | | | | | | | | |
| MS 3.1.26 Complete the whole of the activities under this Cost Centre Part to the satisfaction of the Supervising Officer | | | | | | | | | | | | | | | | | | |
| TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.4 Complete walls of retrieval shaft | | | | | | | | | | | | | | | | | | |
| MS 3.3.5 Complete excavation to formation level for retrieval shaft and complete casting of base slab | | | | | | | | | | | | | | | | | | |
| MS 3.3.6 Complete all necessary works of retrieval shaft to facilitate retrieval of TBM | | | | | | | | | | | | | | | | | | |
| MS 3.3.43 Completion of excavation, support and permanent lining for 55% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.44 Completion of excavation, support and permanent lining for 57.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.45 Completion of excavation, support and permanent lining for 60% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.46 Completion of excavation, support and permanent lining for 62.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.47 Completion of excavation, support and permanent lining for 65% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.48 Completion of excavation, support and permanent lining for 67.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.49 Completion of excavation, support and permanent lining for 70% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.50 Completion of excavation, support and permanent lining for 72.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.51 Completion of excavation, support and permanent lining for 75% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.52 Completion of excavation, support and permanent lining for 77.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.53 Completion of excavation, support and permanent lining for 80% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.54 Completion of excavation, support and permanent lining for 82.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.55 Completion of excavation, support and permanent lining for 85% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.56 Completion of excavation, support and permanent lining for 87.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.57 Completion of excavation, support and permanent lining for 90% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.58 Completion of excavation, support and permanent lining for 92.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.59 Completion of excavation, support and permanent lining for 95% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.60 Completion of excavation, support and permanent lining for 97.5% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.61 Completion of excavation, support and permanent lining for 100% of the total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.107 Completion of excavation, support and permanent lining for 77.5% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.108 Completion of excavation, support and permanent lining for 80% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.109 Completion of excavation, support and permanent lining for 82.5% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.110 Completion of excavation, support and permanent lining for 85% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.111 Completion of excavation, support and permanent lining for 87.5% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.112 Completion of excavation, support and permanent lining for 90% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.113 Completion of excavation, support and permanent lining for 92.5% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.114 Completion of excavation, support and permanent lining for 95% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.115 Completion of excavation, support and permanent lining for 97.5% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.116 Completion of excavation, support and permanent lining for 100% of the total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.118 Complete tunnel internal structures for 50% of total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.119 Complete tunnel internal structures for 75% of total length (measured on plan) of the Northbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.121 Complete tunnel internal structures for 25% of total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.122 Complete tunnel internal structures for 50% of total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.123 Complete tunnel internal structures for 75% of total length (measured on plan) of the Southbound TBM Tunnel | | | | | | | | | | | | | | | | | | |
| Cross Passages for TBM Tunnel | | | | | | | | | | | | | | | | | | |
| MS 3.3.1 Complete 50% of ground treatment for excavation of all Type 1 Cross Passages(Percentage to be certified for 50%) | | | | | | | | | | | | | | | | | | |
| MS 3.3.3 Complete 50% of ground treatment for excavation of all Type 2 Cross Passages(Percentage to be certified for 50%) | | | | | | | | | | | | | | | | | | |
| MS 3.3.4 Complete 100% of ground treatment for excavation of all Type 2 Cross Passages(Percentage to be certified for 100%) | | | | | | | | | | | | | | | | | | |
| MS 3.3.5 Complete 50% of excavation and support for all Type 1 Cross Passages(Percentage to be certified for 50% complete) | | | | | | | | | | | | | | | | | | |
| MS 3.3.7 Complete 50% of excavation and support for all Type 2 Cross Passages(Percentage to be certified for 50% complete) | | | | | | | | | | | | | | | | | | |
| MS 3.3.9 Complete 50% of permanent lining and internal structures for all Type 1 Cross Passages(Percentage to be certified for 50%) | | | | | | | | | | | | | | | | | | |
| MS 3.3.11 Complete 50% of permanent lining and internal structures for all Type 2 Cross Passages(Percentage to be certified for 50%) | | | | | | | | | | | | | | | | | | |

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| | Planned Bar |
| | Planned Bar - Critical |
| | Planned Milestone |
| | Progress bar |
| | Progress Milestone |



| Date | Revision | Checked | Approved |
|-----------|---------------------------|---------|----------|
| 12-Feb-14 | TMCLKDUGEN-PRG98507 | WYu | SPa |
| 08-Apr-14 | TMCLKDUGEN-PRG98507 Rev.B | SPa | WYu |
| 28-Aug-14 | TMCLKDUGEN-PRG98507 Rev.C | CLa | WYu |
| 30-Oct-15 | TMCLKDUGEN-PRG98507 Rev.F | WYu | |

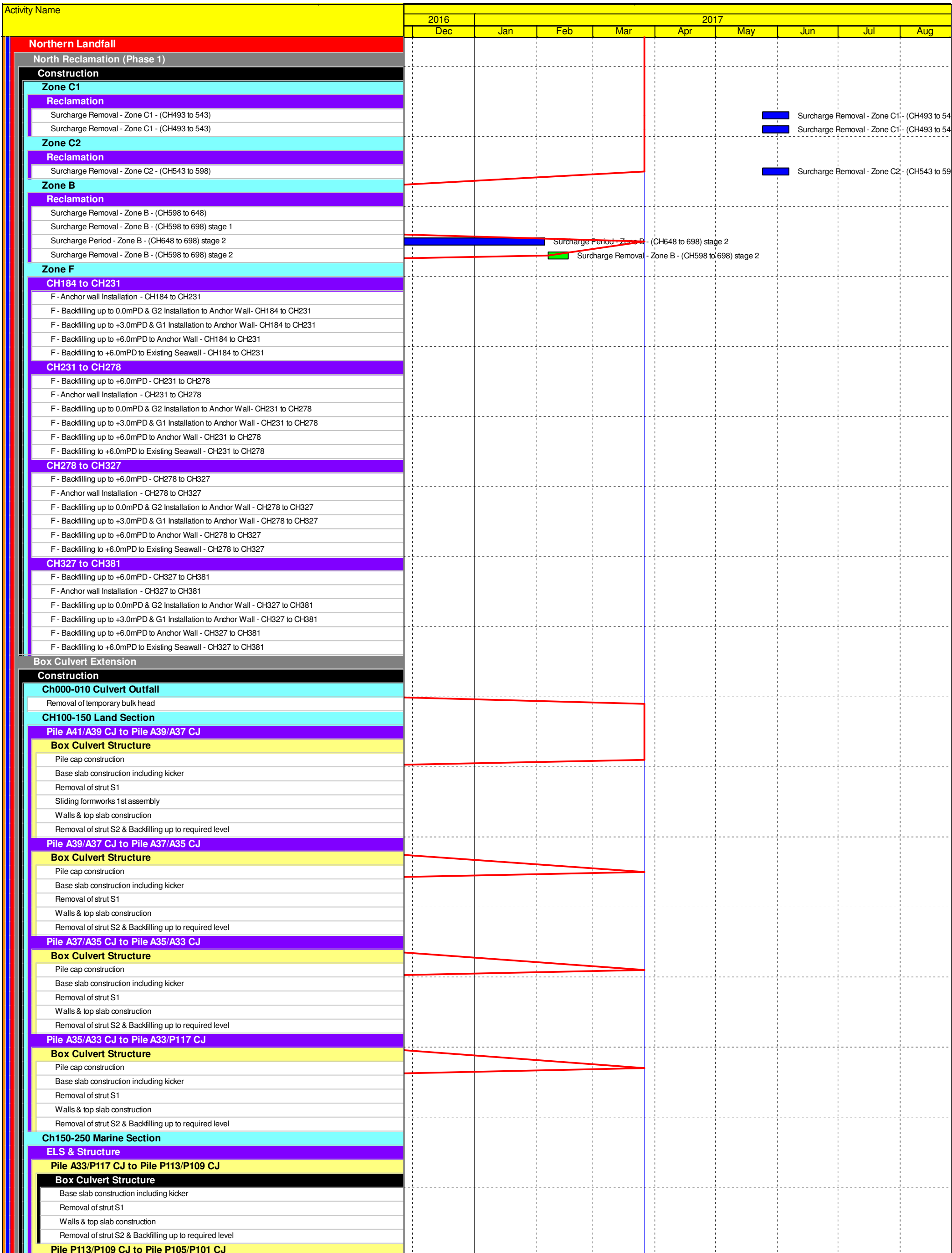
| Activity Name | 2017 | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | |
| Cut-and-cover Tunnels at Southern Landfalls | | | | | | | | | | |
| MS 4.1.1 Complete 10% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.2 Complete 20% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.3 Complete 30% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.4 Complete 40% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.5 Complete 50% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.6 Complete 60% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.7 Complete 70% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.8 Complete 80% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.9 Complete 90% of total length (measured on plan) of temporary retaining walls for excavation of Cut- | | | | | | | | | | |
| MS 4.1.10 Complete 100% of total length (measured on plan) of temporary retaining walls for excavation of C | | | | | | | | | | |
| MS 4.1.11 | | | | | | | | | | |
| MS 4.1.12 Complete 40% of excavation for Cut-and-cover tunnel | | | | | | | | | | |
| MS 4.1.13 Complete 60% of excavation for Cut-and-cover tunnel | | | | | | | | | | |
| MS 4.1.14 Complete 80% of excavation for Cut-and-cover tunnel | | | | | | | | | | |
| MS 4.1.15 Complete 100% of excavation for Cut-and-cover tunnel | | | | | | | | | | |
| MS 4.1.16 Complete permanent tunnel structure for 10% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.17 Complete permanent tunnel structure for 20% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.18 Complete permanent tunnel structure for 30% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.19 Complete permanent tunnel structure for 40% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.20 Complete permanent tunnel structure for 50% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.21 Complete permanent tunnel structure for 60% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.22 Complete permanent tunnel structure for 70% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.23 Complete permanent tunnel structure for 80% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.24 Complete permanent tunnel structure for 90% of the total length (measured on plan) of Cut-and-cc | | | | | | | | | | |
| MS 4.1.26 Complete excavation for 50% of total length (measured on plan) of all Cross Passages | | | | | | | | | | |
| MS 4.1.27 Complete excavation for 100% of total length (measured on plan) of all Cross Passages | | | | | | | | | | |
| MS 4.1.29 Complete pavement for 50% of the total length (measured on plan) of Cut-and-cover Tunnel | | | | | | | | | | |
| Cut-and-cover Tunnel at Northern Landfall | | | | | | | | | | |
| MS 4.2.22 Complete tunnel internal structure for 50% of NB Northern Landfall TBM Tunnel | | | | | | | | | | |
| MS 4.2.24 Complete tunnel internal structure for 50% of SB Northern Landfall TBM Tunnel | | | | | | | | | | |
| MS 4.2.25 Complete tunnel internal structure for 100% of SB Northern Landfall TBM Tunnel | | | | | | | | | | |
| MS 4.2.29 Complete 100% of permanent lining and internal structures for all Northern Landfall Cross Passag | | | | | | | | | | |
| MS 4.2.30 Complete Permanent tunnel structure for 25% of Cut and Cover Tunnel | | | | | | | | | | |
| MS 4.2.31 Complete Permanent tunnel structure for 50% of Cut and Cover Tunnel | | | | | | | | | | |
| MS 4.2.32 Complete Permanent tunnel structure for 75% of Cut and Cover Tunnel | | | | | | | | | | |
| MS 4.2.34 Complete Permanent junction structure at interface between Cut-and-cover and TBM Tunnel | | | | | | | | | | |
| Approach Ramp Structures to Cut-and-cover Tunnel at Southern Landfall | | | | | | | | | | |
| MS 5.1.2 Complete 40% of excavation for approach ramp structures | | | | | | | | | | |
| MS 5.1.3 Complete 60% of excavation for approach ramp structures | | | | | | | | | | |
| MS 5.1.4 Complete 80% of excavation for approach ramp structures | | | | | | | | | | |
| MS 5.1.5 Complete 100% of excavation for approach ramp structures | | | | | | | | | | |
| MS 5.1.6 Complete retaining wall foundation for 10% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.7 Complete retaining wall foundation for 20% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.8 Complete retaining wall foundation for 30% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.9 Complete retaining wall foundation for 40% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.10 Complete retaining wall foundation for 50% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.11 Complete retaining wall foundation for 60% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.12 Complete retaining wall foundation for 70% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.13 Complete retaining wall foundation for 80% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.14 Complete retaining wall foundation for 90% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.15 Complete retaining wall foundation for 100% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.16 Complete retaining wall structure for 10% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| MS 5.1.17 Complete retaining wall structure for 20% of the total length (measured on plan) of approach ramp | | | | | | | | | | |
| At grade Roads at Northern Landfall | | | | | | | | | | |
| MS 6.2.13 Complete drainage installation of 20% length of total length (measured on plan) of drainage pipes | | | | | | | | | | |
| MS 6.2.17 Complete sewerage installation of 20% length of total length (measured on plan) of sewerage pipes | | | | | | | | | | |
| MS 6.2.21 Complete watermain installation of 20% length of total length (measured on plan) of watermain | | | | | | | | | | |
| South Ventilation Buildings | | | | | | | | | | |
| MS 7.1.1 Complete 100% of cofferdam for excavation | | | | | | | | | | |
| MS 7.1.2 Complete 100% of excavation to the formation level | | | | | | | | | | |
| MS 7.1.3 Complete 100% of foundation for the ventilation building | | | | | | | | | | |
| MS 7.1.4 Complete concreting works of 25% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.1.5 Complete concreting works of 50% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.1.6 Complete concreting works of 75% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.1.7 Complete concreting works of 100% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| North Ventilation Buildings | | | | | | | | | | |
| MS 7.2.4 Complete concreting works of 25% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.2.5 Complete concreting works of 50% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.2.6 Complete concreting works of 75% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| MS 7.2.7 Complete concreting works of 100% area of the total construction floor area for the ventilation building | | | | | | | | | | |
| Facilities Provision for E&M Works for TBM Tunnel, Cut & Cover Tunnels and Cross Passages | | | | | | | | | | |
| MS 9.1.1 Complete 25% of bonding terminal, opening and accessories, etc. | | | | | | | | | | |
| MS 9.1.2 Complete 25% of plinth, hoisting facilities and accessories, etc. | | | | | | | | | | |
| MS 9.1.3 Complete 50% of bonding terminal, opening and accessories, etc. | | | | | | | | | | |
| MS 9.1.4 Complete 50% of plinth, hoisting facilities and accessories, etc. | | | | | | | | | | |
| MS 9.1.5 Complete 75% of bonding terminal, opening and accessories, etc. | | | | | | | | | | |
| MS 9.1.6 Complete 75% of plinth, hoisting facilities and accessories, etc. | | | | | | | | | | |
| Facilities Provision for E&M Works for South Ventilation Building | | | | | | | | | | |
| MS 9.4.1 Complete 25% of bonding terminal, main earth mat, clean earth mat, earth pit, lightning pit, conceal | | | | | | | | | | |
| MS 9.4.2 Complete 25% of plinth, hoisting facilities, louver, wire mesh and accessories, etc. | | | | | | | | | | |
| MS 9.4.3 Complete 25% of floor drain, water tank and accessories, etc. | | | | | | | | | | |
| Facilities Provision for E&M Works for North Ventilation Building | | | | | | | | | | |
| MS 9.5.1 Complete 25% of bonding terminal, main earth mat, clean earth mat, earth pit, lightning pit, conceal | | | | | | | | | | |
| MS 9.5.2 Complete 25% of plinth, hoisting facilities, louver, wire mesh and accessories, etc. | | | | | | | | | | |
| MS 9.5.3 Complete 25% of floor drain, water tank and accessories, etc. | | | | | | | | | | |

- Planned Bar
- Planned Bar - Critical
- ◆ Planned Milestone
- Progress bar
- ◆ Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section
Detailed Works Programme (Rev. F)
Three Months Rolling Programme
Progress as of 26-Mar-17



| Date | Revision | Checked | Approved |
|-----------|---------------------------|---------|----------|
| 12-Feb-14 | TMCLKDJGEN-PRG98507 | WYu | SPo |
| 08-Apr-14 | TMCLKDJGEN-PRG98507 Rev.B | SPa | WYu |
| 28-Aug-14 | TMCLKDJGEN-PRG98507 Rev.C | CLa | WYu |
| 30-Oct-15 | TMCLKDJGEN-PRG98507 Rev.F | WYu | |

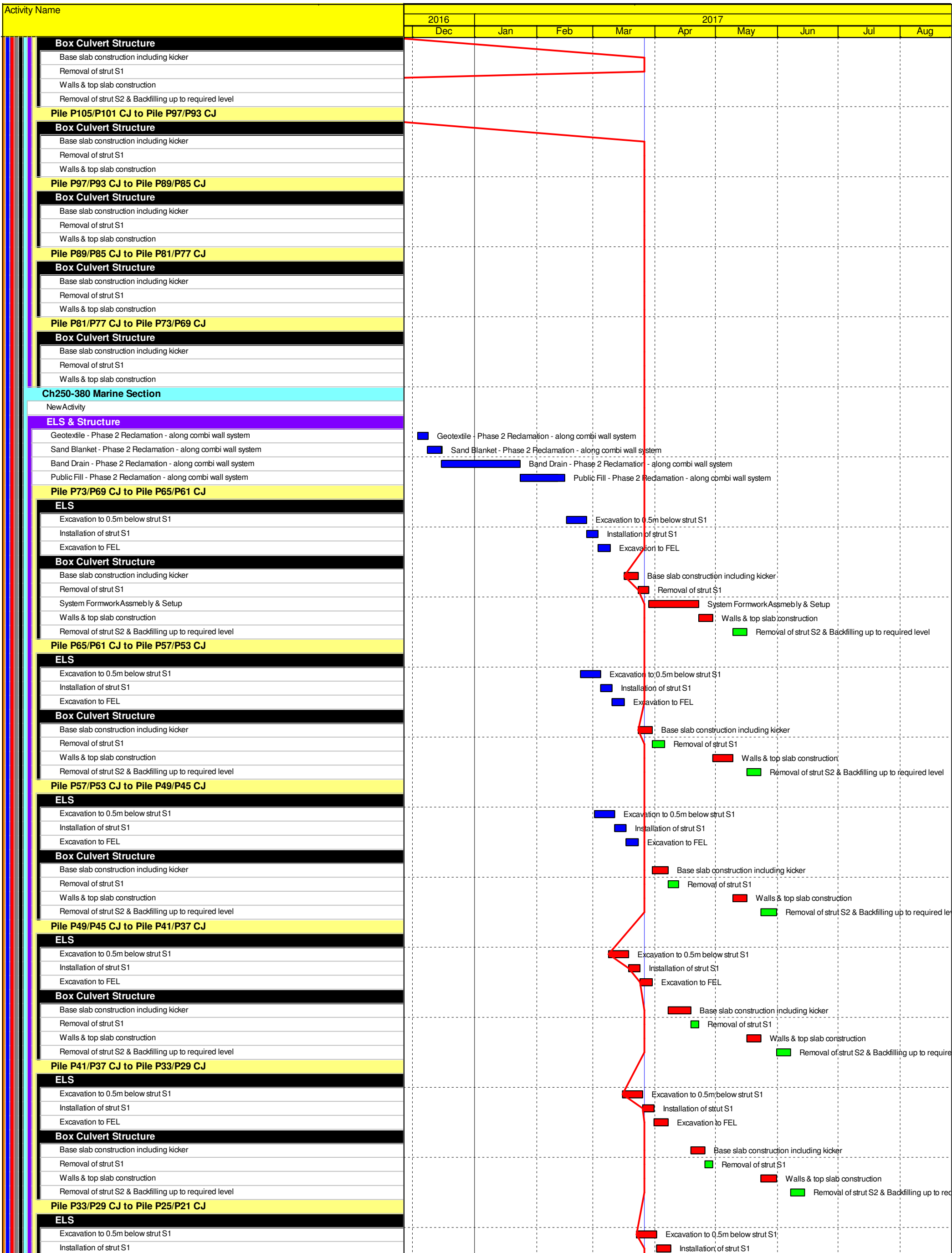


■ Planned Bar
■ Planned Bar - Critical
◆ Planned Milestone
■ Progress bar
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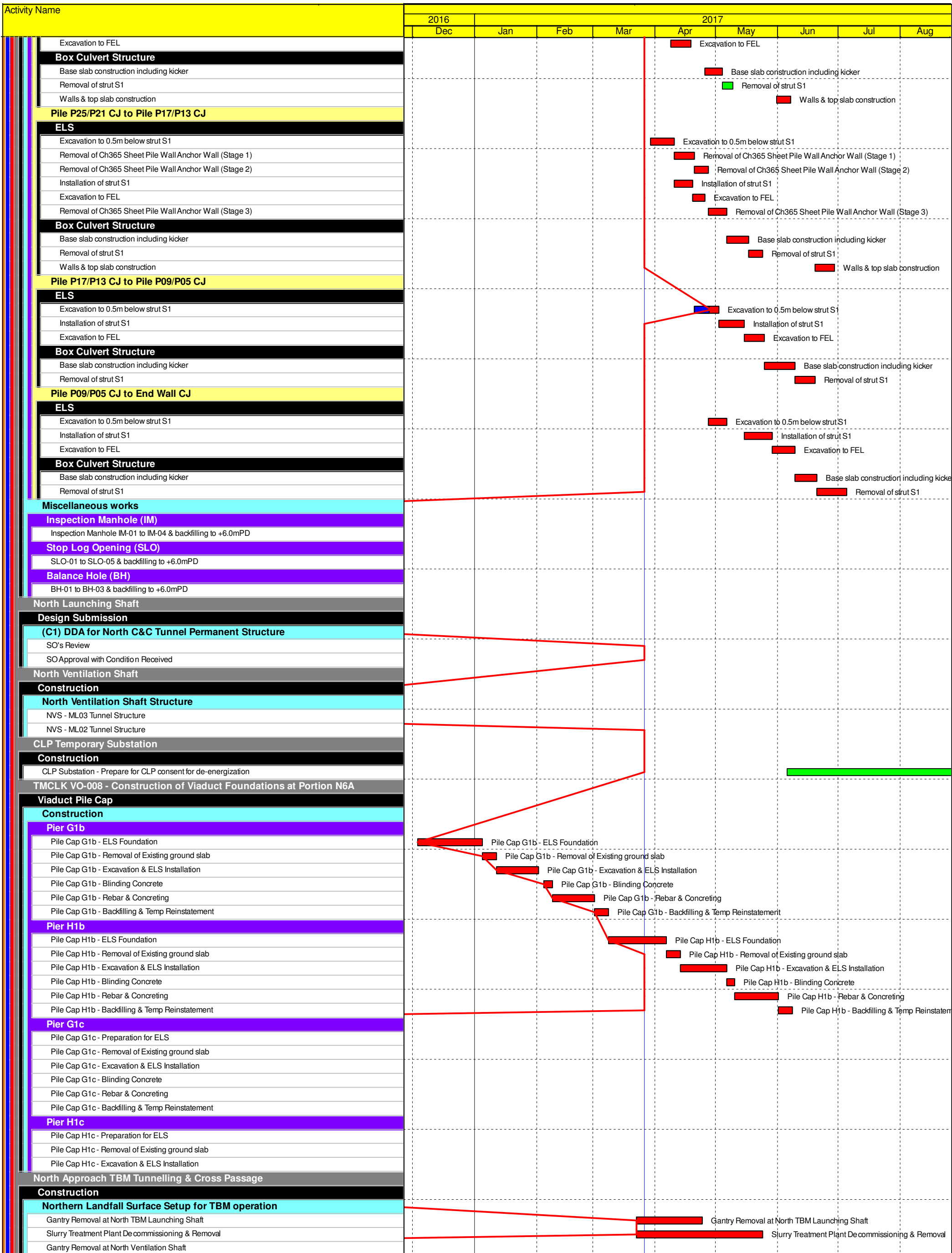


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| | Planned Bar |
| | Planned Bar - Critical |
| | Planned Milestone |
| | Progress bar |
| | Progress Milestone |

TMCLK - Northern Connection Sub-Sea Tunnel Section
 Detailed Works Programme (Rev. F)
 Three Months Rolling Programme
 Progress as of 26-Mar-17



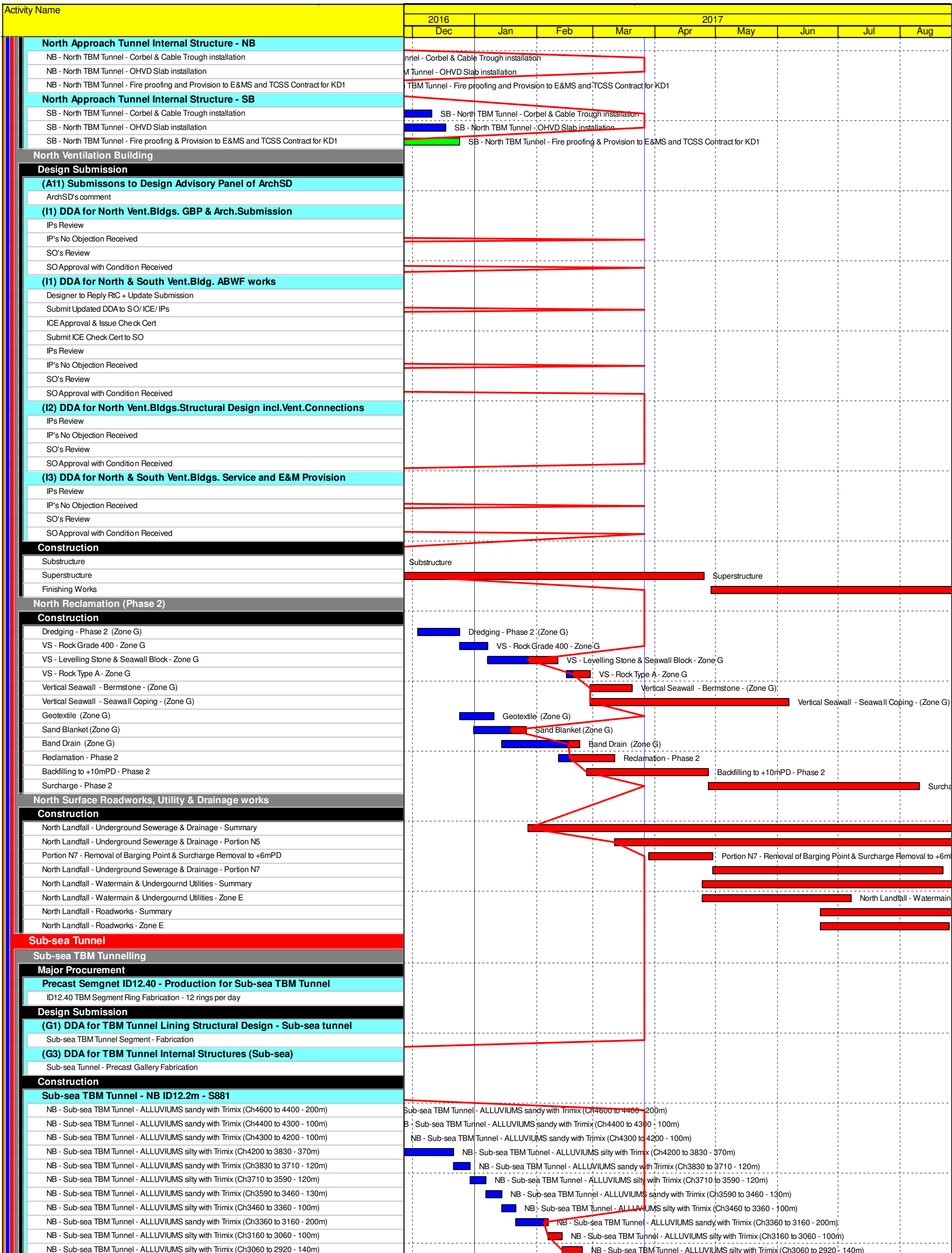
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| ■ | Planned Bar - Critical |
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| ■ | Progress bar |
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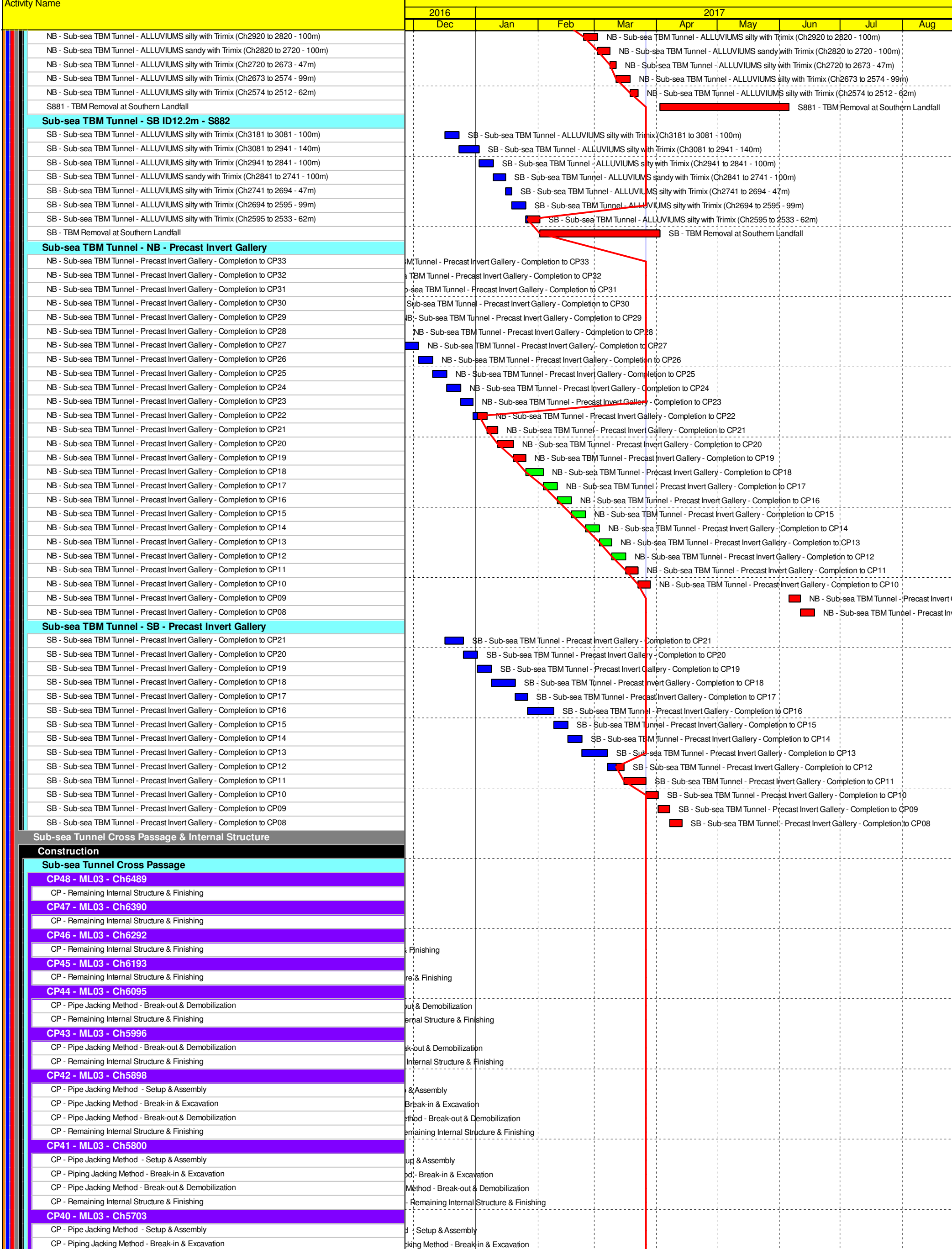


■ Planned Bar
■ Planned Bar - Critical
◆ Planned Milestone
■ Progress bar
◆ Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section
 Detailed Works Programme (Rev. F)
 Three Months Rolling Programme
 Progress as of 26-Mar-17



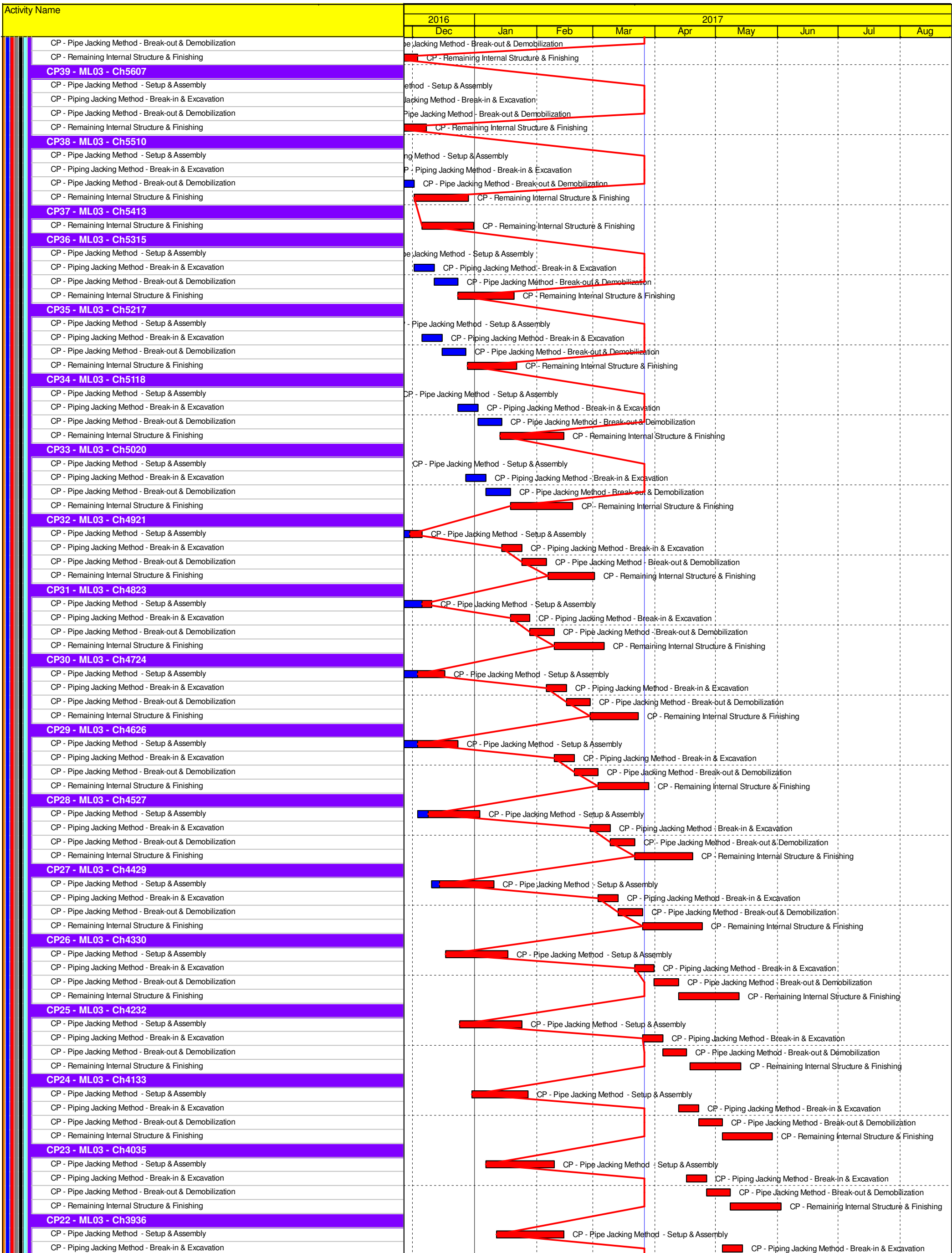
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| | Planned Bar |
| | Planned Bar - Critical |
| | Planned Milestone |
| | Progress bar |
| | Progress Milestone |

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

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| 28-Aug-14 | TMCLKDBJGEN-PRG98507 Rev.C | CLa | WYu |
| 30-Oct-15 | TMCLKDBJGEN-PRG98507 Rev.F | WYu | |

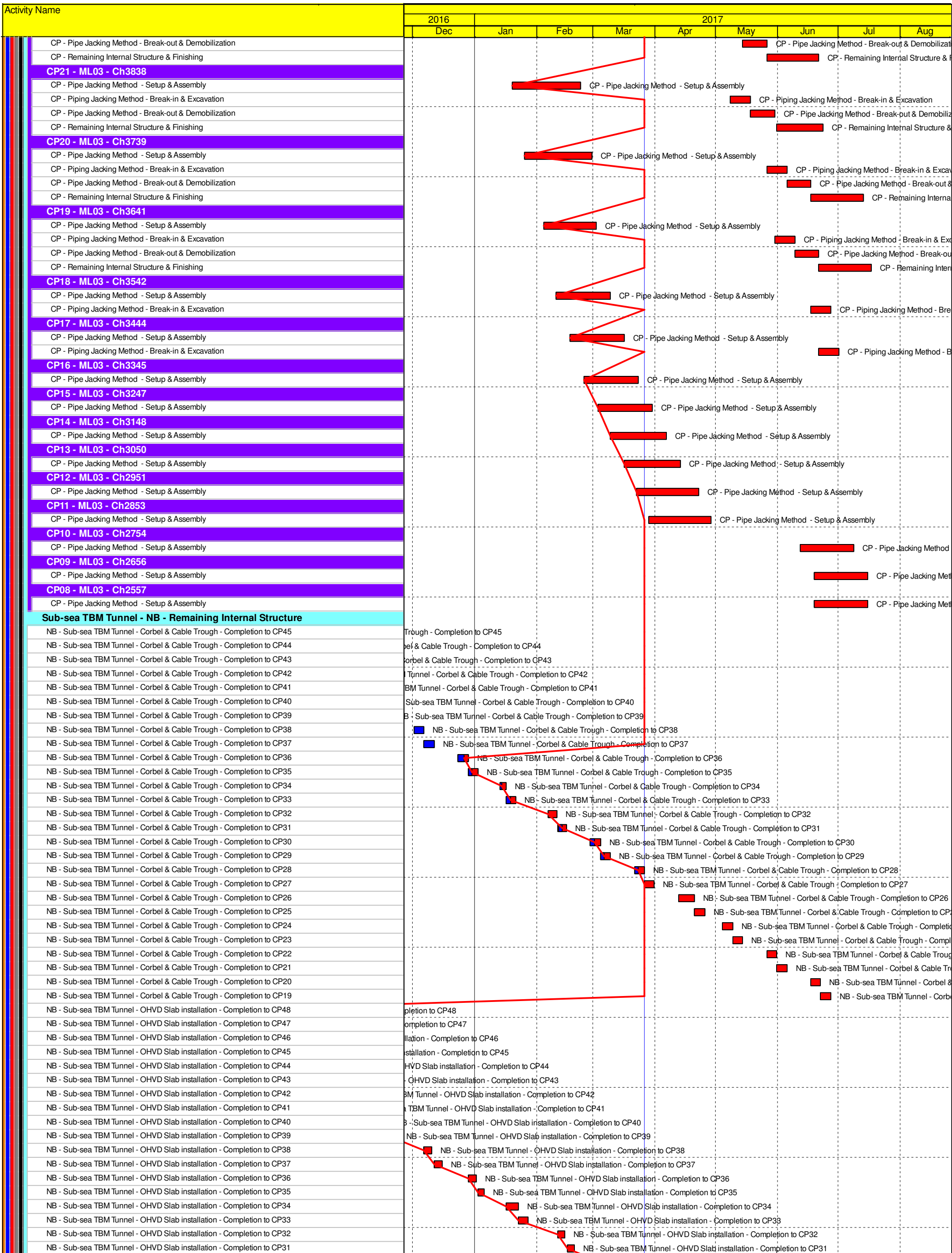


- Planned Bar
- Planned Bar - Critical
- Planned Milestone
- Progress bar
- Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section
 Detailed Works Programme (Rev. F)
 Three Months Rolling Programme
 Progress as of 26-Mar-17



| Date | Revision | Checked | Approved |
|-----------|---------------------------|---------|----------|
| 12-Feb-14 | TMCLKDJGEN-PRG98507 | WYu | SPo |
| 08-Apr-14 | TMCLKDJGEN-PRG98507 Rev.B | SPa | WYu |
| 28-Aug-14 | TMCLKDJGEN-PRG98507 Rev.C | CLa | WYu |
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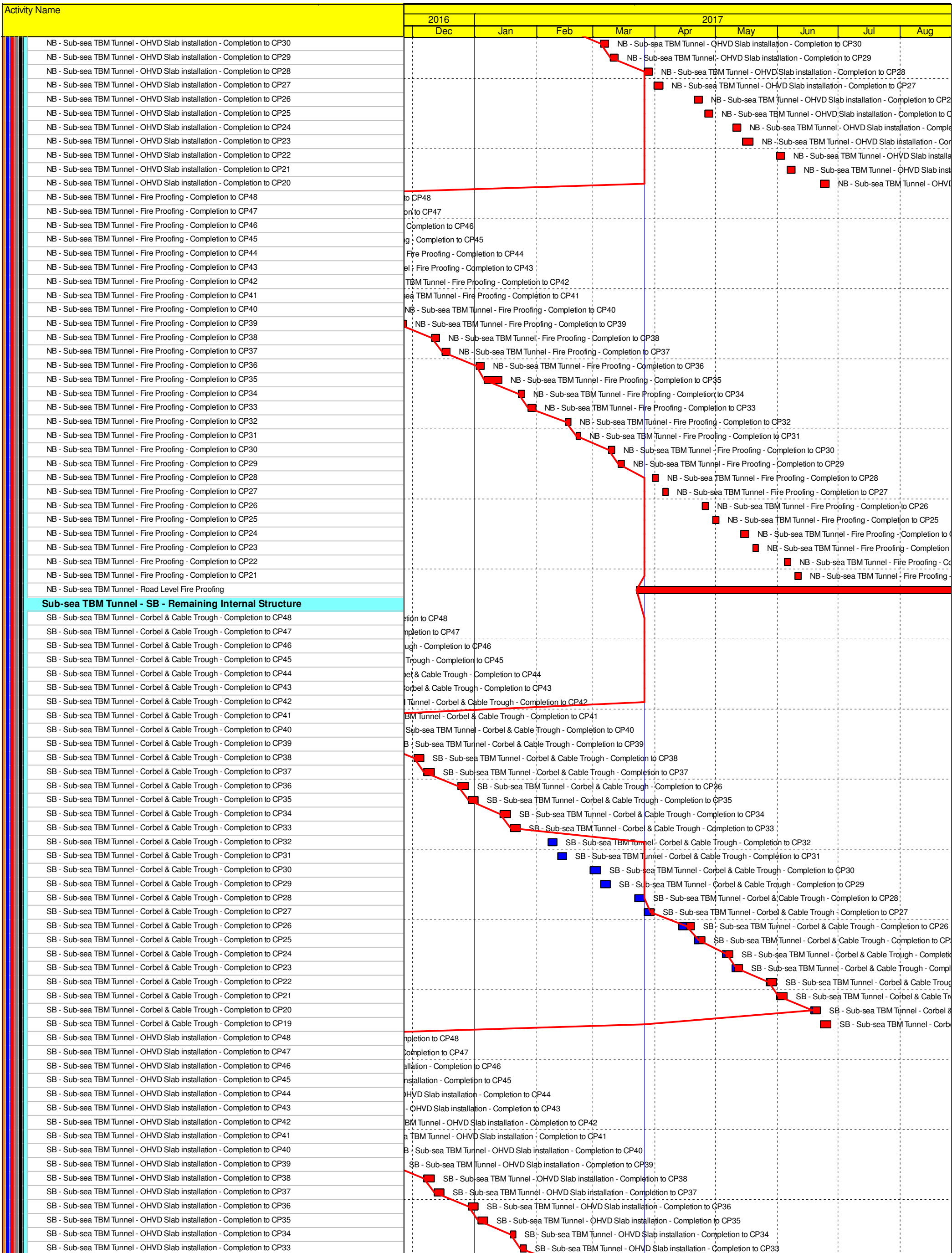


| | |
|--|------------------------|
| | Planned Bar |
| | Planned Bar - Critical |
| | Planned Milestone |
| | Progress bar |
| | Progress Milestone |

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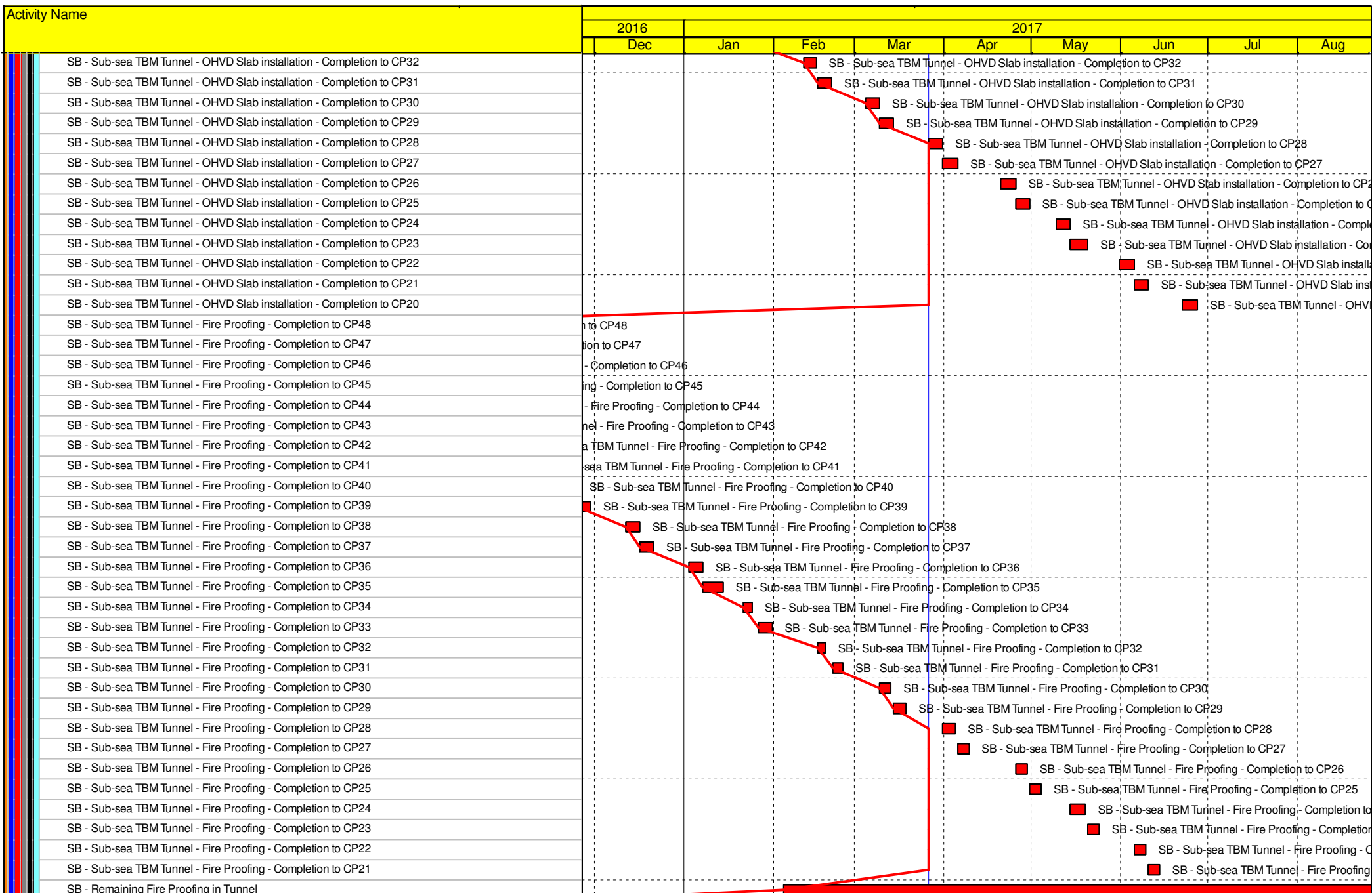


| | |
|--------------------------------------|------------------------|
| ■ | Planned Bar |
| ■ | Planned Bar - Critical |
| ◆ | Planned Milestone |
| ■ | Progress bar |
| ◆ | Progress Milestone |

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Southern Landfall

South Cut & Cover Tunnel

Design Submission

(E2) DDA for South C&C Box & Approach Ramp

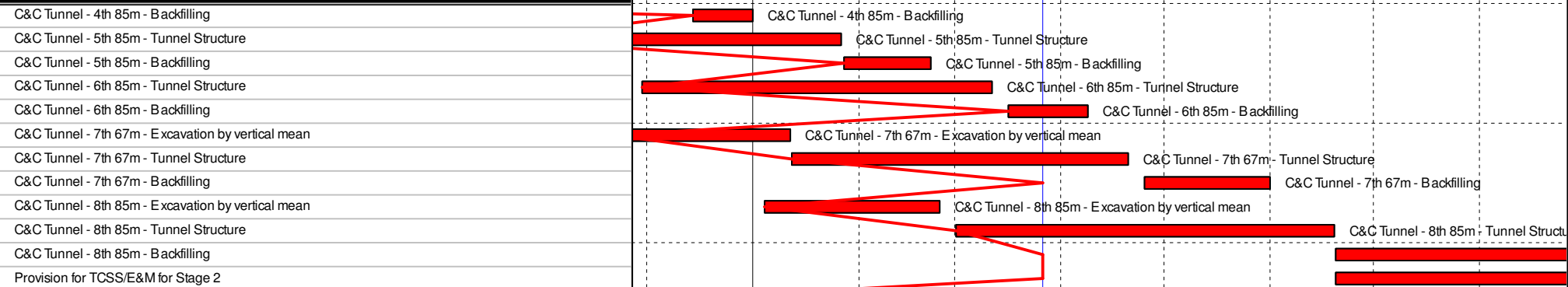
- Review & Comment by JV
- Designer prepare DDA
- Formal Submission of DDA to ICE/ IPs
- Advanced Submission to SO
- IPs/ SO's Advance Comments/ICE Comments
- Comments Received
- Designer to Reply RtC + Update Submission
- Submit Updated DDA to SO/ ICE/ IPs
- ICE Approval & Issue Check Cert
- Submit ICE Check Cert to SO
- IPs Review
- SO's Review

Method Statement Submission

Method Statement of Construction Methodology of C&C Tunnels

- Preparation Method Statement for C&C Tunnels
- Submit Method Statement to SO
- SO Reviews & Comments
- Re-submission
- SO's Review

Construction



South Retrieval Shaft

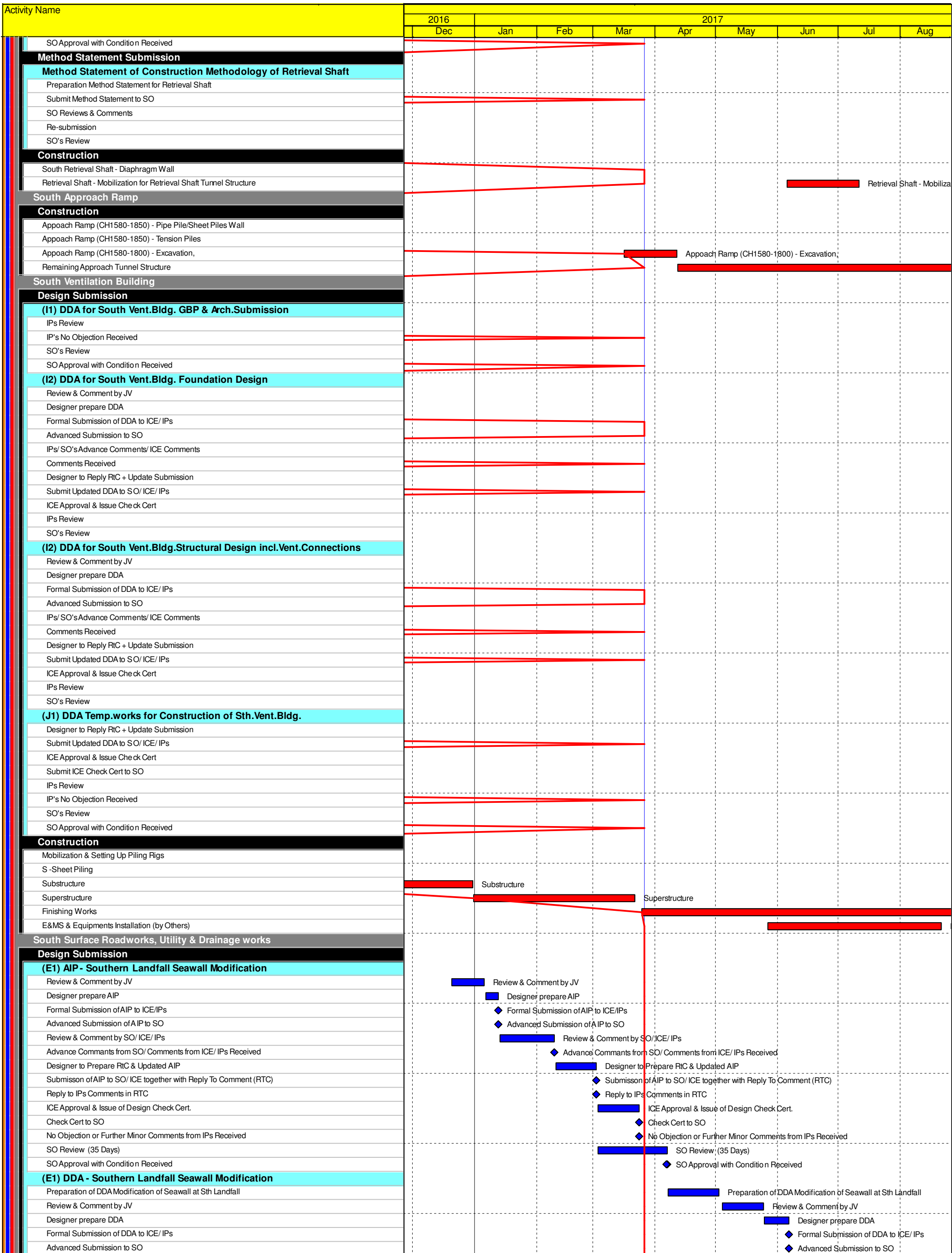
Design Submission

(F4) Gantry Crane Support/Foundations in Southern Landfall

- Designer to Reply RtC + Update Submission
- Submit Updated IFA to SO/ ICE/ IPs
- ICE Approval & Issue Check Cert
- IPs Review
- IP's No Objection Received
- SO's Review



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| Activity Name | 2016 | | 2017 | | | | | | |
|--|------|-----|------|-----|-----|-----|-----|-----|-----|
| | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| IPs/ SO's Advance Comments/ ICE Comments | | | | | | | | | |
| IPs Review | | | | | | | | | |
| IP's No Objection Received | | | | | | | | | |
| SO's Review | | | | | | | | | |
| SO Approval with Condition Received | | | | | | | | | |
| Method Statement Submission | | | | | | | | | |
| Method Statement of Ground Treatment for TBMs Passing under Southern La | | | | | | | | | |
| Preparation Method Statement for Ground Improvement in South Landfall | | | | | | | | | |
| Submit Method Statement to SO | | | | | | | | | |
| SO Reviews & Comments | | | | | | | | | |
| Re-submission | | | | | | | | | |
| SO's Review | | | | | | | | | |
| SO's Approval | | | | | | | | | |
| Construction | | | | | | | | | |
| Temporary Platform for Ground Treatment for TBM passing under Southern Seawall | | | | | | | | | |
| Grouting Treatment for TBM passing under Southern Seawall | | | | | | | | | |
| South Landfall - Underground Sewerage & Drainage | | | | | | | | | |
| Testing & Commissioning/Inspection & Handover | | | | | | | | | |
| Final Inspection & Handover | | | | | | | | | |
| Design Submission | | | | | | | | | |
| (A12) Maintenance Matrix | | | | | | | | | |
| Prepare Re-submission | | | | | | | | | |
| 2nd Submission | | | | | | | | | |
| SO's Condition Approval | | | | | | | | | |
| (A13) Operation & Maintenance Manual | | | | | | | | | |
| Preparation of Operation and Maintenance Manual | | | | | | | | | |
| 1st Submission | | | | | | | | | |
| SO's Comments for 1st Submission | | | | | | | | | |
| Prepare Re-submission | | | | | | | | | |
| (A14) As-built & As-fabricated Drawings | | | | | | | | | |
| Preparation of As-built and As-fabricated Drawings | | | | | | | | | |
| 1st Submission | | | | | | | | | |
| SO's Comments for 1st Submission | | | | | | | | | |
| (A15) Health & Safety File incl. As-built Dwgs & Records, Maintenance Schedules | | | | | | | | | |
| Preparation of Health and Safety File including as-built drawings and records, maintenance schedules, etc. | | | | | | | | | |
| 1st Submission | | | | | | | | | |
| SO's Comments for 1st Submission | | | | | | | | | |

- Planned Bar
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TMCLK - Northern Connection Sub-Sea Tunnel Section

Detailed Works Programme (Rev. F)

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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*

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status * |
|--------------------|-----------------------|---|--|----------------------|---|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| Air Quality | | | | | | | | | |
| 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 | | ✓ |
| 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 | | ✓ |

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|----------------------------------|-----------------------|---|---|----------------------|----------------------------------|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| 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 any earthworks excavation activity on the site. | All site exits / throughout construction period | Contractor | TMEIA Avoid dust | | Y | | ✓ |
| 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 | | ✓ |
| WATER QUALITY | | | | | | | | | |
| <i>Marine Works (Sequence A)</i> | | | | | | | | | |
| 6.1 | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |

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Northern Connection Sub-sea Tunnel Section
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|---------------|-----------------------|---|---|----------------------|---|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| 6.1 | - | 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 |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | Use of cage type silt curtains round allgrab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works. | All areas dredging works | Contractor | TM-EIAO | | Y | | ✓ |
| | 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 | | ✓ |
| 6.1 | - | Trailer suction hopper dredgers shall not allow mud to overflow. | All areas/ throughout construction period | Contractor | Marine Fill Committee Guidelines. DASO permit conditions. | | Y | | ✓ |
| 6.1 | - | 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 | | ✓ |

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Tuen Mun – Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
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|--|-----------------------|--|--|----------------------|----------------------------------|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| 6.1 Figure 6.2b Appendix D6b | Annex A | 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: - 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 | | ✓ |
| 6.1 | - | 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 |
| 6.1 | 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 | | ✓ |
| 6.1 | 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 | | ✓ |
| 6.1 | - | TM-CLKL northern landfall: - Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access; | All areas/ through out marine works | Contractor | TM-EIAO | | Y | | ✓ |

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|-----------------------------|-----------------------|--|---|----------------------|---|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| <i>General Marine Works</i> | | | | | | | | | |
| 6.1 | - | Use of TBM for the construction of the submarine tunnel. | Tunnel works / Construction phase | Contractor | TM-EIAO | | Y | | N/A |
| 6.1 | - | Export dredged spoils from NWWCZ. | All areas as much as possible / dredging activities | Contractor | DASO Permit conditions | | Y | | ✓ |
| 6.1 | - | 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 |
| 6.1 | - | Where sand fill is proposed for filling below +2.5mPD, the fine content in the sand fill will be controlled to 5%. | All areas/ backfilling works | Contractor | TM-EIAO | | Y | | N/A |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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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| | | | | | | D | C | O | |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 |
| 6.1 | - | 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 |
| 6.1 | - | 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 | | ✓ |
| 6.1 | 5.2 | Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the contractor. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.1 | - | The daily maximum production rates shall not exceed those assumed in the water quality assessment. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.1 | - | 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 | | ✓ |

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|-------------------|-----------------------|--|---|----------------------|----------------------------------|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| <i>Land Works</i> | | | | | | | | | |
| 6.1 | - | 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 | | <> |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | Storm drainage shall be directed to storm 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. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | <> |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | Temporary access roads should be surfaced with crushed stone or gravel. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.1 | - | 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 | | ✓ |

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| | | | | | | D | C | O | |
| 6.1 | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 |
| 6.1 | - | The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately. | All areas/ throughout construction period | Contractor | TM-EIAO | | Y | | ✓ |
| 6.1 | - | 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 | | ✓ |

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| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status * |
|---------------|-----------------------|--|---|----------------------|----------------------------------|-----------------------|---|---|----------|
| | | | | | | D | C | O | |
| 6.1 | - | 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 | | ✓ |
| 6.1 | - | 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 | | ✓ |

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

| EIA Reference | EM&A Manual Reference | Environmental Protection Measures | Location/ Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status * |
|---------------------------------|-----------------------|---|---|---|----------------------------------|-----------------------|---|---|---------------------------------|
| | | | | | | D | C | O | |
| 6.1 | - | 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 | ✓ |
| 6.1 | Section 5 | All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice. | All areas/ throughout construction period | Contractor | EM&A Manual | | Y | | ✓ |
| <i>Water Quality Monitoring</i> | | | | | | | | | |
| 6.1 | 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 | ✓ |
| ECOLOGY | | | | | | | | | |
| 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 | N/A. To be implemented by AFCD. |
| 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 | | ✓ |

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Northern Connection Sub-sea Tunnel Section
Environmental Mitigation and Enhancement Measure Implementation Schedule

| 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 | 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 | | ✓ |
| 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 | | N/A |
| 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 | | ✓ |
| LANDSCAPE AND VISUAL | | | | | | | | | |
| 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 |
| 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 |

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

| 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 | 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 | | ✓ |
| 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 |
| WASTE | | | | | | | | | |
| 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 | | ✓ |

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

| 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 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 including waste reduction, reuse and recycling. | Contract Mobilisation | Contractor | TMEIA | | Y | | ✓ |
| 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 | | ✓ |
| 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 | | ✓ |

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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*

| 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 | 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 | | ✓ |
| 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 be considered for segregation and storage activities. | All areas / throughout construction period | Contractor | TMEIA | | Y | | ✓ |
| 12.6 | 8.1 | All falsework will be steel instead of wood. | All areas / throughout construction period | Contractor | TMEIA | | Y | | ✓ |

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Tuen Mun – Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Environmental Mitigation and Enhancement Measure Implementation Schedule*

| 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 | 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: f Suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; f Having a capacity of <450L unless the specifications have been approved by the EPD; and w Chinese according to the instructions prescribed in Schedule 2 of the Regulations. f Clearly labelled and used solely for the storage of chemical wastes; f Enclosed with at least 3 sides; f Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; f Adequate ventilation; f Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and f Incompatible materials are adequately separated. | All areas / throughout construction period | Contractor | TMEIA | | Y | | <> |
| 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 |

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| 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 | 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 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. | All areas / throughout construction period | Contractor | TMEIA | | Y | | <> |
| 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 | | ✓ |
| CULTURAL HERITAGE | | | | | | | | | |
| 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 | | N/A |

*** Remarks:**

- ✓ 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

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

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

Table D2 *Action and Limit Levels for Water Quality*

| 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 | NEL = [STG < 2.4 & ANI < 8.9] and NWL = [STG < 3.9 & ANI < 17.9] | |

Appendix E

Copies of Calibration
Certificates for Air Quality
Monitoring

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 5
 Calibrated by : P.F. Yeung
 Date : 11/02/2017

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 14 Mar 2016
 Slope (m) : 2.10326
 Intercept (b) : -0.06696
 Correlation Coefficient(r) : 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1023
 Ta(K) : 287

| Resistance Plate | | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|----------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 | 18 holes | 11.2 | 3.427 | 1.661 | 55 | 56.32 |
| 2 | 13 holes | 9 | 3.072 | 1.492 | 50 | 51.20 |
| 3 | 10 holes | 6.7 | 2.651 | 1.292 | 43 | 44.03 |
| 4 | 7 holes | 4.3 | 2.123 | 1.041 | 36 | 36.86 |
| 5 | 5 holes | 2.7 | 1.683 | 0.832 | 29 | 29.70 |

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): 32.008 Intercept(b): 3.172 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 15/02/2017

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR10
 Calibrated by : P.F. Yeung
 Date : 11/02/2017

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 14 Mar 2016
 Slope (m) : 2.10326
 Intercept (b) : -0.06696
 Correlation Coefficient(r) : 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1023
 Ta(K) : 287

| Resistance Plate | | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|----------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 | 18 holes | 12.2 | 3.577 | 1.732 | 54 | 55.30 |
| 2 | 13 holes | 9.8 | 3.206 | 1.556 | 48 | 49.15 |
| 3 | 10 holes | 7.2 | 2.748 | 1.338 | 42 | 43.01 |
| 4 | 7 holes | 4.6 | 2.196 | 1.076 | 34 | 34.82 |
| 5 | 5 holes | 2.5 | 1.619 | 0.802 | 25 | 25.60 |

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): 31.500 Intercept(b): 0.598 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 15/02/17

High-Volume TSP Sampler
5-Point Calibration Record

Location : AQMS1
 Calibrated by : P.F. Yeung
 Date : 11/02/2017

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 14 Mar 2016
 Slope (m) : 2.10326
 Intercept (b) : -0.06696
 Correlation Coefficient(r) : 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1023
 Ta(K) : 287

| Resistance Plate | | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|----------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 | 18 holes | 11.6 | 3.488 | 1.690 | 57 | 58.37 |
| 2 | 13 holes | 9.4 | 3.140 | 1.525 | 51 | 52.22 |
| 3 | 10 holes | 6.7 | 2.651 | 1.292 | 44 | 45.06 |
| 4 | 7 holes | 4.5 | 2.172 | 1.065 | 37 | 37.89 |
| 5 | 5 holes | 2.8 | 1.713 | 0.847 | 29 | 29.70 |

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): 33.356 Intercept(b): 1.832 Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 15/02/2017

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 1
 Calibrated by : P.F.Yeung
 Date : 11/02/2017

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 14 Mar 2016
 Slope (m) : 2.10326
 Intercept (b) : -0.06696
 Correlation Coefficient(r) : 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1023
 Ta(K) : 287

| Resistance Plate | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 18 holes | 11.5 | 3.473 | 1.683 | 56 | 57.34 |
| 2 13 holes | 9.0 | 3.072 | 1.492 | 50 | 51.20 |
| 3 10 holes | 7.0 | 2.709 | 1.320 | 44 | 45.06 |
| 4 7 holes | 4.6 | 2.196 | 1.076 | 35 | 35.84 |
| 5 5 holes | 2.8 | 1.713 | 0.847 | 28 | 28.67 |

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): 34.810 Intercept(b): -1.058 correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 15/02/2017

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 6
 Calibrated by : P.F. Yeung
 Date : 11/02/2017

Sampler

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

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 14 Mar 2016
 Slope (m) : 2.10326
 Intercept (b) : -0.06696
 Correlation Coefficient(r) : 0.99989

Standard Condition

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

Calibration Condition

Pa (hpa) : 1023
 Ta(K) : 287

| Resistance Plate | dH [green liquid] (inch water) | Z | X=Qstd (cubic meter/min) | IC (chart) | Y (corrected) |
|------------------|-----------------------------------|-------|-----------------------------|---------------|------------------|
| 1 18 holes | 12.0 | 3.547 | 1.718 | 54 | 55.30 |
| 2 13 holes | 9.4 | 3.140 | 1.525 | 49 | 50.18 |
| 3 10 holes | 6.8 | 2.670 | 1.301 | 43 | 44.03 |
| 4 7 holes | 4.5 | 2.172 | 1.065 | 36 | 36.86 |
| 5 5 holes | 2.6 | 1.651 | 0.817 | 30 | 30.72 |

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): 27.603 Intercept(b): 7.943 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 15/02/2017

ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 1 November 2016

Brand of Test Meter: Davis

Model: Vantage Pro 2 (s/n: AS160104014)

Location : ASR5

Procedures :

1. Wind Still Test: The wind speed sensor was hold by hand until it keep still
2. Wind Speed Test: The wind meter was on-site calibrated against the Anemometer
3. Wind Direction Test : The wind meter was on-site calibrated against the marine compass at four directions

Results:

Wind Still Test

| Wind Speed (m/s) |
|------------------|
| 0.00 |

Wind Speed Test

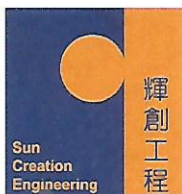
| Davis (m/s) | Anemomete (m/s) |
|-------------|-----------------|
| 1.2 | 1.3 |
| 2.5 | 2.8 |
| 3.3 | 3.6 |

Wind Direction Test

| Davis (o) | Marine Compass (o) |
|-----------|--------------------|
| 271 | 270 |
| 1 | 0 |
| 91 | 90 |
| 179 | 180 |

Calibrated by: Fai
Yeung Ping Fai
(Technical Officer)

Checked by : Fat
Ho Kam Fat
(Senior Technical Officer)



Certificate of Calibration 校正證書

Certificate No. : C165934
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC16-2438) Date of Receipt / 收件日期 : 26 October 2016

Description / 儀器名稱 : Anemometer
Manufacturer / 製造商 : Lutron
Model No. / 型號 : AM-4201
Serial No. / 編號 : AF.27513
Supplied By / 委託者 : Envirotech Services Co.
Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (55 ± 20)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範


Calibration check

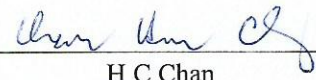
DATE OF TEST / 測試日期 : 27 October 2016

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- Testo Industrial Services GmbH, Germany

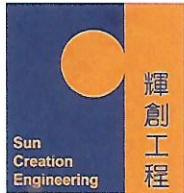
Tested By : 
測試 : _____
T L Shek
Assistant Engineer

Certified By : 
核證 : _____
H C Chan
Engineer

Date of Issue : 28 October 2016
簽發日期

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C165934

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
2. The results presented are the mean of 10 measurements at each calibration point.
3. Test equipment :

| <u>Equipment ID</u> | <u>Description</u> | <u>Certificate No.</u> |
|---------------------|-------------------------------------|------------------------|
| CL386 | Multi-function Measuring Instrument | S12109 |

4. Test procedure : MA130N.
5. Results :

Air Velocity

| Applied Value (m/s) | UUT Reading (m/s) | Measured Correction | | |
|---------------------|-------------------|---------------------|----------------------------|-----------------|
| | | Value (m/s) | Measurement Uncertainty | |
| | | | Expanded Uncertainty (m/s) | Coverage Factor |
| 2.0 | 1.8 | +0.2 | 0.2 | 2.0 |
| 4.0 | 3.8 | +0.2 | 0.2 | 2.0 |
| 6.0 | 5.8 | +0.2 | 0.3 | 2.0 |
| 8.1 | 8.0 | +0.1 | 0.3 | 2.0 |
| 10.0 | 10.0 | 0.0 | 0.4 | 2.0 |

Remarks : - The Measured Corrections are defined as :
Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 – 校正及檢測實驗室

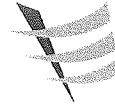
c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW007/008 Manufacturer : HANNA
 Model No. : HI9125 Serial No. : H0040409
 Date of Calibration : 27/02/2017 Calibration Due Date : 26/03/2017

Liquid Junction Error

003/5.2/002/09 (20°C)

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/002/08 (25°C)
 Temperature of Solution : 25.0 / 20.0 $\Delta\text{pH}_{1/2} =$ 0.080 / 0.080
 pH value of diluted buffer : 6.97 / 6.97 $\text{pH (S)} =$ 6.865 / 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} =$ 0.105 / 0.089 (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} =$ 0.02 / 0.01

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s =$ 6.90 / 6.90
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j =$ 0.01 / 0.01

Noise

Noise, $\Delta\text{pH}_n =$ difference between max and min reading : 0.01 / 0.01

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/018 / ET/0521/019
 Temperature record from the reference thermometer (T_R): 25.0 / 20.0 °C
 Temperature record from the ATC (T_{ATC}): 24.9 / 19.9 °C
 Temperature Difference, $|T_R - T_{ATC}|$: 0.1 / 0.1 °C
 Correction : +0.1 / +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/EW007/008 Manufacturer : HANNA
 Model No. : HI9125 Serial No. : H0040409
 Date of Calibration : 30/03/2017 Calibration Due Date : 29/04/2017

Liquid Junction Error

003/5.2/002/09 (20°C)

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/002/10 (25°C)
 Temperature of Solution : 25.0 / 20.0 $\Delta pH_{1/2} =$ 0.080 / 0.080
 pH value of diluted buffer : 6.98 / 6.99 pH (S) = 6.865 / 6.881
 $\Delta pH = pH(S) - pH$ of diluted buffer = 0.115 / 0.109 (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta pH - \Delta pH_{1/2} =$ 0.04 / 0.03

Shift on Stirring

pH of buffer solution (with stirring), $pH_s =$ 6.91 / 6.92
 Shift on stirring, $\Delta pH_s = pH_s - pH(S) - \Delta pH_j =$ 0.01 / 0.01

Noise

Noise, $\Delta pH_n =$ difference between max and min reading : 0.01 / 0.01

Verification of ATC


Ref. No. of reference thermometer used: ET/0521/018 / ET/0521/019
 Temperature record from the reference thermometer (T_R): 25.0 / 20.0 °C
 Temperature record from the ATC (T_{ATC}): 24.9 / 19.9 °C
 Temperature Difference, $|T_R - T_{ATC}|$ 0.1 / 0.1 °C
 Correction +0.1 / +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 | $\leq 0.5^\circ C$ |

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: 



Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/016 Manufacturer : HACH
Model No. : 2100Q Serial No. : 16030C048473
Date of Calibration : 26/01/17 Due Date : 25/04/2017

| Theoretical Value of Turbidity Standard (NTU) | Measured Value (NTU) | Difference % * |
|---|----------------------|----------------|
| 20 | 20.8 | 4.0 |
| 100 | 99.1 | -0.9 |
| 800 | 779 | -2.6 |

(*) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

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 : Bianco

Checked by : [Signature]



Internal Calibration Report of Dissolved Oxygen Meter

| | |
|---|--|
| Equipment Ref. No. : <u>ET/EW/008/008</u> | Manufacturer : <u>YSI</u> |
| Model No. : <u>Pro 2030</u> | Serial No. : <u>14M101489</u> |
| Date of Calibration : <u>19/01/2017</u> | Calibration Due Date : <u>18/04/2017</u> |

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/017

Ref. No. of Water Bath : ---

| | | Temperature (°C) | | |
|-------------------------------|----------|------------------|------------|------|
| Reference Thermometer reading | Measured | 20.3 | Corrected | 19.8 |
| DO Meter reading | Measured | 19.8 | Difference | 0.0 |

Standardization of sodium thiosulphate (Na₂S₂O₃) solution

| Reagent No. of Na ₂ S ₂ O ₃ titrant | CPE/012/4.5/001/15 | Reagent No. of 0.025N K ₂ Cr ₂ O ₇ | CPE/012/4.4/002/16 |
|---|--------------------|---|--------------------|
| | | Trial 1 | Trial 2 |
| Initial Vol. of Na ₂ S ₂ O ₃ (ml) | | 0.00 | 10.35 |
| Final Vol. of Na ₂ S ₂ O ₃ (ml) | | 10.35 | 20.70 |
| Vol. of Na ₂ S ₂ O ₃ used (ml) | | 10.35 | 10.35 |
| Normality of Na ₂ S ₂ O ₃ solution (N) | | 0.02415 | 0.02415 |
| Average Normality (N) of Na ₂ S ₂ O ₃ solution (N) | | 0.02415 | |
| Acceptance criteria, Deviation | | Less than ± 0.001N | |

Calculation: Normality of Na₂S₂O₃, N = 0.25 / ml Na₂S₂O₃ used

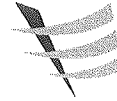
Linearity Checking

*Determination of dissolved oxygen content by Winkler Titration **

| Purging Time (min) | 2 | | 5 | | 10 | |
|---|---------------------|-------|---------------------|------|---------------------|-------|
| | 1 | 2 | 1 | 2 | 1 | 2 |
| Initial Vol. of Na ₂ S ₂ O ₃ (ml) | 0.00 | 11.40 | 23.00 | 0.00 | 6.10 | 9.90 |
| Final Vol. of Na ₂ S ₂ O ₃ (ml) | 11.40 | 23.00 | 29.60 | 6.10 | 9.90 | 13.80 |
| Vol. (V) of Na ₂ S ₂ O ₃ used (ml) | 11.40 | 11.60 | 6.60 | 6.10 | 3.80 | 3.90 |
| Dissolved Oxygen (DO), mg/L | 7.39 | 7.52 | 4.28 | 3.95 | 2.46 | 2.53 |
| Acceptance criteria, Deviation | Less than + 0.3mg/L | | Less than + 0.3mg/L | | Less than + 0.3mg/L | |

Calculation: DO (mg/L) = V x N x 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 | 7.39 | 7.48 | 7.44 | 7.39 | 7.52 | 7.46 | 0.27 |
| 5 | 4.19 | 4.14 | 4.17 | 4.28 | 3.95 | 4.12 | 1.21 |
| 10 | 2.39 | 2.42 | 2.41 | 2.46 | 2.53 | 2.50 | 3.67 |
| Linear regression coefficient | | | | | | 0.9993 | |



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/012/4.7/003/33 | Reagent No. of NaCl (30ppt) | CPE/012/4.8/003/33 |
|-----------------------------|--------------------|-----------------------------|--------------------|

*Determination of dissolved oxygen content by Winkler Titration ***

| Salinity (ppt) | 10 | | 30 | |
|---|---------------------|-------|---------------------|-------|
| Trial | 1 | 2 | 1 | 2 |
| Initial Vol. of Na ₂ S ₂ O ₃ (ml) | 0.00 | 10.90 | 21.80 | 31.20 |
| Final Vol. of Na ₂ S ₂ O ₃ (ml) | 10.90 | 21.80 | 31.20 | 40.60 |
| Vol. (V) of Na ₂ S ₂ O ₃ used (ml) | 10.90 | 10.90 | 9.40 | 9.40 |
| Dissolved Oxygen (DO), mg/L | 7.07 | 7.07 | 6.09 | 6.09 |
| Acceptance criteria, Deviation | Less than + 0.3mg/L | | Less than + 0.3mg/L | |

Calculation: DO (mg/L) = V x N x 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 | 7.12 | 7.07 | 7.1 | 7.07 | 7.07 | 7.07 | 0.42 |
| 30 | 6.14 | 6.17 | 6.16 | 6.09 | 6.09 | 6.09 | 1.14 |

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

: Bauw

Approved by :

[Signature]



Performance Check of Salinity Meter

Equipment Ref. No. : ET/EW/008/008 Manufacturer : YSI
Model No. : Pro 2030 Serial No. : 14M101489
Date of Calibration : 19/01/2017 Due Date : 18/04/2017

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

S/001/9

| Salinity Standard Value (ppt) | Measured Salinity (ppt) | Difference * (%) |
|----------------------------------|----------------------------|------------------|
| 30.0 | 30.3 | 1.00 |

(*) Difference (%) = (Measured Salinity – Salinity Standard value) / Salinity Standard value x 100

Acceptance Criteria

Difference : -10 % to 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 : Brian

Approved by : [Signature]

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 2017**

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

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|--|--|--|--|--|--|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | |

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Air Quality Impact Monitoring Schedule - April 2017**

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

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--|--|--|--|--|--|--|
| | | | | | | 1-Apr |
| | | | | | | |
| 2-Apr | 3-Apr | 4-Apr | 5-Apr | 6-Apr | 7-Apr | 8-Apr |
| | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | |
| 9-Apr | 10-Apr | 11-Apr | 12-Apr | 13-Apr | 14-Apr | 15-Apr |
| 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM |
| 16-Apr | 17-Apr | 18-Apr | 19-Apr | 20-Apr | 21-Apr | 22-Apr |
| | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | |
| 23-Apr | 24-Apr | 25-Apr | 26-Apr | 27-Apr | 28-Apr | 29-Apr |
| | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | |
| 30-Apr | | | | | | |
| 1-hour TSP - 3 times 24-hour TSP - 1 time Impact AQM | | | | | | |

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 (March 2017)**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|--|-----------|--|--------|--|
| | | | 01-Mar | 02-Mar | 03-Mar | 04-Mar |
| | | | | WQM Mid-Flood 9:22 (07:37 - 11:07) Mid-Ebb 15:31 (13:46 - 17:16) | | WQM Mid-Flood 10:33 (08:48 - 12:18) Mid-Ebb 17:16 (15:31 - 19:01) |
| 05-Mar | 06-Mar | 07-Mar | 08-Mar | 09-Mar | 10-Mar | 11-Mar |
| | | WQM Mid-Ebb 8:29 (07:10 - 09:45) Mid-Flood 13:36 (11:51 - 15:21) | | WQM Mid-Ebb 11:08 (09:23 - 12:53) Mid-Flood 16:24 (14:39 - 18:09) | | WQM Mid-Ebb 12:31 (10:46 - 14:16) Mid-Flood 18:11 (16:26 - 19:56) |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | | WQM Mid-Flood 8:13 (06:28 - 09:58) Mid-Ebb 14:04 (12:19 - 15:49) | | WQM Mid-Flood 9:00 (07:15 - 10:45) Mid-Ebb 15:07 (13:22 - 16:52) | | WQM Mid-Flood 9:52 (08:07 - 11:37) Mid-Ebb 16:22 (14:37 - 18:07) |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | | WQM Mid-Flood 6:44 (04:59 - 08:29) Mid-Ebb 19:42 (17:57 - 21:27) | | WQM Mid-Ebb 10:12 (08:45 - 11:40) Mid-Flood 14:50 (13:05 - 16:35) | | WQM Mid-Ebb 11:37 (09:52 - 13:22) Mid-Flood 16:57 (15:12 - 18:42) |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | | WQM Mid-Ebb 13:15 (11:30 - 15:00) Mid-Flood 19:18 (17:33 - 21:03) | | WQM Mid-Flood 8:14 (06:29 - 09:59) Mid-Ebb 14:31 (12:46 - 16:16) | | |

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section
Impact Marine Water Quality Monitoring (WQM) Schedule (April 2017)**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|--|-----------|--|--------|--|
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | 01-Apr |
| | | | | | | WQM Mid-Flood 9:21 (07:36 - 11:06) Mid-Ebb 16:03 (14:18 - 17:48) |
| 02-Apr | 03-Apr | 04-Apr | 05-Apr | 06-Apr | 07-Apr | 08-Apr |
| | | WQM Mid-Flood 11:46 (10:01 - 13:31) Mid-Ebb 19:23 (17:38 - 21:08) | | WQM Mid-Ebb 10:09 (08:24 - 11:54) Mid-Flood 15:15 (13:30 - 17:00) | | WQM Mid-Ebb 11:38 (09:53 - 13:23) Mid-Flood 17:20 (15:35 - 19:05) |
| 09-Apr | 10-Apr | 11-Apr | 12-Apr | 13-Apr | 14-Apr | 15-Apr |
| | | WQM Mid-Ebb 13:11 (11:26 - 14:56) Mid-Flood 19:29 (17:44 - 21:14) | | WQM Mid-Flood 7:53 (06:08 - 09:38) Mid-Ebb 14:11 (12:26 - 15:56) | | WQM Mid-Flood 8:44 (06:59 - 10:29) Mid-Ebb 15:17 (13:32 - 17:02) |
| 16-Apr | 17-Apr | 18-Apr | 19-Apr | 20-Apr | 21-Apr | 22-Apr |
| | | WQM Mid-Flood 10:02 (08:17 - 11:47) Mid-Ebb 17:27 (15:42 - 19:12) | | WQM Mid-Flood 7:12 (05:27 - 08:57) Mid-Ebb 19:50 (18:05 - 21:35) | | WQM Mid-Ebb 10:30 (08:45 - 12:15) Mid-Flood 15:38 (13:53 - 17:23) |
| 23-Apr | 24-Apr | 25-Apr | 26-Apr | 27-Apr | 28-Apr | 29-Apr |
| | | WQM Mid-Ebb 12:16 (10:31 - 14:01) Mid-Flood 18:22 (16:37 - 20:07) | | WQM Mid-Ebb 13:34 (11:49 - 15:19) Mid-Flood 20:04 (18:19 - 21:49) | | WQM Mid-Flood 8:18 (06:33 - 10:03) Mid-Ebb 15:04 (13:19 - 16:49) |
| 30-Apr | | | | | | |
| | | | | | | |

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Impact Dolphin Monitoring Survey Monitoring Schedule - March 2017**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|--------------------------------------|-----------|--------------------------------------|--------|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | | Impact Dolphin Monitoring | | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | | Impact Dolphin Monitoring | | | | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | | | | Impact Dolphin Monitoring | | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | | | | | | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | | Impact Dolphin Monitoring | | | | |

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - April 2017**

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

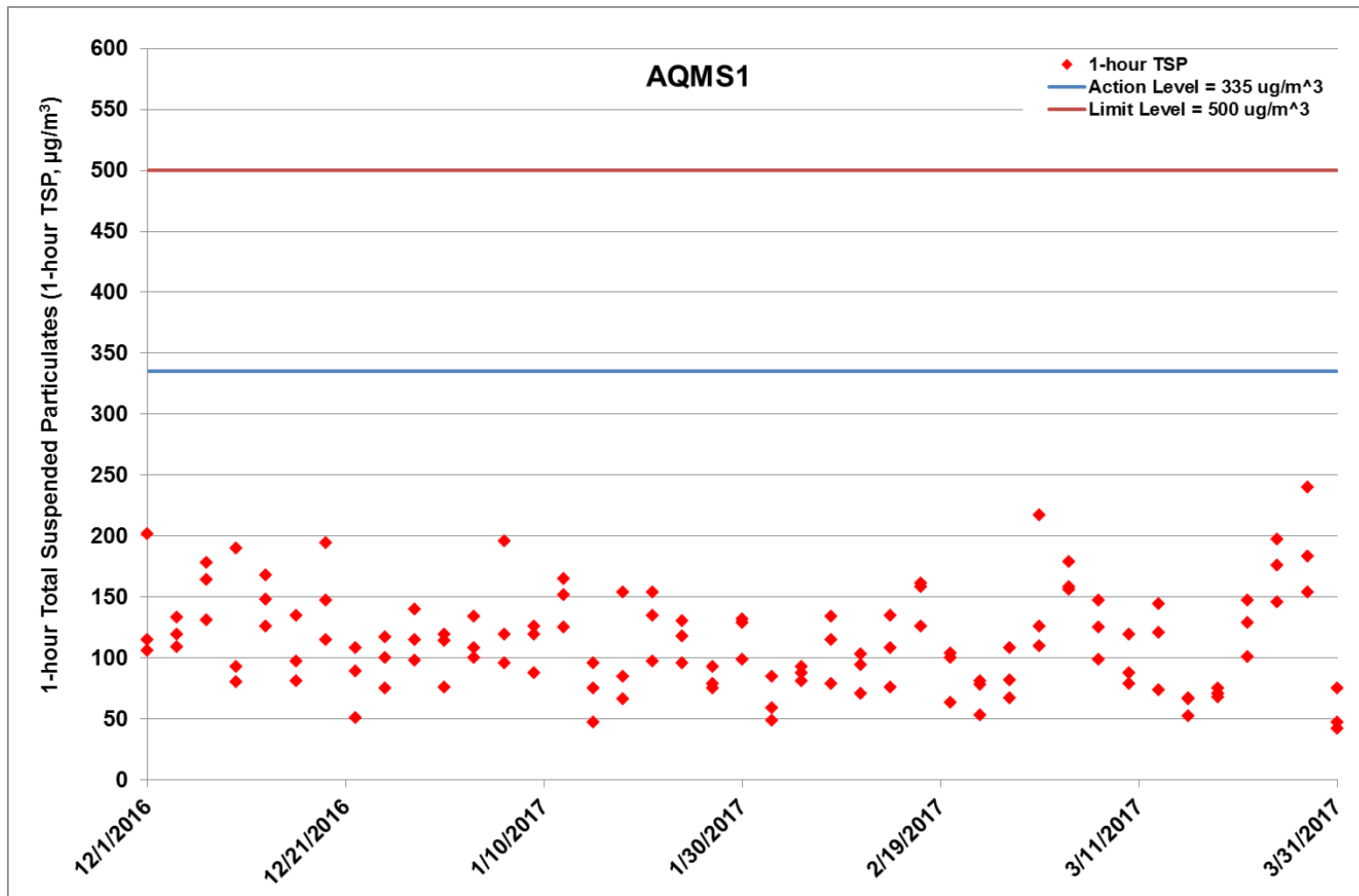


Figure G.1 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



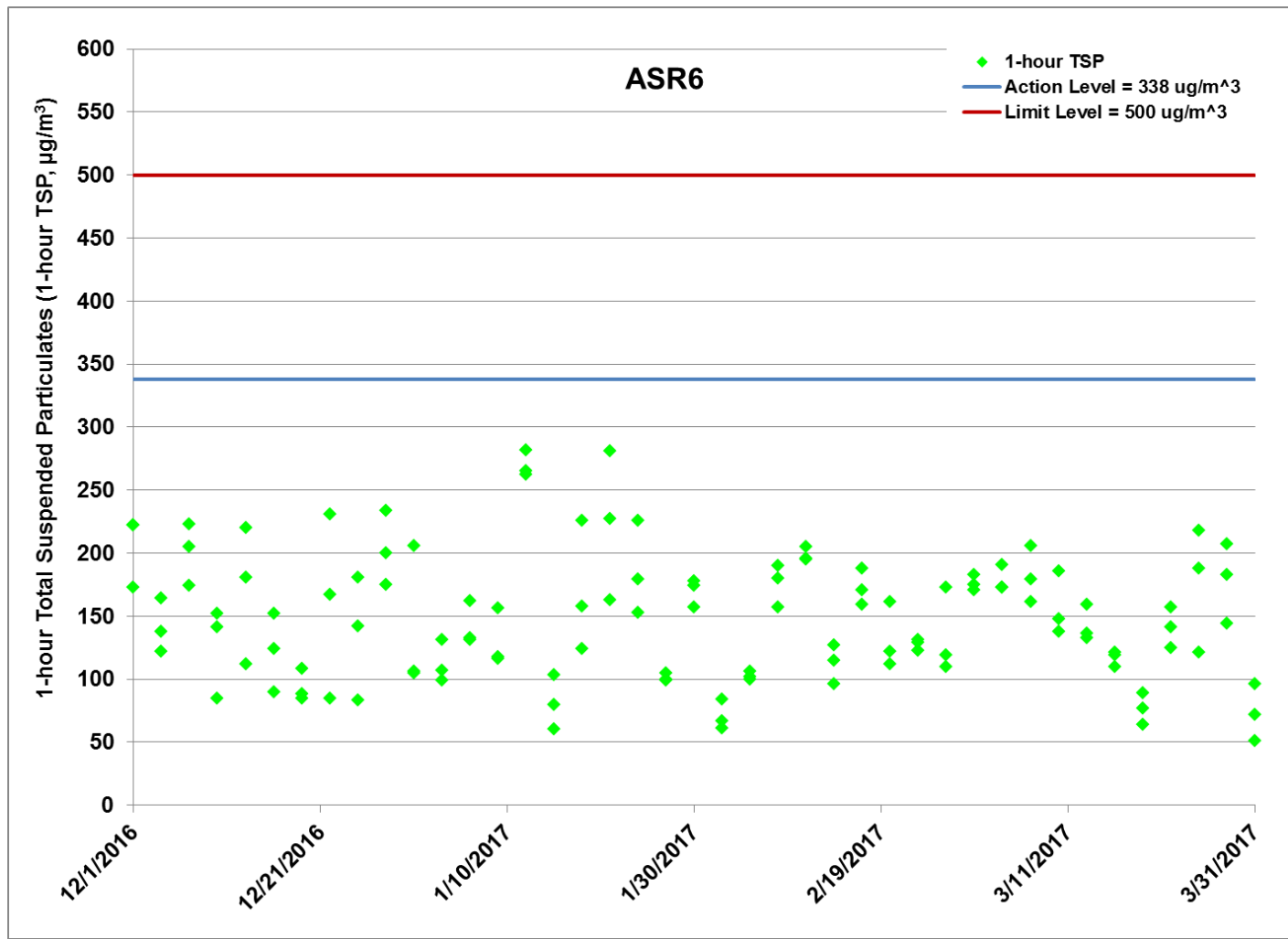


Figure G.2 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR6 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



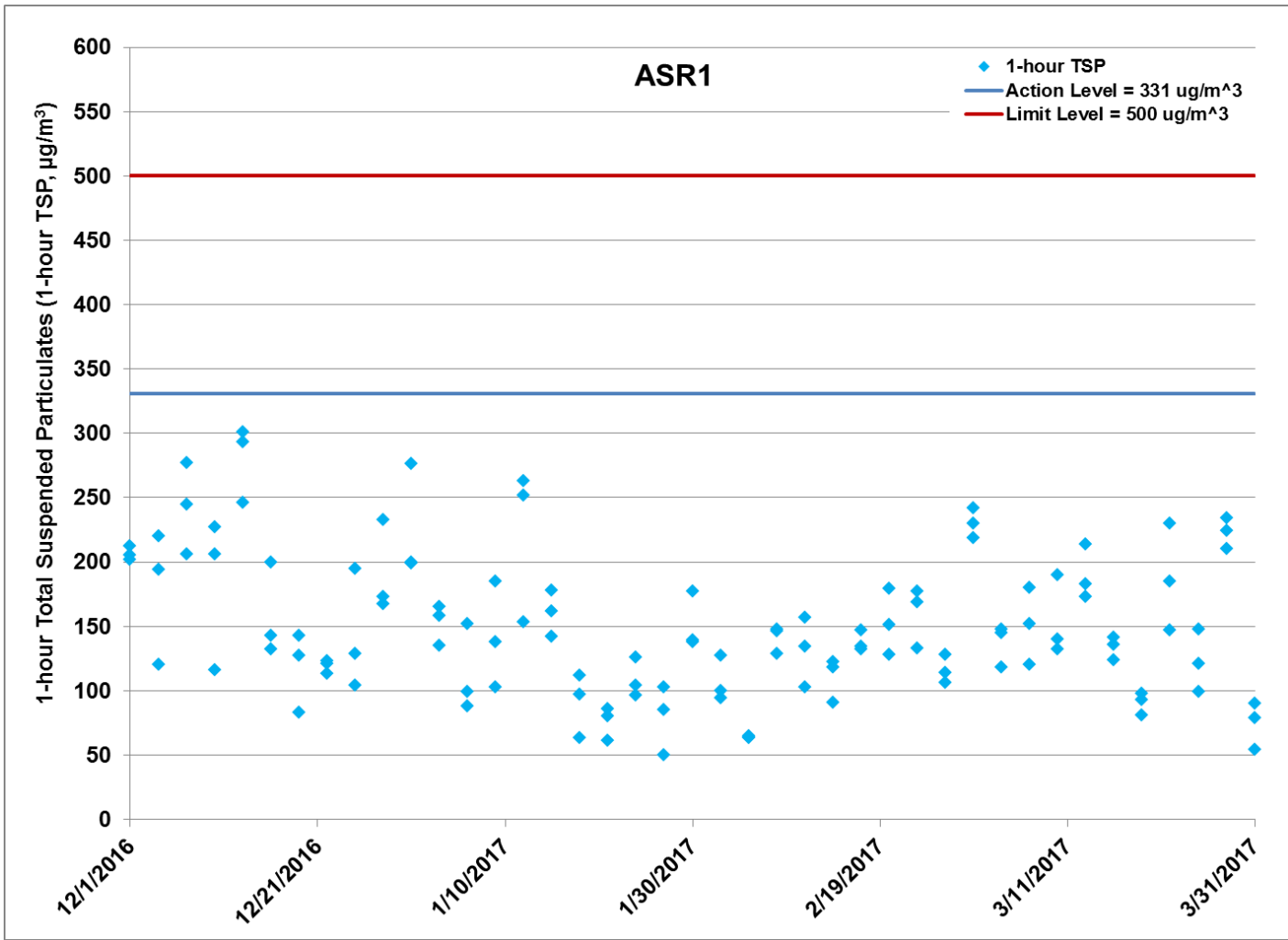


Figure G.3 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



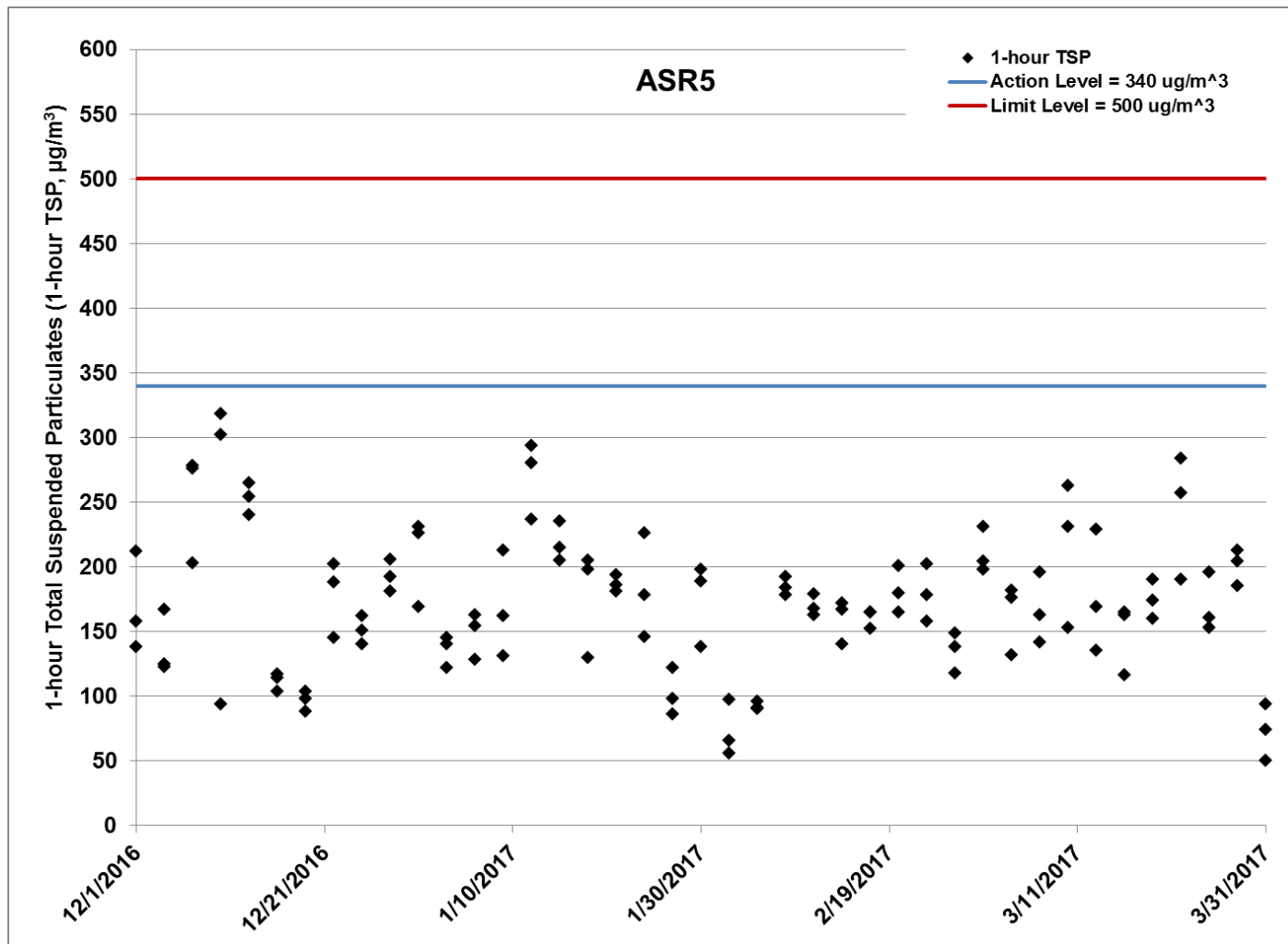


Figure G.4 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



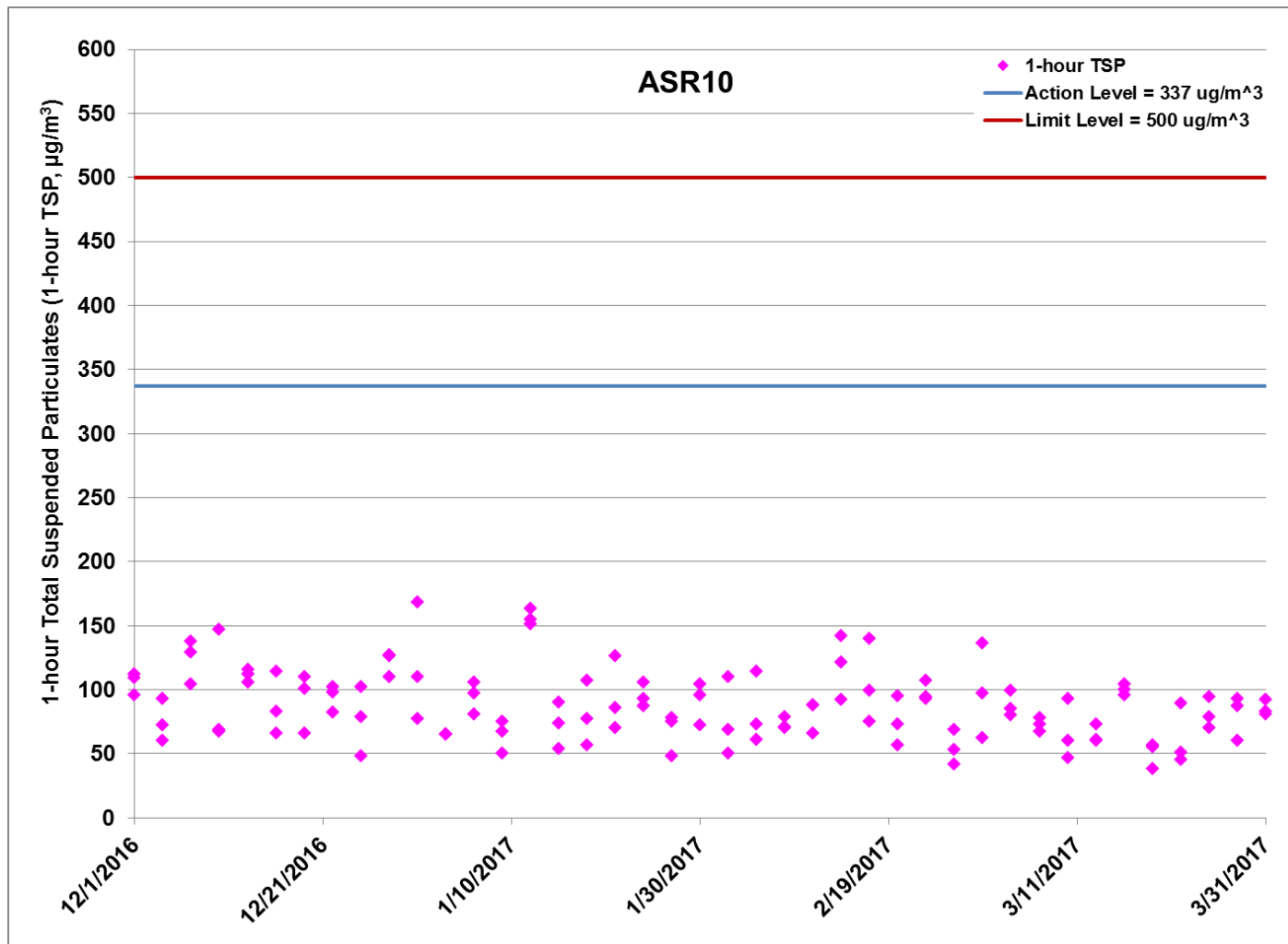


Figure G.5 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR10 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx

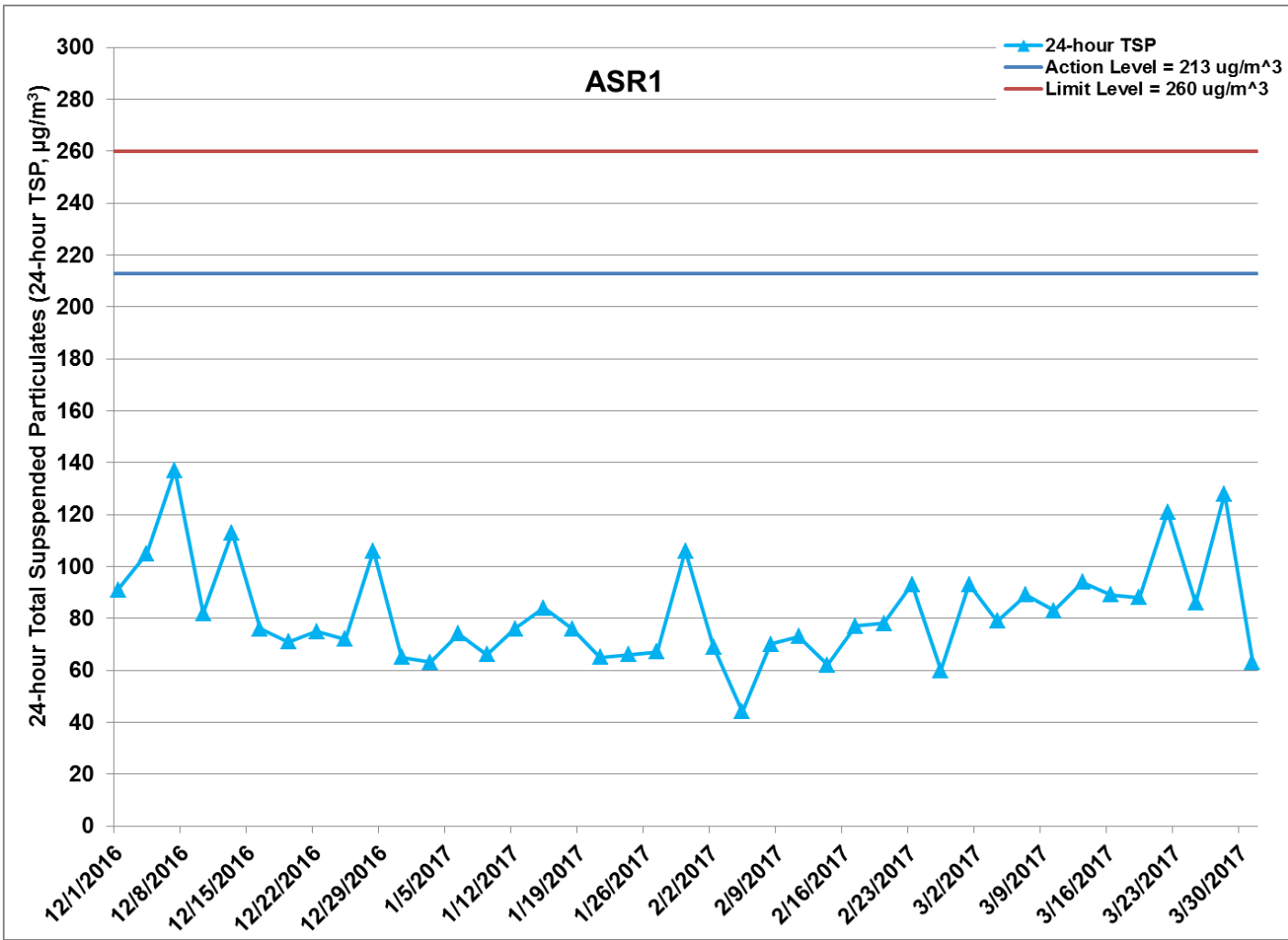


Figure G.6 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



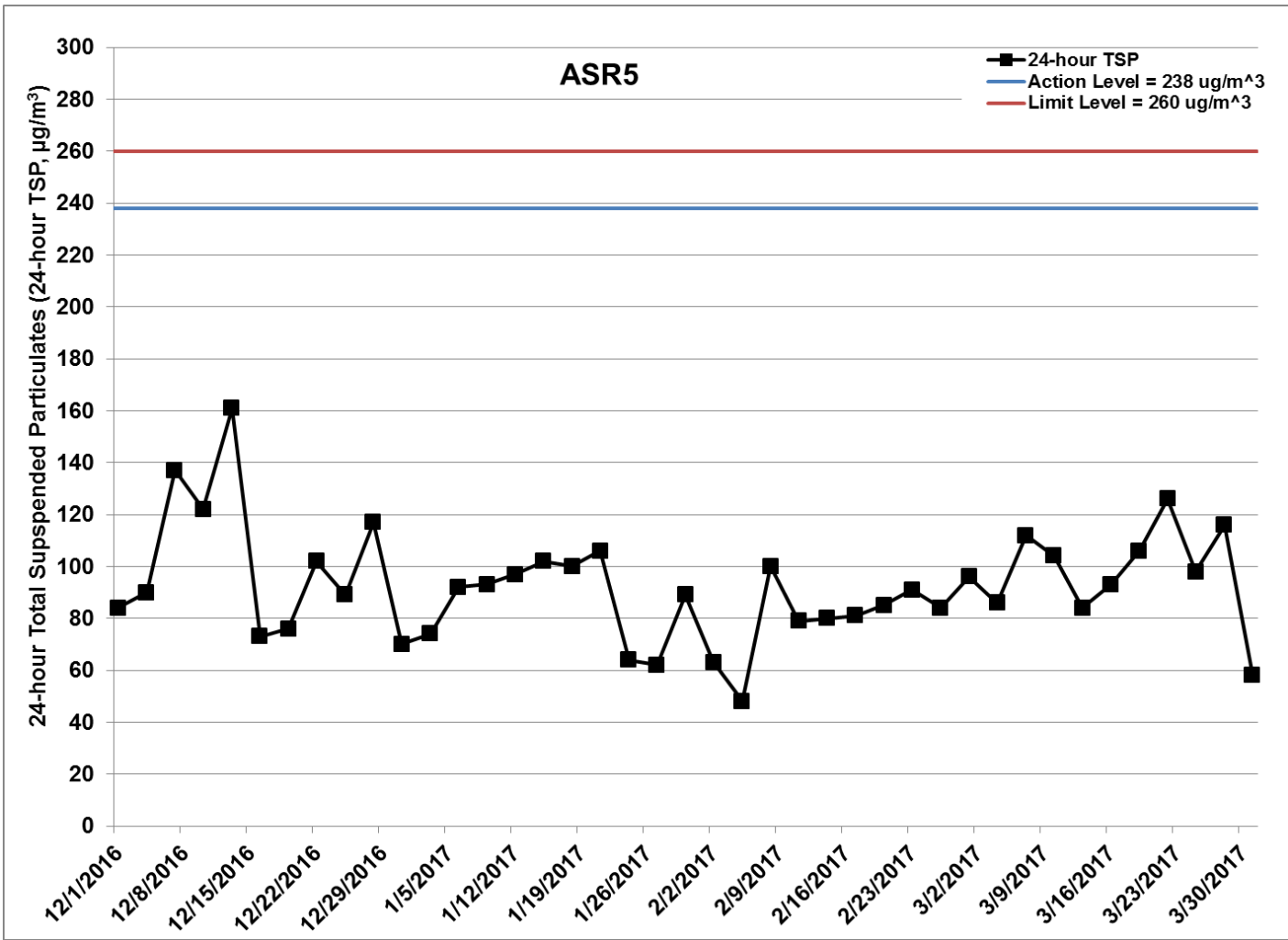


Figure G.7 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



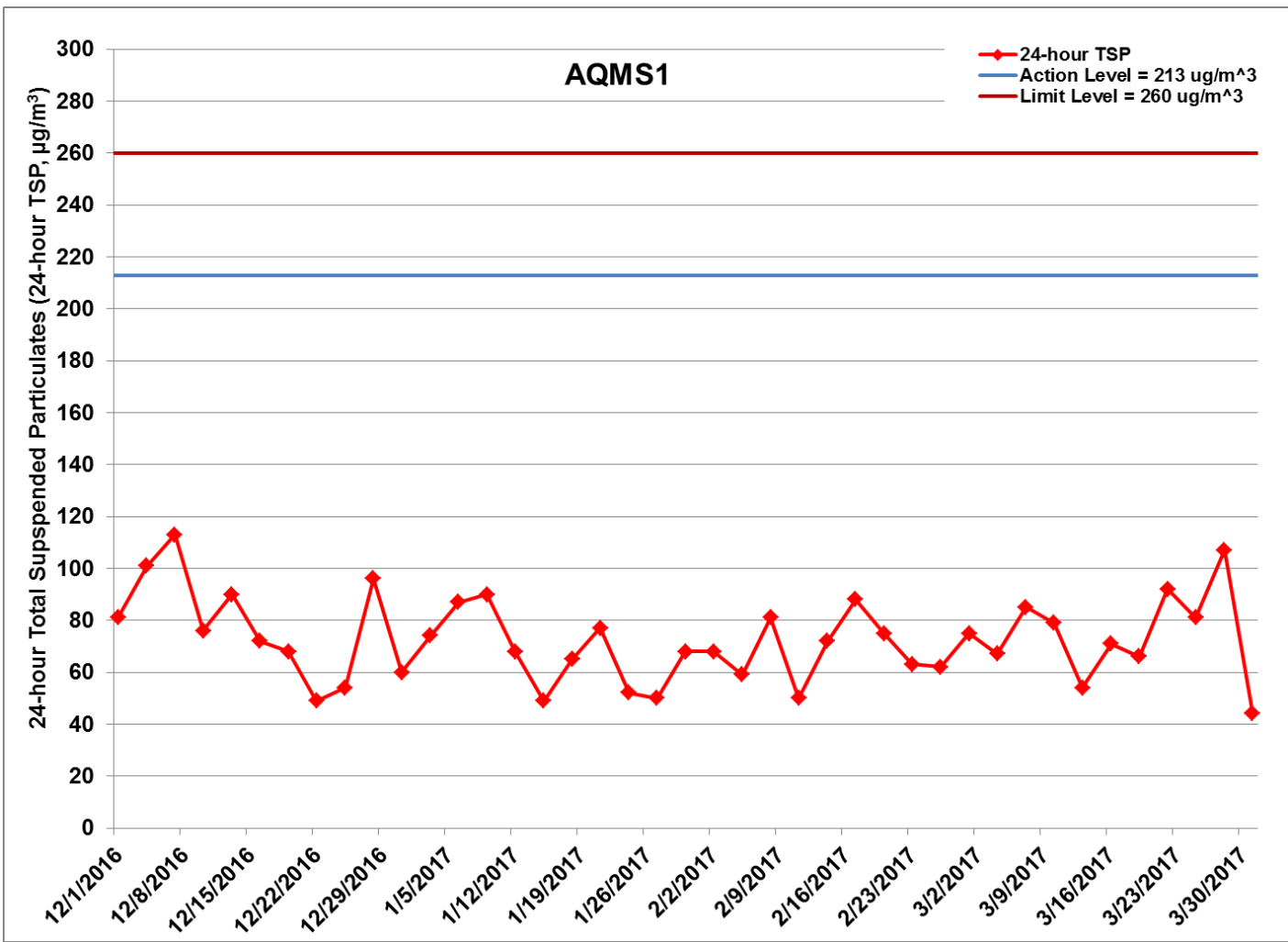


Figure G.8 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



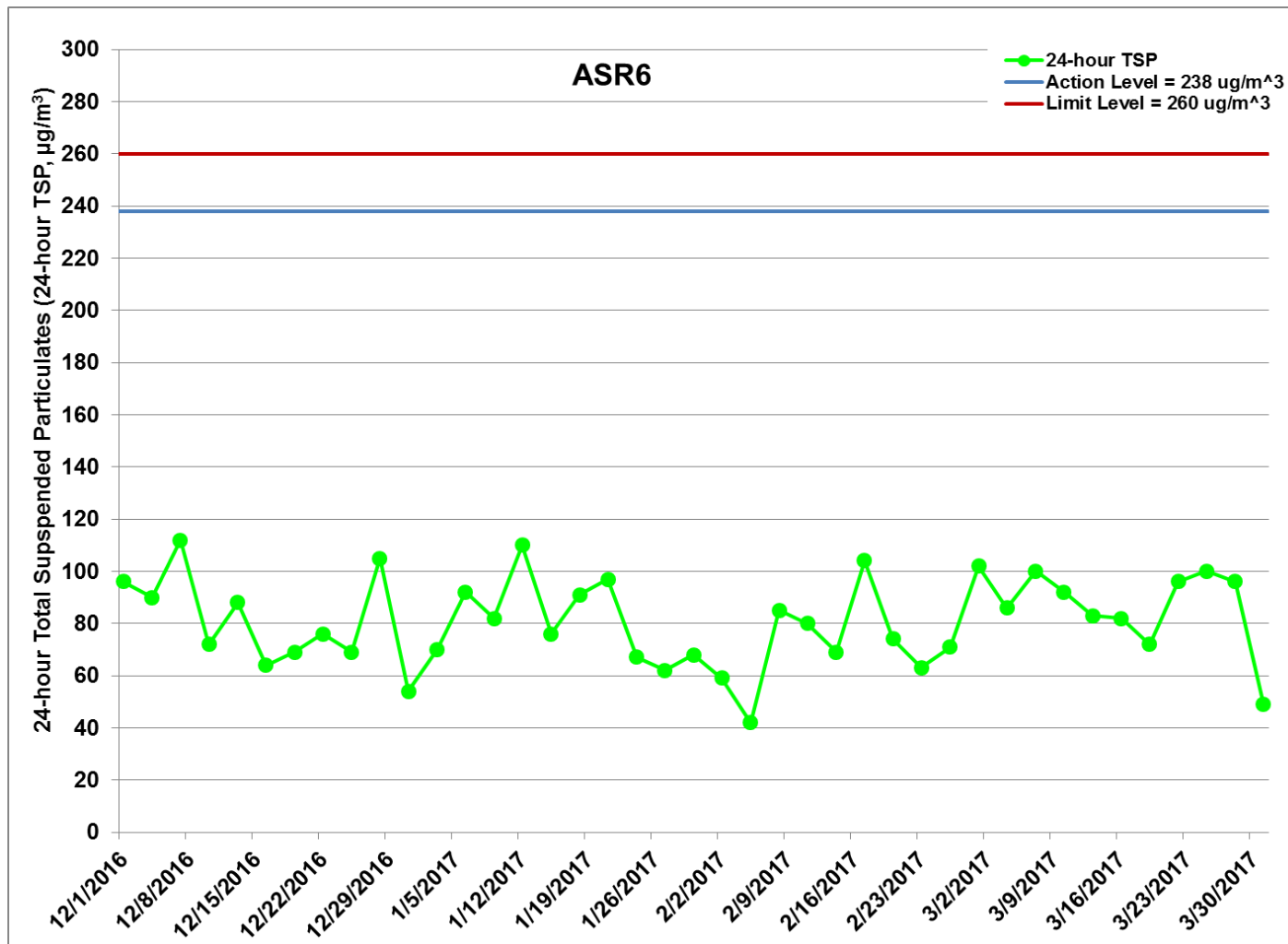


Figure G.9 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR6 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



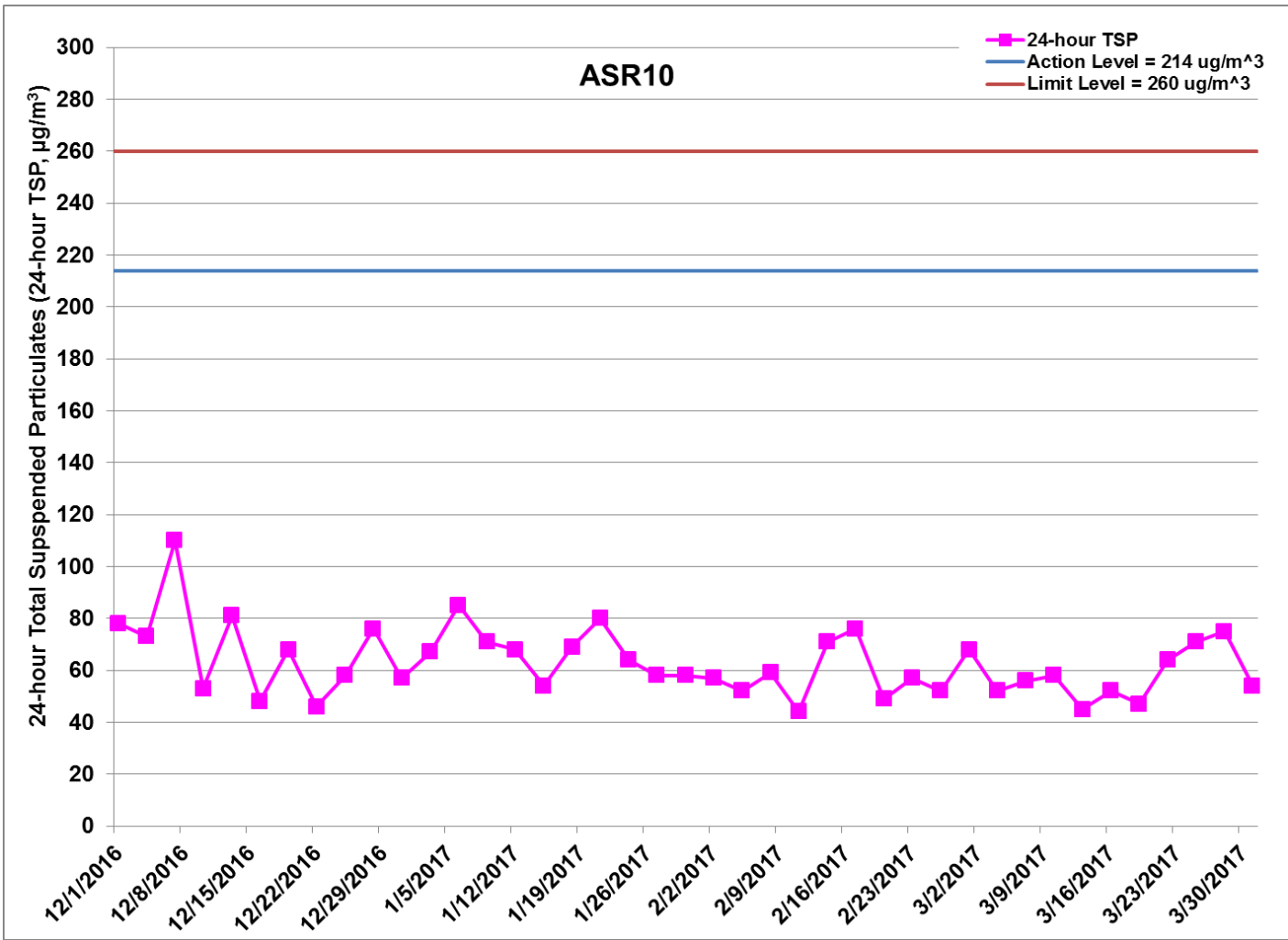


Figure G.10 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR10 between 1 December 2016 and 31 March 2017 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Jet Grouting, CSM Ground Treatment and Diaphragm Wall Construction (1/12/2016 - 31/3/2017) and Box Culvert Extension (1/12/2016 - 31/3/2017). Ref: 0212330_Impact AQM graphs_March 2017_REV a.xlsx



| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-01 | AQMS1 | Sunny | 13:55 | 1-hour TSP | 110 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | AQMS1 | Sunny | 14:57 | 1-hour TSP | 217 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | AQMS1 | Sunny | 15:59 | 1-hour TSP | 126 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR1 | Sunny | 13:44 | 1-hour TSP | 219 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR1 | Sunny | 14:46 | 1-hour TSP | 230 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR1 | Sunny | 15:48 | 1-hour TSP | 242 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR10 | Sunny | 13:13 | 1-hour TSP | 62 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR10 | Sunny | 14:15 | 1-hour TSP | 97 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR10 | Sunny | 15:17 | 1-hour TSP | 136 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR5 | Sunny | 13:33 | 1-hour TSP | 198 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR5 | Sunny | 14:35 | 1-hour TSP | 204 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR5 | Sunny | 15:37 | 1-hour TSP | 231 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR6 | Sunny | 13:23 | 1-hour TSP | 175 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR6 | Sunny | 14:25 | 1-hour TSP | 183 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR6 | Sunny | 15:27 | 1-hour TSP | 171 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | AQMS1 | Sunny | 09:16 | 1-hour TSP | 158 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | AQMS1 | Sunny | 10:18 | 1-hour TSP | 179 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | AQMS1 | Sunny | 11:20 | 1-hour TSP | 156 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR1 | Sunny | 09:05 | 1-hour TSP | 145 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR1 | Sunny | 10:07 | 1-hour TSP | 148 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR1 | Sunny | 11:09 | 1-hour TSP | 118 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR10 | Sunny | 08:33 | 1-hour TSP | 85 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR10 | Sunny | 09:35 | 1-hour TSP | 80 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR10 | Sunny | 10:37 | 1-hour TSP | 99 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR5 | Sunny | 08:54 | 1-hour TSP | 182 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR5 | Sunny | 09:56 | 1-hour TSP | 132 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR5 | Sunny | 10:58 | 1-hour TSP | 176 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR6 | Sunny | 08:43 | 1-hour TSP | 173 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR6 | Sunny | 09:45 | 1-hour TSP | 191 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR6 | Sunny | 10:47 | 1-hour TSP | 173 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-07 | AQMS1 | Cloudy | 13:51 | 1-hour TSP | 147 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | AQMS1 | Cloudy | 14:53 | 1-hour TSP | 125 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | AQMS1 | Cloudy | 15:55 | 1-hour TSP | 99 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR1 | Cloudy | 13:40 | 1-hour TSP | 120 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR1 | Cloudy | 14:42 | 1-hour TSP | 152 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR1 | Cloudy | 15:44 | 1-hour TSP | 180 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR10 | Cloudy | 13:08 | 1-hour TSP | 73 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR10 | Cloudy | 14:10 | 1-hour TSP | 78 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR10 | Cloudy | 15:12 | 1-hour TSP | 67 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR5 | Cloudy | 13:29 | 1-hour TSP | 196 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR5 | Cloudy | 14:31 | 1-hour TSP | 142 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR5 | Cloudy | 15:33 | 1-hour TSP | 163 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR6 | Cloudy | 13:19 | 1-hour TSP | 206 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR6 | Cloudy | 14:21 | 1-hour TSP | 161 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR6 | Cloudy | 15:23 | 1-hour TSP | 179 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | AQMS1 | Cloudy | 13:24 | 1-hour TSP | 79 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | AQMS1 | Cloudy | 14:26 | 1-hour TSP | 88 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | AQMS1 | Cloudy | 15:28 | 1-hour TSP | 119 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR1 | Cloudy | 13:14 | 1-hour TSP | 190 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR1 | Cloudy | 14:16 | 1-hour TSP | 140 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR1 | Cloudy | 15:18 | 1-hour TSP | 132 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR10 | Cloudy | 12:41 | 1-hour TSP | 47 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR10 | Cloudy | 13:43 | 1-hour TSP | 60 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR10 | Cloudy | 14:45 | 1-hour TSP | 93 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR5 | Cloudy | 13:03 | 1-hour TSP | 231 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR5 | Cloudy | 14:05 | 1-hour TSP | 263 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR5 | Cloudy | 15:07 | 1-hour TSP | 153 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR6 | Cloudy | 12:32 | 1-hour TSP | 138 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR6 | Cloudy | 13:54 | 1-hour TSP | 148 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR6 | Cloudy | 14:56 | 1-hour TSP | 186 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-13 | AQMS1 | Sunny | 13:35 | 1-hour TSP | 74 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | AQMS1 | Sunny | 14:37 | 1-hour TSP | 121 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | AQMS1 | Sunny | 15:39 | 1-hour TSP | 144 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR1 | Sunny | 13:25 | 1-hour TSP | 214 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR1 | Sunny | 14:27 | 1-hour TSP | 173 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR1 | Sunny | 15:29 | 1-hour TSP | 183 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR10 | Sunny | 12:52 | 1-hour TSP | 73 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR10 | Sunny | 13:54 | 1-hour TSP | 60 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR10 | Sunny | 14:56 | 1-hour TSP | 61 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR5 | Sunny | 13:13 | 1-hour TSP | 229 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR5 | Sunny | 14:15 | 1-hour TSP | 169 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR5 | Sunny | 15:17 | 1-hour TSP | 135 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR6 | Sunny | 13:03 | 1-hour TSP | 159 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR6 | Sunny | 14:05 | 1-hour TSP | 133 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR6 | Sunny | 15:07 | 1-hour TSP | 136 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | AQMS1 | Cloudy | 13:18 | 1-hour TSP | 52 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | AQMS1 | Cloudy | 14:20 | 1-hour TSP | 66 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | AQMS1 | Cloudy | 15:22 | 1-hour TSP | 67 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR1 | Cloudy | 13:49 | 1-hour TSP | 136 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR1 | Cloudy | 14:51 | 1-hour TSP | 124 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR1 | Cloudy | 15:53 | 1-hour TSP | 141 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR10 | Cloudy | 14:00 | 1-hour TSP | 96 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR10 | Cloudy | 15:02 | 1-hour TSP | 104 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR10 | Cloudy | 16:04 | 1-hour TSP | 100 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR5 | Cloudy | 13:39 | 1-hour TSP | 165 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR5 | Cloudy | 14:41 | 1-hour TSP | 116 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR5 | Cloudy | 15:43 | 1-hour TSP | 163 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR6 | Cloudy | 13:29 | 1-hour TSP | 110 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR6 | Cloudy | 14:31 | 1-hour TSP | 119 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR6 | Cloudy | 15:33 | 1-hour TSP | 121 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-19 | AQMS1 | Rainy | 09:28 | 1-hour TSP | 75 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | AQMS1 | Rainy | 10:30 | 1-hour TSP | 68 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | AQMS1 | Rainy | 11:32 | 1-hour TSP | 71 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR1 | Rainy | 09:17 | 1-hour TSP | 98 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR1 | Rainy | 10:19 | 1-hour TSP | 81 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR1 | Rainy | 11:21 | 1-hour TSP | 93 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR10 | Rainy | 08:45 | 1-hour TSP | 57 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR10 | Rainy | 09:47 | 1-hour TSP | 38 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR10 | Rainy | 10:49 | 1-hour TSP | 55 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR5 | Rainy | 09:06 | 1-hour TSP | 174 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR5 | Rainy | 10:08 | 1-hour TSP | 160 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR5 | Rainy | 11:10 | 1-hour TSP | 190 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR6 | Rainy | 08:55 | 1-hour TSP | 89 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR6 | Rainy | 09:57 | 1-hour TSP | 77 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR6 | Rainy | 10:59 | 1-hour TSP | 64 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | AQMS1 | Cloudy | 13:35 | 1-hour TSP | 147 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | AQMS1 | Cloudy | 14:37 | 1-hour TSP | 129 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | AQMS1 | Cloudy | 15:39 | 1-hour TSP | 101 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR1 | Cloudy | 13:24 | 1-hour TSP | 147 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR1 | Cloudy | 14:26 | 1-hour TSP | 185 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR1 | Cloudy | 15:28 | 1-hour TSP | 230 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR10 | Cloudy | 12:52 | 1-hour TSP | 51 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR10 | Cloudy | 13:54 | 1-hour TSP | 45 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR10 | Cloudy | 14:56 | 1-hour TSP | 89 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR5 | Cloudy | 13:13 | 1-hour TSP | 284 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR5 | Cloudy | 14:15 | 1-hour TSP | 257 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR5 | Cloudy | 15:17 | 1-hour TSP | 190 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR6 | Cloudy | 13:03 | 1-hour TSP | 125 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR6 | Cloudy | 14:05 | 1-hour TSP | 141 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR6 | Cloudy | 15:07 | 1-hour TSP | 157 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-25 | AQMS1 | Sunny | 08:44 | 1-hour TSP | 146 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | AQMS1 | Sunny | 09:46 | 1-hour TSP | 176 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | AQMS1 | Sunny | 10:48 | 1-hour TSP | 197 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR1 | Sunny | 08:33 | 1-hour TSP | 99 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR1 | Sunny | 09:35 | 1-hour TSP | 121 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR1 | Sunny | 10:37 | 1-hour TSP | 148 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR10 | Sunny | 08:00 | 1-hour TSP | 79 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR10 | Sunny | 09:02 | 1-hour TSP | 70 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR10 | Sunny | 10:04 | 1-hour TSP | 94 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR5 | Sunny | 08:22 | 1-hour TSP | 161 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR5 | Sunny | 09:24 | 1-hour TSP | 196 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR5 | Sunny | 10:26 | 1-hour TSP | 153 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR6 | Sunny | 08:10 | 1-hour TSP | 121 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR6 | Sunny | 09:12 | 1-hour TSP | 218 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR6 | Sunny | 10:14 | 1-hour TSP | 188 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | AQMS1 | Sunny | 14:01 | 1-hour TSP | 154 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | AQMS1 | Sunny | 15:03 | 1-hour TSP | 240 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | AQMS1 | Sunny | 16:05 | 1-hour TSP | 183 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR1 | Sunny | 13:50 | 1-hour TSP | 224 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR1 | Sunny | 14:52 | 1-hour TSP | 210 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR1 | Sunny | 15:54 | 1-hour TSP | 234 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR10 | Sunny | 13:18 | 1-hour TSP | 87 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR10 | Sunny | 14:20 | 1-hour TSP | 93 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR10 | Sunny | 15:22 | 1-hour TSP | 60 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR5 | Sunny | 13:40 | 1-hour TSP | 204 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR5 | Sunny | 14:42 | 1-hour TSP | 185 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR5 | Sunny | 15:44 | 1-hour TSP | 213 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR6 | Sunny | 13:29 | 1-hour TSP | 207 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR6 | Sunny | 14:31 | 1-hour TSP | 183 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR6 | Sunny | 15:33 | 1-hour TSP | 144 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|-------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-31 | AQMS1 | Rainy | 09:56 | 1-hour TSP | 75 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | AQMS1 | Rainy | 10:58 | 1-hour TSP | 47 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | AQMS1 | Rainy | 12:00 | 1-hour TSP | 42 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR1 | Rainy | 09:45 | 1-hour TSP | 90 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR1 | Rainy | 10:47 | 1-hour TSP | 79 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR1 | Rainy | 11:49 | 1-hour TSP | 54 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR10 | Rainy | 09:13 | 1-hour TSP | 92 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR10 | Rainy | 10:15 | 1-hour TSP | 83 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR10 | Rainy | 11:17 | 1-hour TSP | 81 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR5 | Rainy | 09:35 | 1-hour TSP | 74 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR5 | Rainy | 10:37 | 1-hour TSP | 94 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR5 | Rainy | 11:39 | 1-hour TSP | 50 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR6 | Rainy | 09:24 | 1-hour TSP | 72 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR6 | Rainy | 10:26 | 1-hour TSP | 96 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR6 | Rainy | 11:28 | 1-hour TSP | 51 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | AQMS1 | Sunny | 17:01 | 24-hour TSP | 75 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR1 | Sunny | 16:50 | 24-hour TSP | 93 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR10 | Sunny | 16:19 | 24-hour TSP | 68 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR5 | Sunny | 16:39 | 24-hour TSP | 96 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-01 | ASR6 | Sunny | 16:29 | 24-hour TSP | 102 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | AQMS1 | Sunny | 12:22 | 24-hour TSP | 67 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR1 | Sunny | 12:11 | 24-hour TSP | 79 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR10 | Sunny | 11:39 | 24-hour TSP | 52 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR5 | Sunny | 12:00 | 24-hour TSP | 86 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | ASR6 | Sunny | 11:49 | 24-hour TSP | 86 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | AQMS1 | Cloudy | 16:57 | 24-hour TSP | 85 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR1 | Cloudy | 16:46 | 24-hour TSP | 89 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR10 | Cloudy | 16:14 | 24-hour TSP | 56 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR5 | Cloudy | 16:35 | 24-hour TSP | 112 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | ASR6 | Cloudy | 16:25 | 24-hour TSP | 100 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|---------|------------|------------|---------|---------|------------|-------------|---------|-------|
| TMCLKL | HY/2012/08 | 2017-03-10 | AQMS1 | Cloudy | 16:30 | 24-hour TSP | 79 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR1 | Cloudy | 16:20 | 24-hour TSP | 83 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR10 | Cloudy | 15:47 | 24-hour TSP | 58 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR5 | Cloudy | 16:09 | 24-hour TSP | 104 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-10 | ASR6 | Cloudy | 15:58 | 24-hour TSP | 92 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | AQMS1 | Sunny | 16:41 | 24-hour TSP | 54 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR1 | Sunny | 16:31 | 24-hour TSP | 94 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR10 | Sunny | 15:58 | 24-hour TSP | 45 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR5 | Sunny | 16:19 | 24-hour TSP | 84 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-13 | ASR6 | Sunny | 16:09 | 24-hour TSP | 83 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | AQMS1 | Cloudy | 17:06 | 24-hour TSP | 71 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR1 | Cloudy | 16:55 | 24-hour TSP | 89 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR10 | Cloudy | 16:24 | 24-hour TSP | 52 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR5 | Cloudy | 16:45 | 24-hour TSP | 93 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | ASR6 | Cloudy | 16:35 | 24-hour TSP | 82 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | AQMS1 | Rainy | 12:34 | 24-hour TSP | 66 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR1 | Rainy | 12:23 | 24-hour TSP | 88 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR10 | Rainy | 11:51 | 24-hour TSP | 47 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR5 | Rainy | 12:12 | 24-hour TSP | 106 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-19 | ASR6 | Rainy | 12:01 | 24-hour TSP | 72 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | AQMS1 | Cloudy | 16:41 | 24-hour TSP | 92 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR1 | Cloudy | 16:30 | 24-hour TSP | 121 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR10 | Cloudy | 15:58 | 24-hour TSP | 64 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR5 | Cloudy | 16:19 | 24-hour TSP | 126 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-22 | ASR6 | Cloudy | 16:09 | 24-hour TSP | 96 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | AQMS1 | Sunny | 11:50 | 24-hour TSP | 81 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR1 | Sunny | 11:39 | 24-hour TSP | 86 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR10 | Sunny | 11:06 | 24-hour TSP | 71 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR5 | Sunny | 11:28 | 24-hour TSP | 98 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | ASR6 | Sunny | 11:16 | 24-hour TSP | 100 | ug/m3 |

| Project | Works | Date | Station | Weather | Start time | Parameters | Results | units |
|----------------|--------------|-------------|----------------|----------------|-------------------|-------------------|----------------|--------------|
| TMCLKL | HY/2012/08 | 2017-03-28 | AQMS1 | Sunny | 17:07 | 24-hour TSP | 107 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR1 | Sunny | 16:56 | 24-hour TSP | 128 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR10 | Sunny | 16:24 | 24-hour TSP | 75 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR5 | Sunny | 16:46 | 24-hour TSP | 116 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | ASR6 | Sunny | 16:35 | 24-hour TSP | 96 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | AQMS1 | Rainy | 13:02 | 24-hour TSP | 44 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR1 | Rainy | 12:51 | 24-hour TSP | 63 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR10 | Rainy | 12:19 | 24-hour TSP | 54 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR5 | Rainy | 12:41 | 24-hour TSP | 58 | ug/m3 |
| TMCLKL | HY/2012/08 | 2017-03-31 | ASR6 | Rainy | 12:30 | 24-hour TSP | 49 | ug/m3 |

Appendix H

Meteorological Data

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 1/3/2017 | 0:00 | 0.9 | 95 |
| 1/3/2017 | 1:00 | 1.8 | 352 |
| 1/3/2017 | 2:00 | 1.8 | 301 |
| 1/3/2017 | 3:00 | 1.8 | 284 |
| 1/3/2017 | 4:00 | 1.8 | 290 |
| 1/3/2017 | 5:00 | 1.8 | 271 |
| 1/3/2017 | 6:00 | 2.7 | 288 |
| 1/3/2017 | 7:00 | 2.7 | 311 |
| 1/3/2017 | 8:00 | 1.3 | 303 |
| 1/3/2017 | 9:00 | 0.9 | 321 |
| 1/3/2017 | 10:00 | 1.3 | 315 |
| 1/3/2017 | 11:00 | 1.3 | 326 |
| 1/3/2017 | 12:00 | 0.9 | 349 |
| 1/3/2017 | 13:00 | 0.4 | 319 |
| 1/3/2017 | 14:00 | 0.4 | 62 |
| 1/3/2017 | 15:00 | 0.4 | 131 |
| 1/3/2017 | 16:00 | 0.4 | 129 |
| 1/3/2017 | 17:00 | 0.4 | 310 |
| 1/3/2017 | 18:00 | 0.4 | 304 |
| 1/3/2017 | 19:00 | 0.9 | 325 |
| 1/3/2017 | 20:00 | 0.4 | 313 |
| 1/3/2017 | 21:00 | 1.3 | 314 |
| 1/3/2017 | 22:00 | 4.5 | 358 |
| 1/3/2017 | 23:00 | 4.5 | 1 |
| 2/3/2017 | 0:00 | 4.9 | 356 |
| 2/3/2017 | 1:00 | 5.4 | 12 |
| 2/3/2017 | 2:00 | 4.9 | 49 |
| 2/3/2017 | 3:00 | 3.6 | 53 |
| 2/3/2017 | 4:00 | 2.7 | 40 |
| 2/3/2017 | 5:00 | 2.7 | 42 |
| 2/3/2017 | 6:00 | 2.2 | 48 |
| 2/3/2017 | 7:00 | 1.8 | 51 |
| 2/3/2017 | 8:00 | 1.8 | 40 |
| 2/3/2017 | 9:00 | 0.9 | 226 |
| 2/3/2017 | 10:00 | 0.4 | 120 |
| 2/3/2017 | 11:00 | 0.4 | 15 |
| 2/3/2017 | 12:00 | 0.4 | 63 |
| 2/3/2017 | 13:00 | 1.3 | 71 |
| 2/3/2017 | 14:00 | 1.3 | 93 |
| 2/3/2017 | 15:00 | 1.3 | 67 |
| 2/3/2017 | 16:00 | 1.3 | 115 |
| 2/3/2017 | 17:00 | 1.3 | 104 |
| 2/3/2017 | 18:00 | 1.8 | 103 |
| 2/3/2017 | 19:00 | 1.8 | 82 |
| 2/3/2017 | 20:00 | 2.2 | 103 |
| 2/3/2017 | 21:00 | 1.8 | 100 |
| 2/3/2017 | 22:00 | 2.7 | 84 |
| 2/3/2017 | 23:00 | 3.1 | 96 |
| 4/3/2017 | 0:00 | 2.7 | 87 |
| 4/3/2017 | 1:00 | 2.2 | 100 |
| 4/3/2017 | 2:00 | 1.8 | 91 |
| 4/3/2017 | 3:00 | 2.2 | 106 |
| 4/3/2017 | 4:00 | 3.6 | 82 |
| 4/3/2017 | 5:00 | 3.1 | 86 |
| 4/3/2017 | 6:00 | 3.1 | 100 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 4/3/2017 | 7:00 | 3.1 | 89 |
| 4/3/2017 | 8:00 | 2.7 | 84 |
| 4/3/2017 | 9:00 | 2.7 | 88 |
| 4/3/2017 | 10:00 | 3.1 | 103 |
| 4/3/2017 | 11:00 | 2.7 | 95 |
| 4/3/2017 | 12:00 | 3.1 | 97 |
| 4/3/2017 | 13:00 | 3.1 | 119 |
| 4/3/2017 | 14:00 | 2.7 | 84 |
| 4/3/2017 | 15:00 | 2.7 | 103 |
| 4/3/2017 | 16:00 | 2.7 | 108 |
| 4/3/2017 | 17:00 | 2.2 | 93 |
| 4/3/2017 | 18:00 | 2.2 | 94 |
| 4/3/2017 | 19:00 | 1.8 | 99 |
| 4/3/2017 | 20:00 | 1.3 | 81 |
| 4/3/2017 | 21:00 | 1.3 | 99 |
| 4/3/2017 | 22:00 | 0.9 | 74 |
| 4/3/2017 | 23:00 | 2.2 | 103 |
| 5/3/2017 | 0:00 | 1.8 | 89 |
| 5/3/2017 | 1:00 | 2.2 | 94 |
| 5/3/2017 | 2:00 | 1.3 | 114 |
| 5/3/2017 | 3:00 | 0.9 | 93 |
| 5/3/2017 | 4:00 | 1.3 | 79 |
| 5/3/2017 | 5:00 | 1.3 | 92 |
| 5/3/2017 | 6:00 | 1.3 | 104 |
| 5/3/2017 | 7:00 | 0.9 | 172 |
| 5/3/2017 | 8:00 | 0.9 | 128 |
| 5/3/2017 | 9:00 | 0.9 | 134 |
| 5/3/2017 | 10:00 | 0.9 | 131 |
| 5/3/2017 | 11:00 | 0.9 | 129 |
| 5/3/2017 | 12:00 | 0.4 | 65 |
| 5/3/2017 | 13:00 | 0 | - |
| 5/3/2017 | 14:00 | 0 | - |
| 5/3/2017 | 15:00 | 0.9 | 77 |
| 5/3/2017 | 16:00 | 0 | - |
| 5/3/2017 | 17:00 | 0 | - |
| 5/3/2017 | 18:00 | 0 | - |
| 5/3/2017 | 19:00 | 0 | - |
| 5/3/2017 | 20:00 | 0 | - |
| 5/3/2017 | 21:00 | 0 | - |
| 5/3/2017 | 22:00 | 0 | - |
| 5/3/2017 | 23:00 | 0 | - |
| 7/3/2017 | 0:00 | 2.2 | 73 |
| 7/3/2017 | 1:00 | 3.6 | 96 |
| 7/3/2017 | 2:00 | 2.2 | 122 |
| 7/3/2017 | 3:00 | 1.3 | 105 |
| 7/3/2017 | 4:00 | 1.8 | 171 |
| 7/3/2017 | 5:00 | 1.8 | 144 |
| 7/3/2017 | 6:00 | 1.3 | 129 |
| 7/3/2017 | 7:00 | 1.8 | 141 |
| 7/3/2017 | 8:00 | 1.8 | 106 |
| 7/3/2017 | 9:00 | 1.3 | 118 |
| 7/3/2017 | 10:00 | 2.2 | 121 |
| 7/3/2017 | 11:00 | 2.7 | 106 |
| 7/3/2017 | 12:00 | 1.3 | 111 |
| 7/3/2017 | 13:00 | 1.3 | 47 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 7/3/2017 | 14:00 | 1.3 | 50 |
| 7/3/2017 | 15:00 | 1.3 | 39 |
| 7/3/2017 | 16:00 | 0.9 | 48 |
| 7/3/2017 | 17:00 | 0.9 | 44 |
| 7/3/2017 | 18:00 | 0.9 | 357 |
| 7/3/2017 | 19:00 | 2.7 | 339 |
| 7/3/2017 | 20:00 | 2.2 | 44 |
| 7/3/2017 | 21:00 | 2.7 | 45 |
| 7/3/2017 | 22:00 | 2.2 | 37 |
| 7/3/2017 | 23:00 | 1.3 | 36 |
| 8/3/2017 | 0:00 | 0.9 | 49 |
| 8/3/2017 | 1:00 | 1.8 | 2 |
| 8/3/2017 | 2:00 | 1.3 | 16 |
| 8/3/2017 | 3:00 | 2.2 | 51 |
| 8/3/2017 | 4:00 | 2.2 | 53 |
| 8/3/2017 | 5:00 | 1.8 | 54 |
| 8/3/2017 | 6:00 | 1.3 | 49 |
| 8/3/2017 | 7:00 | 1.3 | 52 |
| 8/3/2017 | 8:00 | 0.9 | 351 |
| 8/3/2017 | 9:00 | 0.9 | 354 |
| 8/3/2017 | 10:00 | 0.9 | 3 |
| 8/3/2017 | 11:00 | 0.9 | 354 |
| 8/3/2017 | 12:00 | 0.9 | 322 |
| 8/3/2017 | 13:00 | 0.9 | 52 |
| 8/3/2017 | 14:00 | 0.9 | 63 |
| 8/3/2017 | 15:00 | 0.9 | 61 |
| 8/3/2017 | 16:00 | 1.3 | 100 |
| 8/3/2017 | 17:00 | 0.4 | 62 |
| 8/3/2017 | 18:00 | 0.4 | 57 |
| 8/3/2017 | 19:00 | 0.9 | 101 |
| 8/3/2017 | 20:00 | 1.3 | 87 |
| 8/3/2017 | 21:00 | 1.3 | 60 |
| 8/3/2017 | 22:00 | 0.9 | 93 |
| 8/3/2017 | 23:00 | 0.9 | 19 |
| 10/3/2017 | 0:00 | 3.6 | 101 |
| 10/3/2017 | 1:00 | 2.7 | 68 |
| 10/3/2017 | 2:00 | 2.2 | 94 |
| 10/3/2017 | 3:00 | 2.2 | 105 |
| 10/3/2017 | 4:00 | 1.8 | 74 |
| 10/3/2017 | 5:00 | 1.8 | 81 |
| 10/3/2017 | 6:00 | 1.8 | 77 |
| 10/3/2017 | 7:00 | 1.8 | 68 |
| 10/3/2017 | 8:00 | 1.8 | 65 |
| 10/3/2017 | 9:00 | 1.3 | 72 |
| 10/3/2017 | 10:00 | 1.8 | 93 |
| 10/3/2017 | 11:00 | 1.3 | 80 |
| 10/3/2017 | 12:00 | 1.3 | 93 |
| 10/3/2017 | 13:00 | 1.8 | 107 |
| 10/3/2017 | 14:00 | 3.1 | 103 |
| 10/3/2017 | 15:00 | 3.6 | 100 |
| 10/3/2017 | 16:00 | 4 | 112 |
| 10/3/2017 | 17:00 | 4 | 120 |
| 10/3/2017 | 18:00 | 4.5 | 117 |
| 10/3/2017 | 19:00 | 4.9 | 113 |
| 10/3/2017 | 20:00 | 4.5 | 106 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 10/3/2017 | 21:00 | 4.9 | 108 |
| 10/3/2017 | 22:00 | 5.4 | 104 |
| 11/3/2017 | 23:00 | 5.4 | 119 |
| 11/3/2017 | 0:00 | 4.9 | 107 |
| 11/3/2017 | 1:00 | 3.6 | 92 |
| 11/3/2017 | 2:00 | 3.6 | 101 |
| 11/3/2017 | 3:00 | 3.6 | 115 |
| 11/3/2017 | 4:00 | 3.1 | 98 |
| 11/3/2017 | 5:00 | 1.8 | 100 |
| 11/3/2017 | 6:00 | 2.7 | 106 |
| 11/3/2017 | 7:00 | 1.8 | 117 |
| 11/3/2017 | 8:00 | 2.2 | 115 |
| 11/3/2017 | 9:00 | 2.2 | 92 |
| 11/3/2017 | 10:00 | 2.2 | 111 |
| 11/3/2017 | 11:00 | 3.1 | 108 |
| 11/3/2017 | 12:00 | 2.7 | 88 |
| 11/3/2017 | 13:00 | 4 | 115 |
| 11/3/2017 | 14:00 | 3.1 | 104 |
| 11/3/2017 | 15:00 | 2.7 | 102 |
| 11/3/2017 | 16:00 | 3.1 | 89 |
| 11/3/2017 | 17:00 | 3.6 | 102 |
| 11/3/2017 | 18:00 | 3.6 | 113 |
| 11/3/2017 | 19:00 | 3.1 | 107 |
| 11/3/2017 | 20:00 | 3.6 | 114 |
| 11/3/2017 | 21:00 | 3.6 | 106 |
| 11/3/2017 | 22:00 | 5.4 | 121 |
| 11/3/2017 | 23:00 | 4.5 | 109 |
| 13/3/2017 | 0:00 | 1.3 | 102 |
| 13/3/2017 | 1:00 | 1.8 | 85 |
| 13/3/2017 | 2:00 | 1.3 | 71 |
| 13/3/2017 | 3:00 | 1.8 | 94 |
| 13/3/2017 | 4:00 | 1.3 | 62 |
| 13/3/2017 | 5:00 | 1.3 | 71 |
| 13/3/2017 | 6:00 | 1.3 | 58 |
| 13/3/2017 | 7:00 | 1.3 | 74 |
| 13/3/2017 | 8:00 | 1.3 | 93 |
| 13/3/2017 | 9:00 | 1.3 | 62 |
| 13/3/2017 | 10:00 | 1.8 | 71 |
| 13/3/2017 | 11:00 | 0.9 | 75 |
| 13/3/2017 | 12:00 | 0.9 | 88 |
| 13/3/2017 | 13:00 | 0.9 | 91 |
| 13/3/2017 | 14:00 | 0.9 | 90 |
| 13/3/2017 | 15:00 | 0.9 | 74 |
| 13/3/2017 | 16:00 | 0.9 | 81 |
| 13/3/2017 | 17:00 | 0.9 | 76 |
| 13/3/2017 | 18:00 | 0.9 | 72 |
| 13/3/2017 | 19:00 | 0.4 | 69 |
| 13/3/2017 | 20:00 | 0.4 | 73 |
| 13/3/2017 | 21:00 | 0 | - |
| 13/3/2017 | 22:00 | 0.4 | 46 |
| 13/3/2017 | 23:00 | 0.4 | 103 |
| 14/3/2017 | 0:00 | 0.9 | 99 |
| 14/3/2017 | 1:00 | 0.9 | 107 |
| 14/3/2017 | 2:00 | 1.8 | 92 |
| 14/3/2017 | 3:00 | 4.9 | 104 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 14/3/2017 | 4:00 | 4 | 110 |
| 14/3/2017 | 5:00 | 4.5 | 109 |
| 14/3/2017 | 6:00 | 3.1 | 107 |
| 14/3/2017 | 7:00 | 2.2 | 100 |
| 14/3/2017 | 8:00 | 1.3 | 94 |
| 14/3/2017 | 9:00 | 1.3 | 358 |
| 14/3/2017 | 10:00 | 1.8 | 346 |
| 14/3/2017 | 11:00 | 1.3 | 39 |
| 14/3/2017 | 12:00 | 1.3 | 42 |
| 14/3/2017 | 13:00 | 1.3 | 48 |
| 14/3/2017 | 14:00 | 0.9 | 43 |
| 14/3/2017 | 15:00 | 1.3 | 44 |
| 14/3/2017 | 16:00 | 0.4 | 19 |
| 14/3/2017 | 17:00 | 0.9 | 48 |
| 14/3/2017 | 18:00 | 0.9 | 38 |
| 14/3/2017 | 19:00 | 0.9 | 50 |
| 14/3/2017 | 20:00 | 1.3 | 47 |
| 14/3/2017 | 21:00 | 3.1 | 41 |
| 14/3/2017 | 22:00 | 2.7 | 51 |
| 14/3/2017 | 23:00 | 3.1 | 39 |
| 16/3/2017 | 0:00 | 2.5 | 132 |
| 16/3/2017 | 1:00 | 2.2 | 116 |
| 16/3/2017 | 2:00 | 1.8 | 142 |
| 16/3/2017 | 3:00 | 1.8 | 137 |
| 16/3/2017 | 4:00 | 1.3 | 171 |
| 16/3/2017 | 5:00 | 1.3 | 113 |
| 16/3/2017 | 6:00 | 1.8 | 132 |
| 16/3/2017 | 7:00 | 1.8 | 104 |
| 16/3/2017 | 8:00 | 1.3 | 112 |
| 16/3/2017 | 9:00 | 1.3 | 111 |
| 16/3/2017 | 10:00 | 0.9 | 109 |
| 16/3/2017 | 11:00 | 1.3 | 141 |
| 16/3/2017 | 12:00 | 2.2 | 105 |
| 16/3/2017 | 13:00 | 3.1 | 106 |
| 16/3/2017 | 14:00 | 2.7 | 92 |
| 16/3/2017 | 15:00 | 2.7 | 85 |
| 16/3/2017 | 16:00 | 2.7 | 81 |
| 16/3/2017 | 17:00 | 2.7 | 79 |
| 16/3/2017 | 18:00 | 2.7 | 93 |
| 16/3/2017 | 19:00 | 3.1 | 98 |
| 16/3/2017 | 20:00 | 3.1 | 101 |
| 16/3/2017 | 21:00 | 3.1 | 103 |
| 16/3/2017 | 22:00 | 3.6 | 108 |
| 16/3/2017 | 23:00 | 4 | 111 |
| 17/3/2017 | 0:00 | 4.5 | 120 |
| 17/3/2017 | 1:00 | 3.1 | 93 |
| 17/3/2017 | 2:00 | 2.7 | 103 |
| 17/3/2017 | 3:00 | 3.1 | 118 |
| 17/3/2017 | 4:00 | 4 | 116 |
| 17/3/2017 | 5:00 | 2.7 | 104 |
| 17/3/2017 | 6:00 | 3.1 | 107 |
| 17/3/2017 | 7:00 | 3.1 | 109 |
| 17/3/2017 | 8:00 | 0.9 | 118 |
| 17/3/2017 | 9:00 | 1.8 | 96 |
| 17/3/2017 | 10:00 | 4 | 104 |
| 17/3/2017 | 11:00 | 4 | 113 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 17/3/2017 | 12:00 | 4 | 101 |
| 17/3/2017 | 13:00 | 4 | 98 |
| 17/3/2017 | 14:00 | 4.5 | 85 |
| 17/3/2017 | 15:00 | 4.5 | 92 |
| 17/3/2017 | 16:00 | 4.5 | 100 |
| 17/3/2017 | 17:00 | 4 | 81 |
| 17/3/2017 | 18:00 | 3.6 | 105 |
| 17/3/2017 | 19:00 | 3.6 | 111 |
| 17/3/2017 | 20:00 | 3.6 | 106 |
| 17/3/2017 | 21:00 | 2.7 | 114 |
| 17/3/2017 | 22:00 | 2.7 | 114 |
| 17/3/2017 | 23:00 | 2.7 | 124 |
| 19/3/2017 | 0:00 | 2.7 | 131 |
| 19/3/2017 | 1:00 | 3.1 | 125 |
| 19/3/2017 | 2:00 | 0.9 | 88 |
| 19/3/2017 | 3:00 | 0.4 | 244 |
| 19/3/2017 | 4:00 | 0 | - |
| 19/3/2017 | 5:00 | 0.9 | 95 |
| 19/3/2017 | 6:00 | 3.1 | 81 |
| 19/3/2017 | 7:00 | 3.1 | 93 |
| 19/3/2017 | 8:00 | 2.7 | 81 |
| 19/3/2017 | 9:00 | 2.7 | 70 |
| 19/3/2017 | 10:00 | 2.7 | 85 |
| 19/3/2017 | 11:00 | 3.1 | 101 |
| 19/3/2017 | 12:00 | 2.2 | 107 |
| 19/3/2017 | 13:00 | 2.7 | 112 |
| 19/3/2017 | 14:00 | 3.1 | 104 |
| 19/3/2017 | 15:00 | 3.1 | 108 |
| 19/3/2017 | 16:00 | 3.1 | 92 |
| 19/3/2017 | 17:00 | 3.1 | 95 |
| 19/3/2017 | 18:00 | 2.2 | 104 |
| 19/3/2017 | 19:00 | 1.8 | 111 |
| 19/3/2017 | 20:00 | 1.8 | 107 |
| 19/3/2017 | 21:00 | 1.8 | 104 |
| 19/3/2017 | 22:00 | 1.8 | 100 |
| 19/3/2017 | 23:00 | 2.2 | 84 |
| 20/3/2017 | 0:00 | 1.8 | 83 |
| 20/3/2017 | 1:00 | 1.8 | 88 |
| 20/3/2017 | 2:00 | 2.2 | 89 |
| 20/3/2017 | 3:00 | 2.2 | 75 |
| 20/3/2017 | 4:00 | 2.2 | 74 |
| 20/3/2017 | 5:00 | 2.2 | 78 |
| 20/3/2017 | 6:00 | 2.2 | 93 |
| 20/3/2017 | 7:00 | 1.3 | 261 |
| 20/3/2017 | 8:00 | 2.2 | 223 |
| 20/3/2017 | 9:00 | 0.9 | 241 |
| 20/3/2017 | 10:00 | 0.9 | 105 |
| 20/3/2017 | 11:00 | 0.9 | 93 |
| 20/3/2017 | 12:00 | 0.9 | 94 |
| 20/3/2017 | 13:00 | 2.2 | 99 |
| 20/3/2017 | 14:00 | 2.7 | 75 |
| 20/3/2017 | 15:00 | 1.8 | 71 |
| 20/3/2017 | 16:00 | 0.9 | 73 |
| 20/3/2017 | 17:00 | 0.4 | 81 |
| 20/3/2017 | 18:00 | 0.4 | 76 |
| 20/3/2017 | 19:00 | 0.9 | 69 |
| 20/3/2017 | 20:00 | 1.3 | 64 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 20/3/2017 | 21:00 | 1.3 | 96 |
| 20/3/2017 | 22:00 | 0.4 | 100 |
| 20/3/2017 | 23:00 | 0 | - |
| 22/3/2017 | 0:00 | 3.6 | 79 |
| 22/3/2017 | 1:00 | 3.1 | 102 |
| 22/3/2017 | 2:00 | 3.1 | 84 |
| 22/3/2017 | 3:00 | 3.1 | 78 |
| 22/3/2017 | 4:00 | 3.6 | 84 |
| 22/3/2017 | 5:00 | 4 | 81 |
| 22/3/2017 | 6:00 | 3.1 | 102 |
| 22/3/2017 | 7:00 | 4.5 | 121 |
| 22/3/2017 | 8:00 | 4.5 | 115 |
| 22/3/2017 | 9:00 | 3.1 | 93 |
| 22/3/2017 | 10:00 | 1.3 | 85 |
| 22/3/2017 | 11:00 | 1.8 | 80 |
| 22/3/2017 | 12:00 | 1.8 | 87 |
| 22/3/2017 | 13:00 | 1.3 | 96 |
| 22/3/2017 | 14:00 | 0.9 | 98 |
| 22/3/2017 | 15:00 | 0.9 | 99 |
| 22/3/2017 | 16:00 | 1.8 | 103 |
| 22/3/2017 | 17:00 | 1.8 | 82 |
| 22/3/2017 | 18:00 | 1.8 | 85 |
| 22/3/2017 | 19:00 | 0.4 | 94 |
| 22/3/2017 | 20:00 | 0.9 | 104 |
| 22/3/2017 | 21:00 | 2.2 | 101 |
| 22/3/2017 | 22:00 | 1.8 | 84 |
| 22/3/2017 | 23:00 | 1.3 | 86 |
| 23/3/2017 | 0:00 | 1.3 | 88 |
| 23/3/2017 | 1:00 | 1.3 | 105 |
| 23/3/2017 | 2:00 | 1.3 | 145 |
| 23/3/2017 | 3:00 | 1.3 | 122 |
| 23/3/2017 | 4:00 | 0.9 | 171 |
| 23/3/2017 | 5:00 | 2.2 | 205 |
| 23/3/2017 | 6:00 | 0.9 | 231 |
| 23/3/2017 | 7:00 | 1.3 | 62 |
| 23/3/2017 | 8:00 | 1.8 | 93 |
| 23/3/2017 | 9:00 | 1.8 | 85 |
| 23/3/2017 | 10:00 | 2.2 | 74 |
| 23/3/2017 | 11:00 | 1.8 | 102 |
| 23/3/2017 | 12:00 | 2.2 | 85 |
| 23/3/2017 | 13:00 | 1.3 | 122 |
| 23/3/2017 | 14:00 | 1.3 | 119 |
| 23/3/2017 | 15:00 | 1.3 | 105 |
| 23/3/2017 | 16:00 | 0.9 | 117 |
| 23/3/2017 | 17:00 | 1.3 | 82 |
| 23/3/2017 | 18:00 | 1.3 | 93 |
| 23/3/2017 | 19:00 | 2.2 | 84 |
| 23/3/2017 | 20:00 | 3.1 | 98 |
| 23/3/2017 | 21:00 | 2.2 | 105 |
| 23/3/2017 | 22:00 | 3.1 | 84 |
| 23/3/2017 | 23:00 | 3.6 | 100 |
| 25/3/2017 | 0:00 | 0.4 | 171 |
| 25/3/2017 | 1:00 | 0.9 | 149 |
| 25/3/2017 | 2:00 | 1.3 | 251 |
| 25/3/2017 | 3:00 | 1.8 | 299 |
| 25/3/2017 | 4:00 | 1.8 | 315 |
| 25/3/2017 | 5:00 | 1.8 | 322 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 25/3/2017 | 6:00 | 1.8 | 50 |
| 25/3/2017 | 7:00 | 2.2 | 351 |
| 25/3/2017 | 8:00 | 1.3 | 327 |
| 25/3/2017 | 9:00 | 1.3 | 300 |
| 25/3/2017 | 10:00 | 1.3 | 5 |
| 25/3/2017 | 11:00 | 1.8 | 49 |
| 25/3/2017 | 12:00 | 1.3 | 52 |
| 25/3/2017 | 13:00 | 1.8 | 311 |
| 25/3/2017 | 14:00 | 1.3 | 356 |
| 25/3/2017 | 15:00 | 1.3 | 355 |
| 25/3/2017 | 16:00 | 0.9 | 279 |
| 25/3/2017 | 17:00 | 0.9 | 265 |
| 25/3/2017 | 18:00 | 0.9 | 294 |
| 25/3/2017 | 19:00 | 0.9 | 289 |
| 25/3/2017 | 20:00 | 1.3 | 293 |
| 25/3/2017 | 21:00 | 0.9 | 309 |
| 25/3/2017 | 22:00 | 1.3 | 312 |
| 25/3/2017 | 23:00 | 1.3 | 358 |
| 26/3/2017 | 0:00 | 2.2 | 51 |
| 26/3/2017 | 1:00 | 1.3 | 355 |
| 26/3/2017 | 2:00 | 2.2 | 63 |
| 26/3/2017 | 3:00 | 1.3 | 49 |
| 26/3/2017 | 4:00 | 1.8 | 51 |
| 26/3/2017 | 5:00 | 2.2 | 58 |
| 26/3/2017 | 6:00 | 1.3 | 47 |
| 26/3/2017 | 7:00 | 1.3 | 348 |
| 26/3/2017 | 8:00 | 1.3 | 62 |
| 26/3/2017 | 9:00 | 0.9 | 31 |
| 26/3/2017 | 10:00 | 1.3 | 15 |
| 26/3/2017 | 11:00 | 1.3 | 38 |
| 26/3/2017 | 12:00 | 1.3 | 50 |
| 26/3/2017 | 13:00 | 1.3 | 44 |
| 26/3/2017 | 14:00 | 1.3 | 70 |
| 26/3/2017 | 15:00 | 0.9 | 38 |
| 26/3/2017 | 16:00 | 0.9 | 40 |
| 26/3/2017 | 17:00 | 0.9 | 52 |
| 26/3/2017 | 18:00 | 0.9 | 46 |
| 26/3/2017 | 19:00 | 0.9 | 84 |
| 26/3/2017 | 20:00 | 1.8 | 39 |
| 26/3/2017 | 21:00 | 1.3 | 45 |
| 26/3/2017 | 22:00 | 0.4 | 96 |
| 26/3/2017 | 23:00 | 0 | - |
| 28/3/2017 | 0:00 | 4 | 103 |
| 28/3/2017 | 1:00 | 4 | 88 |
| 28/3/2017 | 2:00 | 4 | 112 |
| 28/3/2017 | 3:00 | 4 | 104 |
| 28/3/2017 | 4:00 | 4 | 95 |
| 28/3/2017 | 5:00 | 4.5 | 83 |
| 28/3/2017 | 6:00 | 4 | 100 |
| 28/3/2017 | 7:00 | 4 | 101 |
| 28/3/2017 | 8:00 | 4.5 | 84 |
| 28/3/2017 | 9:00 | 4 | 79 |
| 28/3/2017 | 10:00 | 4 | 93 |
| 28/3/2017 | 11:00 | 3.6 | 85 |
| 28/3/2017 | 12:00 | 3.6 | 102 |
| 28/3/2017 | 13:00 | 4 | 84 |
| 28/3/2017 | 14:00 | 4 | 93 |

Meteorological Data for Impact Monitoring in the reporting period

| Date (yy-mm-dd) | Time (24hrs) | Average of Wind Speed (m/s) | Average of Wind Direction(degree) |
|------------------------|---------------------|------------------------------------|--|
| 28/3/2017 | 15:00 | 3.6 | 91 |
| 28/3/2017 | 16:00 | 3.6 | 97 |
| 28/3/2017 | 17:00 | 2.2 | 82 |
| 28/3/2017 | 18:00 | 1.8 | 94 |
| 28/3/2017 | 19:00 | 1.3 | 102 |
| 28/3/2017 | 20:00 | 0.9 | 94 |
| 28/3/2017 | 21:00 | 0.4 | 119 |
| 28/3/2017 | 22:00 | 1.3 | 127 |
| 28/3/2017 | 23:00 | 1.8 | 93 |
| 29/3/2017 | 0:00 | 2.2 | 84 |
| 29/3/2017 | 1:00 | 1.8 | 82 |
| 29/3/2017 | 2:00 | 1.8 | 105 |
| 29/3/2017 | 3:00 | 3.1 | 100 |
| 29/3/2017 | 4:00 | 4 | 79 |
| 29/3/2017 | 5:00 | 4.5 | 85 |
| 29/3/2017 | 6:00 | 4.5 | 91 |
| 29/3/2017 | 7:00 | 4 | 84 |
| 29/3/2017 | 8:00 | 3.1 | 80 |
| 29/3/2017 | 9:00 | 2.7 | 115 |
| 29/3/2017 | 10:00 | 2.7 | 109 |
| 29/3/2017 | 11:00 | 3.6 | 93 |
| 29/3/2017 | 12:00 | 3.6 | 101 |
| 29/3/2017 | 13:00 | 3.1 | 88 |
| 29/3/2017 | 14:00 | 3.1 | 64 |
| 29/3/2017 | 15:00 | 3.6 | 102 |
| 29/3/2017 | 16:00 | 2.7 | 98 |
| 29/3/2017 | 17:00 | 2.7 | 100 |
| 29/3/2017 | 18:00 | 3.1 | 84 |
| 29/3/2017 | 19:00 | 3.1 | 77 |
| 29/3/2017 | 20:00 | 1.8 | 73 |
| 29/3/2017 | 21:00 | 3.1 | 96 |
| 29/3/2017 | 22:00 | 2.7 | 85 |
| 29/3/2017 | 23:00 | 2.7 | 91 |
| 31/3/2017 | 0:00 | 1.8 | 115 |
| 31/3/2017 | 1:00 | 1.3 | 348 |
| 31/3/2017 | 2:00 | 0.4 | 267 |
| 31/3/2017 | 3:00 | 0.4 | 298 |
| 31/3/2017 | 4:00 | 0.9 | 285 |
| 31/3/2017 | 5:00 | 0.9 | 303 |
| 31/3/2017 | 6:00 | 1.8 | 318 |
| 31/3/2017 | 7:00 | 3.6 | 321 |
| 31/3/2017 | 8:00 | 3.1 | 351 |
| 31/3/2017 | 9:00 | 2.2 | 349 |
| 31/3/2017 | 10:00 | 2.2 | 355 |
| 31/3/2017 | 11:00 | 1.8 | 62 |
| 31/3/2017 | 12:00 | 2.2 | 54 |
| 31/3/2017 | 13:00 | 1.3 | 58 |
| 31/3/2017 | 14:00 | 3.1 | 5 |
| 31/3/2017 | 15:00 | 2.2 | 52 |
| 31/3/2017 | 16:00 | 2.2 | 63 |
| 31/3/2017 | 17:00 | 1.3 | 48 |
| 31/3/2017 | 18:00 | 0.9 | 61 |
| 31/3/2017 | 19:00 | 1.3 | 74 |
| 31/3/2017 | 20:00 | 2.2 | 52 |
| 31/3/2017 | 21:00 | 2.7 | 21 |
| 31/3/2017 | 22:00 | 3.1 | 358 |
| 31/3/2017 | 23:00 | 2.7 | 346 |

Appendix I

Impact Water Quality Monitoring Results

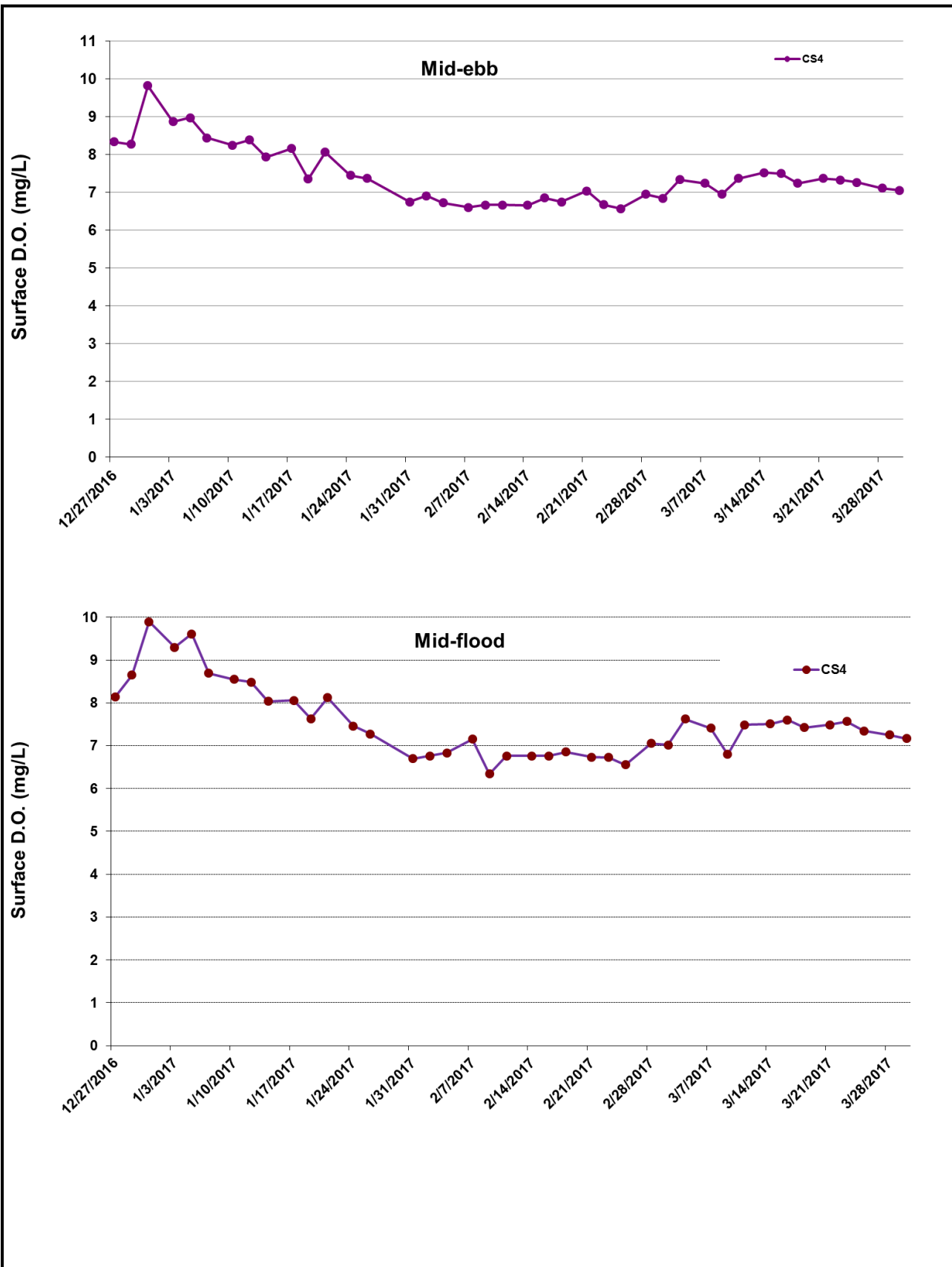


Figure I1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

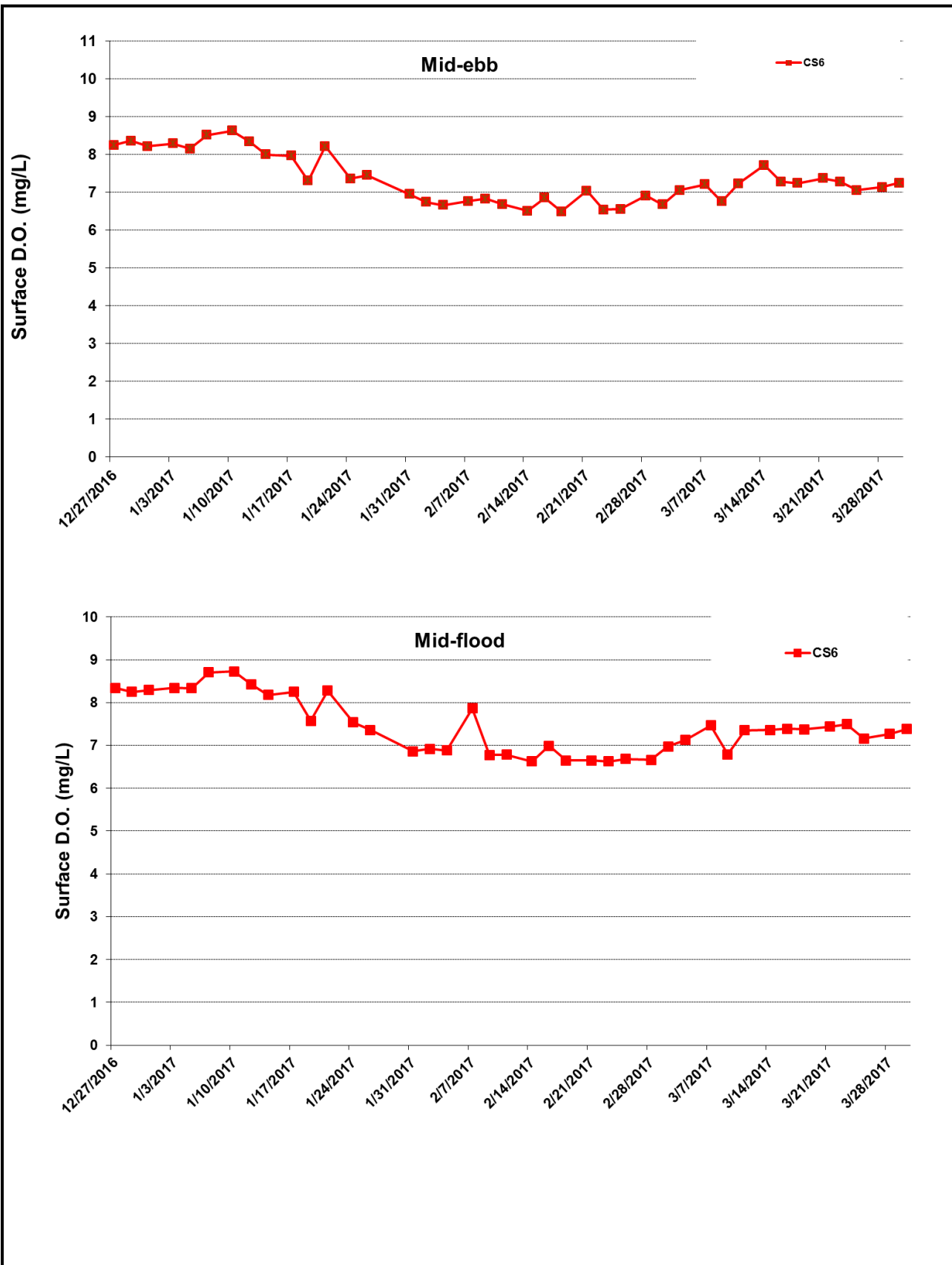


Figure I2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

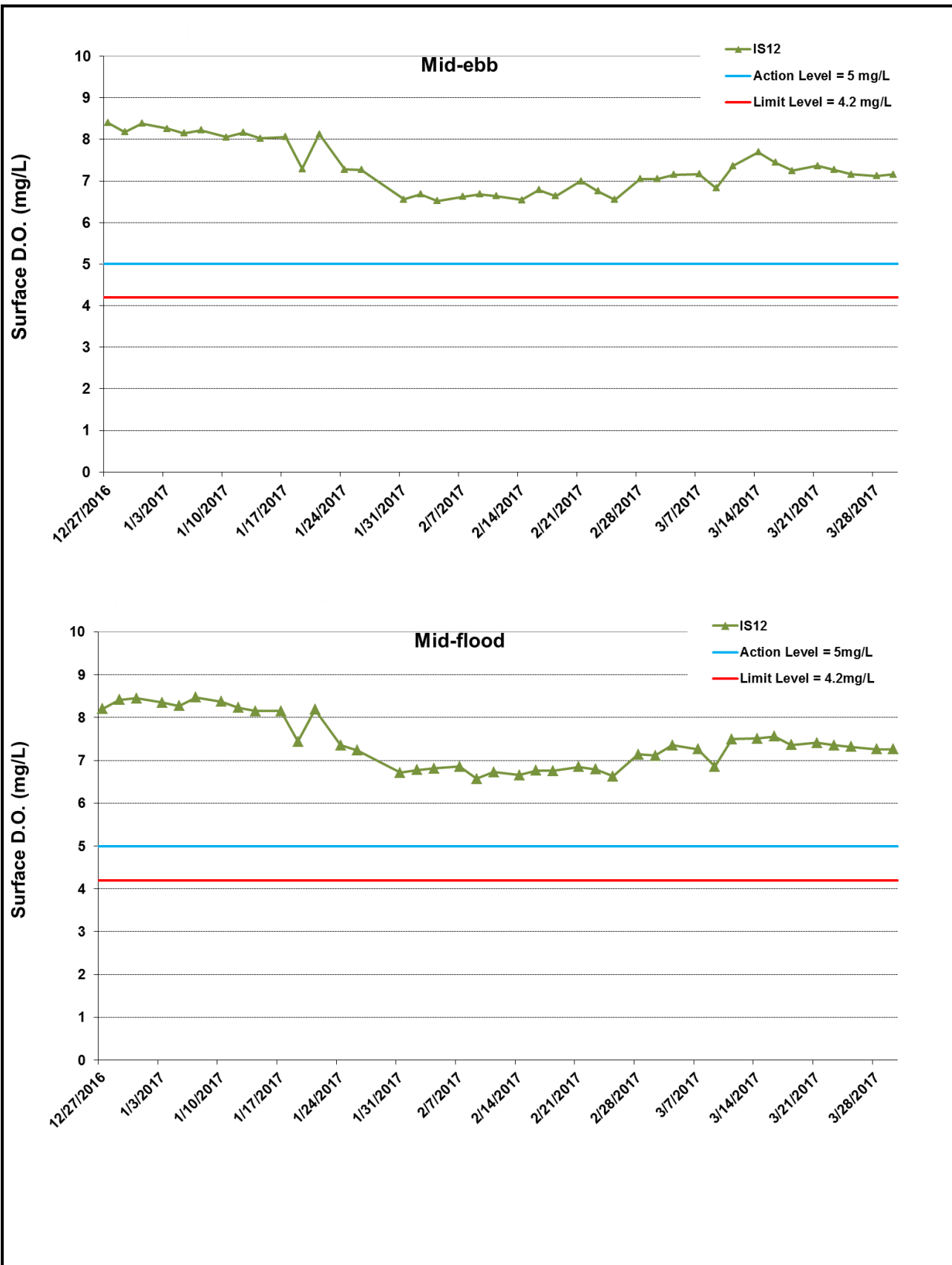


Figure I3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

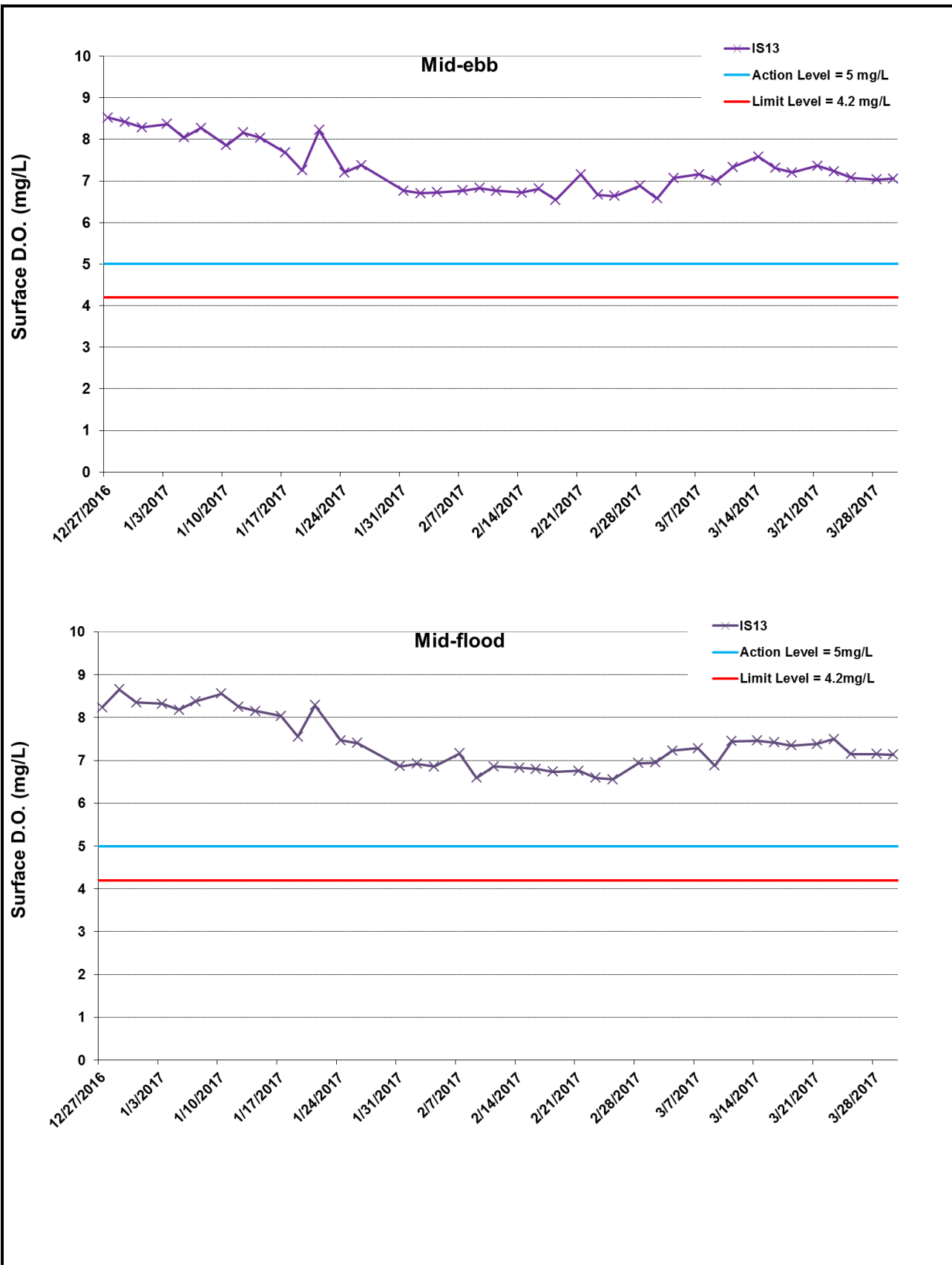


Figure I4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

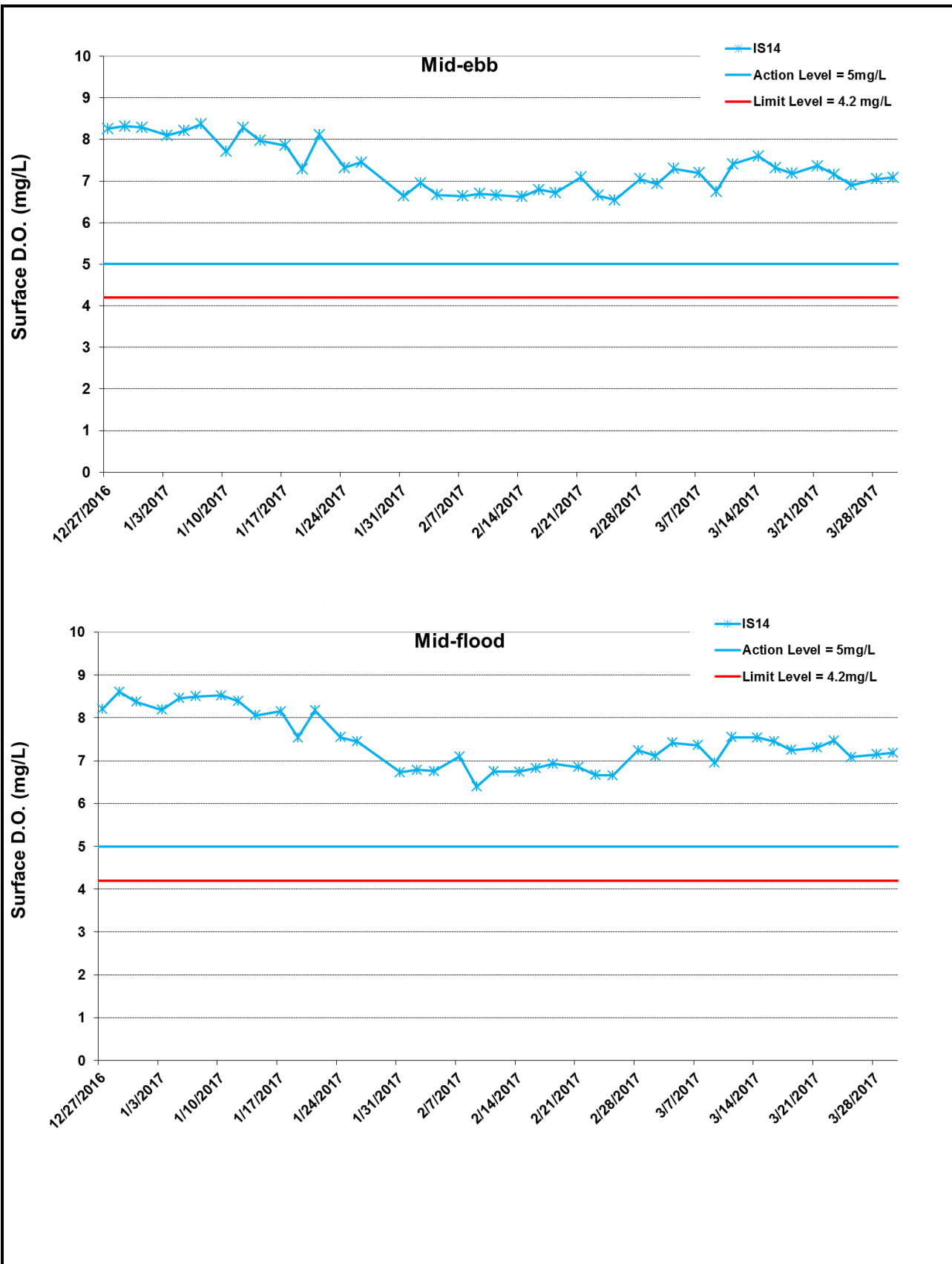
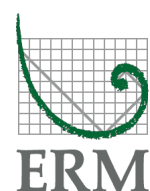


Figure I5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

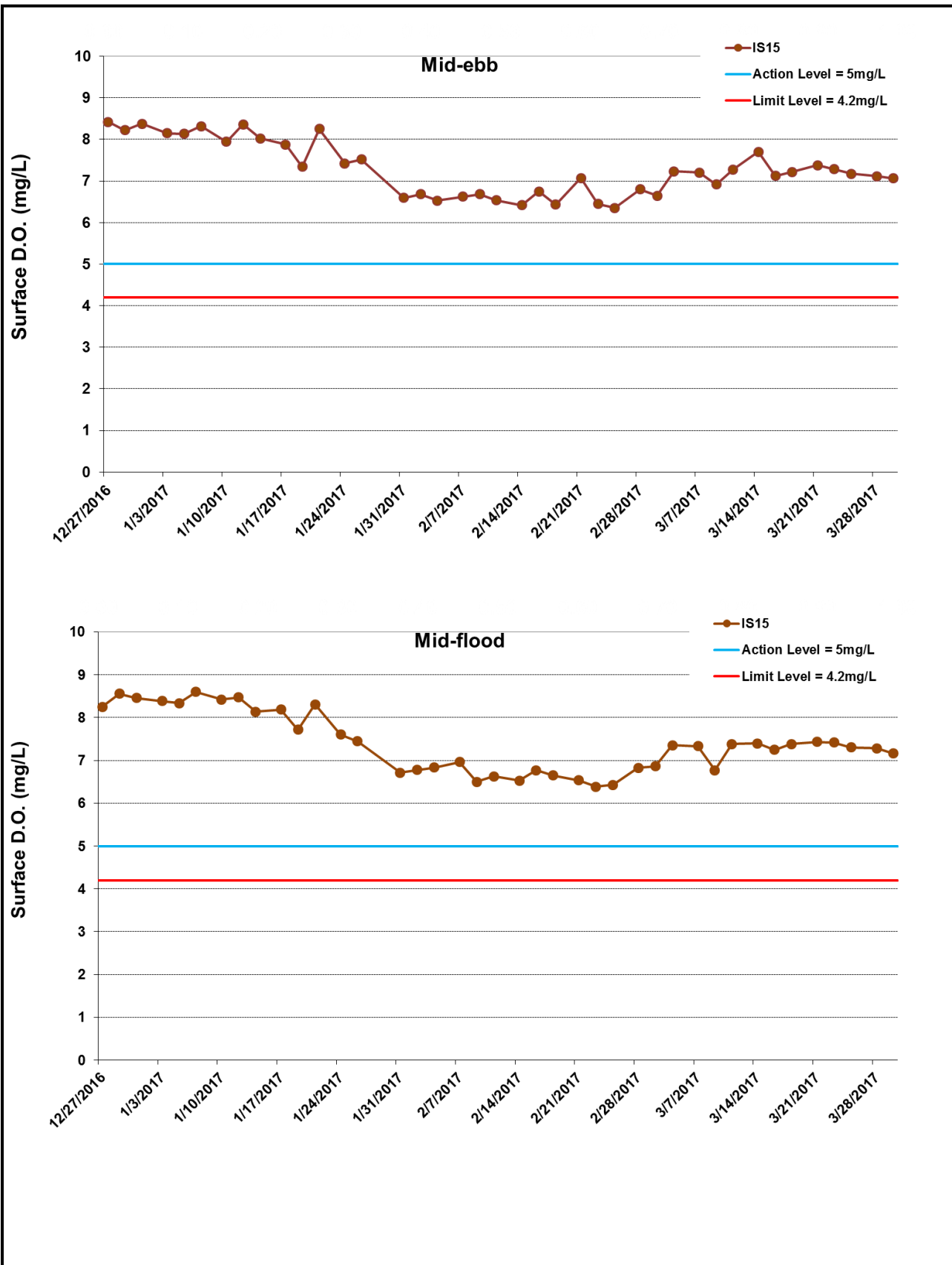


Figure I6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

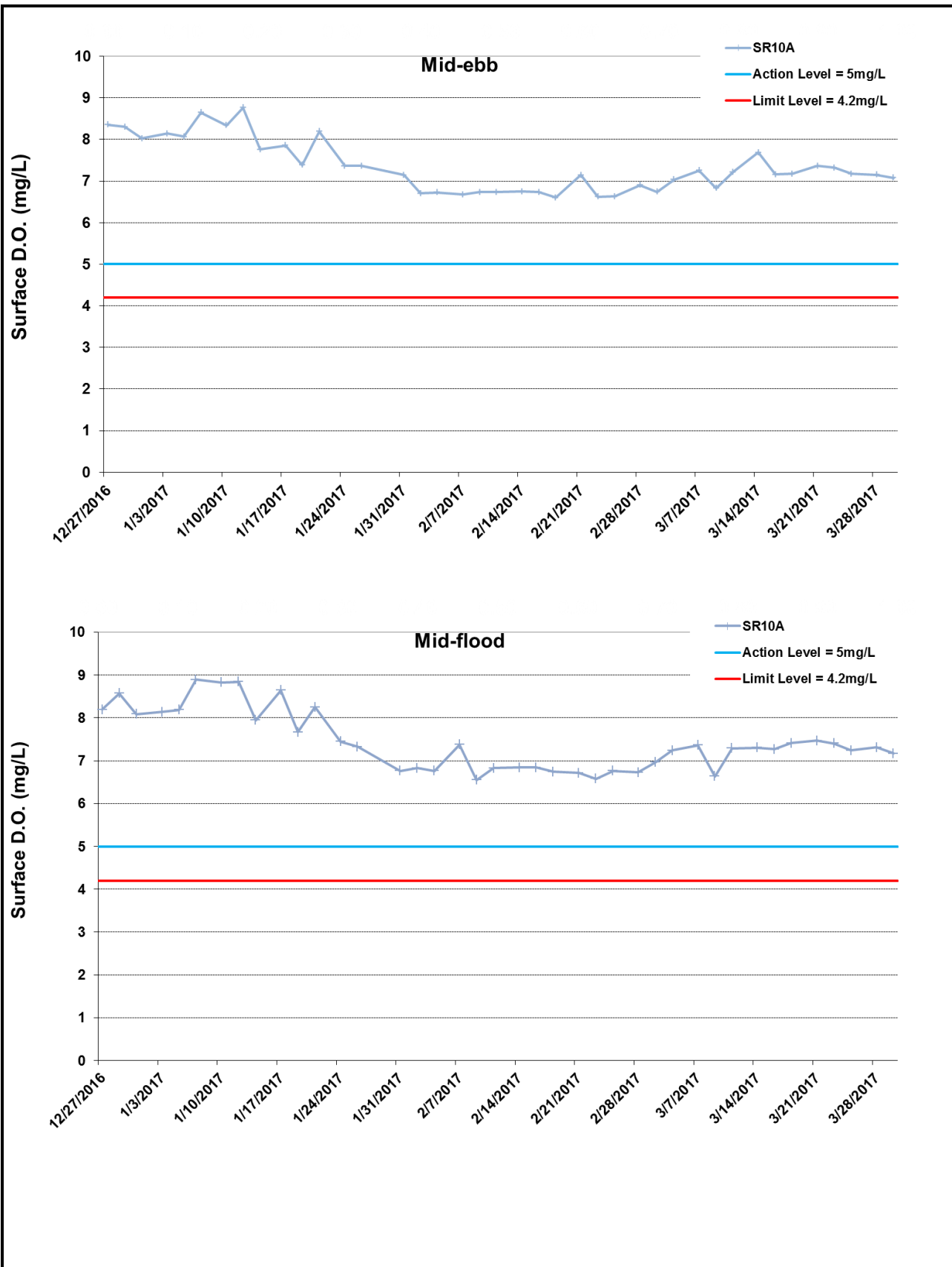


Figure I7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

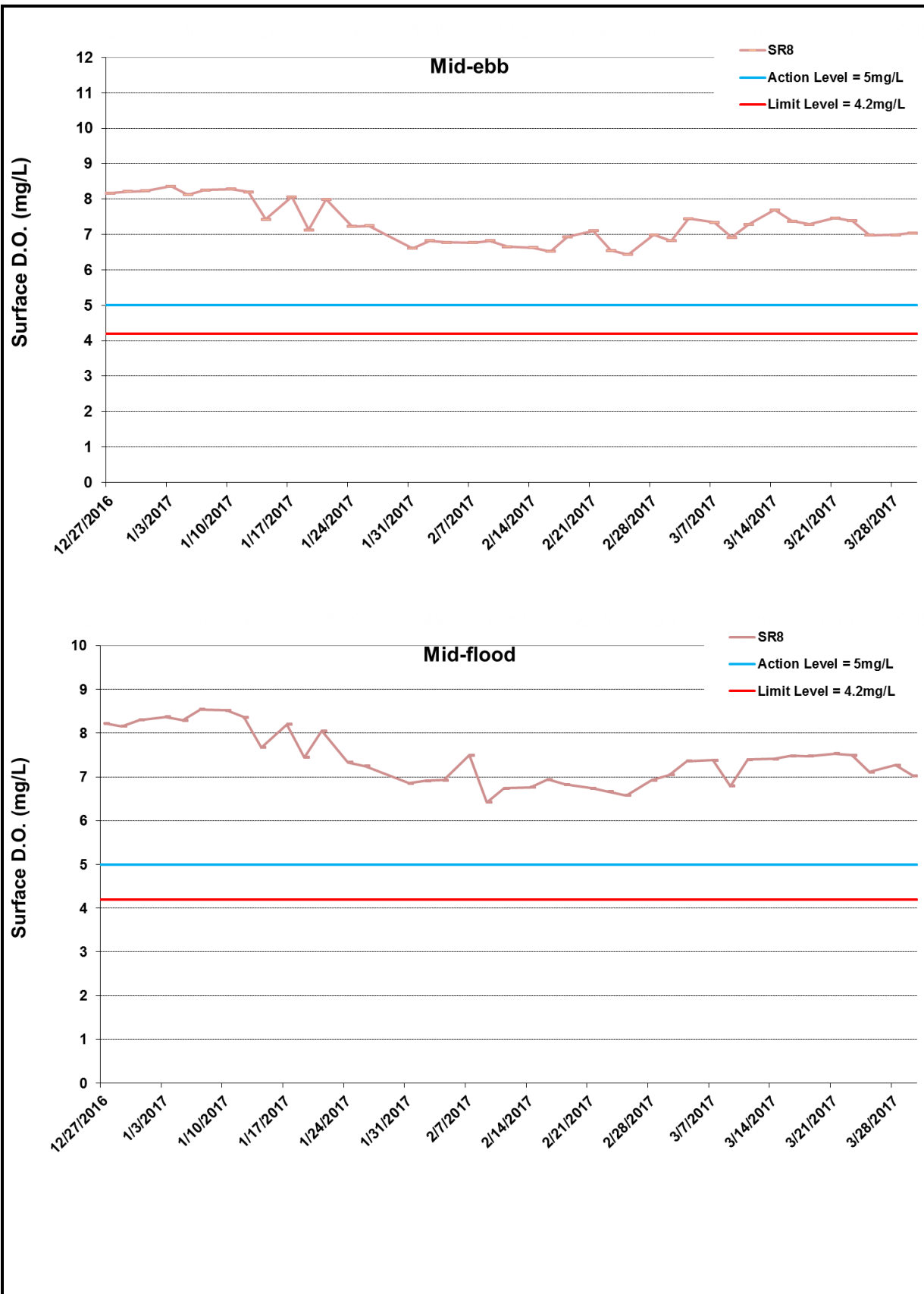


Figure I8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

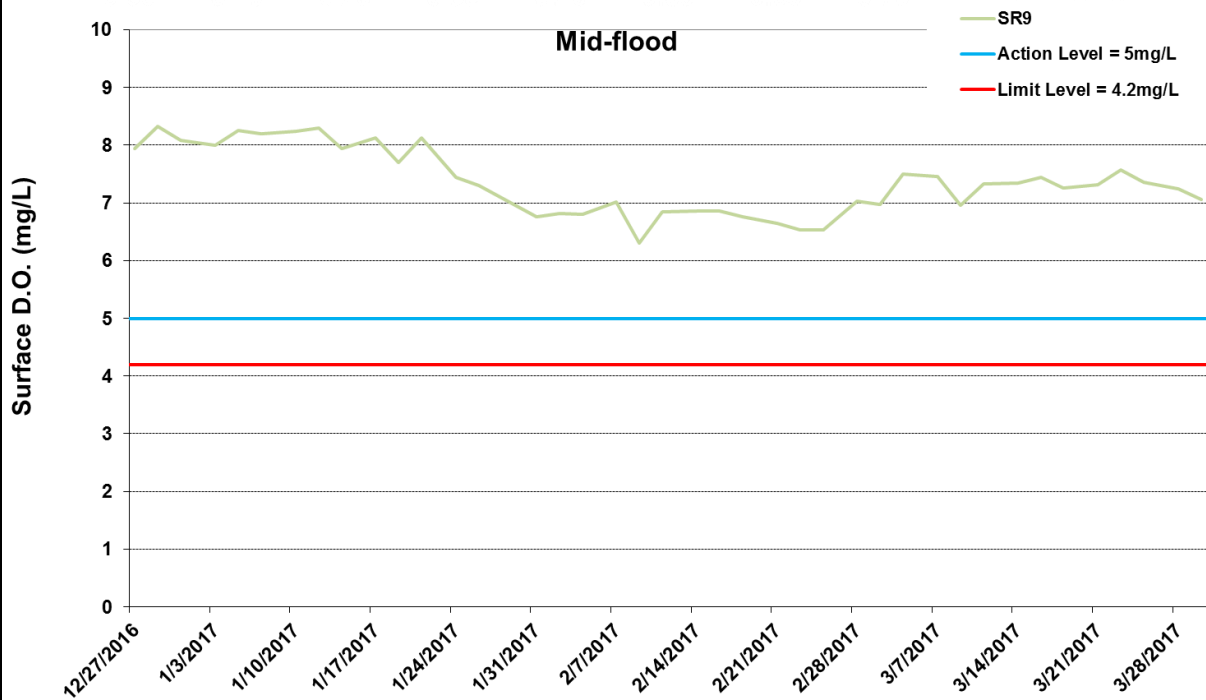
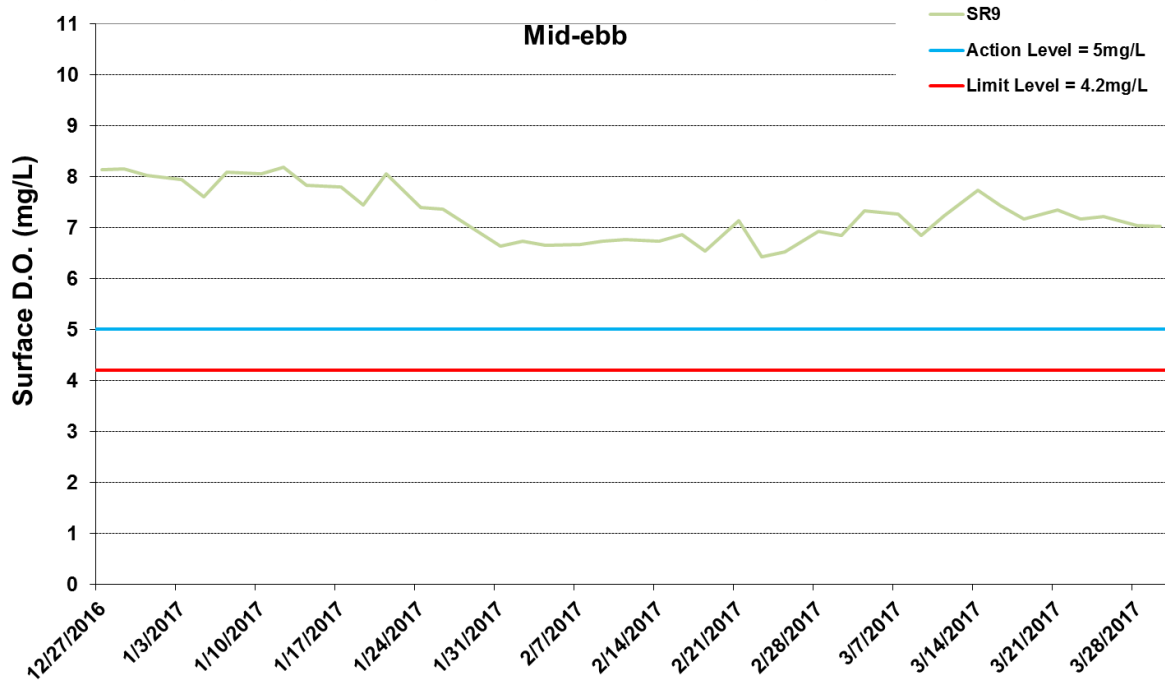
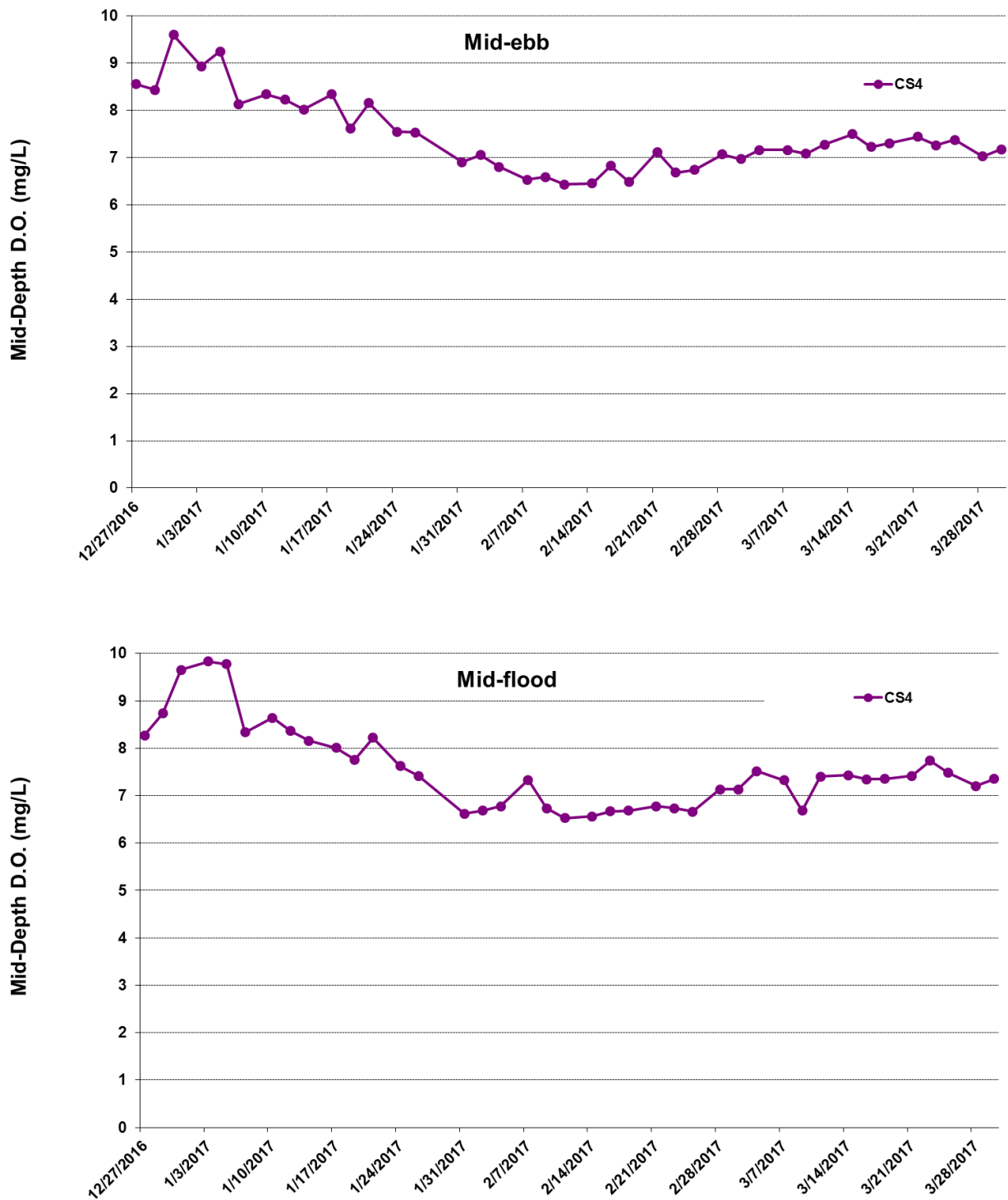


Figure I9 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 27 December 2016 and 31 March 2017 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

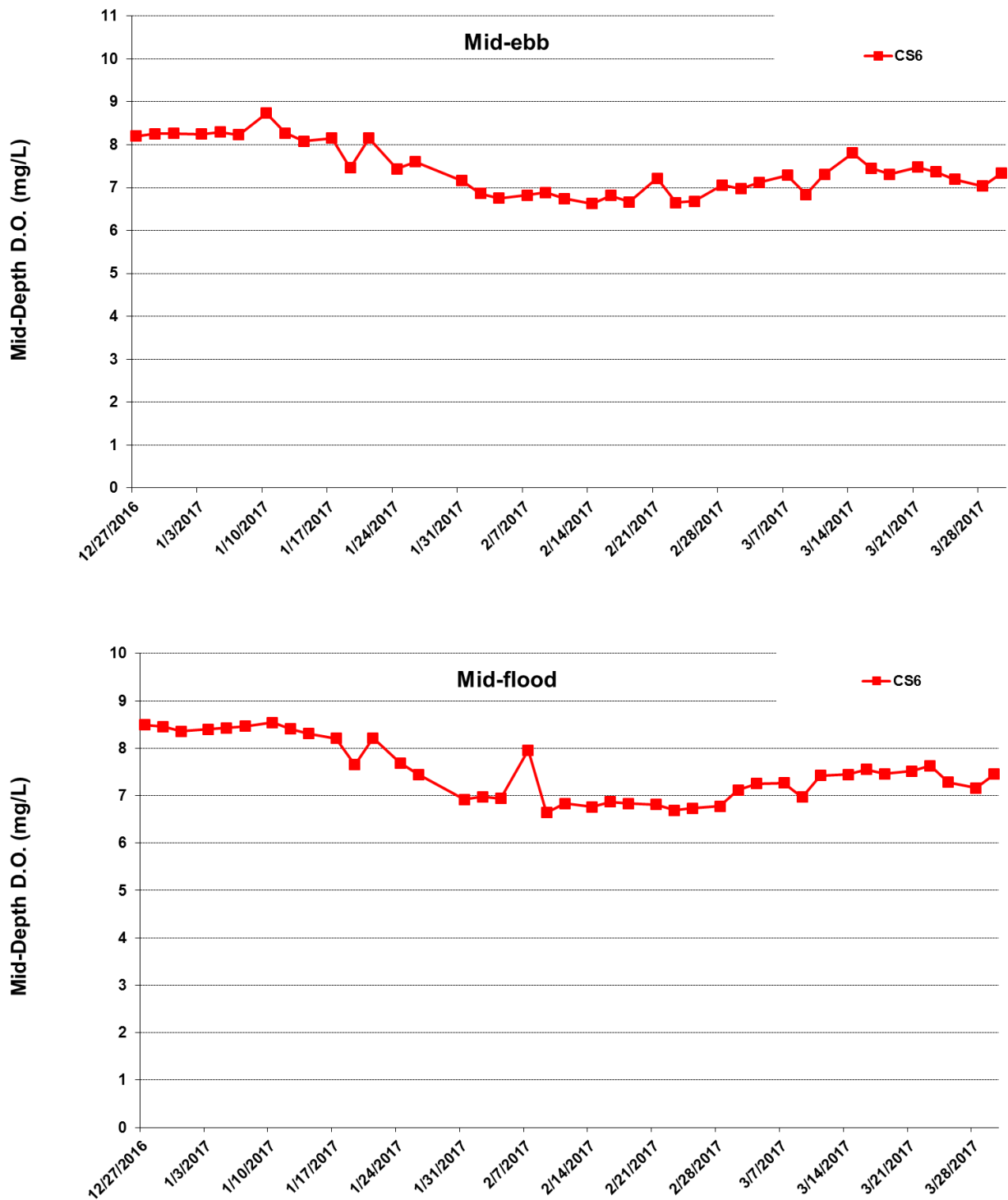




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

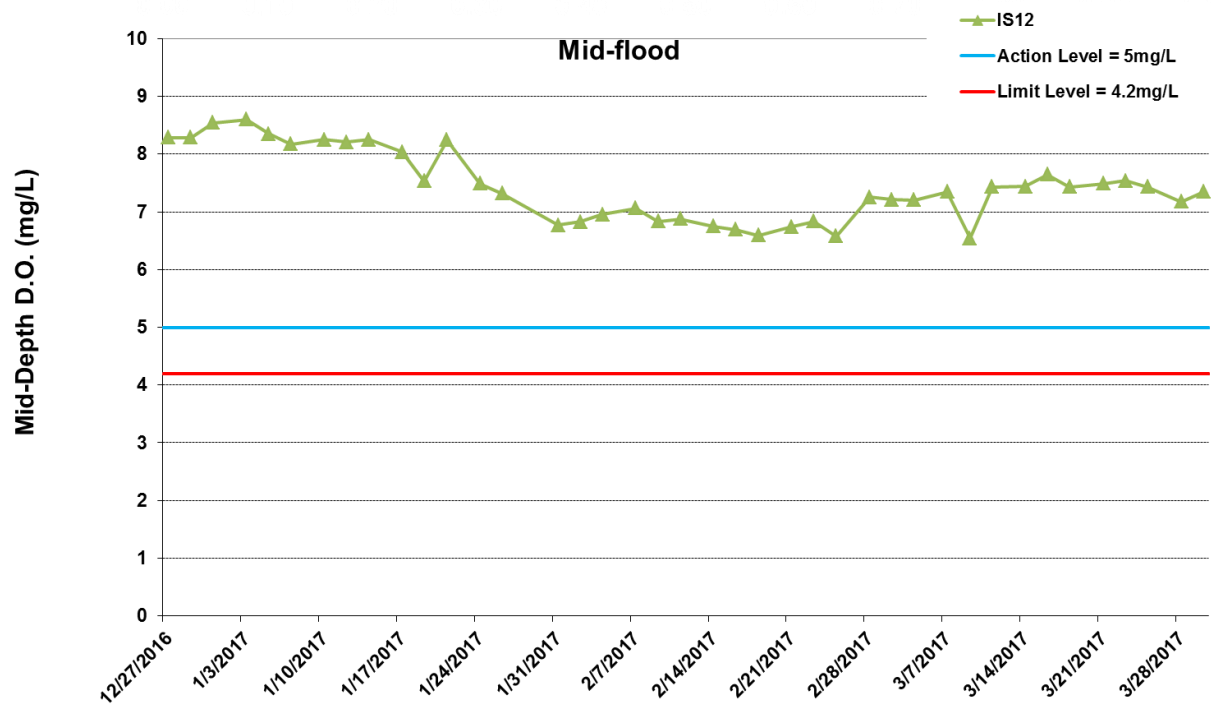
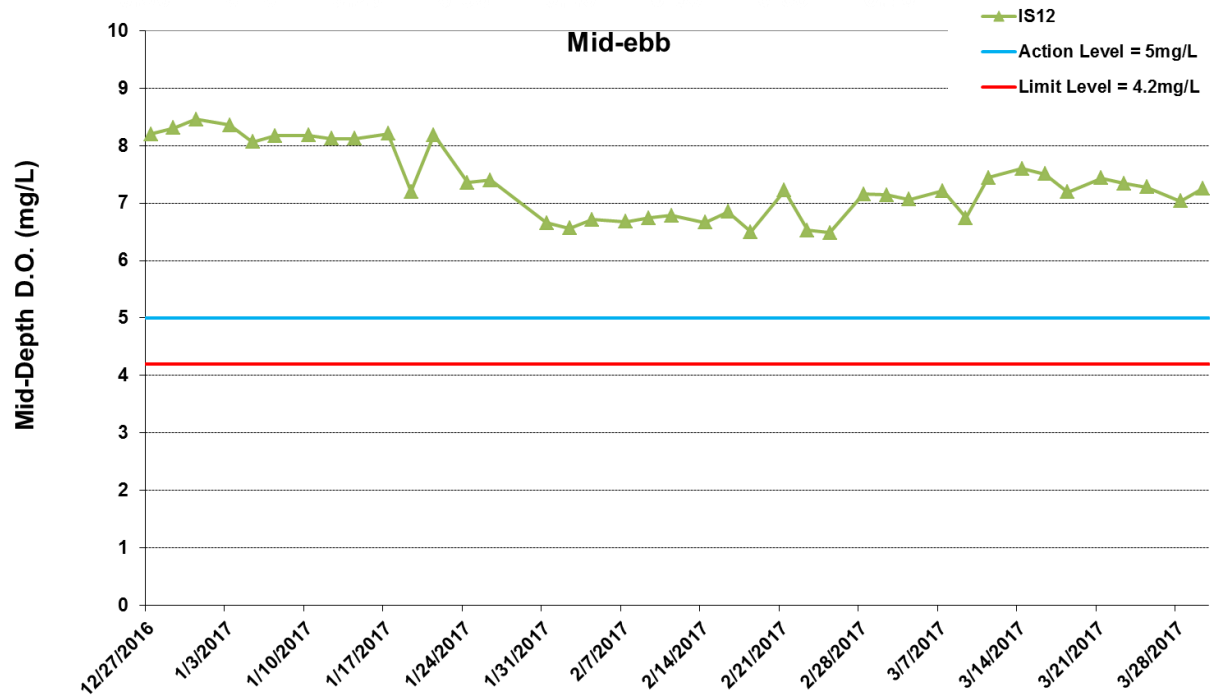




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

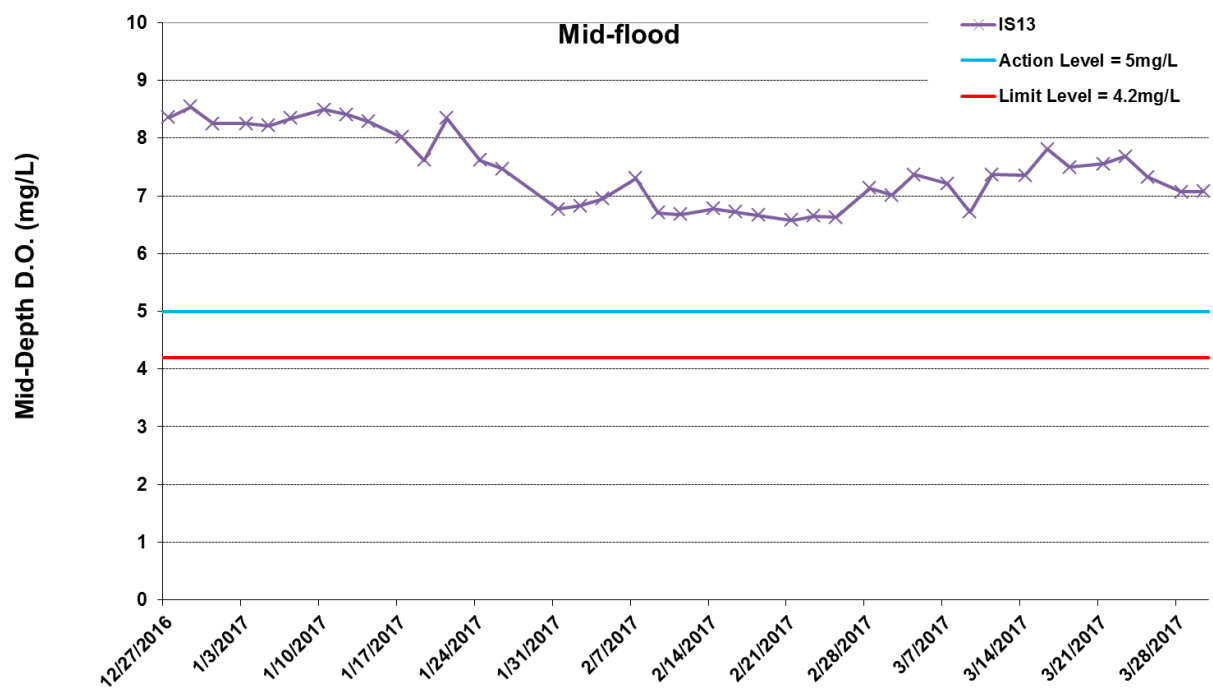
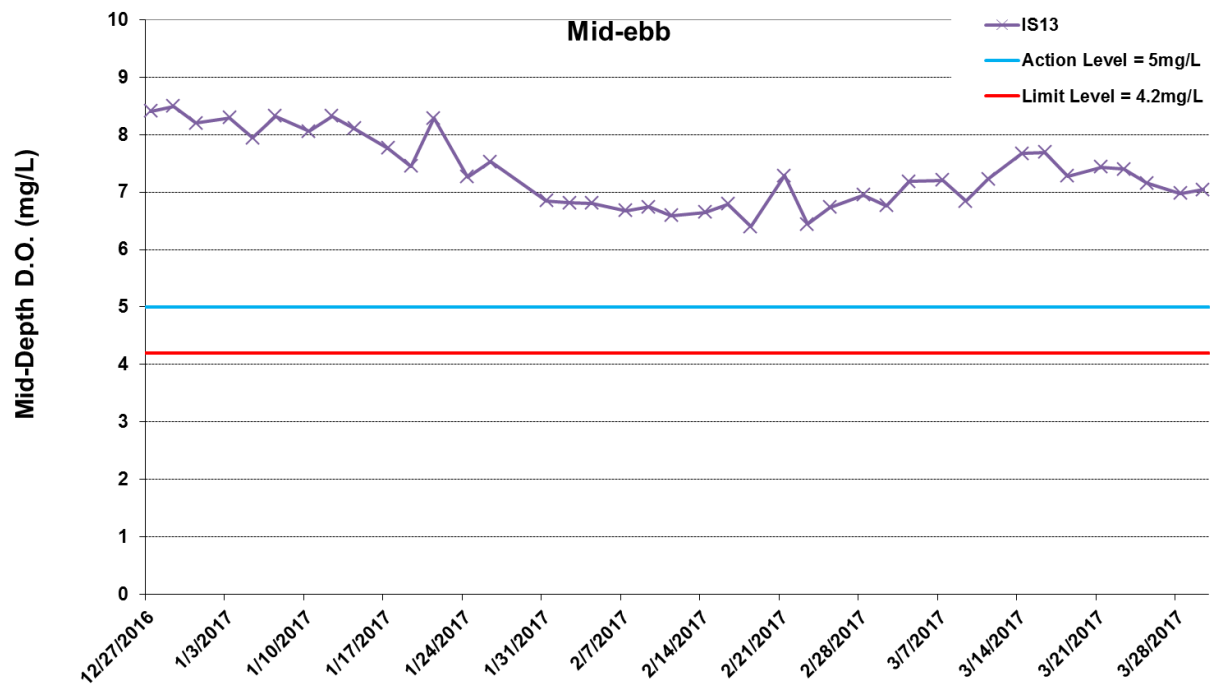




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

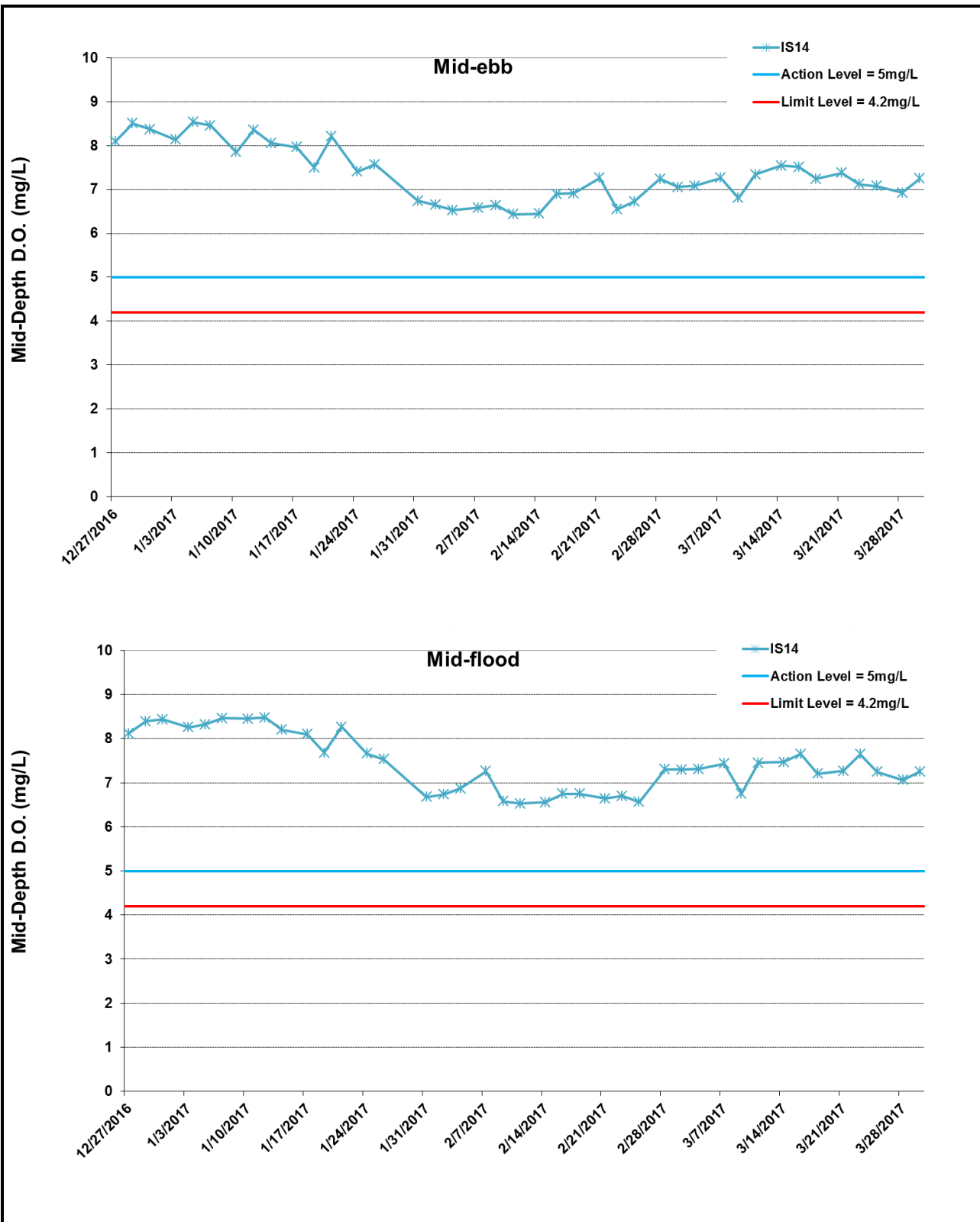




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I13 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

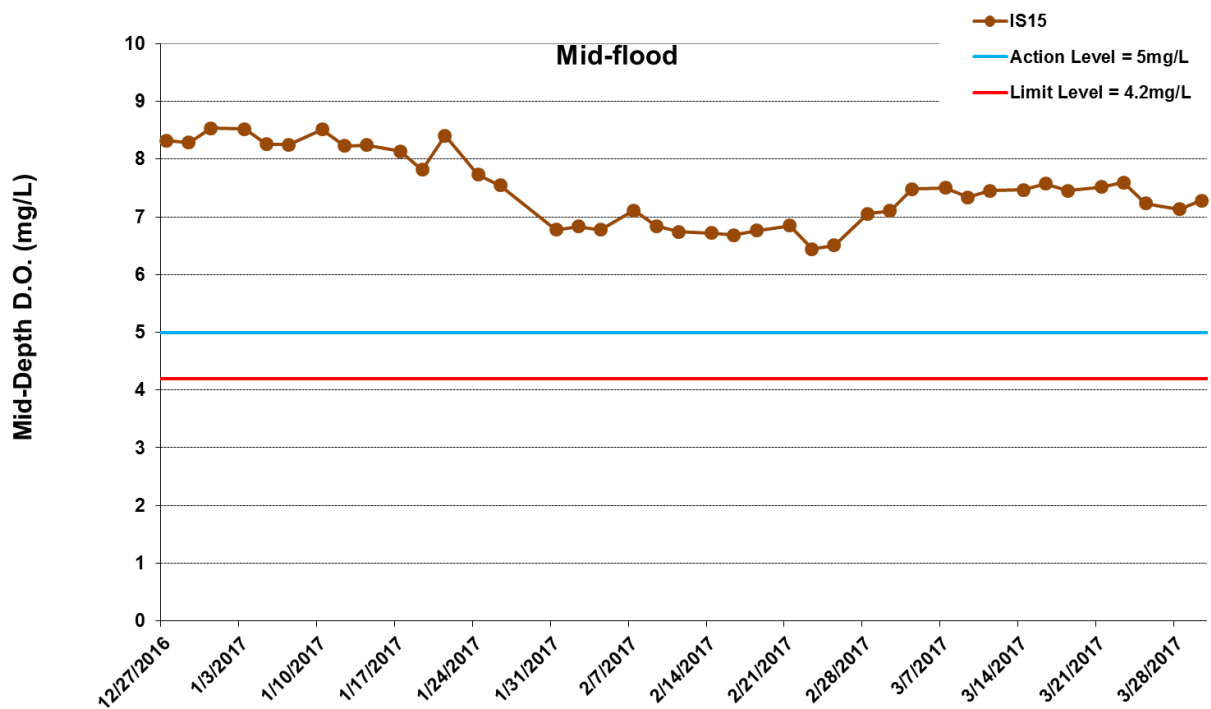
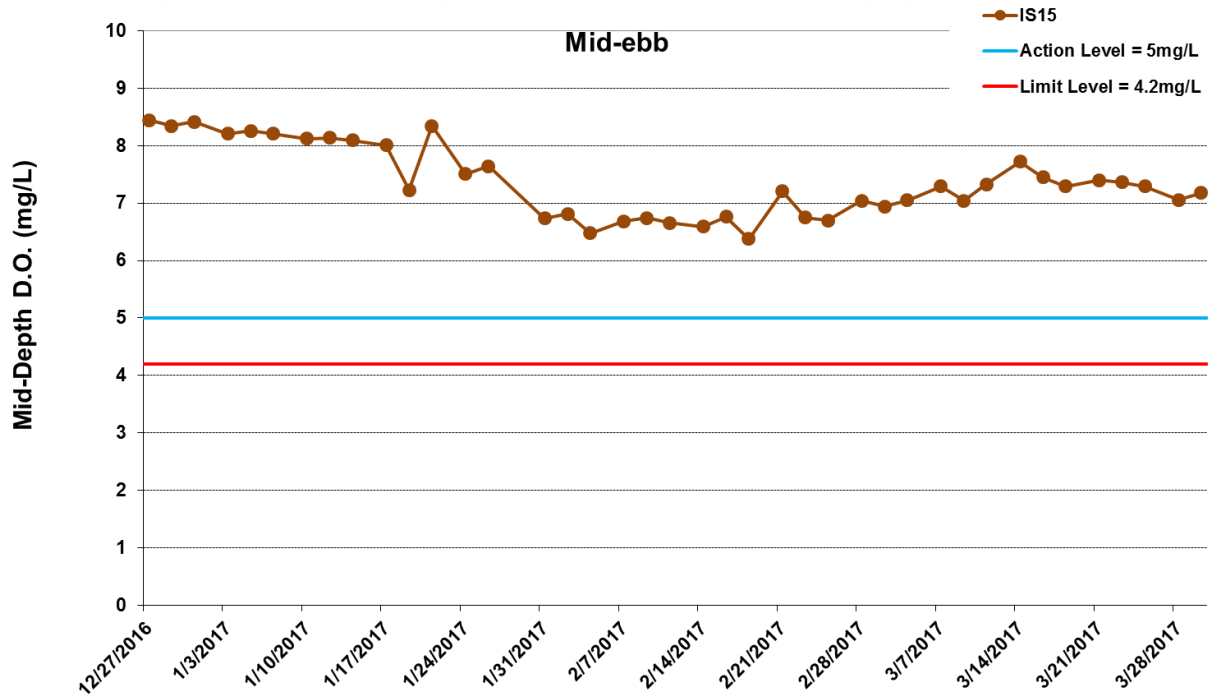




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I14 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.

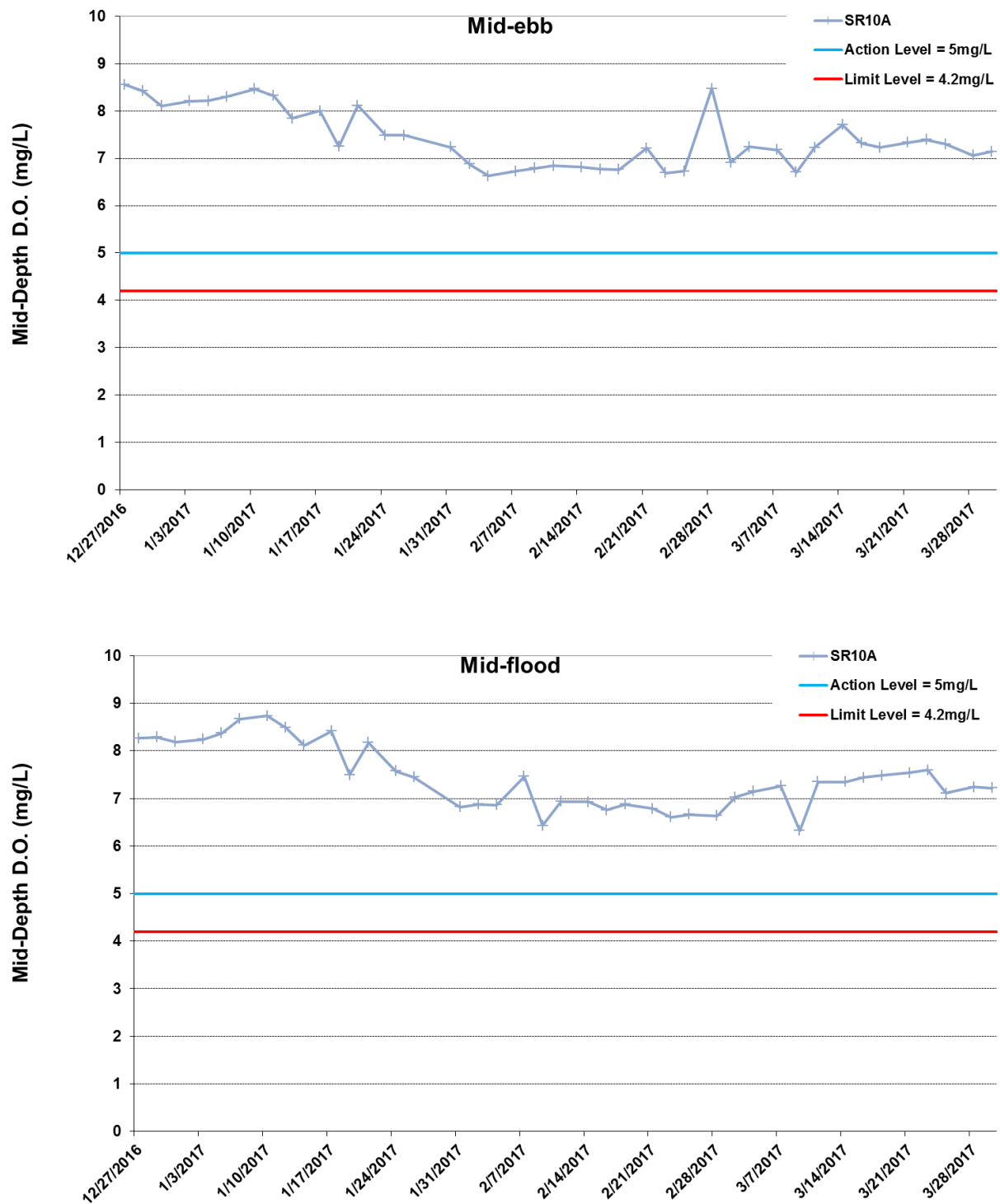




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 27 December 2016 and 31 March 2017 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.





*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 27 December 2016 and 31 March 2017 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



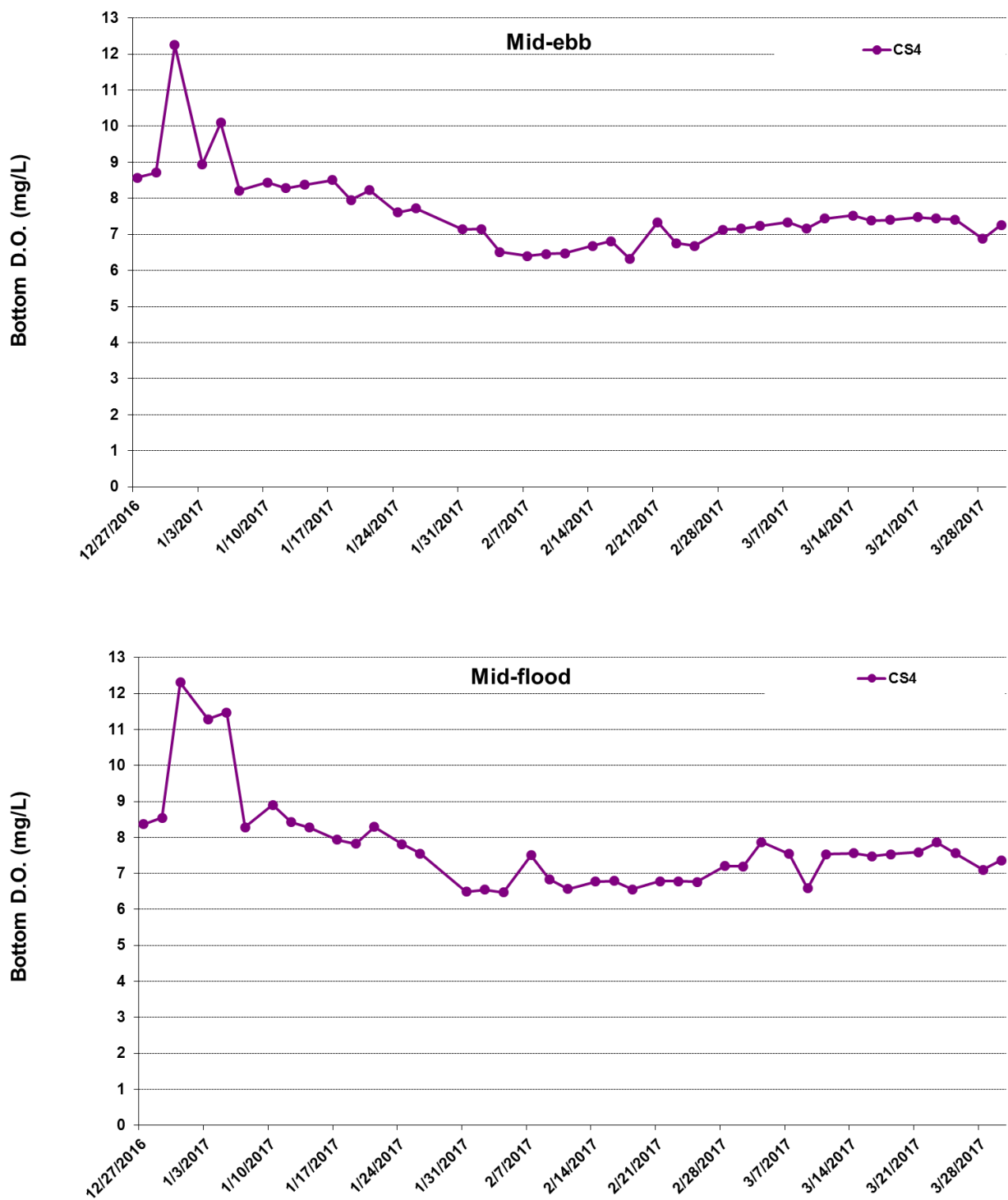


Figure I17 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

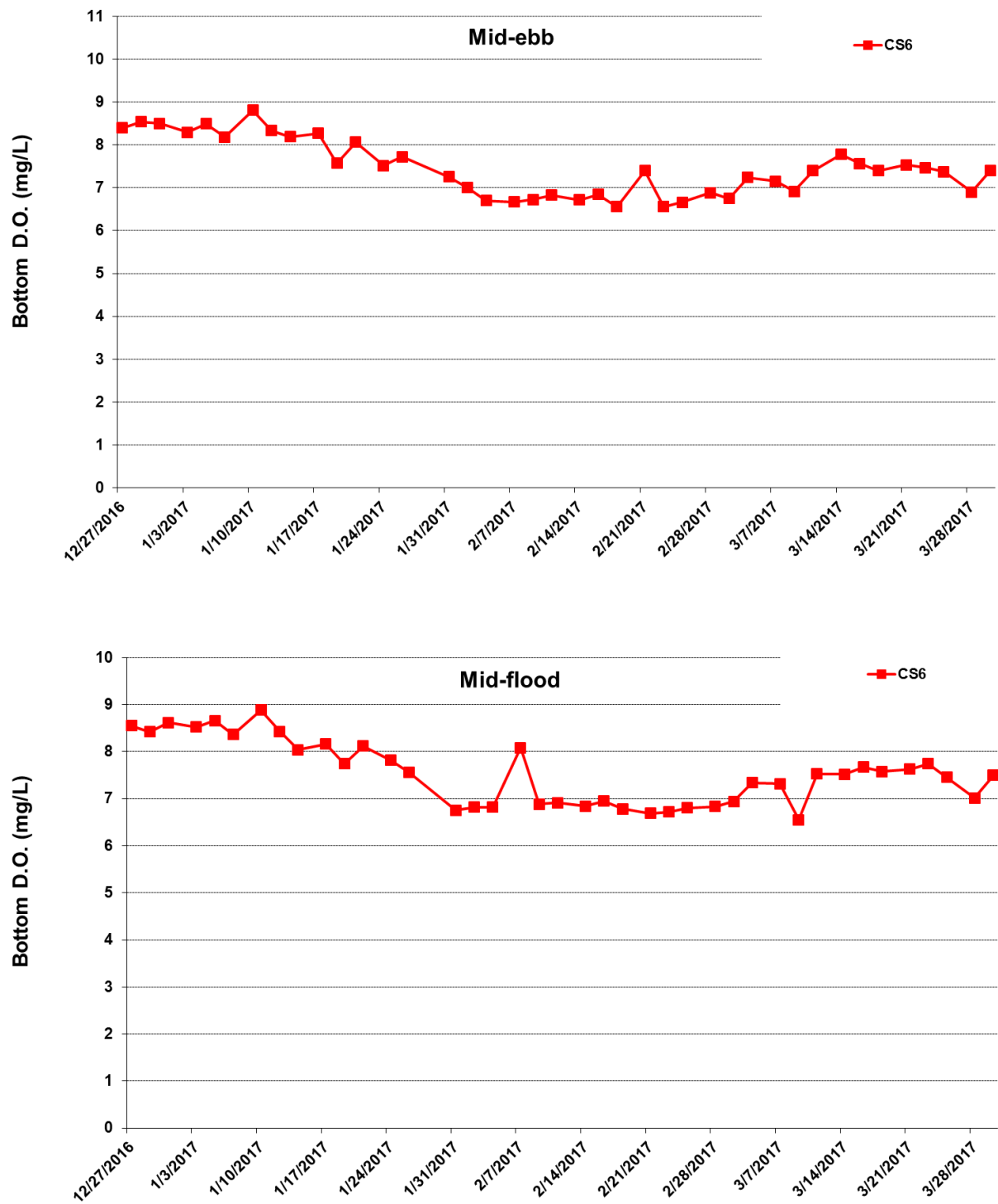


Figure I18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



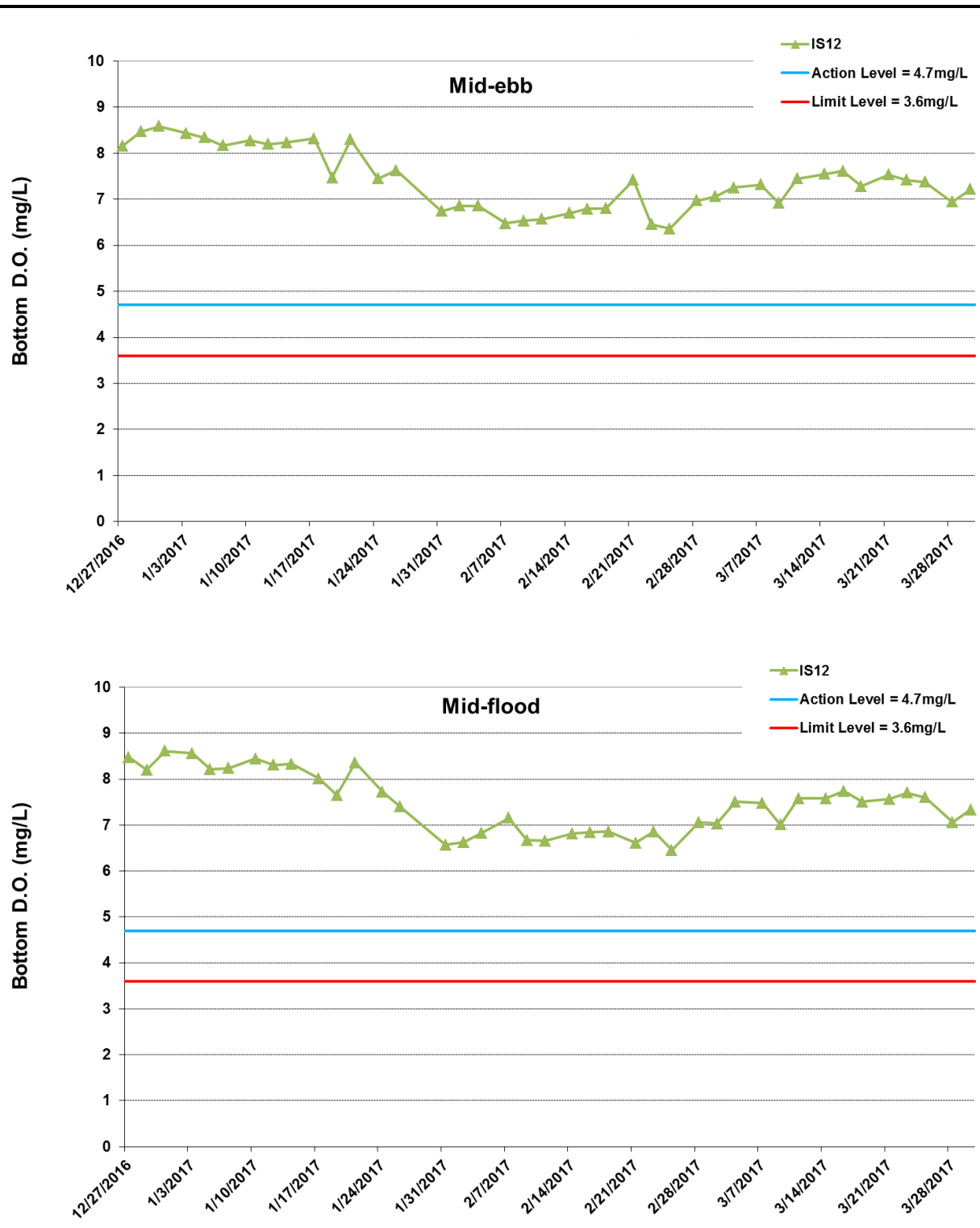


Figure I19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

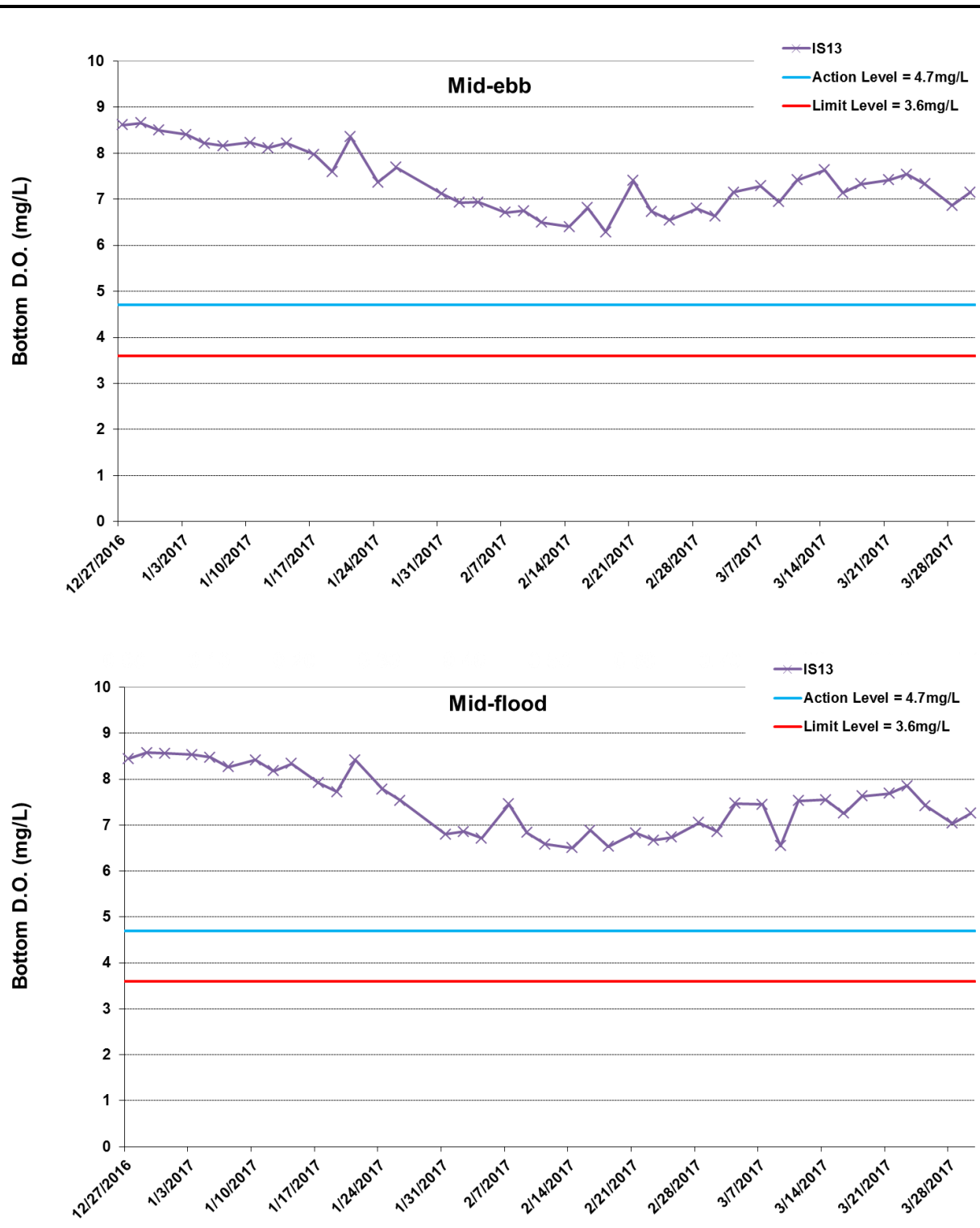


Figure I20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

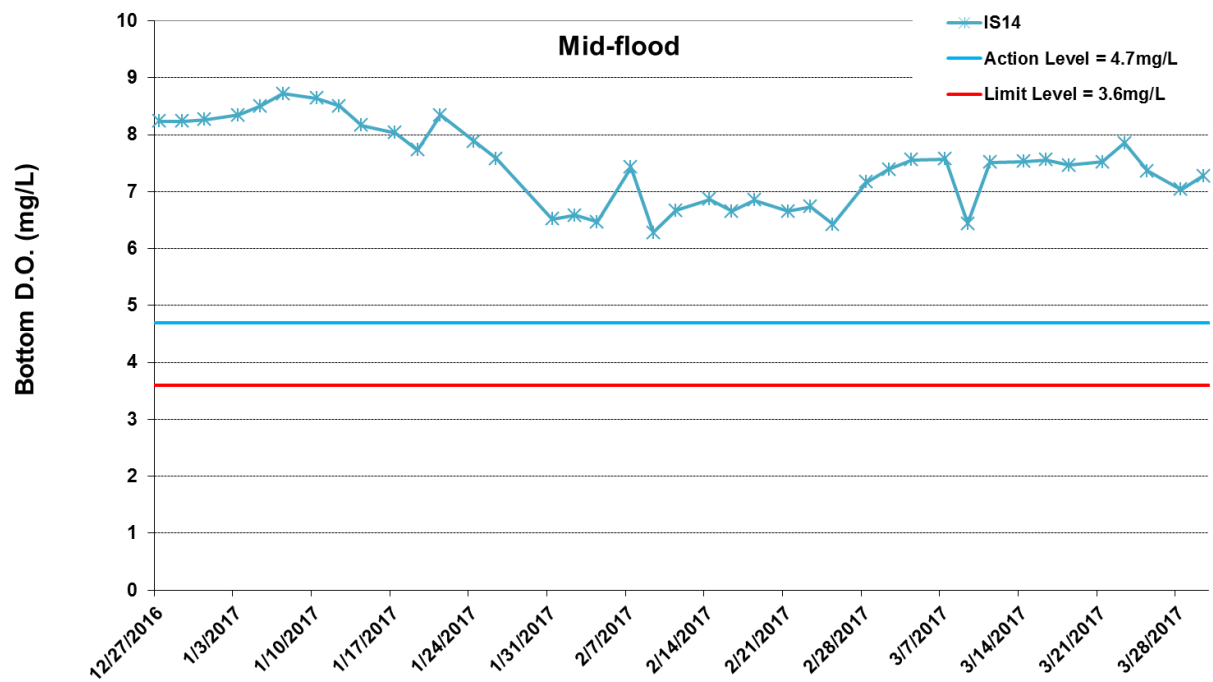
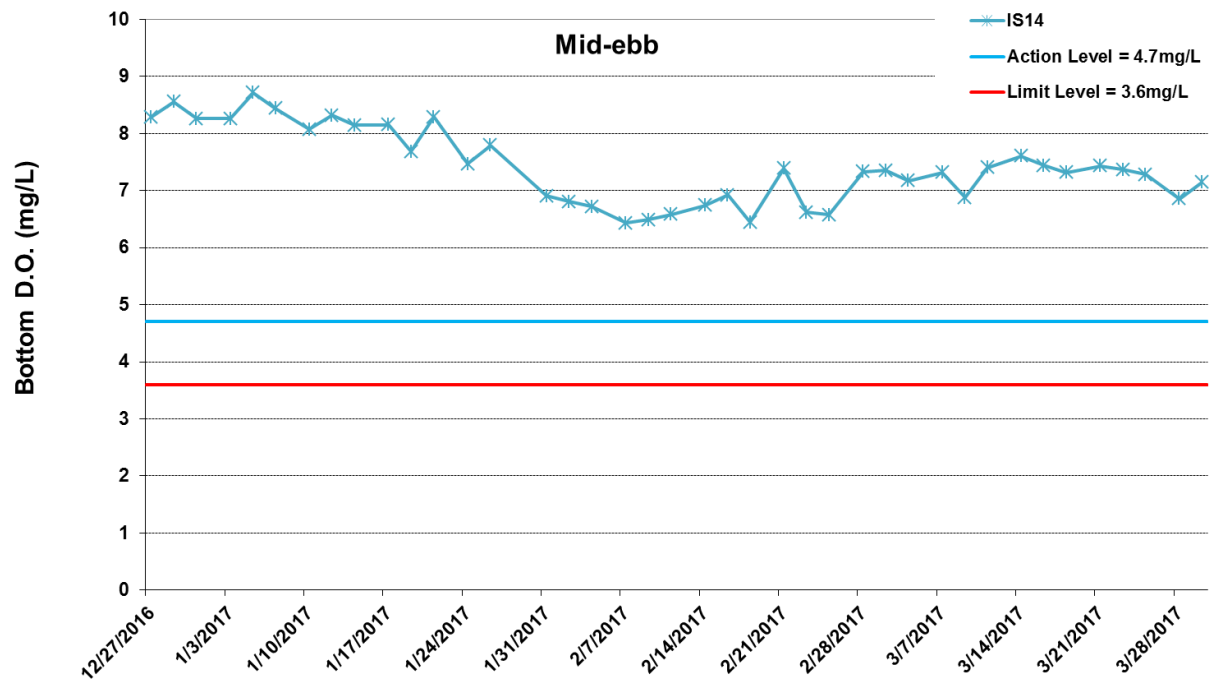


Figure I21 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



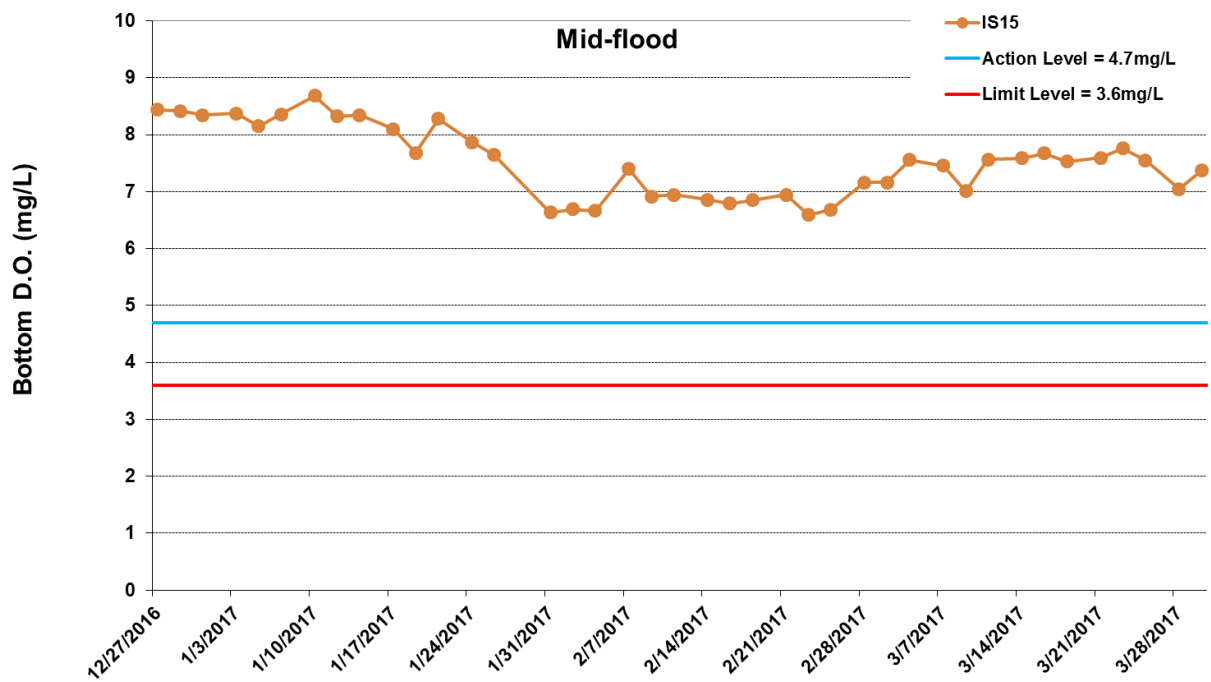
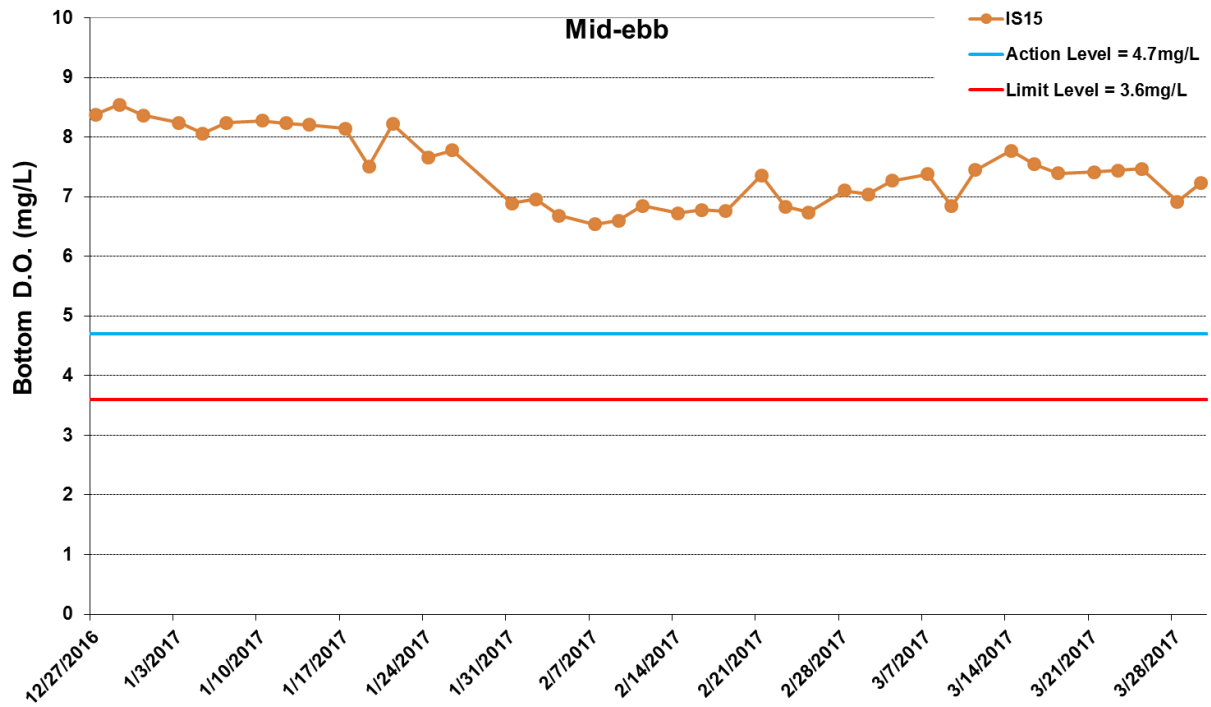


Figure I22 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



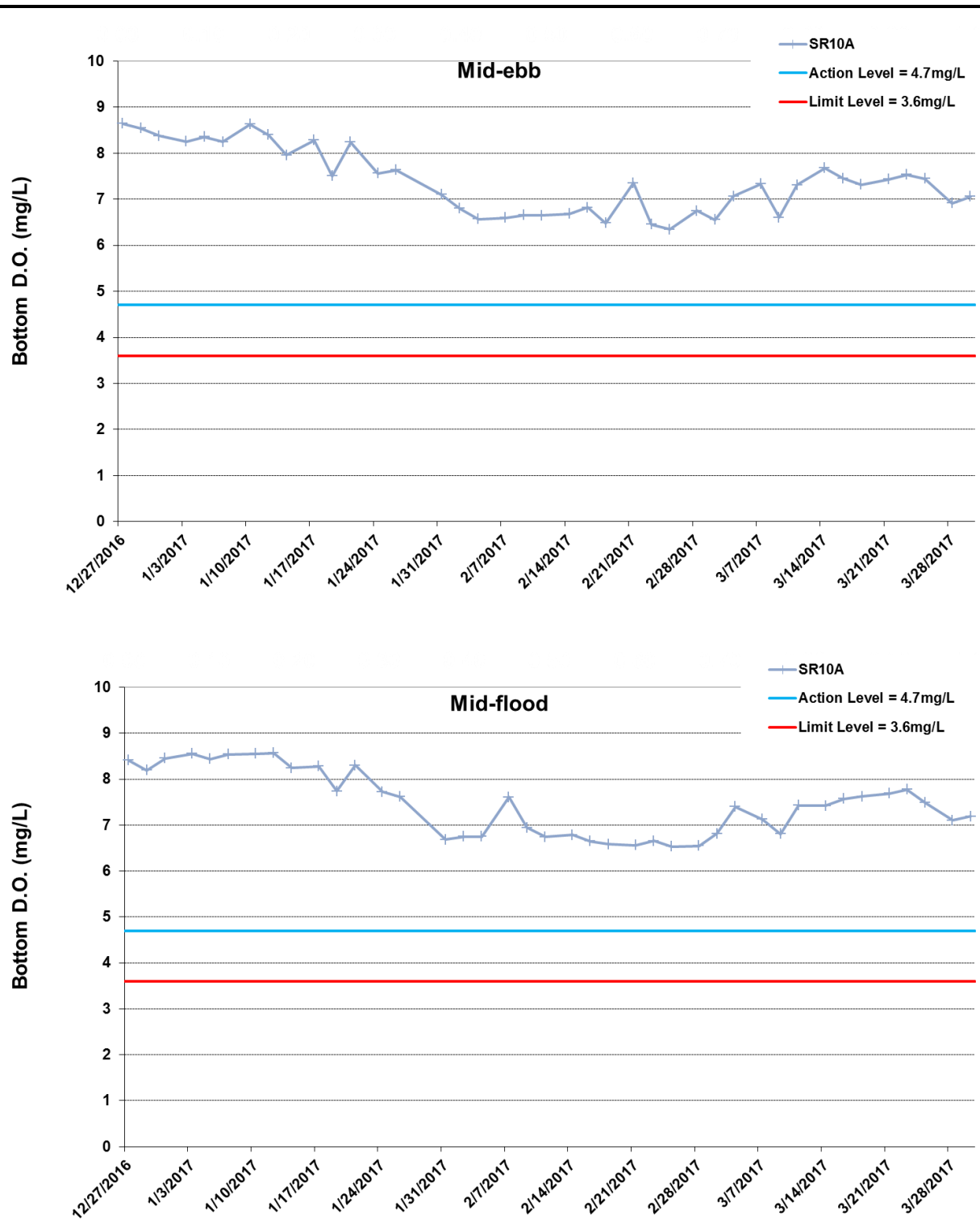


Figure I23 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

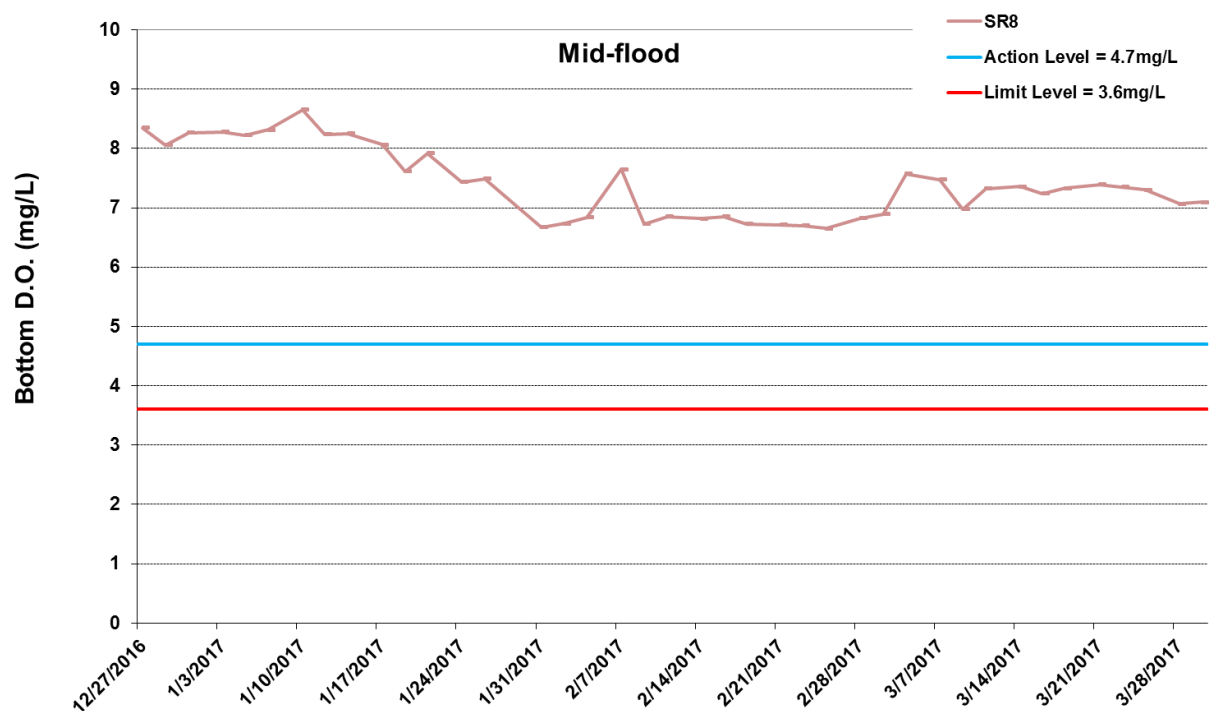
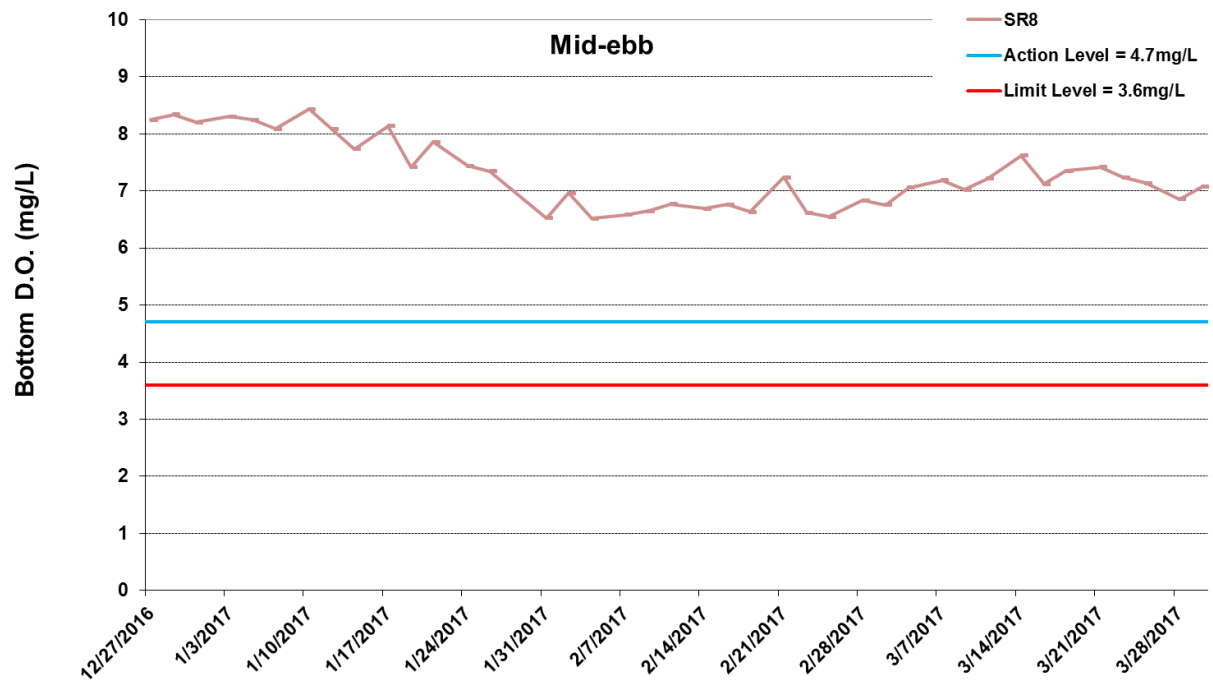


Figure I24 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



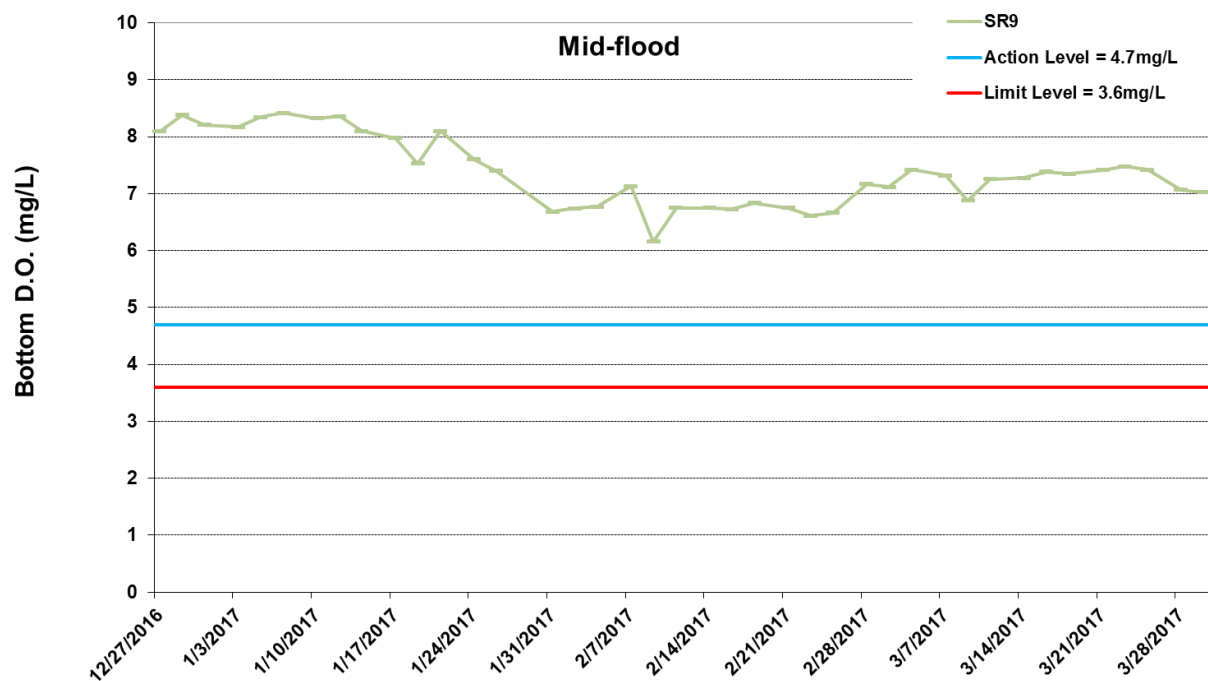
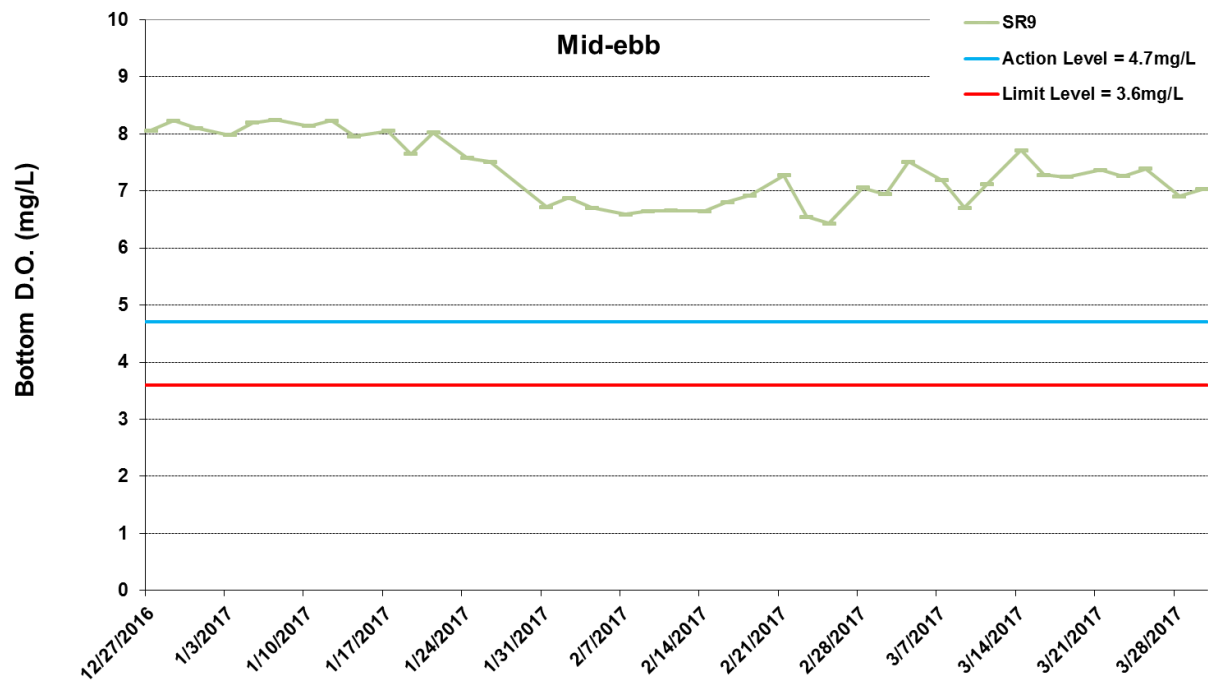


Figure I25 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 27 December 2016 and 31 March 2017 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



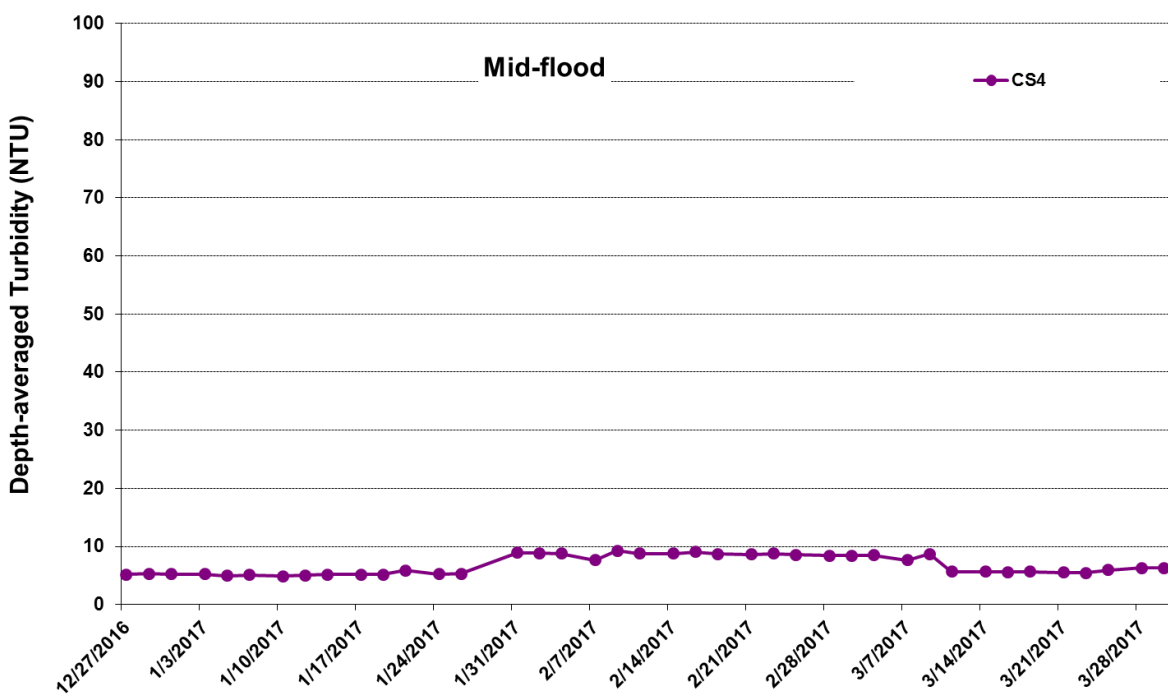
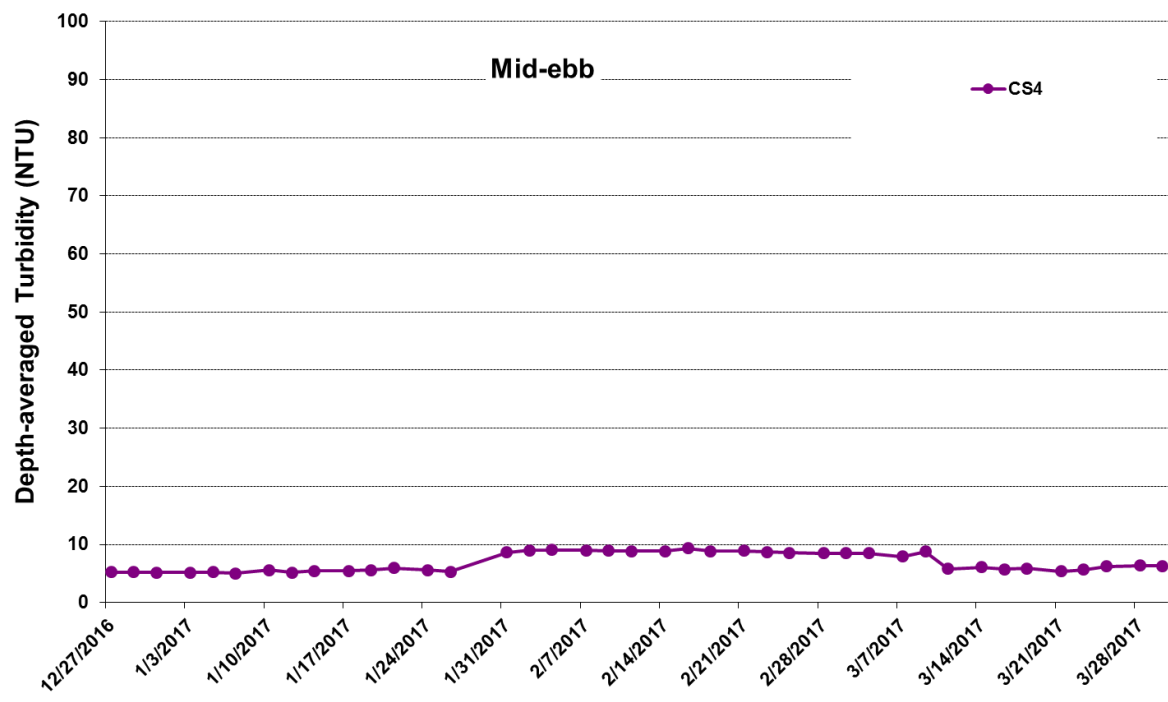


Figure I26 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



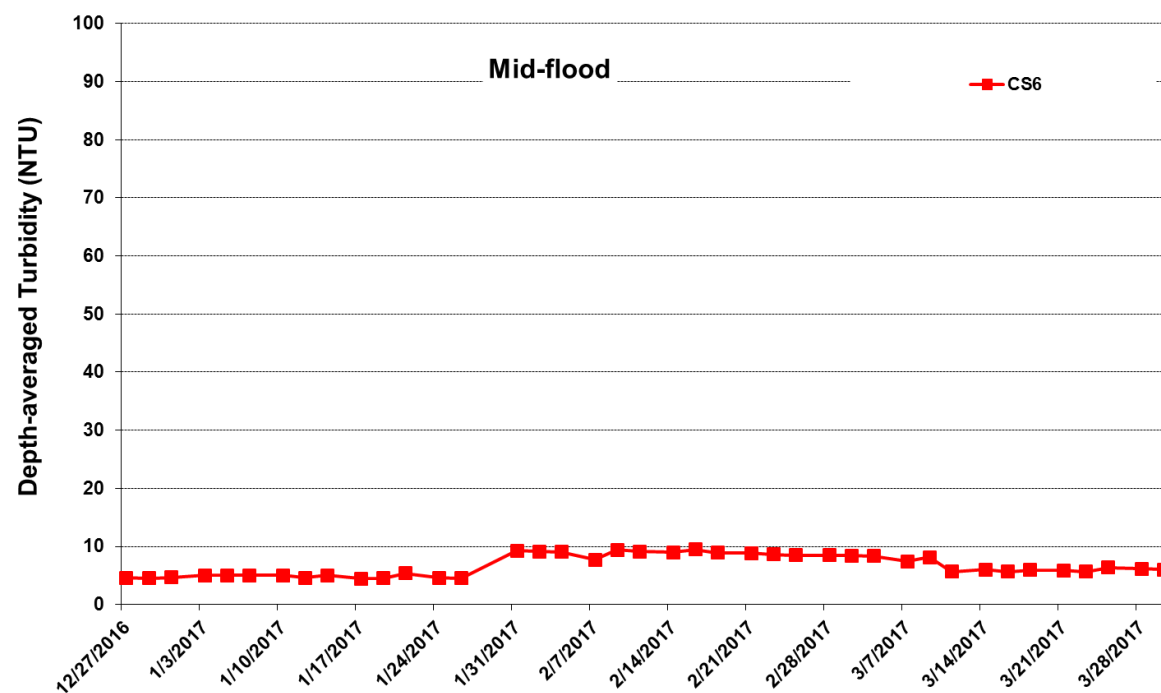
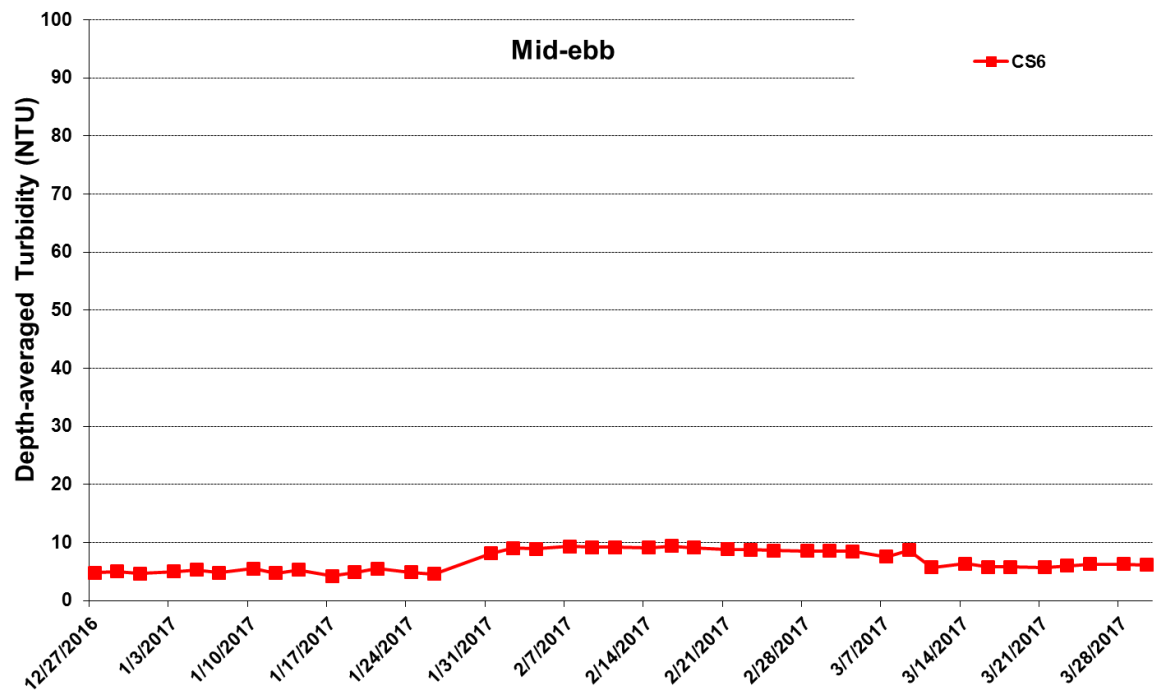


Figure I27 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



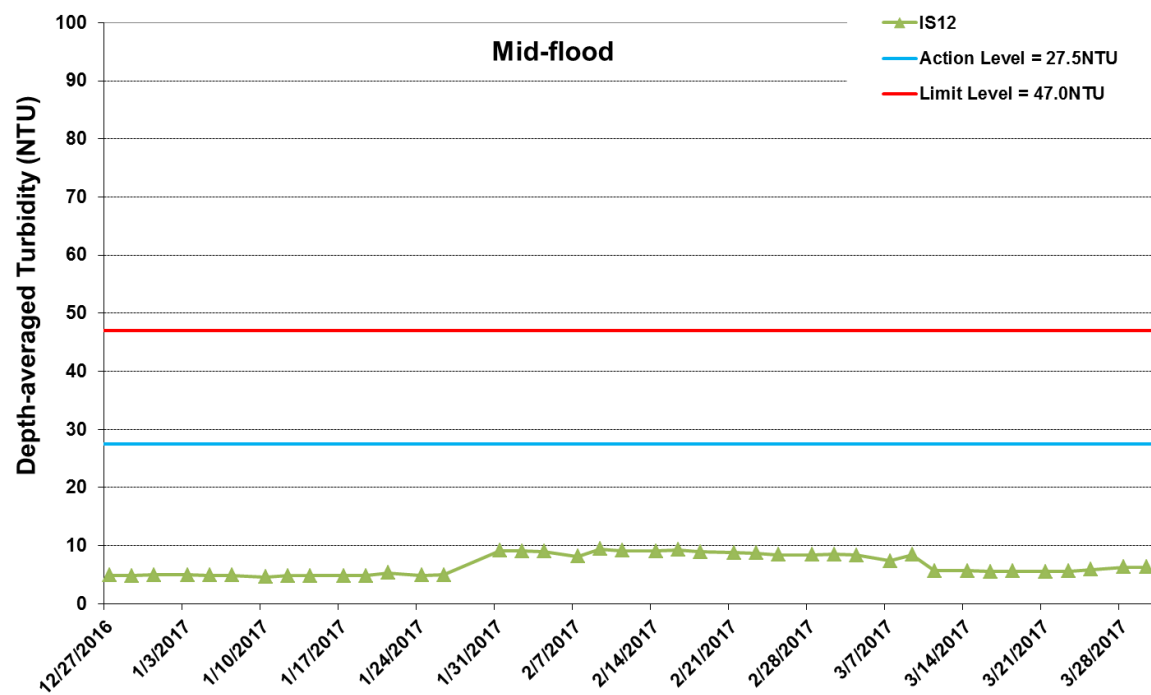
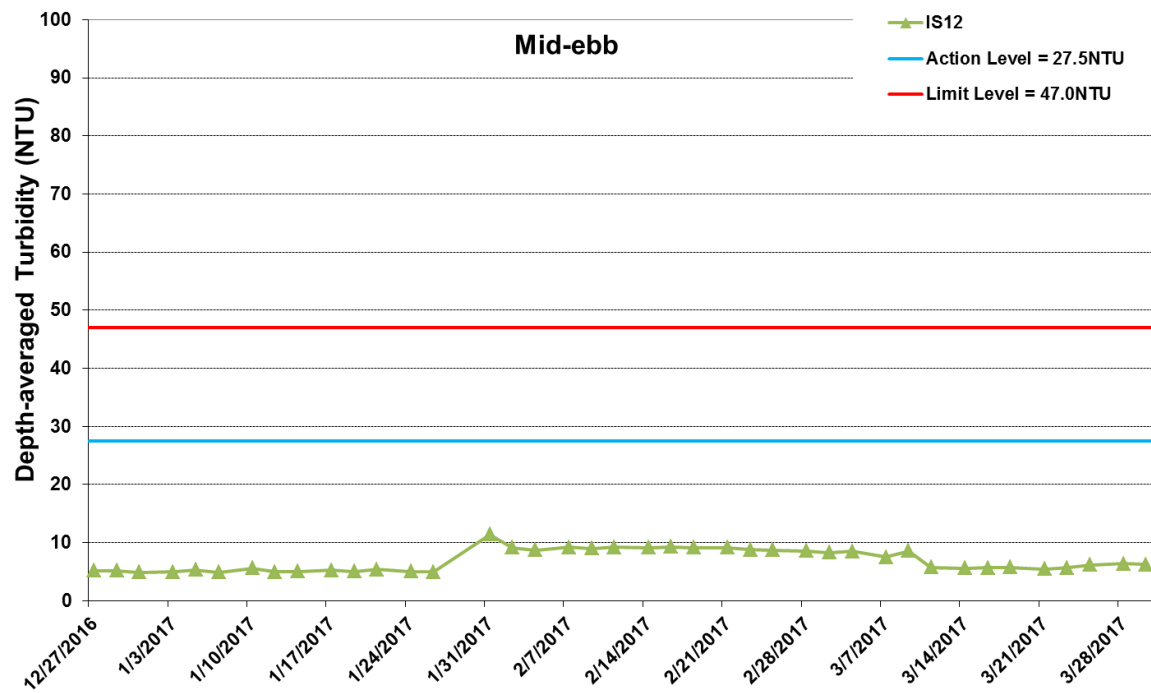


Figure I28 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



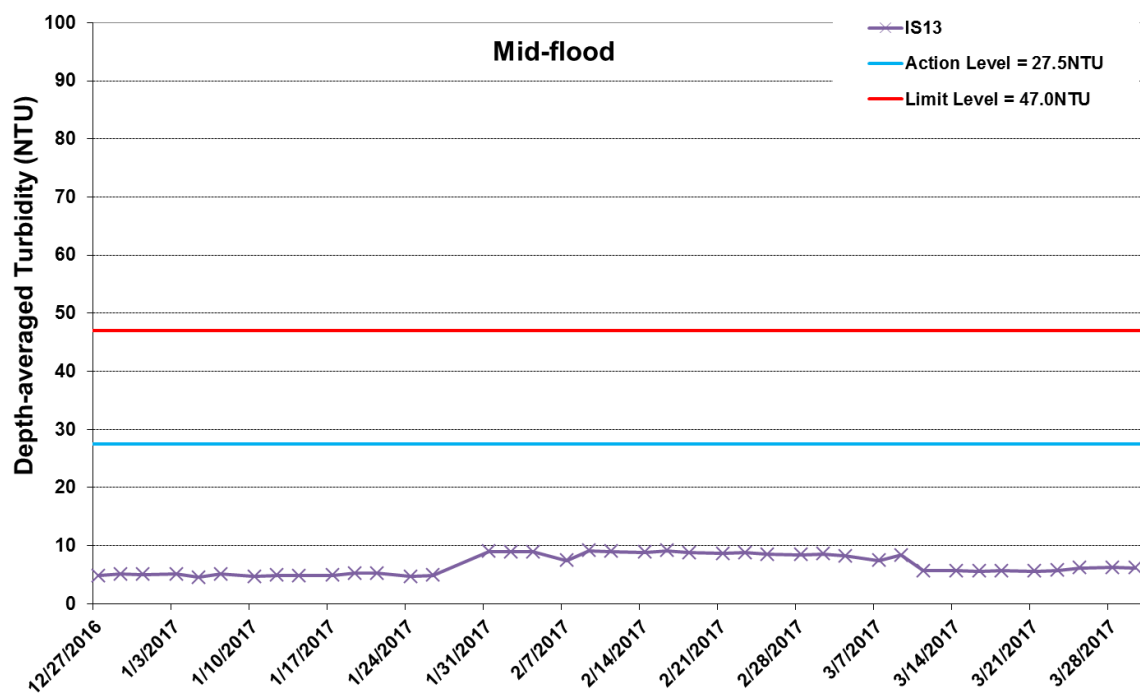
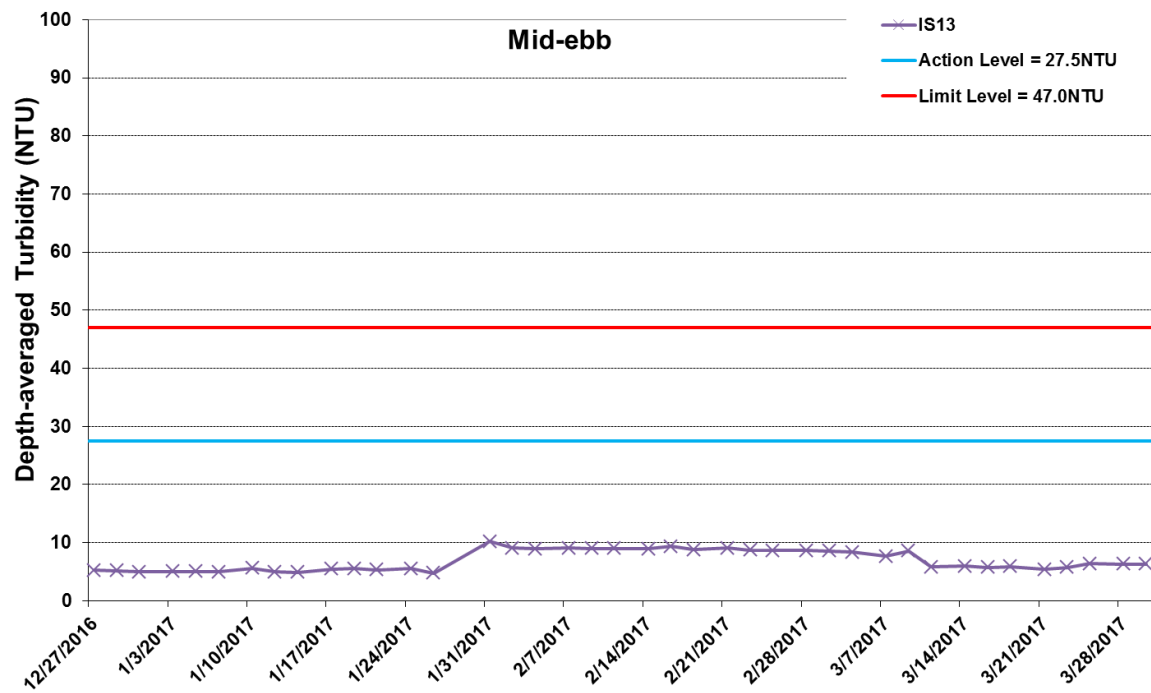


Figure I29 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



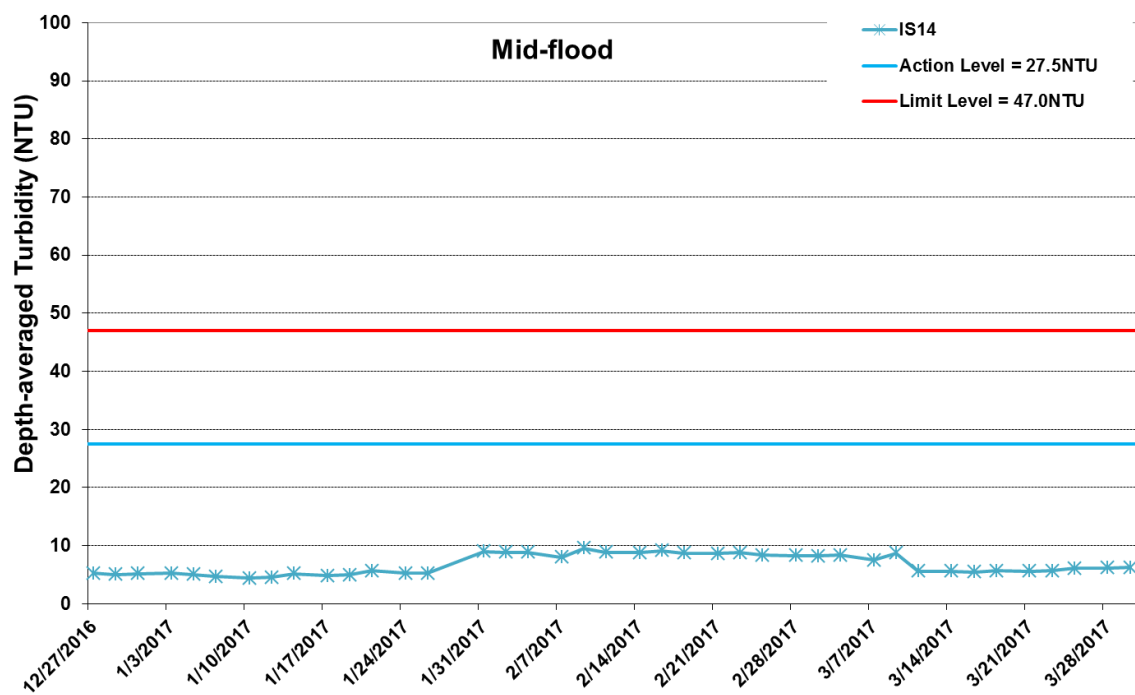
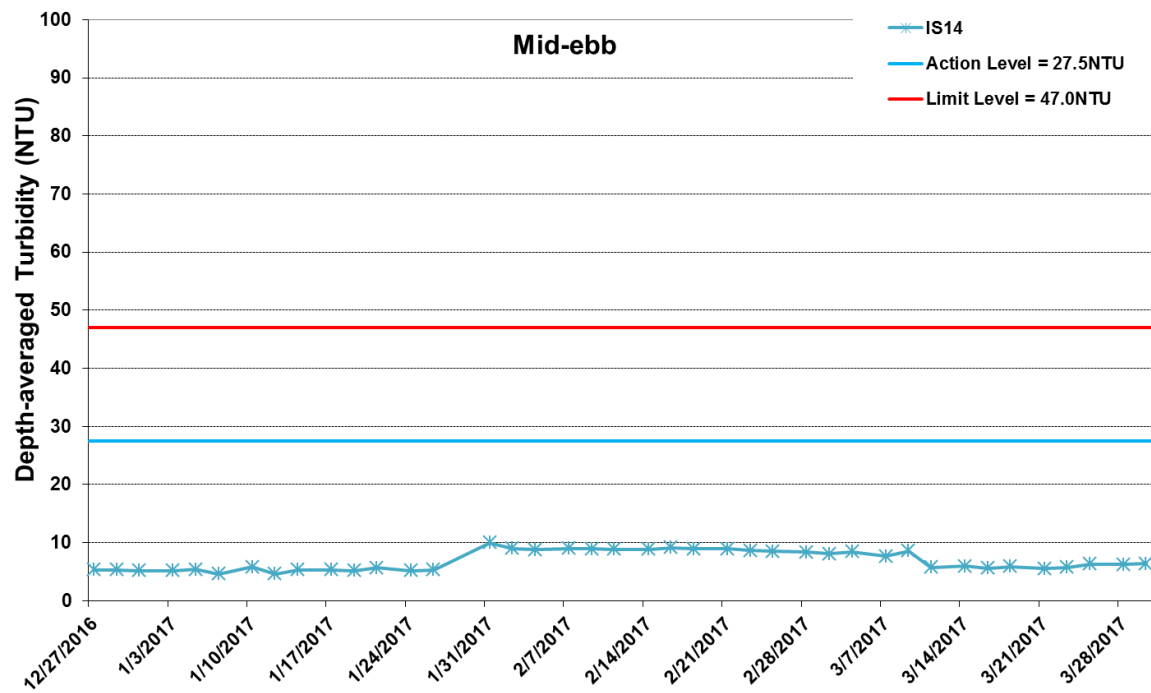


Figure I30 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



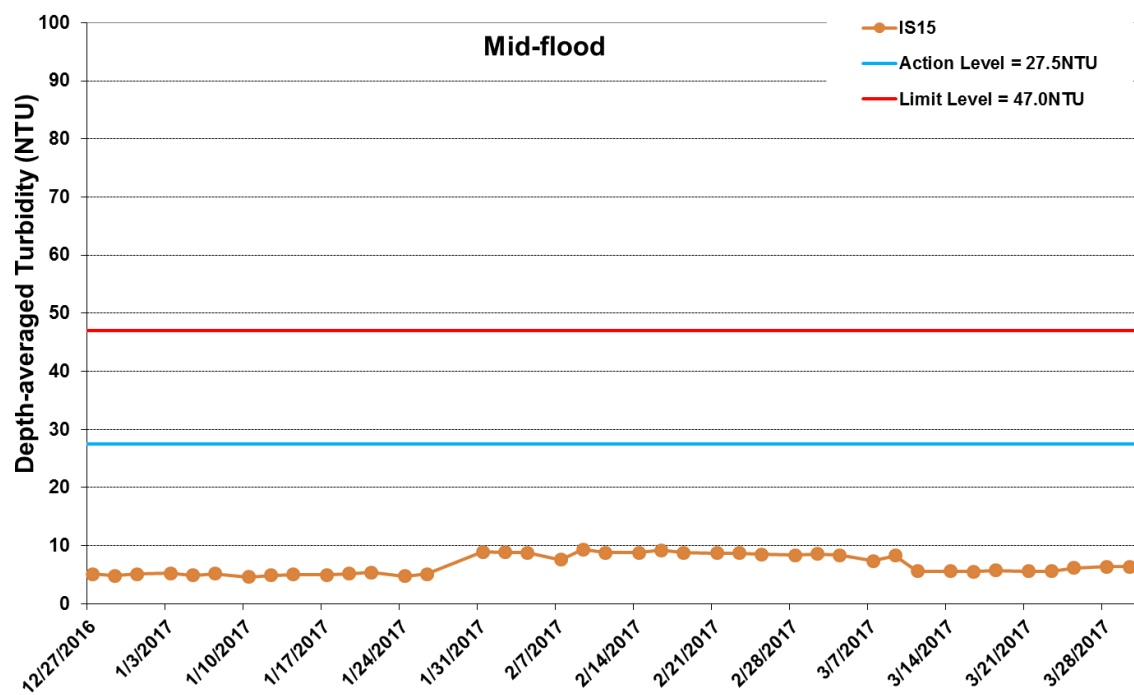
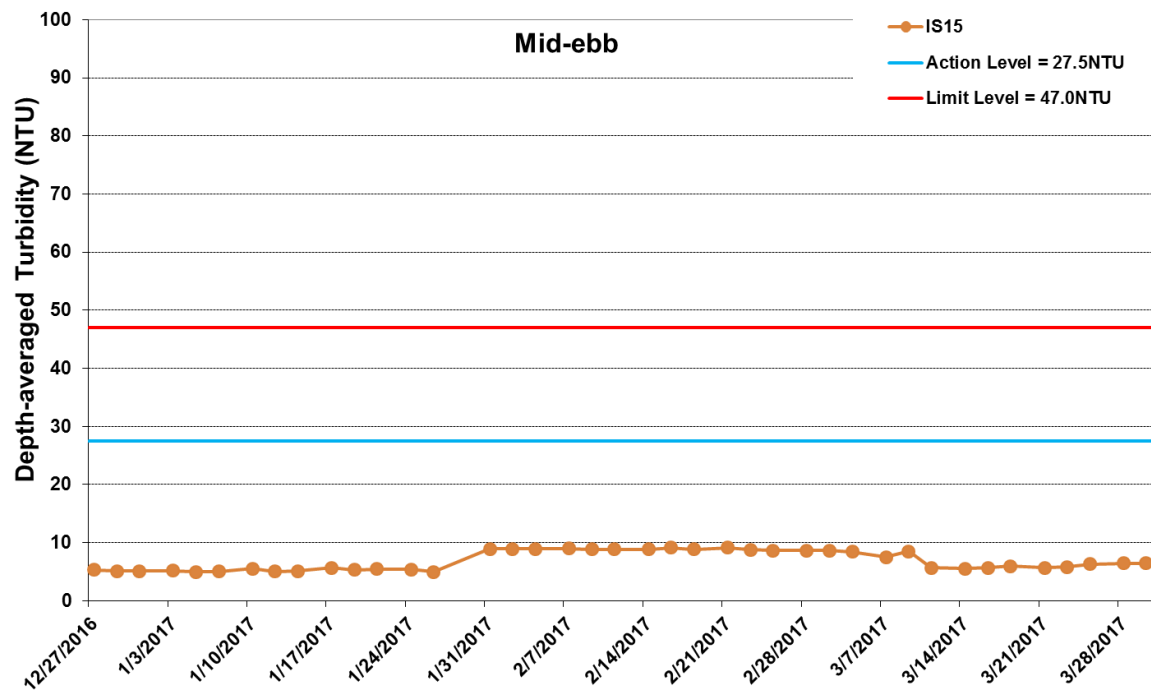


Figure I31 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



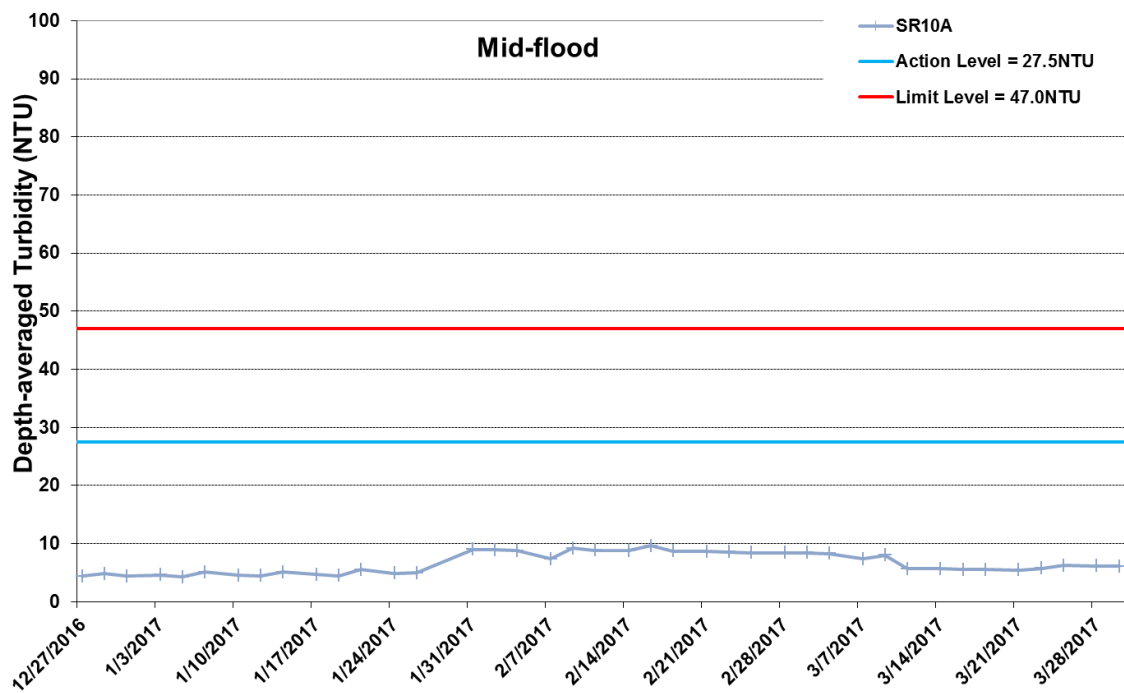
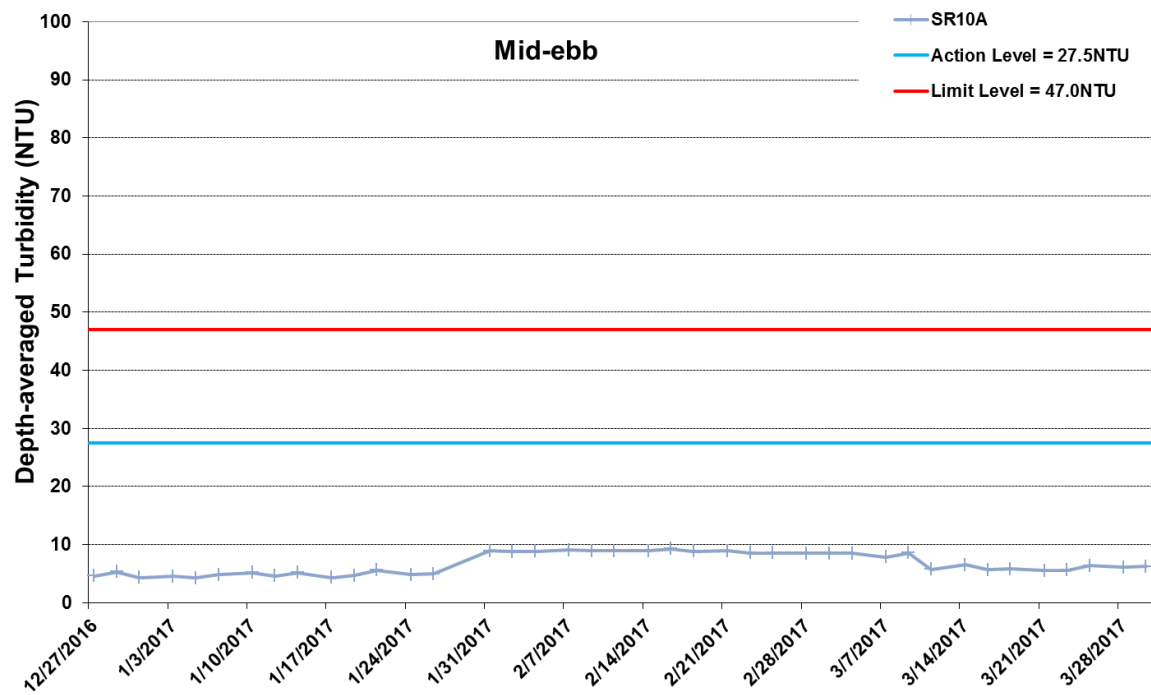


Figure I32 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



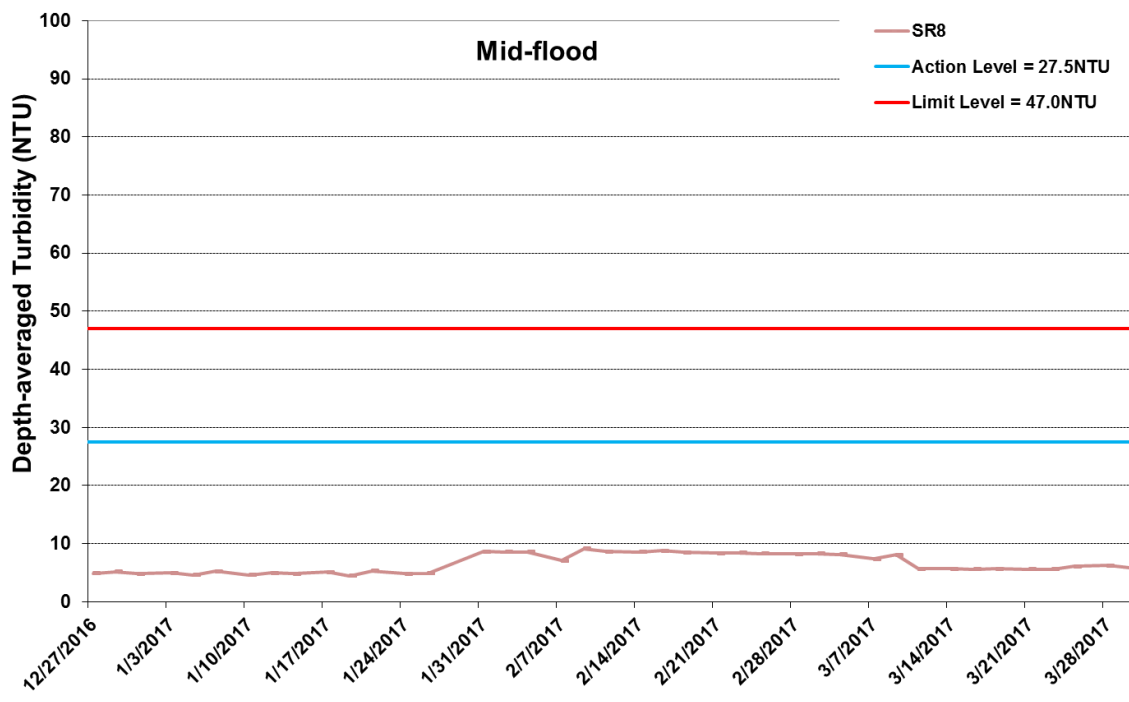
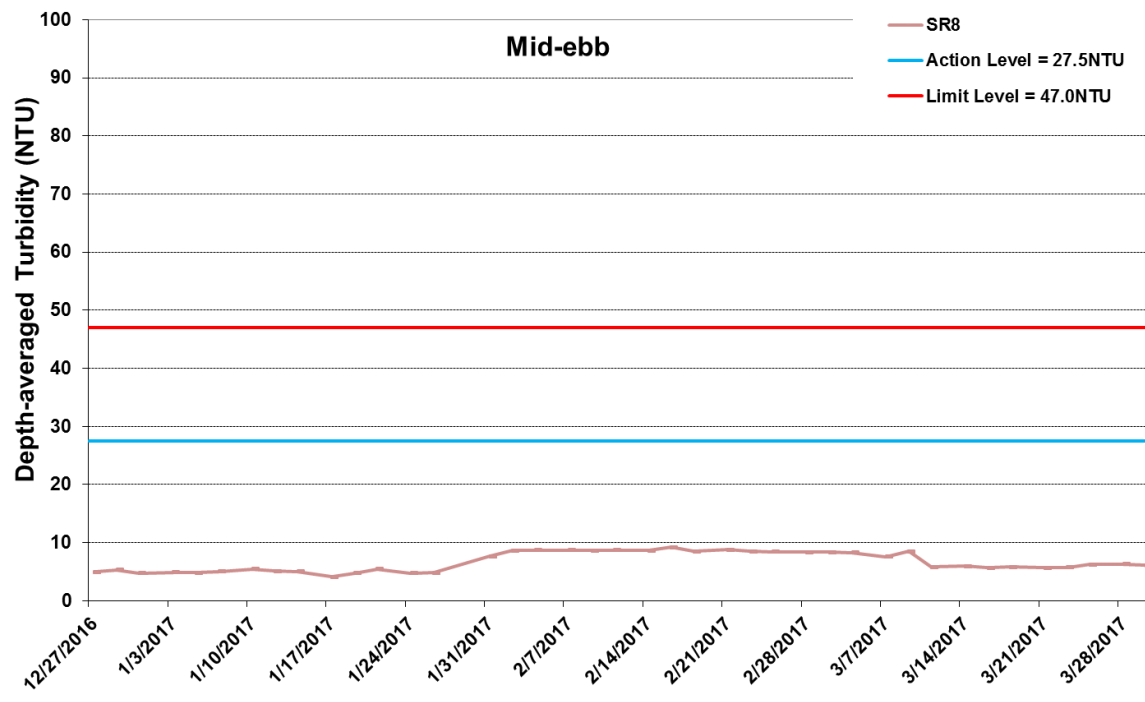


Figure I33 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



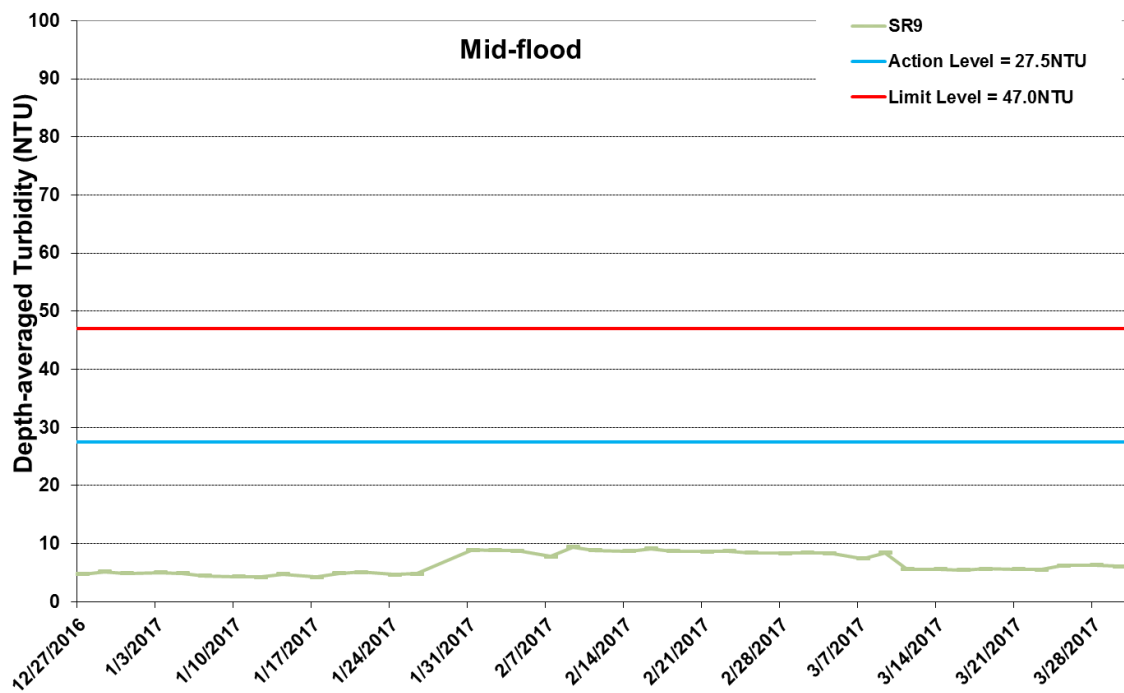
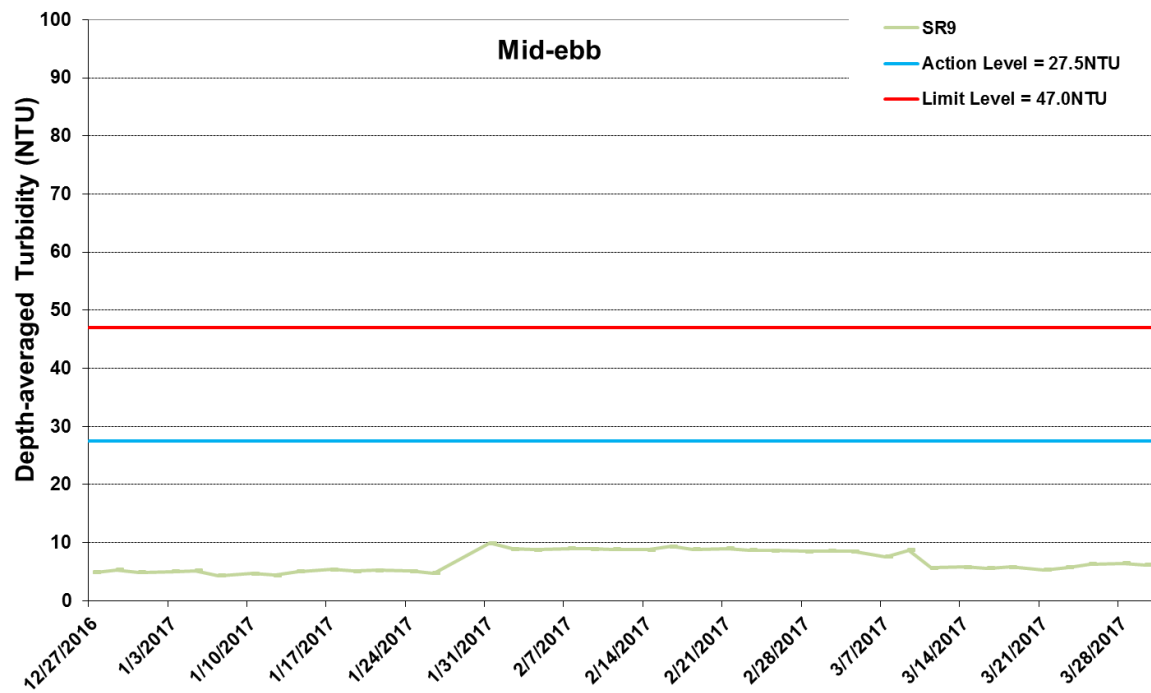


Figure I34 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 27 December 2016 and 31 March 2017 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



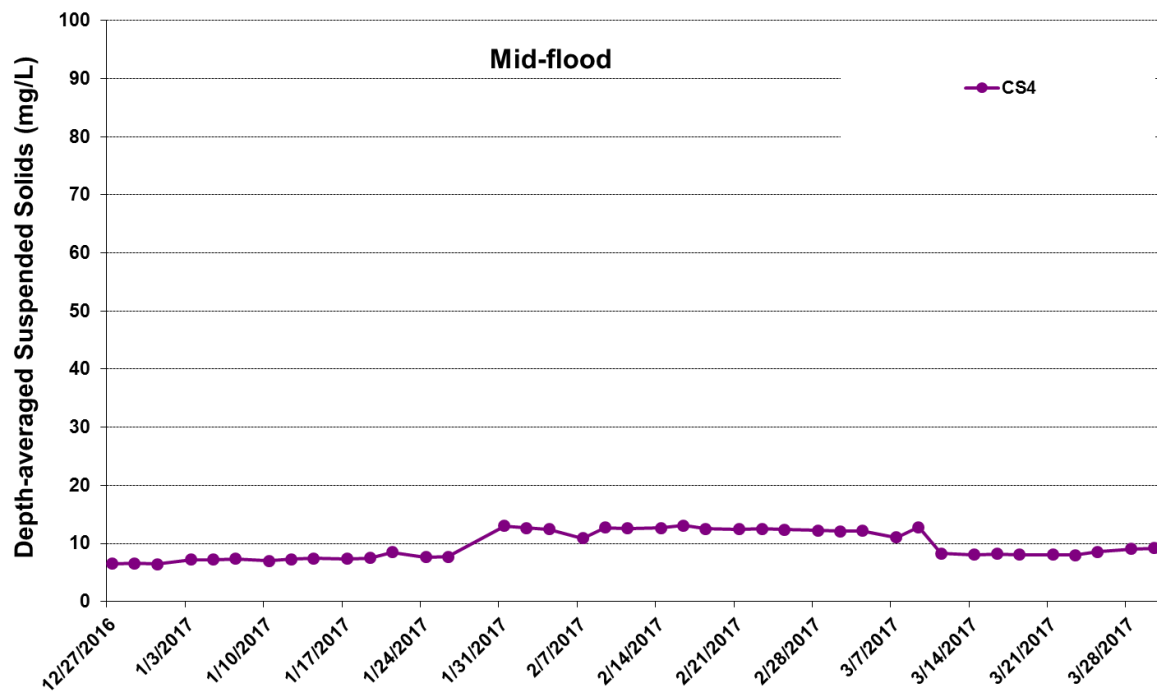
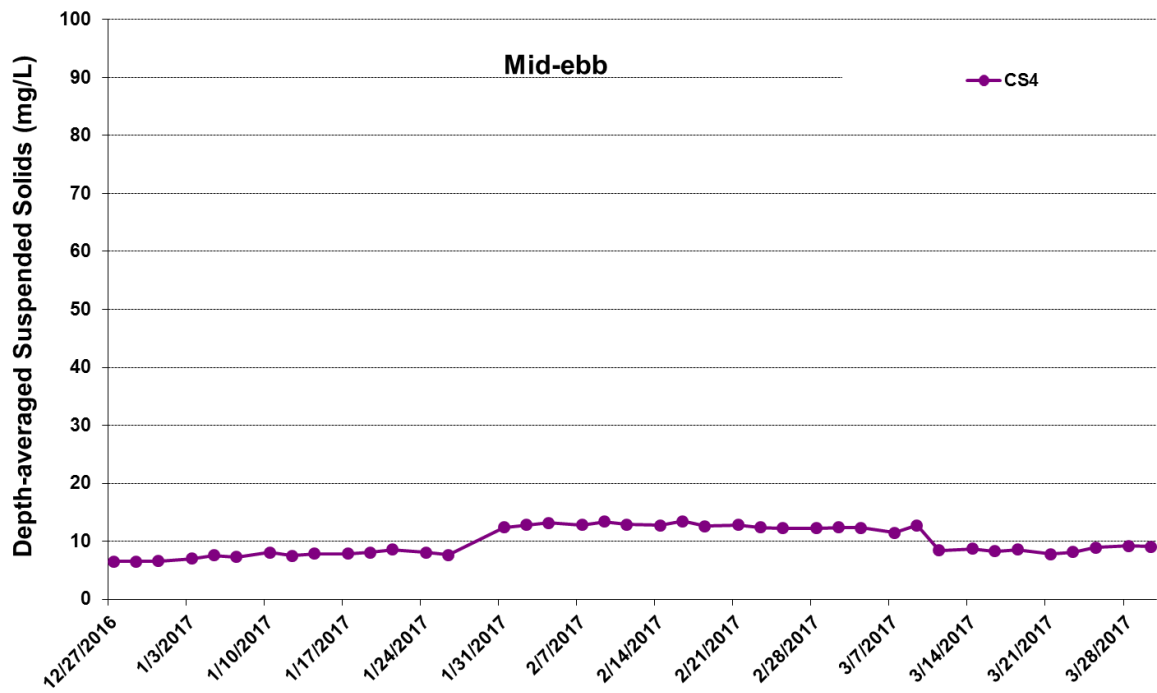


Figure I35 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



Ref: 0212330_Impact-WQM_March2017_graphs_Rev a.xls

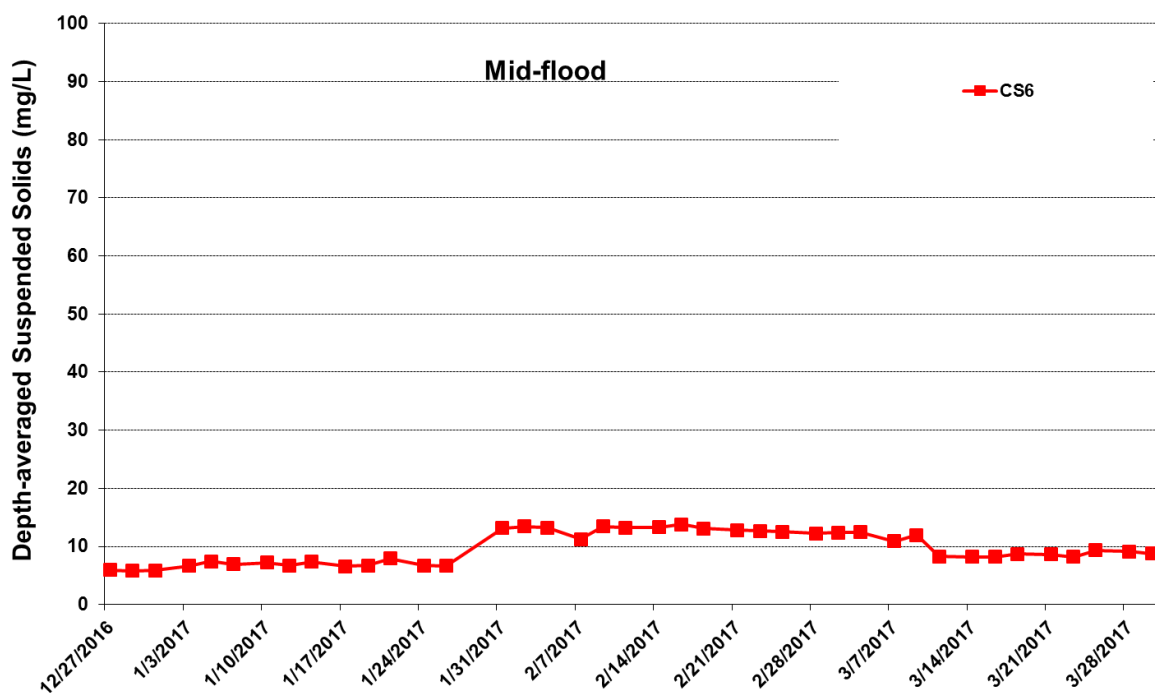
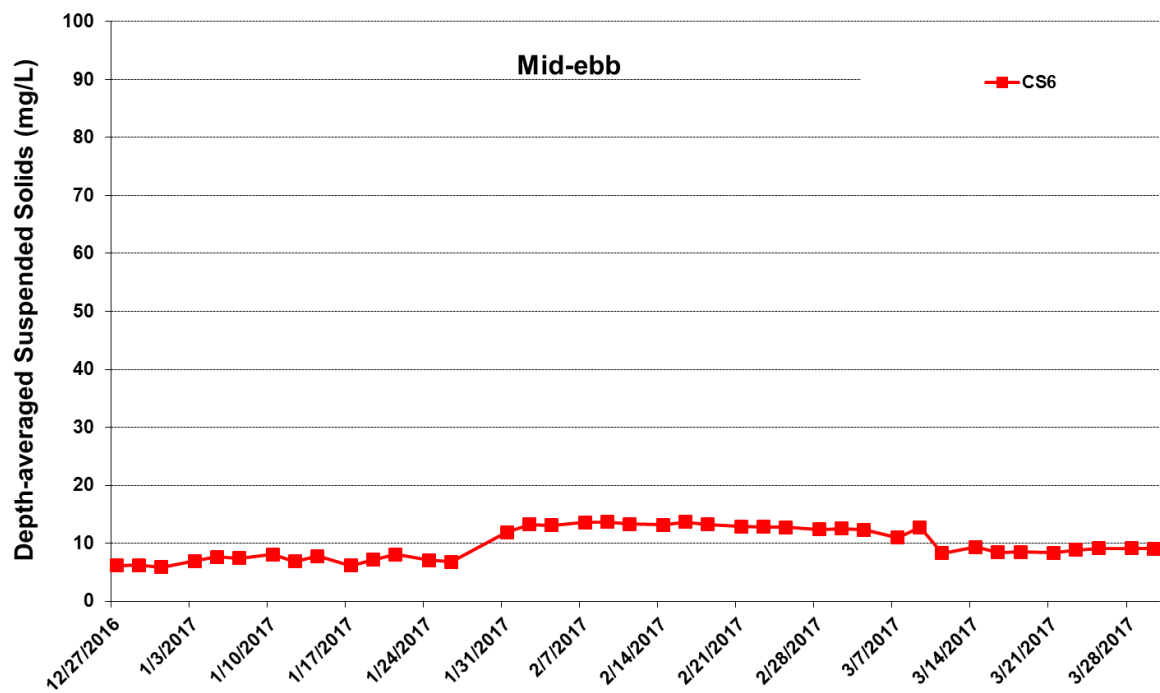


Figure I36 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



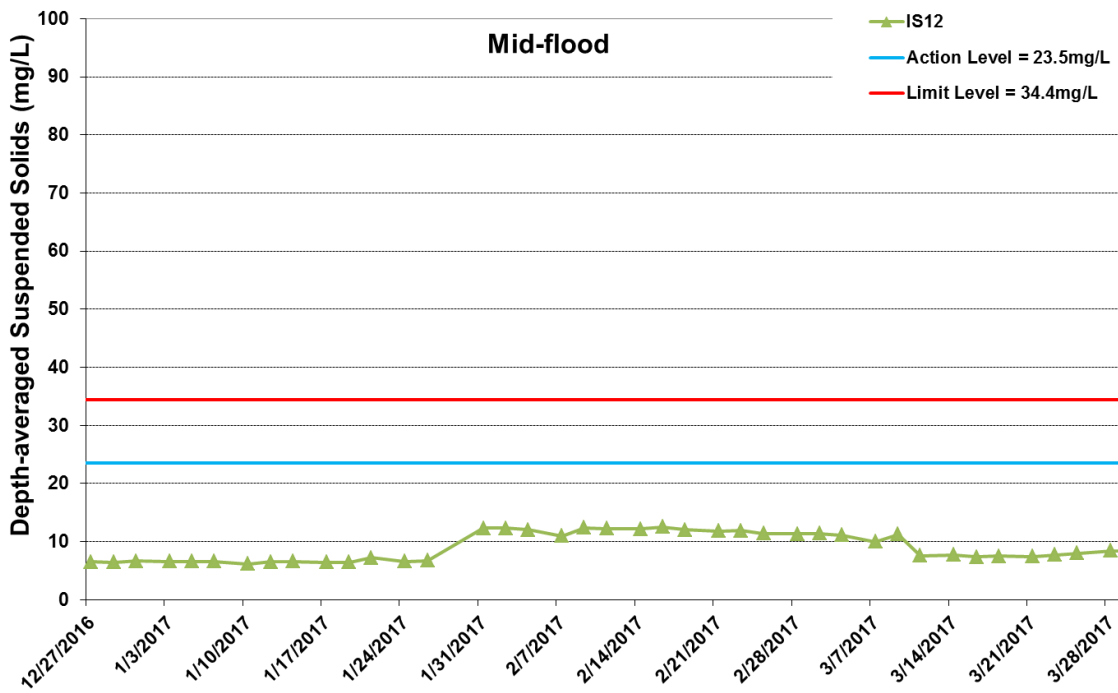
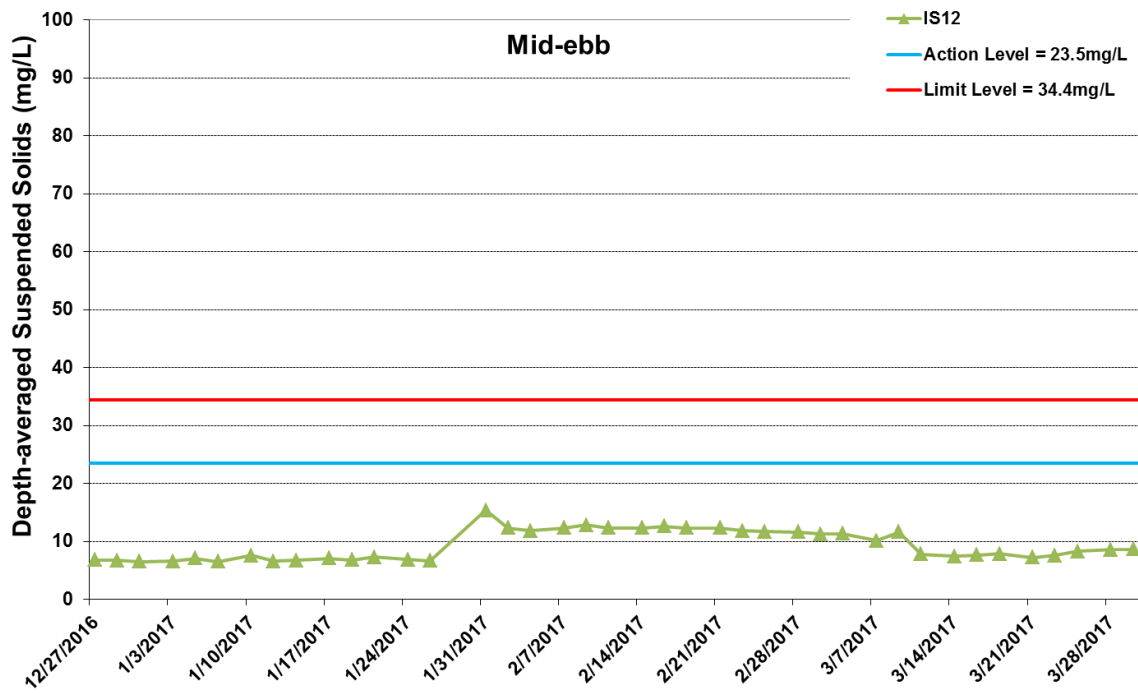


Figure I37 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



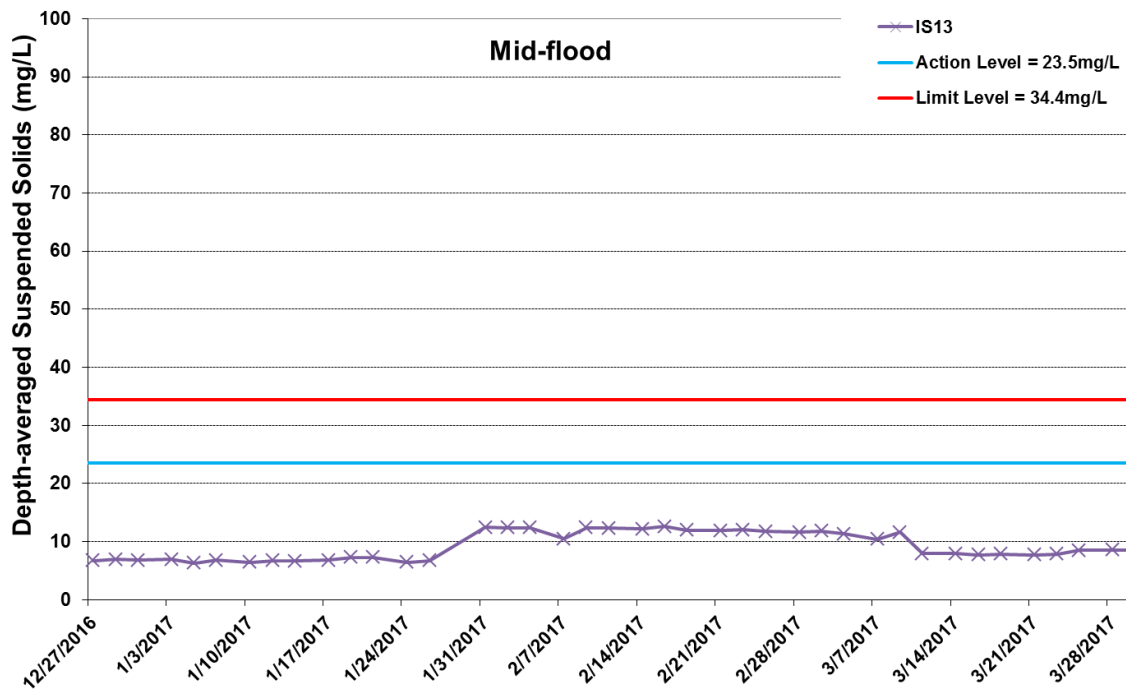
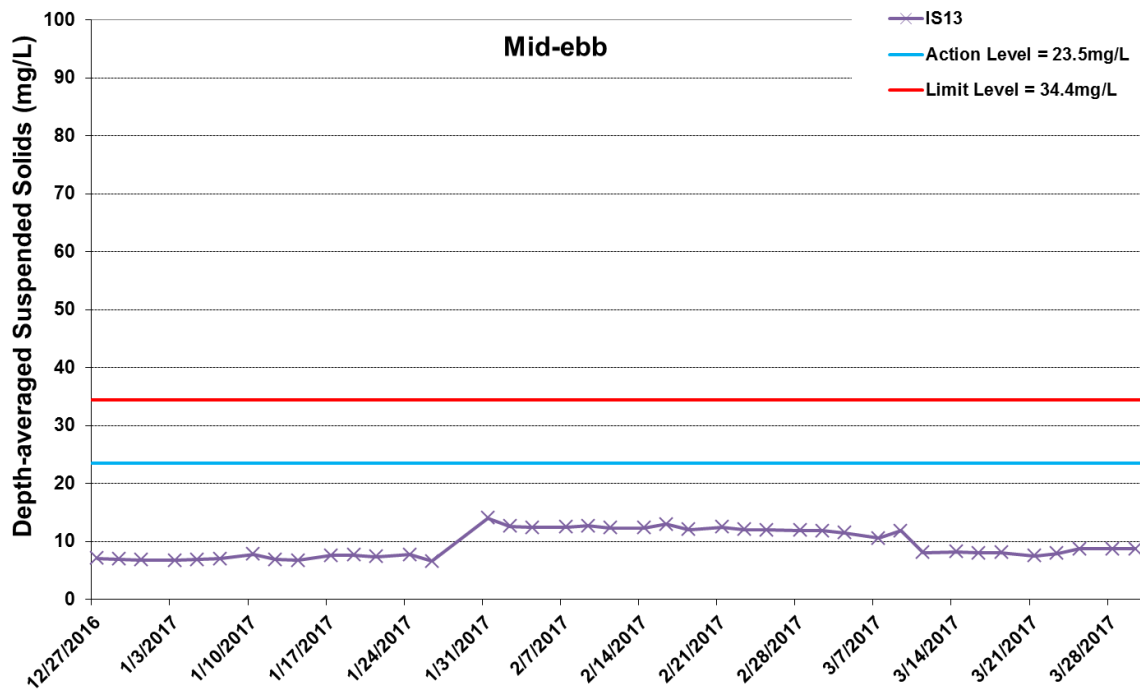


Figure I38 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



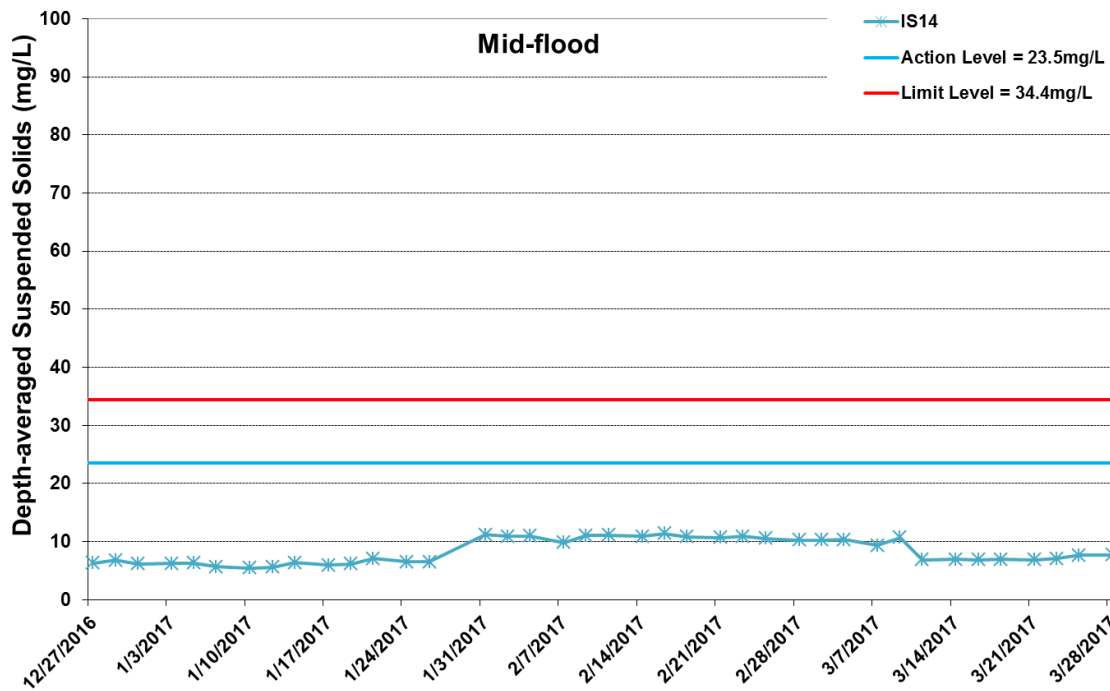
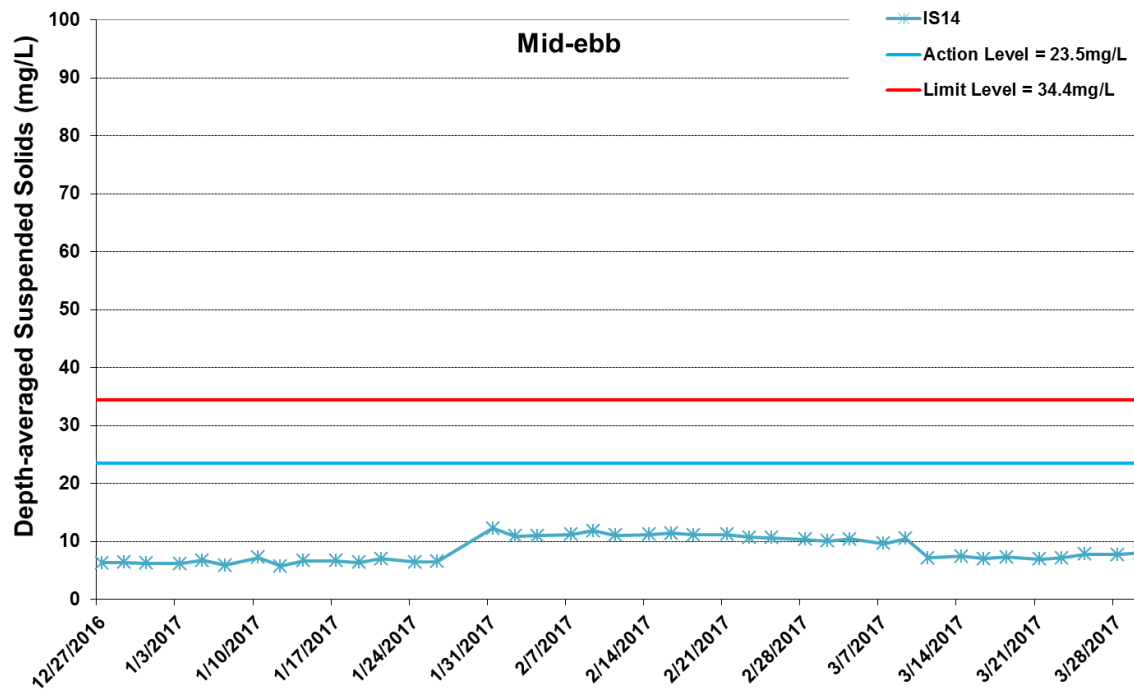


Figure I39 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



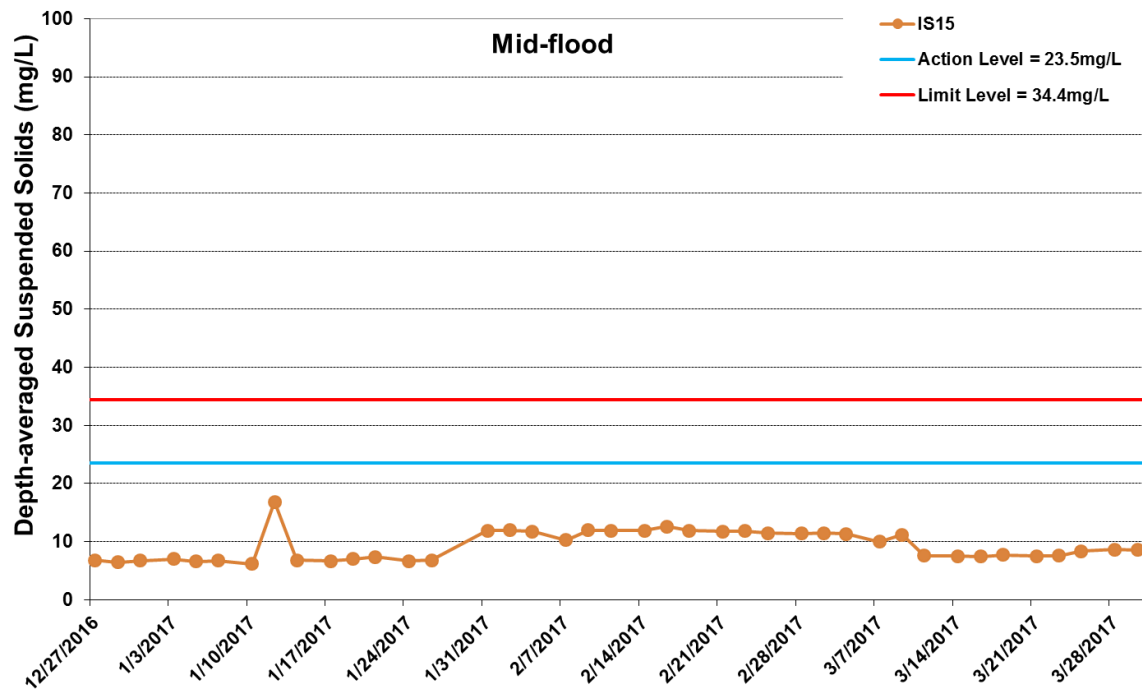
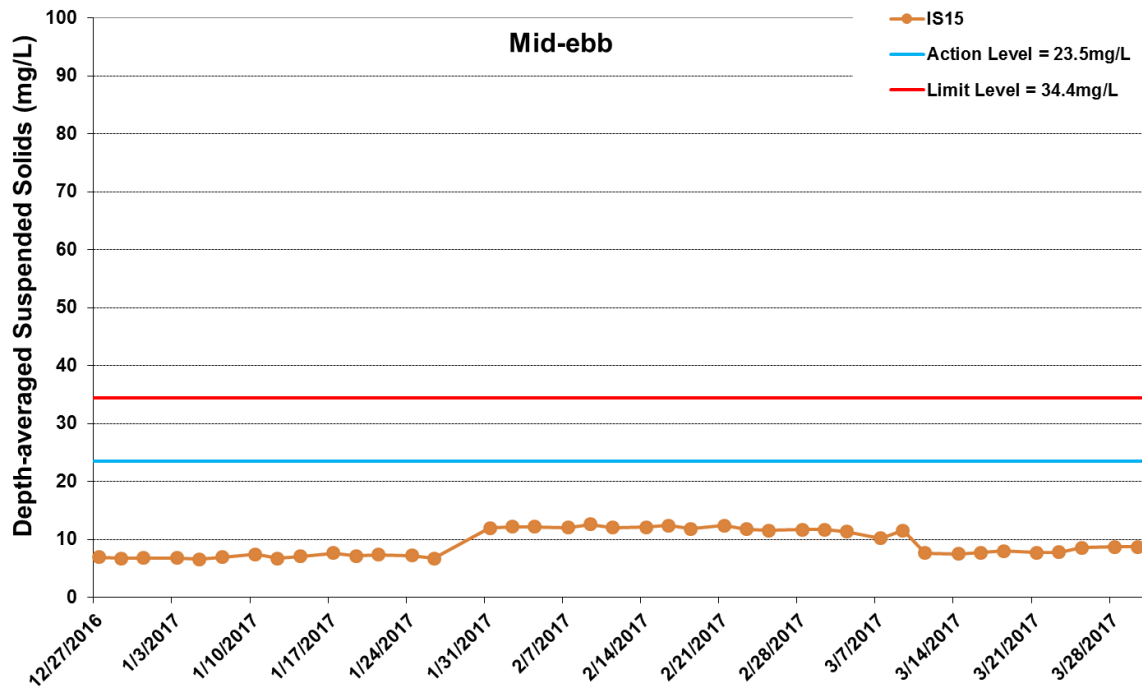


Figure I40 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



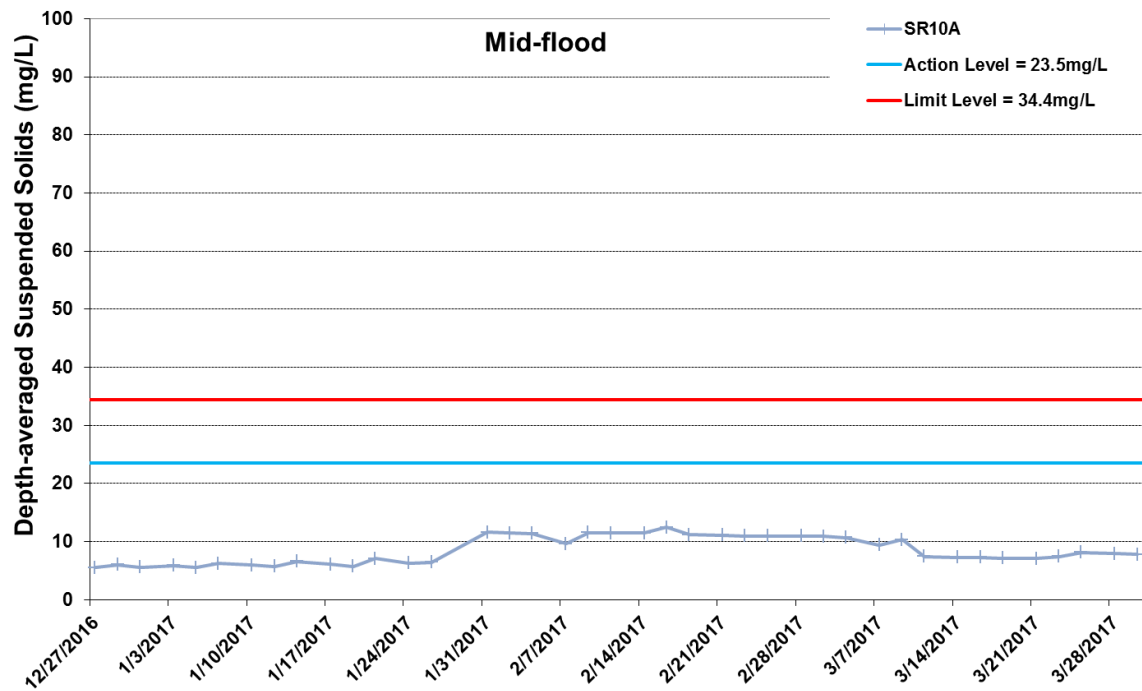
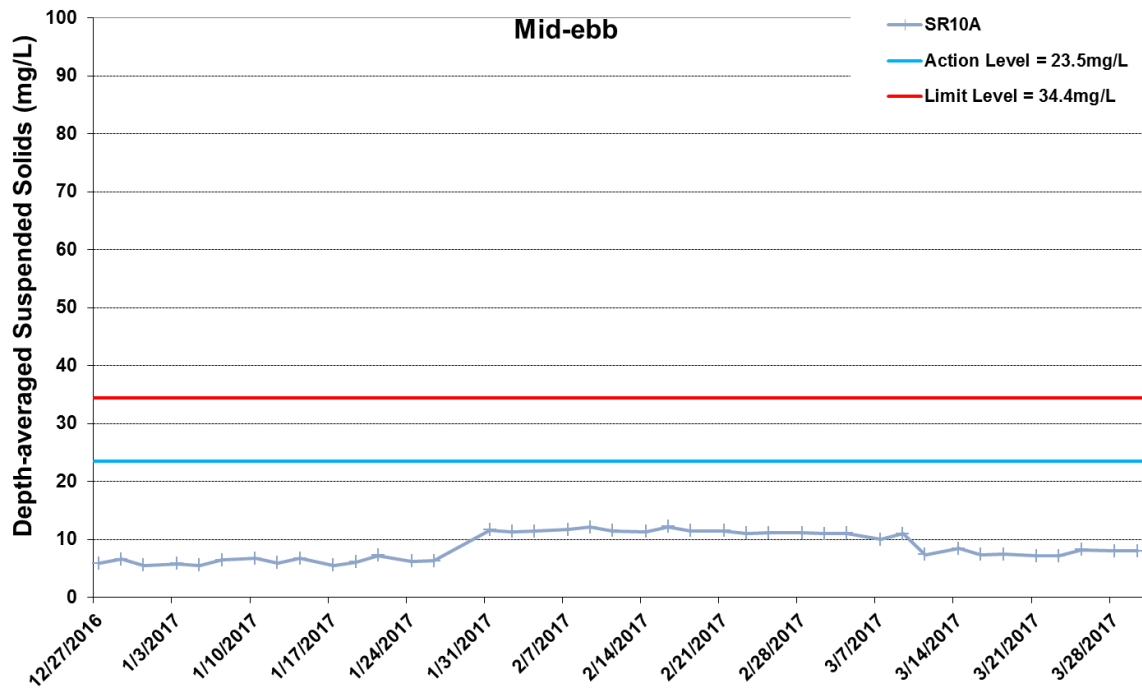


Figure I41 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



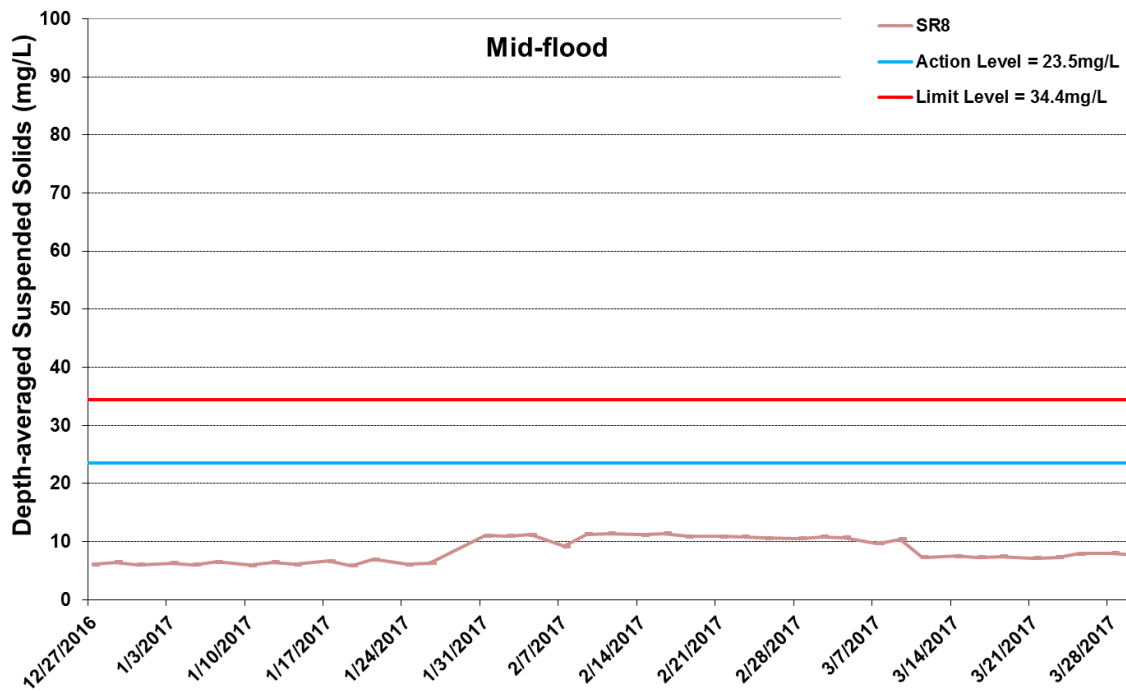
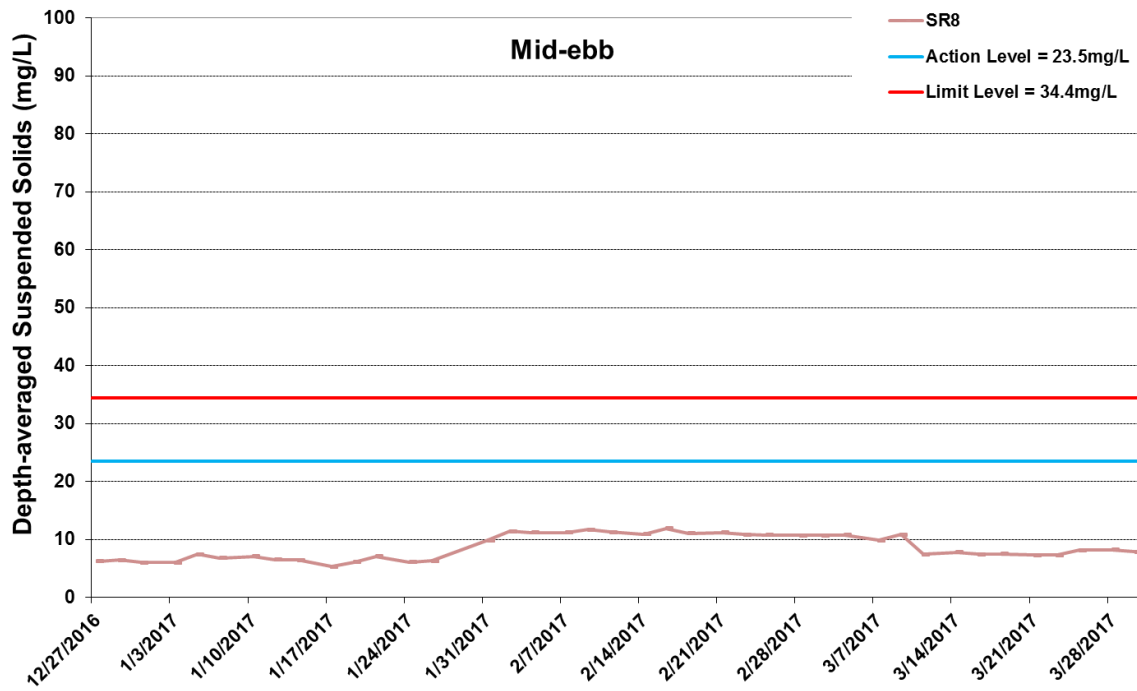


Figure I42 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



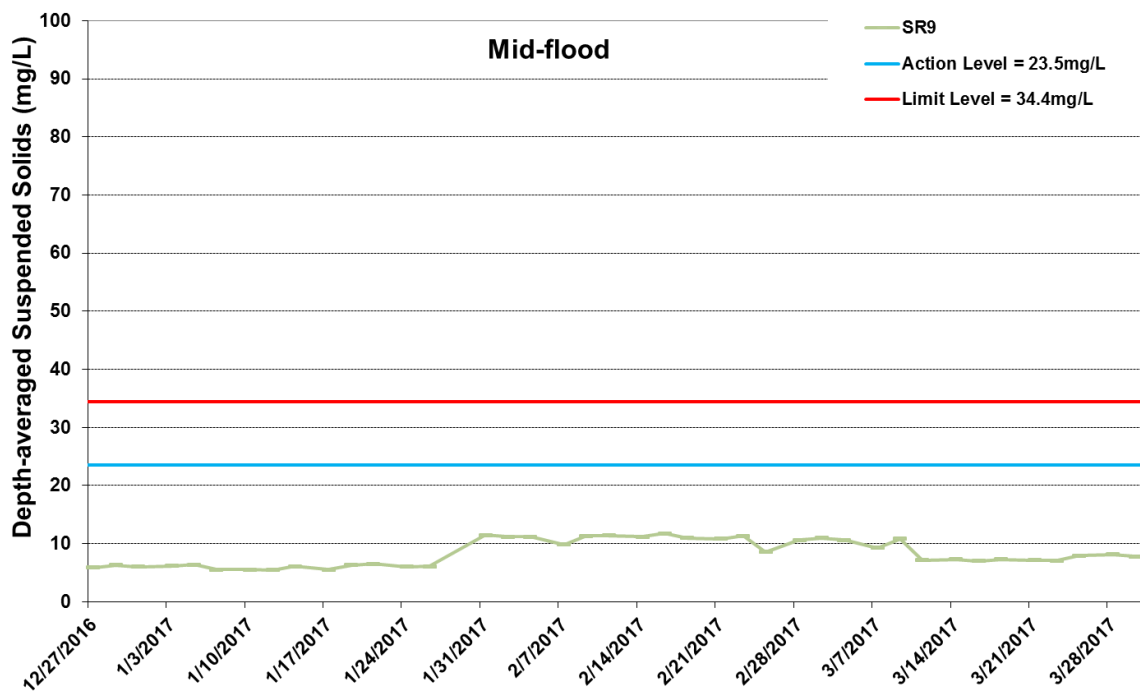
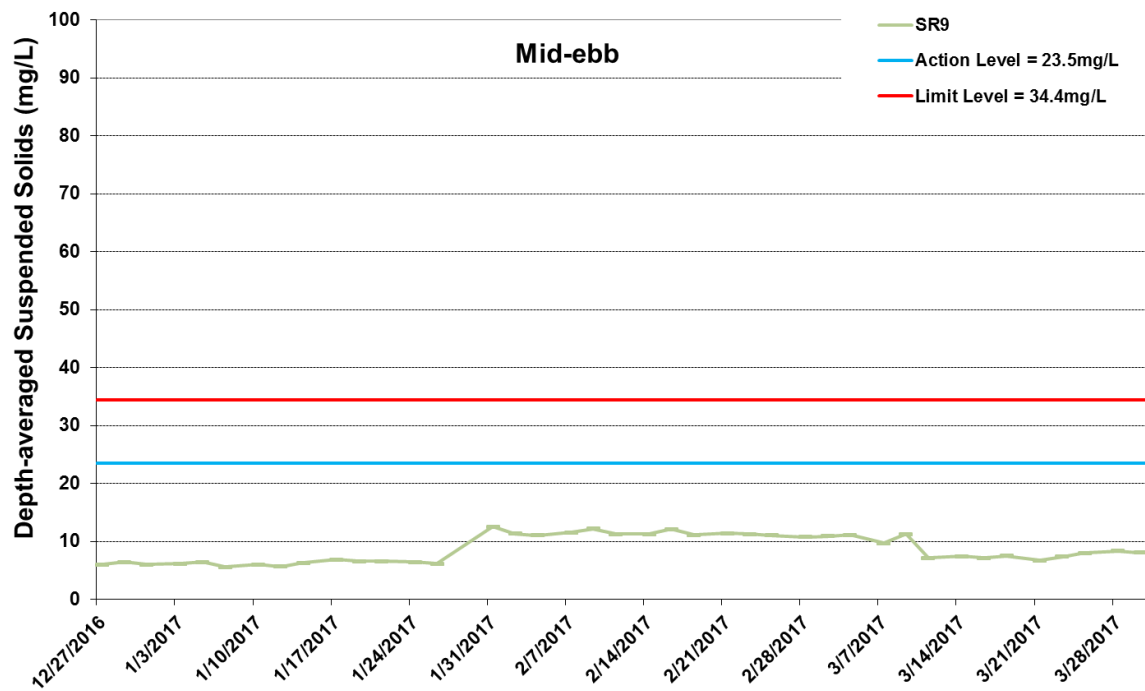


Figure I43 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 27 December 2016 and 31 March 2017 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine works included: Band drains and Filling works at Portion N-A (1/3/2017 - 31/3/2017). WQM was resumed on 27/12/2016.



| 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 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 10:55 | 17.3 | 7.64 | 27.6 | 7 | 8.55 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 10:55 | 17.4 | 7.6 | 27.5 | 7.03 | 8.58 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 10:55 | 17.6 | 7.68 | 27.7 | 7.11 | 8.25 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 10:55 | 17.5 | 7.72 | 27.8 | 7.15 | 8.22 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 1 | 10:55 | 17.7 | 7.85 | 27.9 | 7.17 | 8.31 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 2 | 10:55 | 17.8 | 7.87 | 28 | 7.22 | 8.36 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 08:37 | 17.1 | 7.81 | 27.5 | 6.96 | 8.21 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 08:37 | 17.2 | 7.85 | 27.6 | 6.99 | 8.24 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 08:37 | 17.4 | 7.68 | 27.6 | 7.11 | 8.36 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 08:37 | 17.3 | 7.72 | 27.7 | 7.13 | 8.31 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 1 | 08:37 | 17.4 | 7.89 | 27.8 | 6.92 | 8.78 | 12.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 2 | 08:37 | 17.5 | 7.93 | 27.7 | 6.96 | 8.73 | 12.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 10:26 | 17.4 | 7.73 | 27.5 | 7.13 | 8.36 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 10:26 | 17.5 | 7.76 | 27.6 | 7.09 | 8.38 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 1 | 10:26 | 17.7 | 7.88 | 27.7 | 7.2 | 8.44 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 2 | 10:26 | 17.6 | 7.94 | 27.6 | 7.23 | 8.49 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 1 | 10:26 | 17.8 | 7.64 | 27.8 | 7.01 | 8.67 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 2 | 10:26 | 17.9 | 7.68 | 27.9 | 7.05 | 8.62 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 10:09 | 17.2 | 7.61 | 27.3 | 6.93 | 8.55 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 10:09 | 17.1 | 7.57 | 27.4 | 6.96 | 8.57 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.4 | 2 | 1 | 10:09 | 17.3 | 7.75 | 27.6 | 6.99 | 8.33 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.4 | 2 | 2 | 10:09 | 17.4 | 7.73 | 27.5 | 7.03 | 8.38 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.8 | 3 | 1 | 10:09 | 17.5 | 7.89 | 27.7 | 6.84 | 8.68 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.8 | 3 | 2 | 10:09 | 17.6 | 7.93 | 27.8 | 6.88 | 8.71 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 10:40 | 17.3 | 7.63 | 27.5 | 7.09 | 8.44 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 10:40 | 17.2 | 7.69 | 27.4 | 7.13 | 8.46 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 10:40 | 17.3 | 7.83 | 27.5 | 7.27 | 8.28 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 10:40 | 17.4 | 7.81 | 27.6 | 7.33 | 8.24 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 10:40 | 17.5 | 7.92 | 27.8 | 7.42 | 8 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 10:40 | 17.6 | 7.96 | 27.7 | 7.36 | 8.02 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 09:52 | 17.2 | 7.79 | 27.3 | 6.84 | 8.47 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 09:52 | 17.3 | 7.85 | 27.4 | 6.88 | 8.42 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 1 | 09:52 | 17.4 | 7.58 | 27.5 | 7.08 | 8.65 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 2 | 09:52 | 17.5 | 7.61 | 27.4 | 7.13 | 8.61 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 1 | 09:52 | 17.5 | 7.67 | 27.6 | 7.15 | 8.57 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 2 | 09:52 | 17.4 | 7.74 | 27.7 | 7.17 | 8.51 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 09:18 | 17.4 | 7.63 | 27.4 | 7.06 | 8.14 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 09:18 | 17.3 | 7.67 | 27.3 | 7.03 | 8.18 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 09:18 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 09:18 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 1 | 09:18 | 17.5 | 7.69 | 27.4 | 6.92 | 8.38 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 2 | 09:18 | 17.6 | 7.73 | 27.5 | 6.87 | 8.31 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 09:35 | 17.4 | 7.58 | 27.4 | 6.97 | 8.31 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 09:35 | 17.5 | 7.61 | 27.5 | 6.99 | 8.38 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 09:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 09:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.6 | 3 | 1 | 09:35 | 17.4 | 7.84 | 27.6 | 7.1 | 8.5 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.6 | 3 | 2 | 09:35 | 17.3 | 7.78 | 27.5 | 7.14 | 8.56 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 09:01 | 17.2 | 7.75 | 27.2 | 6.94 | 8.24 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 09:01 | 17.3 | 7.71 | 27.3 | 6.98 | 8.27 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 1 | 09:01 | 17.4 | 7.58 | 27.3 | 7.01 | 8.55 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 2 | 09:01 | 17.5 | 7.63 | 27.4 | 7.05 | 8.6 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.6 | 3 | 1 | 09:01 | 17.7 | 7.79 | 27.6 | 6.79 | 8.48 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.6 | 3 | 2 | 09:01 | 17.7 | 7.84 | 27.5 | 6.83 | 8.51 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 13:46 | 17.4 | 7.75 | 27.5 | 6.83 | 8.73 | 12.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 13:46 | 17.3 | 7.79 | 27.5 | 6.87 | 8.7 | 12.6 |

| 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 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.6 | 2 | 1 | 13:46 | 17.4 | 7.81 | 27.5 | 6.95 | 8.3 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.6 | 2 | 2 | 13:46 | 17.5 | 7.86 | 27.6 | 6.99 | 8.36 | 12.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.2 | 3 | 1 | 13:46 | 17.6 | 7.94 | 27.7 | 7.13 | 8.47 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.2 | 3 | 2 | 13:46 | 17.7 | 7.97 | 27.8 | 7.19 | 8.5 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 15:55 | 17.5 | 7.94 | 27.5 | 6.66 | 8.35 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 15:55 | 17.6 | 7.97 | 27.5 | 6.69 | 8.4 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.5 | 2 | 1 | 15:55 | 17.7 | 7.5 | 27.6 | 6.95 | 8.41 | 12.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.5 | 2 | 2 | 15:55 | 17.8 | 7.55 | 27.6 | 6.99 | 8.45 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12 | 3 | 1 | 15:55 | 17.8 | 7.81 | 27.6 | 6.72 | 8.89 | 13.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12 | 3 | 2 | 15:55 | 17.9 | 7.87 | 27.7 | 6.78 | 8.81 | 12.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 14:19 | 17.4 | 7.64 | 27.5 | 7.02 | 8.11 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 14:19 | 17.5 | 7.66 | 27.6 | 7.08 | 8.15 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 14:19 | 17.6 | 7.87 | 27.6 | 7.13 | 8.28 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 14:19 | 17.7 | 7.9 | 27.6 | 7.16 | 8.24 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 14:19 | 17.8 | 7.51 | 27.7 | 7.03 | 8.5 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 2 | 14:19 | 17.8 | 7.57 | 27.8 | 7.08 | 8.54 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 14:36 | 17.4 | 7.68 | 27.5 | 6.56 | 8.61 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 14:36 | 17.5 | 7.66 | 27.6 | 6.6 | 8.65 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 1 | 14:36 | 17.5 | 7.82 | 27.6 | 6.74 | 8.4 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 2 | 14:36 | 17.6 | 7.85 | 27.7 | 6.78 | 8.44 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.3 | 3 | 1 | 14:36 | 17.7 | 7.9 | 27.7 | 6.62 | 8.73 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.3 | 3 | 2 | 14:36 | 17.8 | 7.94 | 27.7 | 6.65 | 8.77 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 14:02 | 17.4 | 7.92 | 27.4 | 6.91 | 8.21 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 14:02 | 17.4 | 7.96 | 27.5 | 6.95 | 8.27 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 1 | 14:02 | 17.4 | 7.54 | 27.5 | 7.04 | 8.03 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 2 | 14:02 | 17.5 | 7.57 | 27.6 | 7.07 | 8.1 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.1 | 3 | 1 | 14:02 | 17.6 | 7.63 | 27.5 | 7.34 | 7.9 | 9.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.1 | 3 | 2 | 14:02 | 17.7 | 7.69 | 27.5 | 7.37 | 7.97 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 14:52 | 17.5 | 7.87 | 27.5 | 6.62 | 8.56 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 14:52 | 17.6 | 7.84 | 27.6 | 6.67 | 8.59 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.5 | 2 | 1 | 14:52 | 17.6 | 7.7 | 27.6 | 6.93 | 8.74 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.5 | 2 | 2 | 14:52 | 17.6 | 7.74 | 27.7 | 6.96 | 8.78 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 7.9 | 3 | 1 | 14:52 | 17.7 | 7.55 | 27.8 | 7.01 | 8.66 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 7.9 | 3 | 2 | 14:52 | 17.8 | 7.57 | 27.9 | 7.07 | 8.69 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 15:22 | 17.4 | 7.81 | 27.5 | 6.8 | 8.2 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 15:22 | 17.4 | 7.88 | 27.6 | 6.84 | 8.24 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 15:22 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 15:22 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4 | 3 | 1 | 15:22 | 17.5 | 7.95 | 27.6 | 6.74 | 8.45 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4 | 3 | 2 | 15:22 | 17.6 | 7.97 | 27.8 | 6.77 | 8.48 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 15:07 | 17.5 | 7.6 | 27.6 | 6.88 | 8.45 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 15:07 | 17.6 | 7.66 | 27.7 | 6.82 | 8.48 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 15:07 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 15:07 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.1 | 3 | 1 | 15:07 | 17.6 | 7.75 | 27.8 | 6.93 | 8.68 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.1 | 3 | 2 | 15:07 | 17.7 | 7.77 | 27.9 | 6.95 | 8.7 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 15:38 | 17.5 | 7.86 | 27.5 | 6.77 | 8.33 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 15:38 | 17.6 | 7.89 | 27.4 | 6.71 | 8.37 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.2 | 2 | 1 | 15:38 | 17.7 | 7.72 | 27.6 | 6.89 | 8.67 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.2 | 2 | 2 | 15:38 | 17.8 | 7.77 | 27.7 | 6.93 | 8.69 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.3 | 3 | 1 | 15:38 | 17.8 | 7.96 | 27.8 | 6.54 | 8.53 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-02 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.3 | 3 | 2 | 15:38 | 17.9 | 7.99 | 27.9 | 6.57 | 8.57 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 11:50 | 17.5 | 7.75 | 27.6 | 7.61 | 8.25 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 11:50 | 17.4 | 7.78 | 27.5 | 7.63 | 8.33 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 11:50 | 17.6 | 7.67 | 27.7 | 7.53 | 8.4 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 11:50 | 17.7 | 7.65 | 27.6 | 7.51 | 8.45 | 12.3 |

| 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 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 1 | 11:50 | 17.9 | 7.8 | 27.9 | 7.86 | 8.61 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 2 | 11:50 | 17.8 | 7.82 | 27.8 | 7.89 | 8.69 | 12.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 09:48 | 17.4 | 7.81 | 27.7 | 7.12 | 8.28 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 09:48 | 17.5 | 7.8 | 27.6 | 7.13 | 8.36 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.4 | 2 | 1 | 09:48 | 17.6 | 7.73 | 27.8 | 7.24 | 8.47 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.4 | 2 | 2 | 09:48 | 17.5 | 7.7 | 27.7 | 7.27 | 8.41 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 1 | 09:48 | 17.7 | 7.76 | 27.9 | 7.33 | 8.66 | 12.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 2 | 09:48 | 17.6 | 7.79 | 27.8 | 7.35 | 7.73 | 13.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 11:21 | 17.6 | 7.67 | 27.4 | 7.35 | 8.26 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 11:21 | 17.5 | 7.69 | 27.5 | 7.36 | 8.29 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 1 | 11:21 | 17.7 | 7.75 | 27.6 | 7.21 | 8.41 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 2 | 11:21 | 17.6 | 7.78 | 27.6 | 7.2 | 8.48 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 1 | 11:21 | 17.7 | 7.73 | 27.8 | 7.49 | 8.35 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 2 | 11:21 | 17.6 | 7.7 | 27.7 | 7.52 | 8.26 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 11:05 | 17.5 | 7.78 | 27.6 | 7.21 | 8.09 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 11:05 | 17.6 | 7.74 | 27.5 | 7.24 | 8.01 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.4 | 2 | 1 | 11:05 | 17.7 | 7.71 | 27.7 | 7.38 | 8.32 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.4 | 2 | 2 | 11:05 | 17.6 | 7.7 | 27.6 | 7.35 | 8.37 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.8 | 3 | 1 | 11:05 | 17.7 | 7.84 | 27.8 | 7.45 | 8.26 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.8 | 3 | 2 | 11:05 | 17.8 | 7.88 | 27.7 | 7.49 | 8.17 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 11:36 | 17.4 | 7.72 | 27.5 | 7.4 | 8.31 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 11:36 | 17.4 | 7.75 | 27.6 | 7.43 | 8.35 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 1 | 11:36 | 17.5 | 7.69 | 27.7 | 7.32 | 8.23 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 2 | 11:36 | 17.4 | 7.66 | 27.6 | 7.3 | 8.29 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.7 | 3 | 1 | 11:36 | 17.7 | 7.79 | 27.8 | 7.55 | 8.46 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.7 | 3 | 2 | 11:36 | 17.8 | 7.83 | 27.7 | 7.57 | 8.52 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 10:48 | 17.4 | 7.72 | 27.5 | 7.35 | 8.37 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 10:48 | 17.5 | 7.75 | 27.4 | 7.36 | 8.32 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 1 | 10:48 | 17.5 | 7.86 | 27.6 | 7.47 | 8.25 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 2 | 10:48 | 17.5 | 7.87 | 27.5 | 7.49 | 8.18 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 1 | 10:48 | 17.6 | 7.8 | 27.7 | 7.54 | 8.57 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 2 | 10:48 | 17.5 | 7.81 | 27.8 | 7.57 | 8.61 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 10:20 | 17.4 | 7.69 | 27.7 | 7.34 | 8.06 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 10:20 | 17.5 | 7.72 | 27.6 | 7.38 | 8.13 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 10:20 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 10:20 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 1 | 10:20 | 17.4 | 7.76 | 27.7 | 7.56 | 8.23 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 2 | 10:20 | 17.3 | 7.75 | 27.7 | 7.59 | 8.29 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 10:34 | 17.4 | 7.66 | 27.5 | 7.51 | 8.26 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 10:34 | 17.4 | 7.69 | 27.6 | 7.48 | 8.19 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 10:34 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 10:34 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 1 | 10:34 | 17.5 | 7.74 | 27.7 | 7.41 | 8.46 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 2 | 10:34 | 17.4 | 7.71 | 27.6 | 7.43 | 8.41 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 10:04 | 17.4 | 7.74 | 27.6 | 7.25 | 8.16 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 10:04 | 17.4 | 7.7 | 27.5 | 7.23 | 8.1 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.4 | 2 | 1 | 10:04 | 17.5 | 7.83 | 27.7 | 7.16 | 8.28 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.4 | 2 | 2 | 10:04 | 17.4 | 7.87 | 27.7 | 7.14 | 8.22 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.8 | 3 | 1 | 10:04 | 17.6 | 7.81 | 27.8 | 7.38 | 8.34 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.8 | 3 | 2 | 10:04 | 17.5 | 7.79 | 27.7 | 7.42 | 8.41 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 15:31 | 17.6 | 7.63 | 27.4 | 7.33 | 8.35 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 15:31 | 17.7 | 7.67 | 27.5 | 7.35 | 8.37 | 12.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.55 | 2 | 1 | 15:31 | 17.7 | 7.54 | 27.6 | 7.14 | 8.54 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.55 | 2 | 2 | 15:31 | 17.7 | 7.6 | 27.6 | 7.19 | 8.5 | 12.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.1 | 3 | 1 | 15:31 | 17.8 | 7.91 | 27.7 | 7.2 | 8.66 | 12.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.1 | 3 | 2 | 15:31 | 17.9 | 7.97 | 27.8 | 7.26 | 8.69 | 12.5 |

| 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 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 17:39 | 17.5 | 7.77 | 27.5 | 7.04 | 8.37 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 17:39 | 17.5 | 7.71 | 27.6 | 7.07 | 8.41 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 17:39 | 17.5 | 7.52 | 27.7 | 7.11 | 8.27 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 17:39 | 17.6 | 7.57 | 27.7 | 7.14 | 8.2 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 1 | 17:39 | 17.6 | 7.67 | 27.8 | 7.25 | 8.69 | 12.7 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 2 | 17:39 | 17.6 | 7.64 | 27.9 | 7.22 | 8.74 | 13.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 16:04 | 17.6 | 7.76 | 27.5 | 7.12 | 8.36 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 16:04 | 17.7 | 7.74 | 27.6 | 7.18 | 8.39 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 16:04 | 17.8 | 7.52 | 27.7 | 7.03 | 8.54 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 16:04 | 17.7 | 7.54 | 27.8 | 7.09 | 8.57 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 16:04 | 17.9 | 7.68 | 27.7 | 7.27 | 8.48 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 2 | 16:04 | 17.9 | 7.66 | 27.9 | 7.23 | 8.53 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 16:20 | 17.5 | 7.66 | 27.5 | 7.06 | 8.25 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 16:20 | 17.6 | 7.61 | 27.5 | 7.08 | 8.27 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 1 | 16:20 | 17.7 | 7.9 | 27.6 | 7.2 | 8.43 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 2 | 16:20 | 17.8 | 7.95 | 27.7 | 7.17 | 8.48 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.2 | 3 | 1 | 16:20 | 17.9 | 7.82 | 27.8 | 7.13 | 8.33 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.2 | 3 | 2 | 16:20 | 17.9 | 7.88 | 27.9 | 7.17 | 8.3 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 15:47 | 17.6 | 7.81 | 27.5 | 7.32 | 8.44 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 15:47 | 17.6 | 7.88 | 27.6 | 7.28 | 8.47 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.65 | 2 | 1 | 15:47 | 17.7 | 7.96 | 27.6 | 7.07 | 8.3 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.65 | 2 | 2 | 15:47 | 17.8 | 7.92 | 27.7 | 7.1 | 8.34 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 1 | 15:47 | 17.8 | 7.53 | 27.7 | 7.16 | 8.58 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 2 | 15:47 | 17.9 | 7.58 | 27.8 | 7.19 | 8.6 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 16:36 | 17.6 | 7.55 | 27.4 | 7.21 | 8.38 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 16:36 | 17.6 | 7.58 | 27.3 | 7.25 | 8.42 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 1 | 16:36 | 17.7 | 7.84 | 27.5 | 7.08 | 8.27 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 2 | 16:36 | 17.8 | 7.88 | 27.5 | 7.02 | 8.3 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.3 | 3 | 1 | 16:36 | 17.9 | 7.59 | 27.6 | 7.24 | 8.62 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.3 | 3 | 2 | 16:36 | 17.8 | 7.61 | 27.7 | 7.29 | 8.66 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 17:10 | 17.5 | 7.97 | 27.4 | 7.48 | 8.24 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 17:10 | 17.4 | 7.92 | 27.5 | 7.42 | 8.29 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 17:10 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 17:10 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.1 | 3 | 1 | 17:10 | 17.6 | 7.9 | 27.6 | 7.03 | 8.33 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.1 | 3 | 2 | 17:10 | 17.6 | 7.94 | 27.6 | 7.08 | 8.35 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 16:53 | 17.5 | 7.68 | 27.4 | 7.29 | 8.37 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 16:53 | 17.6 | 7.73 | 27.4 | 7.37 | 8.46 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 16:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 16:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 1 | 16:53 | 17.6 | 7.53 | 27.5 | 7.48 | 8.55 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 2 | 16:53 | 17.6 | 7.58 | 27.4 | 7.54 | 8.59 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 17:19 | 17.5 | 7.88 | 27.5 | 7.01 | 8.39 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 17:19 | 17.6 | 7.84 | 27.6 | 7.05 | 8.44 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 1 | 17:19 | 17.6 | 7.52 | 27.8 | 7.22 | 8.57 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 2 | 17:19 | 17.7 | 7.55 | 27.9 | 7.27 | 8.5 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.5 | 3 | 1 | 17:19 | 17.8 | 7.67 | 27.7 | 7.08 | 8.46 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-04 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.5 | 3 | 2 | 17:19 | 17.7 | 7.63 | 27.6 | 7.05 | 8.49 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 14:01 | 17.2 | 7.88 | 28 | 7.4 | 7.45 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 14:01 | 17.1 | 7.85 | 28.1 | 7.42 | 7.39 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 14:01 | 17.4 | 7.94 | 28.2 | 7.34 | 7.59 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 14:01 | 17.3 | 7.9 | 28.3 | 7.31 | 7.52 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 1 | 14:01 | 17.5 | 8.05 | 28.4 | 7.54 | 7.84 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 2 | 14:01 | 17.4 | 8.07 | 28.3 | 7.55 | 7.88 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 11:51 | 17.3 | 8.04 | 28 | 7.46 | 7.68 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 11:51 | 17.2 | 8.05 | 28.1 | 7.47 | 7.6 | 11.3 |

| 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 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 11:51 | 17.3 | 7.95 | 28.2 | 7.28 | 7.34 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 11:51 | 17.3 | 7.92 | 28.1 | 7.26 | 7.43 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.9 | 3 | 1 | 11:51 | 17.4 | 8.02 | 28.3 | 7.33 | 7.29 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.9 | 3 | 2 | 11:51 | 17.3 | 8 | 28.2 | 7.31 | 7.36 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 13:21 | 17.2 | 7.86 | 28.2 | 7.25 | 7.27 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 13:21 | 17.1 | 7.89 | 28.1 | 7.28 | 7.22 | 9.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.6 | 2 | 1 | 13:21 | 17.3 | 7.72 | 28.3 | 7.33 | 7.36 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.6 | 2 | 2 | 13:21 | 17.2 | 7.74 | 28.2 | 7.36 | 7.43 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 12.1 | 3 | 1 | 13:21 | 17.4 | 7.91 | 28.3 | 7.46 | 7.52 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 12.1 | 3 | 2 | 13:21 | 17.4 | 7.92 | 28.4 | 7.49 | 7.58 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 13:06 | 17.1 | 7.95 | 28.1 | 7.29 | 7.48 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 13:06 | 17 | 7.91 | 28.1 | 7.27 | 7.41 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 1 | 13:06 | 17.2 | 8.07 | 28.2 | 7.23 | 7.57 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 2 | 13:06 | 17.2 | 8.06 | 28.1 | 7.2 | 7.52 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.4 | 3 | 1 | 13:06 | 17.3 | 8.01 | 28.3 | 7.46 | 7.32 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.4 | 3 | 2 | 13:06 | 17.4 | 8.03 | 28.2 | 7.43 | 7.38 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 13:48 | 17.1 | 7.94 | 28.2 | 7.34 | 7.3 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 13:48 | 17.1 | 7.97 | 28.3 | 7.38 | 7.36 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 1 | 13:48 | 17.2 | 8.03 | 28.4 | 7.42 | 7.43 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 2 | 13:48 | 17.2 | 8.01 | 28.3 | 7.44 | 7.38 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.5 | 3 | 1 | 13:48 | 17.4 | 7.92 | 28.5 | 7.56 | 7.67 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.5 | 3 | 2 | 13:48 | 17.3 | 7.9 | 28.4 | 7.58 | 7.75 | 9.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 12:51 | 17.1 | 7.89 | 28.1 | 7.32 | 7.21 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 12:51 | 17.2 | 7.92 | 28 | 7.34 | 7.27 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 1 | 12:51 | 17.2 | 7.96 | 28.1 | 7.5 | 7.34 | 9.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 2 | 12:51 | 17.2 | 7.98 | 28.1 | 7.51 | 7.38 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.8 | 3 | 1 | 12:51 | 17.3 | 7.97 | 28.3 | 7.46 | 7.55 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.8 | 3 | 2 | 12:51 | 17.2 | 8.01 | 28.2 | 7.45 | 7.62 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 12:22 | 17.1 | 7.93 | 27.9 | 7.37 | 7.32 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 12:22 | 17 | 7.94 | 27.9 | 7.39 | 7.25 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 12:22 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 12:22 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 1 | 12:22 | 17.2 | 7.88 | 27.9 | 7.46 | 7.48 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 2 | 12:22 | 17.1 | 7.91 | 28 | 7.49 | 7.53 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 12:35 | 17.1 | 7.93 | 28.1 | 7.47 | 7.38 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 12:35 | 17.2 | 7.96 | 28 | 7.45 | 7.32 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 12:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 12:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.6 | 3 | 1 | 12:35 | 17.2 | 7.98 | 28.1 | 7.34 | 7.46 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.6 | 3 | 2 | 12:35 | 17.2 | 8.03 | 28.1 | 7.3 | 7.51 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 12:07 | 17.1 | 7.96 | 28 | 7.35 | 7.59 | 9.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 12:07 | 17.1 | 7.99 | 28 | 7.37 | 7.52 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 7.1 | 2 | 1 | 12:07 | 17.2 | 8.02 | 28.2 | 7.25 | 7.18 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 7.1 | 2 | 2 | 12:07 | 17.1 | 8.04 | 28.1 | 7.28 | 7.24 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 13.1 | 3 | 1 | 12:07 | 17.3 | 8.06 | 28.3 | 7.14 | 7.31 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 13.1 | 3 | 2 | 12:07 | 17.2 | 8.07 | 28.2 | 7.11 | 7.34 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 08:10 | 17.1 | 7.94 | 27.9 | 7.26 | 7.84 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 08:10 | 17.1 | 7.99 | 28 | 7.23 | 7.92 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 1 | 08:10 | 17.2 | 8.03 | 28.2 | 7.18 | 7.59 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 2 | 08:10 | 17.2 | 7.98 | 28.2 | 7.14 | 7.63 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 1 | 08:10 | 17.3 | 7.94 | 28.3 | 7.32 | 8.12 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 2 | 08:10 | 17.2 | 7.95 | 28.3 | 7.35 | 8.23 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 09:35 | 17.2 | 7.98 | 28 | 7.23 | 7.69 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 09:35 | 17.2 | 8.01 | 28.1 | 7.19 | 7.72 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 09:35 | 17.2 | 8.04 | 28.1 | 7.27 | 7.44 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 09:35 | 17.2 | 8.07 | 28.1 | 7.3 | 7.5 | 10.8 |

| 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 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 1 | 09:35 | 17.2 | 7.99 | 28.2 | 7.17 | 7.38 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 2 | 09:35 | 17.3 | 8.01 | 28.2 | 7.14 | 7.42 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 08:34 | 17.1 | 7.93 | 28 | 7.16 | 7.47 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 08:34 | 17.1 | 7.98 | 27.9 | 7.17 | 7.53 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.4 | 2 | 1 | 08:34 | 17.1 | 7.95 | 28.1 | 7.2 | 7.22 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.4 | 2 | 2 | 08:34 | 17.2 | 7.99 | 28 | 7.23 | 7.27 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.7 | 3 | 1 | 08:34 | 17.2 | 7.86 | 28.2 | 7.29 | 7.8 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.7 | 3 | 2 | 08:34 | 17.2 | 7.89 | 28.2 | 7.34 | 7.67 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 08:43 | 17.2 | 8.03 | 28 | 7.17 | 7.66 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 08:43 | 17.1 | 7.98 | 28 | 7.14 | 7.71 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 1 | 08:43 | 17.2 | 7.93 | 28 | 7.19 | 7.45 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 2 | 08:43 | 17.2 | 7.99 | 28.1 | 7.22 | 7.4 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 1 | 08:43 | 17.2 | 8.01 | 28.2 | 7.3 | 7.8 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 2 | 08:43 | 17.3 | 7.97 | 28.2 | 7.27 | 7.89 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 08:23 | 17.1 | 8.02 | 28 | 7.21 | 7.68 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 08:23 | 17.2 | 8 | 28 | 7.18 | 7.72 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 1 | 08:23 | 17.2 | 7.94 | 28 | 7.26 | 7.28 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 2 | 08:23 | 17.3 | 7.97 | 28.1 | 7.27 | 7.34 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 1 | 08:23 | 17.3 | 7.89 | 28.2 | 7.31 | 7.93 | 9.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 2 | 08:23 | 17.3 | 7.91 | 28.3 | 7.33 | 7.99 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 08:54 | 17.2 | 7.98 | 28 | 7.22 | 7.47 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 08:54 | 17.2 | 8.01 | 28 | 7.18 | 7.52 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 1 | 08:54 | 17.2 | 7.87 | 28 | 7.28 | 7.36 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 2 | 08:54 | 17.2 | 7.9 | 28.1 | 7.31 | 7.4 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 1 | 08:54 | 17.2 | 7.93 | 28.2 | 7.37 | 7.71 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 2 | 08:54 | 17.3 | 7.99 | 28.2 | 7.39 | 7.78 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 09:21 | 17.2 | 7.89 | 27.8 | 7.36 | 7.66 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 09:21 | 17.2 | 7.98 | 27.9 | 7.32 | 7.71 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 09:21 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 09:21 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 1 | 09:21 | 17.2 | 7.97 | 28 | 7.21 | 7.45 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 2 | 09:21 | 17.2 | 8 | 28 | 7.16 | 7.51 | 9.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 09:05 | 17.2 | 8.02 | 28 | 7.28 | 7.58 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 09:05 | 17.2 | 8.04 | 28 | 7.25 | 7.5 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 09:05 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 09:05 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 1 | 09:05 | 17.2 | 8.01 | 28 | 7.2 | 7.7 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 2 | 09:05 | 17.2 | 8.05 | 28 | 7.17 | 7.63 | 9.9 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 09:21 | 17.2 | 7.89 | 27.9 | 7.27 | 7.85 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 09:21 | 17.1 | 7.94 | 28 | 7.23 | 7.8 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 09:21 | 17.2 | 7.95 | 28.1 | 7.16 | 7.62 | 9.8 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 09:21 | 17.2 | 7.91 | 28 | 7.2 | 7.67 | 9.7 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 1 | 09:21 | 17.2 | 7.99 | 28.3 | 7.36 | 7.98 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-07 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 2 | 09:21 | 17.3 | 7.96 | 28.2 | 7.31 | 8.04 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 16:55 | 18 | 8.08 | 28.1 | 6.8 | 8.84 | 12.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 16:55 | 18 | 8.02 | 28.1 | 6.79 | 8.81 | 12.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 16:55 | 17.9 | 8.04 | 28 | 6.67 | 8.53 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 16:55 | 17.9 | 8.03 | 28 | 6.69 | 8.59 | 12.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 1 | 16:55 | 18.1 | 7.97 | 28 | 6.58 | 8.78 | 12.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 2 | 16:55 | 18.1 | 7.99 | 28 | 6.59 | 8.77 | 13 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | | 1 | 14:39 | 17.6 | 7.79 | 27.9 | 6.78 | 7.99 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | | 2 | 14:39 | 17.6 | 7.81 | 27.9 | 6.8 | 7.98 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | | 1 | 14:39 | 17.6 | 7.88 | 27.9 | 6.98 | 8.13 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | | 2 | 14:39 | 17.7 | 7.89 | 28 | 6.96 | 8.12 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | | 1 | 14:39 | 17.7 | 7.53 | 28 | 6.54 | 8.24 | 12.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | | 2 | 14:39 | 17.8 | 7.56 | 28 | 6.56 | 8.26 | 12.2 |

| 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 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 16:25 | 17.9 | 7.83 | 27.9 | 6.83 | 8.26 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 16:25 | 17.9 | 7.82 | 28 | 6.88 | 8.25 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 1 | 16:25 | 18 | 7.93 | 28.1 | 6.53 | 8.35 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 2 | 16:25 | 18.1 | 7.94 | 28.1 | 6.56 | 8.34 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 16:25 | 18.1 | 7.55 | 28.2 | 6.99 | 8.64 | 11.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 2 | 16:25 | 18.2 | 7.56 | 28.2 | 7.02 | 8.65 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 16:11 | 17.8 | 7.93 | 28 | 6.88 | 8.03 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 16:11 | 17.8 | 7.91 | 27.9 | 6.87 | 8.02 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 1 | 16:11 | 17.8 | 7.58 | 28 | 6.71 | 8.43 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.2 | 2 | 2 | 16:11 | 17.9 | 7.56 | 27.9 | 6.73 | 8.42 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.4 | 3 | 1 | 16:11 | 17.9 | 7.63 | 27.8 | 6.56 | 8.56 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 9.4 | 3 | 2 | 16:11 | 18 | 7.64 | 27.7 | 6.53 | 8.58 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 16:39 | 18 | 7.9 | 28.1 | 6.94 | 8.64 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 16:39 | 18.1 | 7.93 | 28 | 6.95 | 8.65 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 1 | 16:39 | 18.1 | 7.76 | 28.2 | 6.75 | 8.43 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 2 | 16:39 | 18.1 | 7.78 | 28.2 | 6.76 | 8.42 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 1 | 16:39 | 18.1 | 7.69 | 28.3 | 6.43 | 8.95 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 2 | 16:39 | 18.1 | 7.7 | 28.2 | 6.45 | 8.97 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 15:57 | 17.7 | 7.82 | 27.9 | 6.78 | 8.16 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 15:57 | 17.8 | 7.86 | 27.8 | 6.76 | 8.15 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 15:57 | 17.8 | 7.96 | 28.1 | 7.32 | 8.52 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 15:57 | 17.8 | 7.97 | 28.1 | 7.36 | 8.53 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.5 | 3 | 1 | 15:57 | 17.8 | 7.72 | 27.8 | 6.99 | 8.12 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.5 | 3 | 2 | 15:57 | 17.9 | 7.73 | 27.8 | 7.03 | 8.13 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 15:35 | 17.7 | 7.5 | 28.1 | 6.8 | 7.93 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 15:35 | 17.7 | 7.53 | 28.1 | 6.78 | 7.94 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 15:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 15:35 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 1 | 15:35 | 17.8 | 7.85 | 28.2 | 6.97 | 8.25 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 2 | 15:35 | 17.9 | 7.86 | 28.2 | 6.98 | 8.27 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 15:47 | 17.6 | 7.79 | 27.9 | 6.95 | 8.33 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 15:47 | 17.7 | 7.81 | 27.9 | 6.97 | 8.34 | 10.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 15:47 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 15:47 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 1 | 15:47 | 17.8 | 7.93 | 28.1 | 6.88 | 8.51 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 2 | 15:47 | 17.8 | 7.91 | 28.1 | 6.87 | 8.5 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 15:06 | 17.7 | 7.63 | 28 | 6.63 | 7.82 | 10 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 15:06 | 17.7 | 7.64 | 28.1 | 6.64 | 7.86 | 10.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 1 | 15:06 | 17.7 | 7.77 | 28 | 6.33 | 7.9 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.3 | 2 | 2 | 15:06 | 17.7 | 7.78 | 28 | 6.32 | 7.92 | 10.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.5 | 3 | 1 | 15:06 | 17.8 | 7.81 | 27.9 | 6.81 | 8.15 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 11.5 | 3 | 2 | 15:06 | 17.8 | 7.83 | 27.8 | 6.8 | 8.16 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 10:23 | 17.6 | 7.78 | 27.7 | 6.95 | 8.74 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 10:23 | 17.6 | 7.76 | 27.6 | 6.96 | 8.78 | 13 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 1 | 10:23 | 17.5 | 7.84 | 27.8 | 7.08 | 8.86 | 13.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 2 | 10:23 | 17.4 | 7.85 | 27.7 | 7.09 | 8.95 | 13.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 1 | 10:23 | 17.8 | 7.72 | 27.9 | 7.17 | 8.52 | 12.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 2 | 10:23 | 17.8 | 7.75 | 28 | 7.14 | 8.59 | 12.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 12:26 | 17.4 | 7.81 | 27.7 | 6.75 | 8.45 | 12.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 12:26 | 17.3 | 7.84 | 27.8 | 6.77 | 8.49 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 12:26 | 17.5 | 7.79 | 27.9 | 6.83 | 8.67 | 13 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 12:26 | 17.4 | 7.76 | 27.8 | 6.85 | 8.72 | 12.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 1 | 12:26 | 17.7 | 7.86 | 28 | 6.91 | 8.88 | 13 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 2 | 12:26 | 17.7 | 7.87 | 27.9 | 6.92 | 8.93 | 13 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 10:56 | 17.4 | 7.72 | 27.6 | 6.84 | 8.35 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 10:56 | 17.5 | 7.74 | 27.5 | 6.81 | 8.43 | 11.7 |

| 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 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 10:56 | 17.6 | 7.86 | 27.7 | 6.74 | 8.61 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 10:56 | 17.5 | 7.85 | 27.6 | 6.75 | 8.67 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 10:56 | 17.7 | 7.83 | 27.8 | 6.91 | 8.72 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.1 | 3 | 2 | 10:56 | 17.6 | 7.8 | 27.7 | 6.92 | 8.81 | 12.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 11:11 | 17.5 | 7.73 | 27.7 | 7.01 | 8.47 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 11:11 | 17.6 | 7.76 | 27.6 | 7 | 8.41 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.1 | 2 | 1 | 11:11 | 17.6 | 7.67 | 27.8 | 6.82 | 8.63 | 11.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.1 | 2 | 2 | 11:11 | 17.5 | 7.69 | 27.7 | 6.86 | 8.56 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.1 | 3 | 1 | 11:11 | 17.7 | 7.79 | 27.9 | 6.93 | 8.7 | 12 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 9.1 | 3 | 2 | 11:11 | 17.6 | 7.77 | 27.8 | 6.96 | 8.74 | 12.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 10:40 | 17.6 | 7.69 | 27.7 | 6.74 | 8.51 | 10.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 10:40 | 17.5 | 7.66 | 27.6 | 6.76 | 8.57 | 10.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 1 | 10:40 | 17.7 | 7.74 | 27.7 | 6.8 | 8.42 | 10.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 2 | 10:40 | 17.6 | 7.75 | 27.7 | 6.81 | 8.38 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 1 | 10:40 | 17.7 | 7.79 | 27.8 | 6.87 | 8.69 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 2 | 10:40 | 17.7 | 7.78 | 27.7 | 6.88 | 8.63 | 10.5 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 11:26 | 17.5 | 7.72 | 27.6 | 6.93 | 8.31 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 11:26 | 17.4 | 7.75 | 27.5 | 6.9 | 8.35 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 8.6 | 2 | 1 | 11:26 | 17.7 | 7.8 | 27.7 | 7.03 | 8.72 | 11.9 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 8.6 | 2 | 2 | 11:26 | 17.6 | 7.83 | 27.8 | 7.05 | 8.78 | 11.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.1 | 3 | 1 | 11:26 | 17.8 | 7.68 | 27.9 | 6.85 | 8.46 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.1 | 3 | 2 | 11:26 | 17.7 | 7.69 | 27.8 | 6.83 | 8.39 | 11.6 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 11:55 | 17.4 | 7.79 | 27.7 | 6.91 | 8.54 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 11:55 | 17.5 | 7.78 | 27.6 | 6.92 | 8.61 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 11:55 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 11:55 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.3 | 3 | 1 | 11:55 | 17.5 | 7.84 | 27.8 | 7.01 | 8.44 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.3 | 3 | 2 | 11:55 | 17.6 | 7.86 | 27.7 | 7.04 | 8.49 | 10.8 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 11:41 | 17.4 | 7.68 | 27.7 | 6.84 | 8.69 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 11:41 | 17.4 | 7.72 | 27.7 | 6.85 | 8.62 | 11.2 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 11:41 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 11:41 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 11:41 | 17.5 | 7.74 | 27.7 | 6.71 | 8.84 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 11:41 | 17.4 | 7.77 | 27.8 | 6.7 | 8.78 | 11.3 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 12:09 | 17.3 | 7.84 | 27.6 | 6.82 | 8.36 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 12:09 | 17.3 | 7.88 | 27.7 | 6.84 | 8.42 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.1 | 2 | 1 | 12:09 | 17.5 | 7.91 | 27.6 | 6.71 | 8.59 | 11 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.1 | 2 | 2 | 12:09 | 17.4 | 7.92 | 27.7 | 6.7 | 8.52 | 10.7 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.2 | 3 | 1 | 12:09 | 17.6 | 7.79 | 27.8 | 6.59 | 8.63 | 11.4 |
| TMCLKL | HY/2012/08 | 2017-03-09 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 11.2 | 3 | 2 | 12:09 | 17.7 | 7.78 | 27.7 | 6.62 | 8.69 | 11.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 18:16 | 18 | 7.76 | 28 | 7.47 | 5.36 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 18:16 | 18 | 7.72 | 28 | 7.5 | 5.42 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 18:16 | 18 | 7.67 | 28.1 | 7.42 | 5.67 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 18:16 | 17.9 | 7.71 | 28.1 | 7.38 | 5.72 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 18:16 | 18.1 | 7.69 | 28.2 | 7.56 | 5.93 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 18:16 | 18.1 | 7.71 | 28.2 | 7.51 | 5.99 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 16:26 | 17.9 | 7.86 | 27.8 | 7.37 | 5.28 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 16:26 | 18 | 7.9 | 27.9 | 7.34 | 5.36 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 16:26 | 18.1 | 7.76 | 27.9 | 7.41 | 5.67 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 16:26 | 18 | 7.71 | 27.9 | 7.44 | 5.74 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 1 | 16:26 | 18.1 | 7.7 | 28 | 7.51 | 5.9 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 2 | 16:26 | 18.1 | 7.74 | 28 | 7.54 | 5.98 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 17:49 | 17.9 | 7.79 | 27.8 | 7.48 | 5.38 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 17:49 | 17.9 | 7.75 | 27.9 | 7.51 | 5.44 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 1 | 17:49 | 17.9 | 7.78 | 27.9 | 7.46 | 5.63 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 2 | 17:49 | 18 | 7.81 | 28 | 7.4 | 5.7 | 7.5 |

| 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 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 1 | 17:49 | 18.1 | 7.76 | 28.1 | 7.56 | 5.9 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 2 | 17:49 | 18.1 | 7.79 | 28.1 | 7.59 | 5.82 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 17:34 | 18 | 7.73 | 27.9 | 7.46 | 5.51 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 17:34 | 18 | 7.69 | 28 | 7.44 | 5.57 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 1 | 17:34 | 18 | 7.63 | 28 | 7.38 | 5.66 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 2 | 17:34 | 18 | 7.66 | 28 | 7.35 | 5.6 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 1 | 17:34 | 18.1 | 7.59 | 28.1 | 7.51 | 5.83 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 2 | 17:34 | 18.1 | 7.63 | 28.1 | 7.54 | 5.89 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 18:03 | 18 | 7.74 | 27.9 | 7.56 | 5.4 | 6.5 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 18:03 | 17.9 | 7.76 | 28 | 7.53 | 5.47 | 6.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 1 | 18:03 | 18 | 7.7 | 28 | 7.47 | 5.56 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 2 | 18:03 | 18 | 7.73 | 28 | 7.44 | 5.61 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 1 | 18:03 | 18.1 | 7.74 | 28.1 | 7.5 | 5.76 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 2 | 18:03 | 18.1 | 7.77 | 28.1 | 7.53 | 5.83 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 17:19 | 18 | 7.69 | 27.9 | 7.37 | 5.62 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 17:19 | 18 | 7.72 | 27.8 | 7.4 | 5.55 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 1 | 17:19 | 18 | 7.64 | 27.9 | 7.44 | 5.41 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 2 | 17:19 | 18 | 7.6 | 27.9 | 7.47 | 5.35 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9 | 3 | 1 | 17:19 | 18.1 | 7.67 | 28 | 7.55 | 5.76 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9 | 3 | 2 | 17:19 | 18.1 | 7.72 | 28 | 7.58 | 5.81 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 17:02 | 18 | 7.82 | 27.8 | 7.41 | 5.58 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 17:02 | 18 | 7.8 | 27.9 | 7.38 | 5.63 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 17:02 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 17:02 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 1 | 17:02 | 18 | 7.77 | 27.9 | 7.35 | 5.77 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 2 | 17:02 | 18 | 7.8 | 27.9 | 7.3 | 5.82 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 17:10 | 18 | 7.76 | 27.9 | 7.35 | 5.43 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 17:10 | 17.9 | 7.8 | 27.9 | 7.32 | 5.51 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 17:10 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 17:10 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 1 | 17:10 | 18 | 7.73 | 27.9 | 7.27 | 5.66 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 2 | 17:10 | 18 | 7.7 | 28 | 7.24 | 5.72 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 16:46 | 17.9 | 7.74 | 27.8 | 7.27 | 5.48 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 16:46 | 17.9 | 7.8 | 27.8 | 7.31 | 5.51 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 16:46 | 17.9 | 7.73 | 27.8 | 7.33 | 5.59 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 16:46 | 18 | 7.75 | 27.9 | 7.36 | 5.64 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 1 | 16:46 | 18.1 | 7.71 | 27.9 | 7.42 | 5.86 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 2 | 16:46 | 18 | 7.74 | 28 | 7.43 | 5.91 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 11:46 | 17.8 | 7.74 | 28.1 | 7.39 | 5.56 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 11:46 | 17.7 | 7.77 | 28.2 | 7.35 | 5.5 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 1 | 11:46 | 17.8 | 7.7 | 28.2 | 7.26 | 5.87 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 2 | 11:46 | 17.8 | 7.67 | 28.2 | 7.3 | 5.8 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 1 | 11:46 | 17.9 | 7.72 | 28.3 | 7.45 | 6.09 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 2 | 11:46 | 17.9 | 7.7 | 28.2 | 7.42 | 6.04 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 14:02 | 17.7 | 7.91 | 27.9 | 7.22 | 5.48 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 14:02 | 17.7 | 7.88 | 27.9 | 7.25 | 5.41 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 1 | 14:02 | 17.8 | 7.7 | 28 | 7.3 | 5.78 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 2 | 14:02 | 17.7 | 7.74 | 27.9 | 7.32 | 5.73 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 1 | 14:02 | 17.8 | 7.76 | 28.1 | 7.41 | 6.08 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 2 | 14:02 | 17.8 | 7.73 | 28 | 7.38 | 6.01 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 12:24 | 17.7 | 7.74 | 28 | 7.35 | 5.48 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 12:24 | 17.7 | 7.78 | 27.9 | 7.37 | 5.53 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.2 | 2 | 1 | 12:24 | 17.8 | 7.82 | 28.1 | 7.46 | 5.82 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.2 | 2 | 2 | 12:24 | 17.7 | 7.78 | 28.1 | 7.43 | 5.89 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.4 | 3 | 1 | 12:24 | 17.8 | 7.8 | 28.2 | 7.46 | 5.92 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.4 | 3 | 2 | 12:24 | 17.8 | 7.77 | 28.2 | 7.44 | 5.99 | 8.2 |

| 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 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 12:43 | 17.7 | 7.7 | 27.9 | 7.32 | 5.68 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 12:43 | 17.7 | 7.73 | 28 | 7.35 | 5.62 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 1 | 12:43 | 17.8 | 7.63 | 28 | 7.22 | 5.79 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 2 | 12:43 | 17.7 | 7.65 | 28 | 7.24 | 5.73 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.2 | 3 | 1 | 12:43 | 17.8 | 7.64 | 28.1 | 7.4 | 5.99 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.2 | 3 | 2 | 12:43 | 17.8 | 7.6 | 28.1 | 7.43 | 5.92 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 12:05 | 17.7 | 7.73 | 28 | 7.42 | 5.53 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 12:05 | 17.7 | 7.76 | 28 | 7.4 | 5.59 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 12:05 | 17.8 | 7.71 | 28.1 | 7.36 | 5.66 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 12:05 | 17.7 | 7.73 | 28 | 7.33 | 5.7 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 1 | 12:05 | 17.8 | 7.75 | 28.2 | 7.39 | 5.85 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 2 | 12:05 | 17.8 | 7.78 | 28.1 | 7.41 | 5.91 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 13:02 | 17.7 | 7.74 | 27.9 | 7.29 | 5.66 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 13:02 | 17.7 | 7.7 | 27.9 | 7.26 | 5.72 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 13:02 | 17.7 | 7.61 | 28 | 7.32 | 5.55 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 13:02 | 17.8 | 7.64 | 28 | 7.34 | 5.48 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 1 | 13:02 | 17.8 | 7.73 | 28.1 | 7.46 | 5.92 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 2 | 13:02 | 17.8 | 7.69 | 28 | 7.43 | 5.87 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 13:32 | 17.7 | 7.79 | 27.9 | 7.27 | 5.75 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 13:32 | 17.7 | 7.82 | 27.9 | 7.3 | 5.71 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 13:32 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 13:32 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.5 | 3 | 1 | 13:32 | 17.7 | 7.81 | 28 | 7.2 | 5.95 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.5 | 3 | 2 | 13:32 | 17.8 | 7.76 | 28 | 7.23 | 5.9 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 13:19 | 17.7 | 7.81 | 28 | 7.24 | 5.53 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 13:19 | 17.7 | 7.78 | 27.9 | 7.22 | 5.5 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 13:19 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 13:19 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.5 | 3 | 1 | 13:19 | 17.8 | 7.75 | 28 | 7.14 | 5.8 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.5 | 3 | 2 | 13:19 | 17.7 | 7.72 | 28 | 7.11 | 5.74 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 13:45 | 17.7 | 7.81 | 27.9 | 7.2 | 5.64 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 13:45 | 17.7 | 7.76 | 27.9 | 7.23 | 5.59 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 1 | 13:45 | 17.7 | 7.72 | 28 | 7.24 | 5.72 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 2 | 13:45 | 17.8 | 7.75 | 27.9 | 7.21 | 5.67 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 1 | 13:45 | 17.8 | 7.73 | 28 | 7.3 | 5.97 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-11 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 2 | 13:45 | 17.8 | 7.71 | 28.1 | 7.32 | 6.02 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 09:46 | 19 | 7.71 | 28 | 7.49 | 5.4 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 09:46 | 18.9 | 7.74 | 27.9 | 7.53 | 5.34 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9 | 2 | 1 | 09:46 | 19.1 | 7.7 | 28.1 | 7.44 | 5.66 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9 | 2 | 2 | 09:46 | 19.1 | 7.68 | 28.1 | 7.42 | 5.71 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17 | 3 | 1 | 09:46 | 19.2 | 7.73 | 28.2 | 7.58 | 5.98 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17 | 3 | 2 | 09:46 | 19.2 | 7.7 | 28.1 | 7.54 | 5.92 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 07:58 | 18.9 | 7.91 | 27.8 | 7.35 | 5.35 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 07:58 | 18.9 | 7.88 | 27.8 | 7.37 | 5.31 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 7 | 2 | 1 | 07:58 | 19 | 7.72 | 27.9 | 7.46 | 5.7 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 7 | 2 | 2 | 07:58 | 19.1 | 7.76 | 27.8 | 7.43 | 5.75 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.9 | 3 | 1 | 07:58 | 19.1 | 7.71 | 28 | 7.53 | 7.92 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.9 | 3 | 2 | 07:58 | 19.1 | 7.73 | 28 | 7.51 | 5.99 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 09:17 | 18.9 | 7.8 | 27.9 | 7.5 | 5.36 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 09:17 | 18.9 | 7.77 | 27.9 | 7.52 | 5.41 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 1 | 09:17 | 19.1 | 7.82 | 28 | 7.43 | 5.71 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.5 | 2 | 2 | 09:17 | 19 | 7.8 | 27.9 | 7.45 | 5.65 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 1 | 09:17 | 19.2 | 7.78 | 28.1 | 7.6 | 5.84 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.9 | 3 | 2 | 09:17 | 19.1 | 7.82 | 28.1 | 7.56 | 5.92 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 09:03 | 19 | 7.7 | 27.9 | 7.48 | 5.52 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 09:03 | 18.9 | 7.73 | 27.9 | 7.44 | 5.56 | 7.7 |

| 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 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 1 | 09:03 | 19 | 7.61 | 28 | 7.34 | 5.59 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 2 | 09:03 | 19 | 7.65 | 28.1 | 7.37 | 5.64 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 1 | 09:03 | 19.1 | 7.58 | 28.1 | 7.56 | 5.9 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 2 | 09:03 | 19.1 | 7.61 | 28.1 | 7.54 | 5.86 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 09:31 | 19 | 7.75 | 27.9 | 7.52 | 5.49 | 6.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 09:31 | 18.9 | 7.78 | 27.9 | 7.56 | 5.43 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 1 | 09:31 | 19.1 | 7.74 | 28 | 7.48 | 5.57 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 2 | 09:31 | 19 | 7.72 | 27.9 | 7.46 | 5.62 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 1 | 09:31 | 19.1 | 7.73 | 28 | 7.51 | 5.77 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 2 | 09:31 | 19.1 | 7.77 | 28.1 | 7.54 | 5.82 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 08:48 | 18.9 | 7.7 | 27.9 | 7.39 | 5.54 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 08:48 | 19 | 7.74 | 27.9 | 7.41 | 5.59 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 1 | 08:48 | 19.1 | 7.66 | 27.9 | 7.49 | 5.37 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 2 | 08:48 | 19 | 7.63 | 28 | 7.45 | 5.42 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 1 | 08:48 | 19.1 | 7.73 | 28 | 7.6 | 5.74 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 2 | 08:48 | 19.1 | 7.69 | 28.1 | 7.57 | 5.79 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 08:26 | 18.9 | 7.84 | 27.9 | 7.42 | 5.61 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 08:26 | 19 | 7.81 | 27.8 | 7.4 | 5.57 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 08:26 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 08:26 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 1 | 08:26 | 19 | 7.79 | 27.9 | 7.37 | 5.75 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 2 | 08:26 | 19 | 7.83 | 27.9 | 7.34 | 5.8 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 08:37 | 18.9 | 7.82 | 27.9 | 7.33 | 5.53 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 08:37 | 18.9 | 7.78 | 27.9 | 7.37 | 5.46 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 08:37 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 08:37 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 1 | 08:37 | 19 | 7.71 | 27.9 | 7.29 | 5.64 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 2 | 08:37 | 19 | 7.74 | 27.9 | 7.26 | 5.7 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 08:12 | 19 | 7.75 | 27.8 | 7.32 | 5.47 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 08:12 | 18.9 | 7.8 | 27.8 | 7.29 | 5.52 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 08:12 | 19 | 7.72 | 27.9 | 7.34 | 5.65 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 08:12 | 19 | 7.76 | 27.9 | 7.36 | 5.61 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 1 | 08:12 | 19.1 | 7.75 | 28 | 7.4 | 5.85 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 2 | 08:12 | 19.1 | 7.7 | 27.9 | 7.44 | 5.92 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 12:19 | 18.9 | 7.81 | 28 | 7.52 | 5.96 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 12:19 | 19 | 7.83 | 28 | 7.53 | 5.97 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 12:19 | 18.9 | 7.91 | 28.2 | 7.5 | 5.86 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 12:19 | 18.9 | 7.88 | 28.1 | 7.49 | 5.87 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 1 | 12:19 | 19 | 7.84 | 28.2 | 7.51 | 6.31 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 2 | 12:19 | 19.1 | 7.85 | 28.2 | 7.54 | 6.32 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 15:15 | 19 | 8 | 27.9 | 7.71 | 6.23 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 15:15 | 19 | 7.99 | 27.9 | 7.73 | 6.24 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 1 | 15:15 | 18.9 | 7.9 | 27.9 | 7.8 | 6.37 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 2 | 15:15 | 18.9 | 7.87 | 28 | 7.81 | 6.39 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 1 | 15:15 | 19 | 7.72 | 28.1 | 7.79 | 6.4 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 2 | 15:15 | 19.1 | 7.74 | 28.1 | 7.76 | 6.39 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 13:03 | 18.9 | 7.91 | 27.9 | 7.7 | 5.49 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 13:03 | 18.8 | 7.88 | 28 | 7.68 | 5.47 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 1 | 13:03 | 18.9 | 7.87 | 28.1 | 7.59 | 5.54 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 2 | 13:03 | 19 | 7.85 | 28.1 | 7.61 | 5.54 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 1 | 13:03 | 19 | 7.79 | 28.2 | 7.53 | 5.77 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 2 | 13:03 | 19 | 7.8 | 28.1 | 7.56 | 5.76 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 13:25 | 19 | 7.77 | 28 | 7.59 | 5.91 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 13:25 | 18.9 | 7.74 | 28 | 7.58 | 5.93 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 1 | 13:25 | 19.1 | 7.81 | 27.9 | 7.69 | 6.01 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 2 | 13:25 | 19.1 | 7.79 | 28 | 7.66 | 6.03 | 8.5 |

| 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 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 1 | 13:25 | 19 | 7.63 | 28.1 | 7.65 | 5.86 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 2 | 13:25 | 19.1 | 7.65 | 28 | 7.62 | 5.88 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 12:42 | 18.9 | 7.53 | 28 | 7.61 | 5.67 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 12:42 | 18.8 | 7.54 | 27.9 | 7.59 | 5.69 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 12:42 | 18.9 | 7.61 | 28.1 | 7.55 | 6.12 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 12:42 | 18.9 | 7.62 | 28.1 | 7.53 | 6.1 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 12:42 | 19 | 7.7 | 28.1 | 7.6 | 5.99 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 12:42 | 18.9 | 7.68 | 28.2 | 7.61 | 5.98 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 13:47 | 19 | 7.56 | 27.9 | 7.69 | 5.21 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 13:47 | 19 | 7.57 | 28 | 7.71 | 5.24 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 1 | 13:47 | 19 | 7.81 | 28.1 | 7.72 | 5.61 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 2 | 13:47 | 19.1 | 7.8 | 28 | 7.73 | 5.59 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 1 | 13:47 | 19.2 | 7.91 | 28.1 | 7.76 | 5.71 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 2 | 13:47 | 19.2 | 7.92 | 28.1 | 7.78 | 5.73 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 14:31 | 19 | 7.66 | 27.9 | 7.7 | 6.03 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 14:31 | 19.1 | 7.65 | 27.9 | 7.69 | 6.02 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 14:31 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 14:31 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.3 | 3 | 1 | 14:31 | 19.1 | 7.7 | 28 | 7.63 | 5.86 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.3 | 3 | 2 | 14:31 | 19.2 | 7.71 | 28.1 | 7.61 | 5.87 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 14:09 | 18.9 | 7.51 | 28 | 7.73 | 5.89 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 14:09 | 19 | 7.53 | 27.9 | 7.75 | 5.87 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 14:09 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 14:09 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 1 | 14:09 | 19.1 | 7.49 | 27.9 | 7.72 | 5.72 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 2 | 14:09 | 19.1 | 7.47 | 28 | 7.71 | 5.73 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 14:53 | 19 | 7.59 | 28 | 7.69 | 6.05 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 14:53 | 19.1 | 7.61 | 27.9 | 7.68 | 6.07 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 1 | 14:53 | 19 | 7.73 | 28 | 7.7 | 7.01 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 2 | 14:53 | 19 | 7.76 | 28.1 | 7.71 | 7 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 1 | 14:53 | 19.2 | 7.83 | 28.1 | 7.68 | 6.57 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-14 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 2 | 14:53 | 19.1 | 7.81 | 28 | 7.67 | 6.58 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 10:31 | 17.8 | 7.88 | 27.8 | 7.58 | 5.34 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 10:31 | 17.9 | 7.86 | 27.9 | 7.62 | 5.37 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.1 | 2 | 1 | 10:31 | 18 | 7.52 | 28 | 7.31 | 5.61 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.1 | 2 | 2 | 10:31 | 18 | 7.55 | 28.1 | 7.38 | 5.67 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.2 | 3 | 1 | 10:31 | 18.1 | 7.63 | 28.1 | 7.46 | 5.83 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.2 | 3 | 2 | 10:31 | 18.2 | 7.68 | 28.2 | 7.5 | 5.8 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 08:15 | 17.8 | 7.58 | 27.7 | 7.37 | 5.44 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 08:15 | 17.9 | 7.54 | 27.8 | 7.4 | 5.48 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 08:15 | 18 | 7.67 | 27.9 | 7.54 | 5.61 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 08:15 | 18 | 7.63 | 28 | 7.57 | 5.66 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 1 | 08:15 | 17.9 | 7.81 | 28.1 | 7.68 | 5.85 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 2 | 08:15 | 17.9 | 7.87 | 28 | 7.66 | 5.89 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 09:57 | 17.7 | 7.88 | 27.9 | 7.54 | 5.26 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 09:57 | 17.6 | 7.82 | 27.9 | 7.58 | 5.22 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 1 | 09:57 | 17.8 | 7.53 | 27.9 | 7.63 | 5.57 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 2 | 09:57 | 17.8 | 7.55 | 28 | 7.66 | 5.61 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 1 | 09:57 | 17.9 | 7.61 | 28.1 | 7.76 | 5.7 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 2 | 09:57 | 18 | 7.64 | 28.2 | 7.72 | 5.77 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 09:40 | 17.9 | 7.54 | 27.9 | 7.44 | 5.61 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 09:40 | 18 | 7.56 | 27.8 | 7.4 | 5.66 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 1 | 09:40 | 17.9 | 7.93 | 28 | 7.79 | 5.35 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 2 | 09:40 | 17.9 | 7.97 | 27.9 | 7.83 | 5.37 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.3 | 3 | 1 | 09:40 | 18.1 | 7.62 | 28.1 | 7.22 | 5.81 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.3 | 3 | 2 | 09:40 | 18.2 | 7.66 | 28.1 | 7.28 | 5.85 | 7.9 |

| 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 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 10:14 | 17.8 | 7.57 | 27.8 | 7.46 | 5.3 | 6.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 10:14 | 17.8 | 7.55 | 27.8 | 7.44 | 5.33 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 10:14 | 17.9 | 7.9 | 27.9 | 7.68 | 5.45 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 10:14 | 17.8 | 7.94 | 28 | 7.62 | 5.48 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 10:14 | 18.1 | 7.67 | 27.9 | 7.54 | 5.66 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 10:14 | 18.1 | 7.66 | 27.9 | 7.57 | 5.69 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 09:23 | 17.8 | 7.77 | 27.9 | 7.27 | 5.45 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 09:23 | 17.9 | 7.75 | 27.9 | 7.22 | 5.48 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.3 | 2 | 1 | 09:23 | 18 | 7.62 | 28 | 7.56 | 5.3 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.3 | 2 | 2 | 09:23 | 18 | 7.64 | 27.9 | 7.59 | 5.36 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.5 | 3 | 1 | 09:23 | 17.9 | 7.53 | 28.1 | 7.66 | 5.82 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.5 | 3 | 2 | 09:23 | 18.1 | 7.56 | 28.2 | 7.68 | 5.87 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 08:49 | 17.8 | 7.46 | 27.9 | 7.47 | 5.45 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 08:49 | 17.9 | 7.49 | 28 | 7.5 | 5.48 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 08:49 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 08:49 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 1 | 08:49 | 17.9 | 7.7 | 27.7 | 7.22 | 5.69 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 2 | 08:49 | 18 | 7.73 | 27.8 | 7.26 | 5.66 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 09:06 | 17.7 | 7.52 | 27.8 | 7.43 | 5.36 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 09:06 | 17.8 | 7.55 | 27.9 | 7.46 | 5.4 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 09:06 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 09:06 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 09:06 | 17.9 | 7.61 | 28 | 7.37 | 5.52 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 09:06 | 18 | 7.67 | 28.1 | 7.39 | 5.58 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 08:32 | 17.8 | 7.92 | 27.7 | 7.26 | 5.36 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 08:32 | 17.7 | 7.95 | 27.8 | 7.28 | 5.38 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 1 | 08:32 | 17.7 | 7.61 | 27.9 | 7.42 | 5.53 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 2 | 08:32 | 17.7 | 7.64 | 28 | 7.46 | 5.57 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.8 | 3 | 1 | 08:32 | 17.9 | 7.54 | 28 | 7.59 | 5.68 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.8 | 3 | 2 | 08:32 | 17.9 | 7.56 | 28.1 | 7.55 | 5.71 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 13:22 | 17.9 | 7.85 | 27.9 | 7.49 | 5.45 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 13:22 | 17.9 | 7.88 | 27.9 | 7.51 | 5.47 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 13:22 | 18.1 | 7.51 | 28.1 | 7.21 | 5.81 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 13:22 | 18 | 7.54 | 28 | 7.25 | 5.76 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 13:22 | 18.2 | 7.69 | 28.2 | 7.39 | 5.96 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 13:22 | 18.2 | 7.65 | 28.2 | 7.37 | 5.91 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 15:36 | 17.9 | 7.59 | 27.9 | 7.29 | 5.6 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 15:36 | 17.9 | 7.56 | 27.8 | 7.27 | 5.55 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 15:36 | 18 | 7.63 | 27.9 | 7.46 | 5.78 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 15:36 | 17.9 | 7.65 | 27.9 | 7.44 | 5.75 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 1 | 15:36 | 17.9 | 7.88 | 28.1 | 7.55 | 5.94 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 2 | 15:36 | 18 | 7.84 | 28 | 7.58 | 5.99 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 14:01 | 17.8 | 7.84 | 28 | 7.46 | 5.38 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 14:01 | 17.8 | 7.87 | 27.9 | 7.43 | 5.34 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 14:01 | 17.9 | 7.52 | 28 | 7.5 | 5.68 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 14:01 | 17.8 | 7.56 | 28 | 7.52 | 5.74 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 14:01 | 18.1 | 7.62 | 28.2 | 7.6 | 5.9 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 2 | 14:01 | 18 | 7.66 | 28.1 | 7.62 | 5.82 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 14:19 | 17.9 | 7.57 | 27.9 | 7.3 | 5.74 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 14:19 | 17.9 | 7.53 | 27.9 | 7.32 | 5.78 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 1 | 14:19 | 17.9 | 7.94 | 28 | 7.71 | 5.48 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 2 | 14:19 | 18 | 7.97 | 27.9 | 7.68 | 5.51 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 1 | 14:19 | 18.1 | 7.68 | 28.1 | 7.16 | 5.97 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 2 | 14:19 | 18.1 | 7.63 | 28.2 | 7.12 | 5.93 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 13:44 | 17.9 | 7.56 | 27.9 | 7.31 | 5.41 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 13:44 | 17.8 | 7.58 | 27.9 | 7.33 | 5.45 | 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 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 1 | 13:44 | 17.9 | 7.91 | 28 | 7.5 | 5.62 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 2 | 13:44 | 17.9 | 7.93 | 27.9 | 7.53 | 5.56 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.1 | 3 | 1 | 13:44 | 18.1 | 7.65 | 28.1 | 7.43 | 5.8 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.1 | 3 | 2 | 13:44 | 18.1 | 7.66 | 28 | 7.45 | 5.75 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 14:36 | 17.9 | 7.73 | 27.8 | 7.11 | 5.6 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 14:36 | 17.8 | 7.76 | 27.9 | 7.14 | 5.57 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 1 | 14:36 | 18 | 7.63 | 28 | 7.46 | 5.41 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 2 | 14:36 | 17.9 | 7.65 | 28 | 7.44 | 5.47 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 1 | 14:36 | 18.1 | 7.55 | 28.2 | 7.56 | 5.98 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 2 | 14:36 | 18 | 7.51 | 28.2 | 7.53 | 5.92 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 15:06 | 17.9 | 7.48 | 27.9 | 7.39 | 5.6 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 15:06 | 17.9 | 7.45 | 27.9 | 7.36 | 5.54 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 15:06 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 15:06 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 1 | 15:06 | 17.9 | 7.71 | 27.9 | 7.14 | 5.79 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 2 | 15:06 | 18 | 7.74 | 28 | 7.11 | 5.82 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 14:53 | 17.9 | 7.54 | 27.9 | 7.41 | 5.52 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 14:53 | 17.9 | 7.56 | 27.9 | 7.44 | 5.47 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 14:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 14:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 1 | 14:53 | 18 | 7.63 | 28 | 7.27 | 5.65 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 2 | 14:53 | 18 | 7.67 | 27.9 | 7.29 | 5.72 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 15:19 | 17.8 | 7.96 | 27.8 | 7.15 | 5.48 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 15:19 | 17.9 | 7.94 | 27.8 | 7.17 | 5.52 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 15:19 | 17.8 | 7.62 | 28 | 7.31 | 5.65 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 15:19 | 17.9 | 7.66 | 27.9 | 7.33 | 5.69 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.5 | 3 | 1 | 15:19 | 18.1 | 7.57 | 28.2 | 7.46 | 5.81 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-16 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.5 | 3 | 2 | 15:19 | 18 | 7.54 | 28.1 | 7.45 | 5.79 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 11:12 | 17.8 | 7.71 | 27.9 | 7.41 | 5.33 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 11:12 | 17.9 | 7.7 | 27.9 | 7.44 | 5.41 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 11:12 | 18.1 | 7.82 | 28.1 | 7.35 | 5.72 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 11:12 | 18 | 7.8 | 28 | 7.36 | 5.64 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 11:12 | 18.2 | 7.64 | 28.3 | 7.52 | 5.86 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 11:12 | 18.1 | 7.68 | 28.2 | 7.54 | 5.78 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 09:07 | 17.8 | 7.64 | 28 | 7.38 | 5.81 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 09:07 | 17.9 | 7.63 | 27.9 | 7.37 | 5.89 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 09:07 | 18 | 7.73 | 28.1 | 7.45 | 6.03 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 09:07 | 17.9 | 7.7 | 28 | 7.47 | 6.09 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 1 | 09:07 | 18.1 | 7.68 | 28.2 | 7.58 | 5.96 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 2 | 09:07 | 18 | 7.69 | 28.2 | 7.57 | 5.99 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 10:39 | 17.8 | 7.78 | 28 | 7.34 | 5.42 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 10:39 | 17.7 | 7.76 | 27.9 | 7.38 | 5.49 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 10:39 | 17.9 | 7.71 | 28.1 | 7.42 | 5.61 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 10:39 | 17.8 | 7.7 | 28 | 7.44 | 5.65 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.1 | 3 | 1 | 10:39 | 18 | 7.64 | 28.1 | 7.5 | 5.74 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.1 | 3 | 2 | 10:39 | 18.1 | 7.68 | 28.2 | 7.51 | 5.78 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 10:24 | 18 | 7.74 | 27.9 | 7.33 | 5.48 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 10:24 | 17.9 | 7.78 | 28 | 7.36 | 5.53 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 1 | 10:24 | 18 | 7.67 | 28.1 | 7.5 | 5.62 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 2 | 10:24 | 18.1 | 7.69 | 28 | 7.49 | 5.66 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 1 | 10:24 | 18.2 | 7.79 | 28.1 | 7.62 | 5.88 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 2 | 10:24 | 18.1 | 7.81 | 28.2 | 7.64 | 5.81 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 10:55 | 17.7 | 7.64 | 27.9 | 7.24 | 5.61 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 10:55 | 17.6 | 7.67 | 28 | 7.25 | 5.67 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 1 | 10:55 | 17.8 | 7.78 | 28.1 | 7.2 | 5.52 | 6.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 2 | 10:55 | 17.8 | 7.75 | 28.1 | 7.21 | 5.59 | 6.8 |

| 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 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 1 | 10:55 | 17.9 | 7.69 | 28.2 | 7.44 | 5.66 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 2 | 10:55 | 17.8 | 7.68 | 28.1 | 7.48 | 5.8 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 10:08 | 17.9 | 7.63 | 28 | 7.39 | 5.76 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 10:08 | 17.8 | 7.61 | 27.9 | 7.38 | 5.71 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 1 | 10:08 | 17.9 | 7.69 | 27.9 | 7.44 | 5.64 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 2 | 10:08 | 17.9 | 7.68 | 27.9 | 7.47 | 5.59 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.8 | 3 | 1 | 10:08 | 18 | 7.75 | 28.1 | 7.52 | 5.82 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.8 | 3 | 2 | 10:08 | 18 | 7.7 | 28 | 7.54 | 5.77 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 09:39 | 18 | 7.69 | 27.9 | 7.46 | 5.69 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 09:39 | 18.1 | 7.73 | 27.8 | 7.49 | 5.62 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 09:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 09:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.7 | 3 | 1 | 09:39 | 18 | 7.75 | 28 | 7.31 | 5.68 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.7 | 3 | 2 | 09:39 | 18 | 7.78 | 27.9 | 7.35 | 5.74 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 09:53 | 17.7 | 7.72 | 27.9 | 7.25 | 5.58 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 09:53 | 17.8 | 7.75 | 28 | 7.27 | 5.51 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 09:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 09:53 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 1 | 09:53 | 17.9 | 7.8 | 28 | 7.34 | 5.74 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 2 | 09:53 | 17.9 | 7.78 | 28 | 7.36 | 5.82 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 09:24 | 17.9 | 7.73 | 28 | 7.4 | 5.46 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 09:24 | 17.8 | 7.75 | 27.9 | 7.42 | 5.49 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 1 | 09:24 | 18 | 7.82 | 28.1 | 7.49 | 5.33 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 2 | 09:24 | 18 | 7.8 | 28 | 7.47 | 5.39 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.9 | 3 | 1 | 09:24 | 18 | 7.76 | 28.2 | 7.64 | 5.72 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.9 | 3 | 2 | 09:24 | 18.1 | 7.79 | 28.3 | 7.61 | 5.81 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 14:37 | 17.8 | 7.76 | 27.8 | 7.26 | 5.72 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 14:37 | 17.9 | 7.73 | 27.9 | 7.23 | 5.69 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 14:37 | 17.9 | 7.75 | 28 | 7.29 | 5.93 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 14:37 | 18 | 7.7 | 28 | 7.32 | 5.88 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.5 | 3 | 1 | 14:37 | 18.1 | 7.74 | 28.2 | 7.39 | 6.07 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.5 | 3 | 2 | 14:37 | 18.1 | 7.79 | 28.1 | 7.41 | 6.01 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 16:45 | 18 | 7.67 | 27.8 | 7.26 | 5.74 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 16:45 | 17.9 | 7.63 | 27.8 | 7.23 | 5.81 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 1 | 16:45 | 18 | 7.67 | 27.8 | 7.3 | 5.63 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 2 | 16:45 | 18 | 7.7 | 27.9 | 7.33 | 5.69 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 1 | 16:45 | 18.1 | 7.73 | 28.1 | 7.38 | 5.87 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.5 | 3 | 2 | 16:45 | 18.1 | 7.71 | 28.1 | 7.41 | 5.96 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 15:08 | 17.9 | 7.73 | 27.8 | 7.26 | 5.68 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 15:08 | 17.9 | 7.74 | 27.7 | 7.23 | 5.59 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 1 | 15:08 | 18 | 7.64 | 27.8 | 7.21 | 5.72 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.3 | 2 | 2 | 15:08 | 18 | 7.69 | 27.9 | 7.17 | 5.79 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 1 | 15:08 | 18.1 | 7.7 | 28 | 7.27 | 5.88 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.6 | 3 | 2 | 15:08 | 18.1 | 7.67 | 28 | 7.29 | 5.94 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 15:23 | 17.9 | 7.64 | 27.9 | 7.18 | 5.8 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 15:23 | 17.9 | 7.67 | 27.8 | 7.23 | 5.88 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 1 | 15:23 | 17.9 | 7.6 | 27.9 | 7.27 | 5.69 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 2 | 15:23 | 17.9 | 7.66 | 27.9 | 7.29 | 5.73 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 1 | 15:23 | 18 | 7.68 | 28 | 7.35 | 5.94 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 2 | 15:23 | 18 | 7.63 | 28.1 | 7.31 | 6.03 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 14:53 | 17.9 | 7.69 | 27.8 | 7.17 | 5.83 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 14:53 | 18 | 7.71 | 27.8 | 7.19 | 5.76 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 1 | 14:53 | 18 | 7.7 | 27.8 | 7.23 | 5.8 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 2 | 14:53 | 18 | 7.74 | 27.9 | 7.26 | 5.72 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.2 | 3 | 1 | 14:53 | 18 | 7.68 | 28 | 7.3 | 5.97 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.2 | 3 | 2 | 14:53 | 18.1 | 7.71 | 28 | 7.33 | 6.02 | 7.4 |

| 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 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 15:39 | 17.9 | 7.66 | 27.9 | 7.24 | 5.96 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 15:39 | 18 | 7.63 | 27.9 | 7.2 | 5.89 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 1 | 15:39 | 18 | 7.68 | 27.8 | 7.31 | 5.77 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.7 | 2 | 2 | 15:39 | 18 | 7.64 | 27.9 | 7.27 | 5.74 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 1 | 15:39 | 18 | 7.69 | 27.9 | 7.38 | 6.06 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.4 | 3 | 2 | 15:39 | 18 | 7.65 | 28 | 7.4 | 6.14 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 16:07 | 17.9 | 7.63 | 27.8 | 7.27 | 5.83 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 16:07 | 18 | 7.65 | 27.8 | 7.31 | 5.76 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 16:07 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 16:07 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 1 | 16:07 | 18 | 7.6 | 27.8 | 7.34 | 5.9 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 2 | 16:07 | 18 | 7.63 | 27.9 | 7.37 | 5.84 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 15:54 | 18 | 7.64 | 27.9 | 7.18 | 5.78 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 15:54 | 18 | 7.67 | 27.9 | 7.17 | 5.7 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 15:54 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 15:54 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 1 | 15:54 | 17.9 | 7.63 | 27.9 | 7.23 | 5.91 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 2 | 15:54 | 18 | 7.68 | 27.9 | 7.26 | 5.84 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 16:22 | 18 | 7.68 | 27.8 | 7.18 | 5.89 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 16:22 | 18 | 7.64 | 27.8 | 7.16 | 5.96 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 1 | 16:22 | 18 | 7.63 | 27.8 | 7.21 | 5.57 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 2 | 16:22 | 17.9 | 7.67 | 27.9 | 7.24 | 5.63 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 1 | 16:22 | 18.1 | 7.64 | 28 | 7.3 | 5.96 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-18 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 2 | 16:22 | 18.1 | 7.67 | 28 | 7.33 | 6.04 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 08:22 | 18 | 7.77 | 28.1 | 7.47 | 5.24 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 08:22 | 17.9 | 7.76 | 28.2 | 7.5 | 5.32 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.1 | 2 | 1 | 08:22 | 18.1 | 7.88 | 28.3 | 7.41 | 5.63 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.1 | 2 | 2 | 08:22 | 18.2 | 7.86 | 28.4 | 7.42 | 5.33 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.2 | 3 | 1 | 08:22 | 18.2 | 7.7 | 28.4 | 7.58 | 5.82 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.2 | 3 | 2 | 08:22 | 18.3 | 7.74 | 28.5 | 7.6 | 5.74 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 07:25 | 18 | 7.7 | 28.1 | 7.44 | 5.7 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 07:25 | 17.9 | 7.69 | 28 | 7.43 | 5.8 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 7.1 | 2 | 1 | 07:25 | 18 | 7.79 | 28.1 | 7.51 | 5.94 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 7.1 | 2 | 2 | 07:25 | 18.1 | 7.76 | 28.2 | 7.53 | 6 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 13.2 | 3 | 1 | 07:25 | 18.1 | 7.74 | 28.2 | 7.62 | 5.87 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 13.2 | 3 | 2 | 07:25 | 18.2 | 7.75 | 28.3 | 7.64 | 5.9 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 08:07 | 17.9 | 7.84 | 28 | 7.38 | 5.33 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 08:07 | 17.8 | 7.82 | 28.1 | 7.44 | 5.4 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.2 | 2 | 1 | 08:07 | 17.9 | 7.77 | 28 | 7.48 | 5.52 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.2 | 2 | 2 | 08:07 | 18 | 7.76 | 28.1 | 7.5 | 5.56 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.4 | 3 | 1 | 08:07 | 18.1 | 7.7 | 28.3 | 7.56 | 5.65 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.4 | 3 | 2 | 08:07 | 18 | 7.74 | 28.4 | 7.57 | 5.69 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 08:00 | 18 | 7.8 | 28.1 | 7.39 | 5.39 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 08:00 | 18.1 | 7.84 | 28 | 7.37 | 5.44 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 1 | 08:00 | 18.2 | 7.73 | 28.2 | 7.56 | 5.53 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 2 | 08:00 | 18.1 | 7.75 | 28.3 | 7.55 | 5.57 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.8 | 3 | 1 | 08:00 | 18.3 | 7.85 | 28.5 | 7.68 | 5.79 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.8 | 3 | 2 | 08:00 | 18.2 | 7.87 | 28.4 | 7.7 | 5.72 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 08:14 | 17.7 | 7.7 | 27.9 | 7.3 | 5.52 | 6.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 08:14 | 17.8 | 7.73 | 28 | 7.31 | 5.58 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 1 | 08:14 | 17.9 | 7.84 | 28.1 | 7.26 | 5.43 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 2 | 08:14 | 17.9 | 7.81 | 28 | 7.28 | 5.5 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 1 | 08:14 | 17.9 | 7.75 | 28.1 | 7.5 | 5.77 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 2 | 08:14 | 18 | 7.74 | 28.2 | 7.54 | 5.71 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 07:53 | 17.9 | 7.69 | 28.2 | 7.45 | 5.67 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 19:02 | 18 | 7.67 | 28.1 | 7.42 | 5.62 | 7.4 |

| 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 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 1 | 19:02 | 18 | 7.75 | 28.3 | 7.5 | 5.55 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 2 | 19:02 | 18.1 | 7.74 | 28.2 | 7.53 | 5.5 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 1 | 19:02 | 18.1 | 7.81 | 28.3 | 7.58 | 5.73 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 2 | 19:02 | 18.2 | 7.76 | 28.4 | 7.6 | 5.68 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 07:39 | 17.7 | 7.75 | 27.9 | 7.52 | 5.6 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 07:39 | 17.8 | 7.79 | 27.8 | 7.55 | 5.53 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 07:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 07:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 1 | 07:39 | 17.8 | 7.81 | 27.9 | 7.37 | 5.59 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.8 | 3 | 2 | 07:39 | 17.9 | 7.84 | 28 | 7.41 | 5.65 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 07:46 | 17.9 | 7.78 | 28 | 7.31 | 5.49 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 07:46 | 17.9 | 7.81 | 28.1 | 7.33 | 5.42 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 07:46 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 07:46 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 1 | 07:46 | 17.9 | 7.86 | 28.2 | 7.4 | 5.65 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 2 | 07:46 | 18 | 7.84 | 28.1 | 7.42 | 5.73 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 07:32 | 17.8 | 7.79 | 28 | 7.46 | 5.37 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 07:32 | 17.9 | 7.81 | 27.9 | 7.48 | 5.4 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 7 | 2 | 1 | 07:32 | 18 | 7.88 | 28 | 7.55 | 5.24 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 7 | 2 | 2 | 07:32 | 17.9 | 7.86 | 28.1 | 7.53 | 5.3 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 13 | 3 | 1 | 07:32 | 18 | 7.82 | 28.1 | 7.7 | 5.63 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 13 | 3 | 2 | 07:32 | 18.1 | 7.85 | 28.2 | 7.67 | 5.72 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 17:57 | 18.1 | 7.81 | 28.2 | 7.35 | 5.34 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 17:57 | 18.1 | 7.76 | 28.2 | 7.4 | 5.3 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 17:57 | 18.1 | 7.78 | 28.3 | 7.42 | 5.36 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 17:57 | 18.1 | 7.82 | 28.3 | 7.46 | 5.42 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 1 | 17:57 | 18.1 | 7.81 | 28.2 | 7.46 | 5.39 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 2 | 17:57 | 18 | 7.84 | 28.2 | 7.5 | 5.46 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 19:56 | 18.5 | 7.75 | 28.3 | 7.36 | 5.45 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 19:56 | 18.8 | 7.74 | 28.5 | 7.39 | 5.6 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 1 | 19:56 | 18.6 | 7.76 | 28.3 | 7.46 | 5.68 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.8 | 2 | 2 | 19:56 | 18.7 | 7.77 | 28.3 | 7.5 | 5.74 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.6 | 3 | 1 | 19:56 | 18.7 | 7.74 | 28.3 | 7.51 | 5.89 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.6 | 3 | 2 | 19:56 | 18.7 | 7.75 | 28.3 | 7.56 | 5.96 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 18:31 | 18.1 | 7.79 | 28.4 | 7.34 | 5.27 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 18:31 | 18.2 | 7.82 | 28.2 | 7.39 | 5.34 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6 | 2 | 1 | 18:31 | 18.2 | 7.76 | 28.3 | 7.42 | 5.37 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6 | 2 | 2 | 18:31 | 18.2 | 7.78 | 28.3 | 7.45 | 5.46 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 1 | 3 | 1 | 18:31 | 18.2 | 7.8 | 28.3 | 7.51 | 5.53 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 1 | 3 | 2 | 18:31 | 18.2 | 7.82 | 28.3 | 7.56 | 5.6 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 18:47 | 18.4 | 7.82 | 28.3 | 7.35 | 5.38 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 18:47 | 18.4 | 7.84 | 28.3 | 7.38 | 5.32 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 1 | 18:47 | 18.5 | 7.82 | 28.3 | 7.42 | 5.39 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 2 | 18:47 | 18.5 | 7.85 | 28.3 | 7.45 | 5.46 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.2 | 3 | 1 | 18:47 | 18.4 | 7.83 | 28.3 | 7.39 | 5.45 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.2 | 3 | 2 | 18:47 | 18.4 | 7.84 | 28.3 | 7.44 | 5.5 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 18:15 | 18.2 | 7.74 | 28.2 | 7.34 | 5.56 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 18:15 | 18.2 | 7.78 | 28.2 | 7.38 | 5.6 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 6.7 | 2 | 1 | 18:15 | 18.2 | 7.78 | 28.2 | 7.36 | 5.46 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 6.7 | 2 | 2 | 18:15 | 18.2 | 7.74 | 28.3 | 7.39 | 5.53 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 18:15 | 18.2 | 7.79 | 28.2 | 7.42 | 5.52 | 6.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 18:15 | 18.2 | 7.83 | 28.2 | 7.45 | 5.57 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 19:02 | 18.5 | 7.76 | 28.4 | 7.39 | 5.57 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 19:02 | 18.4 | 7.79 | 28.3 | 7.36 | 5.66 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 19:02 | 18.4 | 7.8 | 28.4 | 7.38 | 5.65 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 19:02 | 18.4 | 7.76 | 28.4 | 7.42 | 5.74 | 7.7 |

| 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 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 1 | 19:02 | 18.4 | 7.79 | 28.3 | 7.39 | 5.71 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 2 | 19:02 | 18.4 | 7.81 | 28.3 | 7.43 | 5.76 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 19:28 | 18.6 | 7.14 | 28.2 | 7.45 | 5.53 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 19:28 | 18.7 | 7.15 | 28.3 | 7.47 | 5.66 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 19:28 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 19:28 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 1 | 19:28 | 18.5 | 7.74 | 28.2 | 7.39 | 5.71 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 2 | 19:28 | 18.6 | 7.76 | 28.3 | 7.44 | 5.8 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 19:26 | 18.4 | 7.79 | 28.3 | 7.32 | 5.22 | 6.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 19:26 | 18.5 | 7.82 | 28.4 | 7.36 | 5.25 | 6.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 19:26 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 19:26 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 19:26 | 18.5 | 7.8 | 28.3 | 7.35 | 5.31 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 19:26 | 18.4 | 7.81 | 28.4 | 7.39 | 5.36 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 19:40 | 18.6 | 7.75 | 28.2 | 7.34 | 5.25 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 19:40 | 18.7 | 7.77 | 28.2 | 7.38 | 5.34 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 1 | 19:40 | 18.7 | 7.74 | 28.2 | 7.32 | 5.47 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 2 | 19:40 | 18.7 | 7.7 | 28.2 | 7.35 | 5.56 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 1 | 19:40 | 18.6 | 7.75 | 28.2 | 7.42 | 5.72 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-21 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 2 | 19:40 | 18.6 | 7.74 | 28.2 | 7.45 | 5.79 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 15:15 | 19 | 7.84 | 27.7 | 7.6 | 5.43 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 15:15 | 18.9 | 7.81 | 27.7 | 7.54 | 5.49 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 5 | 1 | 15:15 | 19 | 7.92 | 27.8 | 7.71 | 5.22 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 15:15 | 19.1 | 7.89 | 27.8 | 7.76 | 5.27 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 1 | 15:15 | 19.1 | 7.88 | 27.9 | 7.83 | 5.63 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.7 | 3 | 2 | 15:15 | 19.2 | 7.87 | 28 | 7.9 | 5.68 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 13:05 | 18.7 | 7.85 | 28 | 7.47 | 5.61 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 13:05 | 18.7 | 7.83 | 28 | 7.52 | 5.67 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 13:05 | 18.7 | 7.91 | 28.1 | 7.6 | 5.47 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 13:05 | 18.8 | 7.87 | 28 | 7.66 | 5.4 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 1 | 13:05 | 19 | 7.95 | 28.2 | 7.77 | 5.78 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 2 | 13:05 | 18.9 | 7.97 | 28.1 | 7.71 | 5.82 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 14:39 | 18.9 | 7.85 | 27.8 | 7.32 | 5.65 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 14:39 | 18.9 | 7.82 | 27.7 | 7.39 | 5.71 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6 | 2 | 1 | 14:39 | 18.9 | 7.79 | 27.8 | 7.51 | 5.4 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6 | 2 | 2 | 14:39 | 19 | 7.83 | 27.9 | 7.57 | 5.36 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11 | 3 | 1 | 14:39 | 19.1 | 7.91 | 27.9 | 7.72 | 5.85 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11 | 3 | 2 | 14:39 | 19.1 | 7.95 | 28 | 7.68 | 5.78 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 14:21 | 18.8 | 7.79 | 27.8 | 7.47 | 5.65 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 14:21 | 18.8 | 7.84 | 27.8 | 7.53 | 5.6 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 1 | 14:21 | 18.9 | 7.92 | 27.9 | 7.66 | 5.74 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 2 | 14:21 | 18.8 | 7.88 | 27.8 | 7.71 | 5.79 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.7 | 3 | 1 | 14:21 | 18.9 | 7.95 | 27.9 | 7.82 | 5.88 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.7 | 3 | 2 | 14:21 | 18.9 | 7.94 | 28 | 7.89 | 5.93 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 14:57 | 18.9 | 7.91 | 27.7 | 7.44 | 5.5 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 14:57 | 18.9 | 7.89 | 27.7 | 7.5 | 5.57 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 14:57 | 19 | 7.85 | 27.8 | 7.62 | 5.7 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 14:57 | 19 | 7.88 | 27.8 | 7.67 | 5.67 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 14:57 | 19.2 | 7.79 | 27.8 | 7.83 | 5.81 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 14:57 | 19.1 | 7.83 | 27.9 | 7.88 | 5.87 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 14:03 | 18.8 | 7.78 | 27.8 | 7.4 | 5.6 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 14:03 | 18.9 | 7.75 | 27.8 | 7.44 | 5.54 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 1 | 14:03 | 18.9 | 7.83 | 27.9 | 7.56 | 5.41 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 2 | 14:03 | 18.9 | 7.87 | 27.8 | 7.63 | 5.36 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.9 | 3 | 1 | 14:03 | 19 | 7.9 | 27.9 | 7.79 | 5.75 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.9 | 3 | 2 | 14:03 | 19.1 | 7.92 | 27.9 | 7.73 | 5.81 | 7.7 |

| 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 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 13:41 | 18.7 | 7.94 | 27.9 | 7.53 | 5.48 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 13:41 | 18.8 | 7.9 | 27.9 | 7.47 | 5.51 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 13:41 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 13:41 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.5 | 3 | 1 | 13:41 | 18.9 | 7.88 | 27.9 | 7.38 | 5.7 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.5 | 3 | 2 | 13:41 | 18.8 | 7.85 | 28 | 7.32 | 5.75 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 13:52 | 18.8 | 7.86 | 27.9 | 7.6 | 5.42 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 13:52 | 18.8 | 7.89 | 27.8 | 7.54 | 5.47 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 13:52 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 13:52 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 13:52 | 18.9 | 7.85 | 28 | 7.45 | 5.68 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 13:52 | 18.9 | 7.81 | 28 | 7.51 | 5.61 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 13:29 | 18.7 | 7.75 | 28 | 7.43 | 5.54 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 13:29 | 18.7 | 7.77 | 27.9 | 7.38 | 5.6 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 1 | 13:29 | 18.8 | 7.84 | 28.1 | 7.56 | 5.69 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 2 | 13:29 | 18.8 | 7.8 | 28.1 | 7.63 | 5.74 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.8 | 3 | 1 | 13:29 | 18.9 | 7.87 | 28.1 | 7.75 | 5.81 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.8 | 3 | 2 | 13:29 | 18.8 | 7.83 | 28.2 | 7.8 | 5.87 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 09:45 | 17.7 | 7.83 | 28 | 7.32 | 5.39 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 09:45 | 17.8 | 7.82 | 27.9 | 7.35 | 5.47 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 09:45 | 17.8 | 7.94 | 28 | 7.26 | 5.78 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 09:45 | 17.9 | 7.92 | 28.1 | 7.27 | 5.7 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 1 | 09:45 | 17.9 | 7.76 | 28 | 7.43 | 5.92 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.6 | 3 | 2 | 09:45 | 18 | 7.8 | 28.1 | 7.45 | 5.84 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 11:25 | 17.9 | 7.76 | 28.2 | 7.29 | 5.87 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 11:25 | 18 | 7.75 | 28.3 | 7.28 | 5.75 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 11:25 | 18.1 | 7.85 | 28.4 | 7.36 | 6.09 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 11:25 | 18.2 | 7.82 | 28.5 | 7.38 | 6.15 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 1 | 11:25 | 18.4 | 7.8 | 28.5 | 7.46 | 6.02 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 2 | 11:25 | 18.3 | 7.81 | 28.6 | 7.48 | 6.05 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 10:04 | 17.8 | 7.84 | 28.1 | 7.25 | 5.48 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 10:04 | 17.9 | 7.82 | 28.2 | 7.29 | 5.55 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 1 | 10:04 | 18 | 7.77 | 28.2 | 7.33 | 5.67 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 2 | 10:04 | 17.9 | 7.76 | 28.3 | 7.35 | 5.71 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.8 | 3 | 1 | 10:04 | 18 | 7.7 | 28.4 | 7.41 | 5.8 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.8 | 3 | 2 | 10:04 | 18.1 | 7.71 | 28.3 | 7.42 | 5.84 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 10:17 | 18.1 | 7.86 | 28.2 | 7.24 | 5.54 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 10:17 | 18.2 | 7.9 | 28.1 | 7.22 | 5.59 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 1 | 10:17 | 18.2 | 7.79 | 28.3 | 7.41 | 5.68 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.7 | 2 | 2 | 10:17 | 18.3 | 7.81 | 28.4 | 7.39 | 5.72 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.4 | 3 | 1 | 10:17 | 18.4 | 7.91 | 28.4 | 7.53 | 5.94 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.4 | 3 | 2 | 10:17 | 18.4 | 7.93 | 28.5 | 7.55 | 5.87 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 09:58 | 17.9 | 7.76 | 28 | 7.15 | 5.57 | 6.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 09:58 | 18 | 7.79 | 28.1 | 7.16 | 5.73 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 1 | 09:58 | 18.1 | 7.9 | 28.2 | 7.11 | 5.58 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.6 | 2 | 2 | 09:58 | 18.2 | 7.87 | 28.1 | 7.13 | 5.65 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.2 | 3 | 1 | 09:58 | 18.2 | 7.81 | 28.2 | 7.35 | 5.92 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.2 | 3 | 2 | 09:58 | 18.1 | 7.8 | 28.3 | 7.39 | 5.86 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 10:30 | 18.1 | 7.75 | 28 | 7.3 | 5.82 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 10:30 | 18 | 7.73 | 28.1 | 7.27 | 5.77 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 10:30 | 18.1 | 7.81 | 28.2 | 7.35 | 5.7 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 10:30 | 18.2 | 7.8 | 28.1 | 7.38 | 5.65 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 1 | 10:30 | 18.2 | 7.87 | 28.2 | 7.43 | 5.88 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 2 | 10:30 | 18.3 | 7.82 | 28.3 | 7.45 | 5.83 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 10:56 | 18.2 | 7.81 | 28 | 7.37 | 5.75 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 10:56 | 18.3 | 7.85 | 28.1 | 7.4 | 5.68 | 7.2 |

| 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 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 10:56 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 10:56 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 1 | 10:56 | 18.3 | 7.87 | 28.1 | 7.22 | 5.74 | 7.2 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 2 | 10:56 | 18.2 | 7.9 | 28.2 | 7.26 | 5.8 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 10:43 | 17.9 | 7.84 | 28 | 7.16 | 5.64 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 10:43 | 18 | 7.87 | 27.9 | 7.18 | 5.57 | 7.1 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 10:43 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 10:43 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 1 | 10:43 | 17.8 | 7.92 | 28.1 | 7.25 | 5.8 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.2 | 3 | 2 | 10:43 | 17.9 | 7.9 | 28.1 | 7.27 | 5.88 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 11:09 | 18.1 | 7.85 | 28.2 | 7.31 | 5.52 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 11:09 | 18.2 | 7.87 | 28.1 | 7.33 | 5.55 | 7 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 11:09 | 18.2 | 7.88 | 28.2 | 7.4 | 5.39 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 11:09 | 18.3 | 7.86 | 28.3 | 7.38 | 5.45 | 6.9 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 1 | 11:09 | 18.3 | 7.82 | 28.3 | 7.55 | 5.78 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-23 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.6 | 3 | 2 | 11:09 | 18.4 | 7.85 | 28.4 | 7.52 | 5.87 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 17:16 | 18.8 | 7.88 | 28 | 7.36 | 5.75 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 17:16 | 18.7 | 7.84 | 28.1 | 7.33 | 5.81 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 17:16 | 18.9 | 7.92 | 28.3 | 7.49 | 5.96 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 17:16 | 18.9 | 7.93 | 28.2 | 7.47 | 5.9 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 17:16 | 19.1 | 8.05 | 28.4 | 7.55 | 6.12 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 17:16 | 19 | 8.07 | 28.3 | 7.58 | 6.04 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 15:12 | 18.7 | 8.05 | 28.1 | 7.14 | 6.22 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 15:12 | 18.8 | 8.03 | 28 | 7.18 | 6.28 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 15:12 | 18.9 | 6.95 | 28.3 | 7.27 | 6.31 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 15:12 | 18.8 | 6.92 | 28.2 | 7.29 | 6.36 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 1 | 15:12 | 19 | 8.11 | 28.4 | 7.44 | 6.42 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.7 | 3 | 2 | 15:12 | 19 | 8.14 | 28.5 | 7.46 | 6.48 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 16:44 | 18.6 | 7.74 | 28 | 7.31 | 5.72 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 16:44 | 18.7 | 7.71 | 28.1 | 7.33 | 5.78 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 1 | 16:44 | 18.8 | 7.86 | 28.2 | 7.45 | 6.05 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.1 | 2 | 2 | 16:44 | 18.8 | 7.88 | 28.1 | 7.42 | 6.09 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 1 | 16:44 | 18.9 | 7.91 | 28.3 | 7.61 | 5.82 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 11.2 | 3 | 2 | 16:44 | 18.8 | 7.93 | 28.2 | 7.59 | 5.89 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 16:29 | 18.9 | 7.96 | 27.9 | 7.14 | 6.22 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 16:29 | 19 | 7.99 | 28 | 7.15 | 6.17 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 1 | 16:29 | 19.1 | 8.1 | 28.1 | 7.32 | 6.12 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.9 | 2 | 2 | 16:29 | 19.1 | 8.11 | 28 | 7.33 | 6.19 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.9 | 3 | 1 | 16:29 | 19.2 | 8.18 | 28.2 | 7.4 | 6.02 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.9 | 3 | 2 | 16:29 | 19.1 | 8.16 | 28.1 | 7.44 | 6.07 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 17:00 | 18.7 | 7.89 | 27.9 | 7.1 | 5.99 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 17:00 | 18.8 | 7.74 | 28 | 7.07 | 5.91 | 7.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 1 | 17:00 | 18.9 | 7.83 | 28.1 | 7.23 | 6.11 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 2 | 17:00 | 18.8 | 7.84 | 28 | 7.26 | 6.03 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 1 | 17:00 | 19 | 7.89 | 28.2 | 7.34 | 6.18 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 2 | 17:00 | 18.9 | 7.9 | 28.3 | 7.38 | 6.25 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 16:14 | 18.8 | 7.95 | 28.1 | 7.3 | 6.17 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 16:14 | 18.9 | 7.97 | 28 | 7.31 | 6.14 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 1 | 16:14 | 19 | 8.12 | 28.2 | 7.22 | 6.03 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 2 | 16:14 | 19 | 8.1 | 28.1 | 7.24 | 6.09 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.9 | 3 | 1 | 16:14 | 19.1 | 8.08 | 28.3 | 7.56 | 6.24 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 8.9 | 3 | 2 | 16:14 | 19 | 8.06 | 28.4 | 7.54 | 6.28 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 15:44 | 18.9 | 7.92 | 28 | 7.12 | 6.02 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 15:44 | 18.9 | 7.94 | 27.9 | 7.1 | 6.08 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 15:44 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 15:44 | | | | | | |

| 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 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 1 | 15:44 | 19 | 7.99 | 28.1 | 7.32 | 6.18 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.4 | 3 | 2 | 15:44 | 18.9 | 8.05 | 28 | 7.29 | 6.11 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 16:00 | 18.8 | 8.01 | 28 | 7.34 | 6.09 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 16:00 | 18.9 | 8.04 | 28.1 | 7.38 | 6.13 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 16:00 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 16:00 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 1 | 16:00 | 19 | 8.12 | 28.1 | 7.43 | 6.35 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 2 | 16:00 | 18.9 | 8.16 | 28.1 | 7.41 | 6.29 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 15:28 | 18.8 | 7.95 | 27.9 | 7.25 | 6.1 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 15:28 | 18.7 | 7.97 | 28 | 7.23 | 6.15 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 1 | 15:28 | 18.9 | 7.82 | 28.1 | 7.1 | 6.34 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 2 | 15:28 | 18.9 | 7.8 | 28.2 | 7.13 | 6.29 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 1 | 15:28 | 19.1 | 8.03 | 28.3 | 7.48 | 6.38 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 2 | 15:28 | 19 | 8.01 | 28.2 | 7.49 | 6.3 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 10:52 | 18.7 | 7.93 | 27.9 | 7.25 | 6.07 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 10:52 | 18.7 | 7.95 | 27.9 | 7.28 | 6.05 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 1 | 10:52 | 18.8 | 8.07 | 28 | 7.36 | 6.14 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.8 | 2 | 2 | 10:52 | 18.9 | 8.09 | 28.1 | 7.39 | 6.17 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.5 | 3 | 1 | 10:52 | 19 | 8.13 | 28.2 | 7.42 | 6.39 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.5 | 3 | 2 | 10:52 | 19.1 | 8.15 | 28.3 | 7.4 | 6.37 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 13:12 | 18.7 | 8.14 | 28.1 | 7.05 | 6.17 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 13:12 | 18.8 | 8.17 | 28.2 | 7.07 | 6.19 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 13:12 | 18.8 | 8.06 | 28.3 | 7.18 | 6.24 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 13:12 | 18.9 | 8.09 | 28.4 | 7.21 | 6.27 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 1 | 13:12 | 19 | 7.93 | 28.5 | 7.36 | 6.35 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.3 | 3 | 2 | 13:12 | 19.1 | 7.96 | 28.5 | 7.39 | 6.39 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 11:35 | 18.7 | 7.86 | 27.9 | 7.14 | 5.97 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 11:35 | 18.8 | 7.88 | 27.9 | 7.17 | 5.99 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 1 | 11:35 | 18.9 | 8.04 | 28 | 7.29 | 6.13 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 2 | 11:35 | 19 | 8.07 | 28.1 | 7.27 | 6.15 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.7 | 3 | 1 | 11:35 | 19.1 | 7.95 | 28.2 | 7.36 | 6.27 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.7 | 3 | 2 | 11:35 | 19.2 | 7.93 | 28.3 | 7.39 | 6.3 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 12:00 | 18.7 | 7.83 | 27.8 | 7.09 | 6.25 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 12:00 | 18.8 | 7.85 | 27.9 | 7.07 | 6.27 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 1 | 12:00 | 18.9 | 7.92 | 28 | 7.14 | 6.39 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 2 | 12:00 | 18.9 | 7.95 | 28.1 | 7.17 | 6.37 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.5 | 3 | 1 | 12:00 | 19 | 8.07 | 28.2 | 7.32 | 6.43 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.5 | 3 | 2 | 12:00 | 19.1 | 8.09 | 28.3 | 7.34 | 6.45 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 11:13 | 18.7 | 8.04 | 27.8 | 6.89 | 6.13 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 11:13 | 18.8 | 8.07 | 27.9 | 6.92 | 6.15 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 11:13 | 18.9 | 8.11 | 28 | 7.07 | 6.28 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 11:13 | 19 | 8.09 | 28.1 | 7.09 | 6.31 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 1 | 11:13 | 19.1 | 7.99 | 28.2 | 7.27 | 6.4 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.4 | 3 | 2 | 11:13 | 19.2 | 7.97 | 28.2 | 7.29 | 6.43 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 12:18 | 18.6 | 8.04 | 28 | 7.16 | 6.13 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 12:18 | 18.7 | 8.07 | 28 | 7.18 | 6.15 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 12:18 | 18.8 | 8.15 | 28.1 | 7.3 | 6.28 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 12:18 | 18.9 | 8.13 | 28.2 | 7.28 | 6.3 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.5 | 3 | 1 | 12:18 | 19 | 7.92 | 28.3 | 7.45 | 6.37 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.5 | 3 | 2 | 12:18 | 19.1 | 7.95 | 28.4 | 7.48 | 6.39 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 12:48 | 18.7 | 8.06 | 27.9 | 6.97 | 6.13 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 12:48 | 18.8 | 8.09 | 28 | 6.99 | 6.15 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 12:48 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 12:48 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.1 | 3 | 1 | 12:48 | 18.9 | 7.87 | 28.1 | 7.13 | 6.29 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.1 | 3 | 2 | 12:48 | 18.9 | 7.89 | 28.2 | 7.15 | 6.31 | 8.3 |

| 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 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 12:36 | 18.6 | 7.93 | 27.9 | 7.2 | 6.25 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 12:36 | 18.7 | 7.91 | 28 | 7.23 | 6.27 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 12:36 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 12:36 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 12:36 | 18.8 | 8.06 | 28.1 | 7.38 | 6.38 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 12:36 | 18.9 | 8.09 | 28.2 | 7.4 | 6.41 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 13:00 | 18.6 | 7.86 | 27.9 | 7.16 | 6.28 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 13:00 | 18.7 | 7.89 | 28 | 7.19 | 6.3 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 1 | 13:00 | 18.8 | 8.04 | 28.1 | 7.29 | 6.36 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 2 | 13:00 | 18.9 | 8.07 | 28.2 | 7.31 | 6.39 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 1 | 13:00 | 19 | 8.15 | 28.3 | 7.44 | 6.4 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-25 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.4 | 3 | 2 | 13:00 | 19 | 8.17 | 28.4 | 7.46 | 6.42 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 19:42 | 18.7 | 7.82 | 28 | 7.27 | 6 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 19:42 | 18.8 | 7.86 | 28.1 | 7.23 | 6.04 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 19:42 | 18.8 | 7.67 | 28.2 | 7.18 | 6.25 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 19:42 | 18.9 | 7.65 | 28.1 | 7.23 | 6.27 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 19:42 | 19 | 7.84 | 27.8 | 7.09 | 6.53 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 19:42 | 19 | 7.88 | 28 | 7.11 | 6.55 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 17:33 | 18.9 | 7.74 | 27.9 | 7.25 | 6.01 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 17:33 | 19 | 7.77 | 28 | 7.28 | 6.04 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 17:33 | 19.1 | 7.82 | 28 | 7.14 | 6.12 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 17:33 | 19 | 7.86 | 28 | 7.18 | 6.18 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 1 | 17:33 | 19.1 | 7.67 | 28 | 7.03 | 6.33 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 2 | 17:33 | 19.2 | 7.7 | 28.1 | 7 | 6.37 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 19:10 | 18.8 | 7.66 | 27.9 | 7.25 | 6.07 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 19:10 | 18.7 | 7.69 | 27.9 | 7.28 | 6.1 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.6 | 2 | 1 | 19:10 | 18.8 | 7.73 | 28 | 7.16 | 6.32 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 6.6 | 2 | 2 | 19:10 | 18.9 | 7.77 | 28.1 | 7.19 | 6.35 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 12.2 | 3 | 1 | 19:10 | 19 | 7.81 | 28.1 | 7.04 | 6.51 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 12.2 | 3 | 2 | 19:10 | 19 | 7.84 | 28.2 | 7.08 | 6.55 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 18:53 | 18.8 | 7.67 | 27.8 | 7.12 | 6.01 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 18:53 | 18.7 | 7.65 | 27.8 | 7.17 | 6.07 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 1 | 18:53 | 18.8 | 7.72 | 27.9 | 7.05 | 6.18 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.8 | 2 | 2 | 18:53 | 18.9 | 7.76 | 27.8 | 7.09 | 6.13 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.5 | 3 | 1 | 18:53 | 19 | 7.71 | 28 | 7.02 | 6.45 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.5 | 3 | 2 | 18:53 | 19.1 | 7.73 | 28.2 | 7.06 | 6.49 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 19:26 | 18.7 | 7.58 | 27.9 | 7.11 | 6.06 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 19:26 | 18.7 | 7.63 | 27.9 | 7.18 | 6.09 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 1 | 19:26 | 18.8 | 7.67 | 27.9 | 7.05 | 6.12 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.9 | 2 | 2 | 19:26 | 18.9 | 7.69 | 28 | 7.08 | 6.17 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 1 | 19:26 | 19 | 7.7 | 28.1 | 7.02 | 6.23 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.8 | 3 | 2 | 19:26 | 19 | 7.74 | 28.1 | 7.06 | 6.26 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 18:37 | 18.8 | 7.74 | 27.9 | 7.27 | 6.1 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 18:37 | 18.9 | 7.7 | 28 | 7.3 | 6.18 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 1 | 18:37 | 18.9 | 7.66 | 28.1 | 7.16 | 6.33 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5 | 2 | 2 | 18:37 | 19 | 7.69 | 28.2 | 7.11 | 6.38 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9 | 3 | 1 | 18:37 | 19.1 | 7.82 | 28.2 | 7.02 | 6.54 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9 | 3 | 2 | 18:37 | 19 | 7.88 | 28.2 | 7.07 | 6.57 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 18:05 | 18.9 | 7.78 | 27.8 | 7.26 | 6.15 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 18:05 | 18.8 | 7.82 | 27.8 | 7.28 | 6.18 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 18:05 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 18:05 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.7 | 3 | 1 | 18:05 | 18.9 | 7.84 | 27.9 | 7.03 | 6.3 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.7 | 3 | 2 | 18:05 | 19 | 7.87 | 28 | 7.1 | 6.38 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 18:21 | 18.8 | 7.72 | 27.8 | 7.22 | 6.12 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 18:21 | 18.8 | 7.7 | 27.9 | 7.27 | 6.18 | 7.9 |

| 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 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 18:21 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 18:21 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 1 | 18:21 | 18.9 | 7.57 | 28 | 7.04 | 6.43 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.7 | 3 | 2 | 18:21 | 18.8 | 7.61 | 28.1 | 7.09 | 6.48 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 17:49 | 18.9 | 7.88 | 28 | 7.29 | 6.03 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 17:49 | 18.9 | 7.9 | 28.2 | 7.33 | 6.08 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 1 | 17:49 | 18.9 | 7.62 | 27.9 | 7.23 | 6.09 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.9 | 2 | 2 | 17:49 | 19 | 7.66 | 27.9 | 7.25 | 6.11 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 1 | 17:49 | 19.1 | 7.84 | 28 | 7.09 | 6.32 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 2 | 17:49 | 19.1 | 7.87 | 28.1 | 7.12 | 6.3 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 12:30 | 18.9 | 7.83 | 27.9 | 7.13 | 6.01 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 12:30 | 18.9 | 7.79 | 27.9 | 7.1 | 6.08 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 1 | 12:30 | 18.9 | 7.8 | 28 | 7.04 | 6.34 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.7 | 2 | 2 | 12:30 | 19 | 7.84 | 28.1 | 7.01 | 6.42 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 1 | 12:30 | 19 | 7.82 | 28.3 | 6.86 | 6.67 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.4 | 3 | 2 | 12:30 | 19.1 | 7.85 | 28.3 | 6.89 | 6.73 | 9.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 14:50 | 19 | 7.79 | 28 | 7.16 | 6.07 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 14:50 | 19 | 7.82 | 28 | 7.12 | 6.14 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 1 | 14:50 | 19 | 7.8 | 28 | 7.05 | 6.25 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.7 | 2 | 2 | 14:50 | 19 | 7.77 | 28 | 7.02 | 6.31 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 1 | 14:50 | 19 | 7.7 | 28.1 | 6.88 | 6.48 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.4 | 3 | 2 | 14:50 | 19.1 | 7.73 | 28.1 | 6.91 | 6.54 | 9.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 13:08 | 18.9 | 7.78 | 28 | 7.13 | 6.23 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 13:08 | 18.9 | 7.75 | 27.9 | 7.11 | 6.16 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.4 | 2 | 1 | 13:08 | 18.9 | 7.76 | 28 | 7.05 | 6.4 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 6.4 | 2 | 2 | 13:08 | 19 | 7.79 | 28 | 7.02 | 6.33 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.7 | 3 | 1 | 13:08 | 19 | 7.8 | 28.1 | 6.96 | 6.64 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 11.7 | 3 | 2 | 13:08 | 19 | 7.83 | 28.1 | 6.92 | 6.6 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 13:24 | 18.9 | 7.76 | 28 | 7.05 | 6.07 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 13:24 | 18.9 | 7.8 | 27.9 | 7.02 | 6.14 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 1 | 13:24 | 18.9 | 7.77 | 28 | 7 | 6.25 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.5 | 2 | 2 | 13:24 | 18.9 | 7.76 | 28 | 6.96 | 6.3 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 1 | 13:24 | 19 | 7.77 | 28 | 6.88 | 6.61 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10 | 3 | 2 | 13:24 | 19 | 7.8 | 28.1 | 6.85 | 6.56 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 12:50 | 18.9 | 7.74 | 27.9 | 7.06 | 6.17 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 12:50 | 18.9 | 7.78 | 27.9 | 7.03 | 6.09 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 1 | 12:50 | 18.9 | 7.67 | 28 | 6.95 | 6.22 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.7 | 2 | 2 | 12:50 | 18.9 | 7.72 | 28 | 6.91 | 6.16 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 1 | 12:50 | 19 | 7.76 | 28 | 6.87 | 6.38 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10.3 | 3 | 2 | 12:50 | 19 | 7.79 | 28.1 | 6.84 | 6.45 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 13:44 | 18.9 | 7.78 | 28 | 7.13 | 6.25 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 13:44 | 19 | 7.74 | 28 | 7.1 | 6.31 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 1 | 13:44 | 19 | 7.77 | 28 | 7.07 | 6.42 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.8 | 2 | 2 | 13:44 | 19 | 7.8 | 28 | 7.04 | 6.49 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 1 | 13:44 | 19 | 7.81 | 28.1 | 6.93 | 6.72 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.6 | 3 | 2 | 13:44 | 19.1 | 7.77 | 28.1 | 6.9 | 6.66 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 14:17 | 18.9 | 7.8 | 28 | 7 | 6.21 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 14:17 | 19 | 7.77 | 28 | 6.97 | 6.27 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 14:17 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 14:17 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 1 | 14:17 | 19 | 7.82 | 28 | 6.88 | 6.4 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 2 | 14:17 | 19 | 7.83 | 28 | 6.84 | 6.47 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 14:04 | 19 | 7.78 | 28 | 7.06 | 6.38 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 14:04 | 19 | 7.81 | 28 | 7.02 | 6.3 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 14:04 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 14:04 | | | | | | |

| 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 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 1 | 14:04 | 19 | 7.8 | 28 | 6.93 | 6.51 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.4 | 3 | 2 | 14:04 | 19 | 7.76 | 28 | 6.89 | 6.6 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 14:32 | 19 | 7.83 | 28 | 7.17 | 6.03 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 14:32 | 19 | 7.79 | 28 | 7.13 | 6.09 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 1 | 14:32 | 19 | 7.76 | 28 | 7.08 | 6.18 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.6 | 2 | 2 | 14:32 | 19 | 7.8 | 28 | 7.04 | 6.23 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 1 | 14:32 | 19.1 | 7.81 | 28.1 | 6.93 | 5.52 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-28 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.2 | 3 | 2 | 14:32 | 19.1 | 7.83 | 28.2 | 6.9 | 6.48 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 09:50 | 19.4 | 7.82 | 28.2 | 7.15 | 6.29 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 09:50 | 19.3 | 7.83 | 28.1 | 7.18 | 6.26 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.2 | 2 | 1 | 09:50 | 19.4 | 7.84 | 28.2 | 7.34 | 6.31 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Middle | 9.2 | 2 | 2 | 09:50 | 19.5 | 7.85 | 28.3 | 7.37 | 6.26 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.4 | 3 | 1 | 09:50 | 19.5 | 7.86 | 28.3 | 7.38 | 6.35 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS4 | Bottom | 17.4 | 3 | 2 | 09:50 | 19.5 | 7.86 | 28.3 | 7.35 | 6.39 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 08:15 | 19.4 | 7.82 | 28 | 7.37 | 5.93 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 08:15 | 19.3 | 7.85 | 28 | 7.39 | 5.98 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 1 | 08:15 | 19.5 | 7.79 | 28.1 | 7.44 | 5.72 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Middle | 6.9 | 2 | 2 | 08:15 | 19.5 | 7.8 | 28.1 | 7.47 | 5.69 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 1 | 08:15 | 19.5 | 7.83 | 28.1 | 7.52 | 6.24 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | CS6 | Bottom | 12.8 | 3 | 2 | 08:15 | 19.6 | 7.82 | 28.2 | 7.48 | 6.28 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 09:17 | 19.4 | 7.8 | 28.1 | 7.28 | 6.11 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 09:17 | 19.4 | 7.81 | 28 | 7.24 | 6.07 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 1 | 09:17 | 19.4 | 7.78 | 28.2 | 7.36 | 6.4 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Middle | 5.9 | 2 | 2 | 09:17 | 19.5 | 7.79 | 28.1 | 7.34 | 6.46 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 10.8 | 3 | 1 | 09:17 | 19.5 | 7.83 | 28.2 | 7.31 | 6.36 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS12 | Bottom | 10.8 | 3 | 2 | 09:17 | 19.5 | 7.83 | 28.2 | 7.35 | 6.32 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 09:06 | 19.4 | 7.82 | 28.1 | 7.15 | 5.98 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 09:06 | 19.3 | 7.84 | 28.1 | 7.11 | 5.95 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.3 | 2 | 1 | 09:06 | 19.5 | 7.85 | 28.2 | 7.06 | 6.21 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Middle | 5.3 | 2 | 2 | 09:06 | 19.5 | 7.84 | 28.1 | 7.09 | 6.25 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 1 | 09:06 | 19.4 | 7.79 | 28.2 | 7.24 | 6.36 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS13 | Bottom | 10.6 | 3 | 2 | 09:06 | 19.5 | 7.8 | 28.2 | 7.27 | 6.39 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 09:28 | 19.4 | 7.78 | 28.1 | 7.2 | 6.08 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 09:28 | 19.4 | 7.79 | 28.1 | 7.17 | 6.12 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 1 | 09:28 | 19.5 | 7.83 | 28.2 | 7.27 | 6.25 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Middle | 5.8 | 2 | 2 | 09:28 | 19.5 | 7.82 | 28.2 | 7.24 | 6.29 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 1 | 09:28 | 19.5 | 7.85 | 28.2 | 7.29 | 6.21 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS14 | Bottom | 10.6 | 3 | 2 | 09:28 | 19.4 | 7.86 | 28.1 | 7.26 | 6.25 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 08:55 | 19.4 | 7.87 | 28 | 7.14 | 6.33 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 08:55 | 19.4 | 7.86 | 28.1 | 7.19 | 6.37 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 1 | 08:55 | 19.5 | 7.82 | 28.1 | 7.27 | 6.47 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Middle | 5.1 | 2 | 2 | 08:55 | 19.4 | 7.81 | 28.2 | 7.3 | 6.42 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 1 | 08:55 | 19.5 | 7.84 | 28.2 | 7.38 | 6.29 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | IS15 | Bottom | 9.2 | 3 | 2 | 08:55 | 19.5 | 7.83 | 28.2 | 7.36 | 6.25 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 08:39 | 19.3 | 7.82 | 28 | 7.04 | 5.82 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 08:39 | 19.4 | 7.83 | 28 | 7.01 | 5.78 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 08:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 08:39 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 1 | 08:39 | 19.4 | 7.78 | 28 | 7.11 | 5.93 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR8 | Bottom | 4.6 | 3 | 2 | 08:39 | 19.4 | 7.76 | 28.1 | 7.08 | 5.96 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 08:47 | 19.3 | 7.85 | 28.1 | 7.08 | 6.21 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 08:47 | 19.3 | 7.86 | 28 | 7.05 | 6.25 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 08:47 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 08:47 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 1 | 08:47 | 19.4 | 7.88 | 28.1 | 7.04 | 5.99 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR9 | Bottom | 3.8 | 3 | 2 | 08:47 | 19.3 | 7.87 | 28.1 | 7.01 | 5.95 | 7.7 |

| 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 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 08:30 | 19.3 | 7.79 | 28 | 7.19 | 6.09 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 08:30 | 19.3 | 7.8 | 28 | 7.15 | 6.05 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 1 | 08:30 | 19.4 | 7.84 | 28 | 7.2 | 5.87 | 7.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Middle | 6.8 | 2 | 2 | 08:30 | 19.5 | 7.85 | 28.1 | 7.24 | 5.81 | 7.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 1 | 08:30 | 19.5 | 7.85 | 28.1 | 7.17 | 6.34 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Flood | Cloudy | Small wave | SR10A | Bottom | 12.7 | 3 | 2 | 08:30 | 19.5 | 7.86 | 28.1 | 7.21 | 6.3 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 1 | 12:46 | 19.4 | 7.87 | 27.9 | 7.04 | 6.16 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Surface | 1 | 1 | 2 | 12:46 | 19.5 | 7.89 | 28 | 7.08 | 6.18 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 1 | 12:46 | 19.5 | 7.65 | 28.1 | 7.16 | 6.32 | 9.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Middle | 8.9 | 2 | 2 | 12:46 | 19.6 | 7.68 | 28.2 | 7.19 | 6.37 | 9.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 1 | 12:46 | 19.7 | 7.74 | 28.3 | 7.25 | 6.33 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS4 | Bottom | 16.8 | 3 | 2 | 12:46 | 19.8 | 7.77 | 28.3 | 7.27 | 6.35 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 1 | 15:02 | 19.3 | 7.84 | 28 | 7.24 | 6.08 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Surface | 1 | 1 | 2 | 15:02 | 19.4 | 7.86 | 27.9 | 7.26 | 6.11 | 9.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.6 | 2 | 1 | 15:02 | 19.5 | 7.63 | 28 | 7.3 | 6.03 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Middle | 6.6 | 2 | 2 | 15:02 | 19.5 | 7.7 | 28.1 | 7.37 | 6.07 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.2 | 3 | 1 | 15:02 | 19.6 | 7.88 | 28.1 | 7.38 | 6.31 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | CS6 | Bottom | 12.2 | 3 | 2 | 15:02 | 19.7 | 7.93 | 28.2 | 7.42 | 6.36 | 9.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 1 | 13:20 | 19.4 | 7.83 | 28 | 7.14 | 6.26 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Surface | 1 | 1 | 2 | 13:20 | 19.5 | 7.87 | 28 | 7.17 | 6.29 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.6 | 2 | 1 | 13:20 | 19.5 | 7.61 | 28 | 7.23 | 6.54 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Middle | 5.6 | 2 | 2 | 13:20 | 19.6 | 7.66 | 28.1 | 7.28 | 6.57 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.2 | 3 | 1 | 13:20 | 19.6 | 7.75 | 28.1 | 7.2 | 6.44 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS12 | Bottom | 10.2 | 3 | 2 | 13:20 | 19.6 | 7.79 | 28.2 | 7.24 | 5.47 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 1 | 13:37 | 19.5 | 7.74 | 27.9 | 7.04 | 6.15 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Surface | 1 | 1 | 2 | 13:37 | 19.5 | 7.76 | 28 | 7.07 | 6.17 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 1 | 13:37 | 19.5 | 7.81 | 28 | 7.01 | 6.33 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Middle | 5.6 | 2 | 2 | 13:37 | 19.6 | 7.87 | 28.1 | 7.08 | 6.37 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 1 | 13:37 | 19.7 | 7.95 | 28.1 | 7.14 | 6.45 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS13 | Bottom | 10.1 | 3 | 2 | 13:37 | 19.8 | 7.98 | 28.2 | 7.17 | 6.47 | 9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 1 | 13:03 | 19.4 | 7.72 | 28 | 7.07 | 6.28 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Surface | 1 | 1 | 2 | 13:03 | 19.4 | 7.77 | 28 | 7.1 | 6.31 | 7.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 1 | 13:03 | 19.5 | 7.84 | 28.1 | 7.22 | 6.38 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Middle | 5.5 | 2 | 2 | 13:03 | 19.6 | 7.88 | 28.2 | 7.28 | 6.35 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 1 | 13:03 | 19.4 | 7.56 | 28.3 | 7.12 | 6.37 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS14 | Bottom | 10 | 3 | 2 | 13:03 | 19.4 | 7.6 | 28.2 | 7.17 | 6.4 | 8.1 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 1 | 13:54 | 19.4 | 7.71 | 27.8 | 7.08 | 6.47 | 8.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Surface | 1 | 1 | 2 | 13:54 | 19.5 | 7.76 | 27.8 | 7.05 | 6.4 | 8.7 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 1 | 13:54 | 19.5 | 7.95 | 27.8 | 7.16 | 6.53 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Middle | 4.9 | 2 | 2 | 13:54 | 19.6 | 7.99 | 27.9 | 7.19 | 6.56 | 8.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 1 | 13:54 | 19.7 | 7.8 | 28.1 | 7.22 | 6.32 | 8.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | IS15 | Bottom | 8.7 | 3 | 2 | 13:54 | 19.7 | 7.88 | 28.2 | 7.24 | 6.38 | 8.4 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 1 | 14:28 | 19.3 | 7.67 | 28 | 7.02 | 6.03 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Surface | 1 | 1 | 2 | 14:28 | 19.4 | 7.66 | 28.1 | 7.06 | 6.08 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 1 | 14:28 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Middle | | 2 | 2 | 14:28 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 1 | 14:28 | 19.5 | 7.82 | 28.1 | 7.05 | 6.05 | 7.8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR8 | Bottom | 4.2 | 3 | 2 | 14:28 | 19.6 | 7.89 | 28.2 | 7.09 | 6.07 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 1 | 14:11 | 19.4 | 7.78 | 28 | 7.01 | 6.24 | 8.2 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Surface | 1 | 1 | 2 | 14:11 | 19.5 | 7.81 | 28 | 7.05 | 6.27 | 8.3 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 1 | 14:11 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Middle | | 2 | 2 | 14:11 | | | | | | |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 1 | 14:11 | 19.5 | 7.92 | 28 | 7 | 6.08 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR9 | Bottom | 3.3 | 3 | 2 | 14:11 | 19.5 | 7.94 | 28.1 | 7.06 | 6.11 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 1 | 14:45 | 19.4 | 7.72 | 27.9 | 7.06 | 6.16 | 8 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Surface | 1 | 1 | 2 | 14:45 | 19.4 | 7.76 | 28 | 7.09 | 6.19 | 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 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 1 | 14:45 | 19.4 | 7.85 | 28 | 7.11 | 6.02 | 7.6 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Middle | 6.7 | 2 | 2 | 14:45 | 19.5 | 7.88 | 28.1 | 7.18 | 6.07 | 7.9 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.3 | 3 | 1 | 14:45 | 19.5 | 7.76 | 28.1 | 7.04 | 6.38 | 8.5 |
| TMCLKL | HY/2012/08 | 2017-03-30 | Mid-Ebb | Cloudy | Small wave | SR10A | Bottom | 12.3 | 3 | 2 | 14:45 | 19.6 | 7.69 | 28.2 | 7.07 | 6.42 | 8.1 |

Appendix J

Impact Dolphin Monitoring Survey

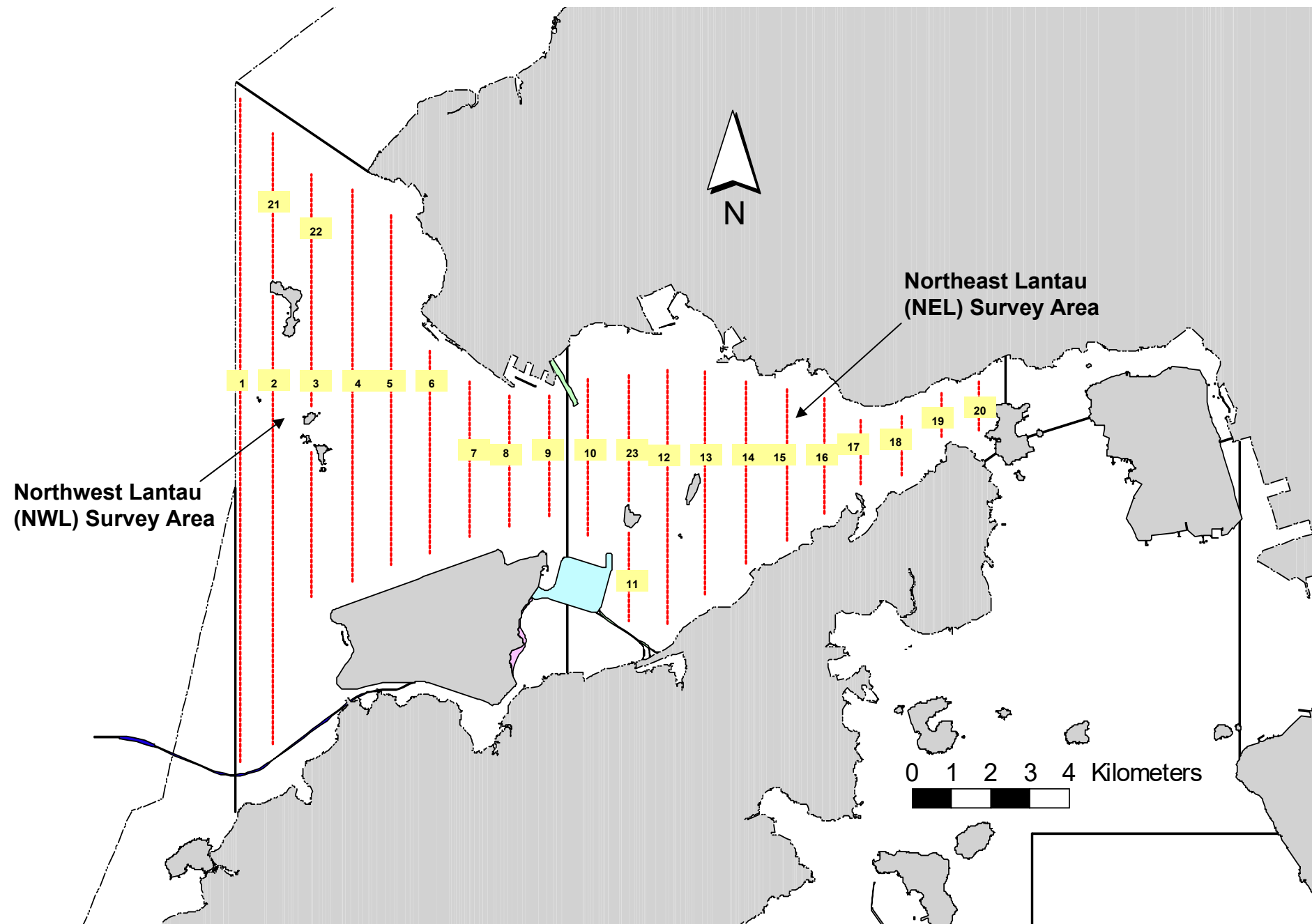


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

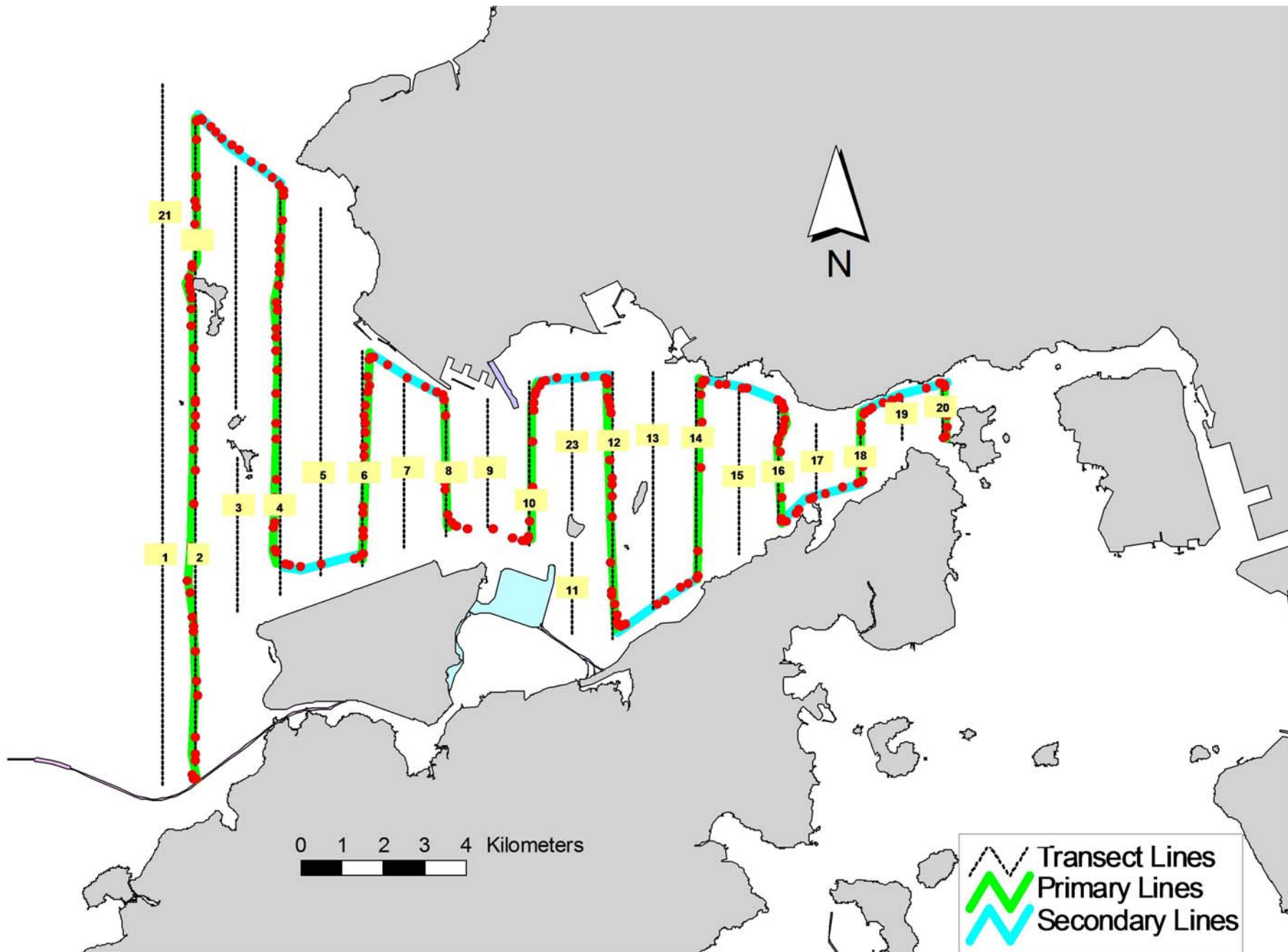


Figure 2. Survey Route on March 2nd, 2017 (from HKLR03 project)

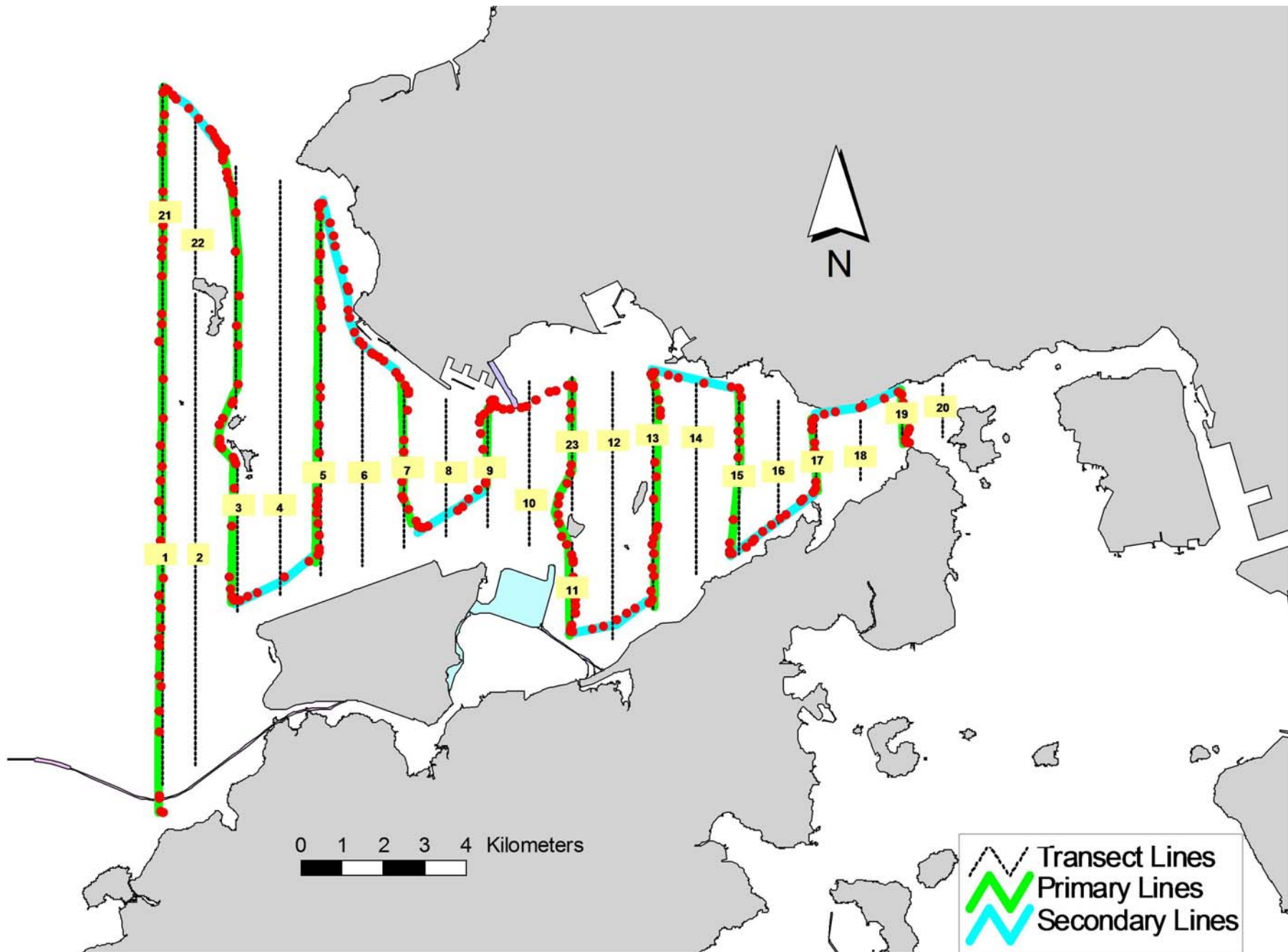


Figure 3. Survey Route on March 7th, 2017 (from HKLR03 project)

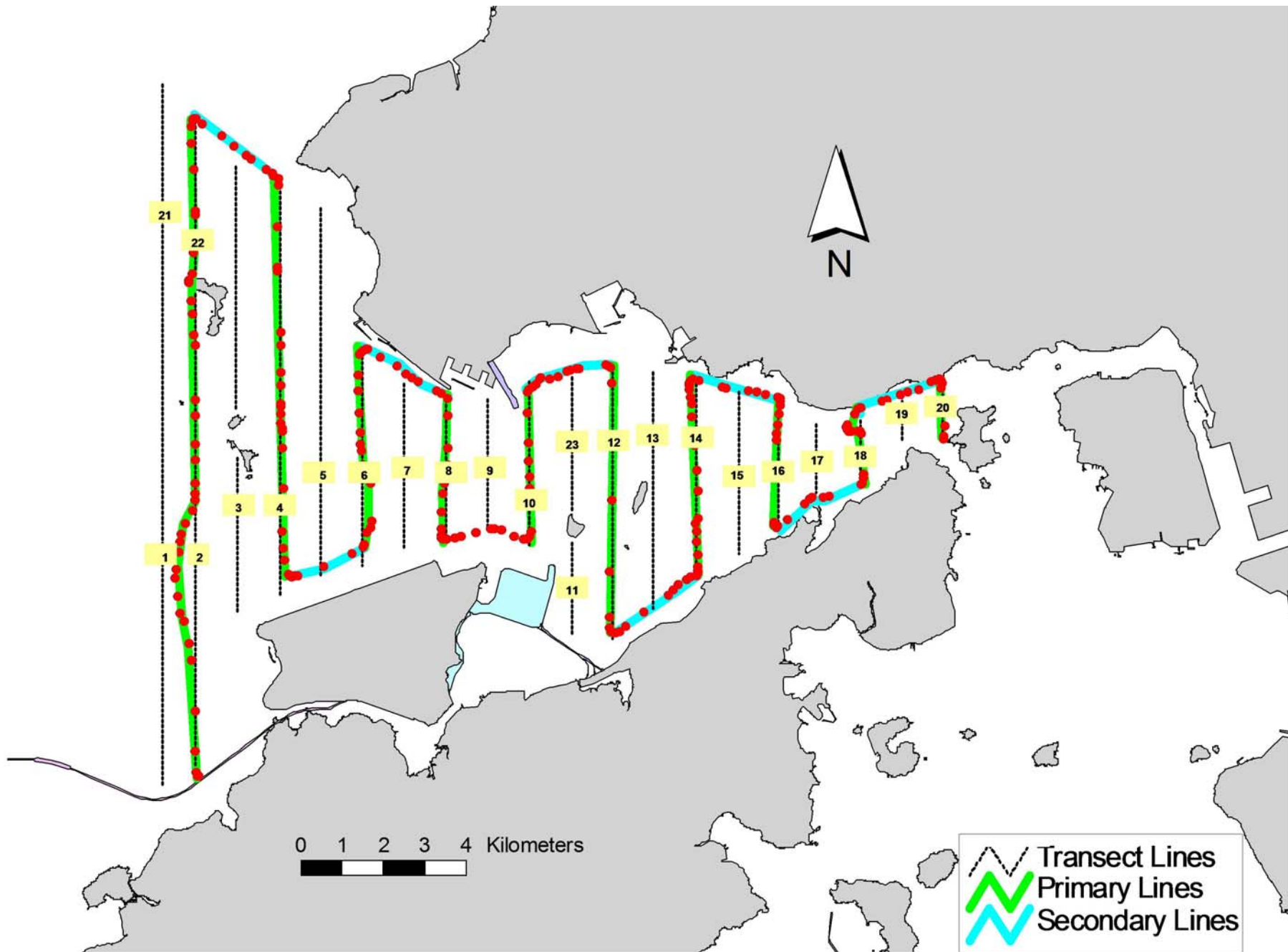


Figure 4. Survey Route on March 16th, 2017 (from HKLR03 project)

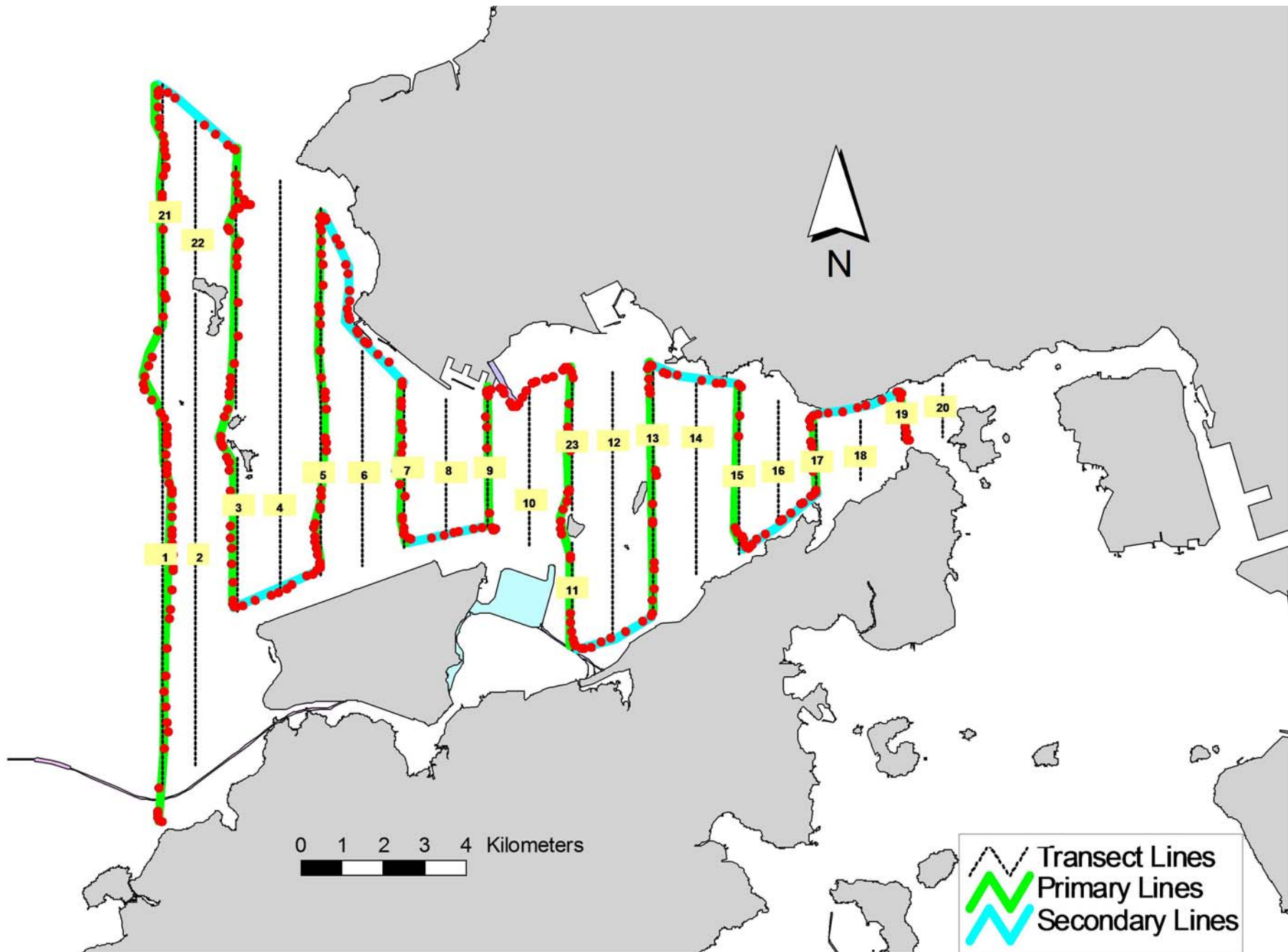


Figure 5. Survey Route on March 28th, 2017 (from HKLR03 project)

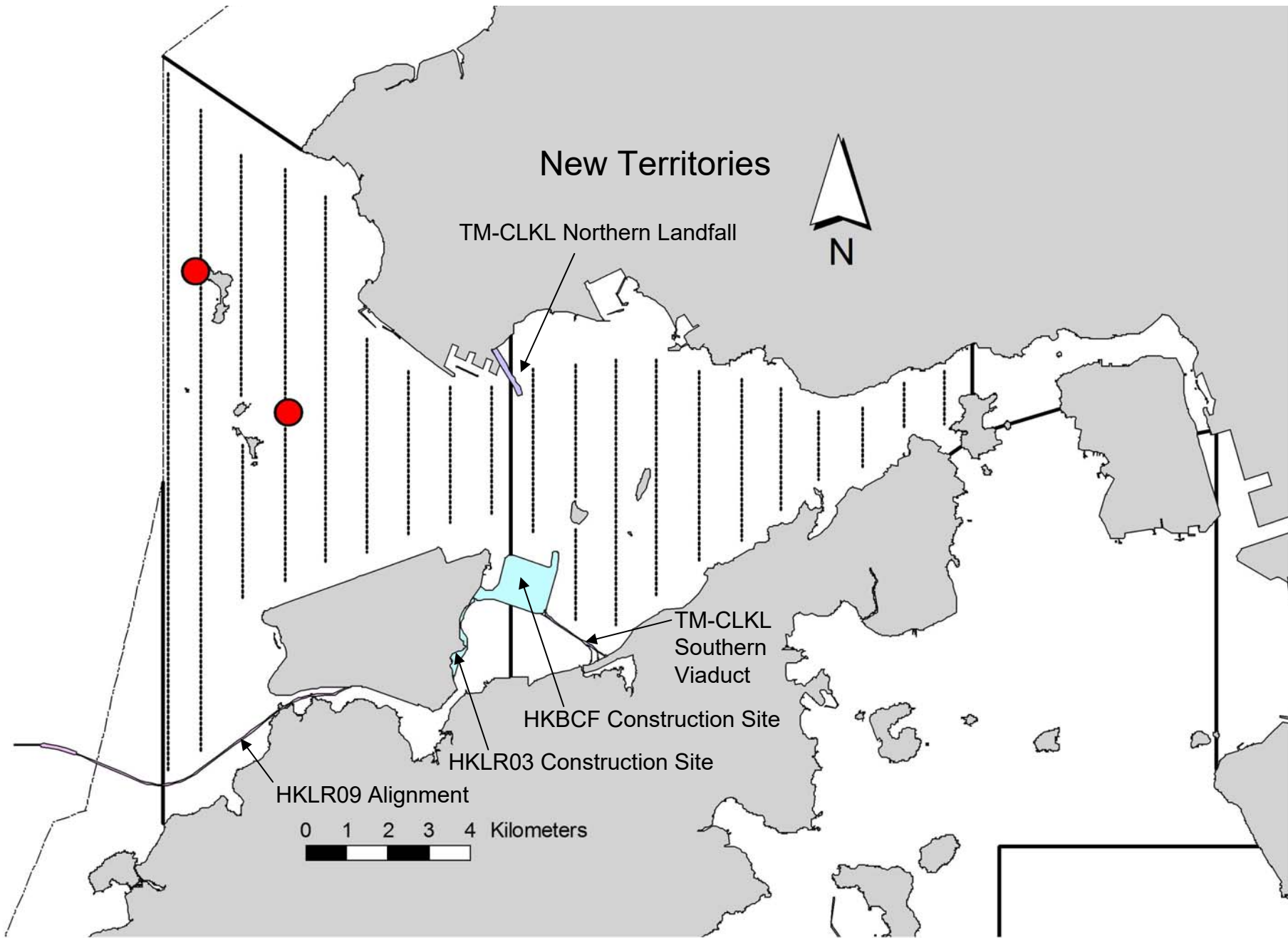


Figure 6. Distribution of Chinese White Dolphin Sightings during March 2017 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (March 2017)

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

| DATE | AREA | BEAU | EFFORT | SEASON | VESSEL | TYPE | P/S |
|-----------|-----------|------|--------|--------|---------------|------|-----|
| 2-Mar-17 | NW LANTAU | 2 | 0.80 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NW LANTAU | 3 | 14.47 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NW LANTAU | 4 | 10.64 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NW LANTAU | 5 | 4.59 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NW LANTAU | 2 | 1.90 | SPRING | STANDARD36826 | HKLR | S |
| 2-Mar-17 | NW LANTAU | 3 | 2.40 | SPRING | STANDARD36826 | HKLR | S |
| 2-Mar-17 | NW LANTAU | 4 | 2.71 | SPRING | STANDARD36826 | HKLR | S |
| 2-Mar-17 | NW LANTAU | 5 | 0.69 | SPRING | STANDARD36826 | HKLR | S |
| 2-Mar-17 | NE LANTAU | 2 | 14.49 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NE LANTAU | 3 | 4.75 | SPRING | STANDARD36826 | HKLR | P |
| 2-Mar-17 | NE LANTAU | 2 | 10.16 | SPRING | STANDARD36826 | HKLR | S |
| 7-Mar-17 | NE LANTAU | 2 | 16.13 | SPRING | STANDARD36826 | HKLR | P |
| 7-Mar-17 | NE LANTAU | 2 | 10.67 | SPRING | STANDARD36826 | HKLR | S |
| 7-Mar-17 | NW LANTAU | 2 | 30.59 | SPRING | STANDARD36826 | HKLR | P |
| 7-Mar-17 | NW LANTAU | 3 | 8.40 | SPRING | STANDARD36826 | HKLR | P |
| 7-Mar-17 | NW LANTAU | 2 | 12.91 | SPRING | STANDARD36826 | HKLR | S |
| 16-Mar-17 | NE LANTAU | 2 | 20.88 | SPRING | STANDARD36826 | HKLR | P |
| 16-Mar-17 | NE LANTAU | 2 | 10.92 | SPRING | STANDARD36826 | HKLR | S |
| 16-Mar-17 | NW LANTAU | 2 | 31.93 | SPRING | STANDARD36826 | HKLR | P |
| 16-Mar-17 | NW LANTAU | 2 | 7.27 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NW LANTAU | 2 | 3.40 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NW LANTAU | 3 | 13.92 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NW LANTAU | 4 | 9.78 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NW LANTAU | 2 | 3.00 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NW LANTAU | 3 | 1.50 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NW LANTAU | 4 | 3.40 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NE LANTAU | 2 | 1.30 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NE LANTAU | 3 | 5.50 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NE LANTAU | 4 | 13.23 | SPRING | STANDARD36826 | HKLR | P |
| 28-Mar-17 | NE LANTAU | 2 | 1.20 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NE LANTAU | 3 | 6.67 | SPRING | STANDARD36826 | HKLR | S |
| 28-Mar-17 | NE LANTAU | 4 | 3.30 | SPRING | STANDARD36826 | HKLR | S |

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (March 2017)

(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 |
|-----------|-------|------|--------|-----------|------|-----|--------|------|----------|---------|--------|-------------|-----|
| 2-Mar-17 | 1 | 1049 | 8 | NW LANTAU | 3 | 60 | ON | HKLR | 826885 | 805324 | SPRING | NONE | S |
| 16-Mar-17 | 1 | 1242 | 12 | NW LANTAU | 2 | 509 | ON | HKLR | 823647 | 807563 | SPRING | PURSE-SEINE | P |

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in March 2017

| ID# | DATE | STG# | AREA |
|------------|-------------|-------------|-------------|
| NL49 | 16/03/17 | 1 | NW LANTAU |
| NL98 | 02/03/17 | 1 | NW LANTAU |
| NL104 | 16/03/17 | 1 | NW LANTAU |
| NL105 | 16/03/17 | 1 | NW LANTAU |
| NL123 | 02/03/17 | 1 | NW LANTAU |
| | 16/03/17 | 1 | NW LANTAU |
| NL202 | 02/03/17 | 1 | NW LANTAU |
| | 16/03/17 | 1 | NW LANTAU |
| NL226 | 16/03/17 | 1 | NW LANTAU |
| NL259 | 02/03/17 | 1 | NW LANTAU |
| NL286 | 02/03/17 | 1 | NW LANTAU |
| NL301 | 16/03/17 | 1 | NW LANTAU |
| NL321 | 16/03/17 | 1 | NW LANTAU |
| WL05 | 02/03/17 | 1 | NW LANTAU |
| WL17 | 16/03/17 | 1 | NW LANTAU |
| WL214 | 16/03/17 | 1 | NW LANTAU |



Appendix IV. Photographs of Identified Individual Dolphins in December 2016 (HKLR03)

NL123_20170316_1



NL202_20170316_1



NL226_20170316_1



NL301_20170316_1



NL321_20170316_1



WL17_20170316_1



WL214_20170316_1



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"> 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"> 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"> 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 | 0 | 30 |
| | Limit | 0 | 2 |
| 24-hr TSP | Action | 0 | 5 |
| | Limit | 0 | 1 |
| Water Quality | Action | 0 | 6 |
| | Limit | 0 | 1 |
| Impact Dolphin Monitoring | Action | 0 | 9 |
| | Limit | 0 | 8 |

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 (March 2017) | 1 ⁽¹⁾ | 0 | 0 |
| Total No. received since project commencement | 14 | 0 | 0 |

(1) ⁽¹⁾ Environmental complaint case regarding noise nuisance and water pollution at the the site near HKBCF of HZMB on 28 March 2017 is under investigation and no investigation report is available yet.

ENVIRONMENTAL COMPLAINT/ENQUIRY INVESTIGATION REPORT

Our Reference: 0212330_Complaint LOG_20170214_12

Basic Information of Complaint/Enquiry

| | |
|------------------------------------|--------------------------------|
| Reference Number: | EP/RW/0000358212 |
| Date of Complaint/Enquiry Received | 6 February 2017 |
| Location of Complaint/Enquiry | Site area near Ho Yeung Street |
| Nature of Complaint/Enquiry | Muddy water discharge |
| Complaint/Enquiry Received by | EPD |
| Via | Fax |
| Complainant/Enquirer | Not disclosed |

Details of Complaint/Enquiry

On 6 February 2017, a complaint case was received by EPD regarding muddy water discharge from the site near Ho Yeung Street from 12:00am on 31 January 2017 to 4:00am on 1 February 2017. The IEC, the Environmental Team (ET) and the Project Proponent received the complaint notification from EPD on 14 February 2017. The ET was informed that the case is categorized as complaint in nature upon the investigation, discussion and agreement between relevant parties (i.e. the Contractor (DBJV), SOR and IEC).

Investigation Report

Upon receiving the case notification from EPD on 14 February 2017, the Contractor had promptly checked the construction programme of January and February 2017.

According to the construction programme provided by the Contractor, no construction works were carried out at the site near Ho Yeung Street during January and February 2017. No improper discharge was recorded. Two wetseps were set up at the site near Ho Yeung Street to treat the wastewater directed from the Slurry Treatment Plant during the incident period. Treated wastewater was discharged to the designated discharge point specified in the Water Discharge License. Site drainage plan of N6 is provided in Annex A.

Moreover, according to the inspection record of DBJV at midnight on 31 January and 1 February, the wastewater was properly treated by the wetsep before discharge. No improper discharge was observed during inspection. Photos taken by DBJV during the incident period were provided in Annex B.

ET has conducted an interview with the site foreman who was responsible for the wastewater treatment and management of wetsep of N6 during the incident period. It was confirmed that there was no improper discharge at N6 site area during the incident period. Maintenance record of the N6 wetsep during the incident period is provided in Annex C.

In addition, ET has conducted a joint site inspection with IEC, SOR and DBJV on 21 February 2017. No improper discharge was observed at the site near Ho Yeung Street. Two wetseps were operating to treat the wastewater from STP. No leakage of water pipes or malfunction of the wetseps was observed during the inspection. No water pipes were found on the seaside. Photos showing the site conditions are provided in Annex B.

Based on the above, there is no evidence to prove that the complaint case is related to this Contract.

Mitigation Measures and Follow-Up Actions Recommended to/Undertaken by Contractor

There is no evidence to prove that the complaint case is related to this Contract.

The Contractor was reminded to review and enhance the current mitigation measures to avoid similar situation.

The Contractor has been reminded to adhere strictly to implement all relevant mitigation measures of water quality impact recommended or specified in the EP (EP-354/2009/D), the approved EIA, Updated EM&A Manual and the Water Discharge License of this Project to avoid causing water pollution. The Contractor shall also fully comply with the conditions in the approved water discharge license to carry out construction works under the Contract.

Date of File Closed : 21 March 2017

Approved and Filed by:

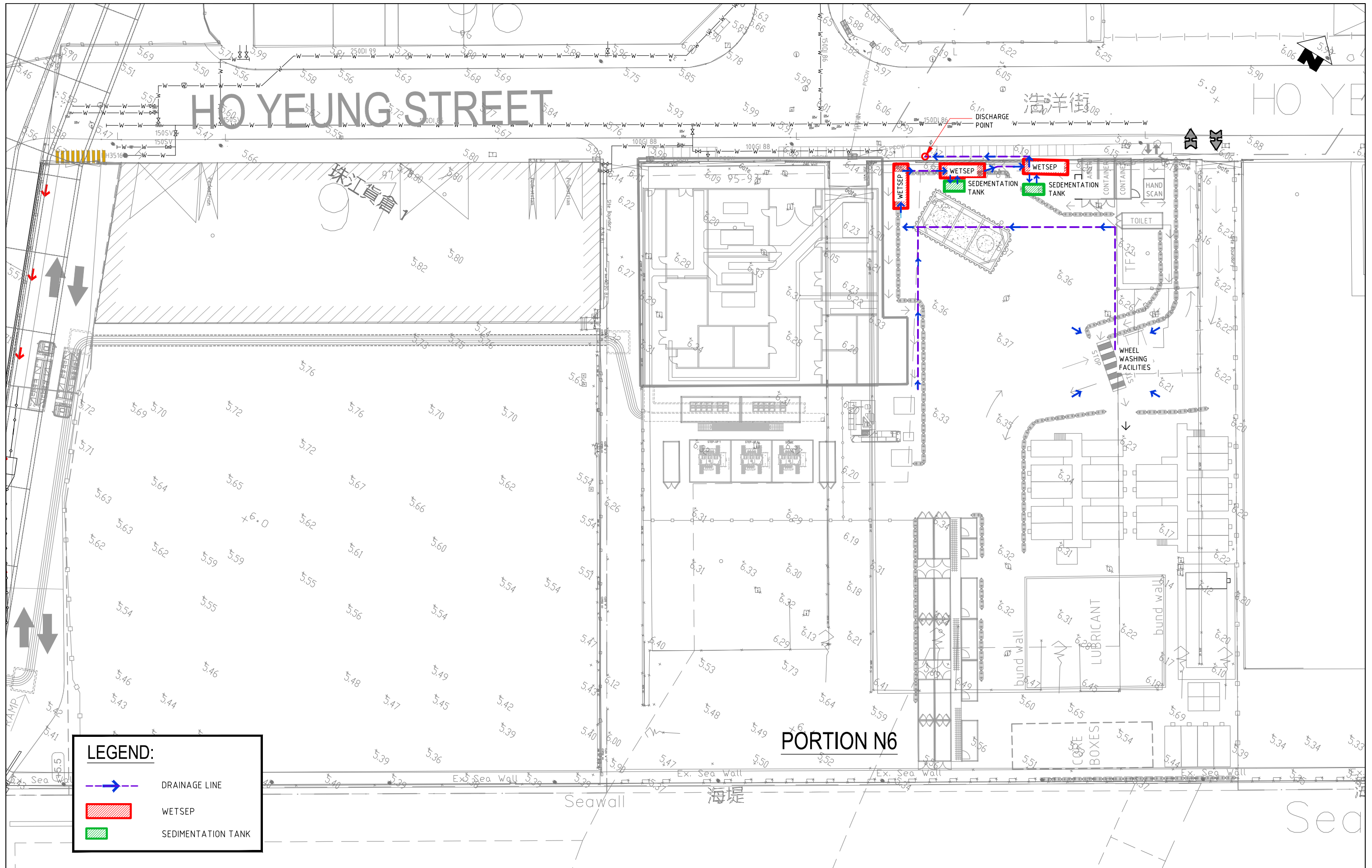


(Jovy Tam, ET Leader)

Date: 21 March 2017

Annex A

Site Drainage Management Plan



| Rev. | Date | Drawn | Designed | Verified | Description | Approved |
|------|---------|-------|----------|----------|---------------------------|----------|
| C | 10FEB17 | AKP | ACM | ECa | DRAINAGE LAYOUT REVISED | ASc |
| B | 07DEC16 | KBa | PKV | PKV | DISCHARGE POINT RELOCATED | ASc |
| A | 01SEP16 | KBa | ECa | ECa | FIRST ISSUE | SPo |

Main Contractor

Dragages - Bouygues Joint Venture 宜基 - 布依格聯營

Client

路政署
HIGHWAYS DEPARTMENT

Contractor's Designer

ARUP 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

GENERAL
PORTION N6
DRAINAGE LAYOUT

Drawing no.

TMCLKL8-DBJ-NAA-MSI-11513

Scale

1:500 @ A3

CADD Ref.

NAA-MSI011513-C-DFT

Issue Status

DFT (DRAFT)

Revision

C

Annex B

Photo Record



Annex B Photo Records taken during Site Investigation

*Note: Photos taken on 21/2/2017



Wastewater was treated in the Wetsep before discharge.

*Note: Photos taken on 21/2/2017



No improper discharge was observed on the seaside.



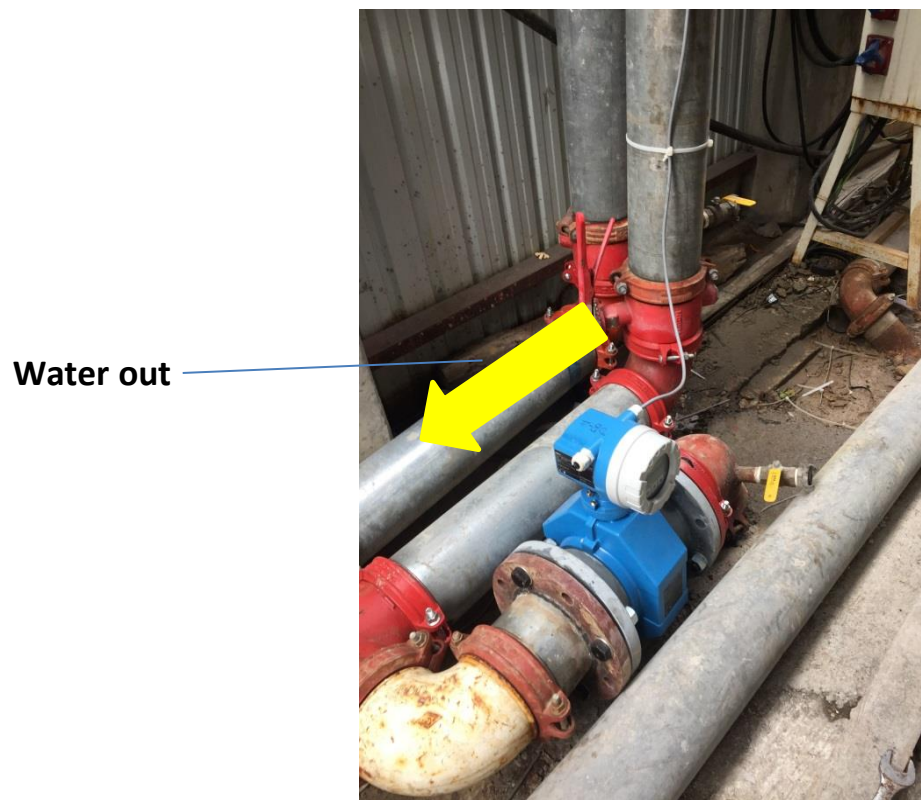
Annex B Photo Records taken during Site Investigation

*Note: Photos taken on 21/2/2017



No improper discharge was observed on the seaside.

*Note: Photos taken on 21/2/2017



Treated wastewater was directed to the designated discharge point.



Annex B Photo Records taken by DBJV

*Note: Photos taken on 1/2/2017



Wastewater was functioning properly.

*Note: Photos taken on 1/2/2017



Water sample was taken for checking.

Annex C

Maintenance Record of Wetsep

WETSEP Location 污水處理機位置: 116

Date

日期:

30-1-17 to 至 5-2-17

| | | <u>Monday</u> 星期一 | <u>Tuesday</u> 星期二 | <u>Wednesday</u> 星期三 | <u>Thursday</u> 星期四 | <u>Friday</u> 星期五 | <u>Saturday</u> 星期六 | <u>Sunday</u> 星期日 |
|-----|---|----------------------|-----------------------|-------------------------|------------------------|----------------------|------------------------|----------------------|
| 1. | WETSEP In Normal Operation? 處理機是否正常運作? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. | pH Value 酸鹼度 (6.0 - 9.0) | 7.4 | 6.1 | 6.7 | 6.0 | 7.3 | 6.8 | 7.5 |
| 3. | Electrical Supply OK? 電力供應正常? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. | Outlet Abnormal? 出水口有否異常? | X | X | X | X | X | X | X |
| 5. | Potion Enough? 藥水是否足夠? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. | Clean the Sedimentation Tank? 有否清理隔沙缸? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. | Clean the De-silt Basin? 有否清理蓄泥池? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. | Are the Cleansing Records of Sedimentation Tank/ De-silt Basin Stored Properly? 清理蓄泥池記錄是否妥善儲存? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. | Refill of Flocculants? pH Neutralization agent? 補充凝絮劑/酸鹼調節劑? | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. | Flow rate of the discharge 排放流量 | 正常 | 正常 | 正常 | 正常 | 正常 | 正常 | 正常 |
| 11. | Nature and Composition of the discharge 廢水排放的性質及成份 | 无色 | 无色 | 无色 | 无色 | 无色 | 无色 | 无色 |
| 12. | Proper Desludging operation and disposal 正確清除及處理淤泥 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13. | Others 其他情況 | | | | | | | |
| | Verified by Site Foreman/Supervisor 地盤管工/監督簽署確認 | Lik | Lik | Lik | Lik | Lik | Lik | Lik |

*Please -

tick (✓) in the box if the condition is normal.

*若情況正常, 請於方格內加上剔號(✓)。

cross (X) in the box if the condition is abnormal, and write down the non-conformance.

*若情況不尋常, 請於方格內加上交叉(X), 並寫下不尋常狀況。

Remarks:

(1) Please keep the record and send to environmental department in monthly basis.

備註:

(1) 請將記錄妥善保存, 並每月將記錄交回環保部。

Appendix M

Waste Flow Table

Monthly Summary Waste Flow Table

Name of Department: HyD

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

Monthly Summary Waste Flow Table for March 2017 [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 | Monthly Break-down of <u>Inert</u> Construction & Demolition Materials (i.e. Public Fill Materials) | | | | |
|--------------------------|---|--|-------------------------------|---------------------------------|-----------------------------------|
| | (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) |
| Sub-total | 1097.465 | 0.000 | 0.000 | 0.000 | 1097.465 |
| Jan-2017 | 60.781 | 0.000 | 0.000 | 0.000 | 60.781 |
| Feb-2017 | 17.367 | 0.000 | 0.000 | 0.000 | 17.367 |
| Mar-2017 | 7.508 | 0.000 | 0.000 | 0.000 | 7.508 |
| Apr-2017 | | | | | |
| May-2017 | | | | | |
| Jun-2017 | | | | | |
| Half Year Sub-total | | | | | |
| Jul-2017 | | | | | |
| Aug-2017 | | | | | |
| Sep-2017 | | | | | |
| Oct-2017 | | | | | |
| Nov-2017 | | | | | |
| Dec-2017 | | | | | |
| Project Total Quantities | 1183.121 | 0.000 | 0.000 | 0.000 | 1183.121 |

| 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 | Disposed | generated |
| Sub-total | 1.850 | 1.850 | 3.150 | 3.150 | 6.870 | 6.870 | 9.450 | 9.450 | 4.935 |
| Jan-2017 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.400 | 3.400 | 0.257 |
| Feb-2017 | 0.000 | 0.000 | 0.200 | 0.200 | 0.000 | 0.000 | 0.000 | 0.000 | 0.340 |
| Mar-2017 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.100 | 6.100 | 0.286 |
| Apr-2017 | | | | | | | | | |
| May-2017 | | | | | | | | | |
| Jun-2017 | | | | | | | | | |
| Half Year Sub-total | | | | | | | | | |
| Jul-2017 | | | | | | | | | |
| Aug-2017 | | | | | | | | | |
| Sep-2017 | | | | | | | | | |
| Oct-2017 | | | | | | | | | |
| Nov-2017 | | | | | | | | | |
| Dec-2017 | | | | | | | | | |
| Project Total Quantities | 1.850 | 1.850 | 3.350 | 3.350 | 6.870 | 6.870 | 18.950 | 18.950 | 5.818 |

| 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 |
| (in '000 ton) | (in '000 ton) | (in '000 ton) | (in '000 ton) | (in '000 ton) |
| 20.000 | 0.000 | 0.000 | 0.000 | 20.000 |

| 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 '000 ton) |
| 0.000 | 0.000 | 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).